



**STATISTICAL REVIEW OF PROGRESS TOWARDS
THE MID-TERM TARGETS OF THE
KENYA HEALTH SECTOR STRATEGIC PLAN 2014–2018**

**Ministry of Health
Republic of Kenya**

in collaboration with
World Health Organization

Foreword

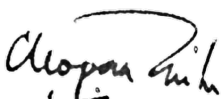
The statistical review report on the performance of the Kenya health sector strategic plan (KHSSP) 2014 – 2018 is an important input into the overall mid-term review of the KHSSP. The report uses data from different sources including data from health management information system and household surveys to provide a comprehensive overview of the current status of performance of the health sector in Kenya. The primary focus of the report is on the core indicators and targets of KHSSP 2014 – 2018. The report also pays special attention to additional indicators that help to assess progress towards achieving other national priorities and global goals that came into effect after development of the KHSSP.

The statistical review report was prepared by the Kenya Ministry of Health in close collaboration with other health sector stakeholders drawn from counties, national institutions, private sector, Nongovernmental organisations, local and international partners. It highlights many areas where significant progress has been made and also areas where greater efforts are needed to achieve the KHSSP targets. The report includes equity analysis – a comprehensive assessment of inequality gaps between key sub-populations of Kenya. Equity analysis will guide us on which sub-populations of the country need a larger infusion of resources in order to achieve parity as well as improve the national average. The report also includes a comparative analysis of our performance with that of similar countries in the sub-region. The comparative analysis gives an idea on where we stand in relation to our peers.

This review report will prove handy to the senior management and technical experts of the Ministry of Health, County departments of health, other government ministries, departments and agencies that have an impact on the health sector. The report will also be useful for policy makers, parliamentarians, the civil society and the community at large. It is my anticipation that future reports from the Ministry of Health will contain a similar level of analytical thinking with comparative and equity considerations.

At a personal level, the report provides me with a perfect audit of where we are and what I need to focus on as a leader in the health sector. It is my hope therefore that all stakeholders in the health sector will use the report to increase efforts in service provision and raise standards for recording, documenting and reporting. We look forward to using the report to improve performance of health sector which will in turn improve the health of our people.

On behalf of the Ministry of Health, I would like to express my appreciation to all the partners of the Health Data Collaborative for providing both the technical and financial support for the mid-term review of the Kenya Health Sector Strategic Plan.



Dr. Cleopa Mailu
Cabinet Secretary
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Additionally, I would like to recognize and congratulate all those individuals, institutions and organizations - public or private, national or international — that contributed to the analysis and writing of this Statistical Review Report. These include the Staff from the Ministry of Health, Counties, Parastatals, National Institutes such as Kenya Bureau of Statistics, Civil Registration Department, Private Sector and Health Data Collaborative Partners, who participated in the statistical review workshop and made invaluable contribution through availing and reviewing data and contributing to the discussions that improved the quality, accuracy and completeness of data and information used in the report. To all those who contributed in one way or the other to this endeavor, please accept the sincere appreciation of the leadership of the Ministry for job well done.

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Executive summary

The KHSSP 2014-18 is implemented at a time in which mortality and morbidity due to communicable diseases are declining, but still remain the leading cause of death in Kenya, and noncommunicable diseases (NCD) and injuries are on the rise.

The midterm statistical review of KHSSP focused on evidence for progress made during the first half of the implementation of the plan - 2014 to mid-2016- using all available data sources, paying special attention to county progress. The most important data source was the health facility report as part of the Ministry's DHIS-2. The DHIS-2 reporting rates have increased from 77% to 89% during 2013/14-2015/16 and the data quality is remarkably good for many core indicators.

Considerable progress was made in many areas including:

Better reproductive, maternal and child health

- Child mortality rates have been coming down by 40% in the past decade and high levels of coverage of essential interventions suggest that the decline will be continuing during KHSSP.
- Encouraging findings of the review include the solid increase in numbers of women delivering in health facilities (from 60 to 72%) and the continued increase in use of modern contraceptives with more than 75% of the demand for family planning met and leading to a decline in unintended births.
- Declines were observed in maternal deaths and stillbirths in health facilities, while the prevalence of low birthweight remained low at 5% of all births. Exclusive breastfeeding during the first 6 months of life is on the rise, more sick children are taken to a health care provider, and child stunting and underweight rates have been declining since 2009.

Major progress is made in the battle against major infectious diseases

- Malaria parasite rates in children are down from 11% to 8%, driven by a decline from 37% to 28% in the Lake endemic zone. Malaria is now diagnosed in 17% of children under 5 taken to health clinics, compared to 27% four years earlier, and hospital mortality due to malaria is also declining. The use of long lasting insecticidal nets continued to increase and is high in endemic counties.
- There were major increases in the use of ART among persons living with HIV (from 44% in 2013/14 to 62% in 2015/16) and antiretroviral for PMTCT (from 69% to 80%).

Evidence of good quality of services

- TB treatment success rates remained high at 88% but ART retention remained at just 74% after 12 months of treatment. In 2015, for the first time in Kenya's history, the majority of children with malaria were diagnosed by laboratory test and not based on just clinical symptoms.

The review data also brought out many old and new challenges:

Declines in immunization coverage and need to increase RMNCH intervention coverage

- Even though immunization coverage in infants is still about 80%, there has been a decline in more than two-thirds of counties and nationally.
- Only 49% of pregnant women make four or more antenatal clinic visits. Reaching the poorest and more remote counties with maternal and child health interventions continues to be a challenge. Further increases in numbers of women delivering in health facilities are needed while ensuring that the quality of maternal and newborn care is high

Infectious diseases are declining but the battle is far from over

- There are 1.6 million persons living with HIV, of which 700,000 are not on ART, and about 100,000 new infections still occur every year. Strong prevention efforts while maintaining and further increasing ART coverage will be critical.

- Even though TB treatment success rates are high, many TB cases are not diagnosed timely, requiring greater action in communities.
- Malaria is still very high in the Lake zone and increased in the coastal endemic zone. Accelerating the increase of malaria intervention coverage in the endemic counties will be crucial.
- Pneumonia and diarrhoeal diseases remain leading killers in childhood and prevention, including improved sanitary facilities and hygiene, and treatment will need special attention.

NCDs are increasingly important and tackling the risk factors will be essential

- Kenya has observed a dramatic increase in obesity. For instance, the percent of women with obesity increased from 7% to 13% between 2009 and 2015. In several counties, mostly located in central Kenya, more than 40% of women and more than 20% of men are overweight or obese; 23% of adults have raised blood pressure and 2% have diabetes; 20% of men smoke tobacco and 23% of men engage in regular heavy episodic alcohol use.
- Only 1 in 7 women had ever been screened for cervical cancer and there is no national system of cancer registries. Data on mental health are completely lacking. The doubling of the number of motorized vehicles in 6 years' time presents a major challenge in terms of reducing the road traffic fatalities.

Progress requires a strong health system in all counties

- Overall, there are an adequate number of health facilities (2.5 per 10,000 population) but the distribution across (and within) counties is unequal. The number of health workers is still low (9 per 10,000 population) and there are very large within-county differences, with the top quintile of counties having four times more health workers than the bottom quintile of counties.
- More people are using the services with now an average of 2.2 visits per person to an outpatient clinic per year, and 6 hospital admissions per 100 population per year. There are still however very large differences within Kenya. In some counties, the average person makes 4.5 visits in a year to the outpatient clinic, in other counties it is just over 1 visit per person in a year.

Intersectoral actions are needed to improve health and wellbeing for all Kenyans

- While the review provided some evidence of intersectoral collaboration, much more is required to address the much broader array of health challenges that need to be overcome to reach the goals of Vision 2030 and the sustainable development goals.

Strategic objective	Main advances during MTR	Key challenges and strategic actions
1 Reduce the burden of communicable diseases	Major increases in ART and PMTCT coverage; more HIV testing & counselling	1.6 million people living with HIV, 700,000 are not on ART; 100,000 new infections every year; maintain PMTCT and further increase ART coverage and enhance prevention efforts
	Malaria parasitaemia down, less malaria and better diagnostic practices in facilities, increase in LLIN use in endemic areas	Further increase coverage of all key malaria control interventions in endemic counties
	High TB completion/cure rates; TB-HIV intervention coverage	Increase TB case detection rates
	More sick children taken to health providers	Immunization coverage decline in majority of counties
2 Halt and reverse the rising burden of noncommunicable diseases		Slow down the dramatic overweight/obesity increase
		Reduce hypertension and prevent diabetes increase, improving treatment coverage
		Increase cancer screening and treatment, such as cervical cancer
3 Violence and injuries	Road traffic fatalities per vehicle reduction	Reduce road traffic fatality rates in spite of vehicle increase through preventive measures
		Gender-based violence reduction
4 Provide essential services (RMNCH)	Family planning coverage increase	Reach the poorest with RMNCH interventions in all counties
	Institutional delivery rates increased in almost all counties	Improve ANC coverage (4+ visits), further efforts to increase institutional deliveries
		Reduce maternal mortality and stillbirth rates in health facilities
5 Exposure to risk factors	Exclusive breastfeeding increase	Tobacco use reduction, notably among men
	Salt iodisation full coverage	Reducing harmful use of alcohol among men
6 Collaboration with other sectors	Child stunting and underweight improvements	Continued reduction of child stunting in all counties, reducing differences ; need for intersectoral action
	Access to drinking water higher	Little progress in access to improved sanitation; need for intersectoral action
7 Health system investments	Limited evidence of improvements in service access through increases in facilities	Fourfold differences in service access between the top and bottom counties; focus on disadvantaged populations and counties, and prevent oversupply of health facilities in some counties
	Increased demand with modest increase in outpatient and inpatient services	Focus on improving services in disadvantaged counties
	Some progress or high levels in quality indicators such as TB cure rate, diagnostic practices for malaria, facility based RMNCH services	Major scope for further improvement to reduce maternal, stillbirth and newborn mortality in facilities, ART retention rates, immunization dropout rates etc.

Introduction

This report was prepared as part of the midterm review of the health sector strategic and investment plan (KHSSP) 2014-2018 in Kenya. The objective was to provide a statistical review of progress and performance at the national and county levels during the first three of implementation of KHSSP, focusing on the period FY2013/2014 to FY2015/2016. Conducting of the statistical review, including a capacity strengthening effort is part of the Kenya Health Data Collaborative roadmap priorities, as identified by the Ministry of Health and endorsed by development partners in May 2016. The analysis process included three workshops of the core team which consisted of about 25 monitoring and evaluation experts. This process was led by the Ministry of Health and supported by a WHO team, with participation of MEASURE/PIMA, CDC, other UN agencies and other partners at various stages of the process.

This report first describes the progress made under each of the strategic objectives. This is followed by a section on progress in efforts to increase health service access and a description of the health status indicators, based on the most recent data mainly from surveys. The last chapter provides a synthetic analysis, using indexes, to describe the situation and trends in counties. The annex provides the individual health statistical profiles for the 47 counties.

Approach

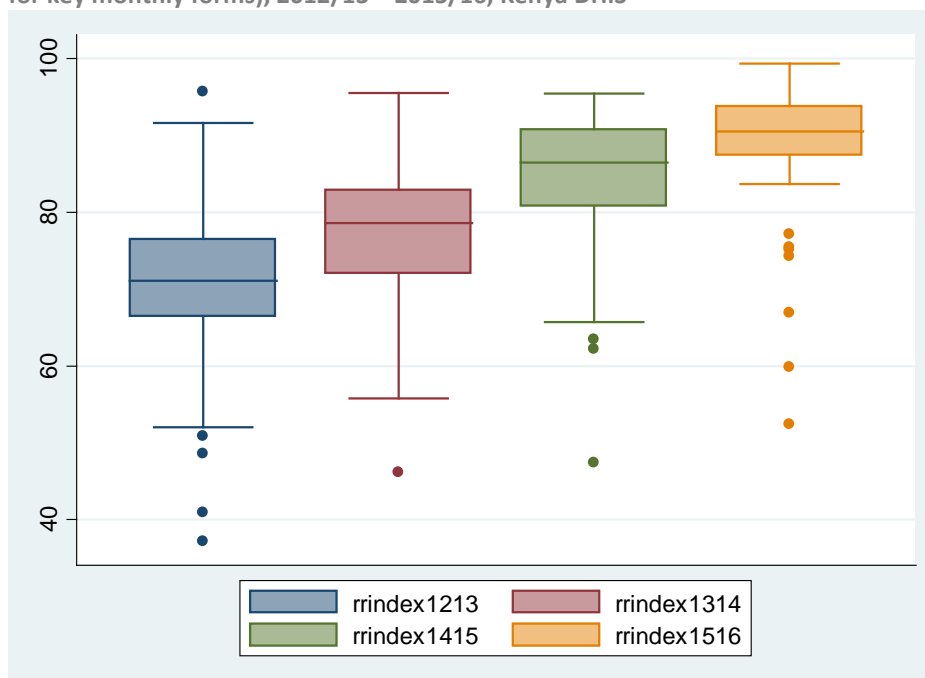
The statistical assessment of progress focused on the 42 indicators and midterm targets of the KHSSP 2014-2018 that were associated with the six strategic objectives and health system investments and outputs. For some indicators no data were available. For other indicators new baseline data have become available and targets or indicator definitions were adjusted.

For many indicators, there was a wealth of data available on recent progress. This was due to the Ministry of Health DHIS2 which functions very well with high reporting rates (over 90% for several key forms such as RMNCH), rapid reporting (analysis up to June 2016 done) and consistent data sets. Figure 1 shows the reporting rate for counties during 2012/13 – 2015/16, with Kenya as a whole marked as a line within the box and the spread of counties indicated by the box and whiskers. The Kenya National Bureau of Statistics projections were used to estimate target populations, with adjustments where needed. The KNBS projections are based on the 2009 census and in quite a number of counties the projected target populations have been found to be problematic. Therefore, a major effort was made to improve the target population sizes, using adjustments for completeness of reporting and health sector outputs for high coverage interventions such as antenatal care visit and the first vaccination of pentavalent vaccine. The method used to improve county target populations for maternal and childhood interventions is explained in a separate document. This document also explains the procedure that was used to adjust for incomplete reporting where needed. A summary of the steps taken is shown in Annex A of the report.

In addition, the statistical review also benefited from the health surveys in 2014 and 2015. The KDHS 2014 provided baseline information at the start of the review period. The KDHS data can however not be used to assess progress within the KHSSP review period. Where no new data were available, the report considered the trend in the indicator between KDHS 2008-09 and KDHS 2014 (e.g. for treatment of sick children or gender-based violence). The Malaria Indicator Survey 2015 and the NCD risk factor survey (STEPS) in 2015 added valuable data on levels and trends of leading public health problems. The NASCOP dashboard and specific data and estimates on HIV provided additional insights in trends for several HIV intervention coverage indicators. Statistics from other sectors were used where available.

The review paid careful attention to data quality. The open access policy and easy sharing of data greatly facilitated the analysis. This included the DHIS-2, which openly shares its password upon request, the TB individual level registry data (TIBU), the STEPS survey and reports from various programs. On the other hand, it turned out to be more difficult or more time-consuming for the review team to obtain a comprehensive data set for the HIV/AIDS indicators, in spite of major investments in the programme and the presence of an advanced dashboard on the web, and the data from special activities such as the six-monthly malaria related health facility surveys. A comprehensive health data observatory that includes also relevant data from other sectors (e.g. on road traffic fatalities) is lacking, but the DHIS does include a wealth of data on many facility-based indicators.

Figure 1: Reporting completeness index (average of reporting completeness for key monthly forms), 2012/13 – 2015/16, Kenya DHIS



Hospital data are still missing for quite a few facilities. No comprehensive data set could be put together on diagnoses at discharge and causes of death. The lack of a comprehensive health data observatory that includes also relevant data from other sectors (e.g. on road traffic fatalities) is lacking, but the DHIS -2 does include a wealth of data on many facility-based indicators. Throughout the report DHIS-2 is referred to as DHIS.

Priority areas for improving health statistics

The review identified a number of data gaps that will need to be addressed in the coming years to be able to monitor the national program implementation, the SDGs, and especially county level progress and performance. The priorities include the following points:

- DHIS: the DHIS is functioning well, but is suffering from an overload of data elements and indicators. The DHIS contains too many indicators that have very limited usefulness. The demand for disaggregation further risks to increase the burden of recording and reporting for health workers. Digitalization of data entry at the service provider level is an important strategy to reduce the burden of recording and especially reporting, but still requires a rational approach to avoid an overload of data collection at the cost of service provision. The DHIS should be protected from program and partner requests for more data through a formal approval process that is driven by technical expertise in all areas of data collection with a view of minimizing the burden of recording and reporting.
- There are several areas where data availability is limited. These include for instance neglected tropical diseases, cancer and outbreak diseases. The programs need to strengthen the monitoring component in close collaboration with the central M&E team by making the right investments in the coming years. For instance, a national system of cancer registries is required. The integration of IDSR into DHIS is essential, including the mainstreaming of notifiable diseases.
- There are several areas where measurement is very challenging, such as gender based violence, and mental health. In these areas research studies and household surveys are likely to provide more relevant public health information than including poor-quality indicators in the DHIS.
- Data on mortality trends and causes are available but need to be strengthened. The strengthening of the civil registration and vital statistics system in Kenya will be essential for public administration and the generation of continuous data on mortality by cause by 2030. This will take time, although some counties can move faster than others as the baseline is good. In parallel to strengthening the CRVS system, it is possible to strengthen

data by setting up a sample registration system with verbal autopsy and improving hospital based cause of death statistics using the ICD. This could be fast tracked by scaling up ongoing work to automate health data in the country.

- The administrative data systems need to be strengthened and more integrated with the DHIS. This includes the health workforce information system and the financial tracking system.
- Greater integration and data sharing in a central repository (or Kenya health data observatory) of all health-related data, including facility surveys, household surveys, administrative and service provision data is required to enhance data access and reduce fragmentation and duplication. Such an observatory is also the portal to improve communication and use of the data through dashboards, visualizations etc. as well as forms the basis for annual profiles to inform regular reviews of progress and performance. This is one of the priorities defined in the Kenya Health data Collaborative.
- The DHIS and also program actions (such as malaria) show major progress in developing and producing county-specific data and making them available. Further investments are needed in regular production of county specific data in easy to use formats, where possible and relevant with sub-county data and statistics. This should be combined with enhanced capacity to strengthen data interpretation and use at the county level.

Table 1: Summary of progress towards the six KHSSP strategic objectives.

Strategic objective	Main advances during MTR	Key challenges
1 Reduce the burden of communicable diseases	Major increases in ART and PMTCT coverage	HIV incidence reduction, further increase ART coverage
	Big increase in LLIN use in endemic areas	Malaria incidence continued reduction
	Very high TB completion/cure rates and TB-HIV intervention coverage	Increase TB case detection rates
	Treatment-seeking behaviour for sick children increased to 2014	Immunization coverage decreased in majority of counties
2 Halt and reverse the rising burden of noncommunicable diseases		Slowing down the dramatic overweight/obesity increase
		Reduce hypertension and prevent diabetes increase
		Increase cancer screening and treatment, such as cervical cancer
3 Violence and injuries	Road traffic fatalities per vehicle reductions	Reduce road traffic fatality rates in spite of vehicle increase
		Gender-based violence reduction
4 Provide essential services (RMNCH)	Family planning coverage, substantial increases	Reach the poorest with RMNCH interventions in all counties
	Institutional delivery rates increased in almost all counties	Improve ANC coverage (4+ visits), continued increase delivery rates
		Reduce maternal mortality and stillbirth rates in health facilities
5 Exposure to risk factors	Exclusive breastfeeding on the increase	Tobacco use reduction, notably among men
	Salt iodisation full coverage	Reducing harmful use of alcohol
6 Collaboration with other sectors	Child stunting and underweight improvements	Continued reduction of child stunting in all counties, reducing differences
	Access to drinking water higher	Little progress in access to improved sanitation
	Women's secondary education continuing to increase	

Strategic objective 1: accelerate reduction of the burden of communicable diseases

Main findings

- **Epidemic trends:** infectious diseases are the leading causes of morbidity and mortality in Kenya. In children, measles cases remained few, malaria prevalence declined by more than one-third but diarrhoea and pneumonia were still leading causes of childhood morbidity. HIV remains very common (an estimated 1.6 million people living with HIV) and TB notification rates are declining slowly. There were marked differences in the infectious disease epidemiology between counties that affect programmes. For instance, HIV and malaria prevalence were 4 times higher than national levels in the 4 counties bordering Lake Victoria while TB cases were more concentrated in urban populations.
- **Child infectious diseases:** immunization coverage was high with 83% of infants receiving 3 doses of pentavalent and measles vaccines. Full immunization coverage was 79%, which is far below the KHSSP target for full immunization coverage. The trend showed a modest decline between 2013/14 and 2015/16. Data by county from the DHIS show that in 34 of the 47 counties full immunization coverage levels in 2015/16 were lower than in 2013/14. Health seeking behaviour for treatment of sick under-fives – diarrhoea, ARI and fever – improved during 2008-2014, and ORS packet use rates increased considerably to 58% of children with diarrhoea.
- **Coverage of HIV, TB and malaria interventions** all showed recent positive trends. Major increases in numbers of people benefitting from PMTCT (from 67% to 80%), ART (from 35% to 56% for adults), LLIN use rates in especially endemic counties (increasing to 74% of children), and high levels of TB treatment completion and cure rates. In addition, coverage of HIV counselling and testing, HIV-TB interventions, and ACT treatment for malaria were all very high. In 2015 the reported number of malaria cases confirmed by lab test surpassed the suspected malaria cases for the first time due to increased testing for malaria.

Data sources and analysis

- **Surveys:** household surveys are an important data source to assess the prevalence and coverage of interventions against infectious diseases. The KDHS 2008/09 and 2014 provide detailed immunization data by vaccine and region, as well as by socioeconomic and demographic characteristics; on childhood illness treatment patterns, and include malaria and HIV modules. No survey with HIV testing was conducted since KAIS 2012. The results of the first TB prevalence survey 2016 were not yet available. The Malaria Indicator Surveys 2010 and 2015 measure the burden of malaria and assess the coverage of interventions.
- **Facility data:** the DHIS includes data by county from 2102/13 on immunizations and selected HIV and malaria interventions, as well as outpatient and inpatient morbidity and mortality. The NASCOP HIV dashboard provided additional data. The TB data are derived from the electronic reporting system, which has individual records from 2012. For some counties the denominators based on population projections appeared to be problematic. An adjustment procedure was applied to make adjustment of numerators (for incomplete reporting) and denominators (for maternal and child health interventions).¹

¹ The full adjustment procedure is described in a separate document. See Annex A for summary.

Indicator	Baseline (Data source)	Achievement (Data source)	Target 2016	Progress	Comments
% of children who are fully immunized	84 (2013/14)	79 (DHIS 2015/16)	90		90% is end target; declining trend in most counties
% of target population that received MDA	50 (2013)		95		Denominator data not available; on average 500,000 children received MDA annually
% School age children dewormed	49 (School based deworming program)	71(School based deworming program)	85		Possible over-reporting because deworming done at schools; does not include school age children who do not attend school
% of children with diarrhoea who received ORS	39 (KDHS 2008)	54 (KDHS 2014)	10		No data after 2014; but target needs revision; fever and pneumonia treatment also positive trend
Prevalence of diarrhoea in child-ren <5 years (%)	16.6 (KDHS 2008-2009)	15.2 (KDHS, 2014)	-		Very small reduction in diarrhoea prevalence
TB completion/cure rate (%)	88/83 (2012)	90 /85 (2014)	90/88		2018 targets for cure 90%
% of targeted under 1's provided with LLITN's	82 (revised, 2012/2013)	57 (DHIS2, 2015/2016)	85 (KHSSP 2014-2018)	-	Under-reporting because category for children under 1 was initially omitted from the reporting tool
% of children <5 years who slept under an LLIN	53 (KDHS 2014)	56 (KMIS 2015)	85		74% coverage in endemic areas
% of targeted pregnant provided with LLIN	80 (DHIS 2, 2012/2013)	88 (DHIS 2, 2015/2016)	70		Great progress; target surpassed.
% of pregnant women who slept under an LLIN	50 (KDHS 2014)	58 (KMIS 2015)	70		78% coverage in endemic areas
% of HIV positive pregnant women who received ARVs to prevent the risk of mother to child HIV transmission	67 (NAS COP & DHIS, 2012/13)	80 (NAS COP & DHIS, 2015/2016)	90		Progress to 80, but target not achieved
% of HIV positive individuals who received live-saving antiretroviral treatment	35% and 44% (2013, NAS COP & DHIS, adults & children)	Adults: 56%, Children: 62%			Denominator is all persons living with HIV for all years.

Red: Limited or no progress; Orange: Some progress but not enough to achieve target, Green: good progress, target achieved or on course to achieve target

1.1. Introduction

The first strategic objective of KHSSP 2014-2018 focuses on accelerating the reduction of the burden of communicable diseases. There are several specific plans in place to address the burden of communicable diseases including:

- *Immunization*: multi-year plan for immunization 2011-2015, Division of Vaccines and Immunization, Ministry of Health.
- *HIV/AIDS*: Kenya AIDS Strategic Framework 2014/15-2018/19 (Ministry of Health).
- *Malaria*: National Malaria Strategy 2009-2018 with a separate monitoring and evaluation plan (National Malaria Control Programme, Ministry of Health).
- *Tuberculosis, leprosy and Lung health*: National Strategic Plan for Tuberculosis, Leprosy and Lung Health 2015-2018 (National TB, Leprosy and Lung Diseases programme, Ministry of Health, (2014).
- *Neglected tropical diseases*: Second Kenya National Strategic Plan for Control of the Neglected Tropical Diseases (NTDs) 2016-2020 (Ministry of Health, 2016).

The KHSSP proposed 9 indicators for this strategic objective, including indicators for immunization, TB, HIV (2), malaria (2), diarrhoea, and neglected tropical diseases (2). This section analyses these indicators, makes adjustments and provides additional information where needed.

1.2. Epidemiological context

Communicable diseases are among the leading causes of death and disability in Kenya. For instance, according to the Kenya burden of disease study 2013, in terms of DALYs, HIV/AIDS, lower respiratory infections, diarrheal diseases and tuberculosis are the four leading causes and malaria is in 8th place.²

Table 2: HIV prevalence, by county, derived from NASCOP/DHIS and KNBS data, 2015.

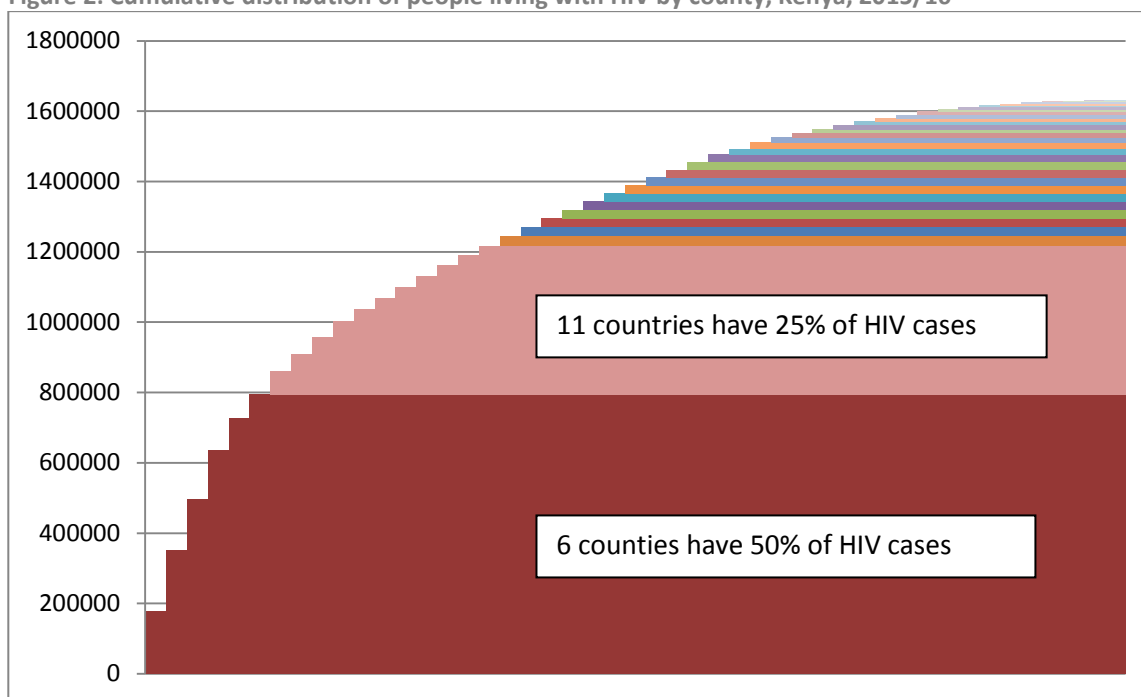
Below 2%		2.0-3.9%		4.0-7.8%		8% or higher	
Wajir	0.2	Elgeyo Marakwet	2.3	Isiolo	4.0	Migori	15.1
Tana River	0.7	Meru	2.4	Kericho	4.0	Kisumu	20.2
Mandera	1.0	Bungoma	2.6	Vihiga	4.1	Siaya	22.9
Garissa	1.2	West Pokot	2.6	Uasin Gishu	4.1	Homa Bay	26.0
Marsabit	1.6	Kilifi	2.7	Kajiado	4.1		
Lamu	1.8	Baringo	2.8	Makueni	4.2		
		Embu	2.9	Trans Nzoia	4.3		
		Kirinyaga	2.9	Murang'a	4.4		
		Kitui	3.2	Samburu	4.7		
		Tharaka	3.3	Narok	4.8		
		Turkana	3.3	Nakuru	4.9		
		Laikipia	3.3	Bomet	5.6		
		Nyandarua	3.5	Nairobi	5.9		
		Kwale	3.6	Kisii	6.0		
		Kiambu	3.6	Nyamira	6.5		
		Taita Taveta	3.6	Busia	6.8		
		Nyeri	3.7	Mombasa	7.5		
		Kakamega	3.8				
		Machakos	3.9				
		Nandi	3.9				

² Ministry of Health. Kenya National Strategy for the Prevention and Control NCDs 2015-2020. Nairobi. 2015. Ministry of Health. Kenya Mental Health Strategy 2015-2030. Nairobi. 2015.

HIV/AIDS remains one of the key public health problems in Kenya. Based on the national survey with HIV testing in 2012 and data for women attending antenatal clinics, it appears that HIV prevalence rate in Kenya is not falling and has remained around 6% since 2010. This is in part expected because more and more HIV patients are now receiving ART and are living longer than their expected time of HIV-related death without antiretroviral treatment. Based on the KNBS population projections and the estimated HIV prevalence rates by May 2016, Kenya had 1.59 million people living with HIV, including almost 127,000 children under age 15. National HIV incidence, a better measure of the course of the epidemic, is not measured directly but estimated at about 100,000 new infections every year and does not appear to be declining.

The distribution of HIV is uneven. HIV prevalence rate among adult females was about 1.6 times higher than the rate among adult males (6.9% and 4.2% respectively in KAIS 2012). NASCOP/ DHIS data on HIV testing in antenatal clinic results were used to estimate adult HIV prevalence by county, and this showed the very high prevalence in the four counties around Lake Victoria and much smaller variation in all other counties (Table 1). This has major epidemiological implications. There were 6 counties which account for half of all people living with HIV in Kenya: Nairobi (172,000), Homa Bay (169,000), Kisumu, Siaya, Migori and Nakuru. Another 11 counties accounted for 25% of HIV cases. The remaining 30 counties have one quarter of Kenya’s 1.59 million people living with HIV (Figure 2).

Figure 2: Cumulative distribution of people living with HIV by county, Kenya, 2015/16



The TB case notification rate resumed its declining path in 2015 and reached a low of 187 per 100,000 population, which still corresponds with about 85,000 tuberculosis cases. Based on these data WHO estimates suggest that TB prevalence and incidence are declining, albeit slowly (Figure 3). The results of the 2016 TB prevalence survey were not yet available at the time of the preparation of this report.

TB is unevenly distributed, with the TB notification rates highest in the cities (Nairobi, Mombasa and Kisumu) and in several counties mostly located in Central Kenya (Figure 4). Low notification rates were observed in the Coastal and several Western/Rift Valley counties.

Figure 3: TB notification rate per 100,000 population, 2010-2015, Kenya

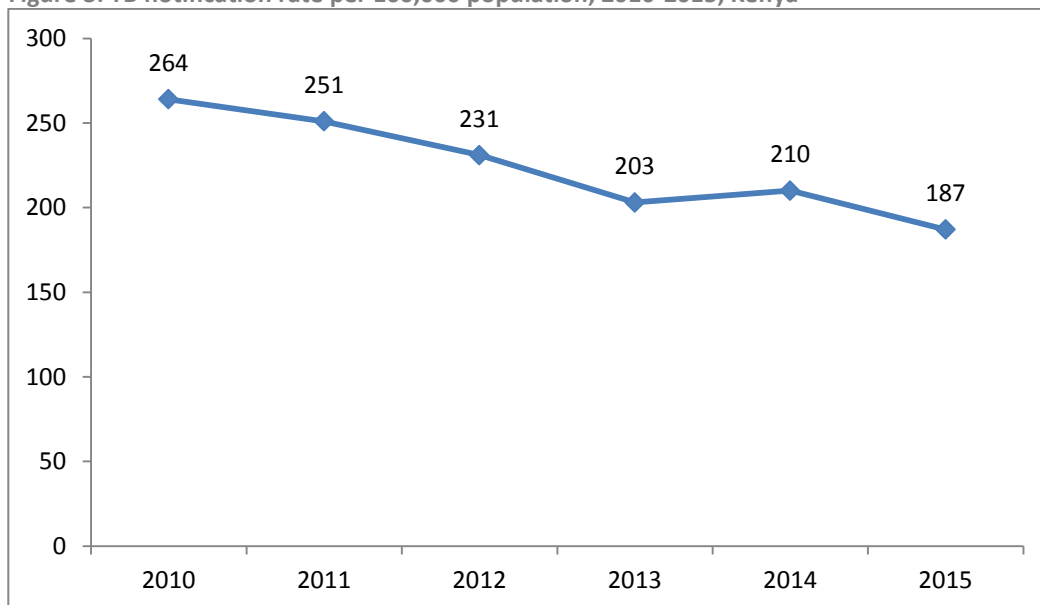
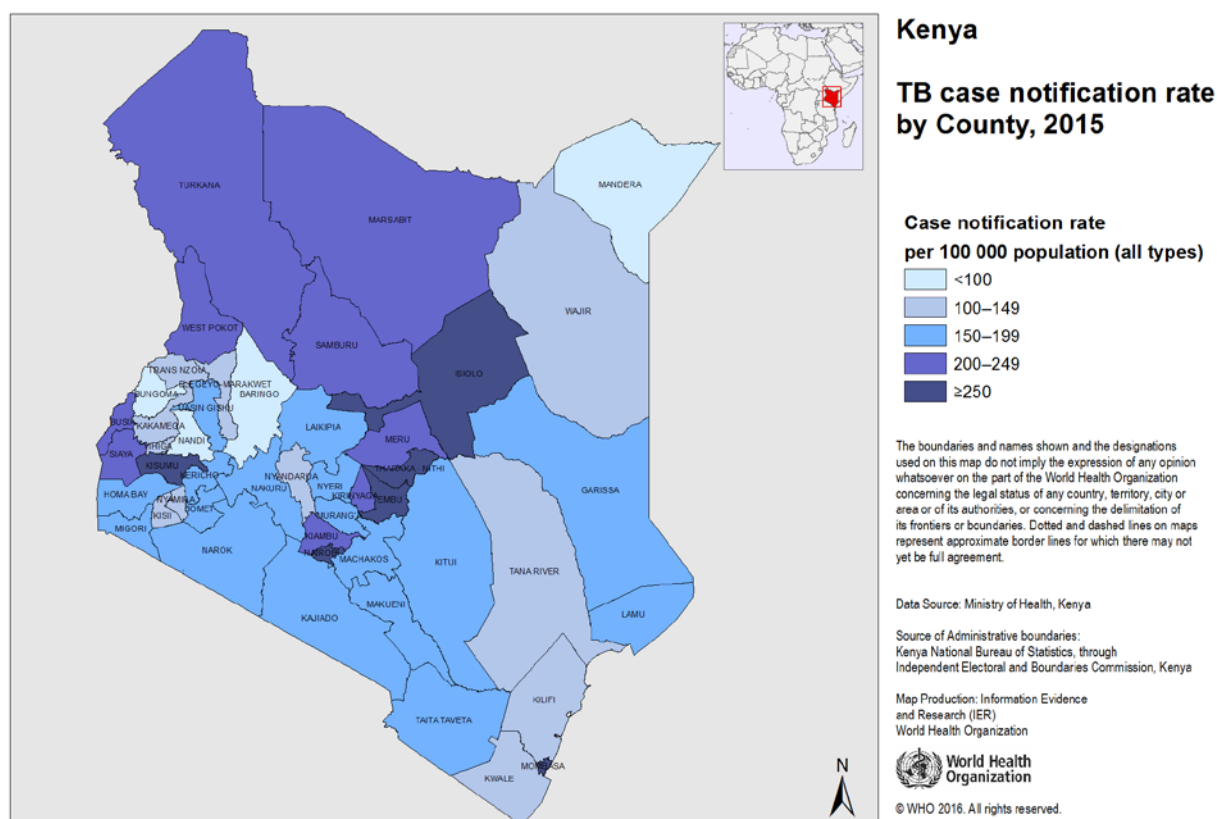


Figure 4: TB case notification rates by county, 2015

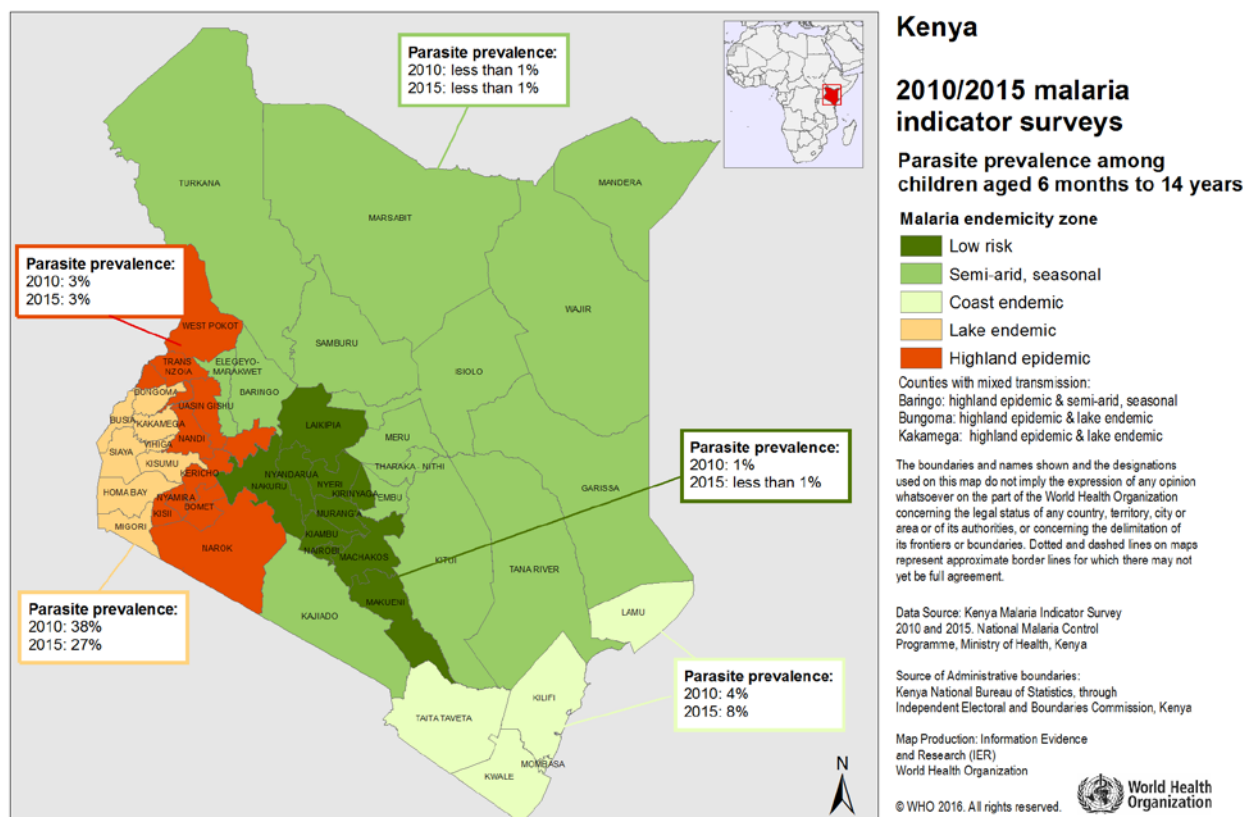


HIV remained a key driver of TB infection in Kenya. However, modelled estimates by WHO suggest that the proportion of TB patients who are infected with HIV is steadily declining. The proportion reduced by about one percentage point annually from 41% in 2010 to 33% in 2015.

Malaria remains a major public health problem in the endemic areas around Lake Victoria and in the coastal counties. There is however progress in the battle against malaria. National prevalence of malaria in children under 5 years declined from 11% to 8% between 2010 and 2015, largely driven by a decline from 37% to 28% in the Lake endemic zone (Figure 5). Malaria accounted for 18% of all outpatient diagnoses in 2015/16, down from 31% in

2012/2013, 26% in 2013/2014, and 20% in 2014/2015. An important contributor to the decline however may be the greater use of laboratory confirmation (see below).

Figure 5: Malaria endemic zones with malaria parasite prevalence rates among children 6 months – 14 years in 2010 and 2015, malaria indicator surveys, Kenya



The KHSSP 2014-2018 section on health investment outputs includes two indicators on malaria. The malaria inpatient case fatality rate target of 8% in 2016 was not achieved. Even though the number of inpatient deaths was more than halved in 2015/16 compared to the preceding 3 years, inpatient case fatality rates remained at 11% as admissions also declined by half (Figure 6).³ There is notable seasonal variation in inpatient malaria case fatality rate with peaks in the period December – February.

The second indicator is the proportion of people with fevers who test positive for malaria. No data were available on the total numbers tested. Importantly however in 2015 the number of confirmed cases exceeded the number of suspected cases in children under 5 for the first time in Kenya’s history, showing the rapid increase of testing, and as a consequence reduced total number of people diagnosed with malaria (Figure 7).

Infectious diseases are the leading diagnoses in OPD. Figure 8 shows the changes over time in the relative share of leading diseases in OPD visits among children under 5 years. Malaria is the most common diagnosis (suspected or confirmed) but has declined dramatically in the last few years. Diarrhoeal diseases account for about 10% of visits, while pneumonia is about 4%. Intestinal worms declined from 2.8% to 2.2% during 2012-2015.

³ There was a possible over-reporting, by more than an excess of 250,000 admissions, of number of malaria admissions in May 2015. Consequently, admission figures for malaria for May 2015 were imputed by getting the average of the three preceding months.

Figure 6: Malaria inpatient number of deaths and case fatality ratio, all ages, DHIS

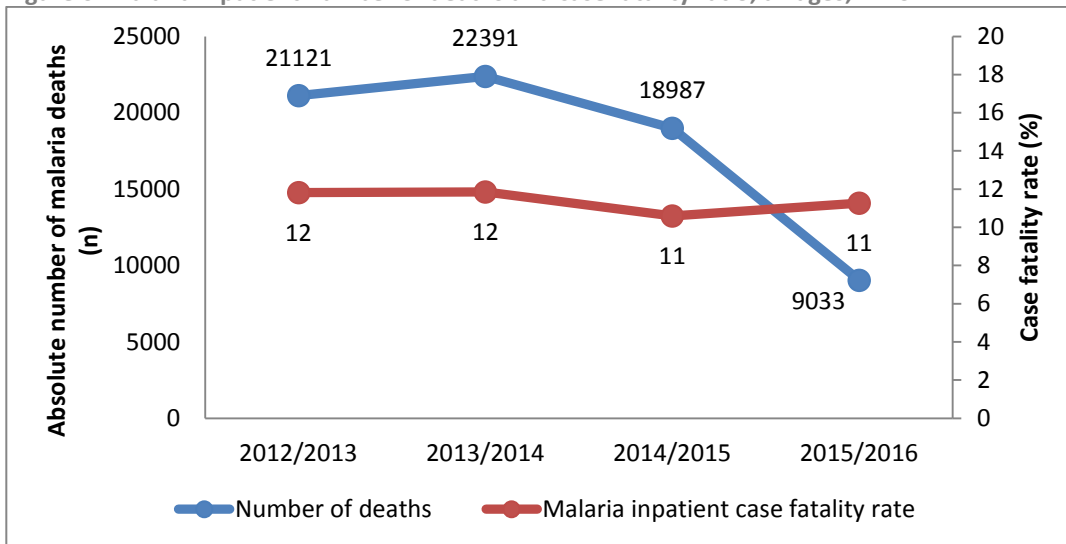


Figure 7: Number of suspected and confirmed malaria diagnoses in OPD among children under 5 years, DHIS, Kenya

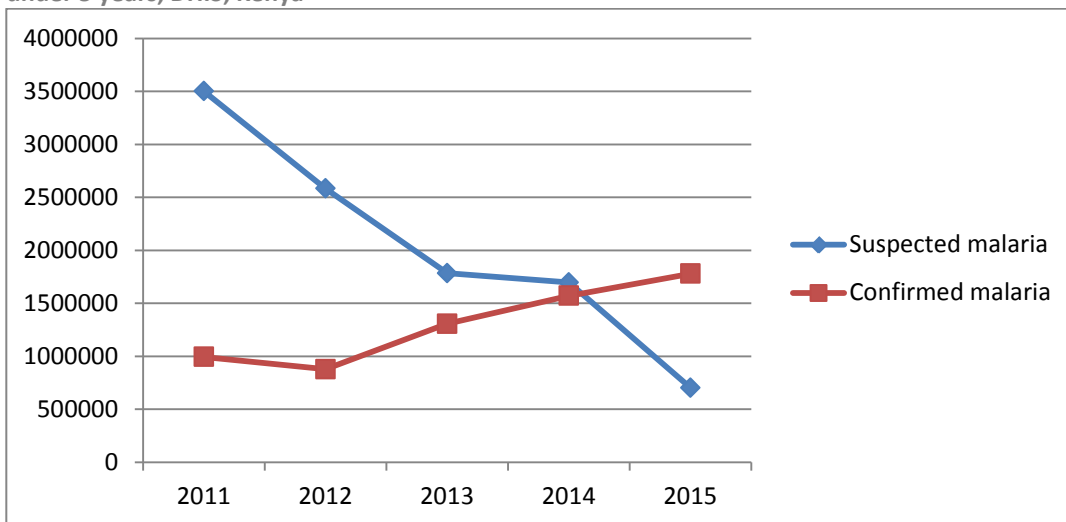
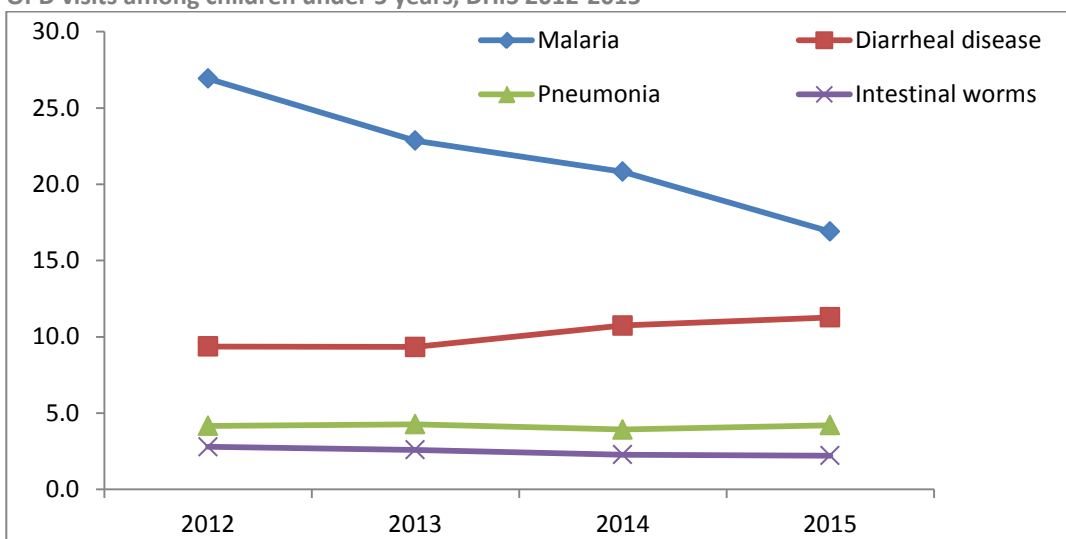


Figure 8: Leading diagnoses of childhood illnesses as a percent of total OPD visits among children under 5 years, DHIS 2012-2015

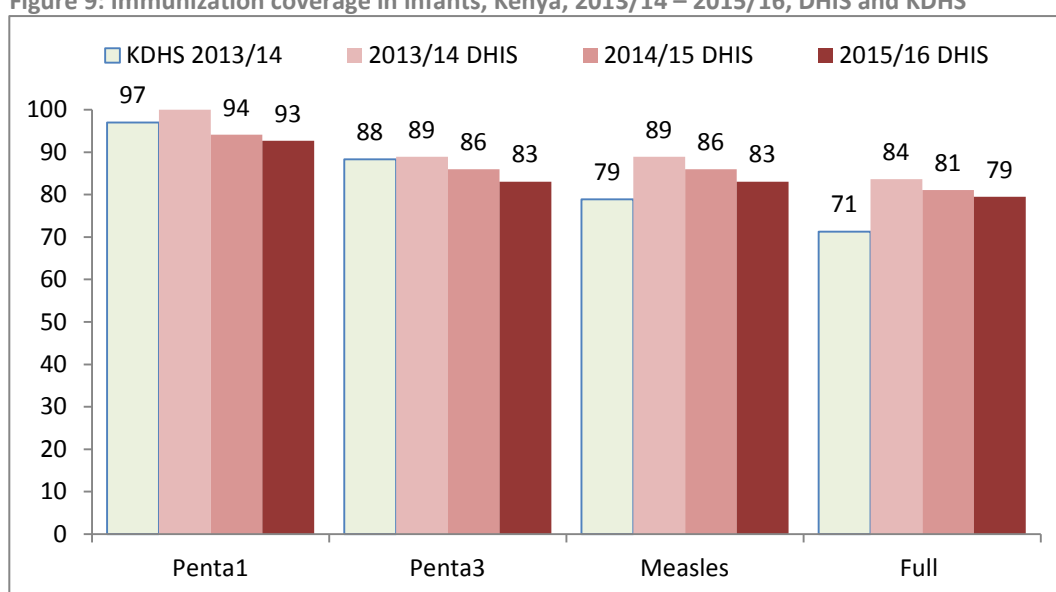


1.3. Immunization coverage

The KDHS 2014 provides data for children in the year prior to 2014. Health facility reports are the basis for the trend assessment 2012/13 – 2015/16.⁴ Immunization coverage among infants declined during the KHSSP (Figure 9). Both penta3 and measles immunization coverage declined from 89% in 2013/14 to 83% in 2015/16. Full immunization coverage – defined as an infant receiving all recommended vaccinations – was 79% in 2015/16. This was higher than the KDHS 2014 results for infants during 2013/14 (71%), but lower than reported DHIS data in 2013/14 (84%).

According to the KDHS 2014 the most important inequalities were by wealth quintile and education. Infants in the poorest quintile had full coverage of 66% while other quintiles had coverage of 80% or higher. There was also a small urban rural difference (83% and 77% full coverage respectively).

Figure 9: Immunization coverage in infants, Kenya, 2013/14 – 2015/16, DHIS and KDHS



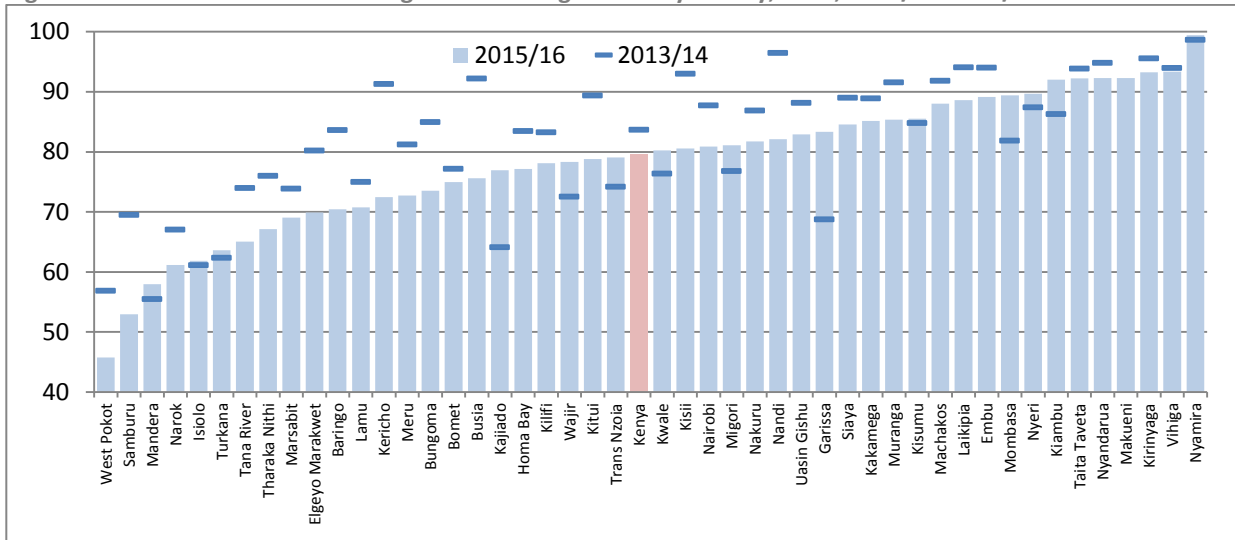
The differences by county were large (Figure 10). In 2015/16, 7 counties had full immunization coverage rates above 90%.⁵ At the other end, there were 10 counties with full coverage below 70% including three counties where coverage was below 60%. In 34 of the 47 counties the full immunization coverage level in 2015/16 was lower than in 2013/14.

In 2015, there were 89 measles cases reported to WHO, down from 351 in 2014 and 190 in 2013. These numbers are considerably lower than 2011 (2395 cases). In 2014, 50 of the 351 cases were lab confirmed and four deaths occurred. Underreporting of measles cases and deaths, which is done through the integrated disease and response reporting system, is likely.

⁴ Reporting rates are very good and went up from 89.4% in 2012/13 to 94.9% in 2015/16. By 2016 only one county had a reporting rate below 80%. DHIS reports on immunization for 2012/13 were higher than expected on the basis of the KDHS 2014 results and vaccination reports in the subsequent years and are therefore not included in this trend analysis.

⁵ This is the new global targets proposed by GAVI: “percentage of countries reaching and sustaining 90% national coverage and 80% in every district with all vaccines included in the national programme.”

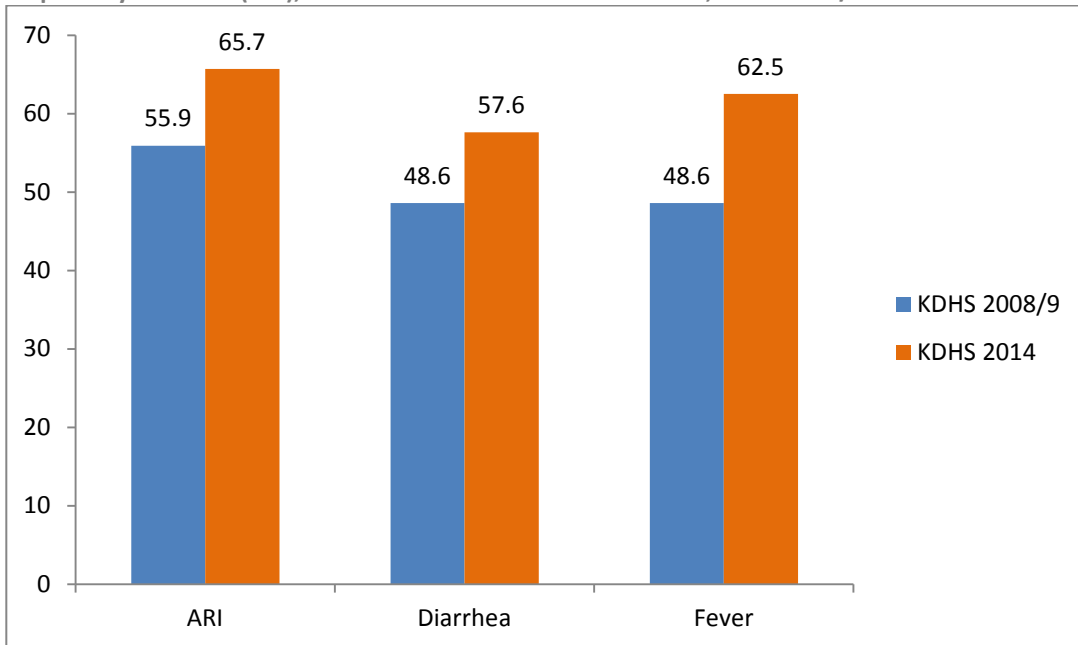
Figure 10: Full immunization coverage rates among infants by county, DHIS, 2013/14-2015/16



1.4. Treatment of sick children

The surveys provide information on health seeking behaviour when the mother perceives certain symptoms in her child. In the KDHS 2014, 8.5% of respondents said their child had symptoms of ARI, 15% had diarrhea and 24% had fever in the last 2 weeks. In about 6 out of 10 cases the child was taken to a health provider, which was an increase since the previous KDHS (Figure 11). Among children with diarrhea, 54% received ORS packets in 2014, up from 39% in 2008/09.

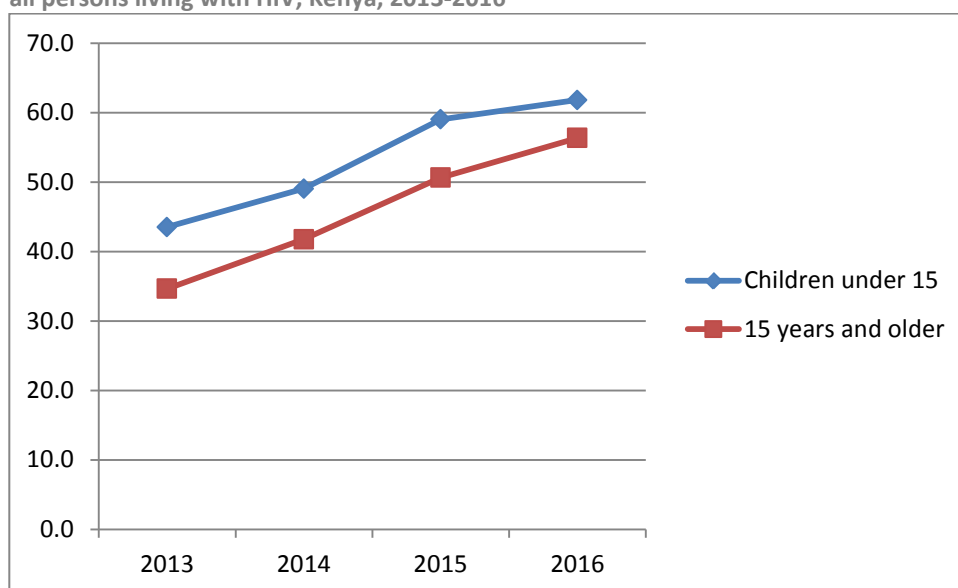
Figure 11: Treatment seeking behaviour among children under 5 with symptoms of acute respiratory infection (ARI), diarrhea or fever in the last 2 weeks, KDHS 2008/09 and 2014



1.5. HIV intervention coverage

The aim in the KHSSP is to increase ART coverage among persons living with HIV by at least 1.4 times the 2013/14 baseline.⁶ There are an estimated 1.59 million persons living with HIV mid-2016, including 127,000 children under age 15. Among adults (15 years and over) the number of people on treatment increased from 574,000 mid-2013 to 822,000 by mid-2016, corresponding with an increase in use among all persons living with HIV from 42% mid-2013 to 56% in mid-2016⁷ (Figure 12). The percent of children under 15 years on ART also increased from 49% to 62%. By May 2016, 75,000 children under 15 years were on treatment, out of an estimated 127,000 children living with HIV. Retention on ART at 12 months during the review period was high but remained relatively unchanged: 73% in 2011, 75% in 2012 and in 2013, and 74% in 2014. Cumulatively, it is estimated that use of ART helped to avert over 100,000 deaths during 2010 -2015.

Figure 12: Percent of children (<15) and adults (15+ years) on ART among all persons living with HIV, Kenya, 2013-2016

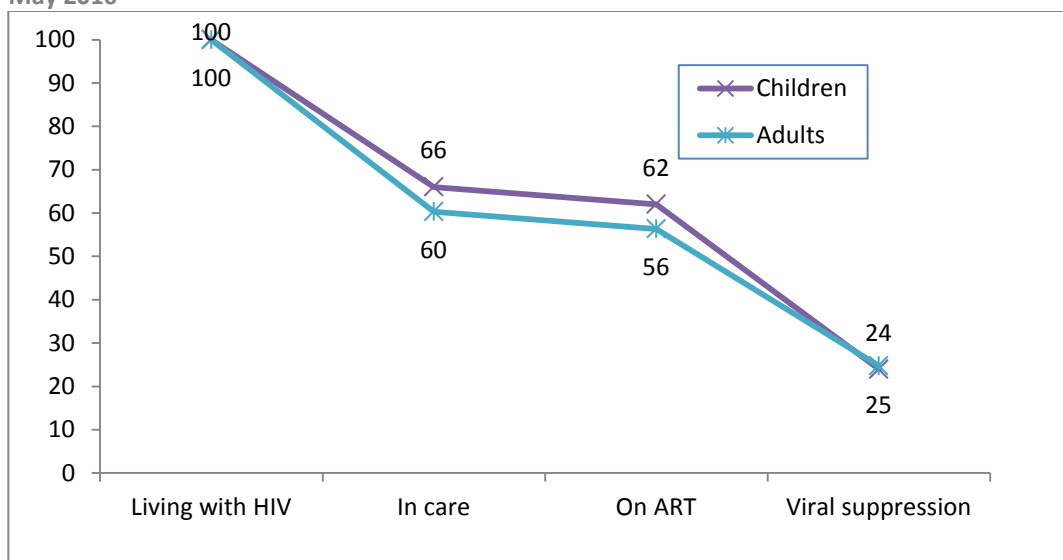


The 90-90-90 cascade provides further insight into the coverage and quality of services. Figure 13 shows the estimate proportion of people in care, on treatment and with viral suppression among people living with HIV. Both adults and children are still quite far from the 90-90-90 targets. The biggest drop is between the estimated number of people living with HIV and those in care, most likely because people do not know they are HIV infected. NASCOP produces regular data on the cascade by county.

⁶ The KHSSP target is to increase ART coverage from 64% in 2013/2014 to 90% in 2015/2016. Based on the current data the baseline however is not correct. Therefore, progress is assessed against the relative increase with a target of 40% increase (based on the 90% / 64% previous targets).

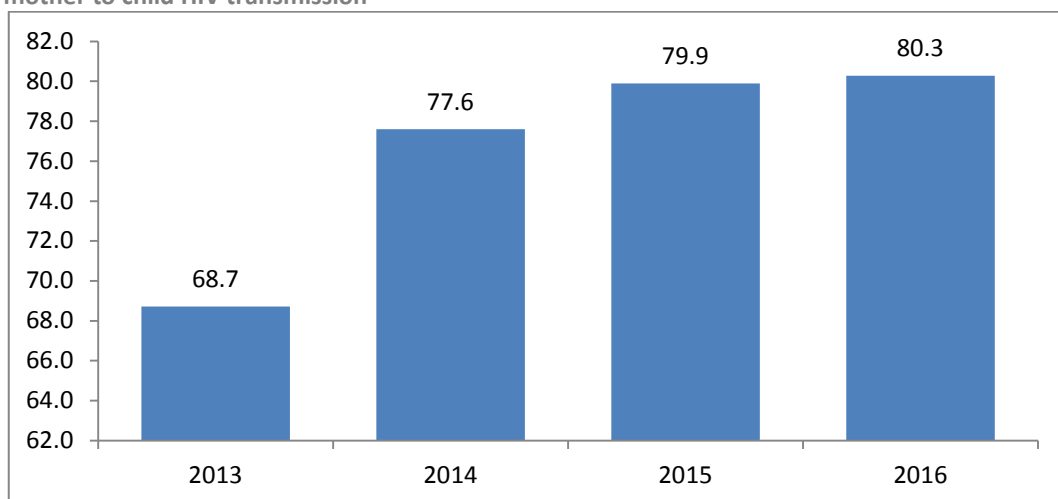
⁷ The coverage computations are based on the KNBS projections and HIV prevalence rates provided by NASCOP, kept constant since 2013. The need for ART is calculated based on the 90-90-90 which assumes that by 2019 the country should have identified 90% of the persons estimated to be living with HIV. Identification means tested, identified to be HIV positive and effectively linked to care and treatment.

Figure 13: Proportion of people in HIV care, on ART and with viral suppression among all people living with HIV, adults (15+) and children (>15 years), computed from NASCOP data, May 2016



Transmission of HIV from mother to child is the most common route of HIV infection in children. The aim in the KHSSP is to increase the proportion of HIV infected pregnant women who receive ART to reduce the risk of mother-to-child transmission of HIV (PMTCT coverage) from 69% in 2012/2013 to 80% in 2015/2016, with limited increase during KHSSP. The target of 90% was not achieved in spite of considerable progress in the past few years (Figure 14).⁸ Overall, 26 counties have PMTCT coverage over 80%, and 6 counties have coverage over 90%. Among the six counties with the largest number of HIV cases, coverage is over 95% except Nairobi (86%).

Figure 14: Percent of HIV pregnant women who received ARVs for reducing the risk of mother to child HIV transmission



Voluntary HIV counselling and testing numbers doubled during 2012/13 and 2015/16 from 6 to over 12 million tests. The increase was gradual. In terms of coverage this means that the number of tests per 100 population (excluding pregnant women and ANC testing and excluding those who already know they are HIV positive) increased from 25 in 2012/13 to 35 in 2013/14 to 38 in 2014/15 and 53 in 2015/16. In four counties – Homa Bay, Kisumu, Migori and Siaya – more than 100 tests per 100 persons were done in 2015/16.

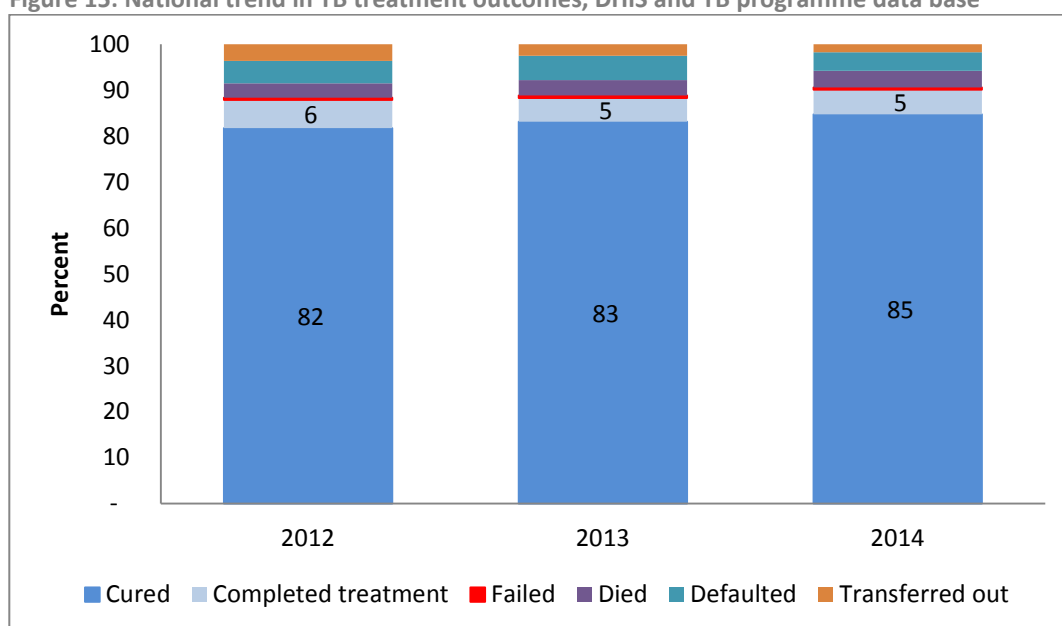
⁸ The PMTCT denominators were obtained from the revised numbers of deliveries, based on the first dose of pentavalent vaccination and antenatal care attendance. The HIV prevalence among pregnant women was obtained from NASCOP and DHIS data.

1.6. TB intervention coverage

There are currently no data on TB case detection rates⁹. WHO estimates suggest that TB case detection rate in Kenya during 2010-2014 was high but stagnant at around 80%. This also means that about 20% of the TB cases in Kenya were not detected each year during 2010-2014. The TB treatment success rate¹⁰ was 90%, up from 88% in 2012 and 2013, and the 90% target was achieved. The TB treatment success rates were high in all counties (at least 83%).

TB cure rate is the only indicator of TB treatment success included in the KHSSP, aiming to increase TB cure rate from 83% in 2013 to 88% in 2016. The trend during 2012-2014 suggests that TB cure rate in Kenya was high and slowly increasing but remained below than the mid-term target (Figure 15).

Figure 15: National trend in TB treatment outcomes, DHIS and TB programme data base



Several specific TB-HIV interventions had very high national coverage rates. Nearly all TB patients seen at the health facilities were tested for HIV during the review period: 96% in 2014 and 97% in 2015. In 2015, nearly all HIV positive TB patients received co-trimoxazole prophylaxis (99%) and life-long antiretroviral treatment (96%).

The number of patients in Kenya with resistance to anti TB drugs is low but increased in 2015: there were 266 cases in 2013, 269 in 2014 and 368 in 2015. The increase was possibly due to a recent change in policy that included patients that are resistant to rifampicin. In 2015, Garissa county had the biggest number of TB drug resistant cases (69), followed by Nairobi (62).

⁹ TB case detection rate refers to the proportion of estimated new smear-positive cases which are detected by the TB control program. It provides an indication of how effective national TB programmes are in finding people with tuberculosis and diagnosing the disease. A low case detection rate may be indicative of poor health care coverage or limitations in capacity if health facilities to detect TB.

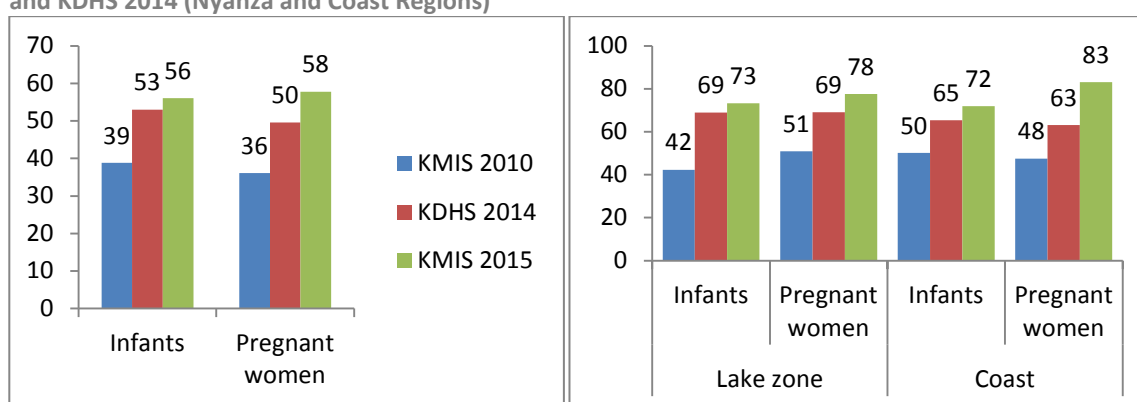
¹⁰ TB treatment success rate refers to "the percentage of new smear-positive TB cases registered under directly observed TB treatment strategy (DOTS) in a given year that successfully completed treatment, whether with bacteriologic evidence of success ("cured") or without ("treatment completed")".

1.7. Malaria interventions¹¹

Long-lasting insecticidal nets (LLIN) have been the main strategy for vector control during the review period. Ownership of ITNs, defined as the percentage of households with at least one LLIN, increased from 54% in the 2010 KMIS survey to 59% in KDHS 2014 and 63% in the KMIS 2015. The highest ownership levels were observed in the highly endemic zones (87% in the Lake endemic areas and 73% in the Coast endemic areas).

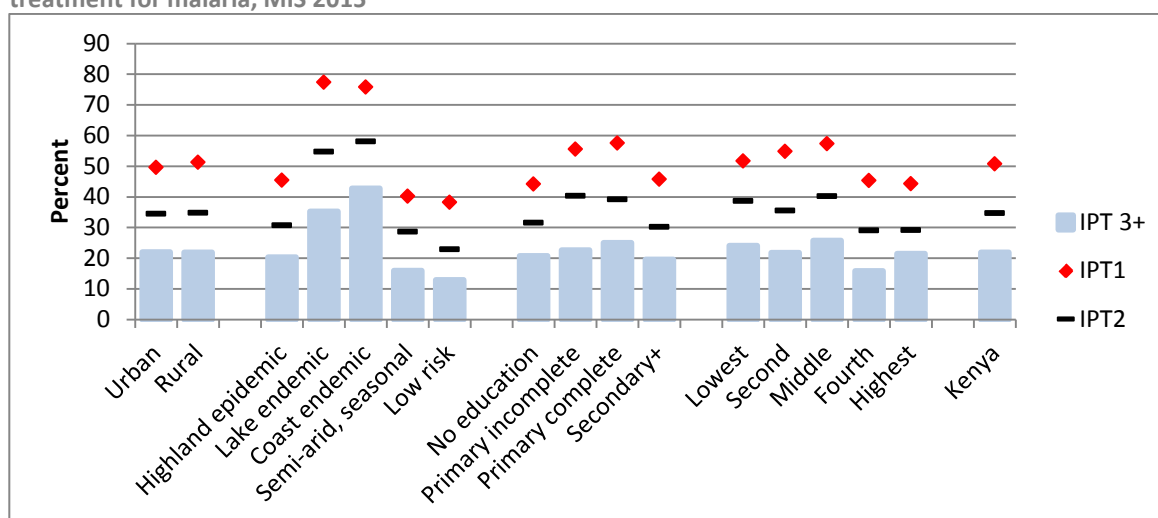
Use of LLIN among children under 5 and pregnant women continued to increase after 2010 and during 2014-2015 (Figure 16). In 2015, 58% of pregnant women and 56% of children under 5 years slept under a LLIN the night before. Both indicators, however, fell short of the respective 70% and 85% target for the midterm. LLIN use was higher in the two endemic areas, Lake and Coast, where more than 70% of children under 5 and about 80% of pregnant women slept under LLIN.

Figure 16: LLIN use; children under 5 and pregnant women who slept under a LLIN the night before the survey, national and endemic zones, KMIS 2010 and KMIS 2015 (Lake and Coast areas) and KDHS 2014 (Nyanza and Coast Regions)



Coverage of intermittent preventive therapy for pregnant women (IPT) was low (Figure 17). The current guidelines recommend that all pregnant women in malaria endemic zones (coastal areas and areas around Lake Victoria) receive at least three doses of IPT (IPT3). Coverage of IPT3 was very low in Kenya (10% in the KDHS 2014 and 22% in the KMIS 2015) and in the endemic zones around Lake Victoria (35%) and coastal zone (43%) (Figure 16).

Figure 17: Percentage of pregnant women who received intermittent preventive treatment for malaria, MIS 2015



¹¹ The geographic patterns of malaria occurrence implies that interventions for malaria vary by levels of transmission. See Kenya Malaria Indicator Survey report 2015.

Artemisinin-based combination therapy (ACT) is the recommended first-line treatment of uncomplicated malaria. Kenya has done very well in this regard, with almost all malaria positive cases (99%) receiving ACT in 2015, according to the MIS 2015.

1.8. Neglected tropical diseases intervention coverage

The “neglected tropical disease program” in Kenya focuses on 14 neglected tropical diseases; three fewer than the number on the global list (Table 3). Some of the neglected tropical diseases were common while others, partly due to limitations in capacity to diagnose them, were quite rare. For instance in 2015/2016, 37,018 cases of schistosomiasis and 14,516 cases of jiggers infestations were reported compared to 281 for Leishmaniasis, 473 for trypanosomiasis, and none for dracunculiasis. There were 309 reported cases of dengue fever in 2014/2015. Reported number of new leprosy cases was generally on the decline. About 200 new leprosy cases were reported each year during 2006-2009. The number dropped to 154 in 2010 and remained below 150 since then although with peaking for some of the years: 122 in 2011, 146 in 2012, 114 in 201, 142 in 2014, and 131 in 2015.

Two indicators were included in the KHSSP 2014-18 to assess performance of efforts towards addressing the burden of neglected tropical diseases, namely: percent of the target population receiving mass drug administration (MDA) for schistosomiasis, and the percent of school-age-children dewormed. The aim in the KHSSP is to increase the percentage of the target population receiving MDA for schistosomiasis from 50% in 2013 to 95% in 2016, and increase the percentage of school age children dewormed from 49% in 2013 to 85% in 2016.

Table 3: List of neglected tropical diseases that the MoH in Kenya focuses on

1. Dengue	10. Foodborne trematodiasis
2. Rabies	11. Lymphatic filariasis
3. Trachoma	12. Onchocerciasis
4. Leprosy	13. Schistosomiasis
5. Trypanosomiasis	14. Soil transmitted helminthiasis
6. Leishmaniasis	15. <i>Buruli ulcer</i> **
7. Taeniasis/Neurocysticercosis	16. <i>Chaga disease</i> **
8. Dracunculiasis (guinea worm)	17. <i>Yaws</i> **
9. Echnococcosis	

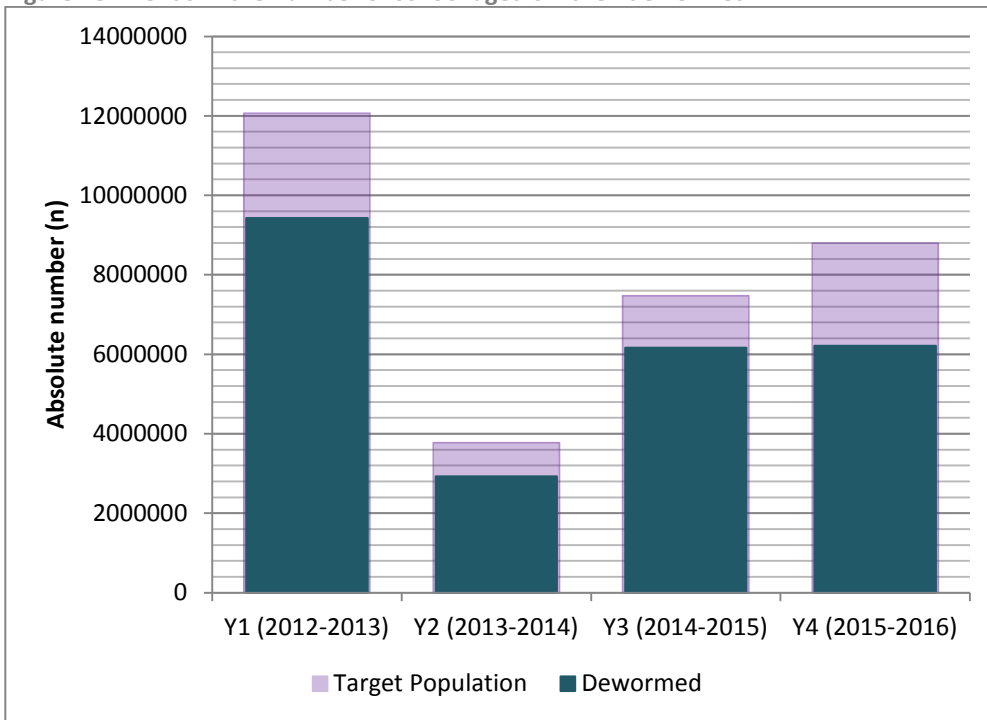
****On global list, but not included in Kenya’s list**

Source: MOH NTD programme

However, denominator data for MDA (the population targeted to receive drug for schistosomiasis) was not available at the time of the review. Because MDA was done in schools, numerator data, i.e. the number that received MDA, was available for school-going children but not for adults and school-age children. The number of school-going children that received MDA was small and sharply undulating. The number increased dramatically from 191,318 in 2012/2013 to 549,734 in 2013/2014. It then dropped sharply to 79,038 in 2014/2015 before increasing sharply again to 459,734 in 2015/2016.

The target for deworming among school-going children was not achieved but a substantial number of the children took deworming tablets: 9,429,880 (78% of target) in 2012/2013, 2,928,963 (78% of target) in 2013/2014, 6,167,847 (83% of target) in 2014/2015 and 6,215,532 (71% of target) in 2015/2016 (Figure 18).

Figure 18: Trends in the number of school aged children dewormed



KHSSP Strategic Objective 2: prevention and control of noncommunicable diseases

Main findings

- Performance of the indicators of overweight/obesity, prevalence and treatment of raised blood pressure and diabetes, tobacco use and harmful use of alcohol (especially men), and cervical cancer screening indicate that greater efforts are required to curb the rapid rise of NCDs and their risk factors. The rapid rise of NCDs is driven by a demographic and epidemiological transition.
- The data from the STEPS 2015 show that the prevalence of overweight and obesity have increased dramatically during the last decade, reaching epidemic proportions especially among women with 38% overweight or obese and 1 in 7 women obese. The increase was observed in all counties, but overweight and obesity varied more than five times between counties, ranging from less than 15% in northern counties to over 45% in most central region counties and cities.
- Raised blood pressure ($\geq 140/90$ mm Hg) affected almost a quarter of adults (23%). Only one-sixth had been diagnosed, and effective treatment coverage, defined as people with raised blood pressure in the population and who have been identified and put on treatment and whose blood pressure has been controlled, was just 4%. For higher blood pressure ($\geq 160/100$ mm Hg) the situation was only marginally better. Counties in central region and, to a lesser extent, eastern region had much higher prevalence of raised blood pressure than elsewhere in Kenya.
- Diabetes prevalence was 1.9% among persons 15-69 years but only 41% had been diagnosed and effective treatment, defined as people with diabetes in the population and who have been identified and put on anti-diabetes treatment and whose diabetes has been controlled, was only 7%.
- Cervical cancer screening rates were low throughout Kenya with only one in 7 women 25-49 years (ever) screened. There were almost no data on cancer incidence and mortality.
- There were no reliable data on the prevalence and treatment coverage for mental health disorders.

Indicator	Baseline (Data source)	Achievement (Data source)	Target 2016	Progress	Comments
% of adults with BMI $>25\text{kg/m}^2$	33, KDHS 2014, women 15-49	37, women 15-69; 18 men 15-69: (STEPS 2015)	NA		Baseline revised, according to new data; evidence of dramatic increase since 2008
Adults with raised blood pressure		23, both sexes, 15-69;	NA		Replaces previous OPD indicator
% of women aged 25-49 years who were screened for cervical cancer	14, KDHS 2014	13 (STEPS 2015)	60		The target was based on a baseline of 50% which turned out to be incorrect.
% of new OPD visits due to mental health	<1 (2013, DHIS)	1 (DHIS 2015/2016)	2		The challenge of this indicator is that many patients are not properly diagnosed in outpatient clinics, which undermines the value of this indicator

Red: Limited or no progress; Orange: Some progress but not enough to achieve target, Green: good progress, target achieved or on course to achieve target

Data sources and analysis

- **Surveys:** the STEPS 2015 provides data for several risk factor indicators. STEPS included 4,500 adults between the ages 18-69 years. All counties were surveyed, but sample sizes are small. The indicators by county therefore have large confidence intervals. In addition, the KDHS 2014 provided data on women's anthropometry (15-49 years).
- **Facility data:** data for the three indicators is problematic because of poor diagnostic practices and reporting (mental health conditions), incomplete and inaccurate reporting (raised blood pressure, is replaced by data from STEPS 2015), and cancer morbidity (poor reporting, no cancer registries).

2.1 Introduction

The second strategic objective of KHSSP 2014-18 focuses on efforts to prevent a rise in the burden of noncommunicable diseases (NCDs). The prioritized interventions in the Kenya Essential Package for Health include improved NCD screening in health facilities and communities; workplace safety, health and hygiene; and food safety. Mental health is included as one of the priority conditions. It is noted that the 5th strategic objective (minimize exposure to major health risk factors) also includes a number of key multisectoral interventions against NCDs, such as tobacco and harmful alcohol use. The launch of the first Kenya National Strategy for the Prevention and Control of NCDs 2015-2020 and the Kenya Mental Health Strategy 2015-2030 are further evidence of greater emphasis on NCDs.¹² The findings of the health facility census (SARAM 2013) showed the poor readiness of health facilities to provide NCD services, which was lower than for almost all other services.¹³

Five indicators are selected in the KHSSP 2014-18, including two population-based indicators and three health-facility based indicators. The 2013/14 baselines needed adjustments for several indicators, as data only became available after the initial targets had been set. In addition, a few indicators such as hypertension prevalence and treatment coverage only became available in 2015, but were added to this report because of their great significance for NCD control, replacing the hypertension indicator (i.e. % of new outpatient cases with high blood pressure) based on health facility data. For other indicators – outpatient morbidity for mental conditions and for cancers – good data were not available at the time of the review.

2.2 Epidemiological situation

There is limited information on the situation and trends in mortality and morbidity due to NCDs. Among OPD visits for persons 5 years and older only arthritis and hypertension are in the top 10 diagnoses, with both increasing in relative importance over time. Among inpatient admissions for persons 5 years and older, cardiovascular conditions, digestive disorders and diabetes all appeared in the top 10. The same three conditions were among the top 10 causes of death in hospitals. Details can be found elsewhere in this report.

In the absence of reliable cause of death information from a death registration system, modeling is used to obtain an idea of the relative importance of NCDs as a cause of death and burden of disease. WHO has estimated that 27% of all deaths are due to NCDs, (including cardiovascular diseases 8%, cancers 7%) and; the probability of dying from the four leading NCDs (cardiovascular conditions, diabetes, cancer and chronic respiratory diseases) between ages 30 and 70 years was estimated at 18%.¹⁴ Numbers of NCD deaths are increasing dramatically, for an important part driven by demographic changes and to a lesser extent by epidemiological changes. The IHME National Burden of

¹² Ministry of Health. Kenya National Strategy for the Prevention and Control NCDs 2015-2020. Nairobi. 2015. Ministry of Health. Kenya Mental Health Strategy 2015-2030. Nairobi. 2015.

¹³ Ministry of Health. Kenya Service Availability and Readiness Mapping (SARA-M). Nairobi 2013.

¹⁴ http://www.who.int/nmh/countries/ken_en.pdf?ua=1

Disease modeling exercise provides similar estimates on trends in causes of death and DALYs.¹⁵ NCDs are increasingly important, particularly because of the decline in mortality due to communicable diseases. In 2013, the top 10 NCDs included cerebrovascular disease, depression, low back pain and neck pain and sense organ disorders.

2.3 Overweight and obesity

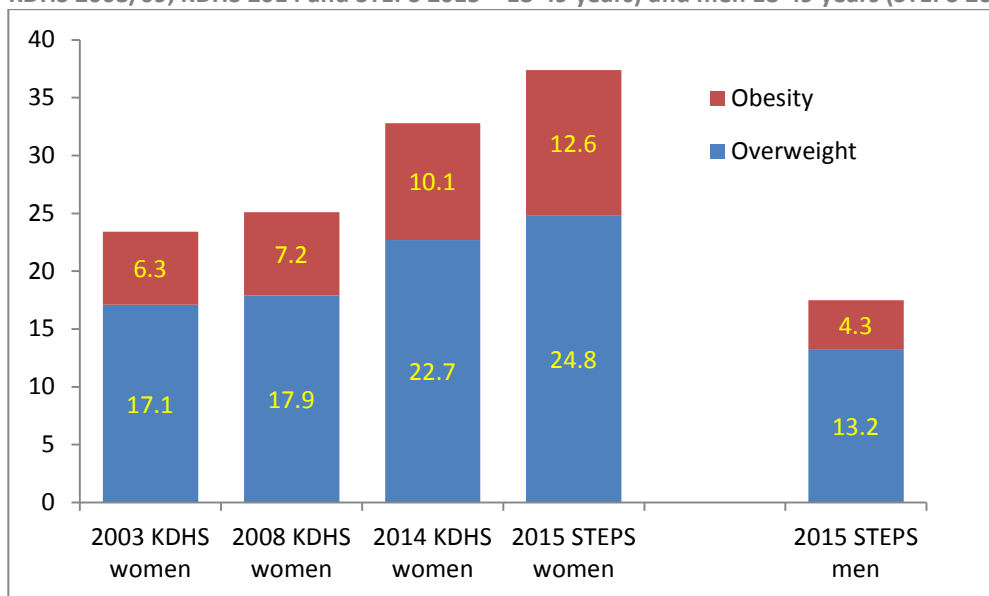
STEPS 2015 shows that the prevalence of overweight (BMI 25.0-29.9 kg/m²) and obesity (BMI ≥ 30) among adults 15-69 years was high, especially among women. It shows that 17.5% of men and 38.4% of women were either overweight (BMI 25-29.9) or obese (BMI 30 or higher), and 13.7% of women and 4.3% of men were obese.¹⁶

The prevalence of overweight or obesity has been increasing dramatically in recent years. Data for women 15-49 years from four national surveys since 2003 show that the prevalence of obesity increased rapidly after 2008, from 7.2% in the KDHS 2008/09 to 10.1% in KDHS 2014 and 12.6% in the STEPS 2015 (Figure 18). The prevalence of overweight also increased considerably.

The KDHS 2014 findings show that huge disparities of overweight and obesity by socioeconomic status. Half of all women in the highest wealth quintile were either overweight or obese compared to only 12% of women in the poorest quintile. Urban-rural differences were also large, with the urban prevalence of overweight or obesity 1.6 times higher than the rural prevalence in the STEPS 2015.

Figure 19 shows the trends in prevalence of overweight or obesity by region. The rapid increase occurred in every region, so it is a nationwide health issue. There were however dramatic differences between regions. Nairobi and Central regions had prevalence rates over 50% in the 2015 STEPS; Coast, Eastern and Nyanza were between 30 and 40%; Rift Valley, Western and particularly North-eastern had prevalence below 30%. The STEPS figures tend to be somewhat higher than the KDHS rates, especially in Nyanza (Figure 20). The differences between the KDHS 2014 and STEPS 2015 rates however were not statistically significant.

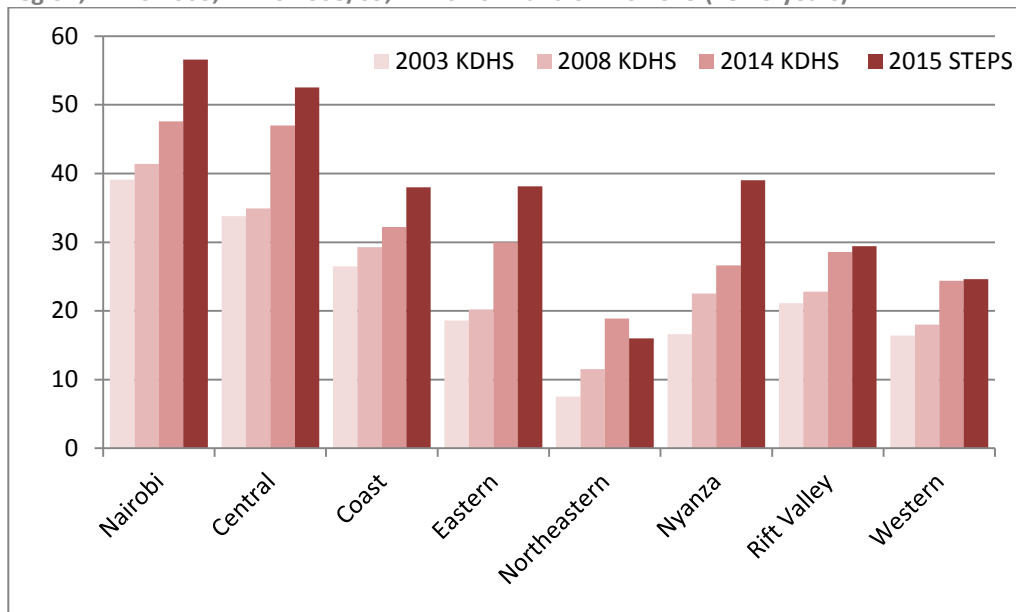
Figure 19: Prevalence of overweight and obesity among women 15-49 years (KDHS 2003, KDHS 2008/09, KDHS 2014 and STEPS 2015 – 18-49 years) and men 18-49 years (STEPS 2015)



¹⁵ Institute for Health Metrics and Evaluation and International Center for Humanitarian Affairs. The Global Burden of Disease: generating evidence, guiding policy in Kenya. Seattle, Washington, USA: 2016.

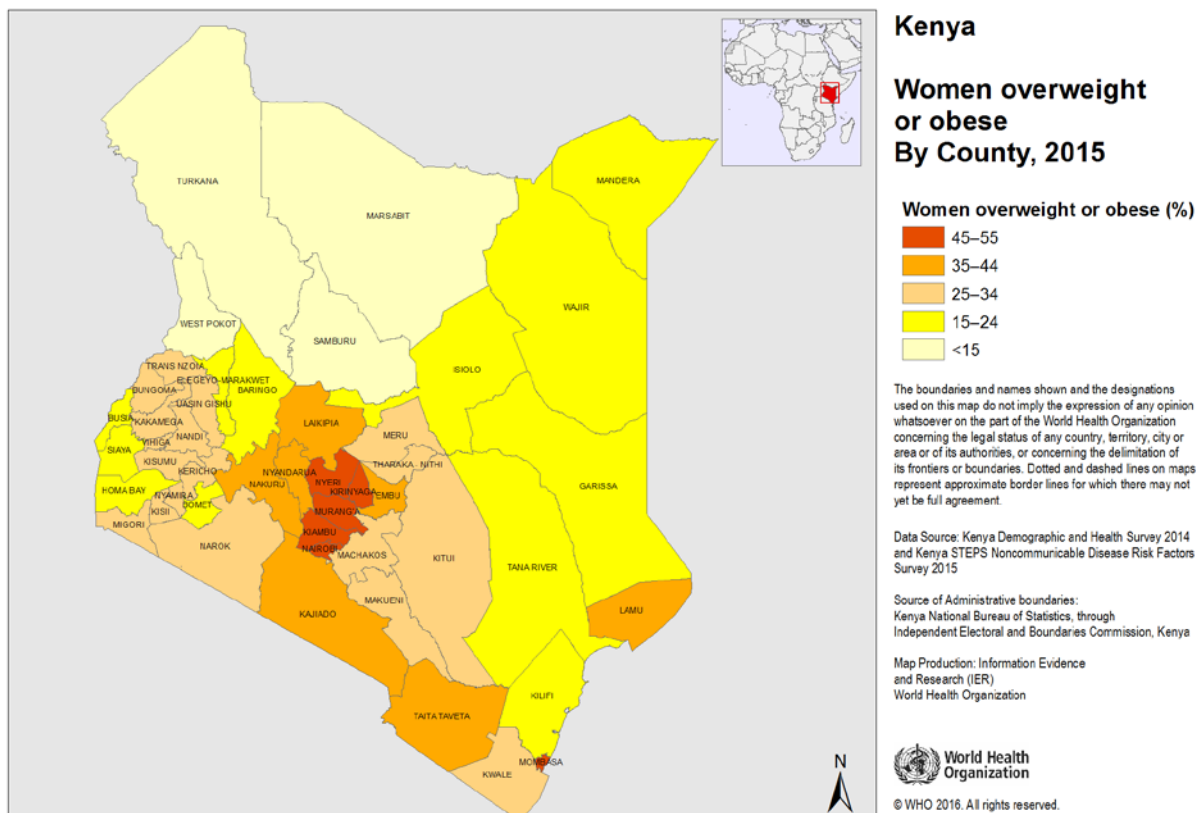
¹⁶ STEPS also collected data on waist circumference. The average waist circumference for men is 78.9 cm and women 79.1 cm. More than a quarter of men (27%) and women (36%) have waist hip ratios above the normal value.

Figure 20: Prevalence of overweight or obesity among women 15-49 years, by region, KDHS 2003, KDHS 2008/09, KDHS 2014 and STEPS 2015 (18-49 years)



County level prevalence rates were available from the 2014 DHS for women and for both sexes from the STEPS 2015. The latter however has small sample size. To obtain more stable estimates of the prevalence of overweight or obesity by county the data from the KDHS 2014 and the STEPS 2015 were combined. (Figure 21). STEPS 2015 also collected data on factors that are associated with weight increase among adults. Only 6.5% of the respondents 15-69 years had insufficient physical activity -defined as less than 150 minutes moderate activity per week- with little difference between men and women. However, 84% of respondents said they always or often added sugar when preparing food or beverages at home.

Figure 21: Percent of women who were overweight or obese, by county, STEPS 2015 and KDHS 2014



2.4 Raised blood pressure

The original KHSSP indicator was the proportion of outpatients diagnosed with raised blood pressure. Data are reported through DHIS and the percentage of recorded new outpatient cases has been steadily increasing over the years with a rise from 1.9% in 2012 to 2.9% in 2016. This indicator however is not a good indicator of population prevalence since many people have hypertension but are not seen at clinics. The STEPS 2015 survey provides for the first time national data on the prevalence of raised blood pressure.

Among adults 18-69 years 22.7% had raised blood pressure (systole >140 mm Hg or diastole >90 mm Hg) or was already on treatment for hypertension. Differences between men and women were small. There were however large differences between counties (not shown because of large sampling errors) and regions. Figure 22 shows that Central region counties had much higher prevalence (37%) than any other region. Eastern region was a distant second with 28%.

Treatment coverage was very low. Among all people with raised blood pressure ($\geq 140/90$, including those already on treatment with normal blood pressure), only 1 in 6 persons said they had been diagnosed in the last year. Only 12% were on treatment, and effective coverage - defined as normal blood pressure in the survey and on treatment among those who need treatment – was only 3.8% (Figure 23). If the analysis is limited to those with very high blood pressure (systole ≥ 160 or diastole ≥ 100), still only just over one third of people had been diagnosed and effective coverage was 19%.

STEPS 2015 also asked about salt intake, a possible risk factor for raised blood pressure. Overall, 23% of respondents said they always or often added salt or salty sauce to their food before eating or as they were eating. Only 4% said they always or often ate processed foods high in salt.

Figure 22: Prevalence of hypertension (measured or on treatment) among adults 18-69 years by region, both sexes, STEPS 2015

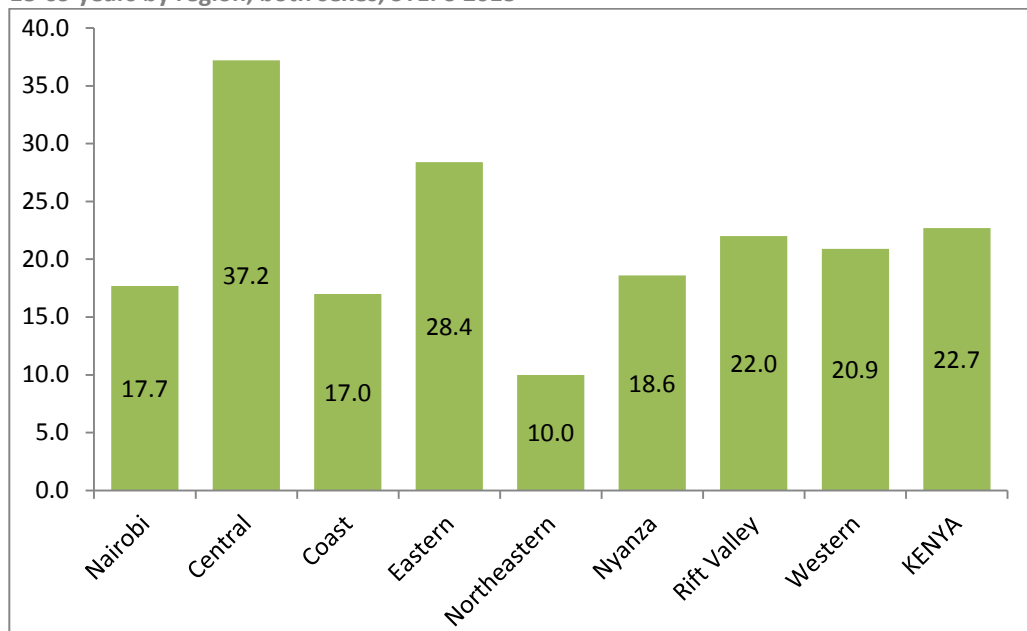
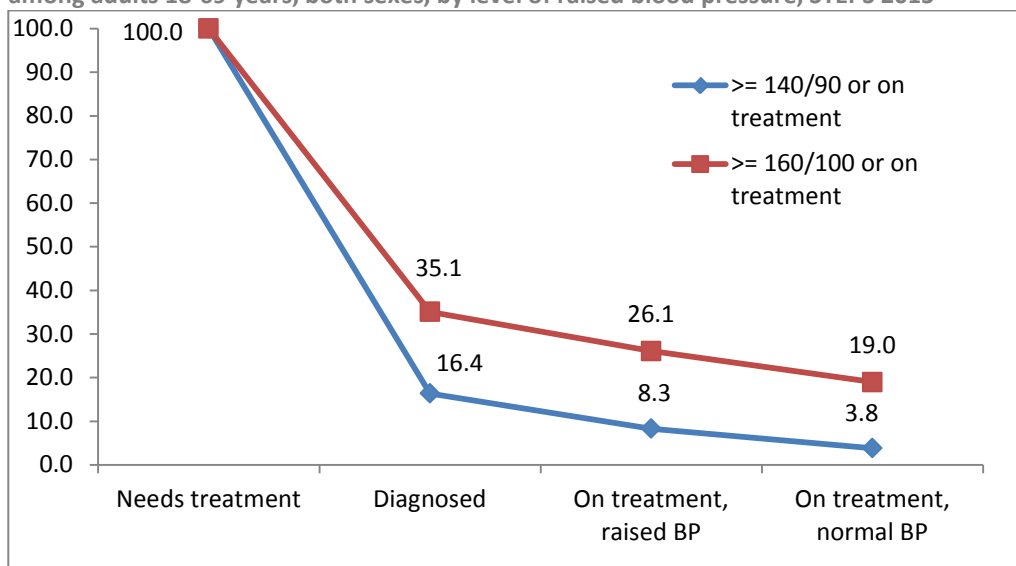


Figure 23: Diagnostic coverage and effective hypertension treatment coverage among adults 18-69 years, both sexes, by level of raised blood pressure, STEPS 2015



2.5 Cancer screening and admissions¹⁷

The recommended screening cycle for the cervical cancer in Kenya is every 5 years for women aged between 25-49 years with the exception for HIV positive women. The midterm target was 60%, but the baseline was assumed to be very high (50%) as well. The recent surveys show that the baseline should have been much lower and the targets for KHSSP need to be revised.

In general, however, coverage of cervical cancer screening among women 25-49 years was very low. In the KDHS 2014, only 18.8% of women 25-49 years had ever had cervical cancer screening. In STEPS 2015, cervical cancer screening coverage rates were similarly low, with 14.2% of women 25-49 years ever screened. Only Nairobi and Central Region had coverage higher than 20%. Among women 30-49 years (the WHO recommended age range for the indicator) the coverage of cervical cancer screening was equally low (17%), ranging from 0% in Wajir and West Pokot to 54% in Mombasa county (with large confidence intervals, as numbers by county in STEPS 2015 were small).

There are very few cancer registries in Kenya and inpatient data are deficient to monitor trends. During the period July 2015-June 2016 only nine facilities reported on inpatient cancer cases. The KHSSP indicator, the percent of patients admitted with cancer, cannot be monitored.

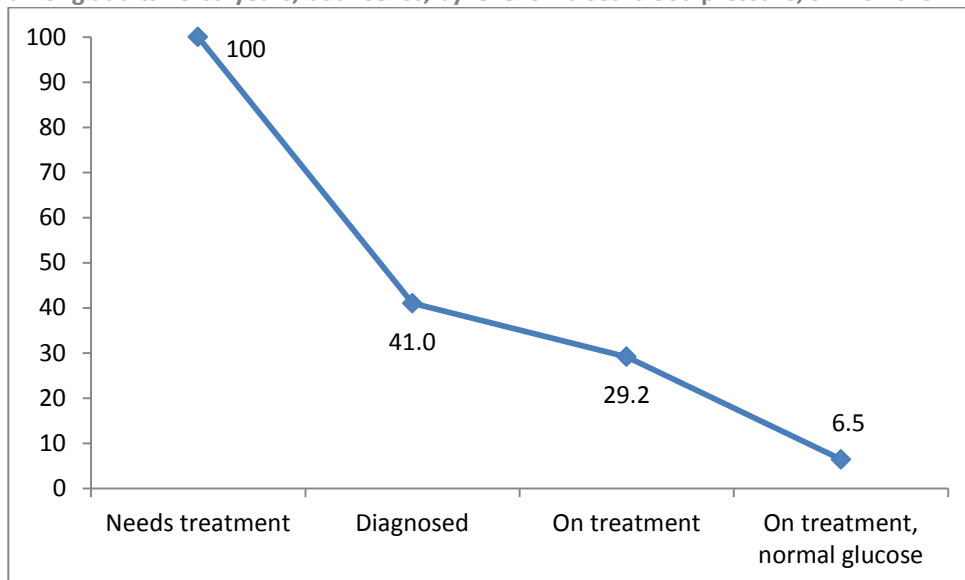
2.6 Other NCD risk factors

Diabetes is one of the priority NCDs in KHSSP 2014-18, but there is currently no specific indicator. Overall, 1.9% of adults 18-69 years tested in the STEPS 2015 had raised fasting blood glucose (≥ 7 mmol/l) or was currently on treatment for diabetes. Women had higher prevalence of diabetes than men (2.3% and 1.5% respectively).

The treatment coverage was low among those with raised blood glucose (including those on treatment now): 41% had been diagnosed, 29% were on diabetes treatment through insulin or oral medication and 6.5% were on treatment and had normal fasting blood glucose in the survey (below 7 mmol/l) (effective coverage) (Figure 24).

¹⁷ KHSSP Strategic Objective 5 includes tobacco use which is one major risk factor for lung cancer.

Figure 24: Diagnostic coverage and effective treatment coverage for diabetes among adults 18-69 years, both sexes, by level of raised blood pressure, STEPS 2015



2.7 Mental disorders

The term ‘mental disorders’ is used to refer to a broad category of problems such as depression, schizophrenia, anxiety disorders, intellectual disabilities and disorders due to drug abuse. The Kenya Mental Health Policy 2015-2030 provides for a framework on interventions for securing mental health systems reforms in Kenya. There is very little information on the prevalence and treatment of mental health, neurological, and substance use in Kenya. The KHSSP 2014-18 included an indicator on the percent of outpatients that are diagnosed with mental health disorders. The challenge of this indicator is that many patients are not properly diagnosed in outpatient clinics, which undermines the value of this indicator.

In the DHIS data less than 1% of the new outpatient cases are diagnosed with mental disorders which is below the target of 3%. The outpatient data did not disaggregate the key different types of mental disorders. In 2015/16 91,049 cases were reported, of which 85% were 5 years and older. There was little change in the total numbers during the last 4 years. The SARA-M 2013 did include mental health related service readiness questions, e.g. on the availability of anti-depression medicines or training of the health worker.

Strategic objective 3: reduce the burden of violence and injuries

Main findings

- In spite of the dramatic increase in the number of vehicles (doubled between 2009 and 2015), the rate of road traffic fatalities, based on civil registration data, hardly increased (from 11.8 to 12.4 per 100,000) between 2013 and 2015. There was decline in fatalities per 10,000 vehicles. The midterm target for new outpatient road traffic injuries is 3% against an achievement of 2.5% for 2015 from a revised baseline of 2.3% for 2013.
- Other injuries, most commonly cuts and falls, accounted for about 1% of all OPD diagnoses with little change over time and similar to the 1% midterm target.
- Less than 1% of new outpatient cases were as a result of gender-based violence during July 2015 – June 2016, significantly lower than the target of 3%. The midterm target had been set at 3%. There is however most likely significant underreporting by health facilities, given the high rates of gender-based violence reported GBV (29% in 2014).
- The reporting rate for this indicator was very low as inpatient data was used. The percentage of facility deaths due to injuries was 5.1% against a target of 6%.

Indicator	Baseline (Data source)	Achievement (Data source)	Target 2016	Progress	Comments
Road traffic fatalities per 100,000 population	7.7/100,000 (2013, NTSA) 11.8/100,000 (2013, Civil registration)	6.9/100,000 (2015, NTSA) 12.4/100,000 (2015, CR)			Replaces KHSSP indicator on mortality in hospitals. More fatalities each year but rates were not going up.
Road traffic injuries in OPD as a % of all diagnoses	2.3	2.5	2		Indicator problematic. Actual numbers of road traffic injuries increased from 940,000 to 1.2M
Other injuries in OPD (% of all diagnoses)	1%	<1%	0.5		Indicator problematic. Actual numbers of other injuries increased from about 227,000 to 332,000.
% of women aged 15-49 years who experienced gender-based violence; last year (%)	24% (KDHS 2008/09); 5.5% often	20% (KDHS 2014); 5.0% often			KDHS 2008/09 and 2014 indicate no progress; OPD based indicator is at present problematic

Red: Limited or no progress; Orange: Some progress but not enough to achieve target, Green: good progress, target achieved or on course to achieve target

Data sources and analysis

- Surveys: the KDHS 2008/09, KDHS 2014 and the STEPS 2015 provide data on gender based and sexual violence, as well as unintentional injuries in the KDHS 2014
- Facility data: the OPD diagnoses related to injuries and especially violence are reported but currently of limited value for monitoring trends.
- Administrative data: the National Transport and Safety System Authority (NTSA) track road traffic related fatalities and injuries on a daily basis. The data are considered to be an under-report because they are mostly limited to deaths at the site of the accident, but may be used for trend assessment. The civil registration data have higher numbers as they also include deaths in the health facilities following the road traffic accident.

3.1 Introduction

The 3rd strategic objective of KHSSP 2014-2018 is focused on reducing the burden of violence and injuries. The Kenya Essential Package for Health includes several interventions aiming to improve the services related to injuries and violence, including pre-hospital care, community management (e.g. responding to gender-based violence or child maltreatment) and disaster response management. The latter includes disaster risk reduction, response planning and management.

Injuries, intentional or non-intentional are an important cause of death and disability. For instance, in the WHO burden of disease estimates injuries accounted for 6.7% of all deaths in 2000 and for 7.6% in 2012. The proportion of deaths due to road traffic injuries increased from 1.4% to 2.4% during 2000-2012 (WHO estimates). Road traffic injuries did not appear in the leading 15 causes of DALYs in the Kenya burden of disease study 2013.¹⁸

The four KHSSP proposed indicators are based on outpatient and inpatient data are specific to gender based violence, road traffic injuries and other injuries. Strategic objective 6 on strengthening cross sectoral collaboration also includes road safety and injury prevention.

3.2 Road traffic injuries

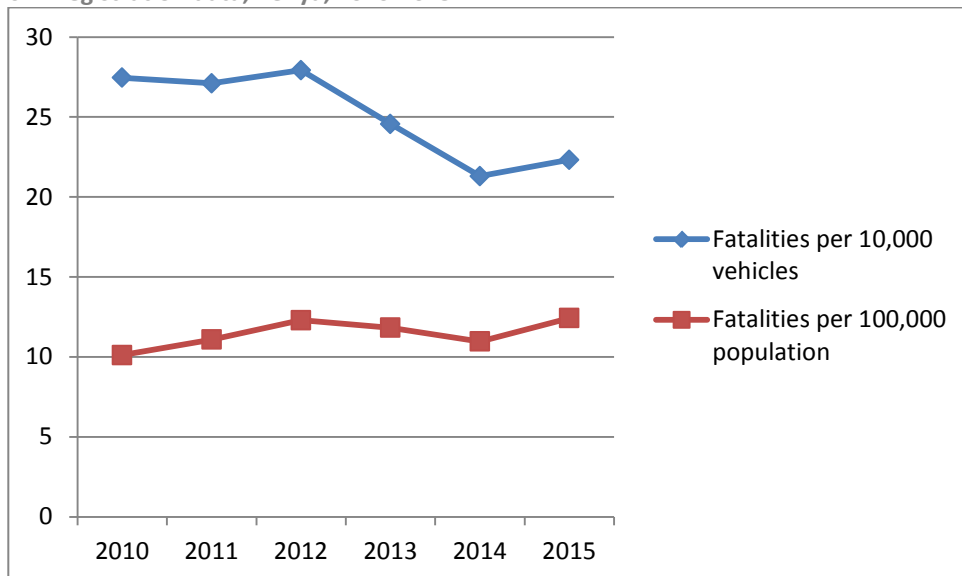
The National Transport and Safety Authority (NTSA) published daily reports of road traffic fatalities and reported about 3000 deaths due to road traffic accidents every year. These data are however incomplete.¹⁹ The civil registration data on cause of death are also incomplete but have higher numbers than those reported by NTSA. This is because they include victims of road traffic accidents who did not die at the site of the accident and were taken to health facilities. The number of road traffic fatalities increased from 3892 in 2010 to 4942 in 2013 and 5488 in 2015.

The number of vehicles is increasing rapidly. Between 2009 and 2015 the number of registered vehicles doubled from 1.2 to nearly 2.5 million. Based on the civil registration data this implies a modest increase in fatalities from 10 to 12 per 100,000 population, and decline in road fatalities by motorization levels (Figure 25). In 2015, there were 3,057 deaths or 12 fatalities per 100,000 population, and 22 fatalities per 10,000 vehicles.

¹⁸ Institute for Health Metrics and Evaluation and International Center for Humanitarian Affairs. The Global Burden of Disease: generating evidence, guiding policy in Kenya. Seattle, Washington, USA: 2016.

¹⁹ The extent of underreporting is not clear, but WHO has estimated almost 13,000 traffic deaths per year for 2012, which would mean that only one-fourth of fatalities are reported by NTSA.

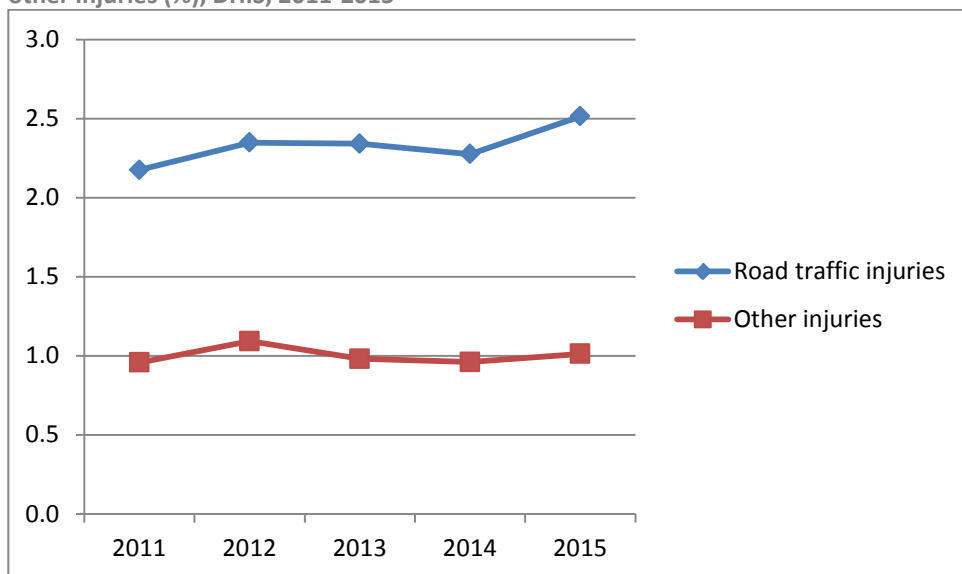
Figure 25: Road traffic fatalities per 10,000 vehicles and per 100,000 population, civil registration data, Kenya, 2010-2015



According to the NTSA data the most common victims were pedestrians (1344 deaths or 44% of all fatalities), followed by vehicle drivers or passengers (33%), motor cycle riders or passengers (22%) and pedal cyclists (2%). In the NTSA records, Nairobi County recorded the highest number of road traffic fatalities at 668, followed by Nakuru County (258). Turkana had the lowest fatalities at 3. There was a mixed picture by county as some had reduced number of fatalities between the two years while others had increased. In terms of fatality rate per 100,000 population Nairobi and Nakuru were the top two, followed by Taita Taveta, Mombasa and Baringo.

The KDHS 2014 reports a surprisingly high proportion of men and women 15-49 years who were involved in a road traffic accident in the past 12 months: 8.8% of men and 3.2% of women. This would further suggest that the NTSA data are underreporting the number of road traffic injuries. Health facility data are not reliable in capturing road traffic injuries and fatalities, as many cases may not reach the health services. In 2015, 2.5% of outpatients visits were associated with road traffic injuries, slightly up from 2.3% in 2013 (Figure 26). Health facility data are not reliable in capturing road traffic injuries and fatalities, as many cases may not reach the health services.

Figure 26: Percent of OPD visits associated with road traffic injuries and other injuries (%), DHIS, 2011-2015



3.3 Other injuries

The most common other injuries are burns and poisoning. Combined other injuries other than road traffic injuries account for 1.0% of all OPD visits, with little change over time (Figure 2). In terms of hospital admissions injuries were associated with about 4% of all admissions among children under 5 years, and with 6-8% among those aged 5 years and older. This includes road traffic injuries.

In the KDHS 2014 16.5% of women and 24.2% of men 15-49 said they had an unintentional injuries (excluding road traffic injuries) in the last 12 months. The most common injury was cuts (60% and 66% of all unintentional injuries for women and men respectively), followed by falls (40% and 32% respectively).

3.4 Gender-based violence

Gender-based violence (GBV) is defined as violence that is directed against a woman because she is a woman or that affects women disproportionately.²⁰ It includes acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion and other deprivations of liberty. Sexual violence is any sexual act, attempt to obtain a sexual act, or other act directed against a person's sexuality using coercion. Gender-based violence is very difficult to measure, as women often do not report such incidents in surveys, do not visit health facilities if GBV happens, are not recognized or recorded by the health as GBV, and because the definition of GBV is very broad and subject to individual variation.

The KHSSP 2014-18 proposed an indicator: percent of new outpatient cases that were diagnosed as a result of GBV. In 2015/16 only 6 per 100,000 diagnoses were coded as GBV, but the meaning of this figure is unclear given all the biases. The number of sexual violence cases among persons 5 years and older has remained at about 22,000 diagnoses per year during 2012/13-2015/16. For under-fives, 5149 cases were reported in 2015/16, lower than 7725 in 2013/14.

Nakuru County had the highest number of sexual violence cases reported (313) followed by Nairobi (193). Eleven counties did not report on this indicator. According to the DHIS where a rape survivors tool was implemented from May 2016 40% of rape survivors were adolescent girls aged 10-17 years; 39% were 18-49 years, 16% under age 10 and 6% 50 years or older.

The KDHS 2014 also reported on physical and sexual violence experiences. Physical violence is not rare: 20% of women reported to have experienced physical violence in the last 12 months, and 5% said this happened often. This was very similar to the results of the KDHS 2008/09 (24% and 5.5% respectively). For men the corresponding figures were lower: 11% and 1.4% respectively.

Overall, 7.8% and 2.3% of women and men 15-49 years respectively reported to have been involved in a sexual assault incident in the past 12 months. Sexual violence against women was more commonly reported in Western, Nyanza and Nairobi regions. The person committing the sexual violence against the women was the current husband or partner in 48% of cases, followed by the former husband or partner (25%).

The midterm target had been set at 3% an increase in relation to the less than 1% baseline target in an effort to increase reporting of sexual violence cases and additionally to make the health sector more responsive to address victims of sexual violence.

²⁰ A similar definition can be used for men.

Strategic objective 4: improve person-centred essential health services

Main findings

- Maternal mortality: the hospital maternal mortality declined gradually to 106/100000 deliveries in 2015/16, with 27 of the 47 counties below 100.
- Family planning: Use of modern contraceptives has been increasing rapidly between 2008 and 2014 and current trends appear to continue, based on the couple years of protection estimated from DHIS. There were however large differences between counties.
- Antenatal and delivery care: coverage of 4 ANC visits was increasing but slowly and falling short of the target; coverage of deliveries by health facilities is continuing to increase and reached 72% in 2015/16. The increase occurred in 43 of 47 counties and the increase was largest in low coverage counties, suggesting positive effect of the free maternal health services.
- Stillbirth rates and low birthweight rates remained at the same levels during the last 3 years in health facilities.
- The recent trend data on maternal mortality, stillbirth rates and Caesarean section rates suggests that the facilities were able to cope with the increasing numbers of deliveries without comprising the quality of care.

Indicator	Baseline	Achievement	Target 2016	Progress	Comments
Number of maternal deaths in health facilities per 100,000 deliveries	118 (DHIS 2013/14), revised	106 (DHIS 2015/16)	100		Good progress but pace not enough to meet target. On average about 1,100 maternal deaths each year during the review period
% of married women 15-49 years who used modern method of contraception	39 (KDHS 2008/09); CYP 1.26 mln (2013/14)	53 (KDHS 2014); CYP 1.62 mln (2015/16) up by 15%	80		Both sources confirm increase. Target too high
Women of reproductive age receiving FP (%)	45% (DHIS 2, 2013)	60.9 (KDHS 2014)	80		Good progress. But target too high
% of pregnant women who made 4 or more ANC visits	42 (2012/13, DHIS), revised	49 (2015/16, DHIS)	80		2018 target 80%
% of deliveries that took place in health facilities	60 (2012/13, DHIS), revised	72 (2015/16, DHIS)	(69)		Baseline was set too low, revised target
Stillbirth rate per 1,000 births in institutions(fresh)	13 (2013/14, DHIS)	12 (2015/16, DHIS)	10		MTR target based on baseline of 30%, here revised
Low birth weight (%)	5.1 (DHIS, 2013/14)	5.0 (DHIS, 2015/2016)	6		Baseline revised; only for babies born in health facilities
Facility-based under five deaths per 1,000	60 (2013)		20		No data

Red: Limited or no progress; Orange: Some progress but not enough to achieve target, Green: good progress, target achieved or on course to achieve target

Data sources and analysis

- **Surveys:** household surveys are an important data source to assess the coverage of several interventions related to the essential package, such as family planning, antenatal care and delivery care. The KDHS 2008/09 and 2014 provide data on trends by region and nationally, but cannot provide data on the progress during the KHSSP 2014-18.
- **Facility data:** the DHIS includes data by county from 2012/13 on key interventions, as well as outpatient and inpatient morbidity and mortality. For some counties the denominators based on population projections appeared to be problematic. An adjustment procedure was applied to make adjustment of numerators (for incomplete reporting) and denominators (for maternal and child health interventions) (see Annex A).

4.1 Introduction

The 4th strategic objective of KHSSP 2014-2018 includes a large set of personal health interventions that are aiming to improve the access and quality of care of individuals seeking health care. The services range from emergency, maternity, reproductive health, inpatient, clinical laboratory, outpatient, radiology, surgery, rehabilitation to specialized services. The aim is also to ensure a closer and more comprehensive approach to customer care and response.

Many elements of this strategic objective are addressed by the indicators in other objectives. The KHSSP proposed 8 indicators for this strategic objective, mostly indicators that relate to the quality of reproductive, maternal and child health care. One indicator referred to surgical care (surgical rate for cold cases), but there were no data to assess progress. Two key strategic planning documents for reproductive, maternal, newborn and child health (RMNCH) are:

- National Roadmap for the attainment of the MDGs related to maternal and newborn health in Kenya 2010-2015. Division of Reproductive Health. Ministry of Health.
- Kenya reproductive, maternal, newborn, child and adolescent health (RMNCAH) investment framework, published by the Ministry of Health in January 2016. A new plan related to the Global Financing Facility

Data on customer satisfaction and on readiness of services in terms of health workforce, equipment, medicines and commodities, diagnostics etc. are not yet available. The last customer satisfaction survey was conducted in 2009, and last service readiness census in 2012-13. A facility survey is planned for later in 2016, as well as a facility census in 2017.

4.2 Maternal mortality

The population level of maternal mortality in the KDHS 2014 was 362 per 100,000 live births for the period 2007-14, which was lower than 520 for the 7 years preceding the KDHS 2008/09 (although confidence intervals are overlapping). One in 7 deaths (14.1%) among women of reproductive ages were due to pregnancy-related causes. At this point, it is not possible to say whether maternal mortality has declined since 2014.

The DHIS provides more recent information on maternal mortality in health facilities. There was a slight decline from 130 per 100,000 deliveries in 2012/13 to 118 in 2013/14, 103 in 2014/15 and 106 in 2015/16. This is close to the target of 100 per 100,000 deliveries, but still 1105 maternal deaths occurred in health facilities in 2015/16. Maternal mortality ratios in health institutions vary considerably between counties (Figure 27). Levels over 200 per 100,000 deliveries for 2014/15 and 2015/16 were reported by four counties (Turkana, Isiolo, Garissa, and Kisumu). At the other end, Elgeyo Marakwet and Nyamira reported levels below 50. Underreporting of maternal deaths is common and the data should be interpreted with caution. Notable is however that Nairobi, Mombasa and Kisumu cities all have maternal mortality ratios above the national average, presumably related to late referral of complicated cases.

Figure 27: Stem-and-leaf plot of maternal mortality ratios in hospitals, by county, average of 2014/15 and 2015/16, DHIS, Kenya



4.3 Family planning services

The use of modern methods of contraception can be measured through the household surveys and with the DHIS data, using the couple years of protection (CYP) approach. It is an indicator in strategic objective 4 and 5, but presented here.

The KDHS data show a dramatic increase of use of modern contraceptives among currently married women 15-49 years during the 5 years, increasing from 32% in 2003 to 39% in 2008/09 and 53% in 2014. Injectables were by far the leading contraceptive (26% in 2014). Implants were the second most common with 10% use, increasing fivefold between 2008 and 2014. In 2014, the percent of demand satisfied by modern methods, which also takes into account the desire for children and other factors affecting fertility, was 71% among currently married women, up from 64% in 2008/09.

Current modern contraceptive use by married women 15-49 was higher in urban than rural areas, but the difference was small: 57% and 51% respectively. Women in the poorest wealth quintile however had much lower contraceptive use (29%) than all other quintiles where use ranged from 54-60%. Figure 28 shows the differences in coverage between counties, based on the KDHS 2014. CYP is the estimated protection provided by contraceptive methods during a one-year period, based upon the volume of all contraceptives sold or distributed free of charge to clients during that period.²¹ Figure 29 shows the upward trend in CYP, suggesting that further increases in population use of modern contraceptives are occurring. The increase in CYP between 2013/14 and 2015/16 was 15%. This suggests that now over 75% of the demand for family planning is met.

²¹ <https://www.usaid.gov/what-we-do/global-health/family-planning/couple-years-protection-cyp>. The facility data by method are converted into CYP as follows: 1 CYP is 4 injections, 1 IUD insertion, 1 implant, 3.5 provisions of oral contraceptives and 1 sterilization.

Figure 28: Use of modern contraceptives by currently married women 15-49 years, KDHS 2014

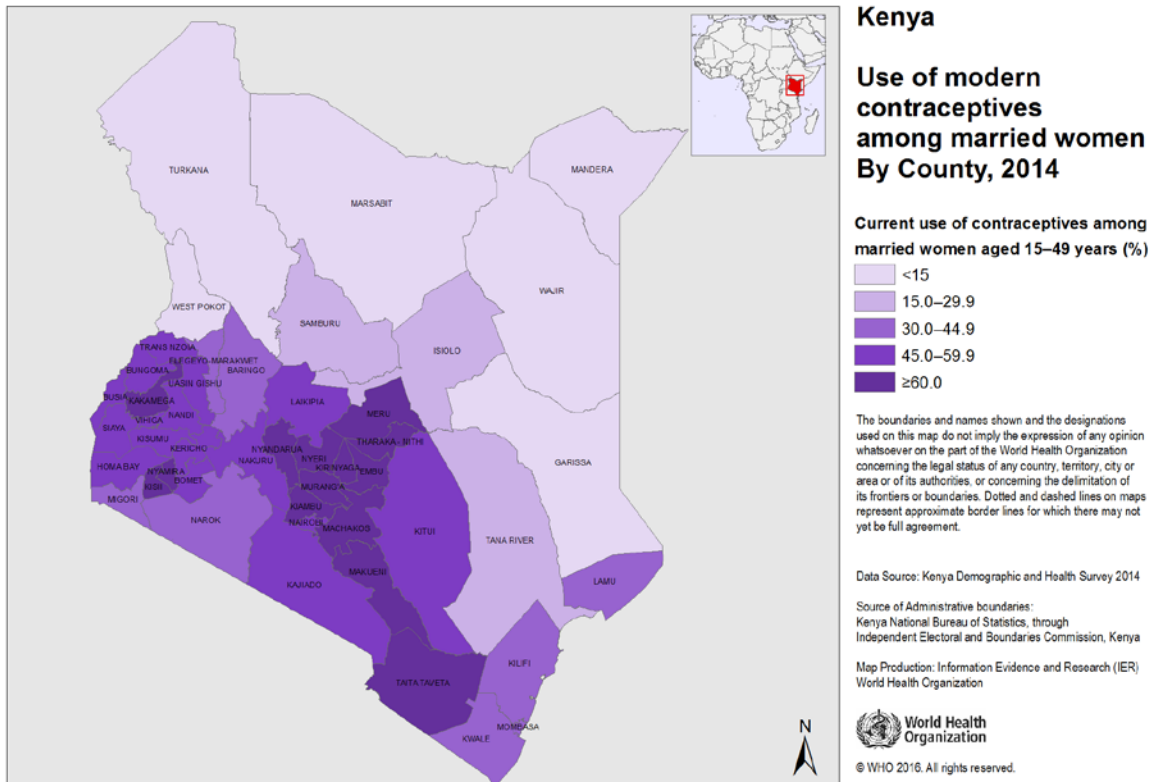
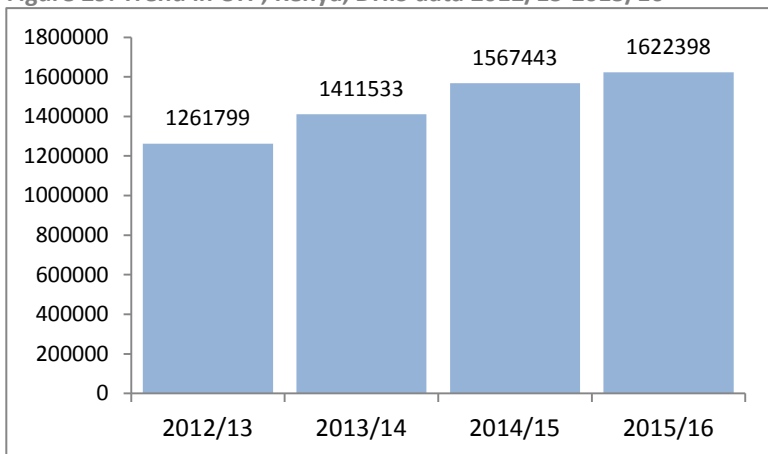


Table 4 compares the CYP by county with the KDHS 2014 data on use of modern contraceptives among currently married women. The CYP rates were computed by dividing the CYP by the estimated number of currently married women 15-49 years in each county.²² The analysis shows that there is a high correlation between the KDHS contraceptive use rates in 2014 and the outputs of the family planning program in terms of methods distribution in 2015/16. This indicates that there were no major changes between counties. Kericho county was having lower program outputs in 2015/16 than expected based on the contraceptive prevalence rate in 2014. Migori county was the opposite with higher outputs than expected.

Figure 29: Trend in CYP, Kenya, DHIS data 2012/13-2015/16



²² The KNBS projections were used to obtain the number of women 15-49 years in 2015/16 and the KDHS 2014 was used to obtain the proportion in a union (59.6%). The CYP per married women is lower than the contraceptive use rate because a significant proportion of women obtain contraceptives outside of health facilities (e.g. 17% in pharmacies, KDHS 2014) and because long-acting methods given in preceding years are not taken into account with the CYP method.

Table 4: Comparison of use of modern contraceptives among currently married women, KDHS 2014, with CYP per married woman (%) obtained from the DHIS for 2015/16, by county

Use of modern contraceptives among married women, KDHS 2014 (%)	Programme output 2015/16 (CYP per married woman)			
	Very low (<10%)	Low (10-19%)	Average (20-29%)	High (30% and over)
<15%	Turkana; Mandera; Marsabit; Wajir; Garissa; West Pokot			
15-29%	Isiolo	Samburu; Tana River		
30-44%		Lamu; Baringo; Narok; Elgeyo Marakwet	Mombasa; Kilifi; Kwale	Migori
45-59%		Kericho	Trans Nzoia; Uasin Gishu; Bomet; Homa Bay; Kajiado; Siaya; Laikipia; Nakuru; Vihiga; Nandi; Nairobi	Bungoma; Busia Kitui; Kisumu
60% and over			Taita Taveta; Kisii; Murang'a; Makueni; Embu; Machakos; Kiambu; Meru	Kakamega; Nyandarua; Nyeri; Tharaka Nithi; Kirinyaga

4.4 Antenatal and delivery care

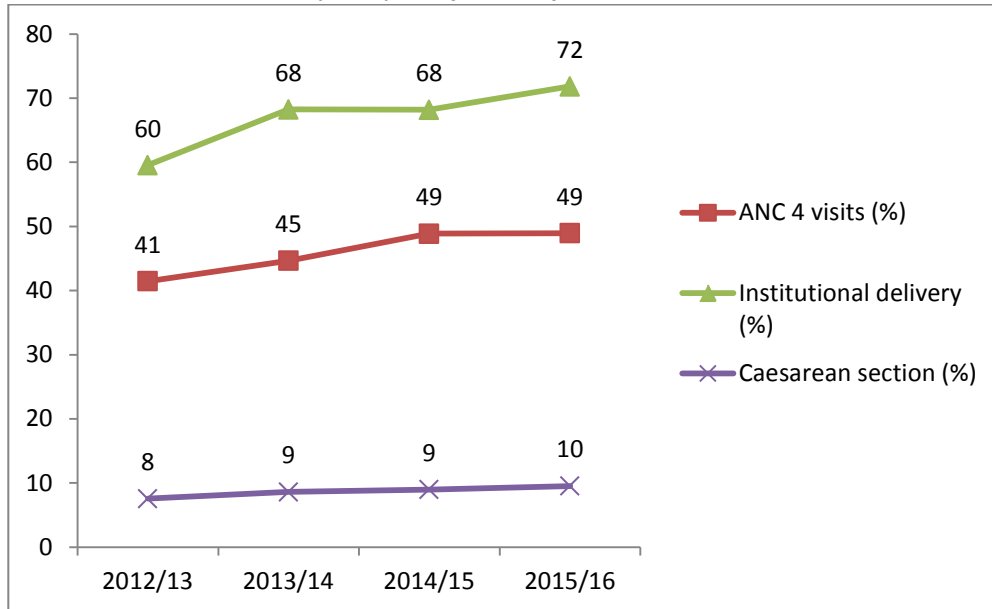
Coverage of the first visit of antenatal care (ANC) was nearly universal. In the KDHS 2014 96% of women made at least one ANC visit, and in the DHIS ANC coverage rates also range from 95-97% during 2012/13-2015/16. The proportion of pregnant women who made 4 or more antenatal care visits was much lower but increased from 47% to 58% in the KDHS 2008/09 and 2014. In the DHIS there was also an increase from 42% to 49%. This fell short of the 80% target for the MTR and for 2018 (Figure 30).

Institutional delivery rates were taken as a proxy for the skilled birth attendance. In the KDHS 2014 results, 61% of deliveries during 2010-2014 occurred in health facilities, including 15% reported as having taken place in private health facilities. This was a substantial increase since the KDHS 2008/09 in which 43% of deliveries during 2004-2008 took place in health facilities. Skilled birth attendance rates were 44% and 62% in the KDHS 2008/09 and 2014 respectively.

This large increase also resulted in an increase of Caesarean section rates from 7.6% to 9.5%. This increase was almost entirely the result of more women delivering in health facilities, as the proportion of women with Caesarean section among those delivering in a health facility remained constant at 13%. This, like the continued decline of institutional maternal mortality ratios, also suggests that health facilities were able to keep up with the increased utilization, as Caesarean section rates did not go down.

The DHIS provided insights into the trends after the beginning of KHSSP and the presidential initiative of free maternity services. There was a significant increase in the proportion of women delivering in health facilities from just under 60% in 2012/13 to 72% in 2015/16, exceeding the 2018 target already.

Figure 30: Trends in institutional delivery rates, coverage of four antenatal care visits and Caesarean section rates, DHIS, 2012/13-2015/16

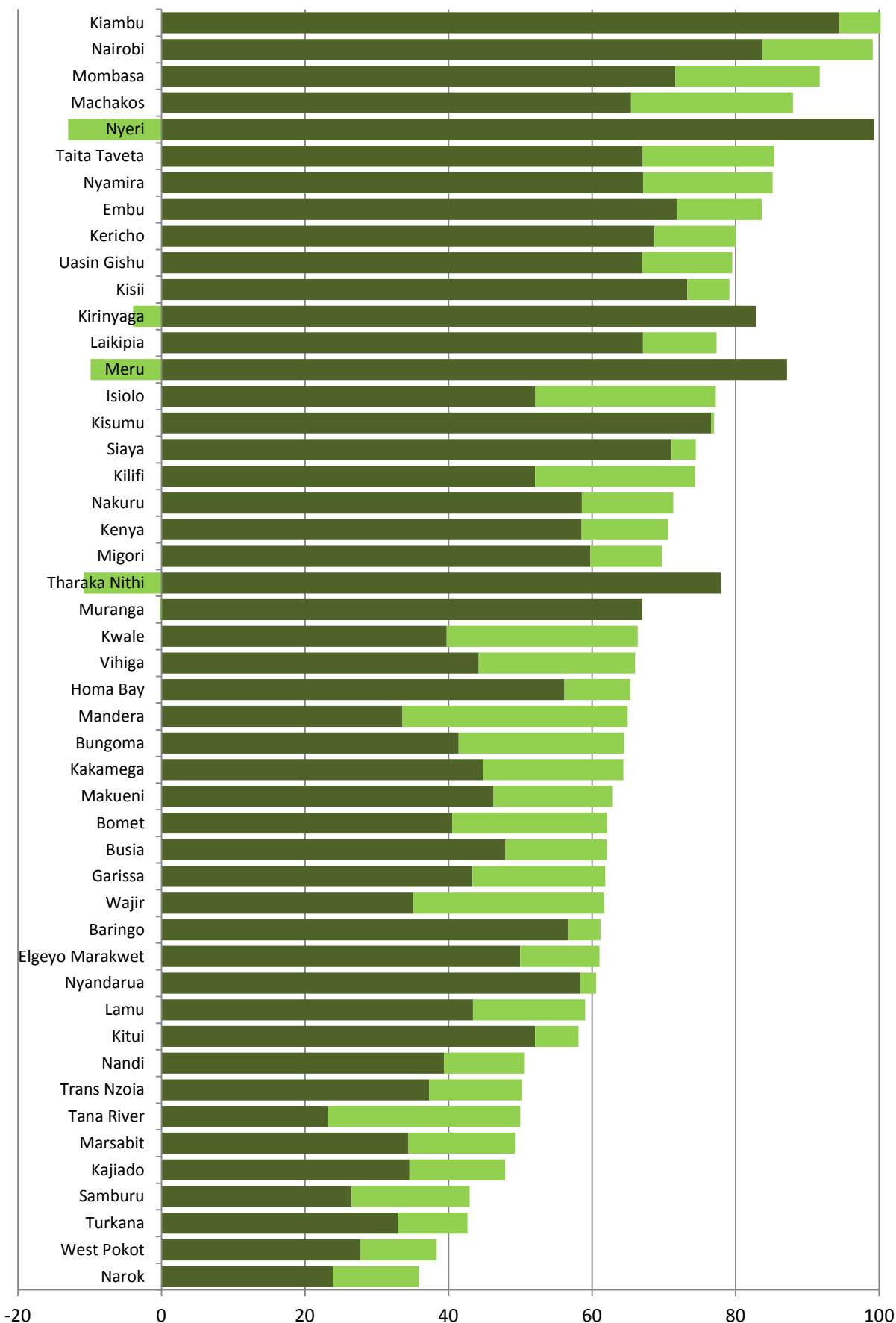


The stillbirth rate in health institutions declined from 34 to 26 per 1,000 births during 2012/13 to 2015/16. Fresh stillbirth rates remained fairly constant at about 13-15 per 1,000 births. The proportion of newborns with low birth weight (<2500 grams) remained at 5% from 2012/13 to 2014/15 which is the target for 2018. The increase in delivery rates in health facilities occurred in 43 of the 47 counties (Figure 31). Several of the low coverage counties showed dramatic increases, such as Tana River, Wajir, Mandera and Kwale.

4.5 Stillbirths and low birth weight

The overall stillbirth rate (macerated and fresh) was 26 per 1000 births in health facilities in 2015/16. The fresh stillbirth rate was 12 per 1,000 births, similar to the rate of 13 per 1,000 in the two preceding years. The KHSSP target for the MTR was 20 per 1,000 births, but this was based on a much higher baseline (30). The low birth weight rate (less than 2500 grams) remained around 5% in all four years of DHIS data. In 2015/16 5.0% of babies were born with low birth weight in health facilities. The respondents in the KDHS 2014 reported a higher prevalence of low birth weight for their babies: 7.6%.

Figure 31: Institutional delivery coverage rates by county, in 2013/14 (dark green) and 2015/16 (full bar), DHIS



Strategic Objective 5: minimize exposure to health risk factors

Main findings

- Tobacco use: smoking tobacco was largely limited to men, with about 1 in 5 smoking tobacco and with little change in smoking prevalence over time. Women rarely smoked tobacco.
- Alcohol use: about 5% of women and 34% of men drink alcohol in 2015. Almost one-fourth of men engage in heavy episodic drinking. There were no data to assess the trend in alcohol use.
- Exclusive breastfeeding increased to 61% of infants 0-5 months, on track for the KHSSP target.
- The target of full coverage of all households with iodised salt was achieved.

Indicator	Baseline (Data source)	Achievement (Data source)	Target 2016	Progress	Comments
% of adult population who smoke	17, men 15-54 years (KDHS 2014)	20, men 18-69 years, STEPS, 2015	15		Focus on men, less than 1% of women smoke
% of the population that consumed alcohol regularly	17, 15-49 years, KDHS 2014	19, 18-69 years, STEPS 2015	25		34% of men consume alcohol; 23% heavy episodic drinking
% of children 0-5 months who were exclusively breastfed	32 (KDHS 2008/09)	61 (KDHS 2014)	40		KHSSP End target is 70%
% of households that had iodised salt (%)	97.6 (KDHS 2008/09)	99.5 (2014)	100		
% of the population that is aware of health risk factors	30 (2013)		50		No data. Indicator problematic. Both numerator and denominator need to be defined e.g. which health risk factors

Red: Limited or no progress; Orange: Some progress but not enough to achieve target, Green: good progress, target achieved or on course to achieve target

Data sources and analysis

- Surveys: the KDHS 2008/09, KDHS 2014 and the STEPS 2015 provide data for several risk factors such as tobacco use.
- Facility data: the DHIS data for 2012/13-2015/16 on family planning use by method are used to estimate couple years of protection. All other indicators require survey data.

5.1 Introduction

The 5th strategic objective of KHSSP 2014-2018 is focused on putting into place health promotion interventions that would address risk factors to health. These included health promotion and interventions aimed at improvement of individual level behaviours, physical environment and societal environment. It included communicable conditions, NCDs and mental health, violence and injuries. There is some overlap with the 6th objective “Strengthen collaboration with health-related sectors.

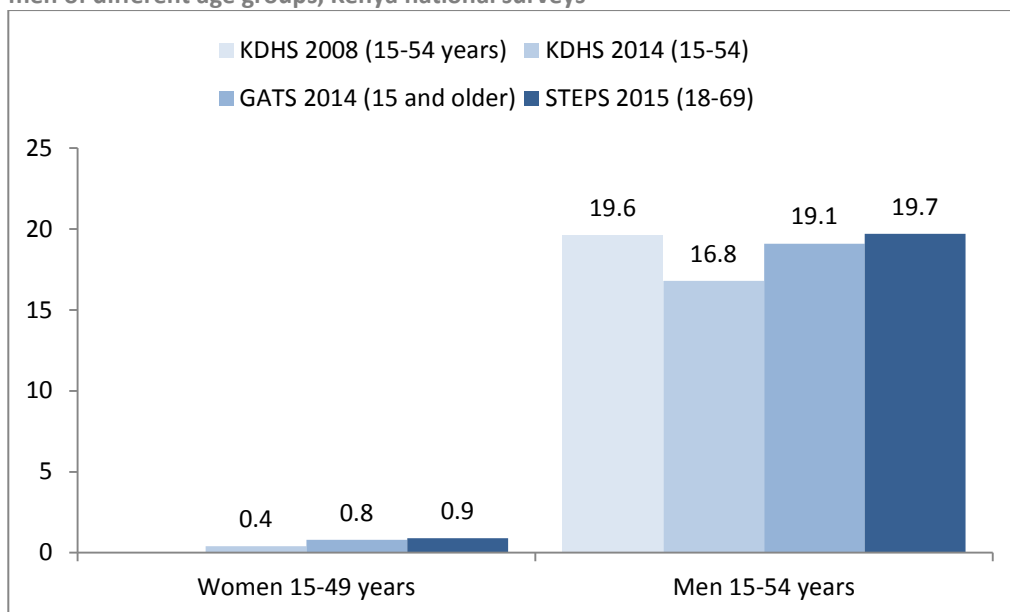
The KHSSP proposed 7 indicators for this strategic objective, including indicators for NCD prevention (tobacco and alcohol use), child nutrition (exclusive breastfeeding and salt iodization), family planning (couple years of protection due to all FP methods), population awareness of risk factors to health, and adult nutrition (screened adults with mid upper arm circumference who are above average). The latter indicator can be omitted given the progress in monitoring anthropometry among adults in Kenya, based on the KDHS 2008, 2014 and STEPS 2015.

5.2 Tobacco use and smoking

Kenya has rich body of survey data to document trends in tobacco use, including the KDHS surveys, the Global Adult Tobacco Survey 2014 and STEPS 2015. In general, the levels of tobacco use were fairly stable over time (Figure 32 and 33). There were persistent large differences in tobacco use between women and men. Men smoked tobacco almost 20 times more frequently than women. Among men, all surveys since 2008 showed that about 1 in 5 men 15-49 years were using tobacco. And most of those were smokers. The KDHS 2003 (not shown) also showed similar levels (23% smoking among men 15-54 years). The figures reported from GATS survey in 2014, which included all persons aged 15 years and over, were of a similar level as KDHS and STEPS. In all three recent surveys the majority of male tobacco users were smokers: 91% in the KDHS 2014, 79% of the GATS and 86% in the STEPS 2015. Among women only a small proportion smokes tobacco (less than 1% in all three recent surveys); most users chewed tobacco.

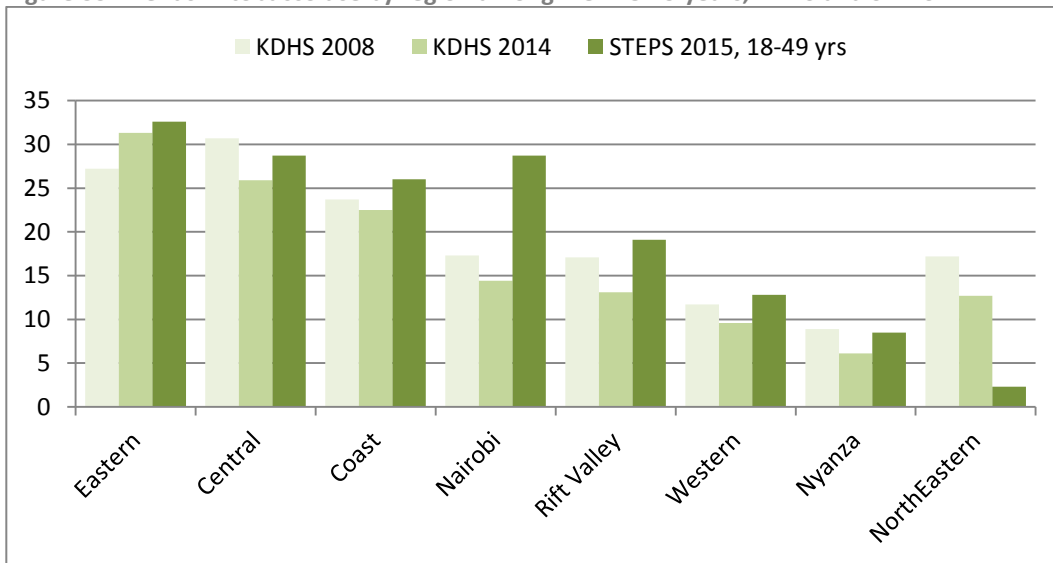
There were major differences between regions. Tobacco use is 25% or higher in Eastern, Central, Nairobi and Coast regions, below 20% in Rift Valley and Western, and below 10% in Nyanza and North-eastern. Nairobi may have had an increase, but the STEPS sample size for Nairobi was small and the difference with the preceding surveys was not statistically significant.

Figure 32: Trends in current tobacco smoking among women 15-49 and men of different age groups, Kenya national surveys



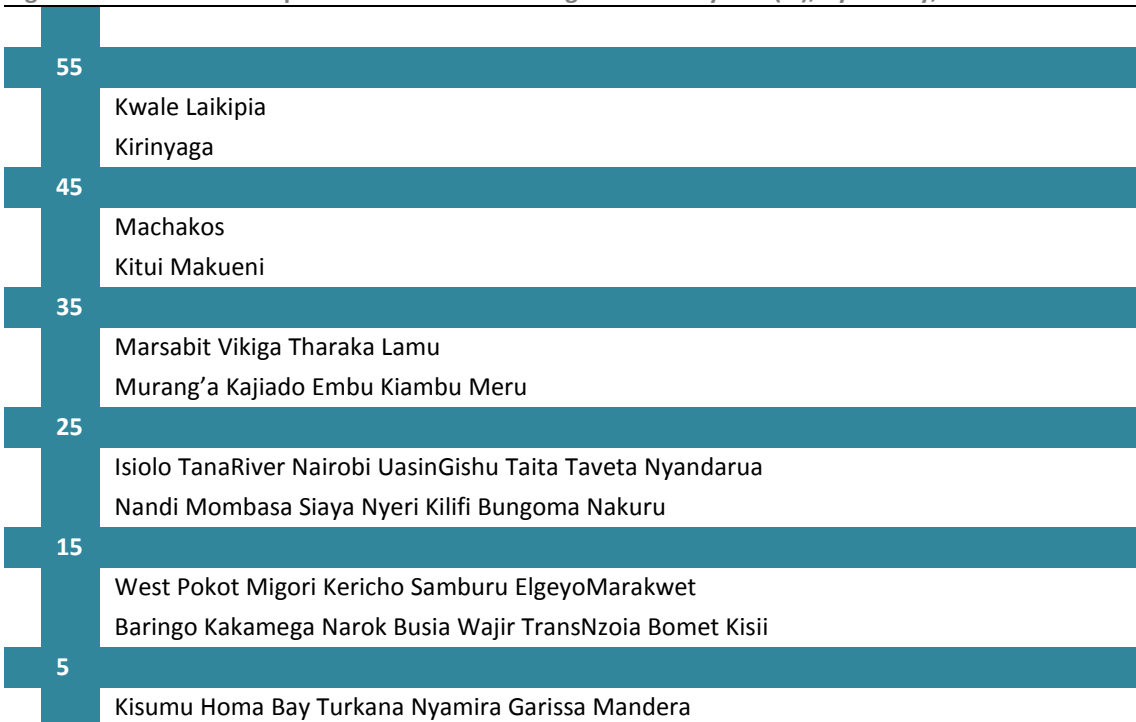
County level tobacco use rates are available from the STEPS 2015 (Figure 34). The sample size are small and the confidence intervals are therefore large. There are very large differences in tobacco use between the counties, with some exceeding 45% and some below 10% use.

Figure 33: Trends in tobacco use by region among men 15-49 years, KDHS and STEPS



Among women tobacco use was still uncommon. The STEPS survey suggested that tobacco use rates may have been increasing in 2015. Among women 18-69 years, tobacco use was found to be most common in Coast Region (11.5%), followed by Rift Valley (8%) and Eastern Region (5.7%). This often involved chewing tobacco among older women. In all other regions use was 1% or less. There were too few cases to analyse county levels.

Figure 34: Stem-and-leaf plot of tobacco use among men 18-69 years (%), by county, STEPS 2015

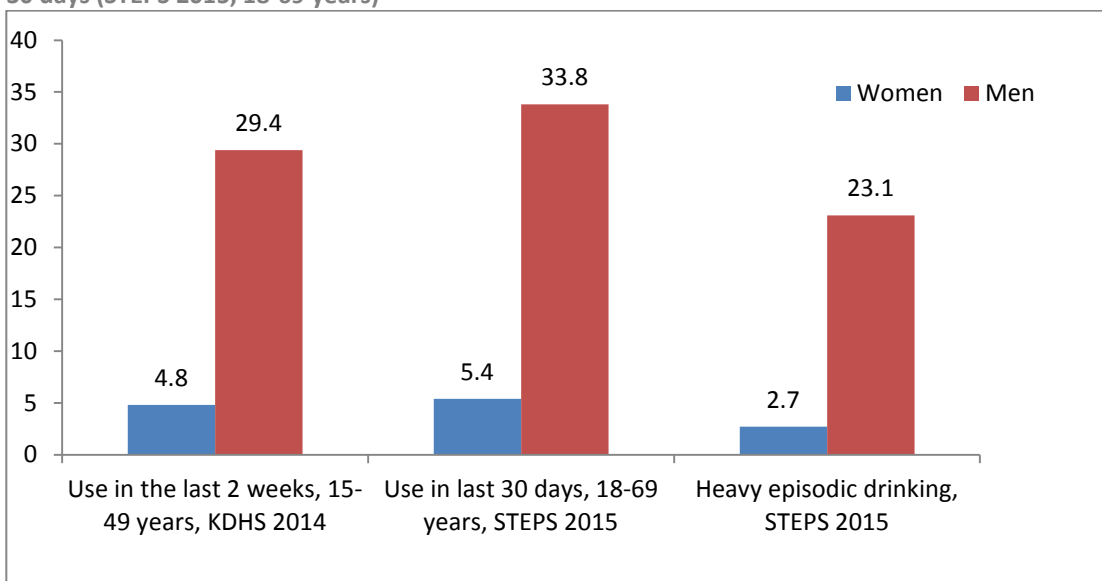


5.3 Alcohol use

The majority of Kenya's adults are lifetime abstainers: 41% of men and 80% of women 18-69 years. About 5% of women and 30% of men were found to drink alcohol at least once every two weeks (KDHS 2014) or last 30 days (STEPS 2015) (Figure 35). For both sexes combined 19.3% of adults 18-69 years currently consume alcohol beverages in 2015. Among current drinkers, 26% drank on 3 or more days in the last week, 50% drank on 1 or 2 days, and 16% did not drink during the last 7 days.

The largest negative health impact is from heavy drinking and heavy episodic drinking. WHO defines heavy episodic drinking as having six or more alcoholic drinks in one occasion in the past 30 days. Approximately, 12.7% of Kenyans 18-69 years engage in heavy episodic drinking, that is 23% of men and 3% of women. This implies that among men who are considered current drinkers the majority (23/34%=68%) engaged in heavy episodic drinking.

Figure 35: Alcohol use in the past 15 days (KDHS, women 15-49 years) or 30 days (STEPS 2015, 18-69 years)



5.4 Exclusive breastfeeding

The KHSSP indicator targets aim for a dramatic increase in exclusive breastfeeding from 32% in 2013/14 to 50% midterm and 70% by the end of the plan. Reliable data could only be obtained from household surveys (and not from health facility data). The KDHS 2014 showed that breastfeeding is nearly universal in Kenya (98.7% initiated breastfeeding) and that exclusive breastfeeding is also very common: 72% at 0-3 months and 61% at 0-5 months. An additional 10% of children were receiving only plain water in addition to breastfeeding. These figures were remarkably better than in the KDHS 2008/09 when 43% of infants 0-3 months and 32% 0-5 months were exclusively breastfed. This indicates that there was a positive trend and the target of 70% exclusive breastfeeding at ages 0-5 months is achievable.

5.5 Salt iodisation

Inadequate amounts of salt in the diet present serious health risks for young children. In both the KDHS 2008/09 and KDHS 2014 household salt was tested for iodine content. In 2008/09, 97.6% of households had adequate (15+ ppm) iodine contents in salt. By 2014 the coverage was nearly universal: 99.5%. All counties but Lamu (89%) had more than 95% of households with iodised salt.

Strategic Objective 6: strengthen collaboration with health-related sectors

Main findings

- Nutrition: marked reductions in child stunting and underweight occurred during 2008-2014, in almost all counties, on track to reach the 2016 target.
- Water and sanitation: good and continued progress on access to improved drinking water supply, but little progress on improving household access to improved sanitary facilities
- Education: continued progress on women's education, continued high enrolment in primary schools.

Indicator	Baseline (Data source)	Achievement (Data source)	Target 2016	Progress	Comments
Reduce prevalence of stunting (%)	35 (KDHS 2008)	26 (KDHS 2014)	25		Good progress. Close to the target
Reduce the prevalence of underweight (%)	17 (KDHS 2013)	11 (KDHS 2014)	10		
% of households with improved drinking water source	60 (KAIS 2012)	71 (KMIS 2015) 67 (STEPS 2015)	70		
% of households with improved sanitation	55 (KAIS 2012) 48 (KDHS 2014)	52 (KMIS 2015) 59 (STEPS 2015)	75		Target of 75% was households with latrines
% of women with at least some secondary education	34 (KDHS 2008/09)	43 (KDHS 2014)	45		Completed secondary education 27%
Primary school enrolment rate (%)	60 (KHSSP)	88.2 (MTPII annual performance report)	75		Primary school enrolment 2013: 96%; secondary (gross): 49%
% of schools providing complete school health package	15 (MoE, 2013)	–	40		No data

Red: Limited or no progress; Orange: Some progress but not enough to achieve target, Green: good progress, target achieved or on course to achieve target

Data sources and analysis

- Surveys: the KDHS 2008/09 and KDHS 2014 provide data on water and sanitation, education and child anthropometric status. The KAIS and KMIS surveys also include water and sanitation questions.
- Facility data: all indicators require survey data.
- Administrative data: education data.

6.1 Introduction

The 6th strategic objective of KHSSP 2014-2018 is focused on strengthening collaboration with other sectors. The KHSSP specifically list the roles in health of 12 sectors. The actions were focused on information generation on activities in other sectors and their impact on health and advocacy for required investments with related sectors, donors and Ministry of Finance, based on evidence. The action with a cross sectoral focus are not limited to the 6th strategic objective. In particular, the 5th objective on minimizing exposure to major health risk factors through intersectoral health promotion addressed several areas such as tobacco use, alcohol misuse and salt iodisation.

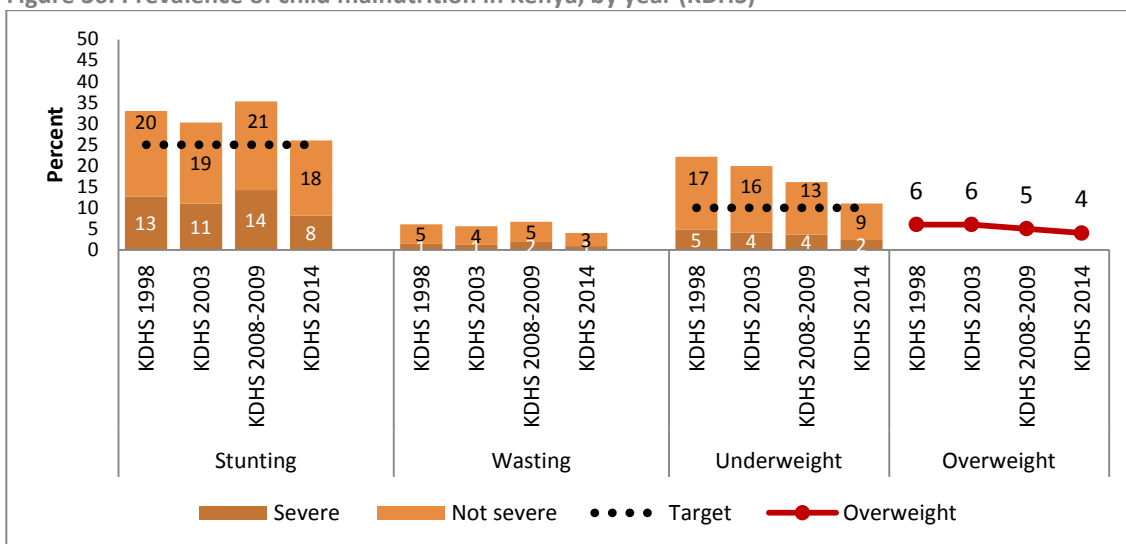
The nine indicators proposed for this strategic objective include two on child nutritional status, two on water and sanitation, one on infrastructure, three related to education, and one to housing. The analysis focused on the nutrition and water and sanitation indicators. No data are available on housing ventilation, schools providing a complete school health package, and classified road network in good condition.

6.2 Child anthropometry

Child nutrition is one of the key elements of the essential health care package in Kenya. The KHSSP uses two population-based indicators to monitor efforts towards improving child nutrition, namely: reducing the rate of stunting among children under 5 years from 35% in 2013 to 25% in 2016 and 15% in 2018, and reducing the rate of underweight among children <5 years from 17% in 2013 to 10% in 2016 and 5% in 2018.²³

There are no data after KDHS 2014. The survey showed that prevalence of poor nutrition among children under 5 was high but there was good progress. The prevalence of stunting reduced by 1.8 points annually from 35% in the 2008-2009 KDHS survey to 26% in the 2014 survey, and of underweight reduced by 1 point annually from 16% in the 2008-2009 KDHS survey to 11% in the 2014 survey, with both edging closer to KHSSP midterm targets (Figure 36). If these trends continued, the stunting rate in 2016 should be somewhere around 22% and of underweight around 10%. Child overweight and wasting rates also declined²⁴.

Figure 36: Prevalence of child malnutrition in Kenya, by year (KDHS)



²³ Stunting rate measures the proportion of children who are shorter than their expected height for that age i.e. their height-for-age is below minus two standard deviations (-2 SD) of the median. (severe stunting is below -3 SD). Stunting is a sign of growth retardation and occurs mostly due to chronic malnutrition. Children who fail to achieve the expected weight for their age are considered to be underweight i.e. their weight-for-age is below -2 SD of the median (severe underweight if below -3 SD). Underweight occurs due to chronic or acute malnutrition.

²⁴ Children are considered overweight if their weight-for-height is more than +2 SD of the median.

The KDHS surveys show large disparities in child malnutrition by mother’s education level and wealth status, with the rates of both stunting and underweight decreasing with increase in the mother’s education level and wealth status. About a third of the children of mothers in the poorest quintiles were stunted compared to 25% for mothers in the third (middle) quintile, 21% in the fourth quintile and 14% in the fifth (highest) quintile. Similar patterns with much higher underweight rates were observed for women 15-49 in the KDHS 2014, where 20% of mothers in the lowest quintile were underweight, compared to 12% in the second lowest quintile, 9% in the third (middle) quintile, 7% in the fourth quintile and 4% in the fifth (highest) quintile.

Figure 37 shows the rates of stunting and underweight by region. All regions registered a decline in the rates of both stunting and underweight, with a faster decline in the underweight rate than the stunting rate. Differences between regions were small for stunting rate but quite large for underweight. The rates of both stunting and underweight were generally lower in the counties in Central region than elsewhere in Kenya. In the 2014 KDHS survey, stunting rates in three regions, Coast, Eastern and Rift valley, were higher than the 25% midterm target but the trend suggests that they were edging closer to the midterm targets. Stunting rate in Western and North Eastern region were right on the midterm target while Nyanza, Central and Nairobi region had rates lower the midterm target. In the 2014 KDHS survey, the 10% midterm target for underweight was already achieved in four regions, Nairobi, Central, Nyanza and Western region while rates in the other regions were higher but edging closer to the midterm target.

Figure 37: Rates of stunting and underweight, by region (KDHS)

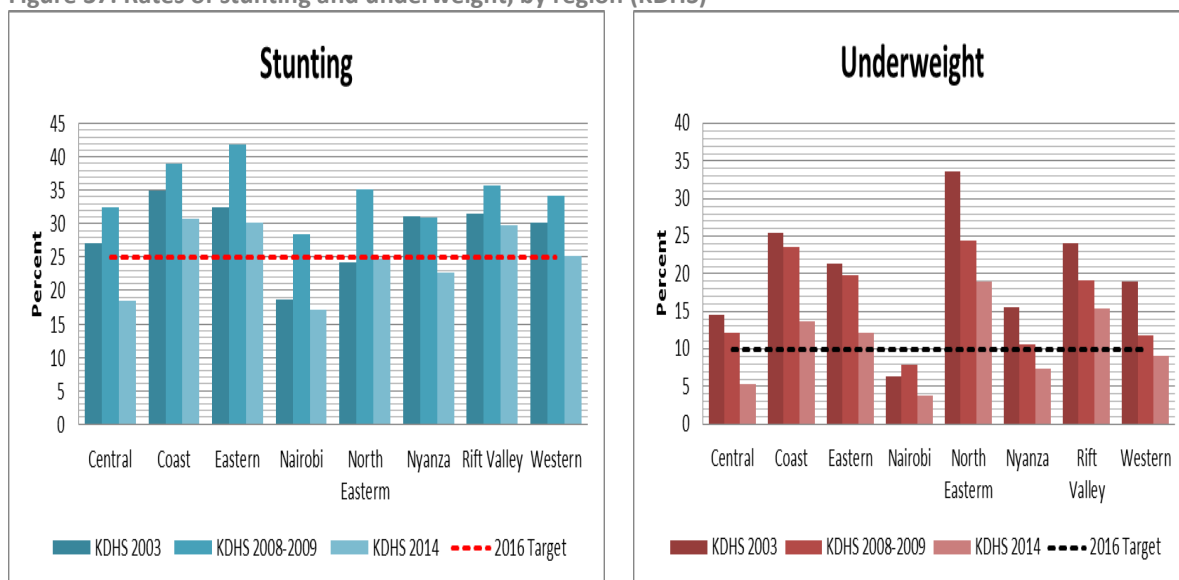
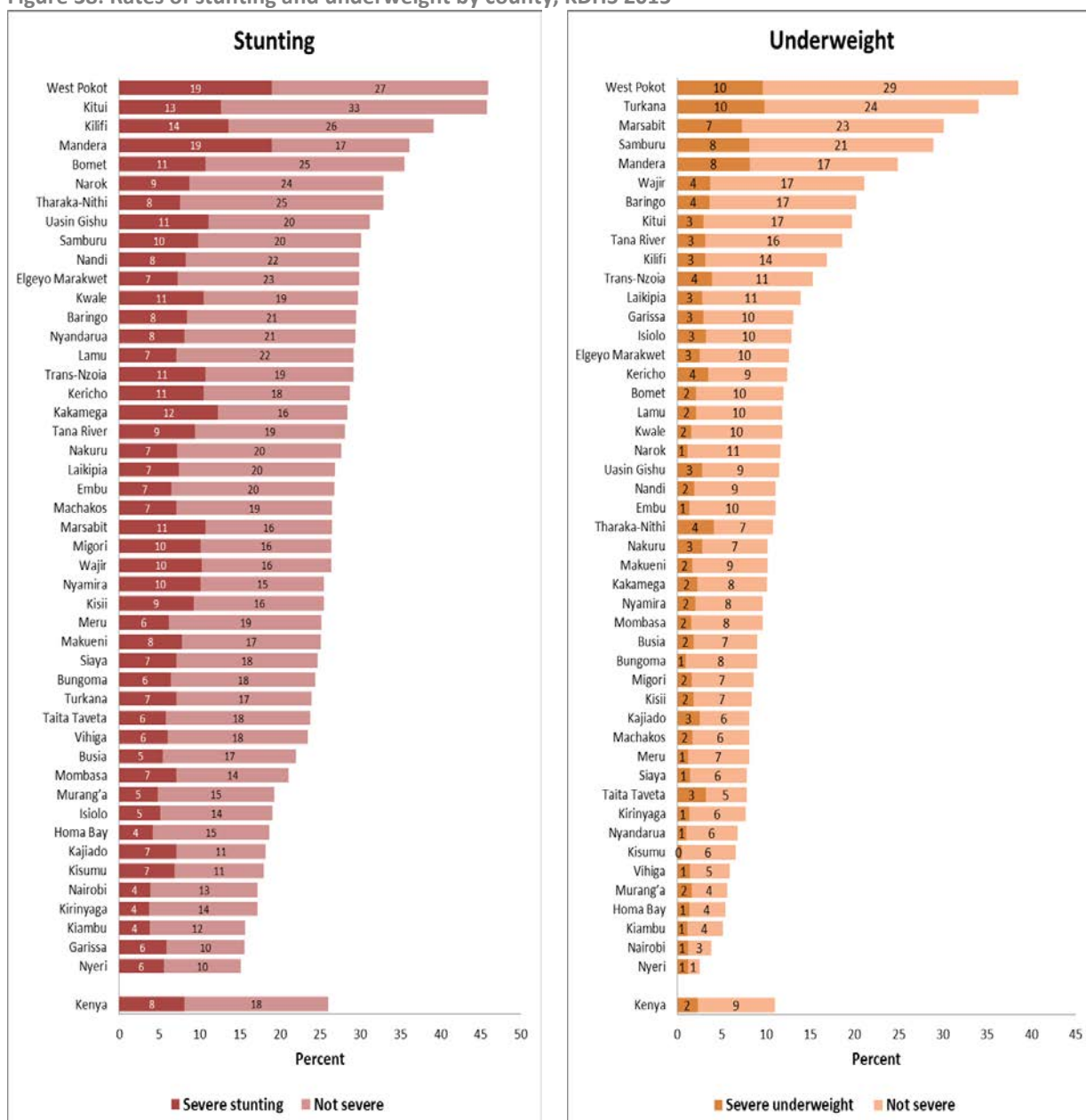


Figure 38 presents the rates of stunting and underweight by county in the 2014 KDHS survey. It shows very large differences in rates of stunting and underweight between the top and bottom counties, with absolute difference of up to 31 points for stunting and 36 points for underweight. Nyeri county had the lowest rates of stunting and underweight; the rates were highest in West Pokot county.

Figure 38: Rates of stunting and underweight by county, KDHS 2015

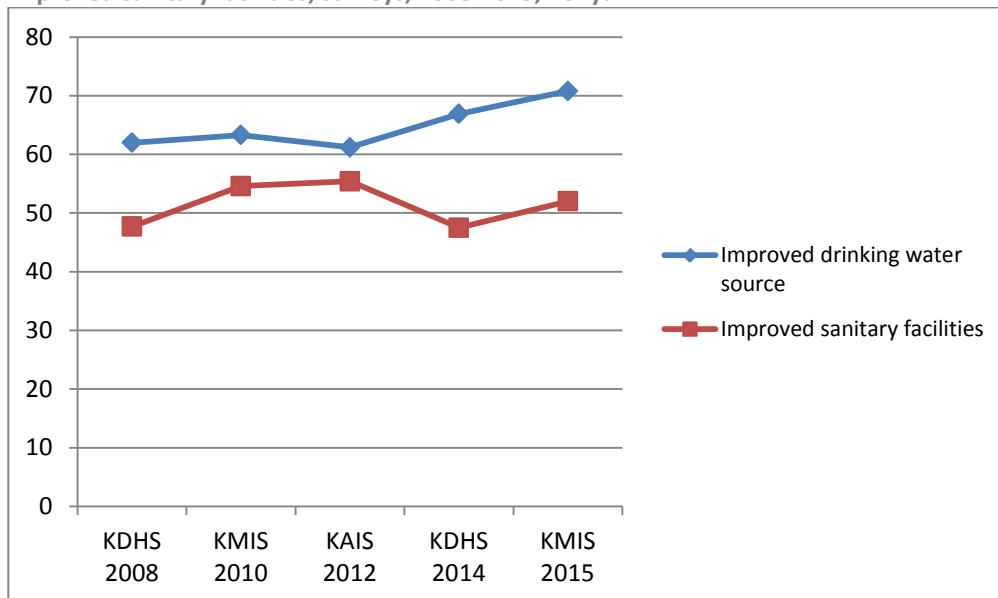


6.3 Water and sanitation

Five surveys since 2008 provide a picture of trends in the water and sanitation indicators. The percent of the population with access to drinking water from an improved source increased from 61% in 2012 to 67% in 2014 and 71% in 2015 (Figure 39). The target for 2015/16 was 70%. Urban access was 88% and rural access 62%.

There was no increase in households with improved sanitary facilities. In the KMIS 2015 52% of households had improved facilities, which was slightly higher than in the KDHS 2014, but similar to values in the 2008, 2010 and 2012 surveys. Only 41% of rural households had access to improved sanitary facilities, compared to 74% of urban households. The MTR national target was 75% and 80% by the end of KHSSP.

Figure 39: Access to improved drinking water supply (% of the population) and improved sanitary facilities, surveys, 2008-2015, Kenya



6.4 Education

The primary school net enrolment rate increased gradually until 2011 to 96% and remained at that level during 2012 and 2013. The primary school completion rate by 2013 was 80%, 79% for girls and 82% for boys. The primary to secondary school transition rate was 77%, and slightly higher for girls than boys. The gross and net enrolment rate in secondary schools were gradually increasing to 49% and 33% respectively in 2013. The KHSSP MTR target is 75% school enrolment rate, from a baseline of 60%. The specifics of the indicator and target need to be clarified.

The percent of women 15-49 years with secondary education in the KDHS 2008/09 and 2014 was 22% and 27% respectively. Women with any secondary education was 43% in 2014, up from 34% in 2008/09. The KHSSP midterm target was 45%. Nairobi and Central region have considerably higher rates than elsewhere in Kenya.

7. Health investments and outputs: access, quality and demand

Main findings

- County health budgets vary from less than KSh 1,000 to KSh 4,000 per person per year for the period 2013/14-2015/16. Overall, the health budget for counties has increased from KSh 49 billion in 2013/14 to KSh 84 billion in 2015/16.
- Access to health care services in Kenya is improving but there are still substantial differences within the country and in several instances the midterm targets have not been met. Differences in health care access between counties were generally very large, with the access in Turkana, Wajir, Bomet, Narok, Mandera, Tana River and Kwale generally poorer than elsewhere, and generally better in Kirinyaga, Nyeri, Embu, Machakos, and Mombasa.
- The per capita outpatient utilisation rate increased from 1.8 in 2012/2013 to 2.2 in 2015/2016. However the utilisation rate during the review period remained stagnant at around 2.2 which is lower than the KHSSP target of 3.
- The inpatient admission rate increased steadily during the review period. It was 3.8 in 2012/2013, 4.2 in 2013/2014, 4.5 in 2014/2015, and 4.4 in 2015/2016.
- Caesarean section rate remained at around 13% of institutional deliveries and the population increased because more women were delivering in health facilities. This suggests that facilities were able to cope with the increased number of deliveries. This is further supported by the trends in maternal mortality and stillbirth rates in health facilities.
- Treatment of sick children: more children with diarrhoea were treated with oral rehydration therapy (39% (KDHS 2008-2009) to 54% (KDHS 2014)), more children with fever received treatment or advice from a health care provider (from 49% (KDHS 2008-2009) to 64% (KDHS 2014)) and more children with suspected pneumonia received treatment or advice from a service provider (from 56% (KDHS 2008-2009) to 66% (KDHS 2014))
- Core health workforce (doctors, clinical officers, nurses and midwives): Kenya aimed to increase the health worker density from 5 per 10,000 population in 2013 to 7 per 10,000 population in 2016. The data do not allow a reliable assessment of the trends, and the baseline is likely to be an underestimate of the true number at that time. It is estimated that there were 9 core health workers per 10,000 population in Kenya in 2016. There are large differences within Kenya with the top 2 urban counties having 2.5 times higher and the bottom 5 counties 4 times lower densities than the national average.
- Health facility density (per 10,000 population): Kenya aimed to increase the health facility density from 1.9 per 10,000 population in 2013 to 2.5 per 10,000 population in 2016. This target was not met. The density during the review period remained stagnant at 2.2-2.3 per 10,000 population but represents an improvement, albeit small, from the baseline value.
- Bed density: The average bed density in Kenya declined steadily during the review period but remained higher than the average in the African region of 10 beds per 10,000 population. In 2016, Kenya had 14.1 bed per 10,000 population, which represents one bed for every 709 people.

Indicator	Baseline (Data source)	Achievement (Data source)	Target 2016	Progress	Comments
Per capita outpatient utilisation rate	1.8 (DHIS 2012/2013)	2.2 (DHIS, 2015/2016)	3 (KHSSP)		Some progress from baseline but pace not enough to achieve the target
Inpatient admission rate per 100 population	3.8 (DHIS 2012/2013)	4.4 (DHIS 2016)			Some progress from the baseline but pace not enough to meet the target
Caesarean section rate (%)	8 (DHIS, 2012/2013)	10 (DHIS, 2015/2016)			The rate is just about right, close to the recommend rate at population level
Health worker density (number per 10,000 population)	5 (KHSSP, 2013 - SARAM)	9 (County reports, 2016)	7		Possible progress from baseline value data are inadequate to assess trends
Facility density (number per 10,000 population)	1.9 (MoH, 2013)	2.2 (MoH, 2016)	1 (revised; see notes)		More than double the required number of health facilities per 10,000 population
Inpatient bed density per 10,000 population	14.4 (DHIS, 2012)	14.1 (DHIS, 2016)	18 (Revised; SARA target; see notes)		The revised target not achieved but density is higher than the average in the African region

Red: Limited or no progress; Orange: Some progress but not enough to achieve target, Green: good progress, target achieved or on course to achieve target

Data sources

- Facility data / DHIS: All data were adjusted for reporting completeness to better assess the trend, as completeness was improving over time. It was assumed that the rate of service provision in non-reporting facilities was lower than that of reporting facilities (one quarter lower).
- Analysis of core health workforce is based on the most recent county reports on the number of health workers and the SARAM 2013. There is underestimation of the number of core health workers because the data only partially include nurses, midwives, and clinical officers in the private sector.
- Population denominator based on the projections by KNBS from the 2010 census

7.1 Introduction

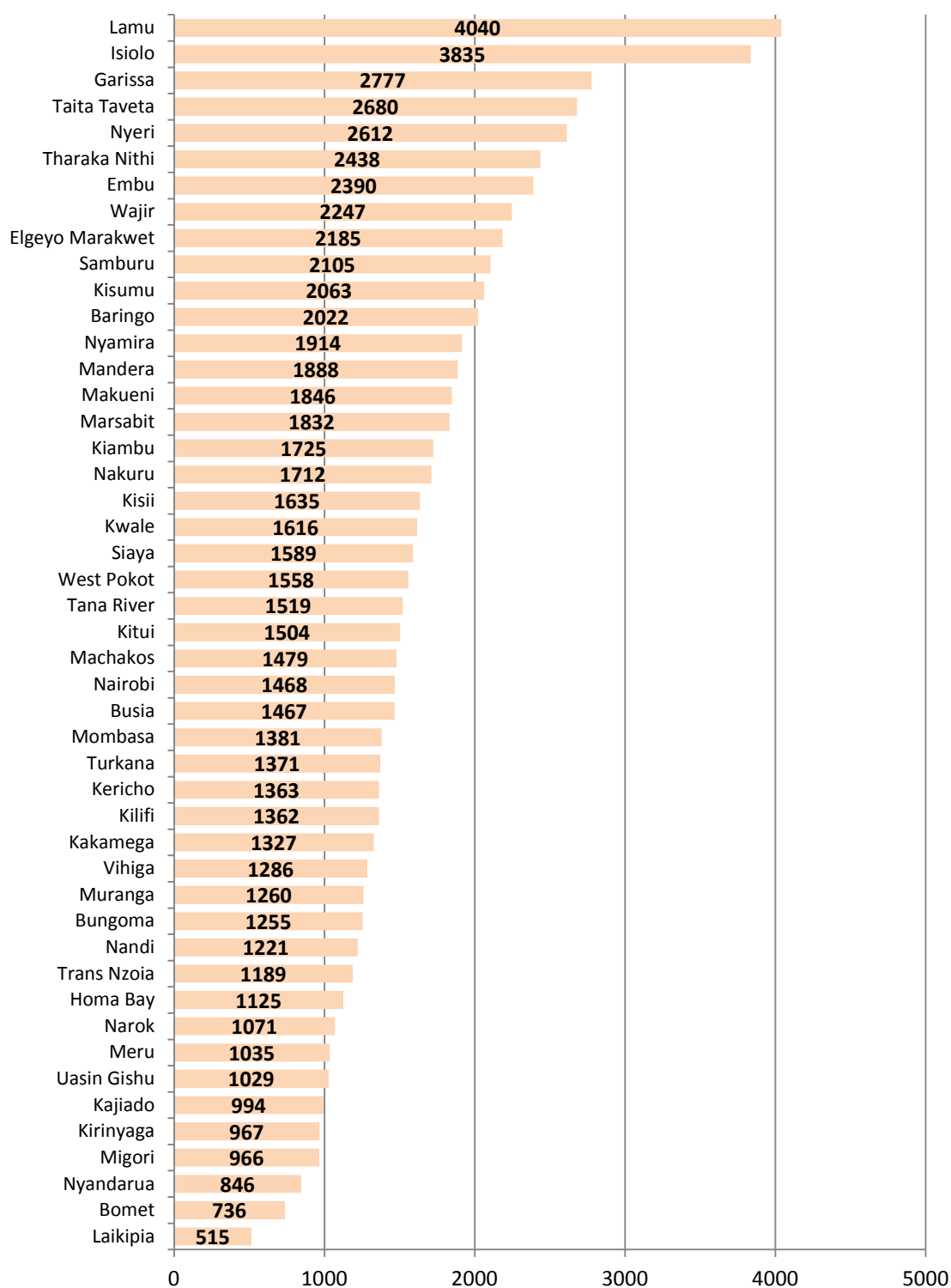
One of the primary objectives of the KHSSP 2014-2018 is to improve access, quality and demand for health care services. Physical access, financial affordability and cultural acceptability are the key components of health care access outlined in the KHSSP.

Physical access has been defined as the physical presence of health care services which includes distance to health care facilities and the availability of ready-to-use health care services. The government has put in place specific plans to increase physical access to health care facilities. These include making all the KEPH services available in the hard to reach areas (Northern arid land and informal settings in urban areas), upgrading at least 40% of the

dispensaries to fully functional primary care facilities, upgrading all the model health centres to primary care facilities, and ensuring that all facilities have at least 80% of their infrastructure functional.

The KHSSP has proposed six indicators for monitoring the progress and performance of efforts towards improving access to health care services, namely: outpatient utilisation rate, population living within a 5km radius, availability of basic and comprehensive emergency obstetric care, bed occupancy rate and the availability of immunization services. Data were not available for assessing the proportion of the population that lives within a 5km radius.

Figure 40: Health budget per person per year, average for the period 2013/14-2015/16, by county



7.2 County health financing

Data are available on county health budgets for the period 2013/14-2015/16. The total budget for health in the 47 counties increased from KSh 48.7 billion in 2013/14 to KSh 63.4 billion in 2014/15 and KSh 83.8 billion in 2015/16. The per capita allocation for health to counties was KSh 1,874 in 2015/16.

The distribution of the resources did not change much during the three years. Figure 40 shows the average amount per person per year that each of the counties budgeted for health. There is major variation from a high of more than KSh 4,000 in Lamu and KSh 3,835 in Isiolo, both small population counties, to less than KSh 1,00 per person per year in Laikipia, Bomet, Nyandarua, Migori, Kirinyaga and Kajiado.

7.3 Health facility density

Health facility density is a crude indicator of access to outpatient services. It is expressed as number of facilities per 10,000 population. In Kenya, the target is to have one dispensary for every 10,000 people, a health centre for every 30,000 people, a primary hospital (level IV) for every 100,000 people, a secondary hospital for every one million people and a tertiary hospital for every 5 million people. This means that at the minimum, there should be nearly 1.5 health facility (regardless of the level) for every 10,000 people in Kenya. This target has been surpassed. Kenya had more than double the targeted number of health facilities (Figure 41). It is possible that the health facility density in Kenya is higher than reported because the master facility list does not include all the private facilities.

Figure 41: Number of health facilities per 10,000 population

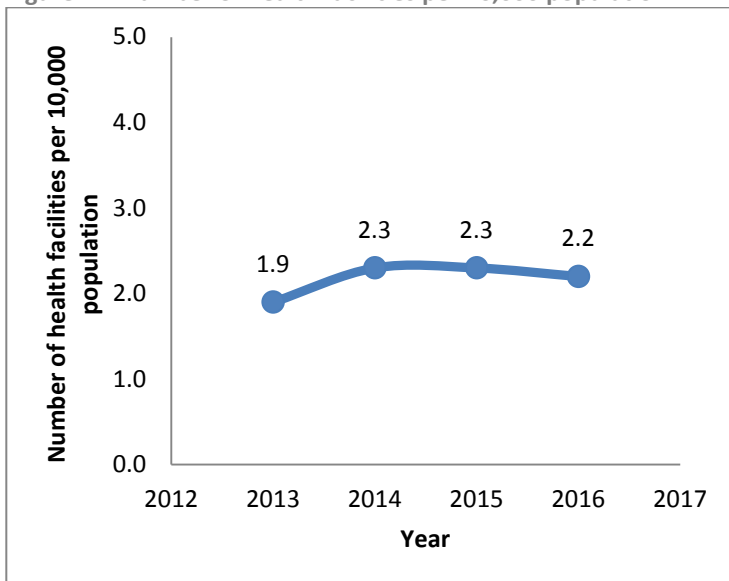


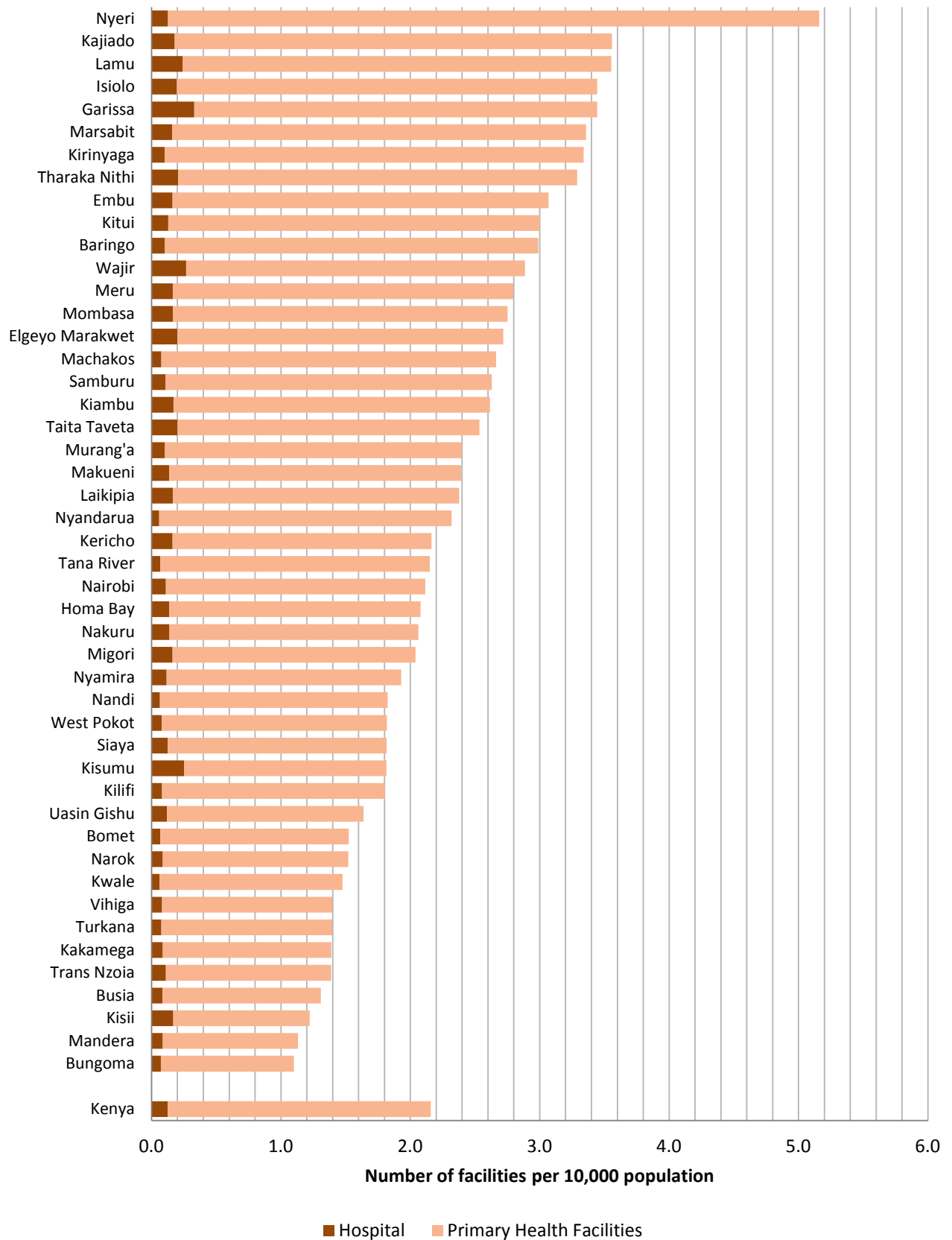
Figure 42 shows the health facility density in Kenya, by county. It shows very large inequalities between the counties, with for instance the density in Garissa county about six times higher than that in Nyandarua county. The density was however higher than the mid-term target in 32 of the 47 counties.

A major limitation of health facility density is the assumption that all facilities provide the same amount of service, which is not the case. In many countries, more advanced care such as outpatient services for chronic noncommunicable conditions is available only in hospitals. Therefore, if the target population of the lowest level hospital in Kenya (level IV hospital) is 100,000 people then there should be at least one hospital (regardless of level) for every 100,000 people in Kenya. This target was surpassed. Hospital density in Kenya in 2016 was 1.3 per 100,000 population. This represents one hospital for every 78431 people.

Surpassing the target for health facility density does not necessarily mean access to health care is good for all citizens. Determinants of health care access are many and varied including distance, funds, availability of services, health worker attitudes and practices, and other socio-cultural factors. Moreover, most of the health care facilities

in Kenya are in urban areas where only 30% of the population live. Therefore, decisions on whether or not to construct additional health facilities should not be based on health facility density alone.

Figure 42: Health facility density per 10,000 population in Kenya, (MoH, 2016)



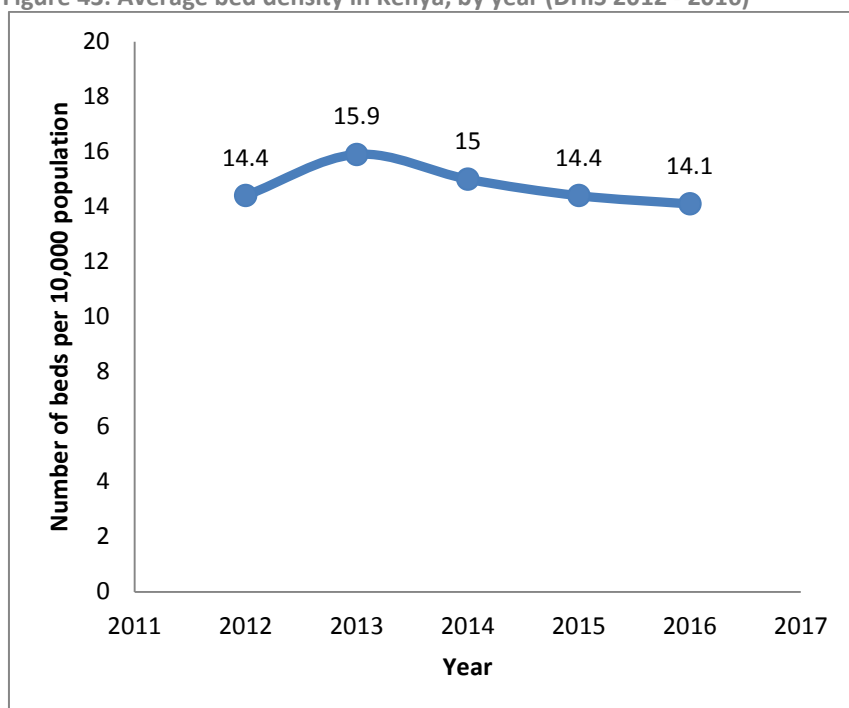
7.4 Inpatient bed density

Inpatient bed density is an indicator of access to inpatient services. It is expressed as the number of inpatient beds per 10,000 population. Assessment of inpatient bed density is based on all admission beds but excludes maternity beds. There is currently no global norm for density of inpatient beds in relation to total population. The global average for inpatient bed density is 27 per 10,000 and the average in the African region is 10 beds per 10,000 population. The service availability and readiness assessment survey (SARA) uses benchmarks of 18 and 39 inpatient beds per 10,000 for lower and upper-middle-income countries, respectively.

The aim in the KHSSP was to increase the inpatient bed density from 50 per 10,000 population in 2013 to 150 per 10,000 population in 2016. This is higher than the global average and the average in the African region. Moreover, the baseline value is higher than the value calculated for 2013. The baseline and target have therefore been revised using the DHIS and SARA values to 14.4 (DHIS, 2012) and 18 (SARA) per 10,000 population, respectively.

The average bed density in Kenya declined steadily during the review period but remained higher than the average in the African region of 10 beds per 10,000 population (Figure 43). In 2016, the density was 14.1 per 10,000 population. This means that on average, there is one inpatient bed for every 709 people in Kenya.

Figure 43: Average bed density in Kenya, by year (DHIS 2012 - 2016)



7.5 Health workforce density

Health systems require a strong health workforce i.e. an adequate number of health workers with knowledge, skills, and motivation to deliver services across the country. The assessment of the level and distribution of the health workforce in Kenya was based on the availability and distribution of staff that are at the core of patient care, namely doctors, clinical officers, nurses and midwives, also referred to as core health professionals. It did not include the other cadres. The availability of core staff is a very good proxy indicator of the strength of health workforce. The minimum health workforce threshold required for effective delivery of health care services is

currently unknown but WHO has proposed a threshold of 23 physicians, nurses and midwives per 10,000 population²⁵.

Kenya aimed to increase the density of health workers from 5 per 10,000 population in 2013 to 7 per 10,000 population in 2016. The quality of data is however not good enough to track trends in the numbers and density of core health professionals. The best estimate for 2016 is based on county reports and the SARAM 2012, and several data imputations had to be made to obtain the best estimate.²⁶ It is estimated that there were 9 health workers per 10,000. Because there are no reliable data over time, it is difficult to assess whether progress has made during KHSSP. As expected, there were more nurses/midwives than clinicians (doctors and clinical officers). The density per 10,000 population was 1.4 for doctors, 0.5 for clinical officers, and 7.3 for nurses. This corresponds with a skills mix of 2.7 nurses/midwives for on medical or clinical officer.

Table 5: Percent of approved positions that have been filled (County reports, 2016)

	Level 2	Level 3	Level 4	Tertiary	Kenya
Medical officers	N/A	5	14	43	17
Clinical officers	5	9	9	19	9
Nurses and specialist nurse	16	15	14	30	16
Total	14	13	13	30	15

A related indicator for assessing the availability of health workers is the percentage of approved positions that have been filled. This indicator assesses the availability of health workers against the staffing norms established by the government for each health facility level. For instance, Kenya is expected to have 2 doctors at each level3 facility, 40 at each level4, and 121 at each tertiary level facility. Table 5 shows that only 15% of the approved positions in Kenya were filled, with the percentage in tertiary level higher compared to other facility levels.

There are large differences between the counties (Figure 44). The urban counties of Nairobi and Mombasa have densities above 24 per 10,000, and in all likelihood this is still an underestimate of the true number, as many work in the private sector and are not fully counted. Inequalities between counties in core health worker density were very large, with up to sevenfold difference between the county with the highest and the county with the lowest core health worker density. Overall, 43 of the 47 counties have a health worker density below 10 per 10,000 population and the densities were particularly low in Turkana, Mandera, Bomet, Kajiado, Narok, Migori, Kilifi and Kwale.

7.6 Outpatient and inpatient utilization rate

Outpatient utilization rate measures the number of visits for ambulant care in a defined administrative or health area during a year. It includes visits to all public and private facilities as well as mobile clinics but excludes visits for immunization services. It is expressed as per capita outpatient utilisation rate per year i.e. the average number of outpatient visit per person per year.

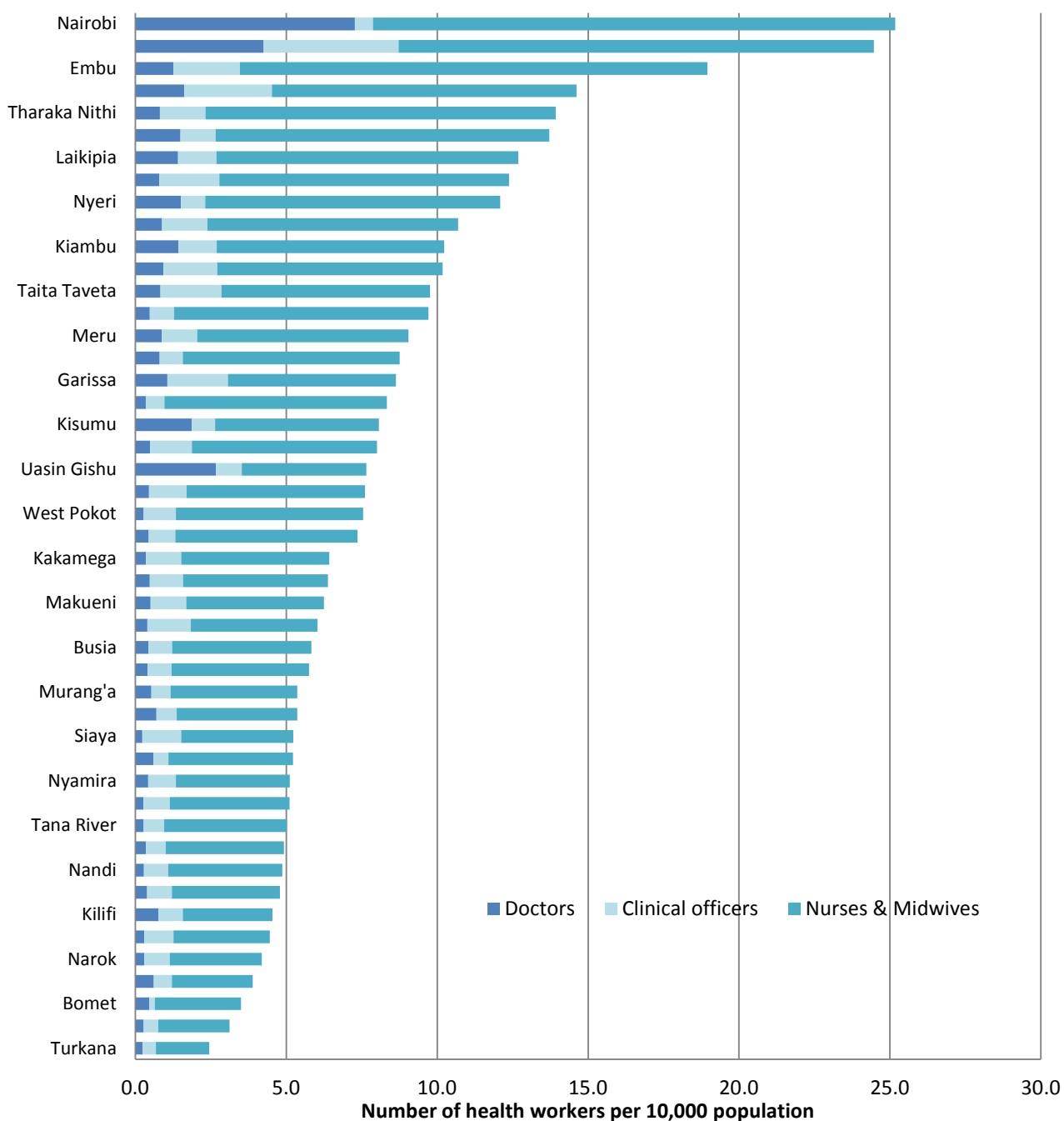
²⁵ This is based on an analysis that countries with less than 23/10,000 generally fail to achieve adequate coverage rates for maternal and child health care interventions. WHO 2006 (pg. 11). Working together for health. The world health report 2006. Available at: http://www.who.int/whr/2006/whr06_en.pdf accessed on 25th Aug 2016

²⁶ Two data sources were used, as at present there is still no complete health workforce information system: county reports on numbers of health workers by cadre and the health facility census conducted in 2012 (SARAM). The recent county reports were taken as starting point, but appeared to suffer from underreporting in several counties. If the county reports were lower than the headcount in the SARAM, the SARAM data were used as best estimate of number of health workers. In case of Nairobi, an additional adjustment was made, as there was a heavy underreporting of nurses (there were 2.5 times more medical and clinical officers than nurses). The number of nurses was estimated using a skills mix ratio of 2.2.

In countries of the Organization for Economic Co-operation and Development (OECD), the average number of physician consultations per person per year is about six. The World Health Organization’s service availability and readiness assessment (SARA) uses five outpatient visits per person per year as a benchmark²⁷.

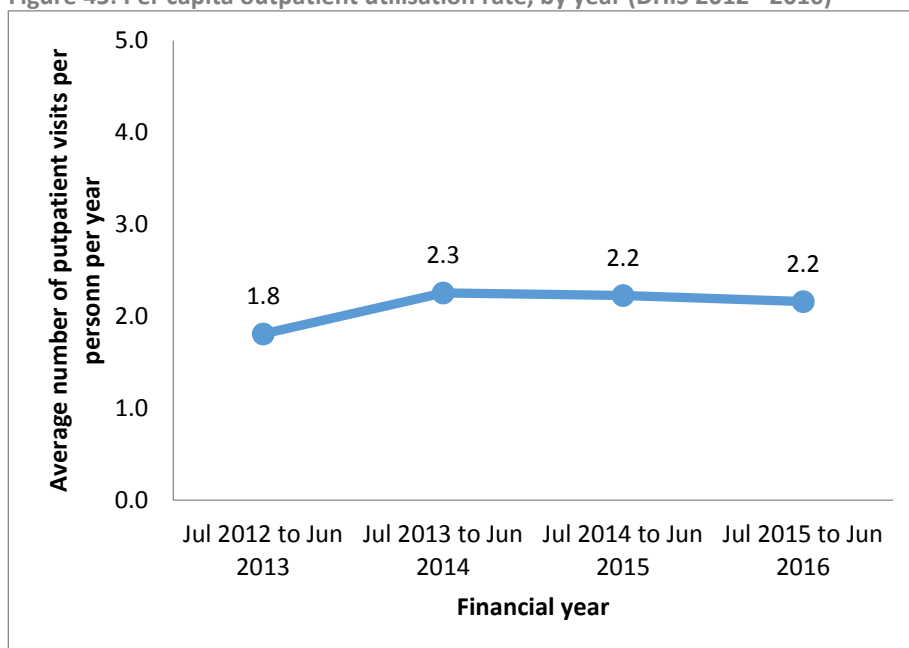
Kenya aimed to increase the per capita outpatient utilization rate from 1.8 in 2013 to 3 in 2016 and 4 in 2018. This intermediate target was not achieved. The per capita outpatient utilization rate during the review period was stagnant at around 2.2 i.e. on average; there were about two OPD visits per person each year during the review period. This however represents a slight increase from the July 2012 – June 2013 baseline value (Figure 45). However, the per capita OPD utilization in Kenya could be higher than reported because data for visits to most private facilities, especially to private for profit facilities, were considered to be incomplete.

Figure 44: Health worker density by county, from county reports and SARAM 2012



²⁷ Available at: http://www.who.int/healthinfo/systems/sara_reference_manual/en/

Figure 45: Per capita outpatient utilisation rate, by year (DHIS 2012 - 2016)



Values adjusted for reporting completeness

Per capita outpatient utilization rate during the review period varied quite widely between counties, with about fivefold difference between the county with the highest and the county with the lowest per capita outpatient utilization rate (Figure 45). During the review period, Trans-Nzoia county had the lowest per capita outpatient utilization rate, followed by Bungoma, Narok, Turkana, Vihiga, Mandera, Tana River, and West Pokot county. Kirinyaga had the highest density followed by Nyeri, Embu, Machakos, Murang'a and Mombasa.

Inpatient admission rate provides additional information on the availability and access to inpatient services. In developing countries with high disease burden, a low inpatient admission rate suggests limited access to inpatient services. Assessment of inpatient utilisation rate is based on all inpatient admissions excluding admissions for delivery. It is expressed as the number of patient discharges per 100 population per year. In OECD countries, which have an ageing population, there are about 15 discharges per 100 population per year. WHO's SARA survey uses 10 discharges per 100 people per year as a benchmark²⁸.

Inpatient admission rate during the review period was almost constant at around 6 per 100 population. It was 6.1 in 2012/2013, 6.6 in 2013/2014, 6.7 in 2014/2015, and 6.2 in 2015/2016. Differences by county were very large (Figure 46). During the review period, the admission rates in Busia, Kirinyaga, Mombasa, Nyeri and Kisumu were higher than elsewhere. The rates were particularly low in Tana River, Bomet, Wajir, Narok, and Kwale. The trend during the review period was towards a reduction in the relative inequality gap but increase in absolute gap (Figure 47).

²⁸ Available at: http://www.who.int/healthinfo/systems/sara_reference_manual/en/

Figure 46: Per capita outpatient utilisation rate during the review period, by county (DHIS 2013 - 2016)

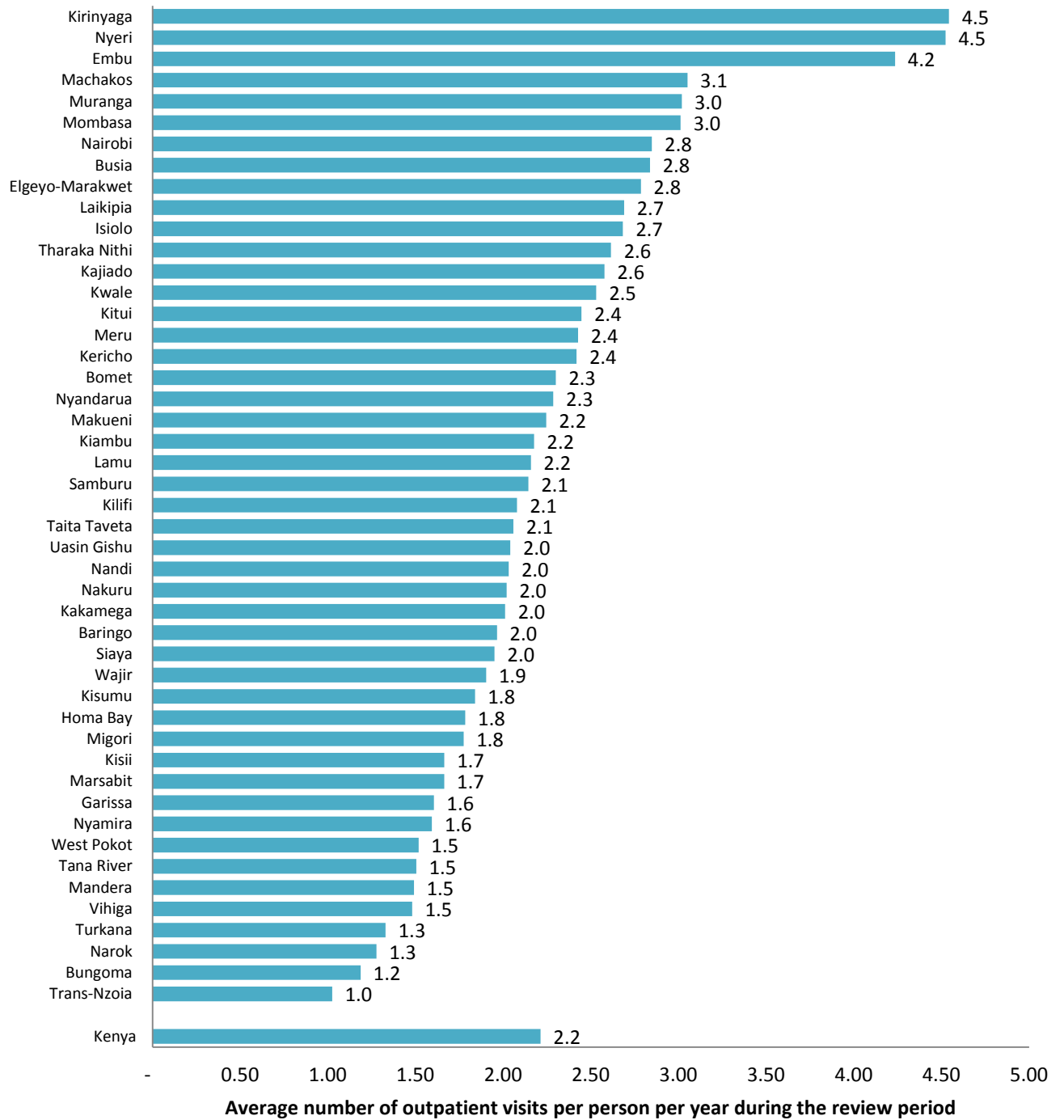


Figure 47: Average inpatient admission rate per year during the review period (DHIS)

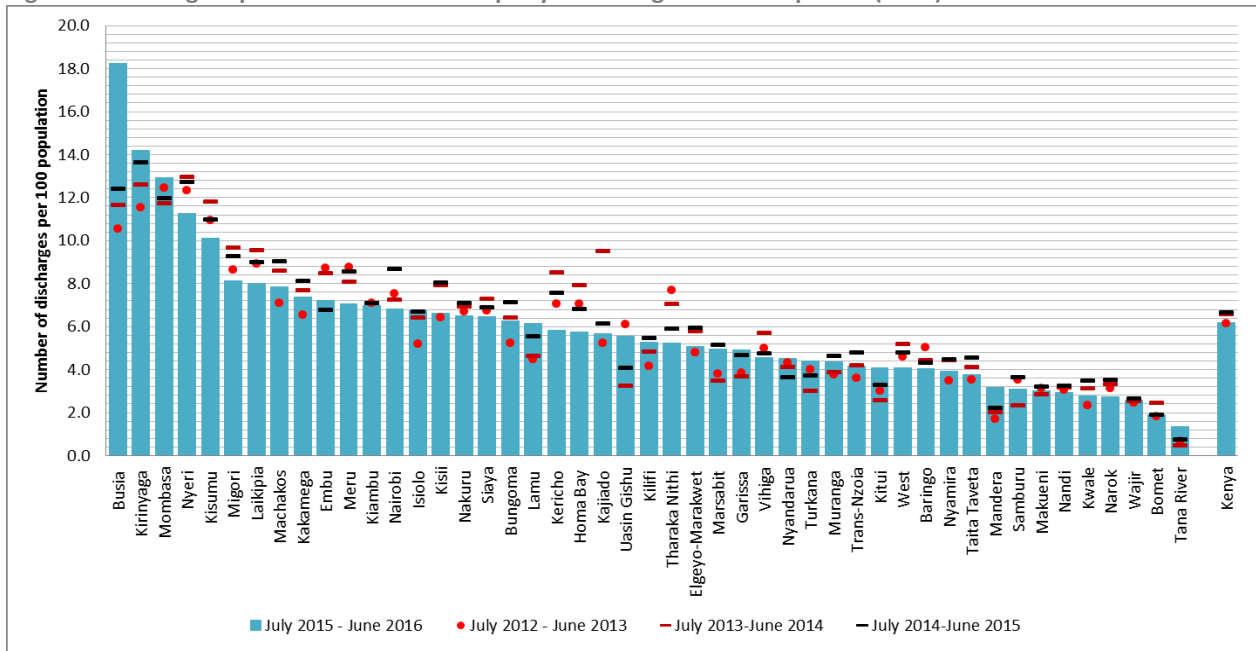
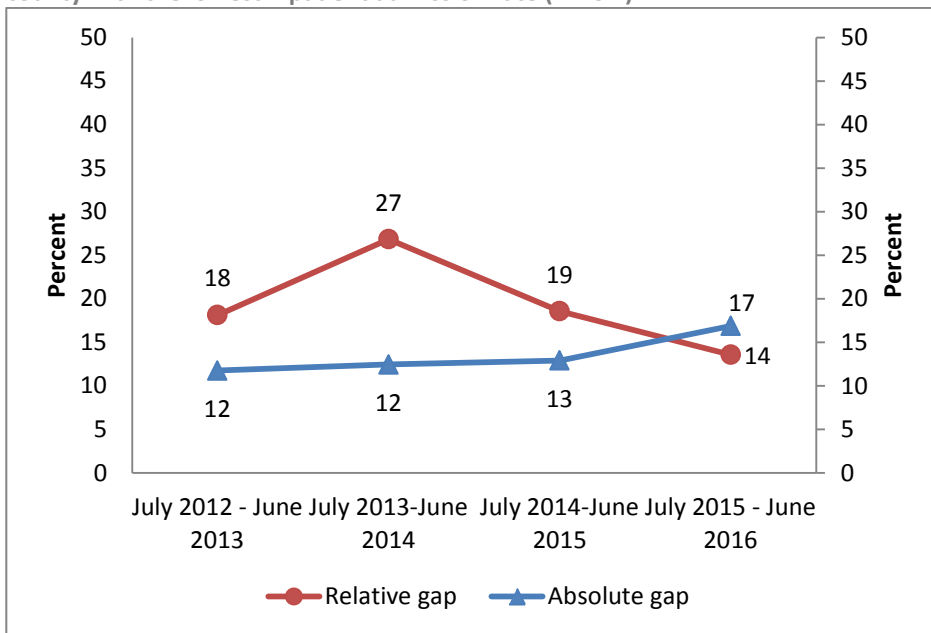


Figure 48: Trends in inequality gap between the county with the highest and county with the lowest inpatient admission rate (DHIS 2)



7.7 Bed occupancy rate

Bed occupancy rate is a measure of utilization of the available bed capacity. It indicates the percentage of beds occupied by patients in a defined period of time, usually a year. The aim of the KHSSP is to increase the bed occupancy rate from 85% in 2013 to 95% in 2016 and in 2018. The optimal bed occupancy rate is not known but bed occupancy rate above 85% is thought to be too high and a considerable risk to safe and efficient delivery of health services. Bed occupancy rate above 100% means there were more inpatients than available beds. The baseline value in the KHSSP needed revision because it was way higher than the value calculated when data became available (41% in 2012/2013). As shown by Figure 49, the average annual bed occupancy rate in Kenya during the review period remained fairly constant at slightly over 40%.

Big differences between counties in bed occupancy rate (Figure 50). During 2015/2016, bed occupancy rate in Migori county was more than 100% - suggesting a severe shortage of beds i.e. more patients admitted than the available beds. The rates were particularly low in Wajir (13%) and Vihiga (13%) which may suggest difficulties in access to inpatient services.

Figure 49: Average bed occupancy rate in Kenya, by fiscal year (DHIS 2)

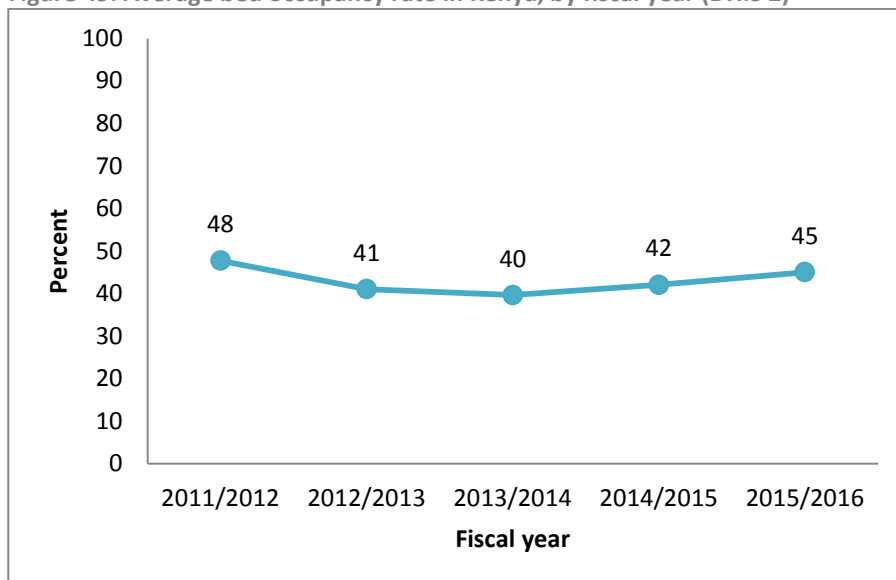
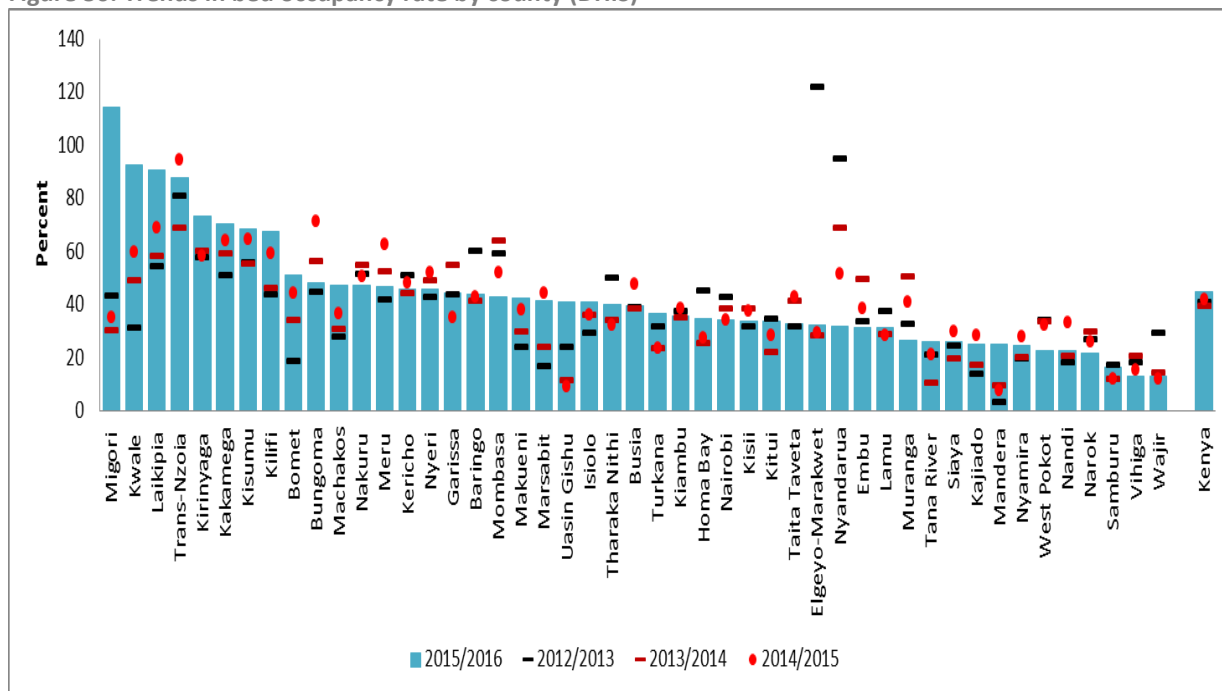


Figure 50: Trends in bed occupancy rate by county (DHIS)

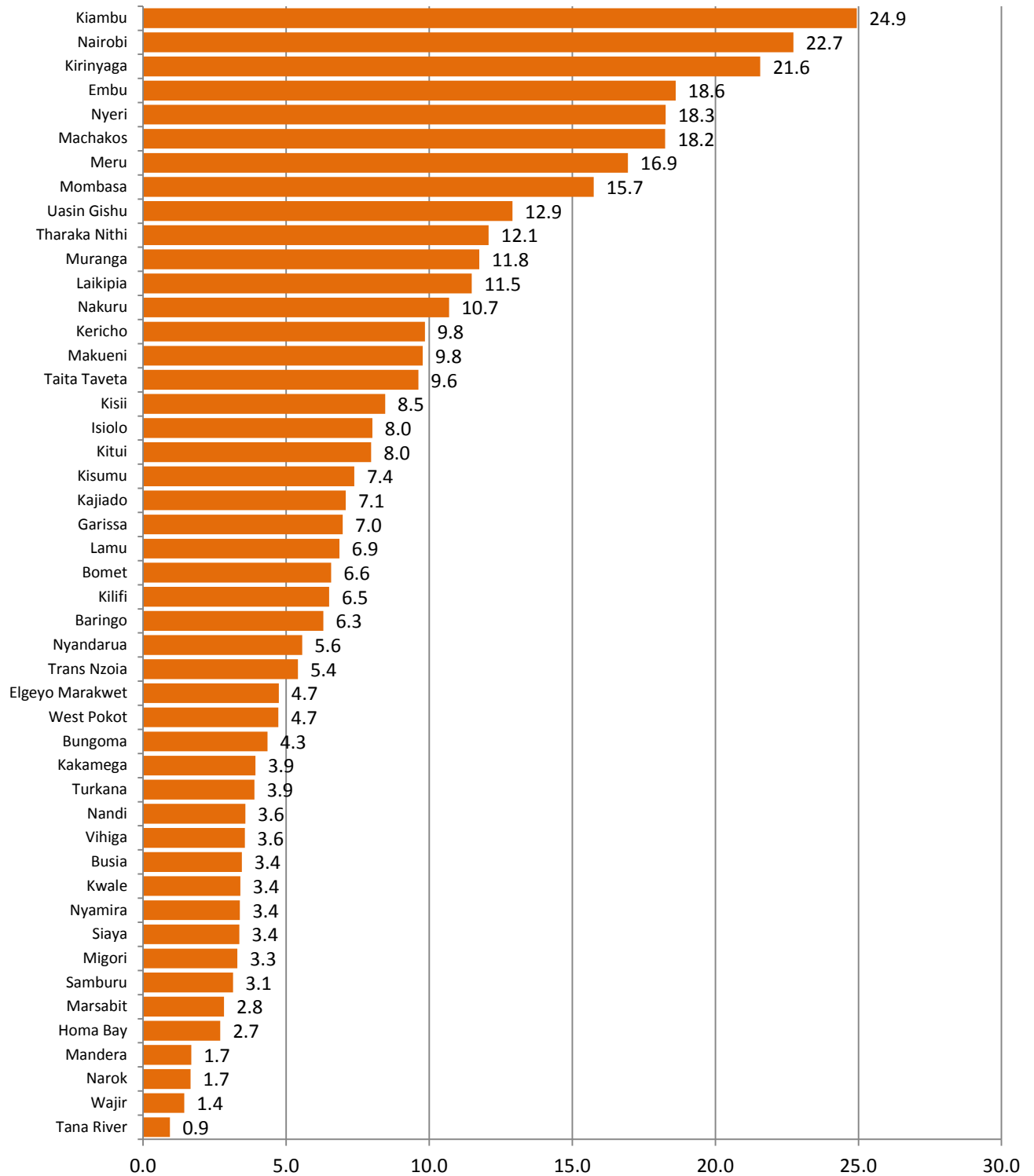


7.8 Caesarean section rate

There was an increase of Caesarean section rates from 7.6% to 9.5%. This increase is almost entirely the result of more women delivering in health facilities, as the proportion of women with Caesarean section among those delivering in a health facility remained constant at 13%. This, like the continued decline of institutional maternal mortality ratios, suggests that health facilities were able to keep up with the increased utilization, as Caesarean section rates did not go down. This was also supported by trends in institutional stillbirth rates and maternal mortality ratios (see relevant section).

However, Caesarean rate in Kenya differed quite widely by county, with up to 23 point difference between the counties with the highest rate (Nairobi and Kirinyaga) and those with the lowest rate (Wajir, Mandera and Tana River) (Figure 51). This large difference is associated with differences in county institutional delivery rates and access to emergency obstetric services within facilities.

Figure 51: Caesarean sections per 100 deliveries, by county (DHIS 2015/2016)



Other indicators of health care access

Oral rehydration therapy for diarrhoea:

Diarrhoea is a major cause of child morbidity and mortality. In Kenya, it is the third most common cause of morbidity in children under-five years. According to the KDHS (2014), about 15% of the children in Kenya had diarrhoea in the two weeks that preceded the survey.

Oral rehydration therapy is the recommended first line treatment for diarrhoea. It is cheap and should be readily available at all health care delivery levels, including private clinics. Knowledge of oral rehydration therapy among women in Kenya was found to be high and increasing. It was 78% in the 2008-2009 survey and 93% in the 2014 survey. Therefore, if access to health care is good, all children with diarrhoea should receive oral rehydration therapy. This however was not the case in Kenya. According to the KDHS, the percentage of children with diarrhoea receiving oral rehydration therapy was low but increasing. It was 39% in the 2008 – 2009 survey and 54% in the 2014 survey.

Treatment of fevers within 48 hours:

Another indicator of health care access is the proportion of children promptly treated for fevers. Malaria and respiratory tract infections are the leading cause of fever in children in Kenya. According to the KDHS 2014, 24% of children under five years had fever in the two weeks that preceded the survey. Of these, 63% received treatment or advice on the management of fevers. This represents a big improvement from the 49% in the 2008 – 2009 KDHS survey that received treatment or advice for fever.

Treatment of acute respiratory infection within 48 hours:

Acute respiratory infection (ARI) is one of the leading causes of childhood morbidity and mortality throughout the world. Early diagnosis and treatment is important for reducing the number of deaths among children.

The DHS considers a child with cough accompanied by short rapid breathing as having pneumonia and for which treatment or advice should be sought from a health worker. If health care access is good, ideally all children with suspected pneumonia should receive treatment from a health provider. This was not the case in Kenya. According to the KDHS (2014), only 66% of children under five years who were suspected to have pneumonia received treatment or advice from a health provider. This however represents an improvement from the 56% in the 2008 – 2009 survey who received treatment or advice from a health provider.

The performance of these indicators suggests that access to health care services for children in Kenya is limited but also improving.

8. Health status

8.1 Life expectancy at birth

One of the objectives of the KHSSP is to increase the average life expectancy at birth from 60 years in 2013 to 62 years in 2016 and 65 years in 2018. In the absence of complete death registration, life expectancy is estimated from survey and census data on child and adult mortality. The most recent data are from the KDHS 2014 which provides mortality data based on years preceding the survey. Therefore, life expectancy trends during KHSSP can only be projected based on previous trends.

WHO estimates the average life expectancy at birth in Kenya at 62.6 years in 2013, increasing to 63.4 years in 2015²⁹. Female life expectancy by 2015 is 65.8 years, compared to 61.1 years for men. Since 2000, life expectancy has increased at a rate of 0.8 years per year (1.3% average annual increase), driven by child and adult mortality declines.³⁰ According to the WHO estimates, the average life expectancy at birth in Kenya in the past several years was higher than the median of eight sub-regional countries of similar socio-economic status but was the third highest in the group after Rwanda and Ethiopia (Figure 52).

8.2 Child mortality

To assess the performance of efforts towards improving child health in Kenya, the KHSSP has selected two child mortality indicators: neonatal and under-five mortality rates per 1,000 live births. The aim is to reduce neonatal mortality rate per 1,000 live births from 31 in 2013 to 25 in 2016 and 15 in 2018, and under-five mortality rate per 1,000 live births from 74 in 2013 to 50 in 2016 and 35 in 2018.

The last three KDHS surveys show that the neonatal and under-five mortality rates in Kenya are decreasing at a fast pace. In the 2014 KDHS survey, the neonatal, and under-five mortality rates per 1,000 live births in Kenya were 22 and 52, respectively, for the five years preceding the survey (Figure 53).

Using the UN estimates that are based on all survey and census data, neonatal mortality has declined at a rate of 2.7% per year during 2005-2015. If this rate of decline continues post-2015 then neonatal mortality would be 22 by 2016 (target met), 20 by 2018 (target of 15 not met), and 15 per 1,000 live births by 2030 (SDG target of 12 not met).

For under-five mortality the rate of decline 2005-2015 was faster than for neonatal mortality: 5.5% per year. If this rapid pace of decline is maintained, under-five mortality rates would be 47 in 2016 (target surpassed), 42 in 2018 (target not met) and 25 per 1,000 live births in 2030 (SDG target of 25 met).

The midterm targets are likely to have been met, but the 2018 targets are too ambitious. Under-five mortality is on track for the SDG target, while the rate of decline of neonatal mortality rate needs to increase to an average of 4% per year. Compared to the UN estimates for the 8 subregional countries, Kenya is in third place for under-five mortality (after Rwanda and Tanzania) and in 6th place for neonatal mortality (Figure 55).

²⁹ <http://apps.who.int/gho/data/view.main.SDG2016LEXv?lang=en>

³⁰ In the KDHS 2014 adult mortality, measured by the probability of dying between ages 15 and 50 years, declined by 7.3% per year for women and 3.9% for men since the KDHS 2008/09.

Figure 52: Comparison of average life expectancy at birth in sub-regional countries (WHO estimates)

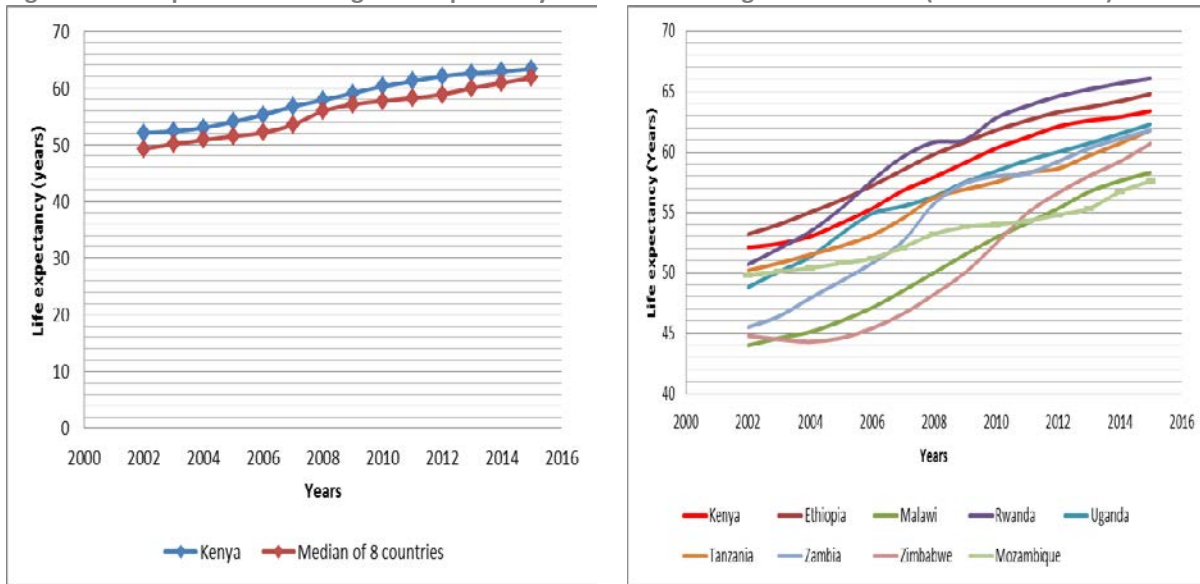
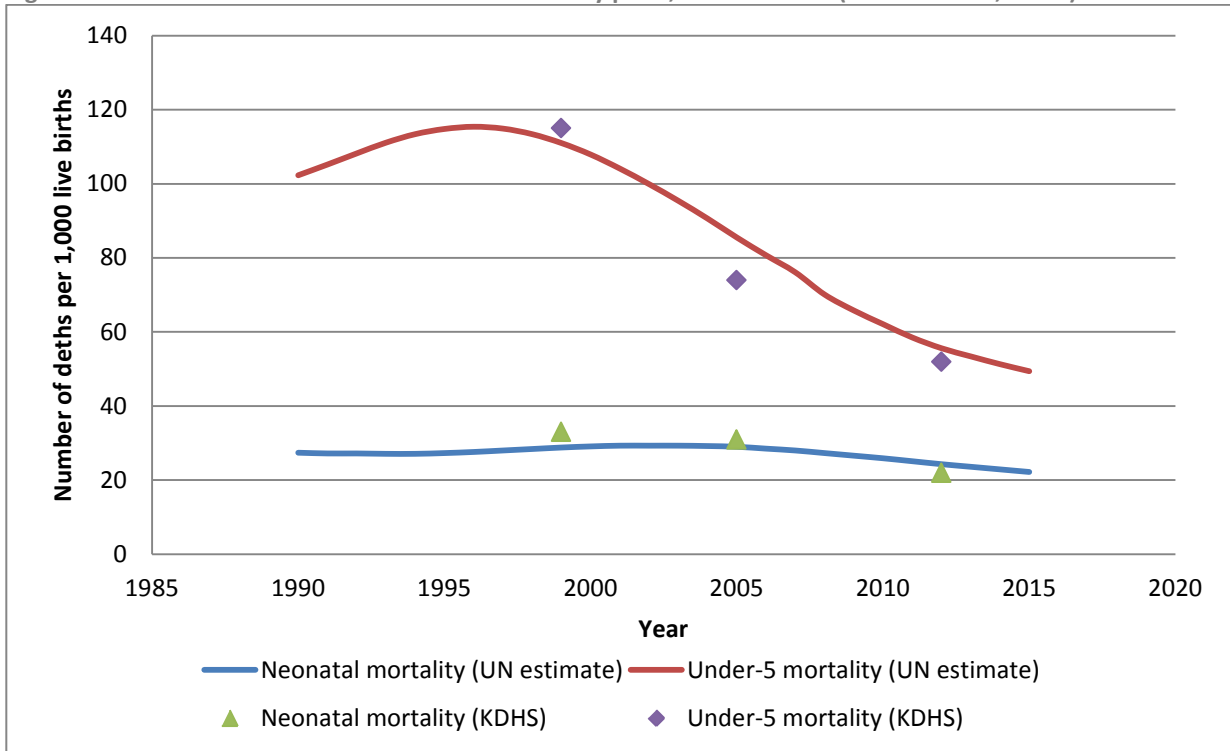
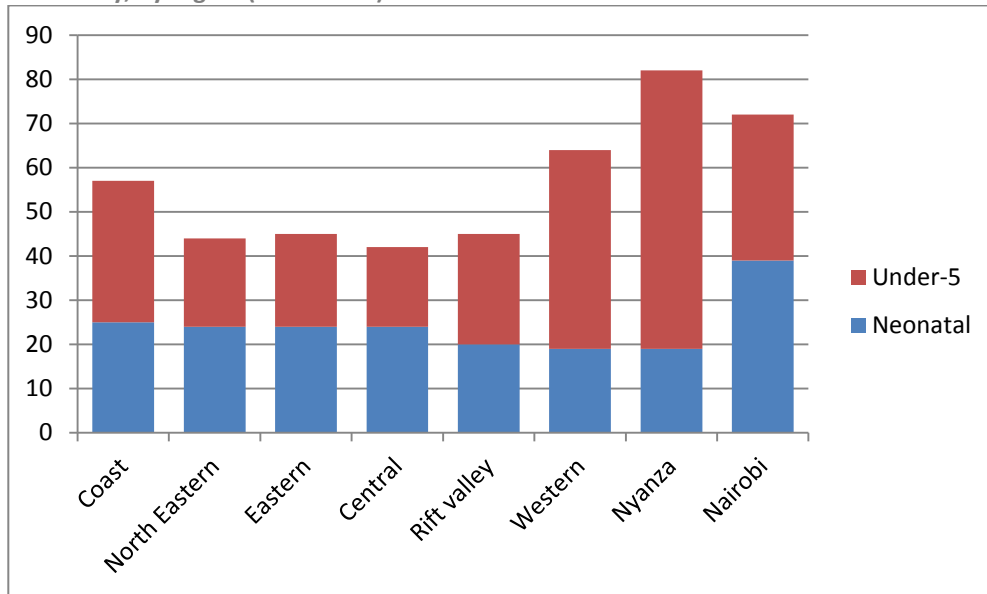


Figure 53: Trends in neonatal and under-five mortality per 1,000 live births (UN estimates, KDHS)



The KDHS provides data by region, showing substantial differences between the regions with the under-five and infant mortality rates substantially higher in Nairobi and Nyanza than elsewhere in Kenya. Nairobi also had the highest neonatal mortality rate (Figure 54). Changes in child mortality rates over time are not shown in this report but all the regions have registered substantial declines in neonatal, infant and under-five mortality rates. The 2009 census provides child mortality data by county, showing the very high mortality rates in the counties bordering Lake Victoria.

Figure 54: Neonatal and under-five mortality rates for the 10 year period preceding the survey, by region (KDHS 2014)

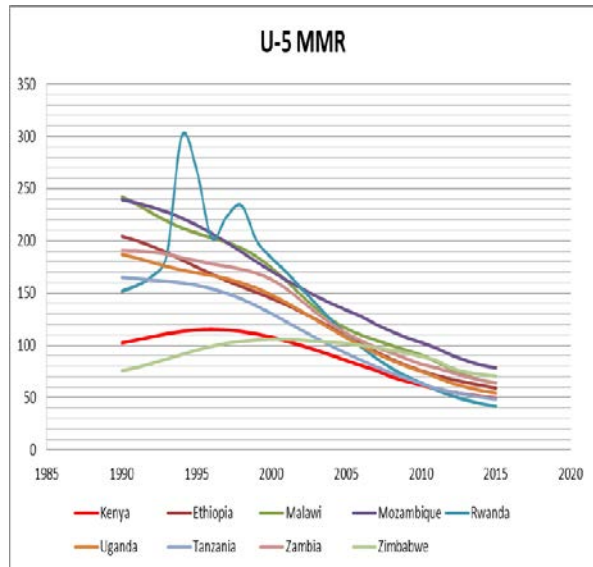
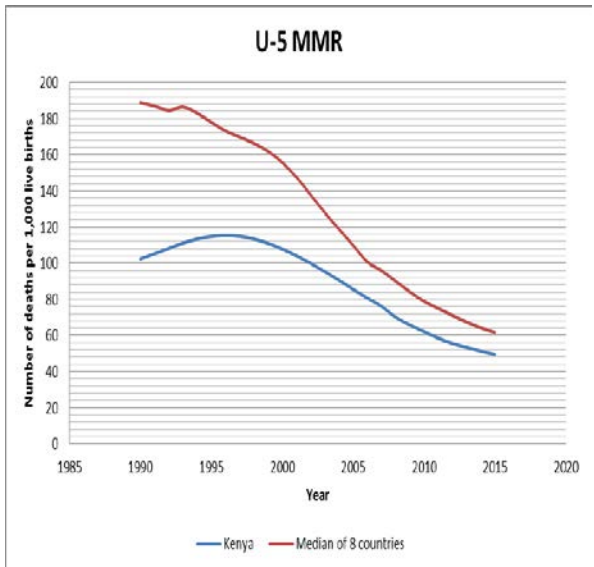
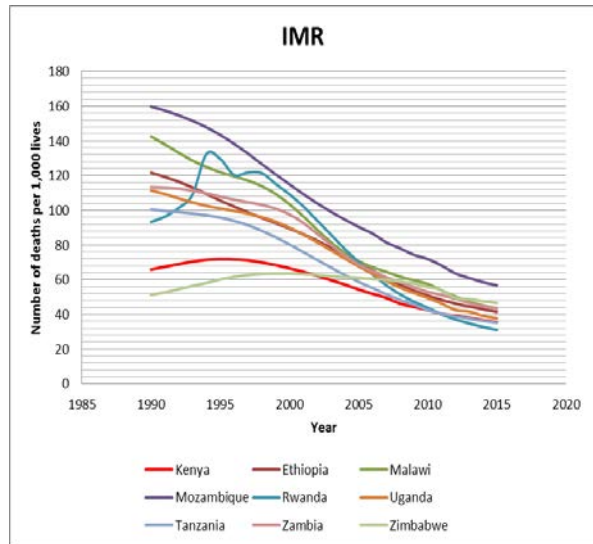
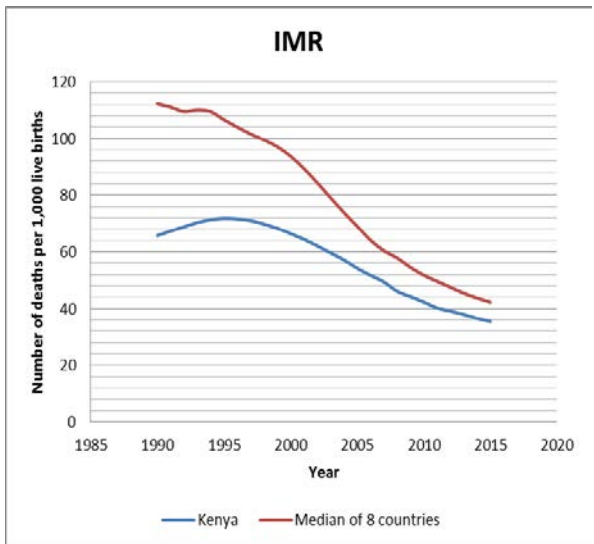
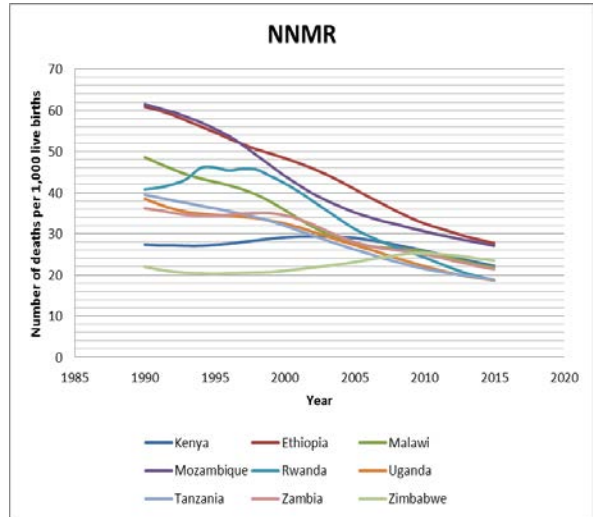
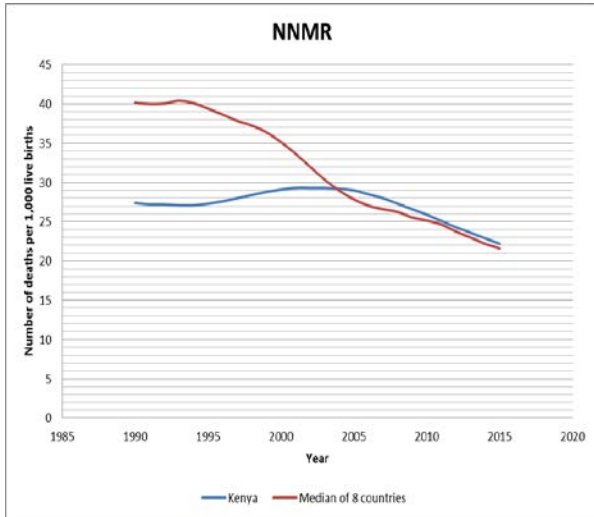


8.3 Maternal mortality

One of the key KHSSP objectives is to reduce the maternal mortality per 100,000 live births from 400 in 2013 to 300 in 2016 and 150 in 2018. According to the KDHS survey, the MMR in Kenya for the seven year period preceding the survey dropped quite substantially from 520 in the 2008-2009 survey to 362 in the 2014 KDHS survey. The proportion of deaths among women 15-49 years that occurred during pregnancy, childbirth or within 6 weeks postpartum was 14.1%, which was similar to 14.3% in the KDHS 2008/09.

Population level data to estimate the maternal mortality ratio during the review period were not available by the time of this review and the updated UN estimates including the KDHS 2014 data have not yet been published. The KDHS 2014 cannot provide disaggregated maternal mortality data by county. County data for institutional maternal mortality are available and these are discussed elsewhere in the report. Figure 56 shows maternal mortality by county as documented by the 2009 census.

Figure 55: Cross-country comparison, neonatal, infant and under five mortality per 1,000 live births, IGME estimates



9. Integrated assessment of county progress and performance

Main findings

- This chapter uses summary measures or indexes to assess the situation and progress in counties. The *health system input* (facilities, beds, health workforce) index shows very large differences between counties, with several but not all counties in northern, northeastern and Rift Valley having the lowest input scores, while most centrally located counties had the higher input scores.
- The *health system output* index (outpatient service utilization and hospital discharge rates) were strongly associated with the input score, but there were exceptions. Counties with lower than expected outputs include Tana River, Lamu, Taita Taveta, Samburu, Isiolo and Baringo, which can be related to low population density of the counties or relative oversupply of for instance health workers. In other counties there was evidence of a high output for their inputs scores, such as Busia, Kakamega and Bungoma, which may have to do with attracting additional patients from across the border.
- The RMCNH service coverage index (family planning, antenatal visits institutional delivery, and full child immunization coverage) progressed only slowly during KHSSP, with only slight reductions in inequality between counties. The RMNCH index was highest in Kiambu, Nyeri and Nyamira (80%) and lowest in Mandera and West Pokot (less than 40%). Yet, progress had been greatest in counties like Mandera, Garissa and Wajir, as well as Kwale and Taita Taveta.
- The communicable disease control coverage index (HIV, TB and malaria) progressed more than the RMNCH index, driven by HIV and malaria intervention coverage. Meru, Busia, Bungoma and Laikipia counties made the greatest progress.
- The UHC access and coverage index brings all indicators together and is based on indicators for RMNCH, communicable disease control, NCD risk factors prevalence and service access. Mombasa county had the highest score. The analysis grouped by level of socioeconomic development of the county into quintiles and allowed the identification of stronger and weaker performers in 2016.
- The UHC index score was not related to the county health budget 2013-16. Counties that had higher health system input scores (more infrastructure and more health workers) tended to have higher health budgets.
- The maps analyzing the numbers of the county target population not receiving specific services (no family planning, no full child immunization, no ART, home deliveries) or at risk (obesity, tobacco use) showed the great differences within Kenya by intervention. In terms of numbers of people in need or at risk obesity and tobacco use and lack of HIV treatment were particularly strongly concentrated (mostly in central Kenya for the NCD risk factors and Lake counties for HIV). Home deliveries (western Kenya and lake counties), family planning needs and lack of full immunization were less concentrated. Nairobi county often topped the list of numbers of target population not benefiting from interventions because of their large population size.

9.1 Introduction

Summary measures or indexes are a useful way to assess overall progress and performance of Kenya as a whole and, in particular, counties during the first half of the implementation of KHSSP 2014-18. The summary measures have limitations as the availability of data for some areas is inadequate. For instance, no reliable trend data were available on the health workforce density in counties, or very limited data were available on treatment coverage for common illnesses.

In this final chapter, indexes of health system inputs, health system outputs, service coverage (RMNCH and communicable diseases control) and universal health coverage were computed. In addition, an index of county socioeconomic development was computed based on the KNBS poverty index for counties (2012) and the mean years of education of women and men combined (source KDHS 2014). The index results are presented in the

specific county profiles. Here, the focus is on the levels of progress that counties had made during the first half of KHSSP and to assess their current situation and progress against the strength of the health system and level of socioeconomic development.

9.2 Health system inputs and outputs

The health system strength in counties was measured for inputs and immediate outputs. The health systems inputs index was constructed from three indicators. For each indicator an upper limit was set to correspond with 100% to be able to compute normalized scores and to reduce the effects of oversupply on the analysis:

- Health facility density: the upper limit for the score was 2.5 health facilities per 10,000 population, or one facility per 4,000 population. This exceeded the current government targets, but since the majority of counties already had at least 2 facilities per 10,000 population, a higher cutoff was chosen. If a county had more facilities the score remained at 100%. If a county for instance had 1 facility per 10,000 population, the county score for this indicator was 40%.
- Hospital bed density: the arbitrary upper limit was set at 27 beds per 10,000 population, based on statistics available from middle and high income countries (global average).
- Core health professional density: the upper limit used by WHO in the 2006 World Health Report of 23 core health professionals per 10,000 population was applied.

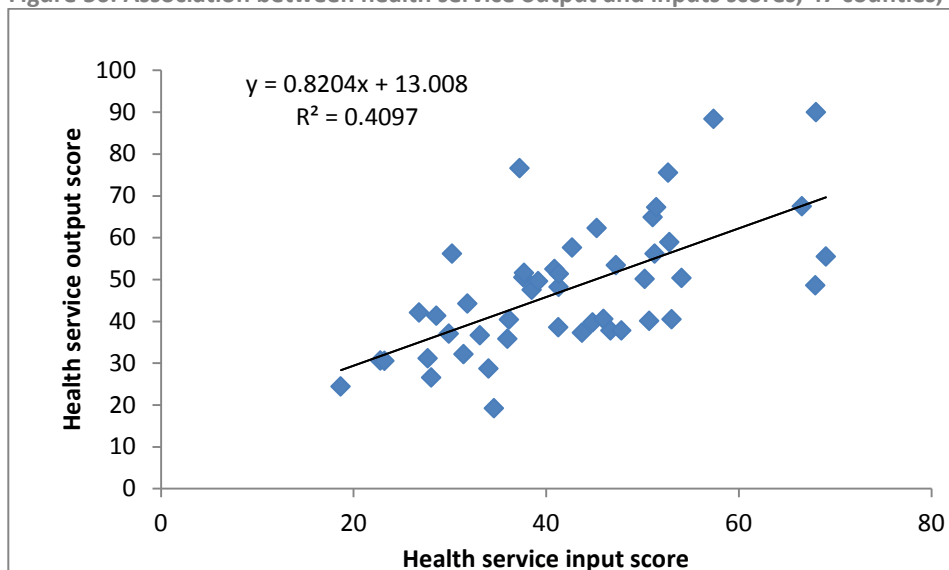
The health systems input index gives double weight to the health worker density indicator, as there are two indicators for health infrastructure.

The health systems output index was based on the outpatient services utilization and inpatient admission rate, giving equal weight to the two components. As with the inputs index, upper limits were introduced as follows:

- Outpatient visits: the upper limit of the number of visits per person per year was set at 5 visits, derived from middle and upper income statistics
- Inpatient admission / discharges: the upper limit of number of discharges per 10,000 population was set at 10 per 1000 population.

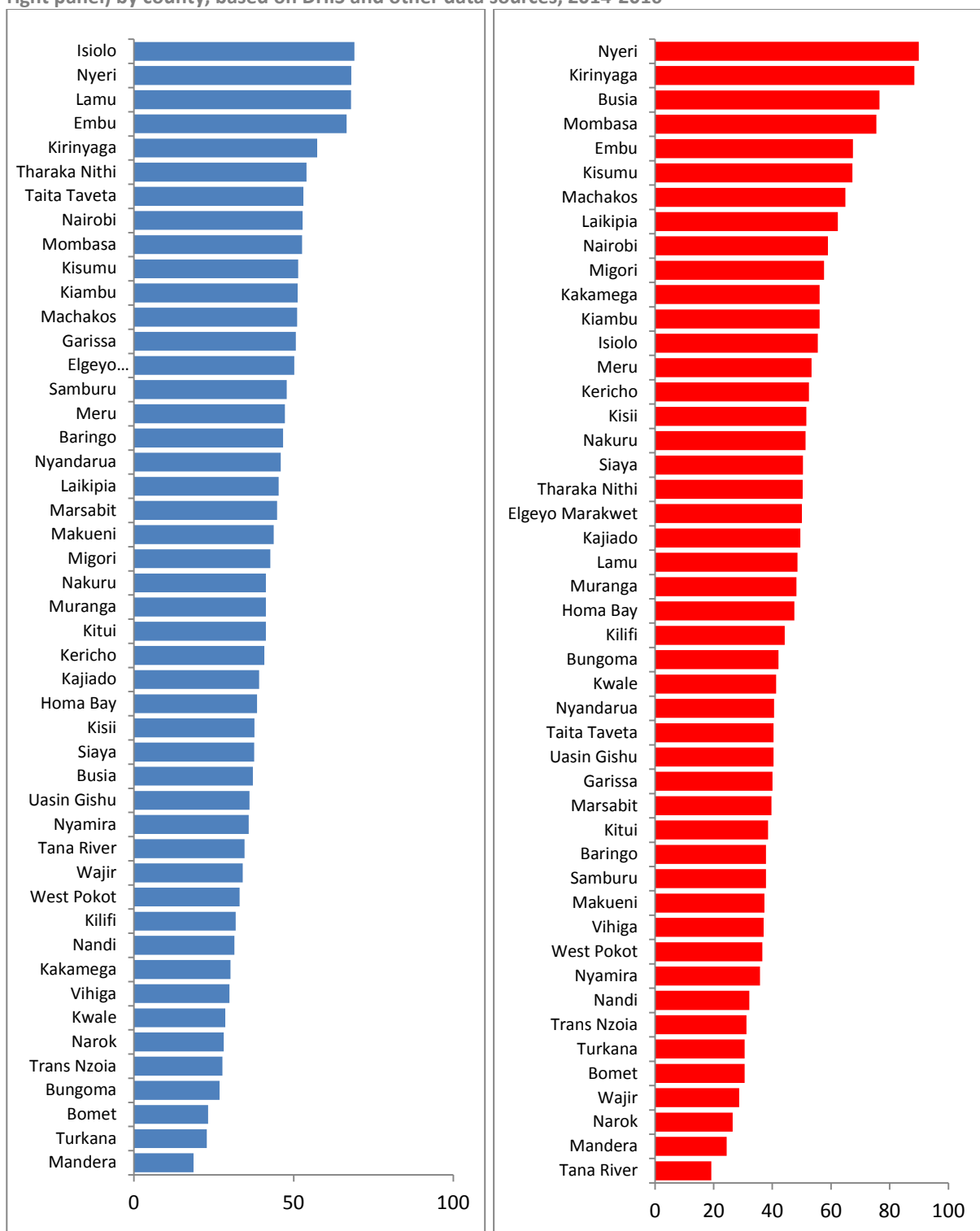
Figure 56 examines the extent to which counties had a relatively high or low output – input ratio, based on general OPD and inpatient service utilization. There was a good correlation between the input and output score as shown with the linear regression: higher inputs result in higher outputs, as expected, but with considerable variation among the counties. Several counties had low output for their input scores – these are located at a distance below the regression line. This could be indicative of relatively low workload for health facilities and health workers and low bed occupancy rates in health facilities.

Figure 56: Association between health service output and inputs scores, 47 counties, Kenya



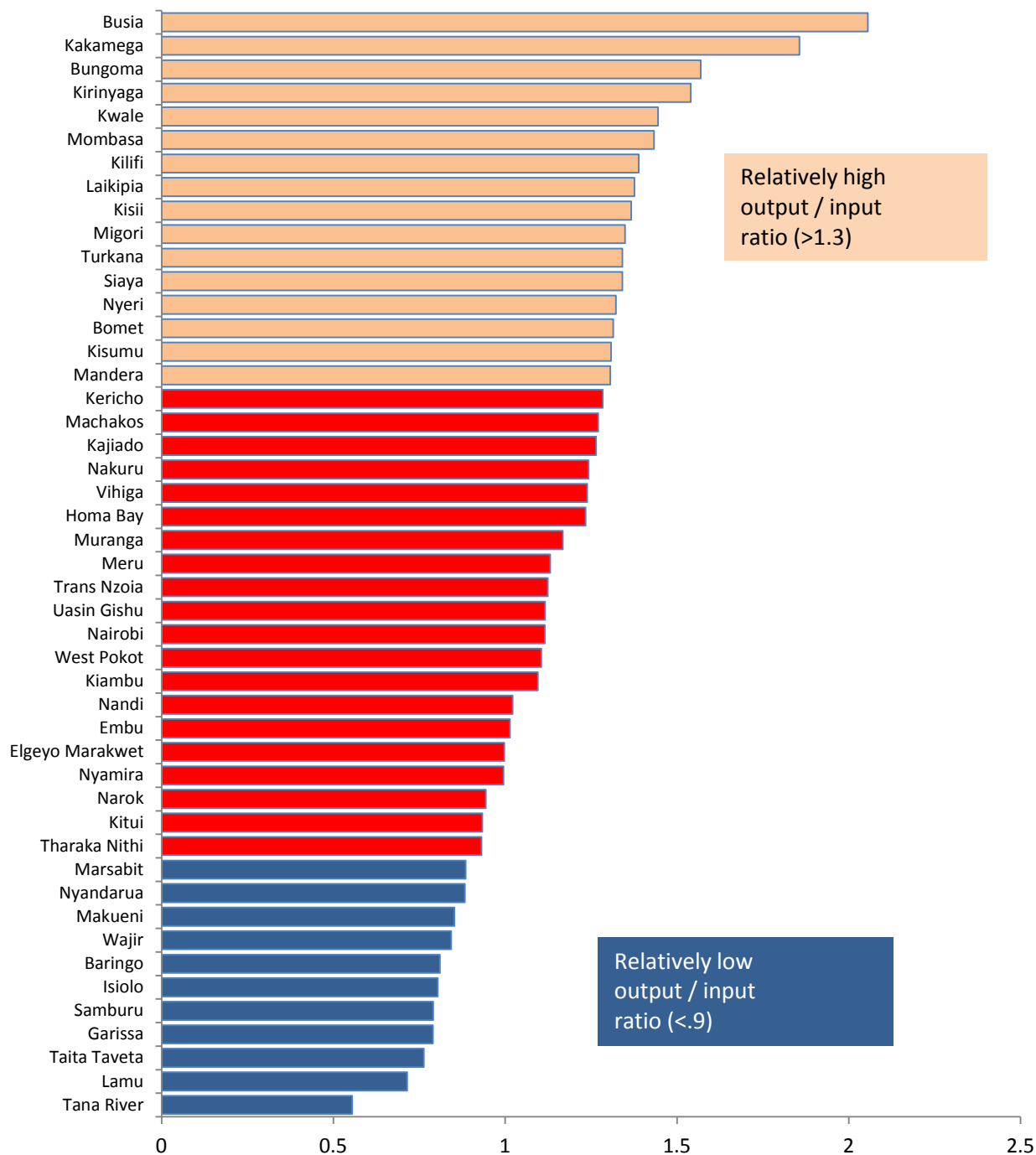
The county scores on the health system input (facilities, beds, health workers, left panel) and health system output (outpatient and inpatient service utilization, right panel) are presented in Figure 57. The counties with the highest score on the health system inputs included counties in the central region such as Nyeri, Embu and Kirinyaga and small population counties such as Lamu and Isiolo. The counties with the lowest availability (and access) to services included several counties in northern Kenya and Rift Valley (Mandera, Turkana, Bomet, Bungoma and Trans Nzoia), though there were several counties such as Samburu, Baringo and Marsabit in those regions with considerable higher health system input scores. The output scores show a fairly similar pattern.

Figure 57: Health system input score (facilities–beds–health workers, left panel) and **output score** (utilization, right panel) by county, based on DHIS and other data sources, 2014-2016



Counties with lower than expected outputs included Tana River, Lamu, Taita Taveta, Samburu, Isiolo and Baringo (Figure 57). In some instances, this may be related to the low population density of the counties, in others there may indeed be a relative oversupply of for instance health workers. Other counties had relatively high output for their inputs scores. Three counties in western Kenya – Busia, Kakamega and Bungoma - topped the list, which may have to do with attracting additional patients from across the border. Three coastal counties – Mombasa, Kwale, and Kilifi - also had relatively higher outputs than expected on the basis of their inputs. In Kwale and Kilifi this may be associated with relatively low service inputs.

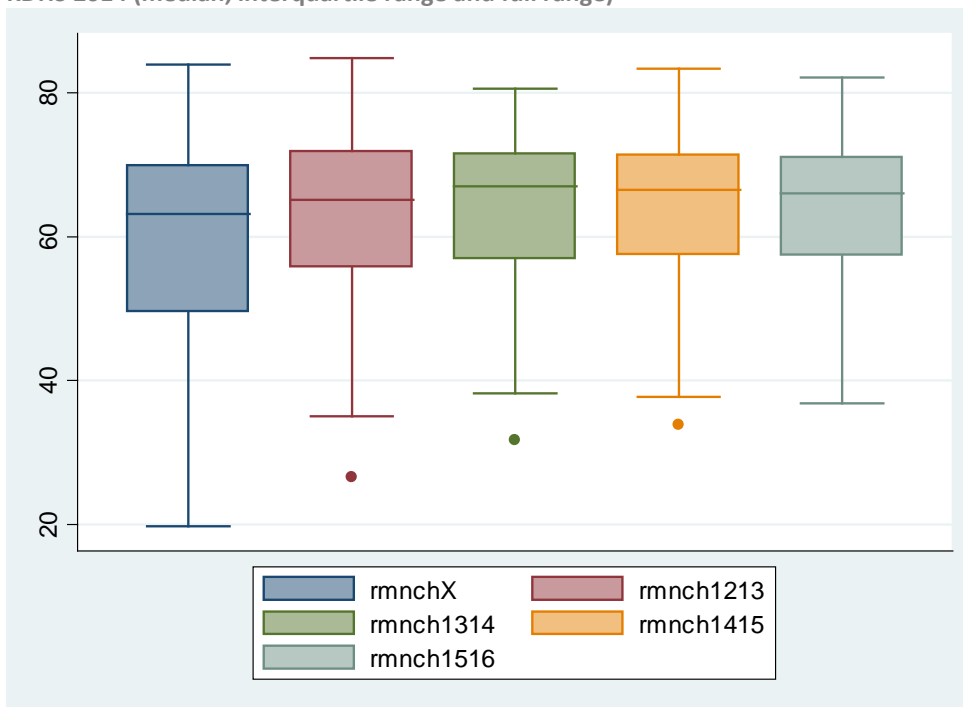
Figure 58: Service output to input ratio by county, based on the index scores, Kenya



9.3 Coverage of services: RMNCH index

Data were available for several indicators of intervention coverage through the DHIS for the period 2012/13 to 2015/16. The RMNCH index includes FP coverage³¹, antenatal visits (four or more), institutional delivery, and full child immunization coverage. Figure 59 shows the RMNCH index trends during 2012/13 to 2015/16 according to the DHIS data (labelled rmnch1213 etc.) as well as the situation according to the KDHS 2014 (labelled rmnchX). The box presents the interquartile range and the line shows the median. The whiskers of the box indicate the full range of county values and the dots are the outliers. There was an increase in the RMNCH coverage index from 2012/13 to 2013/14 but none after that. There was however a narrowing of the range over time, meaning less inequality between the counties. The KDHS 2014 shows greater differences than the DHIS data, which may in part be due to inclusion of pre 2012 data on the maternity related indicators in the KDHS index value.

Figure 59: RMNCH index trends in counties according to the DHIS-based coverage statistics (2012/13-2015/16) and the RMNCH index value obtained from the KDHS 2014 (median, interquartile range and full range)

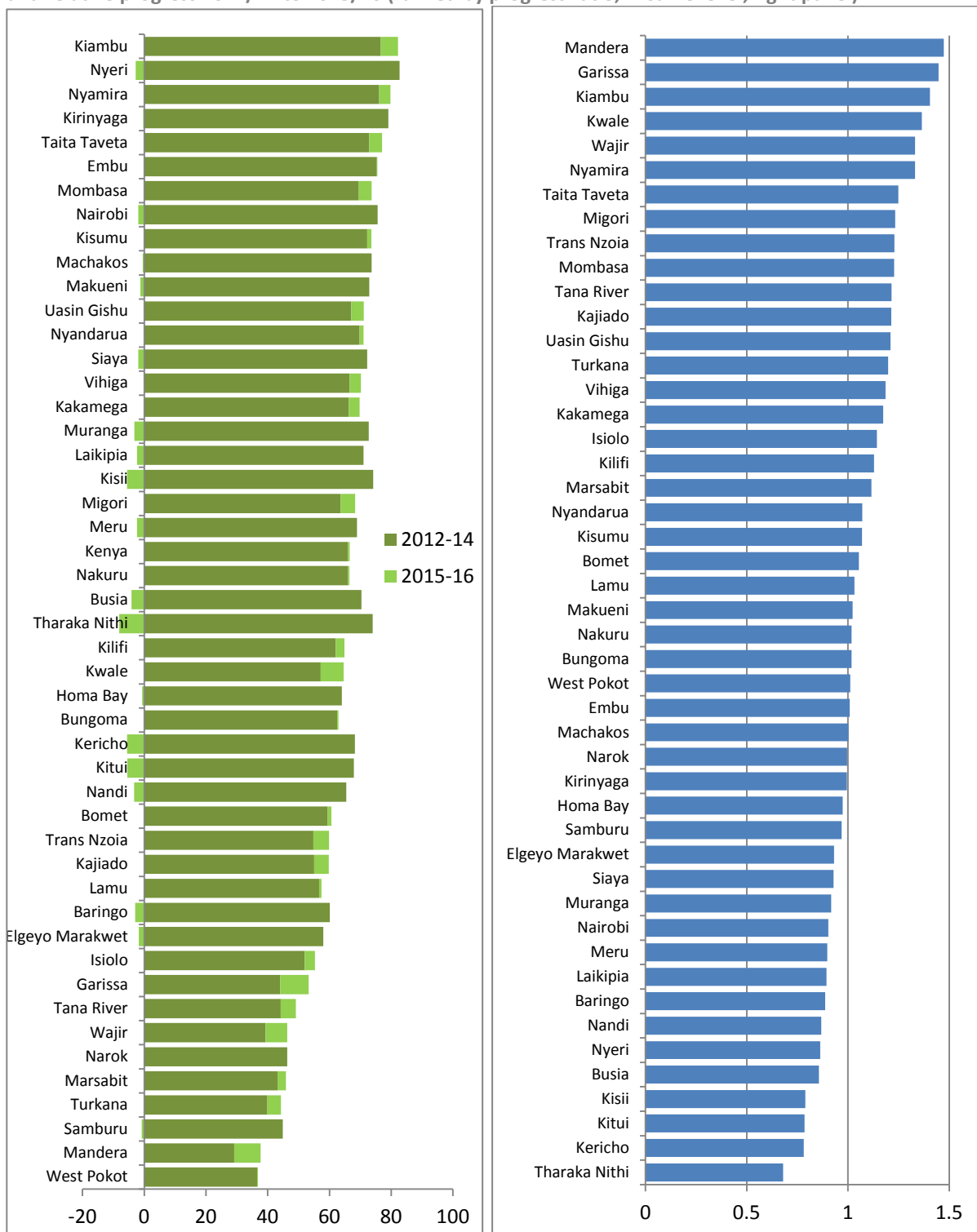


There was considerable variation in the progress of counties. In general, counties with lower coverage prior to KHSSP 2014-18 made greater progress than counties that had higher coverage to begin with. Figure 60 ranks the counties according to the RMNCH index with Kiambu, Nyeri and Nyamira having the highest values at about 80% and Mandera and West Pokot having an index of less than 40%. The changes in the coverage index in 2012-14 and 2015-16 show a different pattern. Fifteen counties had lower RMNCH coverage index values in 2015-16 than in 2012-14. The largest absolute progress was made in Garissa, Mandera, Kwale and Wajir counties, all counties with lower levels of coverage.

Figure 60 also shows the relative progress in counties in the right panel. A progress ratio greater than 1 indicates progress, less than 1 means decline in coverage (the odds ratio of coverage rates was used in the analysis).

³¹ Computed from couple years of protection and the KDHS current use of family planning methods among married women (long term methods) and a conversion from contraceptive use rate to family planning coverage (use of modern methods among those who need family planning) using the formula from Barros et al. (2015).

Figure 60: RMNCH coverage index in 2012-14 and 2015-16 by county (ranked by 2015-16 index level, left panel) and relative progress 2012/14 to 2015/16 (ranked by progress ratio, 1=same level, right panel)

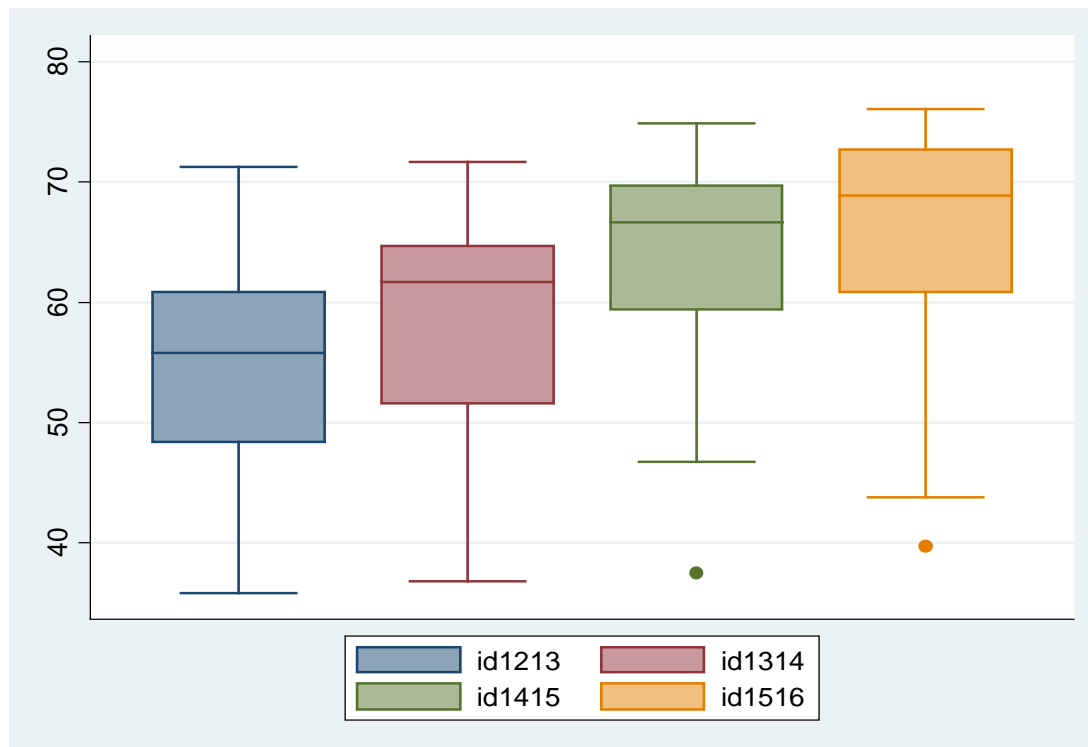


9.4 Coverage of services: communicable disease control

The index includes the following coverage indicators: HIV ART among adults, PMTCT, TB treatment coverage, LLITN use among the population and care seeking behaviour of fever in children. LLITN are only recommended in counties within endemic and epidemic zones. Therefore, the malaria intervention coverage rates in counties located in the lake endemic, coast endemic and highland epidemic zones were included in the index, but no malaria indicator was included in the other counties.

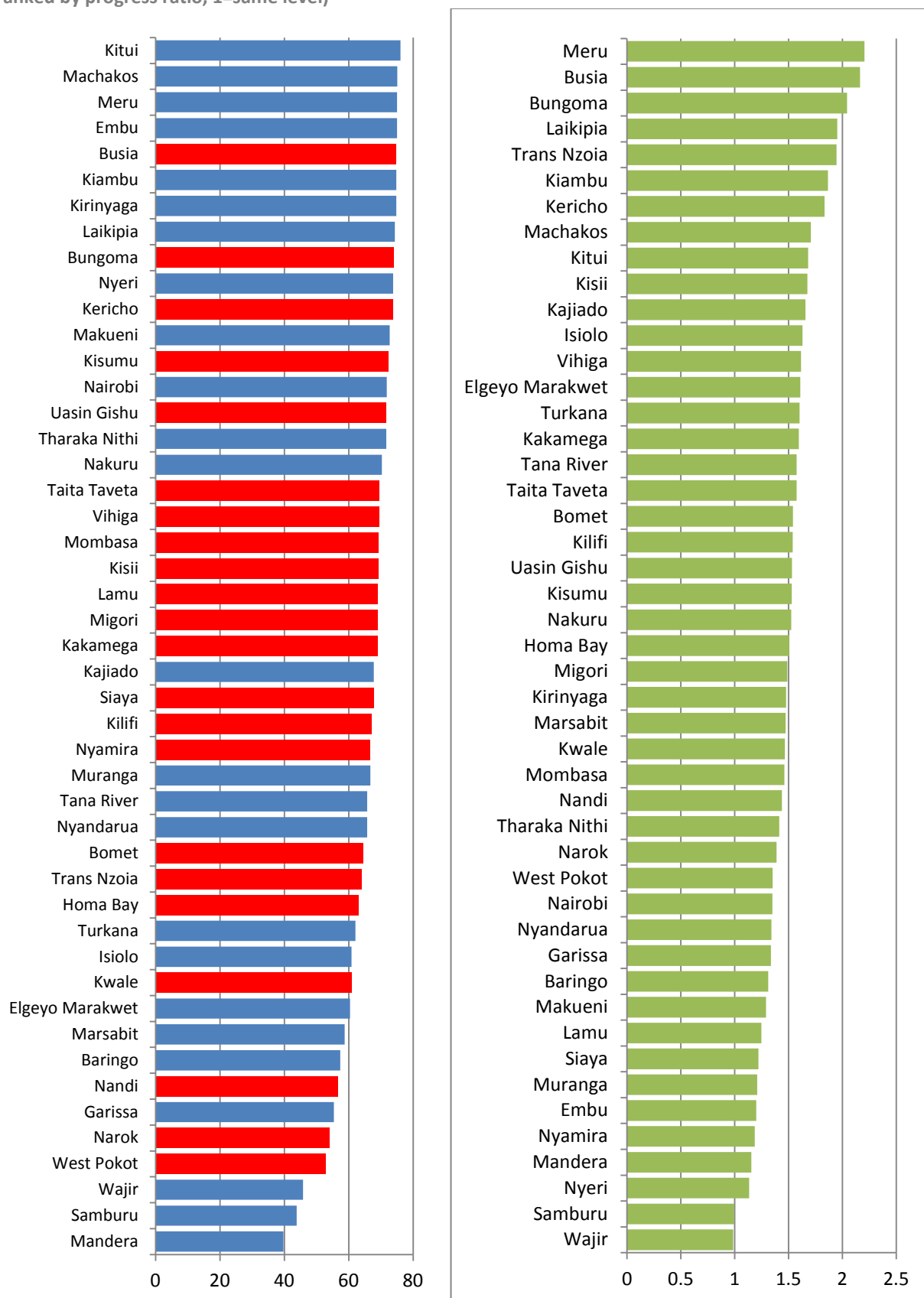
Figure 61 shows the communicable diseases coverage index trends during 2012/13 to 2015/16 according to the DHIS data (labelled id1213 etc.). There was a major increase in the index over time, but no narrowing of the range over time, meaning the same inequality between the counties.

Figure 61: RMNCH index trends in counties according to the DHIS-based coverage statistics (2012/13-2015/16) and the RMNCH index value obtained from the KDHS 2014 (median, interquartile range and full range)



The left panel of Figure 62 shows the wide range of the communicable diseases control index among counties. The highest index scores were observed in four counties in the eastern region: Kitui, Machakos, Embu and Meru, all with rates well over 70%. At the lower end, counties in northern and northwestern Kenya, as well as Narok, had an index of the order of 50% or lower. The right panel showed that almost all counties made progress during 2012/14 to 2015/2016. Only Samburu and Wajir remained at the same index levels. Meru, Busia, Bungoma and Laikipia made the greatest progress, with an index value that increased 1.5 times during KHSSP.

Figure 62: Communicable diseases control index in 2015-16 by county (left panel, ranked by 2015/16 index level, red indicates malaria indicators included – see text) and relative progress 2012/14 to 2015/16 (right panel, ranked by progress ratio, 1=same level)



9.5 Universal health coverage: essential services coverage

Monitoring coverage of essential health services is a key component of the WHO/World Bank framework for monitoring Universal Health Coverage (UHC). One approach to summarizing coverage of essential health services is to compute an index which combines tracer indicators of health service coverage into a single metric.

The SDG monitoring process has proposed an index of essential coverage and a financial protection indicator for UHC. In this report the focus was on the UHC essential service coverage by county. WHO has proposed 16 tracer indicators, with four indicators chosen for each of the four service coverage categories. Effective coverage, which captures the extent to which those in need of health services receive quality care that obtains the desired result, was the guiding principle for choosing tracer indicators. However, in several cases the selected indicator is only a proxy for effective coverage, which is currently not measurable for many important health service areas.

The analysis was based on the following data:

1. RMNCH: coverage of family planning, 4 antenatal visits & delivery care (as one indicator), full immunization in children, and fever treatment seeking behaviour in children.
2. Communicable diseases control: ART, TB successful treatment coverage (using the WHO national estimate of 76% notification rate among incident cases and the county specific treatment success rates), ITN coverage in the population, and access to sanitary facilities.
3. NCD risk factor control: nonuse of tobacco (men 18-69 years), no hypertension diagnosis (both sexes 18-69 years), cervical cancer screening (women 30-49 years). Diabetes was not included because of low prevalence.
4. Health system capacity: utilization of inpatient and outpatient services, health workforce density.

Table 1 presents the results. The counties were grouped by the level of socioeconomic development based on education and poverty index into five quintiles (each quintile had 9-10 counties with comparable levels of socioeconomic development).

Overall, Turkana and Mandera had the lowest UHC index (37%), while Mombasa county had the highest (63%). As expected, the UHC index correlated well with the level of socioeconomic development: more developed counties had higher UHC index scores. Within the five quintiles of development there were however marked differences:

- Least developed counties: Turkana and Mandera scored lowest while Kilifi and especially Homa Bay were a positive outliers
- Lower than average developed counties: West Pokot was the outlier on the low side and fits better in the least developed counties in terms of UHC index. Busia was the main outlier on the positive side with high coverage rates for many indicators.
- Average level of development: most counties in the middle group had a UHC coverage index between 50-58% but Narok was an outlier with an index value below 45%.
- Higher than average level of development: the counties in this group, mostly located in Rift Valley, did not have higher levels of UHC index than the previous group. Four counties had index scores below 50% while Meru and Uasin Gishu had the higher scores of over 55%.
- Most developed counties: most counties would have been expected to have score over 55% which was the case in Nyeri, Kirinyaga, Nairobi, Kiambu and Mombasa. On the other hand, Kajiado, Nyandarua, Murang'a and Nakuru had scores of 51% or lower.

The average county health budget 2013-2016 was higher in the lowest three of the five groups of counties according to level of socioeconomic development: KSh 1083, KSh 1909 and KSh 1989 per capita per year in the least developed, lower than average and average groups respectively. In the higher than average and most developed county groups the averages were KSh 1226 and KSh 1440 per person per year respectively. There was no association between the per capita budget and UHC index score. Also, the level of investment as measured by the health budget was not associated with the progress made during KHSSP. Finally, there was a positive correlation between health system inputs (facilities, beds, health workforce) and the size of the health budget allocation ($r=0.6$), meaning counties with higher health system inputs received more health budget.

Table 6: UHC index score by county level of socioeconomic development, DHIS 2016

UHC index score	County level of socioeconomic development (quintiles)				
	Least developed	Lower than average	Average	Higher than average	Most developed
35	Turkana Mandera				
40	Samburu Marsabit Wajir	West Pokot	Narok		
45	Tana River Garissa Kilifi	Kitui Kwale Isiolo Makueni		Elgeyo Maraket Nandi Baringo Laikipia	Kajiado Nyandarua Murang'a
50	Homa Bay	Kakamega Tharaka Nithi Siaya Nyamira	Vihiga Bungoma Lamu Machakos Kisii	Trans Nzoia Bomet Kericho Migori	Nakuru
55			Taita Taveta Kisumu Embu	Meru Uasin Gishu	Nyeri Kirinyaga Nairobi Kiambu
60		Busia			Mombasa
65					

9.6 Quality of care

Quality of care is a core element of universal health coverage. The KHSSP quality of care indicators focus on client experiences with health care services, health care safety and effectively. The KHSSP has proposed five indicators for monitoring progress and performance of efforts with improving quality of health care, namely: TB cure rate, fevers tested for malaria, maternal death audits, malaria inpatient case fatality rate, and average length of stay.

TB cure rate: the proportion of patients who completed treatment and were cured remained high in Kenya, indicating the good quality of care of TB patients. The results are discussed under Strategic Objective 1.

Fevers tested for malaria: there was a significant change in the ratio confirmed and suspected malaria cases. This is indicative of a major shift in diagnostic practices for patients with fever in outpatient settings. In 2015 a crossover was achieved. For the first time in history more patients were confirmed malaria than suspected malaria cases. This is evidence of improved quality of care. The section under strategic objective 1 provides more details.

Maternal death audits: In 2014 the tool for collecting data on maternal death audits was introduced. The percentage of maternal deaths audited in Kenya was 59.5% in 2015/1, which falls below the target of 70%.

Malaria in-patient case fatality rate: case fatality rates remained at 11% in 2015/16, similar to preceding years. The number of malaria deaths however fell sharply between 2014/15 and 2015/16 (halved) which means that the number of admissions diagnosed with malaria also declined dramatically. This is most likely due to better diagnostic practices. This may conceal an actual improvement in the quality of care for malaria patients leading to a drop in case fatality. (see also the section on strategic objective 1).

Average length of stay: 4.2 days for the medical wards in 2015/16, similar to 4.3 days for 2013/14. It is not clear how this indicator can be used to reflect the quality of care. It could be considered an efficiency measure.

Institutional maternal mortality ratio: the national MMR went down from 130 to 118, 103 and 106 per 100,000 deliveries in health facilities during 2012/13 to 2015/16.

9.7 Other dimensions of inequality

This chapter focuses on the inequalities between the counties. The previous chapters examined the levels and trends in equity in the health indicators by sex, age, urban-rural residence and socioeconomic position. The household surveys are the main data sources for these data. Since the last comprehensive survey was in 2014, no recent trend data are available.

In spite of the dramatic progress in stunting rates among children under 5 years in all wealth quintiles, the large difference between the poorest and richest quintiles remained (Figure 63). Similarly there was considerable progress over time in the composite coverage index used by the Countdown to 2015 (includes coverage of family planning, maternal care, immunization and child treatment), especially in the KDHS 2014. The gap between the poorest and richest quintiles however reduced only marginally.

Figure 63: Stunting rates (%) in children under 5 years by wealth quintile, KDHS surveys 1993, 2003, 2008 and 2014

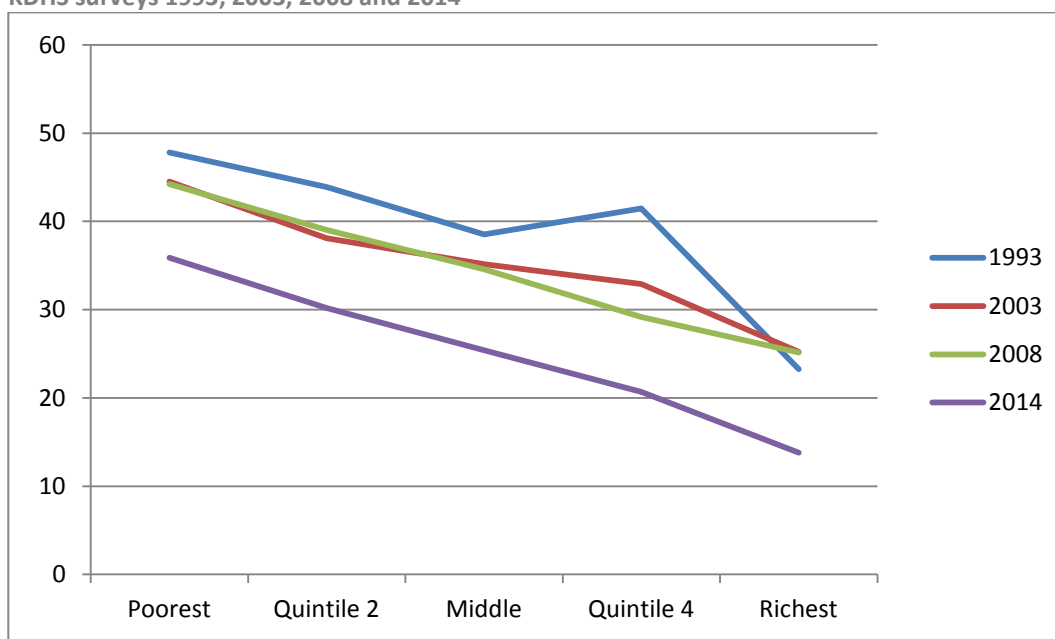
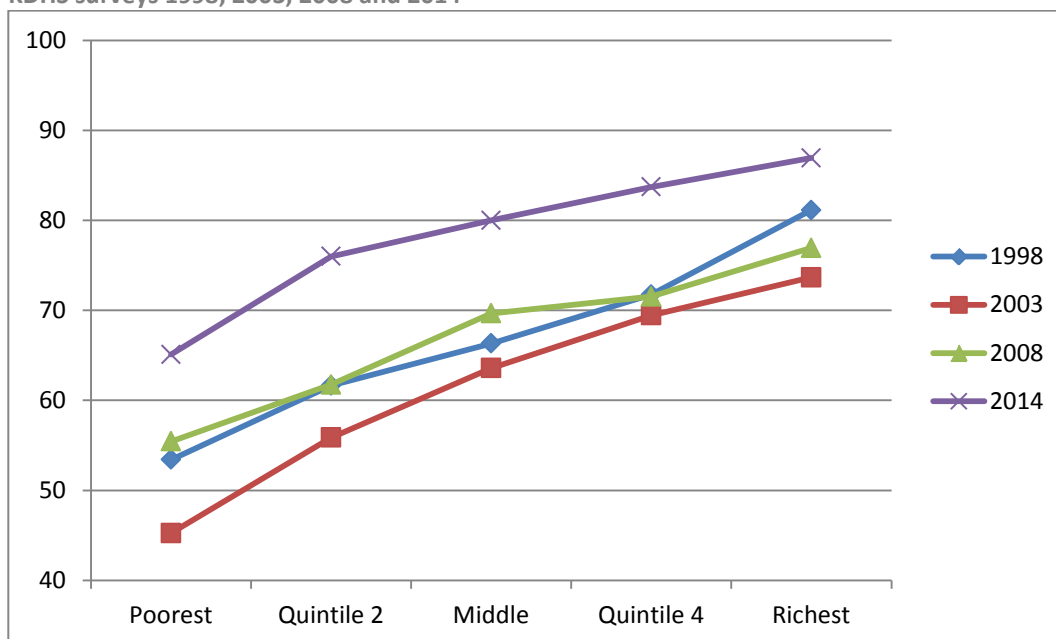


Figure 64: RMNCH composite coverage index (%) in children under 5 years by wealth quintile, KDHS surveys 1998, 2003, 2008 and 2014



9.8 In which counties do persons not receiving services live?

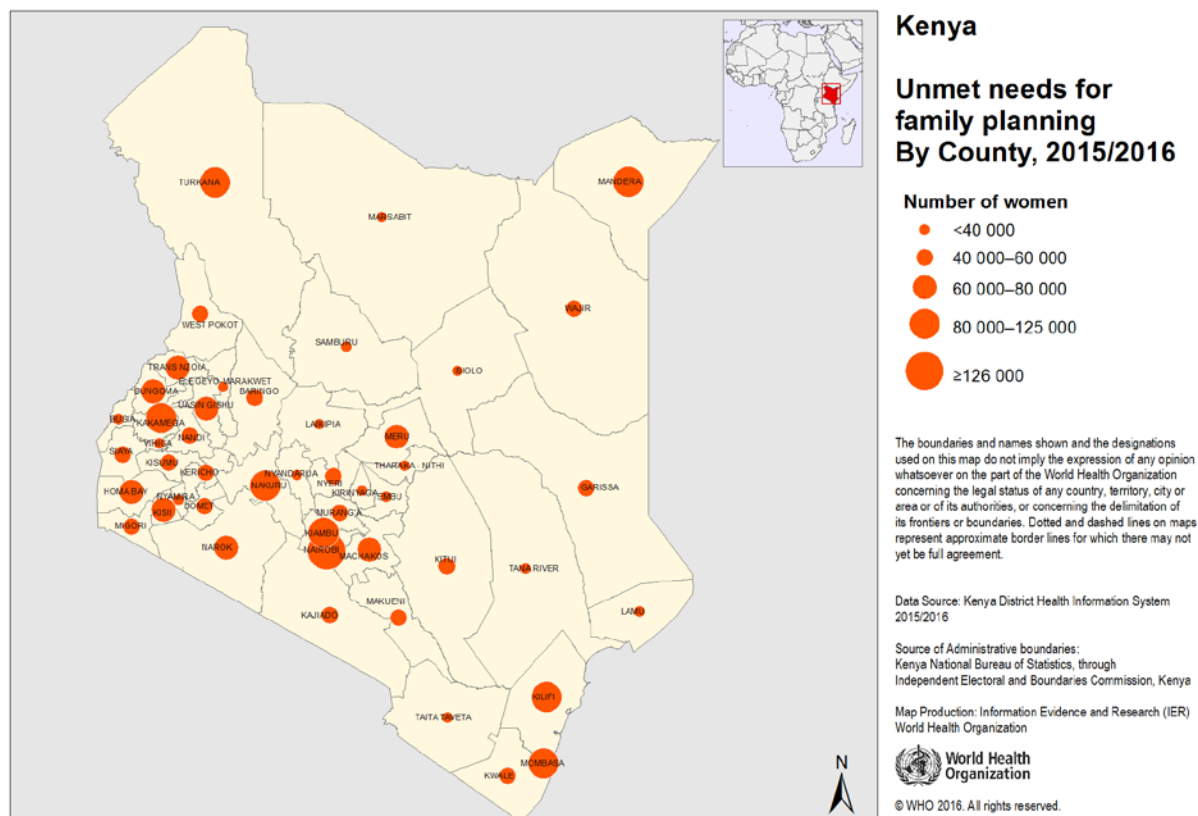
The report focused on the levels and trends in coverage of services in the counties, describing the proportion of persons who received the service among the target population - those who needed the service. Looking forward it is also useful to turn this around: where do the persons who do not receive the services live. This was determined not only by the coverage of the services but also by the size of the population in the counties. The average population size of a county in 2015/16 was just under 1 million. At the lower end two counties had populations below 250,000 (Isiolo and Lamu) and eight counties between 250,000 and 500,000 (Samburu, Tana River, Marsabit, Taita Taveta, Tharaka Nithii, Wajir, Elgeyo Marakwet, Laikipia). At the higher end, Nairobi is an outlier with a projected population of 4.3 million, and two counties had a population that exceeds 1.5 million (both about 1.8-1.9 million). Sixteen counties had populations between 1 and 1.5 million.

The following maps show the distribution of persons not receiving specific interventions and selected risk factors in 2015, showing the concentration of gaps in densely populated central Kenya for several indicators:

Women in need of family planning 2015/16

Women not receiving family planning methods: 2.3 million. The counties that had the highest numbers of women with unmet need were distributed in all parts of Kenya, and the top 10 counties accounted for 52% of the total need in Kenya, led by Nairobi, Nakuru and Turkana (Figure 65).

Figure 65: Numbers of women who need family planning but do not have access (unmet need) by county, 2015-16 (Kenya total: 2,258,295 women have unmet need for FP)



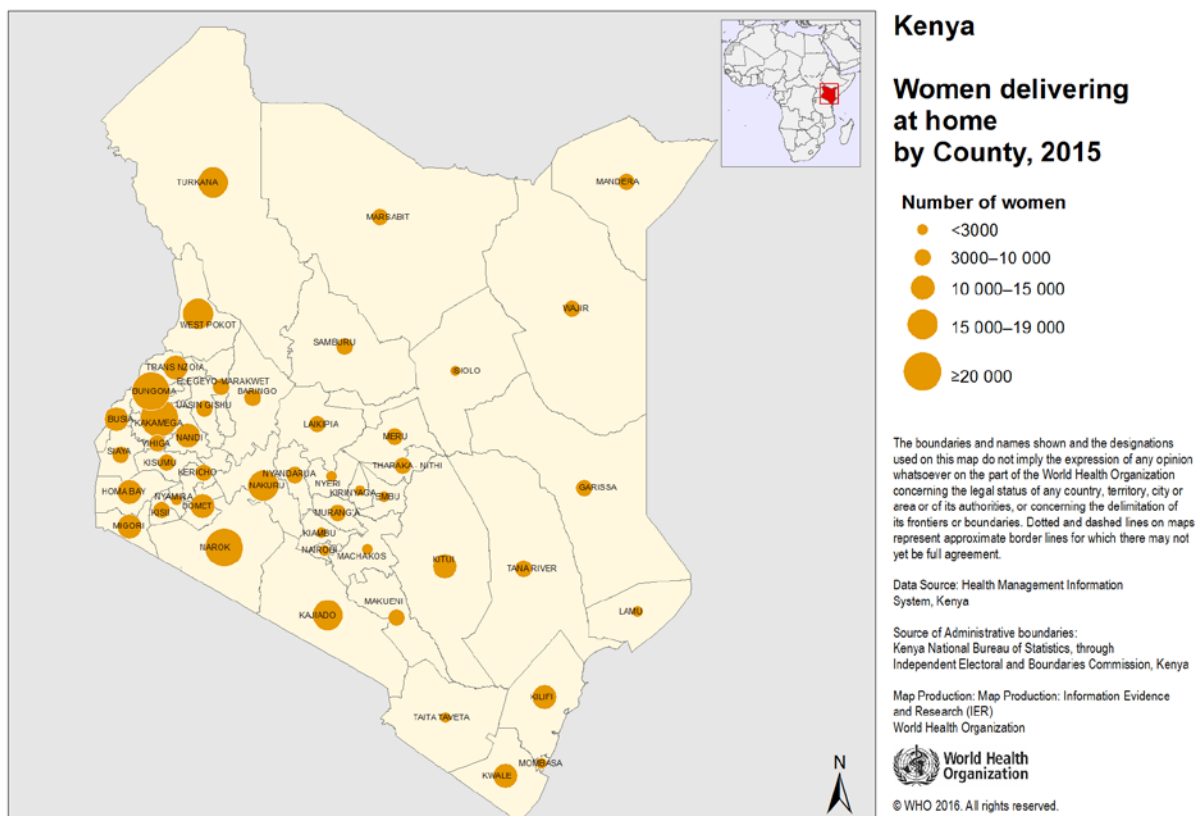
10 counties with the highest numbers of women with unmet FP need (52% of total in Kenya)

Nairobi	328,617	Kilifi	89,709
Nakuru	125,993	Kakamega	88,004
Turkana	113,686	Mandera	87,868
Kiambu	101,172	Bungoma	78,236
Mombasa	96,788	Meru	76,966

Women delivering at home 2015/16

Women delivering at home: just over 400,000 women delivered at home in 2015/16. The counties with the largest numbers were in the western part of Kenya, and the top 10 counties accounted for 45% of the total need. The top 3 counties were Narok, Bungoma and Kakamega (Figure 66).

Figure 66: Numbers of women who delivered at home by county, 2015-16
(Kenya total: 408,435 women delivered at home)



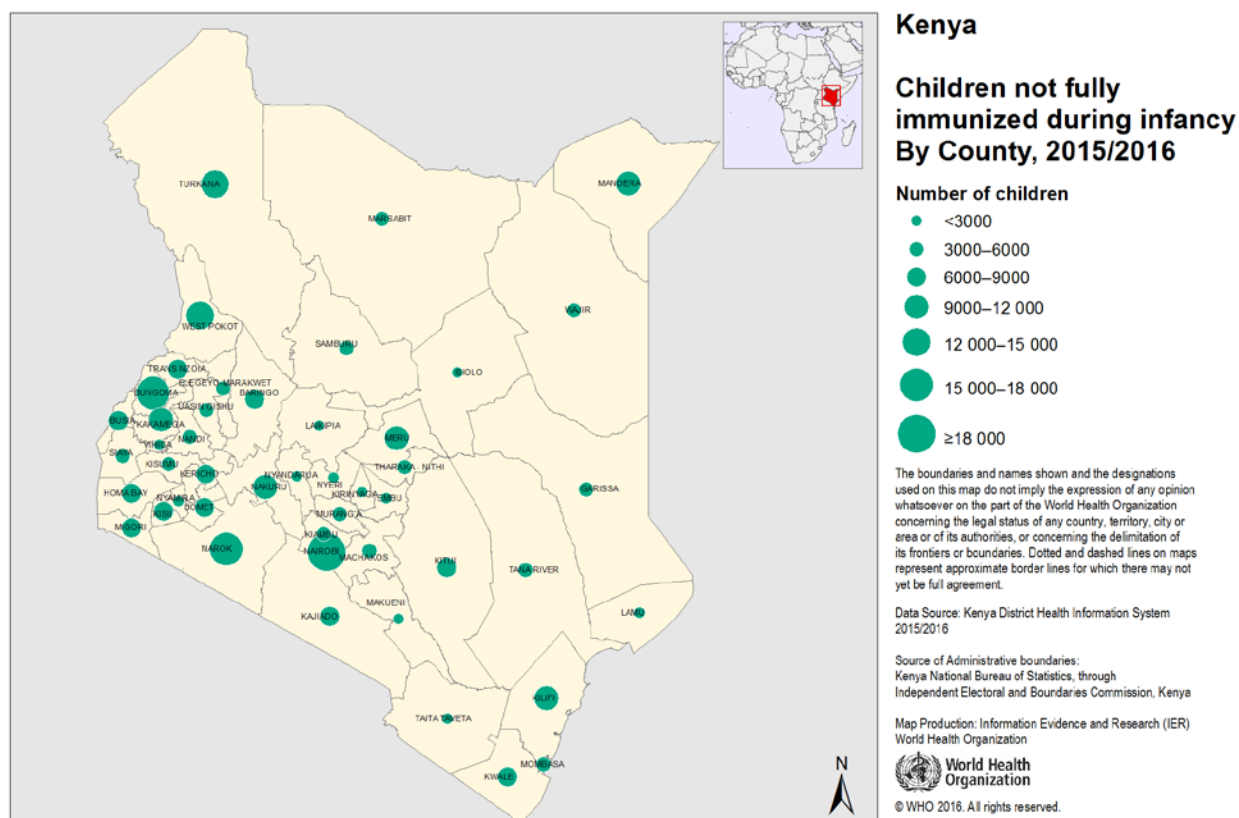
10 counties with the highest numbers of home deliveries (45% of total in Kenya)

Narok	28,867	Nakuru	17,394
Kakamega	22,879	West Pokot	17,371
Bungoma	20,434	Trans Nzoia	14,835
Turkana	19,712	Homa Bay	13,196
Kajiado	18,066	Kitui	12,938

Children not fully immunized during infancy 2015/16

Children not fully immunized (in infancy): 290,000 children were not fully immunized during infancy in 2015/16. Counties that had the largest numbers of not fully immunized children were located in central, Rift and western Kenya. The top 10 counties accounted for 48% of not fully immunized children and the top 3 were Nairobi, Narok and Bungoma (Figure 67).

Figure 67: Numbers of infants who did not complete the full immunization schedule in 2015/16 (Kenya total: 290,250 infants not fully immunized)



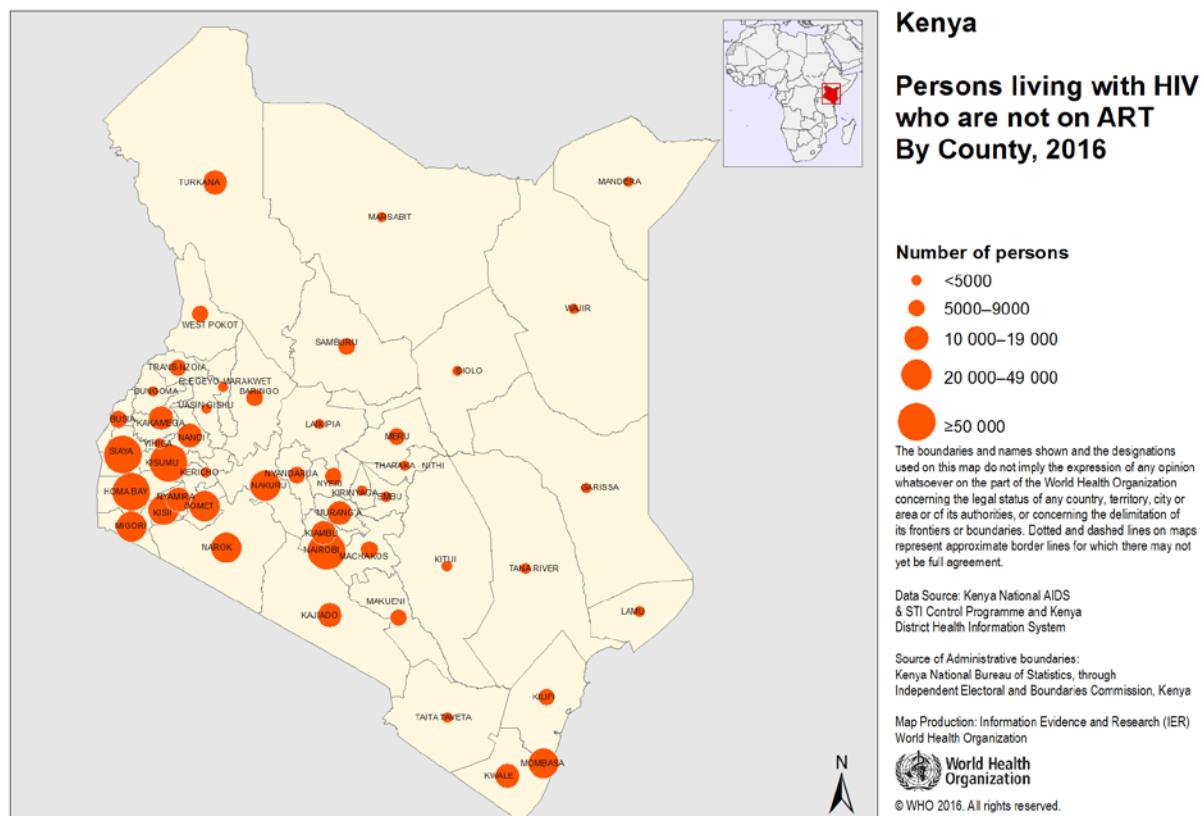
10 counties with the highest numbers of infants not fully immunized (48% of total Kenya)

Nairobi	27,057	Nakuru	11,631
Narok	17,053	Meru	10,538
Bungoma	15,420	Kilifi	10,447
West Pokot	14,852	Mandera	9,969
Turkana	12,085	Kakamega	9,785

Persons living with HIV, all ages who are not on ART, 2016

Persons living with HIV not on ART: an estimated 685,000 persons, all ages, live with HIV but are not on ART. The greatest need was located in the counties around Lake Victoria. The top 10 counties accounted for 63% of total unmet need and the top 5 were Homa Bay, Siaya, Nairobi, Kisumu and Migori (Figure 68).

Figure 68: Numbers of persons all ages who live with HIV but are not on ART in 2016
(Kenya total: 685,000 persons who are living with HIV but are not on ART)



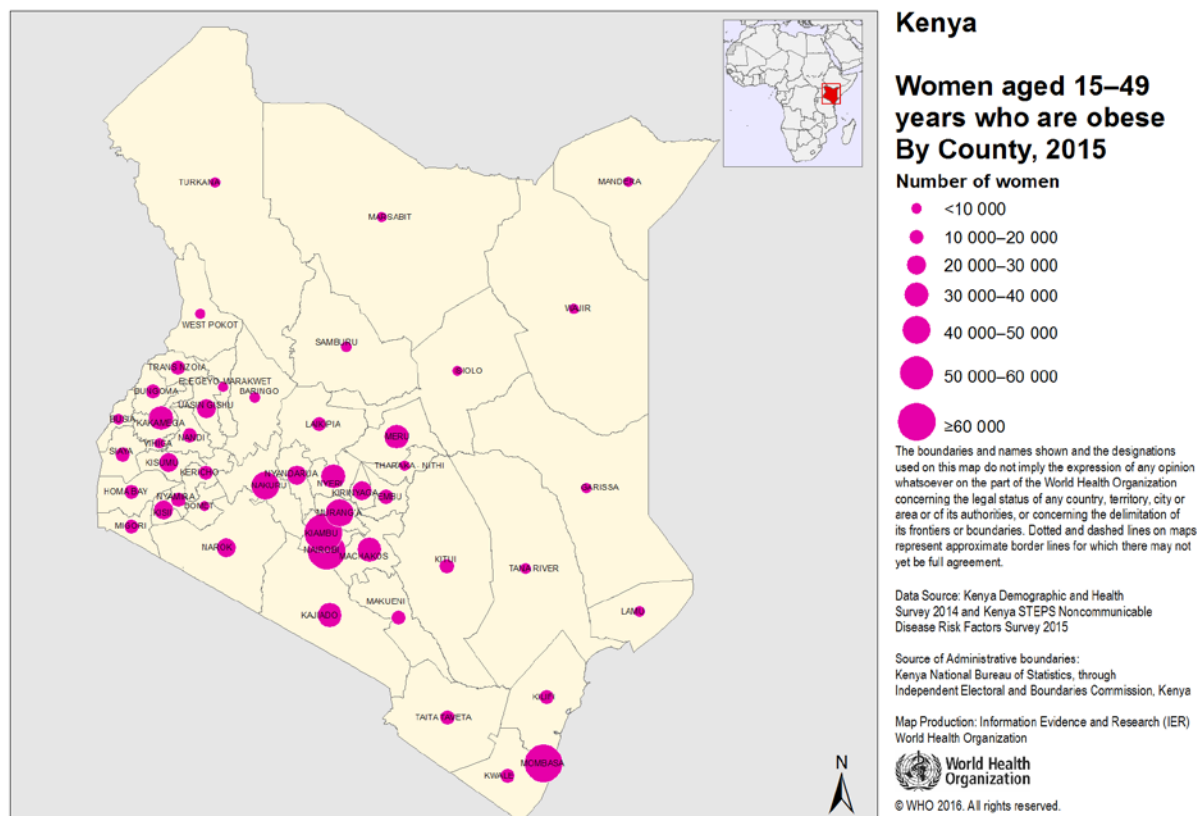
10 counties with the highest numbers of persons living with HIV but not on ART, all ages (63% of total in Kenya)

Homa Bay	90,275	Nakuru	32,975
Siaya	67,604	Kisii	25,989
Nairobi	61,006	Mombasa	22,816
Kisumu	53,960	Narok	21,504
Migori	35,711	Bomet	20,972

Women 15-49 years who are obese

Women who are obese: nearly 1 million women 15-49 years were obese in 2015. Obese women were concentrated in central Kenya and urban counties. Two-thirds of all obese women lived in 10 counties and the top 3 were Nairobi, Kiambu and Mombasa (Figure 69).

Figure 69: Numbers of women 15-49 years who are obese in 2015
(Kenya total: 992,417 women who are obese)



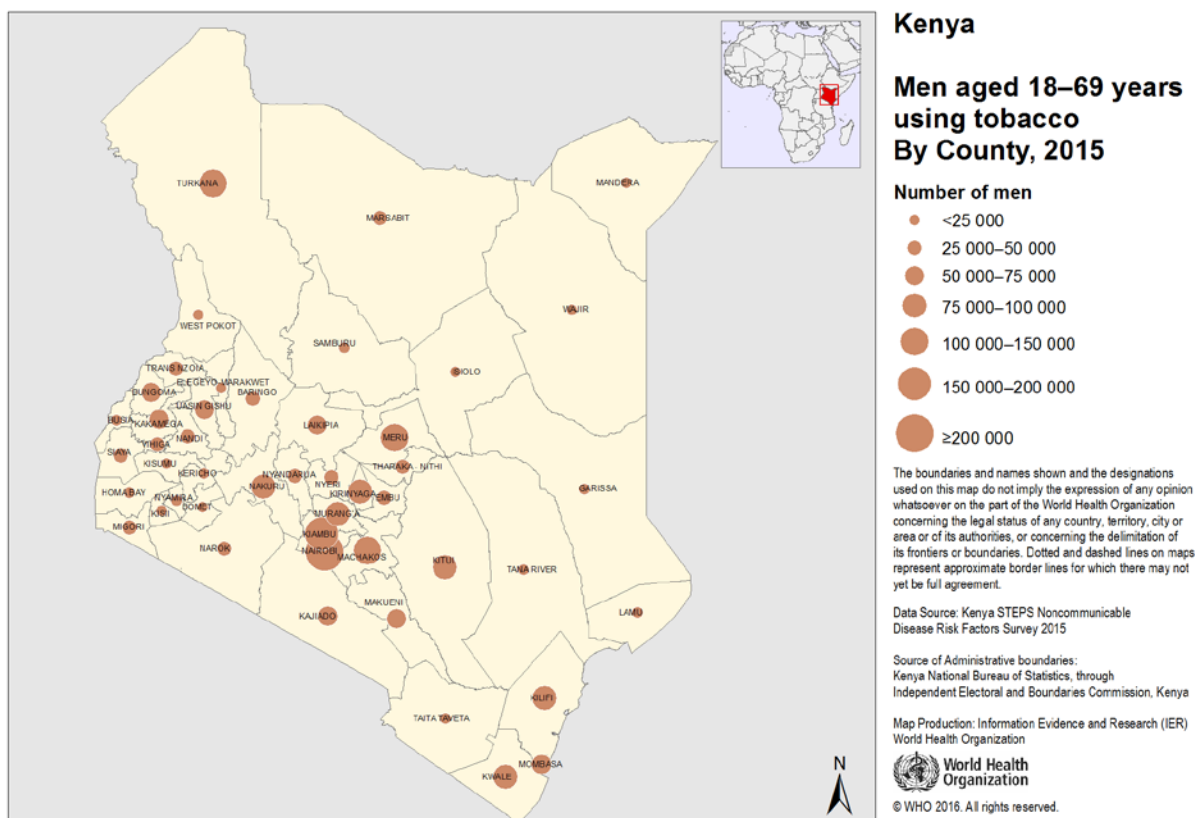
10 counties with the highest numbers of obese women 15-49 years (66% of total in Kenya)

Nairobi	216,745	Meru	39,489
Kiambu	101,365	Kajiado	38,278
Mombasa	71,728	Nyeri	32,635
Nakuru	48,117	Kakamega	32,507
Murang'a	46,615	Machakos	32,184

Men 18-69 years who use tobacco

Men who are current users of tobacco: 2.1 million men 18-69 years were using tobacco in 2015, and its use was concentrated in the central parts of Kenya. The top ten counties accounted for 60% of all users, and Nairobi, Kiambu and Machakos had the highest numbers of tobacco users (Figure 70).

Figure 70: Numbers of men 18-69 years who are using tobacco in 2015 (Kenya total: 2,110,861 men using tobacco)



10 counties with the highest numbers of men using tobacco (60% of total in Kenya)

Nairobi	327,182	Murang'a	96,018
Kiambu	152,036	Kilifi	89,603
Machakos	142,576	Kirinyaga	89,492
Meru	101,613	Nakuru	89,478
Turkana	100,832	Kitui	82,491

Annex A: Quality assessment and adjustment of DHIS data and population denominators for county maternal and child health indicators

A summary of the methods used

The assessment and adjustment procedure for MCH coverage estimates is summarized in Table A.1. The aim is to adjust the numerators for incomplete reporting and the denominators for inaccuracies in standard projections of the last census.

First, the most recent survey-based data should be considered. The Kenya DHS 2014 provides an indication of the levels of coverage for key indicators by county. This provides a good external validation test for the coverage estimates generated from the facility reports, with projected denominators. The survey data can also be used to assess if there are indicators with near universal coverage. The KDHS 2014 shows that coverage levels of the first antenatal visit (ANC1) among births in the five years preceding the survey and the first dose of pentavalent vaccination (Penta1) among children 12-23 months are almost universal (95.5% and 97.5% respectively) and over 90% in nearly all counties. The previous national survey (KDHS 2008-09) also shows near universal coverage. In Kenya, ANC1 coverage in the previous KDHS was 91.5%. This indicates that there is coverage levels have been high and near universal for a long time. Sampling errors at county levels are substantial and need to be considered when using the survey results, especially for Penta1 as this refers to a smaller population than ANC1.

The second step focuses on the numerator of the coverage indicators and involves adjustment for incomplete reporting. In 2015/16 national reporting rates for ANC1 and penta1 were high (96% and 95% respectively) and both were over 90% in the majority of counties. There was a modest increase in reporting rates (from 91% and 89% in 2012/13) which was more pronounced in some counties which can have an impact on the trends assessment. For deliveries in institutions RR was also very high. (Table?)

No matter how the reporting completeness is used in the coverage computations, there is an underlying assumption about the extent to which the non-reporting facilities are providing services. In other words, the adjustment applied depends on assumptions about the number of service outputs (pregnancy care, vaccinations, etc.) provided at non-reporting facilities compared to those that reported. The adjustment can be expressed as follows:

$p(\text{adjusted}) = p + p(1/(c)-1)*k$, where p =number of service outputs, c =reporting completeness, k =adjustment factor.

If no adjustment is made for incomplete reporting the missing reports are considered an indication that no services were provided during the reporting period ($k=0$). It may however also be that services were provided, but not at the same level as in prior reporting periods, in which case the apparent incomplete reporting is rather an indication of a lower level of service provision (k is between 0 and 1). In other cases, it may be assumed that services were provided at the same rate in non-reporting facilities as in reporting facilities.

To select the most likely value of k , the national coverage is computed from the facility data for different values of k and compared with survey data at the national level. The value of k that approximates the national survey statistics was selected: 0.6 of k was selected for Penta1 and ANC1 and 1.0 for deliveries. The higher value for deliveries was chosen because it is likely that more larger private facilities are among the non-reporting facilities than among the reporting facilities, offsetting the downward effect of the association between poorer reporting and lower delivery rates in other facilities. No county specific values of k were selected. Because reporting rates are high, the impact on the coverage estimates is modest, especially at lower values of k .

In the third step, the accuracy of the census projection is tested and, if problems are identified, an alternative denominator is computed from the health facility data. Based on the reporting-adjusted numbers of vaccinations in health facilities (step 2) and the official projections of the population under 1 year of age national and county penta1 coverage are computed. National Penta1 coverage rates ranges from 91-97% in the last 3 years which is close to the KDHS 2014, but county coverage rates indicate that there are major denominator issues at the county level. Counties with denominators that are too low: 6 counties – all in the northern part of Kenya - have coverage estimates exceeding 120%, while 11 counties have unlikely low penta1 coverage rates (below 80%). This may be true but is more likely a problem of overestimation of the target population.

Given the challenges with the accuracy of the census projections at the county level, the consistent picture of facility reports on Penta1 vaccinations, supported by consistent reporting of ANC1 visits, and the near universal coverage of Penta1 according to household survey data, the number of children with penta1 vaccinations are used as the denominator or target population of infants. The adjusted number of Penta1 vaccinations is used, with an increase of 3-10% to account for truly non-immunized children in all counties for each year, as computed in step 5. The only exception is Mandera county where the household surveys indicated a lower coverage (increased by 25%).

The trend in infant numbers was linearly smoothed so that target population size continues to gradually increase over time with a growth rate of 3%, as was used by KNBS). This results in 1.45 million children under 1 year in 2015/16. The other target populations are derived from the number of infants with Penta1. For live births: increase the number of infants obtained from penta1 by 2% to add neonatal deaths; for deliveries: decrease the number of births by 1.5% to reduce for multiple births and add 2% for stillbirths which implies adding 0.5% to births; pregnancies: add 3% to deliveries to account for early fetal loss (late fetal loss or stillbirths are already accounted for). Early fetal loss is considerably higher than 3% but because most women do not visit ANC early in pregnancy, these are not included in the computations of the coverage rates.

Table A.1: Summary of the method to compute MCH statistics with results for Kenya






Step	Method	Result for Kenya
1	Obtain and review data from different sources	
1a	Check availability of recent survey data to obtain statistics for selected coverage indicators needed for the quality assessment and adjustment of health facility data	KDHS 2014 provides statistics on coverage of MCH indicators by county; focus on first antenatal visit (ANC1), first dose of pentavalent vaccine (Penta1) and delivery coverage; ANC1 and Penta1 coverage rates over 95% almost everywhere; delivery coverage 61%
1b	Obtain official population projections	KNBS provides projections for population under 1 by county
1c	Obtain health facility reports on services provided	Four years of data by county for key MCH indicators, including ANC1, Penta1 and institutional delivery rates
2	Assess health facility data quality (numerators)	
2a	Check completeness of facility reporting; Adjust for non-reporting making assumptions about performance of non-reporting facilities, using adjustment factor based on comparison with survey data	Good reporting rates during 2012/13-2015/16, but increasing over time which may affect trends; adjustment factor of 0.6 is selected for non-reporting facilities for ANC1 and Penta1 and 1.0 for institutional deliveries
2b	Check annual consistency of coverage of interventions over time, by county, for key indicators	Good consistency over time for ANC1 and penta1, penta1 slightly higher than ANC1, suggesting more complete reporting
3	Compute target populations (denominators)	
3a	Compute Penta1 coverage with census projection-based denominator to assess level and identify outliers	National coverage 90-95 % (2012/13-15/16), but 6 northern counties have consistently over 120% penta1 coverage, 12 counties have unlikely low coverage (<80%)
3b	Revise the target population for infants based on reported penta1 numbers; smoothen the time trend using estimated growth rate; compute new targets for deliveries and pregnancies	Penta1 numbers from facilities used as target population, adding 2.5% for non-coverage of penta1; growth in number of births of 3% per year used to obtain time trend
4	Compute coverage rates with adjusted numerators and improved denominators	
4a	Compute Penta3, measles and full immunization coverage for infants, check national and county rates	Improved consistency and spread of the coverage rates by county; national level slightly lower than the 2014 KDHS
4b	Compute ANC1, ANC4, delivery, and other MCH indicators with the new denominators	Improved consistency and spread of the coverage rates by county; national levels close to 2014 KDHS

Annex B: County health statistics profiles

Explanatory note

Panel: General statistics, health service inputs, health status, NCD risk factors

The different data sources for each indicator are provided in the county profiles. For each indicator, if relevant, the rank of the county among all 47 counties is shown. Rank number 1 is the best result. The colour codes refer to the ranks as follows:

	Top	Rank 1-9
	Better than average	Rank 10-18
	Average	Rank 19-29
	Worse than average	Rank 30-38
	Bottom	Rank 39-47

For these indicators there are generally no data available to assess trends during the first half of KHSSP 2014-2018. Therefore, only the most recent data on the levels in each county are presented.

General statistics	
Population, total 2015/16	Obtained from the KNBS projections; computed for all ages, Jan 1 2016 (the middle of the fiscal year)
Births 2015/16	Estimated number of births based on service data (3 rd pentavalent vaccine and first antenatal visit), 2015/16 (see Annex A of the full report)
Total Fertility Rate	Number of children per woman based on the fertility rates in the three years preceding the KDHS 2014, source: KDHS 2014.
Female education	Median number of years of education among women 15-49 years, KDHS 2014
Health service inputs	
Facilities	Number of health facilities, any type, public or private, per 10,000 population 2015/16, DHIS-2 based on SARAM and county reports
Facilities that are private for profit	Percent of health facilities that are private according to the SARAM census of facilities conducted in 2013
Hospital beds	Number of hospital beds including cots and maternity beds per 10,000 population 2015/16, DHIS-2
Core health professionals	Number of physicians, clinical officers and nurses (registered and enrolled) per 10,000 population 2015/16; the current rate is an estimate based on the SARAM 2013 and the reports by counties which are variable in terms of capturing the private sector. Because underreporting is an issue, the highest number of the two sources was selected. For Nairobi, there appears to be underreporting of nurses and an adjustment was made to bring the Nairobi numbers closer to the national figures (see Report)
County health budget	Per capita budget allocation for health in 2014/15 and 2015/16
Health status	
Under 5 mortality	Based on the census mortality report (2012) which provides county level estimates of under 5 mortality per 1,000 live births (KDHS only provides provincial estimates)
Maternal mortality	Also based on census 2009

Life expectancy	Average number of years a person can expect to live, based on the mortality rates derived from the census 2009, men and women
HIV prevalence	15 years and over: percent of persons aged 15 years and older who are living with HIV, based on MOH estimates Antenatal women: percent of pregnant women attending antenatal clinics who were HIV positive, DHIS-2, 2015/2016
TB notifications	Number of TB cases notified by the health clinics per 100,000 population, obtained from the electronic individual record registers (TIBU)
Malaria parasite rate	Percent of children 2-10 years with positive malaria test , based on malaria indicator survey 2015
Stunting, wasting, underweight	Percent of children 0-59 months who are stunted (height for age below minus 2 standard deviations of the median), wasted (weight for height below minus 2 standard deviations of the median) or underweight (weight for age below minus 2 standard deviations of the median), KDHS 2014
NCD risk factors	
Overweight or obese	Percent of women 15-49 years who had a BMI of 25 or higher, based on KDHS 2014 and STEPS 2015
Obesity	Percent of women 15-49 years who had a BMI of 30 or higher, based on KDHS 2014 and STEPS 2015
Overweight or obese	Percent of men 18-69 years who had a BMI of 25 or higher, based on STEPS 2015
Obesity	Percent of men 18-69 years who had a BMI of 30 or higher, based on STEPS 2015
Tobacco use	Percent of men 18-69 years who are currently using tobacco products, STEPS 2015
Raised blood glucose	Percent of men and women 18-69 years, combined, who had raised fasting blood glucose (defined as ≥ 7 mmol/l) or was currently on treatment for diabetes, STEPS 2015
Raised blood pressure	Percent of men and women 18-69 years, combined, who had a raised blood pressure (systole >140 mm Hg or diastole >90 mm Hg) or was already on treatment for hypertension, STEPS 2015
Cervical cancer screening	Percent of women 30-49 years who had ever had a cervical cancer screening test, STEPS 2015

Panel: Leading diagnoses in OPD

The DHIS data for 2015/16 were used to obtain an idea of the leading diagnoses in outpatient departments (OPD). The figures use broad groupings of diagnoses. For malaria, the bar also stacked into two parts: the first part refers to suspected cases, the second to confirmed cases. For children under 5, the bar is also stacked to showing respiratory infections and or with pneumonia.

The inpatient data reporting on diagnoses at discharge and causes of death in hospitals were not available for all counties as reporting rates are still inadequate.

Panel: Indexes ranked

Eight indexes were computed (for details see main report). For each index the ranking of the county is shown with a star, the other counties in the same Region are shown by a square and all remaining counties are represented as a circle. The following indexes are included:

Health system inputs: based on the density of health facilities, hospital beds and core health professionals. Counties at the top of the rankings have higher levels of access to services than those at the bottom.

Health system outputs: based on utilization of outpatient services and inpatient services (admissions). Counties at the top of the rankings have the highest levels of service utilization. It is expected that if a county has a high level health system input, it will also have a high rank on the health system outputs, but there will be exceptions based on population distribution and other factors.

NCD risks: based on the prevalence of overweight or obesity, tobacco use, raised blood pressure and raised blood glucose, all obtained from STEPS 2015 and KDHS 2014. Counties high on the list have lower NCD risks than counties low on the list.

UHC index: based on the coverage of services in the areas of RMNCH, communicable disease control and NCDs, as well as health system capacity. The counties high on the list have the highest levels of UHC.

RMNCH level index: based on the RMNCH index for 2015/16, which includes family planning, maternity care and immunization coverage. The counties highest on the list have the highest levels of RMNCH coverage in 2015/16.

RMNCH index progress in KHSSP: this compares the situation in 2015/16 with the baseline which is defined as the RMNCH index in 2012/14. The counties at the top have made the most relative progress which was measured by the odds ratio to take account of the different starting levels.

Communicable diseases control level index: based on the communicable diseases control index for 2015/16, which includes coverage of interventions against HIV/AIDS (ART, PMTCT), TB (treatment coverage) and malaria (LLITN use in the population and treatment of children with fever). The counties highest on the list have the highest levels of the index in 2015/16.






Communicable diseases control index progress in KHSSP: this compares the situation in 2015/16 with the baseline which is defined as the communicable diseases control index in 2012/14. The counties at the top have made the most relative progress which was measured by the odds ratio to take account of the different starting levels.

Panel: General, RMNCH and communicable diseases

The DHIS-2 provided data for each financial year in the period 2012-16, with June 2016 as the last month. For each county the values are given for the individual years and compared with Kenya as a whole. The KDHS 2014 value is also shown in the first column if available.

The county rank column present the ranking of the county for the value of the indicator in 2015/16. The colour coding is explained above.

For the progress column the difference between 2015/16 and the baseline (2012-14) was compared and the following colour coding was used:

	Strong progress	Increased by at least 20% of baseline value
	Some progress	Increased between 5-19% of baseline value
	No progress	Value is within plus or minus 5% of baseline value
	Some decline / deterioration	Decreased between 5-19% of baseline value
	Large decline / deterioration	Decreased by at least 20% compared to baseline value.

The indicators are defined as follows:

General statistics	
DHIS reporting index	Completeness of reporting by facilities, compiled by the Ministry of Health, as an average of all key reporting forms in DHIS-2.
Inpatient discharges	Based on DHIS-2 reports, refers to the number of discharges per 100 population. Admission rates will be slightly higher as these also include deaths in the facilities. Population figures are obtained from KNBS projections.
Outpatient visits	Based on DHIS-2 reports, refers to the number of OPD visits per person per year. Population figures are obtained from KNBS projections.
Reproductive, maternal, newborn and child health	
Contraceptive use	Based on DHIS-2 and KDHS 2014 data. The number of women using modern contraceptives among married women 15-49 years was computed from couple years of protection data in the DHIS-2 (for details see main report).
Antenatal care	Based on DHIS-2 data, with adjusted denominators. Percent of pregnant women who made at least 4 or more antenatal visits in each financial year.
Delivery care	Based on DHIS-2, the percent of women who delivered in a health facility among all deliveries, using the DHIS-2 derived adjusted denominators (see main report Annex A)
Caesarean section	Based on DHIS-2, the percent of all deliveries that were Caesarean sections. The progress 2012/14-2015/16 ox was only completed of the rates were below 15%. Above 15% it is difficult to judge if increases in Caesarean section rates represent progress or simply a preference for this mode of delivery.
Maternal mortality	Based on DHIS-2, the number of maternal deaths in health institutions per 100,000 deliveries in those institutions. This is not the same as the population maternal mortality ratio which also includes deaths and deliveries in the communities. Note that the progress indicator now refers to the amount of reduction. The higher the reduction in maternal mortality, the higher the county appears in the rankings.
Fresh stillbirths	Based on DHIS-2, the number of fresh stillbirths (as opposed to macerated) per 1,000 births in health facilities.
Low birth weight	Based on DHIS-2, the number of births with a birth weight less than 25000 grams among all births in health facilities
Immunization	Based on DHIS-2, three indicators are presented: 3 rd dose of pentavalent vaccination, measles and full immunization coverage. All are based on the reports of number of infants who received the respective vaccinations out of all infants in the population.
Vitamin A supplements	Based on KDHS 2014, the number of children 6-59 months who received a dose of vitamin A during the last 6 months.

Communicable diseases

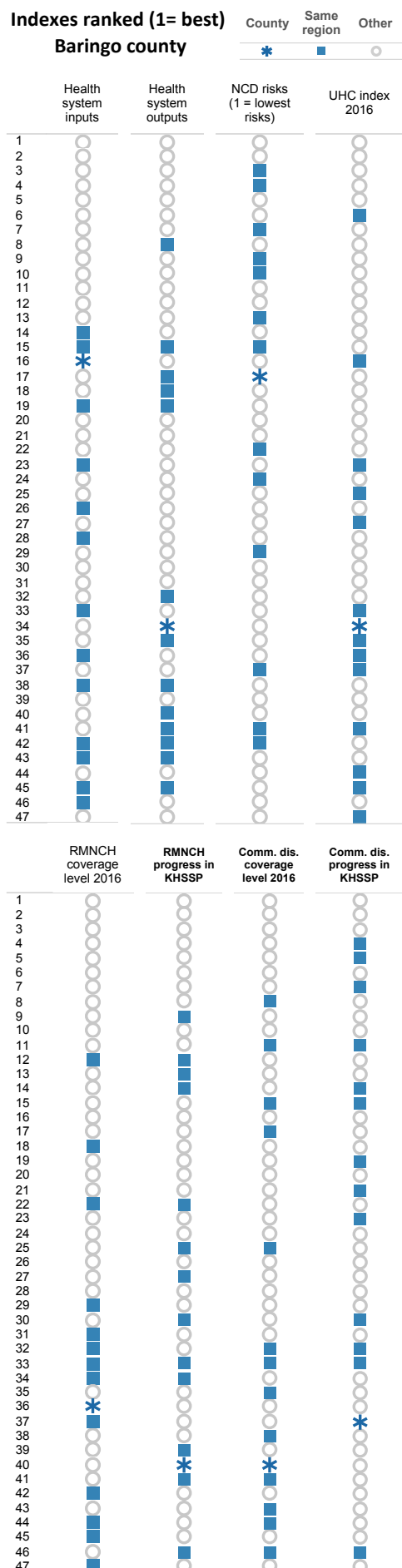
ART treatment	Based on DHIS-2 and MOH data, the number of persons on ART (under 15 years and 15 and older) among all persons living with HIV. The estimates of the denominator by county were done based on the HIV prevalence data by county. The numerators were obtained from the MOH database as there were some differences with DHIS-2.
PMTCT	Based on DHIS-2 and MOH data, the number of HIV positive women who delivered and received ART treatment of prophylaxis to prevent HIV transmission to the child.
HIV testing and counselling	Based on DHIS-2, the number of persons who were tested and counselled among all persons 15 and over in the financial year. For some counties the ratio exceeds 100, implying that people were tested more than once during the year.
TB notifications	Number of TB cases notified by the health clinics per 100,000 population, obtained from the electronic individual record registers (DHIS-2 TIBU)
TB treatment	Based on DHIS-2 (TIBU), the number of persons who completed treatment among those who initiated TB treatment
LLITN use	Based on county analysis by MOH using the malaria indicator surveys in 2010 and 2015: percent of population (or pregnant women) who slept under a LLITN among the whole population (all pregnant women)
IPT 2	Based on county analysis by MOH using the malaria indicator surveys in 2010 and 2015: percent of pregnant women who received at least two doses of intermittent preventive therapy against malaria among all pregnant women
Fever treatment	Based on county analysis by MOH using the malaria indicator and KDHS surveys: percent of children with fever who were taken to a health provider

A caveat is that all numbers are subject to annual fluctuations, and potential inaccuracies in the numerator and denominators. The analysis was done carefully to obtain the best possible statistics for all indicators. For some indicators the values exceed 100%. This may occur because of inaccuracies in the denominator or because there was an increase in service use from neighbouring counties or countries. For progress calculations, baselines exceeding 100% were treated at the maximum coverage level of 100%.

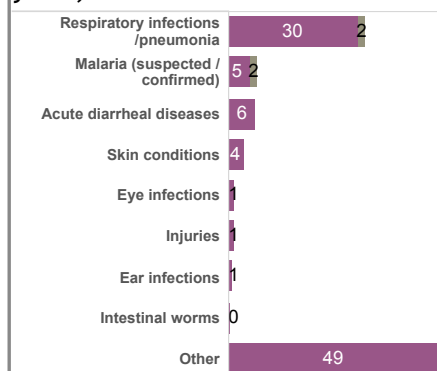
Baringo county health statistics profile

Midterm review KHSSP 2014-18, November 2016

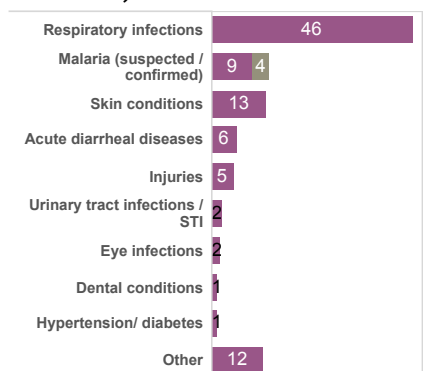
	Highest	Higher than average	Average	Lower than average	Lowest
	Baringo		Kenya	Baringo rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	690 738	44 733 470			
Births 2015/16 (estimated from DHIS)	22 189	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	4.8	3.9	33		
Female education (median years, KDHS 2014)	7.4	7.6	22		
Health service inputs					
Facilities per 10,000 population	3.0	2.2	10		
Facilities that are private for profit (%)	7.9	37.1			
Hospital beds per 10,000 population	6.5	8.8	31		
Core health professionals per 10,000 population (est.)	8.0	9.3	20		
County health budget per capita 2014/15 (KSh)	1832	1442	14		
County health budget per capita 2015/16 (KSh)	2612	1874	11		
Health status					
Under 5 mortality per 1000 live births (census 2009)	70	79	24		
Maternal mortality per 100,000 live births (census 2009)	234	495	8		
Life expectancy males (years) (census 2009)	54	58	30		
Life expectancy females (years) (census 2009)	59	61	24		
HIV prevalence 15 years and over (MOH 2016)	2.8	5.5	12		
HIV prevalence among antenatal women (DHIS 2015/16)	2.1	4.9	10		
TB notifications per 100,000 (DHIS / TIBU 2015)	91	187	3		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	29.5	26.0	35		
Wasting in children under 5 (%) (KDHS 2014)	6.9	4.0	38		
Underweight in children (%) (KDHS 2014)	20.2	11.0	41		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	20.6	33.6	9		
Obesity, women 15-49 (%)	4.4	10.6	8		
Overweight or obese, men 18-69 years (%)	7.5	17.6	14		
Obesity, men, 18-69 years (%)	1.6	4.3	19		
Tobacco use, men 18-69 (%)	22.2	23.2	24		
Raised blood glucose, both sexes 18-69 (%)	1.3	1.9	21		
Raised blood pressure, both sexes 18-69 (%)	27.3	22.7	34		
Cervical cancer screening, women 30-49 (%)	9.4	17.0	26		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



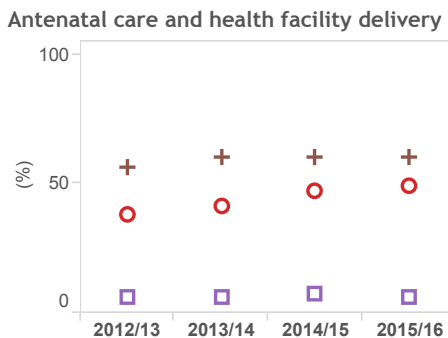
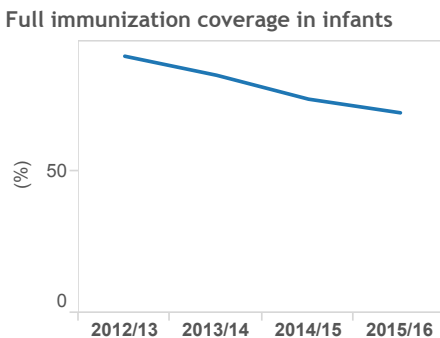
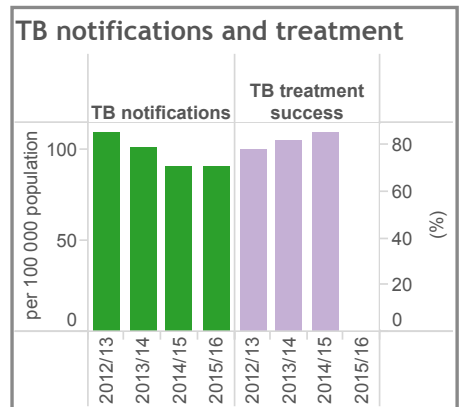
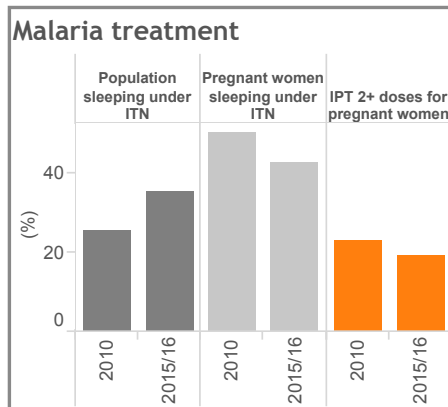
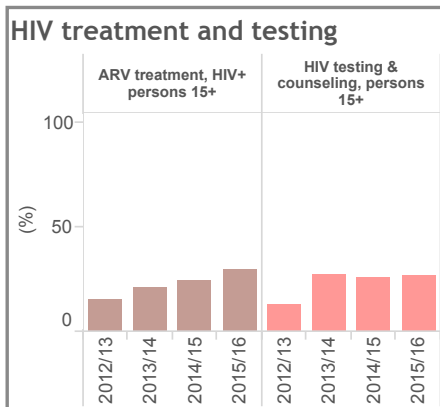
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Baringo county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		57	70	79	88	89	31		
Inpatient discharges per 100 population		4.5	4.0	4.0	3.8	5.7	12		
Outpatient visits per person per year		1.4	1.8	1.9	1.8	2.0	17		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	67	44	45	46	47	60	38		
Antenatal care 4 or more visits (%)		38	41	47	49	49	19		
Delivery in health facility (%)	54	56	60	60	60	72	35		
Caesarean Section in all deliveries (%)	5	6	6	7	6	10	26		
Maternal mortality per 100,000 hospital deliveries		98	55	113	30	106	2		
Fresh stillbirths per 1,000 births		20	14	15	14	12	26		
Low birth weight per 100 births in health facilities (%)		7	6	6	6	5	31		
Pentavalent vaccination 3rd dose, infants	95	101	94	83	80	86	40		
Measles vaccination, infants	83	95	87	80	74	83	40		
Full immunization coverage, infants	69	90	84	75	70	80	37		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	67					71	34		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		15	21	24	30	57	41		
ART among HIV+ children under 15 (%)		16	25	29	33	46	40		
PMTCT among HIV+ women who delivered (%)		53	53	54	62	80	40		
HIV testing & counseling 15+ (%)	49	13	28	26	27	54	37		
TB notifications per 100,000 population		109	101	91	91	187	3		
TB treatment success rate (%)		78	82	85		89	41		
Population sleeping under LLITN (%)*		26			36	41	30		
Pregnant women sleeping under LLITN (%)*		50			43	51	38		
IPT 2 or more doses for pregnant women (%)*		23			19	22	19		
Children with fever taken to a health provider (%)*		71			75	72	23		

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

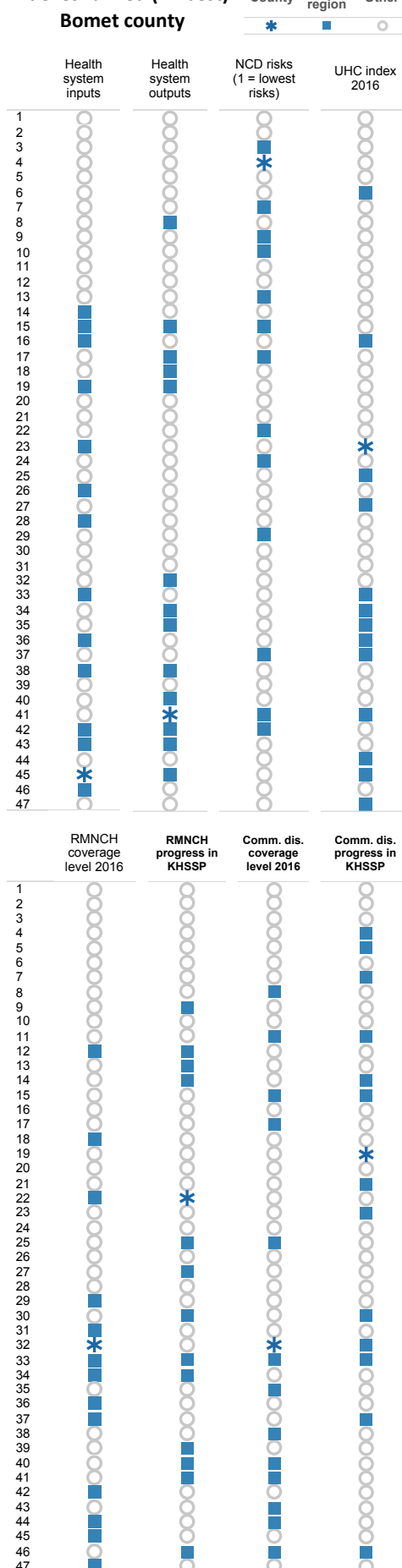
Midterm review KHSSP 2014-18, November 2016

Bomet county health statistics profile

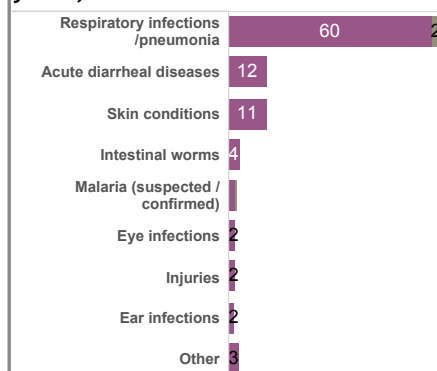
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Bomet		Kenya	Bomet rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	903 900	44 733 470			
Births 2015/16 (estimated from DHIS)	27 069	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	4.3	3.9	25		
Female education (median years, KDHS 2014)	7.3	7.6	26		
Health service inputs					
Facilities per 10,000 population	1.5	2.2	37		
Facilities that are private for profit (%)	5.9	37.1			
Hospital beds per 10,000 population	3.1	8.8	44		
Core health professionals per 10,000 population (est.)	3.5	9.3	45		
County health budget per capita 2014/15 (KSh)	821	1442	42		
County health budget per capita 2015/16 (KSh)	939	1874	47		
Health status					
Under 5 mortality per 1000 live births (census 2009)	55	79	10		
Maternal mortality per 100,000 live births (census 2009)	247	495	11		
Life expectancy males (years) (census 2009)	55	58	28		
Life expectancy females (years) (census 2009)	61	61	20		
HIV prevalence 15 years and over (MOH 2016)	5.6	5.5	38		
HIV prevalence among antenatal women (DHIS 2015/16)	2.3	4.9	12		
TB notifications per 100,000 (DHIS / TIBU 2015)	164	187	21		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	35.5	26.0	43		
Wasting in children under 5 (%) (KDHS 2014)	1.8	4.0	5		
Underweight in children (%) (KDHS 2014)	12.0	11.0	31		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	19.1	33.6	7		
Obesity, women 15-49 (%)	3.9	10.6	6		
Overweight or obese, men 18-69 years (%)	3.9	17.6	5		
Obesity, men, 18-69 years (%)	2.7	4.3	25		
Tobacco use, men 18-69 (%)	12.8	23.2	11		
Raised blood glucose, both sexes 18-69 (%)	0.7	1.9	14		
Raised blood pressure, both sexes 18-69 (%)	12.7	22.7	8		
Cervical cancer screening, women 30-49 (%)	50.1	17.0	2		

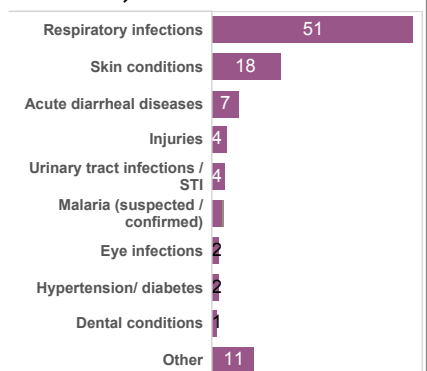
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



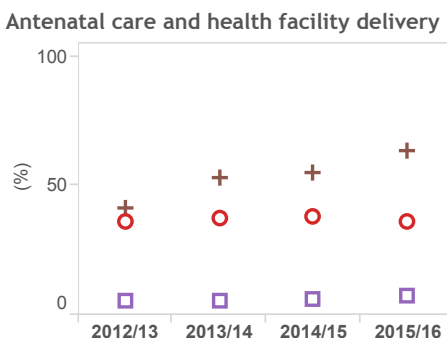
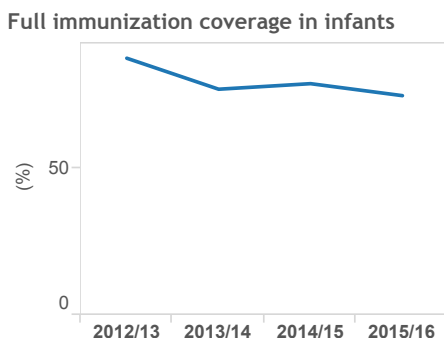
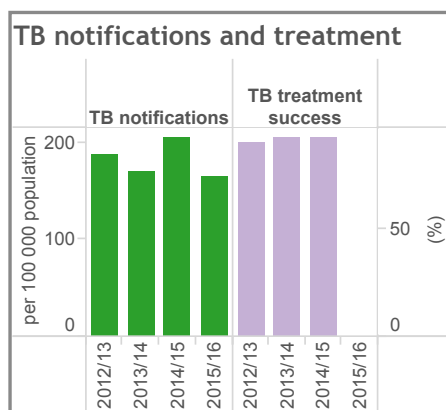
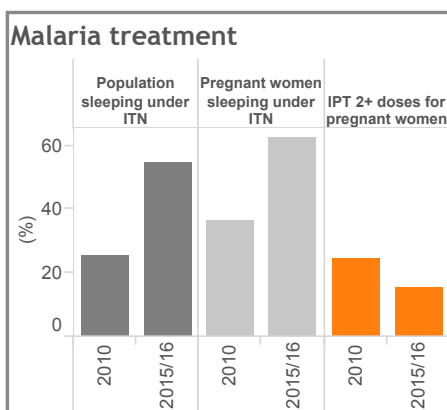
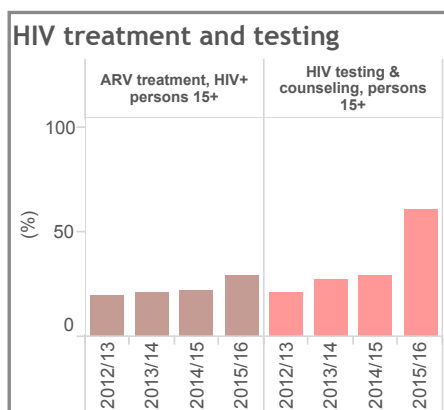
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Bomet county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance Level				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		63	68	81	91	89	23						
Inpatient discharges per 100 population		1.7	2.3	1.8	1.9	5.7	2						
Outpatient visits per person per year		1.3	2.3	2.3	2.0	2.0	26						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	38	54	55	57	58	60	26						
Antenatal care 4 or more visits (%)		36	37	38	36	49	41						
Delivery in health facility (%)	49	41	53	55	63	72	29						
Caesarean Section in all deliveries (%)	5	5	5	6	7	10	20						
Maternal mortality per 100,000 hospital deliveries		135	102	160	72	106	13						
Fresh stillbirths per 1,000 births		18	20	34	18	12	40						
Low birth weight per 100 births in health facilities (%)		8	6	5	4	5	8						
Pentavalent vaccination 3rd dose, infants	98	97	94	91	87	86	16						
Measles vaccination, infants	92	95	83	85	81	83	28						
Full immunization coverage, infants	81	88	77	79	75	80	32						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	70					71	30						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		19	21	22	29	57	42						
ART among HIV+ children under 15 (%)		24	19	23	30	46	41						
PMTCT among HIV+ women who delivered (%)		66	78	82	93	80	4						
HIV testing & counseling 15+ (%)	44	21	27	29	60	54	8						
TB notifications per 100,000 population		187	170	204	164	187	21						
TB treatment success rate (%)		91	93	93		89	6						
Population sleeping under LLITN (%)*		25			55	41	15						
Pregnant women sleeping under LLITN (%)*		37			63	51	15						
IPT 2 or more doses for pregnant women (%)*		24			15	22	25						
Children with fever taken to a health provider (%)*		65			75	72	22						

* 2010 and 2015



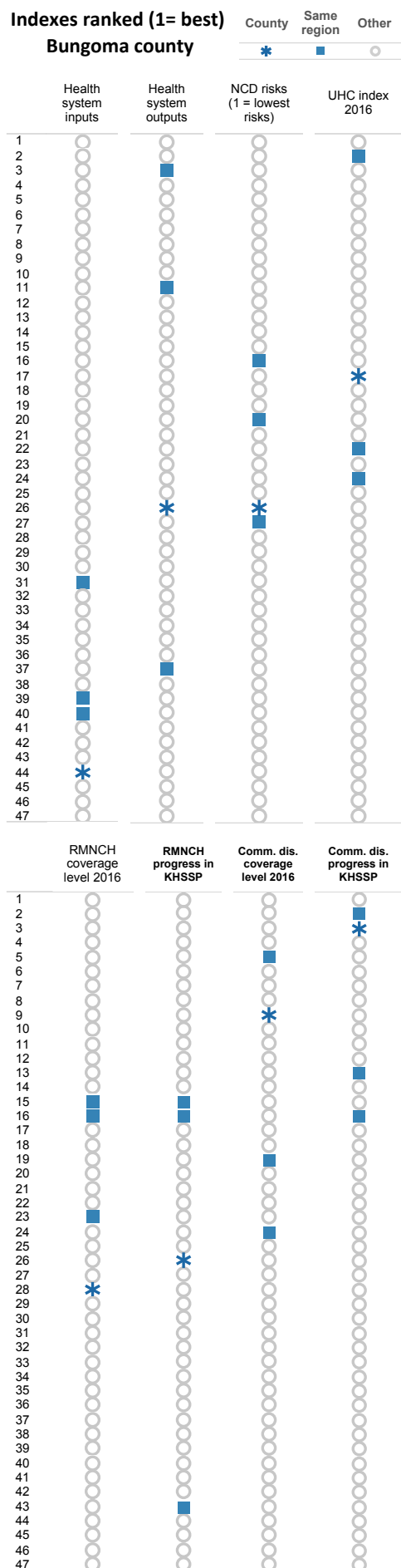
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

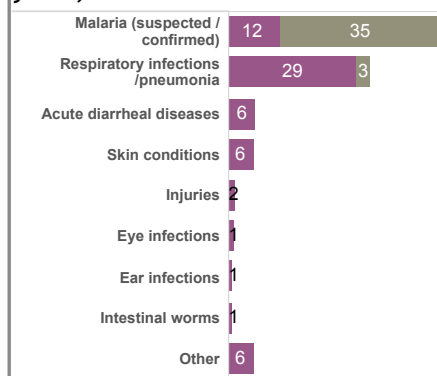
Bungoma county health statistics profile

Midterm review KHSSP 2014-18, November 2016

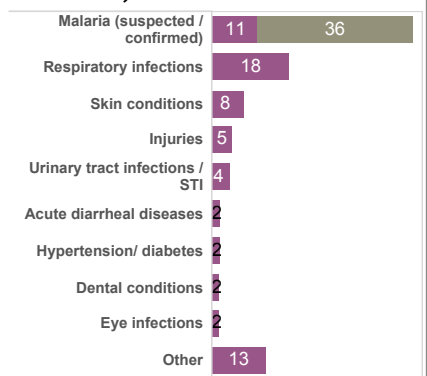
	Performance				
	Highest	Higher than average	Average	Lower than average	Lowest
	Bungoma	Kenya	Bungoma rank (1-47)		
General statistics					
Population, total 2015/16 (KNBS projection)	1 539 780	44 733 470			
Births 2015/16 (estimated from DHIS)	59 349	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	5.0	3.9			35
Female education (median years, KDHS 2014)	7.3	7.6			26
Health service inputs					
Facilities per 10,000 population	1.1	2.2			46
Facilities that are private for profit (%)	26.8	37.1			
Hospital beds per 10,000 population	6.5	8.8			31
Core health professionals per 10,000 population (est.)	4.9	9.3			38
County health budget per capita 2014/15 (KSh)	1378	1442			28
County health budget per capita 2015/16 (KSh)	1297	1874			42
Health status					
Under 5 mortality per 1000 live births (census 2009)	115	79			37
Maternal mortality per 100,000 live births (census 2009)	259	495			12
Life expectancy males (years) (census 2009)	57	58			20
Life expectancy females (years) (census 2009)	58	61			28
HIV prevalence 15 years and over (MOH 2016)	2.6	5.5			9
HIV prevalence among antenatal women (DHIS 2015/16)	2.9	4.9			20
TB notifications per 100,000 (DHIS / TIBU 2015)	100	187			4
Malaria parasite rate in children (MOH 2015)	10-19%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	24.4	26.0			16
Wasting in children under 5 (%) (KDHS 2014)	1.8	4.0			5
Underweight in children (%) (KDHS 2014)	9.0	11.0			17
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	29.4	33.6			22
Obesity, women 15-49 (%)	5.5	10.6			15
Overweight or obese, men 18-69 years (%)	20.3	17.6			34
Obesity, men, 18-69 years (%)	4.6	4.3			32
Tobacco use, men 18-69 (%)	22.5	23.2			25
Raised blood glucose, both sexes 18-69 (%)	1.9	1.9			28
Raised blood pressure, both sexes 18-69 (%)	21.8	22.7			25
Cervical cancer screening, women 30-49 (%)	13.5	17.0			20



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



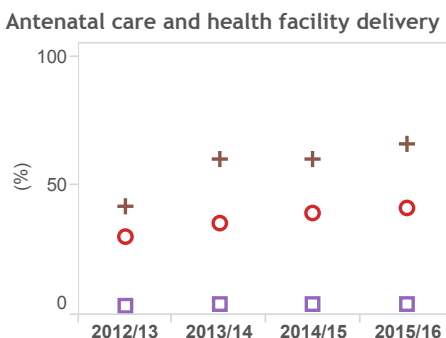
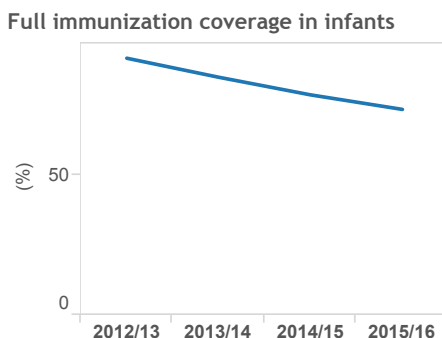
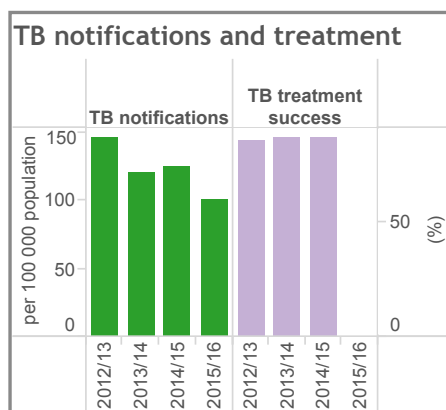
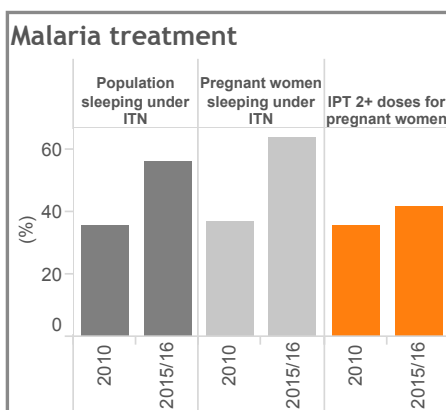
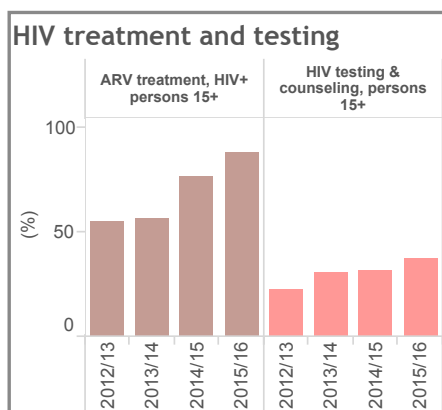
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Bungoma county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		69	73	82	87	89	35		
Inpatient discharges per 100 population		4.8	5.9	6.6	5.9	5.7	30		
Outpatient visits per person per year		0.9	1.1	1.2	1.0	2.0	2		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	45	56	59	62	62	60	17		
Antenatal care 4 or more visits (%)		30	35	39	41	49	34		
Delivery in health facility (%)	41	42	60	60	66	72	26		
Caesarean Section in all deliveries (%)	5	3	4	4	4	10	31		
Maternal mortality per 100,000 hospital deliveries		167	135	80	68	106	9		
Fresh stillbirths per 1,000 births		18	17	12	10	12	12		
Low birth weight per 100 births in health facilities (%)		5	4	4	4	5	8		
Pentavalent vaccination 3rd dose, infants	89	98	96	84	82	86	35		
Measles vaccination, infants	84	101	91	85	77	83	37		
Full immunization coverage, infants	76	92	85	79	74	80	33		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	88					71	2		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		55	56	77	88	57	1		
ART among HIV+ children under 15 (%)		39	38	53	57	46	26		
PMTCT among HIV+ women who delivered (%)		55	68	78	83	80	22		
HIV testing & counseling 15+ (%)	46	23	30	31	37	54	22		
TB notifications per 100,000 population		146	121	125	100	187	4		
TB treatment success rate (%)		85	86	86		89	37		
Population sleeping under LLITN (%)*		36			56	41	11		
Pregnant women sleeping under LLITN (%)*		37			64	51	13		
IPT 2 or more doses for pregnant women (%)*		36			42	22	9		
Children with fever taken to a health provider (%)*		49			78	72	12		

* 2010 and 2015



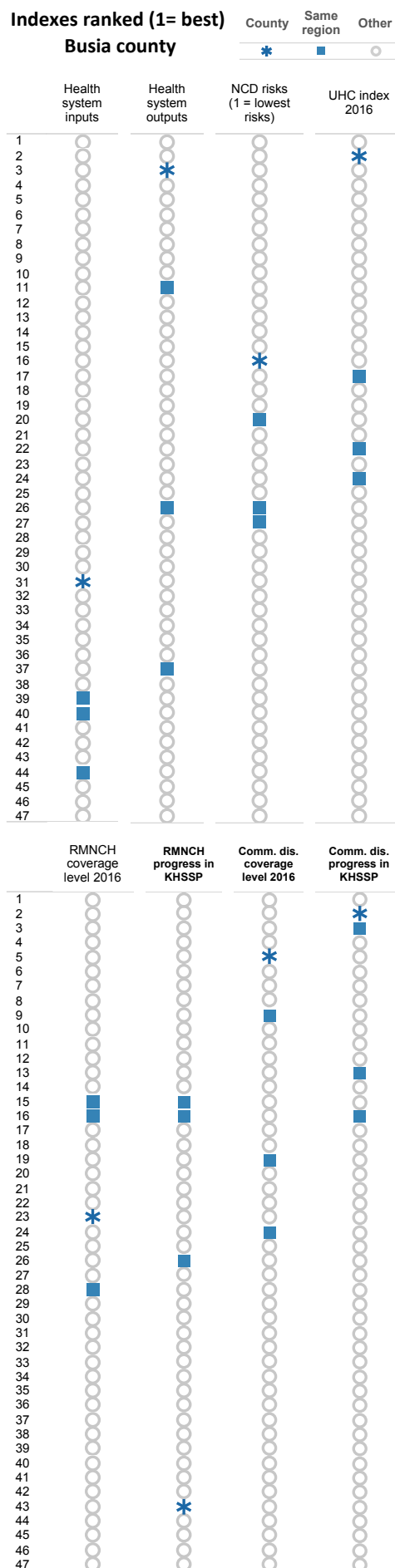
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

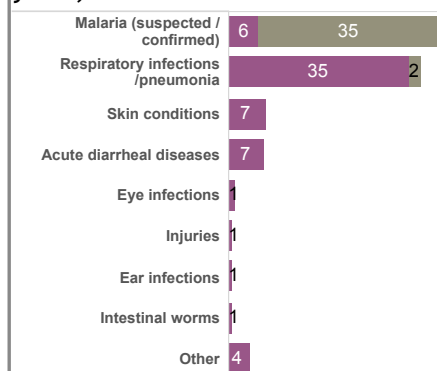
Busia county health statistics profile

Midterm review KHSSP 2014-18, November 2016

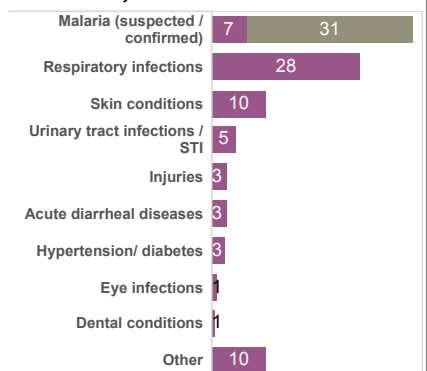
	Highest	Higher than average	Average	Lower than average	Lowest
	Busia		Kenya	Busia rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	832 879	44 733 470			
Births 2015/16 (estimated from DHIS)	29 787	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	4.7	3.9	31		
Female education (median years, KDHS 2014)	6.5	7.6	35		
Health service inputs					
Facilities per 10,000 population	1.3	2.2	44		
Facilities that are private for profit (%)	15.7	37.1			
Hospital beds per 10,000 population	13.9	8.8	7		
Core health professionals per 10,000 population (est.)	5.8	9.3	29		
County health budget per capita 2014/15 (KSh)	1494	1442	21		
County health budget per capita 2015/16 (KSh)	1734	1874	30		
Health status					
Under 5 mortality per 1000 live births (census 2009)	149	79	41		
Maternal mortality per 100,000 live births (census 2009)	307	495	18		
Life expectancy males (years) (census 2009)	51	58	39		
Life expectancy females (years) (census 2009)	54	61	40		
HIV prevalence 15 years and over (MOH 2016)	6.8	5.5	42		
HIV prevalence among antenatal women (DHIS 2015/16)	6.2	4.9	43		
TB notifications per 100,000 (DHIS / TIBU 2015)	145	187	14		
Malaria parasite rate in children (MOH 2015)	20-49%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	22.0	26.0	12		
Wasting in children under 5 (%) (KDHS 2014)	2.2	4.0	10		
Underweight in children (%) (KDHS 2014)	9.0	11.0	17		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	21.6	33.6	11		
Obesity, women 15-49 (%)	4.2	10.6	7		
Overweight or obese, men 18-69 years (%)	20.7	17.6	35		
Obesity, men, 18-69 years (%)	3.8	4.3	28		
Tobacco use, men 18-69 (%)	13.8	23.2	12		
Raised blood glucose, both sexes 18-69 (%)	0.8	1.9	16		
Raised blood pressure, both sexes 18-69 (%)	18.5	22.7	18		
Cervical cancer screening, women 30-49 (%)	31.0	17.0	7		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



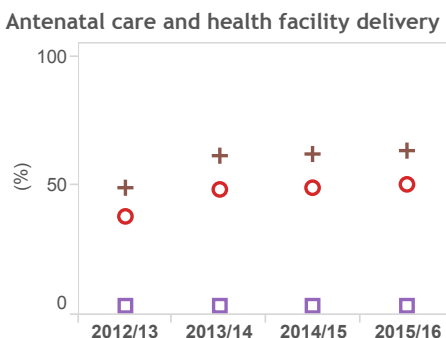
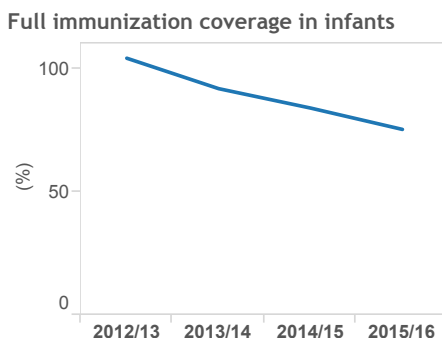
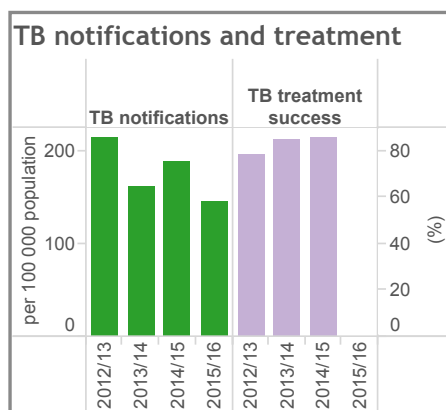
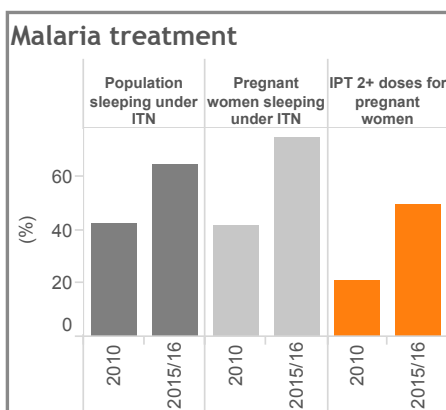
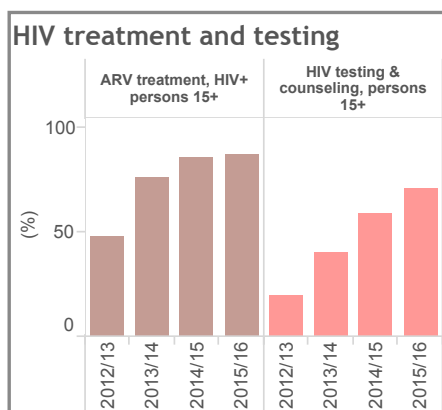
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Busia county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2012/13	2013/14
DHIS Reporting index (%)		70	76	82	89	89	29	Strong progress	Some progress
Inpatient discharges per 100 population		9.7	10.9	11.6	17.4	5.7	47	Some decline	Large decline
Outpatient visits per person per year		2.3	2.7	2.6	2.7	2.0	40	Some decline	Large decline
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	55	63	64	66	67	60	5	Some decline	Large decline
Antenatal care 4 or more visits (%)		38	48	49	50	49	17	Some decline	Large decline
Delivery in health facility (%)	58	49	61	62	63	72	29	Some decline	Large decline
Caesarean Section in all deliveries (%)	4	3	3	3	3	10	36	Some decline	Large decline
Maternal mortality per 100,000 hospital deliveries		239	119	92	105	106	29	Some decline	Large decline
Fresh stillbirths per 1,000 births		16	15	13	13	12	23	Some decline	Large decline
Low birth weight per 100 births in health facilities (%)		5	5	4	4	5	8	Some decline	Large decline
Pentavalent vaccination 3rd dose, infants	90	107	101	82	83	86	29	Some decline	Large decline
Measles vaccination, infants	92	108	97	89	80	83	31	Some decline	Large decline
Full immunization coverage, infants	80	105	92	84	76	80	31	Some decline	Large decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	83					71	5	Some decline	Large decline
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		48	76	86	88	57	2	Some decline	Large decline
ART among HIV+ children under 15 (%)		27	42	47	48	46	30	Some decline	Large decline
PMTCT among HIV+ women who delivered (%)		48	76	80	89	80	9	Some decline	Large decline
HIV testing & counseling 15+ (%)	45	19	40	59	71	54	7	Some decline	Large decline
TB notifications per 100,000 population		215	162	189	145	187	14	Some decline	Large decline
TB treatment success rate (%)		79	85	86		89	38	Some decline	Large decline
Population sleeping under LLITN (%)*		43			64	41	5	Some decline	Large decline
Pregnant women sleeping under LLITN (%)*		42			74	51	6	Some decline	Large decline
IPT 2 or more doses for pregnant women (%)*		21			49	22	5	Some decline	Large decline
Children with fever taken to a health provider (%)*		37			69	72	37	Some decline	Large decline

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

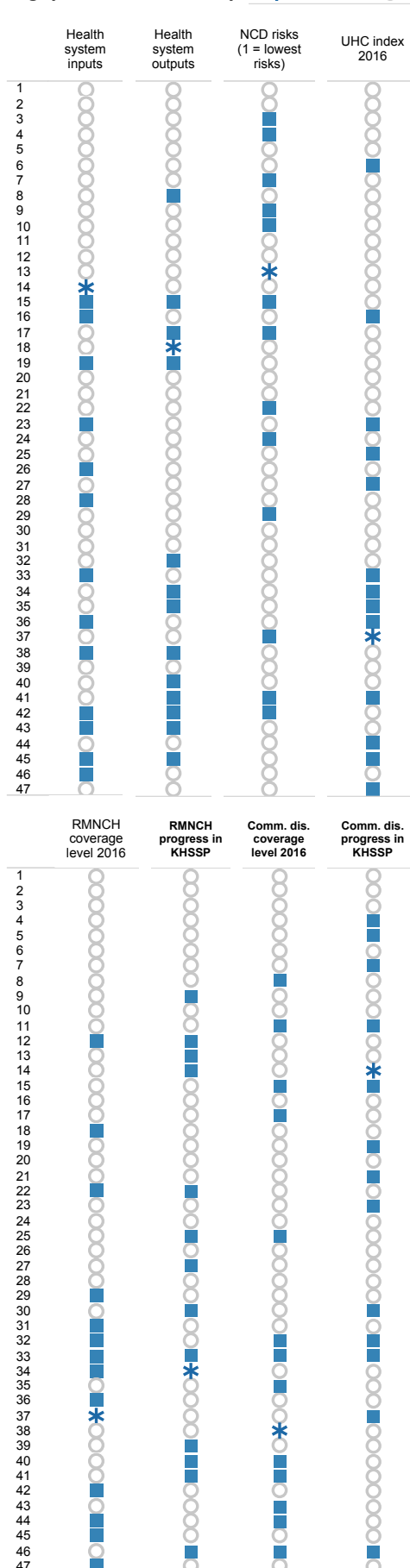
Midterm review KHSSP 2014-18, November 2016

Elgeyo Marakwet county health statistics profile

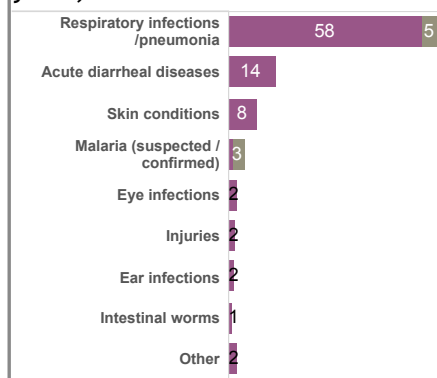
Midterm review KHSSP 2014-18, November 2016

	Elgeyo Marakwet	Kenya	Elgeyo Marakwet rank (1-47)
<div style="display: flex; justify-content: space-around; font-size: small;"> Highest Higher than average Average Lower than average Lowest </div>			
General statistics			
Population, total 2015/16 (KNBS projection)	460 006	44 733 470	
Births 2015/16 (estimated from DHIS)	17 661	1 442 952	
Total fertility rate (children per woman, KDHS 2014)	4.1	3.9	23
Female education (median years, KDHS 2014)	7.7	7.6	14
Health service inputs			
Facilities per 10,000 population	2.7	2.2	15
Facilities that are private for profit (%)	4.9	37.1	
Hospital beds per 10,000 population	10.8	8.8	15
Core health professionals per 10,000 population (est.)	7.4	9.3	24
County health budget per capita 2014/15 (KSh)	2014	1442	13
County health budget per capita 2015/16 (KSh)	2807	1874	10
Health status			
Under 5 mortality per 1000 live births (census 2009)	42	79	1
Maternal mortality per 100,000 live births (census 2009)	408	495	31
Life expectancy males (years) (census 2009)	57	58	20
Life expectancy females (years) (census 2009)	62	61	17
HIV prevalence 15 years and over (MOH 2016)	2.3	5.5	7
HIV prevalence among antenatal women (DHIS 2015/16)	1.8	4.9	8
TB notifications per 100,000 (DHIS / TIBU 2015)	113	187	7
Malaria parasite rate in children (MOH 2015)	<1%	1-4%	
Stunting in children under 5 (%) (KDHS 2014)	29.9	26.0	37
Wasting in children under 5 (%) (KDHS 2014)	4.3	4.0	31
Underweight in children (%) (KDHS 2014)	12.6	11.0	33
NCD Risk factors (STEPS 2015 & KDHS 2014)			
Overweight or obese, women 15-49 (%)	22.0	33.6	13
Obesity, women 15-49 (%)	5.7	10.6	16
Overweight or obese, men 18-69 years (%)	2.2	17.6	4
Obesity, men, 18-69 years (%)	0.0	4.3	1
Tobacco use, men 18-69 (%)	15.7	23.2	14
Raised blood glucose, both sexes 18-69 (%)	6.3	1.9	46
Raised blood pressure, both sexes 18-69 (%)	21.9	22.7	26
Cervical cancer screening, women 30-49 (%)	8.6	17.0	27

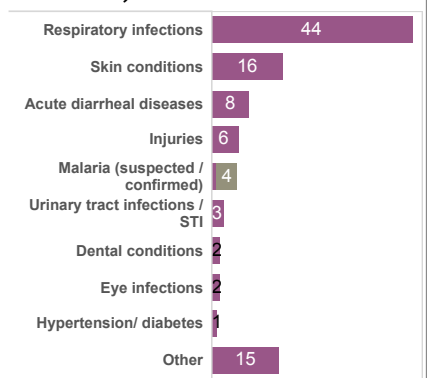
Indexes ranked (1= best) Elgeyo Marakwet county



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



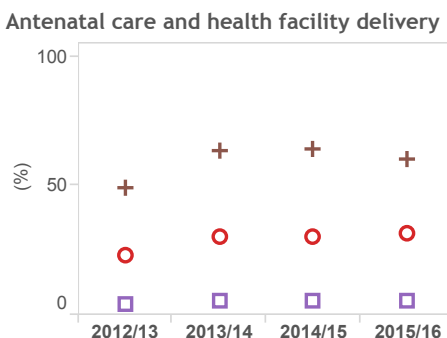
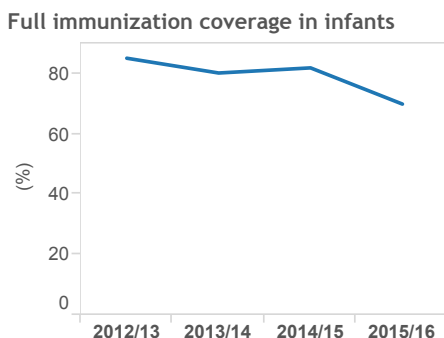
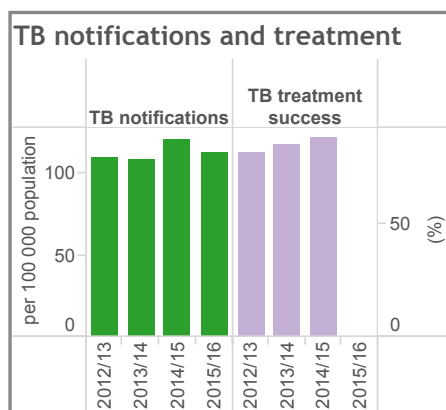
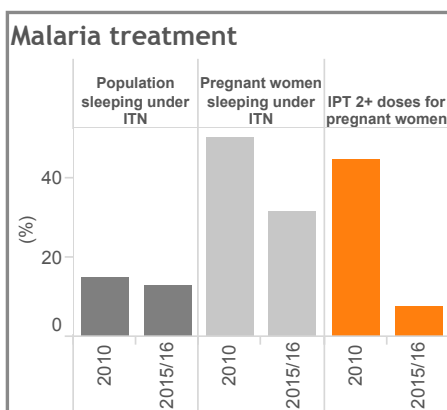
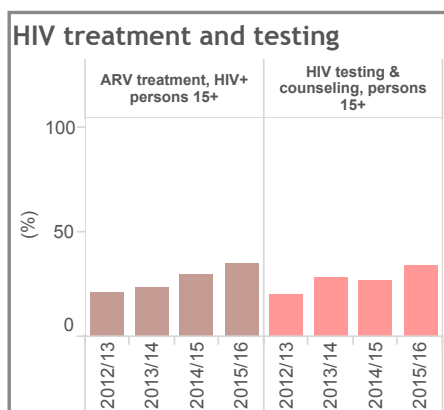
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Elgeyo Marakwet county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
<div style="display: flex; justify-content: space-around; font-size: small;"> Strong progress Some progress Same level Some decline Large decline </div>								
DHIS Reporting index (%)		67	73	86	93	89	15	
Inpatient discharges per 100 population		4.5	5.4	5.7	4.9	5.7	23	
Outpatient visits per person per year		1.5	3.3	2.4	2.3	2.0	33	
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	56	49	50	54	53	60	34	
Antenatal care 4 or more visits (%)		23	30	30	31	49	44	
Delivery in health facility (%)	65	49	63	64	60	72	35	
Caesarean Section in all deliveries (%)	4	4	5	5	5	10	28	
Maternal mortality per 100,000 hospital deliveries		61	35	22	44	106	4	
Fresh stillbirths per 1,000 births		16	13	17	11	12	16	
Low birth weight per 100 births in health facilities (%)		5	5	7	7	5	38	
Pentavalent vaccination 3rd dose, infants	98	96	97	91	76	86	44	
Measles vaccination, infants	87	92	86	84	74	83	41	
Full immunization coverage, infants	85	85	80	82	70	80	38	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	81					71	10	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		21	24	30	35	57	38	
ART among HIV+ children under 15 (%)		22	25	31	35	46	39	
PMTCT among HIV+ women who delivered (%)		32	42	67	71	80	35	
HIV testing & counseling 15+ (%)	46	20	28	26	34	54	29	
TB notifications per 100,000 population		109	108	121	113	187	7	
TB treatment success rate (%)		82	86	89		89	25	
Population sleeping under LLITN (%)*		15			13	41	42	
Pregnant women sleeping under LLITN (%)*		50			32	51	41	
IPT 2 or more doses for pregnant women (%)*		45			8	22	37	
Children with fever taken to a health provider (%)*		75			71	72	30	

* 2010 and 2015



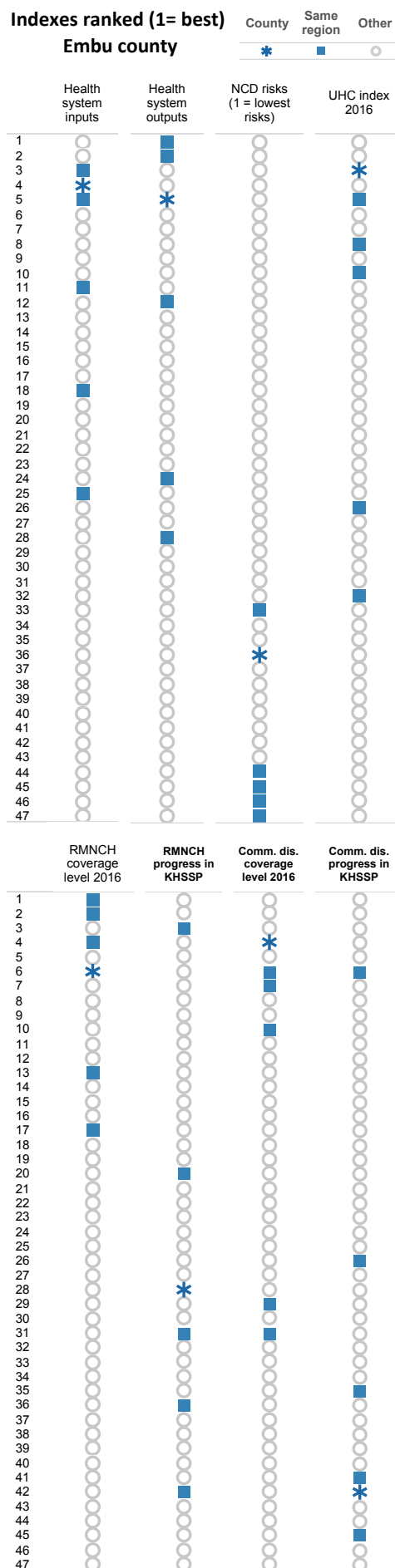
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

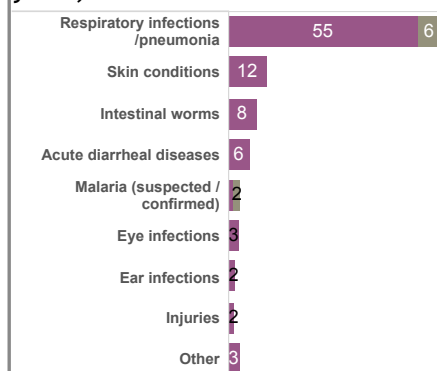
Embu county health statistics profile

Midterm review KHSSP 2014-18, November 2016

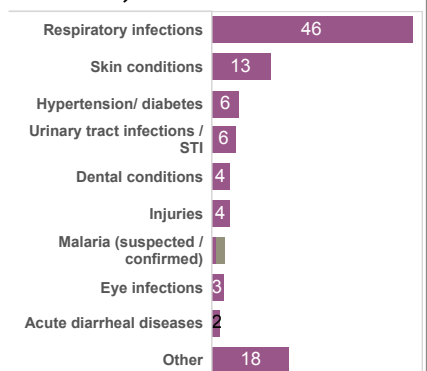
	Highest	Higher than average	Average	Lower than average	Lowest
	Embu		Kenya	Embu rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	556 833	44 733 470			
Births 2015/16 (estimated from DHIS)	14 127	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.1	3.9	6		
Female education (median years, KDHS 2014)	7.6	7.6	18		
Health service inputs					
Facilities per 10,000 population	3.1	2.2	9		
Facilities that are private for profit (%)	31.2	37.1			
Hospital beds per 10,000 population	13.1	8.8	8		
Core health professionals per 10,000 population (est.)	19.0	9.3	3		
County health budget per capita 2014/15 (KSh)	2087	1442	11		
County health budget per capita 2015/16 (KSh)	3365	1874	5		
Health status					
Under 5 mortality per 1000 live births (census 2009)	49	79	3		
Maternal mortality per 100,000 live births (census 2009)	388	495	28		
Life expectancy males (years) (census 2009)	59	58	16		
Life expectancy females (years) (census 2009)	65	61	7		
HIV prevalence 15 years and over (MOH 2016)	2.9	5.5	13		
HIV prevalence among antenatal women (DHIS 2015/16)	2.8	4.9	17		
TB notifications per 100,000 (DHIS / TIBU 2015)	267	187	43		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	26.8	26.0	26		
Wasting in children under 5 (%) (KDHS 2014)	3.0	4.0	18		
Underweight in children (%) (KDHS 2014)	11.1	11.0	25		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	35.9	33.6	35		
Obesity, women 15-49 (%)	13.9	10.6	37		
Overweight or obese, men 18-69 years (%)	16.9	17.6	28		
Obesity, men, 18-69 years (%)	4.4	4.3	31		
Tobacco use, men 18-69 (%)	27.3	23.2	29		
Raised blood glucose, both sexes 18-69 (%)	4.8	1.9	44		
Raised blood pressure, both sexes 18-69 (%)	33.2	22.7	40		
Cervical cancer screening, women 30-49 (%)	43.2	17.0	4		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



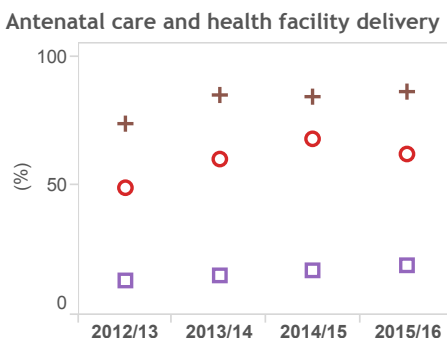
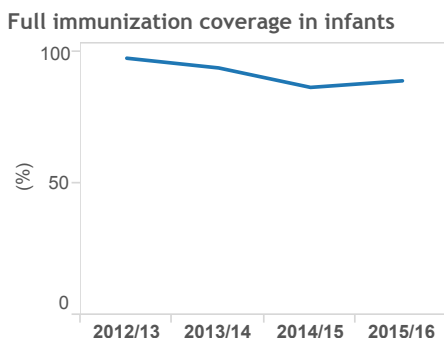
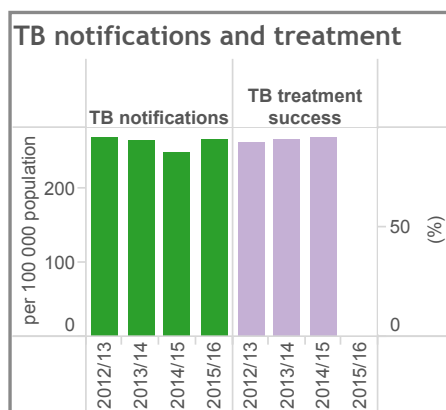
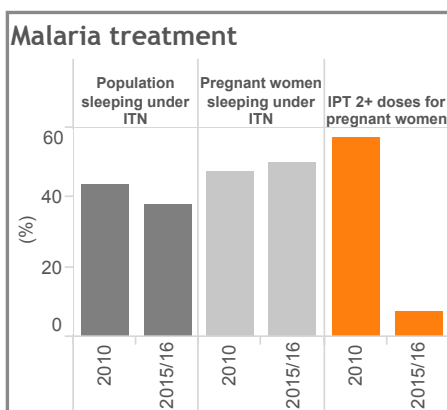
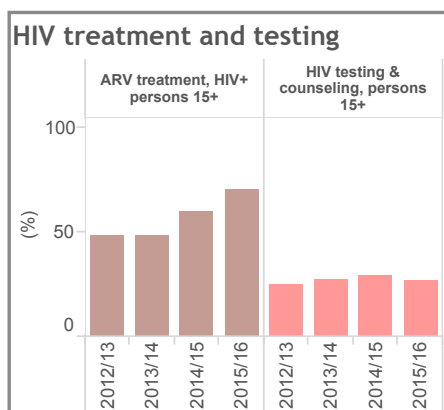
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Embu county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2012/13	2013/14
DHIS Reporting index (%)		76	79	86	93	89	15		
Inpatient discharges per 100 population		7.9	7.8	6.3	6.9	5.7	37		
Outpatient visits per person per year		2.9	4.9	3.7	3.2	2.0	45		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	26	63	64	64	63	60	14		
Antenatal care 4 or more visits (%)		49	60	68	62	49	8		
Delivery in health facility (%)	82	74	85	84	86	72	8		
Caesarean Section in all deliveries (%)	16	13	15	17	19	10	4		
Maternal mortality per 100,000 hospital deliveries		88	120	70	117	106	34		
Fresh stillbirths per 1,000 births		12	13	10	19	12	42		
Low birth weight per 100 births in health facilities (%)		6	4	3	4	5	8		
Pentavalent vaccination 3rd dose, infants	99	95	95	88	87	86	18		
Measles vaccination, infants	93	98	96	90	92	83	7		
Full immunization coverage, infants	86	98	94	87	89	80	10		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	79					71	14		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		48	49	60	70	57	10		
ART among HIV+ children under 15 (%)		76	76	89	80	46	15		
PMTCT among HIV+ women who delivered (%)		127	116	109	88	80	14		
HIV testing & counseling 15+ (%)	47	25	27	29	26	54	38		
TB notifications per 100,000 population		268	264	249	267	187	43		
TB treatment success rate (%)		89	90	91		89	14		
Population sleeping under LLITN (%)*		44			38	41	29		
Pregnant women sleeping under LLITN (%)*		48			50	51	31		
IPT 2 or more doses for pregnant women (%)*		57			7	22	39		
Children with fever taken to a health provider (%)*		66			74	72	25		

* 2010 and 2015



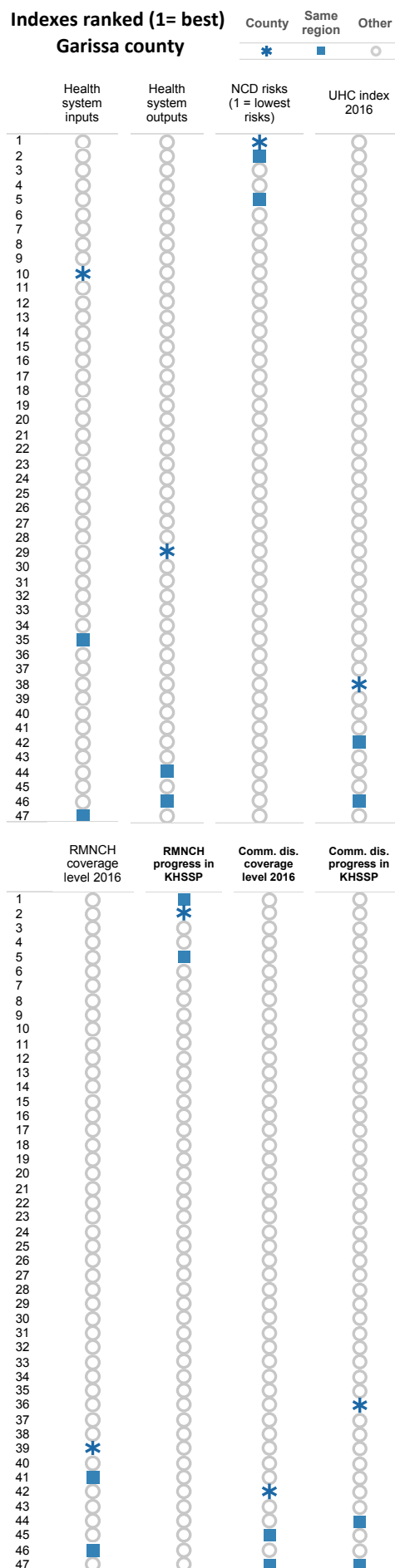
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

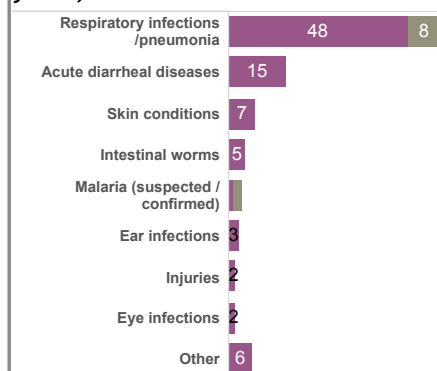
Garissa county health statistics profile

Midterm review KHSSP 2014-18, November 2016

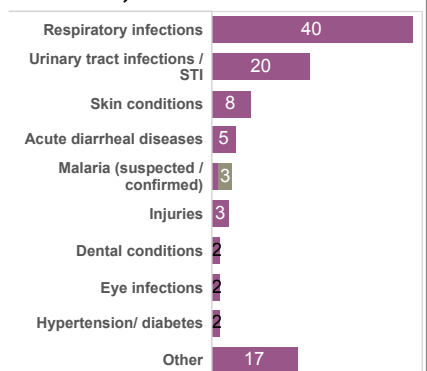
	Highest	Higher than average	Average	Lower than average	Lowest
	Garissa		Kenya	Garissa rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	427 750	44 733 470			
Births 2015/16 (estimated from DHIS)	19 343	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	6.1	3.9	43		
Female education (median years, KDHS 2014)	0.0	7.6	42		
Health service inputs					
Facilities per 10,000 population	3.4	2.2	4		
Facilities that are private for profit (%)	41.8	37.1			
Hospital beds per 10,000 population	9.2	8.8	22		
Core health professionals per 10,000 population (est.)	8.6	9.3	17		
County health budget per capita 2014/15 (KSh)	3067	1442	3		
County health budget per capita 2015/16 (KSh)	3337	1874	6		
Health status					
Under 5 mortality per 1000 live births (census 2009)	129	79	40		
Maternal mortality per 100,000 live births (census 2009)	646	495	39		
Life expectancy males (years) (census 2009)	56	58	25		
Life expectancy females (years) (census 2009)	65	61	7		
HIV prevalence 15 years and over (MOH 2016)	1.2	5.5	4		
HIV prevalence among antenatal women (DHIS 2015/16)	0.5	4.9	2		
TB notifications per 100,000 (DHIS / TIBU 2015)	199	187	33		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	15.6	26.0	2		
Wasting in children under 5 (%) (KDHS 2014)	11.4	4.0	41		
Underweight in children (%) (KDHS 2014)	13.1	11.0	35		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	16.8	33.6	6		
Obesity, women 15-49 (%)	4.9	10.6	13		
Overweight or obese, men 18-69 years (%)	9.2	17.6	17		
Obesity, men, 18-69 years (%)	3.8	4.3	28		
Tobacco use, men 18-69 (%)	1.7	23.2	2		
Raised blood glucose, both sexes 18-69 (%)	3.6	1.9	41		
Raised blood pressure, both sexes 18-69 (%)	10.1	22.7	3		
Cervical cancer screening, women 30-49 (%)	0.0	17.0	43		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



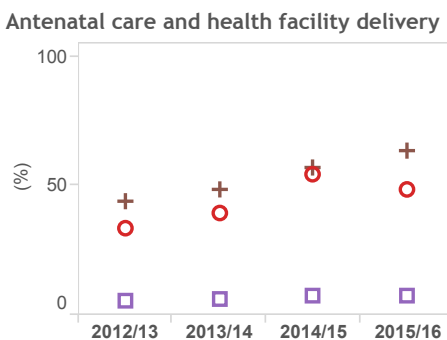
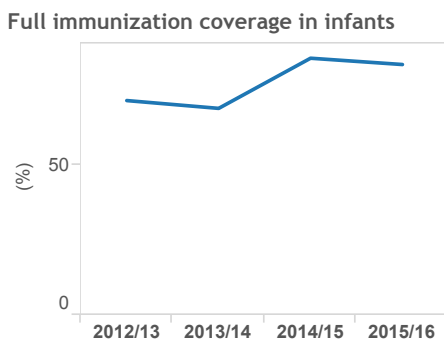
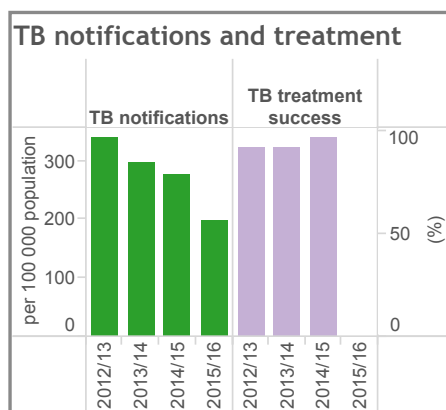
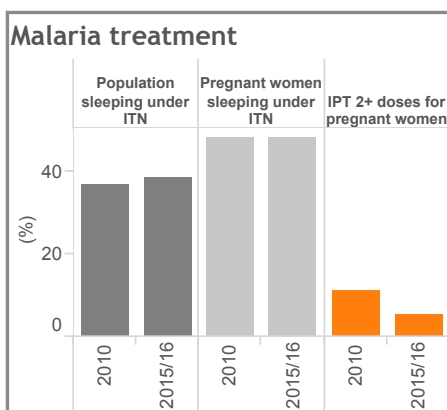
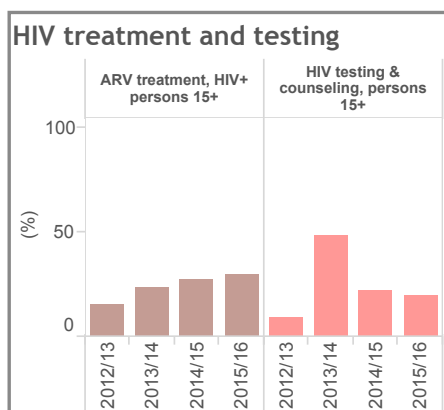
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Garissa county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
DHIS Reporting index (%)		66	92	93	88	89	34	Strong progress
Inpatient discharges per 100 population		3.6	3.6	4.6	4.7	5.7	21	Some decline
Outpatient visits per person per year		1.2	1.2	1.6	1.8	2.0	17	Some decline
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	57	21	21	21	21	60	45	Large decline
Antenatal care 4 or more visits (%)		33	39	54	48	49	22	Strong progress
Delivery in health facility (%)	37	44	48	57	63	72	29	Strong progress
Caesarean Section in all deliveries (%)	6	5	6	7	7	10	20	Strong progress
Maternal mortality per 100,000 hospital deliveries		304	247	346	132	106	37	Strong progress
Fresh stillbirths per 1,000 births		8	14	19	15	12	32	Large decline
Low birth weight per 100 births in health facilities (%)		2	2	2	2	5	1	Strong progress
Pentavalent vaccination 3rd dose, infants	92	79	81	90	87	86	16	Strong progress
Measles vaccination, infants	81	81	79	93	87	83	14	Strong progress
Full immunization coverage, infants	58	71	69	86	83	80	17	Strong progress
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	76					71	21	Some decline
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		15	24	27	30	57	40	Strong progress
ART among HIV+ children under 15 (%)		7	9	10	11	46	45	Strong progress
PMTCT among HIV+ women who delivered (%)		37	42	64	58	80	41	Strong progress
HIV testing & counseling 15+ (%)	51	9	49	22	19	54	44	Large decline
TB notifications per 100,000 population		339	297	276	199	187	33	Strong progress
TB treatment success rate (%)		92	92	97		89	3	Strong progress
Population sleeping under LLITN (%)*		37			38	41	28	Some decline
Pregnant women sleeping under LLITN (%)*		48			48	51	34	Some decline
IPT 2 or more doses for pregnant women (%)*		11			5	22	46	Large decline
Children with fever taken to a health provider (%)*		66			64	72	45	Some decline

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

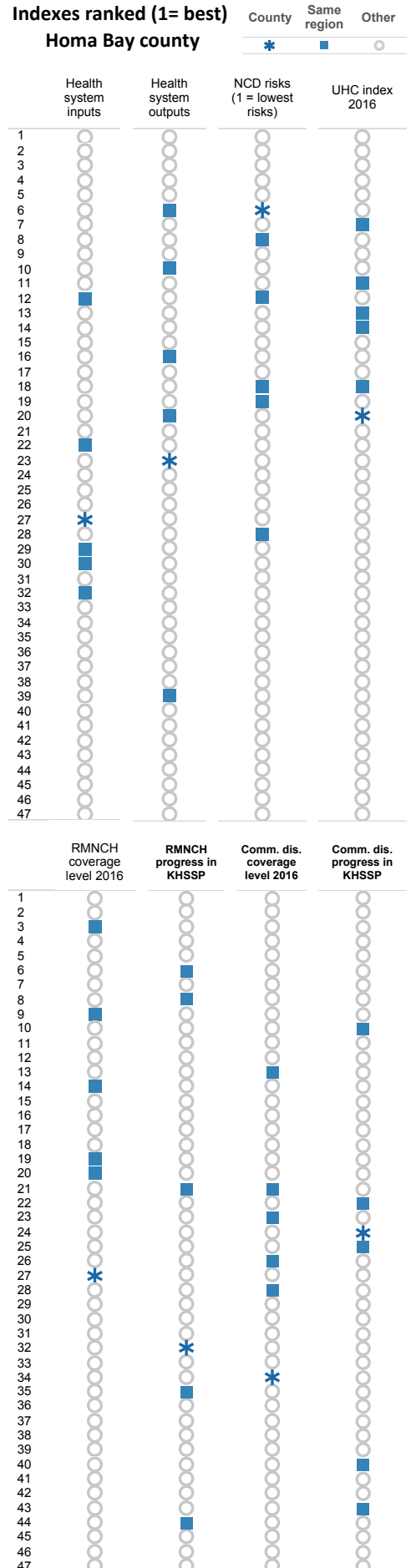
Homa Bay county health statistics profile

Midterm review KHSSP 2014-18, November 2016

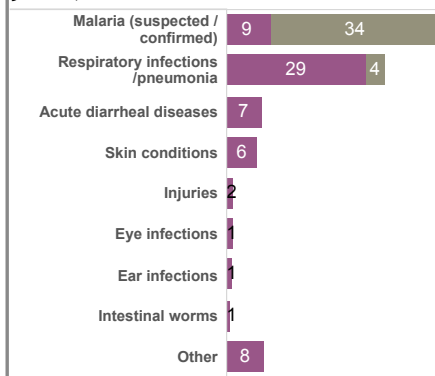
	Homa Bay	Kenya	Homa Bay rank (1-47)
<div style="display: flex; justify-content: space-around; font-size: small;"> Highest Higher than average Average Lower than average Lowest </div>			
General statistics			
Population, total 2015/16 (KNBS projection)	1 113 592	44 733 470	
Births 2015/16 (estimated from DHIS)	39 684	1 442 952	
Total fertility rate (children per woman, KDHS 2014)	5.2	3.9	38
Female education (median years, KDHS 2014)	7.3	7.6	26
Health service inputs			
Facilities per 10,000 population	2.1	2.2	26
Facilities that are private for profit (%)	14.0	37.1	
Hospital beds per 10,000 population	10.3	8.8	18
Core health professionals per 10,000 population (est.)	5.1	9.3	36
County health budget per capita 2014/15 (KSh)	1064	1442	38
County health budget per capita 2015/16 (KSh)	1332	1874	40
Health status			
Under 5 mortality per 1000 live births (census 2009)	170	79	44
Maternal mortality per 100,000 live births (census 2009)	673	495	40
Life expectancy males (years) (census 2009)	47	58	45
Life expectancy females (years) (census 2009)	55	61	35
HIV prevalence 15 years and over (MOH 2016)	26.0	5.5	47
HIV prevalence among antenatal women (DHIS 2015/16)	19.4	4.9	47
TB notifications per 100,000 (DHIS / TIBU 2015)	197	187	32
Malaria parasite rate in children (MOH 2015)	20-49%	1-4%	
Stunting in children under 5 (%) (KDHS 2014)	18.7	26.0	8
Wasting in children under 5 (%) (KDHS 2014)	2.3	4.0	11
Underweight in children (%) (KDHS 2014)	5.4	11.0	4
NCD Risk factors (STEPS 2015 & KDHS 2014)			
Overweight or obese, women 15-49 (%)	20.6	33.6	9
Obesity, women 15-49 (%)	4.5	10.6	9
Overweight or obese, men 18-69 years (%)	15.7	17.6	26
Obesity, men, 18-69 years (%)	0.8	4.3	15
Tobacco use, men 18-69 (%)	5.8	23.2	5
Raised blood glucose, both sexes 18-69 (%)	0.6	1.9	13
Raised blood pressure, both sexes 18-69 (%)	12.5	22.7	7
Cervical cancer screening, women 30-49 (%)	18.3	17.0	16

Indexes ranked (1= best)

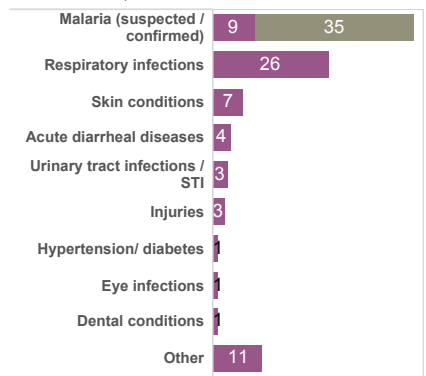
Homa Bay county



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



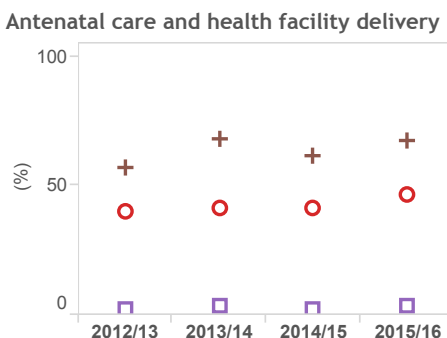
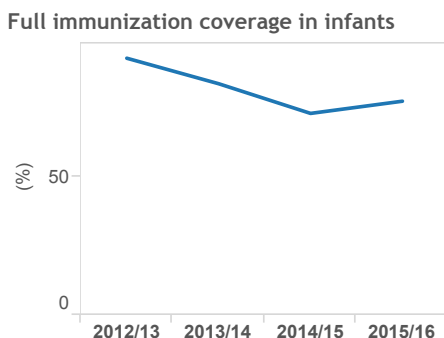
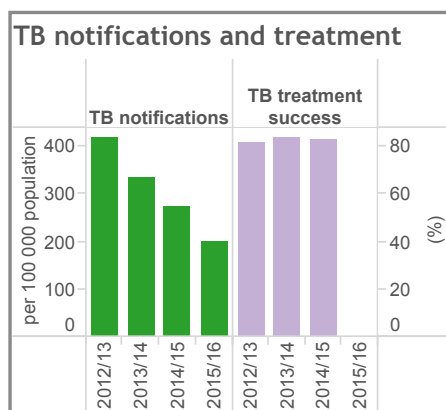
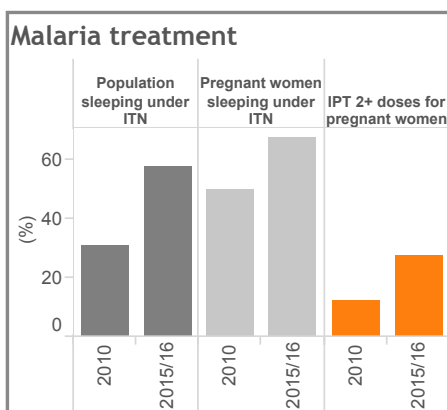
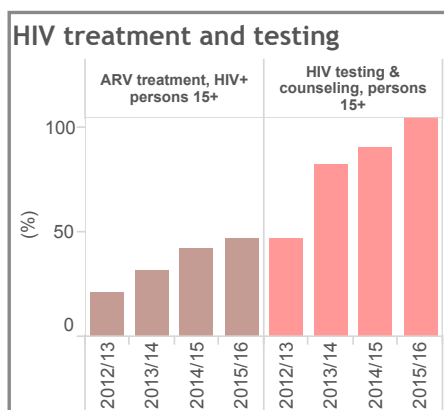
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Homa Bay county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
Reproductive, maternal, newborn and child health								
DHIS Reporting index (%)		71	79	89	95	89	10	
Inpatient discharges per 100 population		6.5	7.4	6.5	5.6	5.7	28	
Outpatient visits per person per year		1.5	1.6	1.6	1.9	2.0	22	
Modern contraceptive use, women 15-49	67	52	52	54	57	60	29	
Antenatal care 4 or more visits (%)		40	41	41	46	49	26	
Delivery in health facility (%)	62	57	68	61	67	72	25	
Caesarean Section in all deliveries (%)	3	2	3	2	3	10	36	
Maternal mortality per 100,000 hospital deliveries		90	96	113	72	106	13	
Fresh stillbirths per 1,000 births		11	12	10	13	12	23	
Low birth weight per 100 births in health facilities (%)		3	3	3	3	5	5	
Pentavalent vaccination 3rd dose, infants	82	96	95	84	81	86	39	
Measles vaccination, infants	80	96	89	76	79	83	33	
Full immunization coverage, infants	64	93	83	73	77	80	29	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	79					71	12	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		21	32	42	47	57	30	
ART among HIV+ children under 15 (%)		18	28	40	43	46	35	
PMTCT among HIV+ women who delivered (%)		65	73	76	77	80	28	
HIV testing & counseling 15+ (%)	64	47	82	90	168	54	1	
TB notifications per 100,000 population		418	332	274	197	187	32	
TB treatment success rate (%)		82	84	83		89	47	
Population sleeping under LLITN (%)*		31			57	41	10	
Pregnant women sleeping under LLITN (%)*		50			67	51	12	
IPT 2 or more doses for pregnant women (%)*		12			28	22	16	
Children with fever taken to a health provider (%)*		59			70	72	36	

* 2010 and 2015



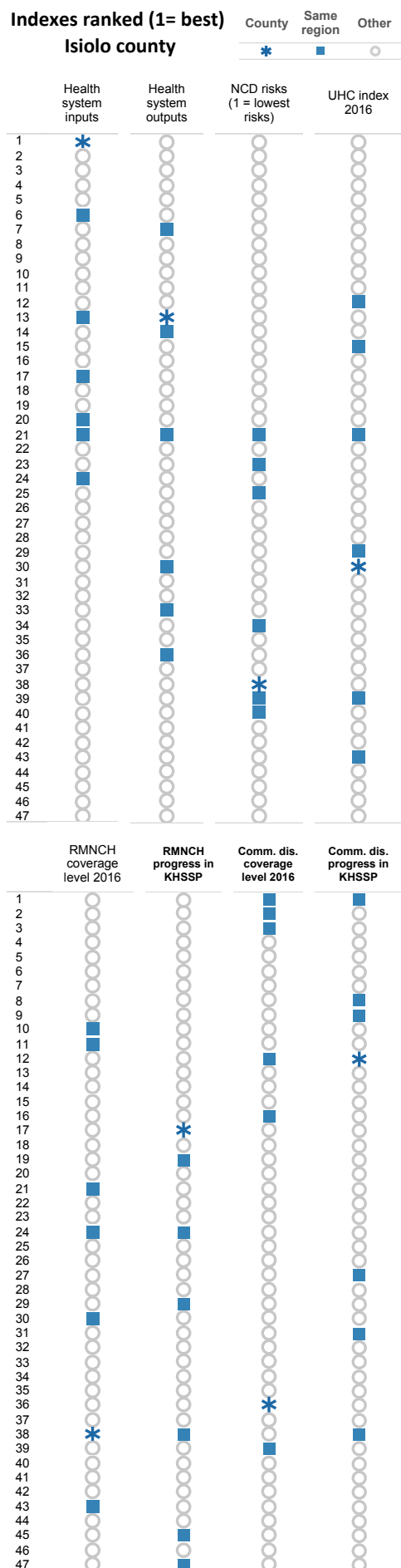
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

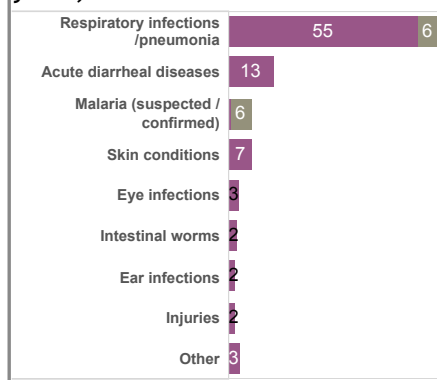
Isiolo county health statistics profile

Midterm review KHSSP 2014-18, November 2016

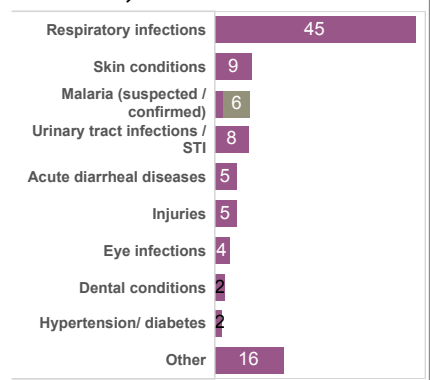
	Performance			Isiolo rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	154 644	44 733 470		
Births 2015/16 (estimated from DHIS)	7248	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	4.9	3.9	34	
Female education (median years, KDHS 2014)	5.0	7.6	39	
Health service inputs				
Facilities per 10,000 population	3.4	2.2	4	
Facilities that are private for profit (%)	9.4	37.1		
Hospital beds per 10,000 population	15.4	8.8	4	
Core health professionals per 10,000 population (est.)	13.7	9.3	6	
County health budget per capita 2014/15 (KSh)	3851	1442	1	
County health budget per capita 2015/16 (KSh)	4675	1874	2	
Health status				
Under 5 mortality per 1000 live births (census 2009)	60	79	17	
Maternal mortality per 100,000 live births (census 2009)	790	495	43	
Life expectancy males (years) (census 2009)	65	58	1	
Life expectancy females (years) (census 2009)	70	61	1	
HIV prevalence 15 years and over (MOH 2016)	4.0	5.5	27	
HIV prevalence among antenatal women (DHIS 2015/16)	2.6	4.9	16	
TB notifications per 100,000 (DHIS / TIBU 2015)	354	187	46	
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	19.1	26.0	9	
Wasting in children under 5 (%) (KDHS 2014)	9.1	4.0	40	
Underweight in children (%) (KDHS 2014)	12.9	11.0	34	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	22.9	33.6	14	
Obesity, women 15-49 (%)	7.9	10.6	26	
Overweight or obese, men 18-69 years (%)	28.1	17.6	41	
Obesity, men, 18-69 years (%)	8.7	4.3	40	
Tobacco use, men 18-69 (%)	44.8	23.2	42	
Raised blood glucose, both sexes 18-69 (%)	1.1	1.9	18	
Raised blood pressure, both sexes 18-69 (%)	23.7	22.7	28	
Cervical cancer screening, women 30-49 (%)	3.8	17.0	35	



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



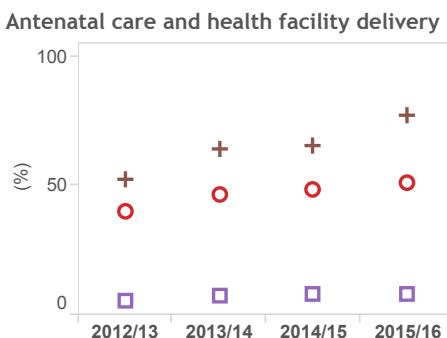
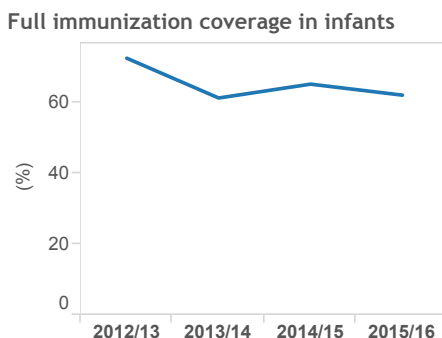
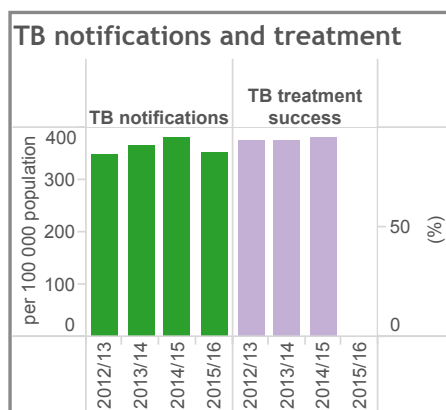
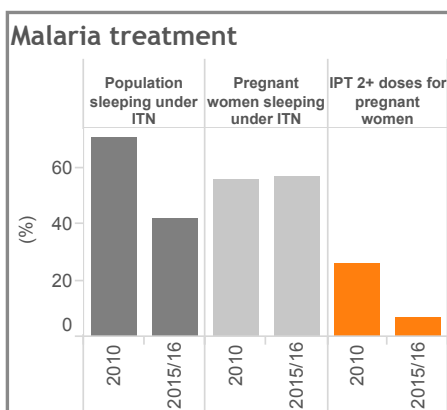
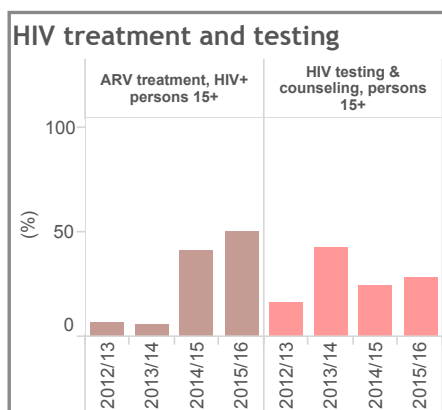
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Isiolo county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		52	63	66	67	89	45						
Inpatient discharges per 100 population		4.6	5.8	6.1	6.1	5.7	32						
Outpatient visits per person per year		1.9	2.3	2.3	2.7	2.0	40						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	44	38	39	39	40	60	39						
Antenatal care 4 or more visits (%)		40	46	48	51	49	15						
Delivery in health facility (%)	42	52	64	65	77	72	16						
Caesarean Section in all deliveries (%)	7	5	7	8	8	10	17						
Maternal mortality per 100,000 hospital deliveries		76	329	252	317	106	46						
Fresh stillbirths per 1,000 births		10	13	13	11	12	16						
Low birth weight per 100 births in health facilities (%)		3	6	6	5	5	23						
Pentavalent vaccination 3rd dose, infants	94	86	85	84	81	86	36						
Measles vaccination, infants	87	79	74	80	75	83	39						
Full immunization coverage, infants	82	72	61	65	62	80	43						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	81					71	9						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		6	6	42	50	57	27						
ART among HIV+ children under 15 (%)		8	8	56	58	46	25						
PMTCT among HIV+ women who delivered (%)		51	53	55	51	80	42						
HIV testing & counseling 15+ (%)	48	16	43	24	28	54	35						
TB notifications per 100,000 population		348	365	381	354	187	46						
TB treatment success rate (%)		89	89	91		89	15						
Population sleeping under LLITN (%)*		71			42	41	25						
Pregnant women sleeping under LLITN (%)*		56			57	51	24						
IPT 2 or more doses for pregnant women (%)*		26			7	22	41						
Children with fever taken to a health provider (%)*		64			76	72	20						

* 2010 and 2015



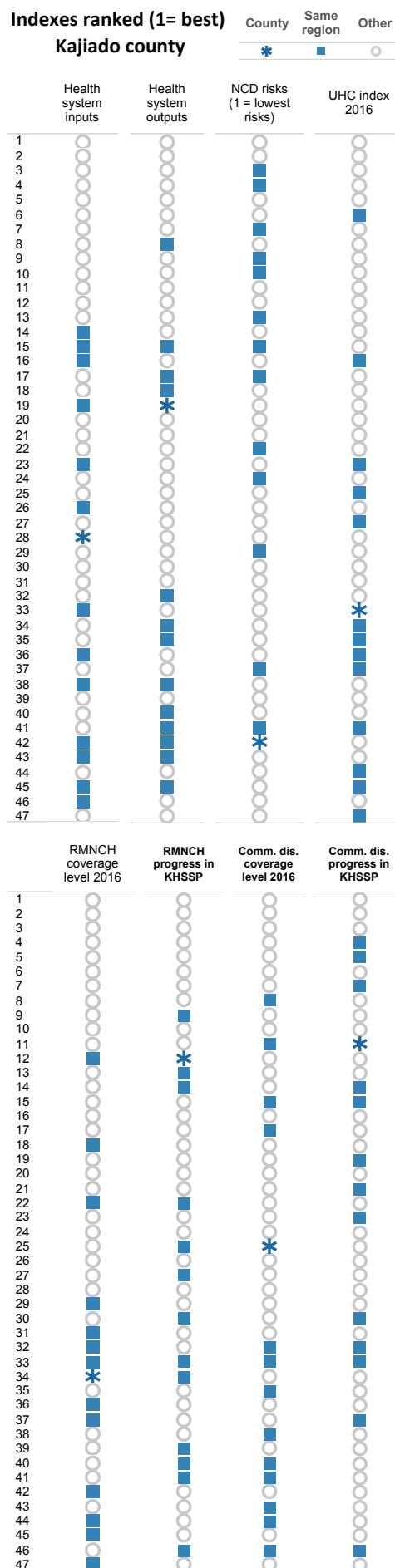
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

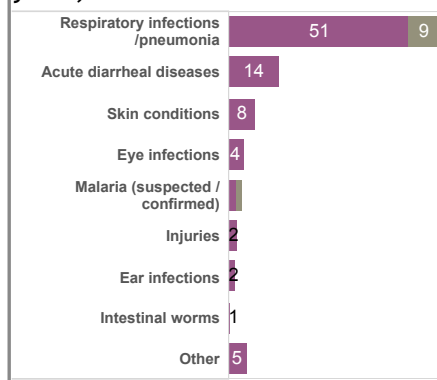
Kajiado county health statistics profile

Midterm review KHSSP 2014-18, November 2016

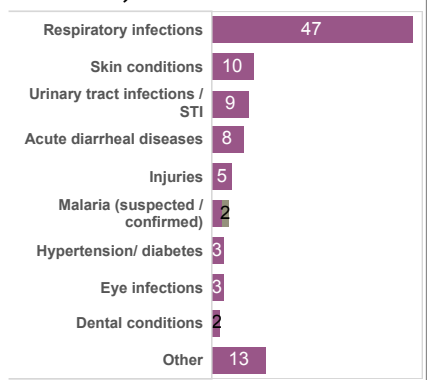
	Highest	Higher than average	Average	Lower than average	Lowest
	Kajiado		Kenya	Kajiado rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	854 329	44 733 470			
Births 2015/16 (estimated from DHIS)	34 761	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	4.5	3.9	29		
Female education (median years, KDHS 2014)	8.0	7.6	6		
Health service inputs					
Facilities per 10,000 population	3.6	2.2	2		
Facilities that are private for profit (%)	55.5	37.1			
Hospital beds per 10,000 population	7.2	8.8	28		
Core health professionals per 10,000 population (est.)	3.9	9.3	44		
County health budget per capita 2014/15 (KSh)	760	1442	43		
County health budget per capita 2015/16 (KSh)	1780	1874	28		
Health status					
Under 5 mortality per 1000 live births (census 2009)	53	79	8		
Maternal mortality per 100,000 live births (census 2009)	243	495	9		
Life expectancy males (years) (census 2009)	60	58	11		
Life expectancy females (years) (census 2009)	64	61	10		
HIV prevalence 15 years and over (MOH 2016)	4.1	5.5	29		
HIV prevalence among antenatal women (DHIS 2015/16)	3.4	4.9	32		
TB notifications per 100,000 (DHIS / TIBU 2015)	193	187	31		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	18.2	26.0	7		
Wasting in children under 5 (%) (KDHS 2014)	3.0	4.0	18		
Underweight in children (%) (KDHS 2014)	8.1	11.0	12		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	40.8	33.6	38		
Obesity, women 15-49 (%)	16.8	10.6	41		
Overweight or obese, men 18-69 years (%)	29.7	17.6	43		
Obesity, men, 18-69 years (%)	11.7	4.3	45		
Tobacco use, men 18-69 (%)	32.1	23.2	34		
Raised blood glucose, both sexes 18-69 (%)	1.5	1.9	24		
Raised blood pressure, both sexes 18-69 (%)	20.4	22.7	21		
Cervical cancer screening, women 30-49 (%)	5.2	17.0	31		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



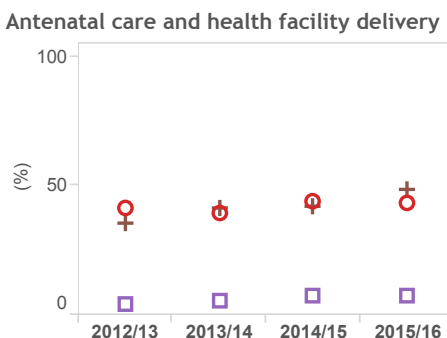
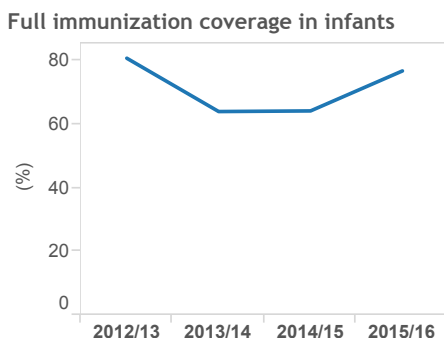
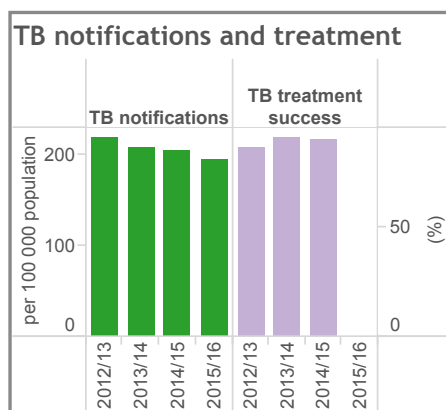
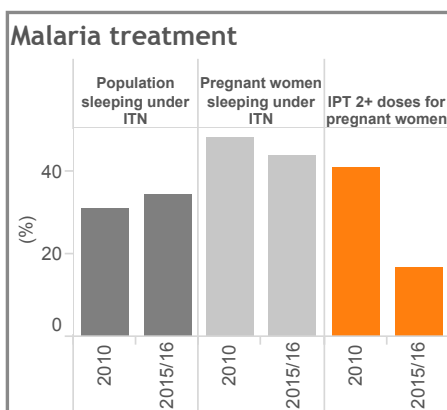
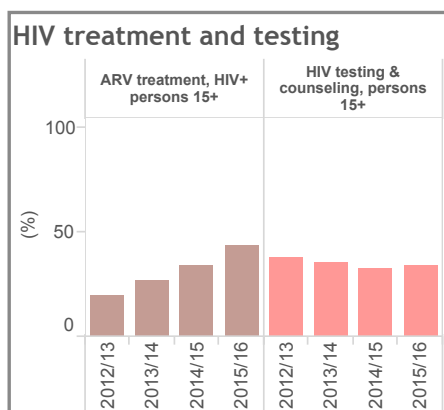
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kajiado county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
Reproductive, maternal, newborn and child health								
DHIS Reporting index (%)		70	71	79	85	89	38	
Inpatient discharges per 100 population		4.6	8.4	5.4	5.1	5.7	25	
Outpatient visits per person per year		2.0	2.2	2.4	2.3	2.0	33	
Modern contraceptive use, women 15-49	46	53	54	56	57	60	27	
Antenatal care 4 or more visits (%)		41	39	44	43	49	31	
Delivery in health facility (%)	63	35	41	42	48	72	43	
Caesarean Section in all deliveries (%)	11	4	5	7	7	10	20	
Maternal mortality per 100,000 hospital deliveries		152	100	77	52	106	5	
Fresh stillbirths per 1,000 births		16	15	14	22	12	43	
Low birth weight per 100 births in health facilities (%)		4	4	3	4	5	8	
Pentavalent vaccination 3rd dose, infants	79	92	93	87	88	86	14	
Measles vaccination, infants	81	89	85	82	82	83	27	
Full immunization coverage, infants	56	81	64	64	77	80	30	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	48					71	46	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		20	27	34	44	57	32	
ART among HIV+ children under 15 (%)		20	30	40	41	46	37	
PMTCT among HIV+ women who delivered (%)		61	76	78	90	80	5	
HIV testing & counseling 15+ (%)	63	38	36	32	34	54	28	
TB notifications per 100,000 population		218	206	203	193	187	31	
TB treatment success rate (%)		86	90	90		89	19	
Population sleeping under LLITN (%)*		31			34	41	31	
Pregnant women sleeping under LLITN (%)*		48			43	51	37	
IPT 2 or more doses for pregnant women (%)*		41			17	22	23	
Children with fever taken to a health provider (%)*		65			68	72	39	

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

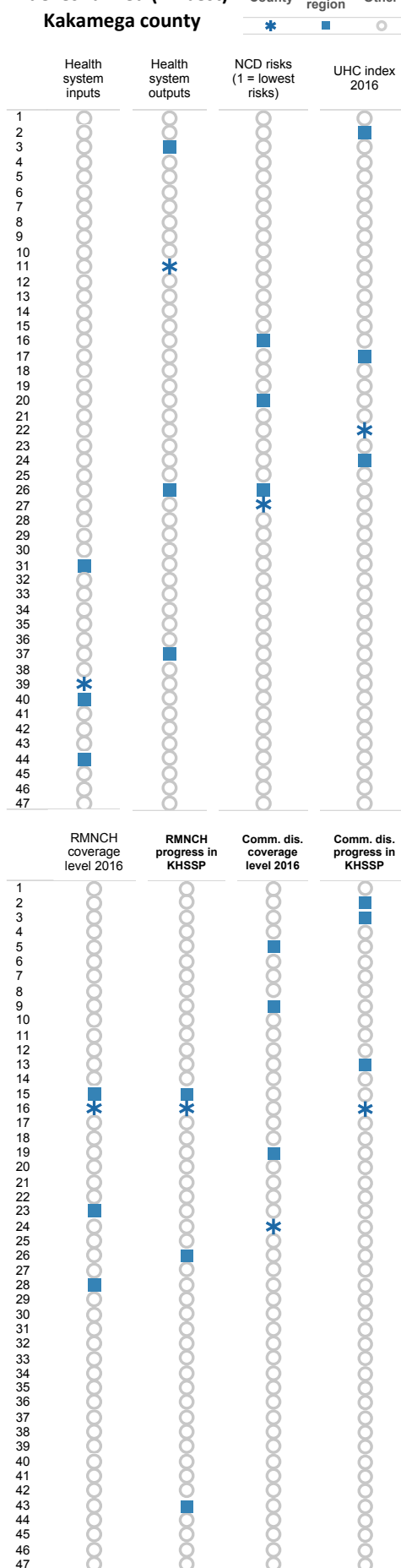
Midterm review KHSSP 2014-18, November 2016

Kakamega county health statistics profile

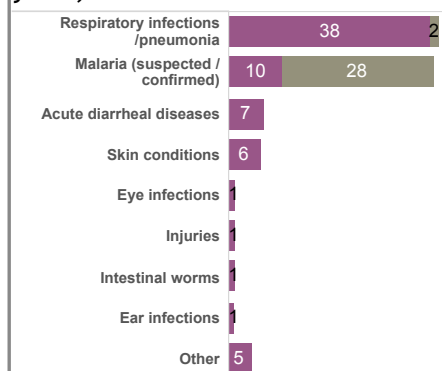
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
General statistics					
Population, total 2015/16 (KNBS projection)	1 859 056	44 733 470			
Births 2015/16 (estimated from DHIS)	67 118	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	4.4	3.9	28		
Female education (median years, KDHS 2014)	7.3	7.6	26		
Health service inputs					
Facilities per 10,000 population	1.4	2.2	40		
Facilities that are private for profit (%)	32.0	37.1			
Hospital beds per 10,000 population	9.3	8.8	21		
Core health professionals per 10,000 population (est.)	6.4	9.3	25		
County health budget per capita 2014/15 (KSh)	1301	1442	31		
County health budget per capita 2015/16 (KSh)	1707	1874	32		
Health status					
Under 5 mortality per 1000 live births (census 2009)	113	79	36		
Maternal mortality per 100,000 live births (census 2009)	316	495	19		
Life expectancy males (years) (census 2009)	53	58	35		
Life expectancy females (years) (census 2009)	55	61	35		
HIV prevalence 15 years and over (MOH 2016)	3.8	5.5	24		
HIV prevalence among antenatal women (DHIS 2015/16)	4.2	4.9	37		
TB notifications per 100,000 (DHIS / TIBU 2015)	119	187	8		
Malaria parasite rate in children (MOH 2015)	20-49%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	28.4	26.0	30		
Wasting in children under 5 (%) (KDHS 2014)	1.8	4.0	5		
Underweight in children (%) (KDHS 2014)	10.1	11.0	21		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	34.6	33.6	34		
Obesity, women 15-49 (%)	7.7	10.6	24		
Overweight or obese, men 18-69 years (%)	20.8	17.6	36		
Obesity, men, 18-69 years (%)	0.6	4.3	13		
Tobacco use, men 18-69 (%)	18.0	23.2	18		
Raised blood glucose, both sexes 18-69 (%)	1.2	1.9	19		
Raised blood pressure, both sexes 18-69 (%)	21.5	22.7	23		
Cervical cancer screening, women 30-49 (%)	7.1	17.0	29		

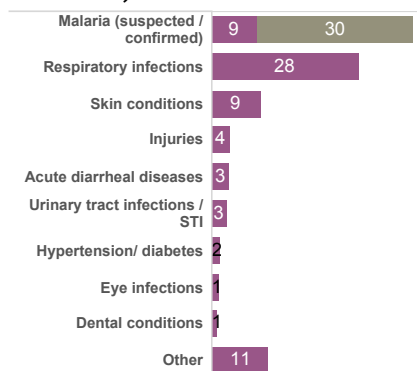
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



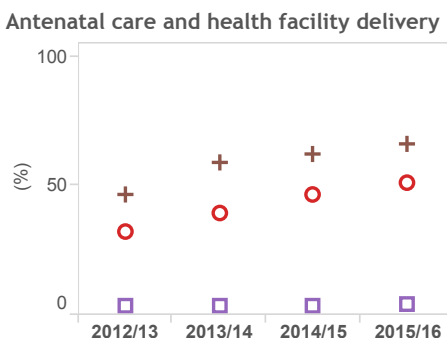
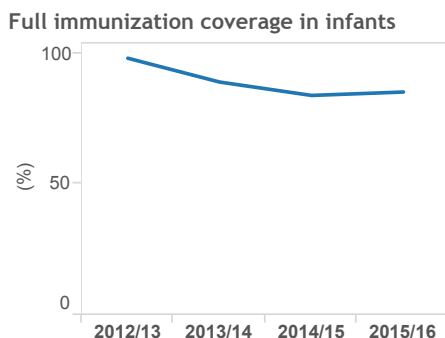
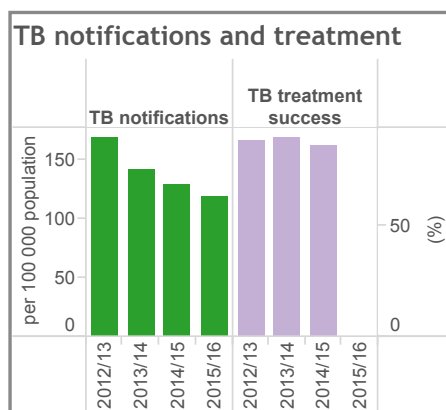
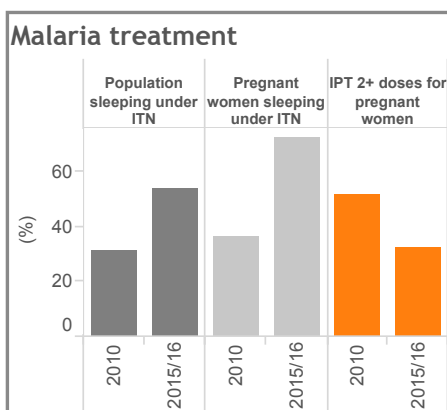
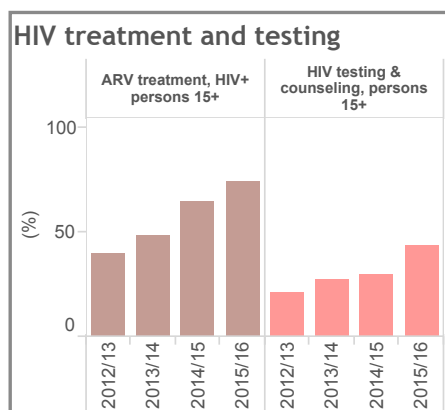
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kakamega county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
DHIS Reporting index (%)		73	81	91	96	89	9	Strong progress
Inpatient discharges per 100 population		6.0	7.1	7.6	7.0	5.7	39	Some decline
Outpatient visits per person per year		1.2	1.7	1.9	2.0	2.0	26	Some decline
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	68	60	63	65	66	60	8	Strong progress
Antenatal care 4 or more visits (%)		32	39	46	51	49	15	Some progress
Delivery in health facility (%)	47	46	59	62	66	72	26	Some decline
Caesarean Section in all deliveries (%)	3	3	3	3	4	10	31	Large decline
Maternal mortality per 100,000 hospital deliveries		160	135	56	97	106	24	Some decline
Fresh stillbirths per 1,000 births		14	15	11	11	12	16	Some decline
Low birth weight per 100 births in health facilities (%)		4	4	3	4	5	8	Some decline
Pentavalent vaccination 3rd dose, infants	95	99	98	86	84	86	26	Some decline
Measles vaccination, infants	80	103	95	89	87	83	13	Some decline
Full immunization coverage, infants	73	98	89	84	85	80	15	Some decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	65					71	37	Some decline
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		39	49	65	74	57	7	Strong progress
ART among HIV+ children under 15 (%)		29	43	53	55	46	27	Some decline
PMTCT among HIV+ women who delivered (%)		63	85	87	81	80	26	Some decline
HIV testing & counseling 15+ (%)	45	21	27	30	44	54	14	Some decline
TB notifications per 100,000 population		168	142	129	119	187	8	Strong progress
TB treatment success rate (%)		88	89	85		89	44	Some decline
Population sleeping under LLITN (%)*		31			54	41	16	Some decline
Pregnant women sleeping under LLITN (%)*		36			73	51	7	Some decline
IPT 2 or more doses for pregnant women (%)*		52			33	22	10	Some decline
Children with fever taken to a health provider (%)*		60			67	72	42	Some decline

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

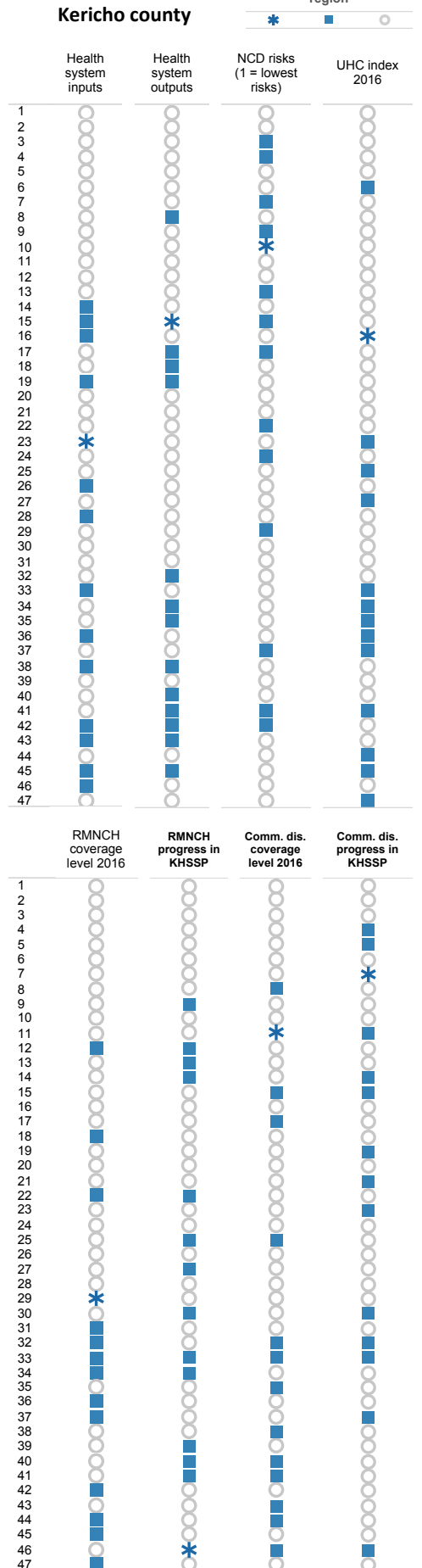
Midterm review KHSSP 2014-18, November 2016

Kericho county health statistics profile

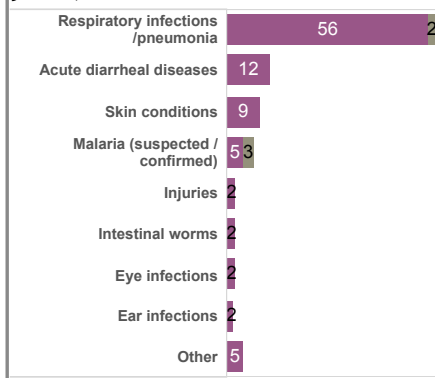
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Kericho		Kenya	Kericho rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	931 497	44 733 470			
Births 2015/16 (estimated from DHIS)	26 989	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	4.0	3.9	21		
Female education (median years, KDHS 2014)	7.6	7.6	18		
Health service inputs					
Facilities per 10,000 population	2.2	2.2	24		
Facilities that are private for profit (%)	21.6	37.1			
Hospital beds per 10,000 population	10.4	8.8	17		
Core health professionals per 10,000 population (est.)	5.4	9.3	32		
County health budget per capita 2014/15 (KSh)	1347	1442	29		
County health budget per capita 2015/16 (KSh)	1614	1874	34		
Health status					
Under 5 mortality per 1000 live births (census 2009)	69	79	23		
Maternal mortality per 100,000 live births (census 2009)	243	495	9		
Life expectancy males (years) (census 2009)	54	58	30		
Life expectancy females (years) (census 2009)	59	61	24		
HIV prevalence 15 years and over (MOH 2016)	4.0	5.5	27		
HIV prevalence among antenatal women (DHIS 2015/16)	3.2	4.9	26		
TB notifications per 100,000 (DHIS / TIBU 2015)	185	187	26		
Malaria parasite rate in children (MOH 2015)	5-9%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	28.7	26.0	31		
Wasting in children under 5 (%) (KDHS 2014)	5.6	4.0	35		
Underweight in children (%) (KDHS 2014)	12.4	11.0	32		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	25.6	33.6	18		
Obesity, women 15-49 (%)	6.7	10.6	19		
Overweight or obese, men 18-69 years (%)	14.5	17.6	24		
Obesity, men, 18-69 years (%)	2.7	4.3	25		
Tobacco use, men 18-69 (%)	11.0	23.2	8		
Raised blood glucose, both sexes 18-69 (%)	0.3	1.9	11		
Raised blood pressure, both sexes 18-69 (%)	12.2	22.7	6		
Cervical cancer screening, women 30-49 (%)	9.9	17.0	24		

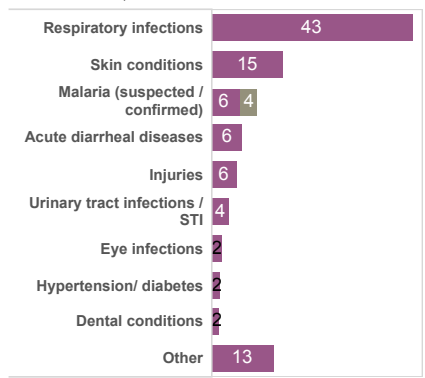
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



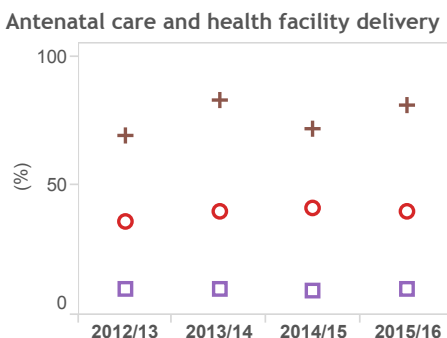
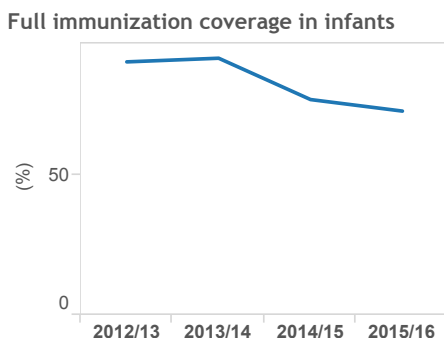
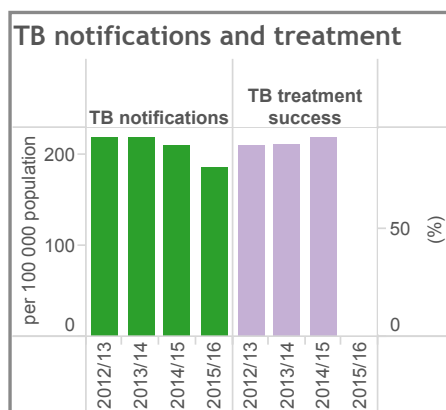
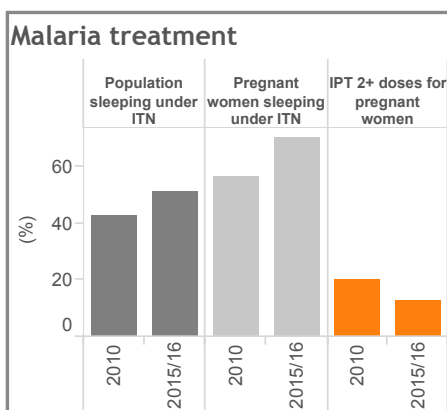
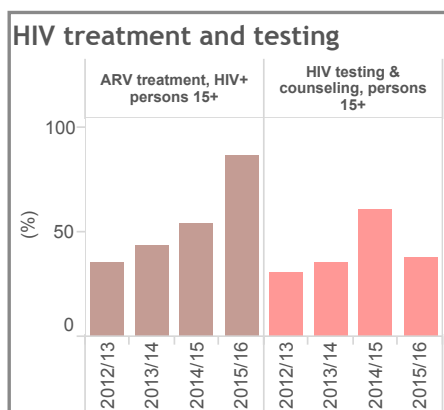
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kericho county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
DHIS Reporting index (%)		77	78	88	88	89	33	
Inpatient discharges per 100 population		6.7	7.9	7.1	5.5	5.7	27	
Outpatient visits per person per year		1.7	2.7	2.1	2.0	2.0	26	
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	51	57	58	58	55	60	31	
Antenatal care 4 or more visits (%)		36	40	41	40	49	35	
Delivery in health facility (%)	62	69	83	72	81	72	10	
Caesarean Section in all deliveries (%)	10	10	10	9	10	10	14	
Maternal mortality per 100,000 hospital deliveries		90	73	51	73	106	15	
Fresh stillbirths per 1,000 births		17	21	15	15	12	32	
Low birth weight per 100 births in health facilities (%)		6	7	7	6	5	31	
Pentavalent vaccination 3rd dose, infants	96	101	101	86	82	86	33	
Measles vaccination, infants	83	97	91	83	78	83	34	
Full immunization coverage, infants	72	90	91	77	73	80	35	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	67					71	35	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		36	44	54	87	57	3	
ART among HIV+ children under 15 (%)		47	52	65	107	46	3	
PMTCT among HIV+ women who delivered (%)		76	88	94	87	80	15	
HIV testing & counseling 15+ (%)	28	31	36	61	38	54	20	
TB notifications per 100,000 population		218	218	208	185	187	26	
TB treatment success rate (%)		88	89	92		89	8	
Population sleeping under LLITN (%)*		43			51	41	17	
Pregnant women sleeping under LLITN (%)*		57			71	51	9	
IPT 2 or more doses for pregnant women (%)*		20			12	22	30	
Children with fever taken to a health provider (%)*		57			77	72	14	

* 2010 and 2015



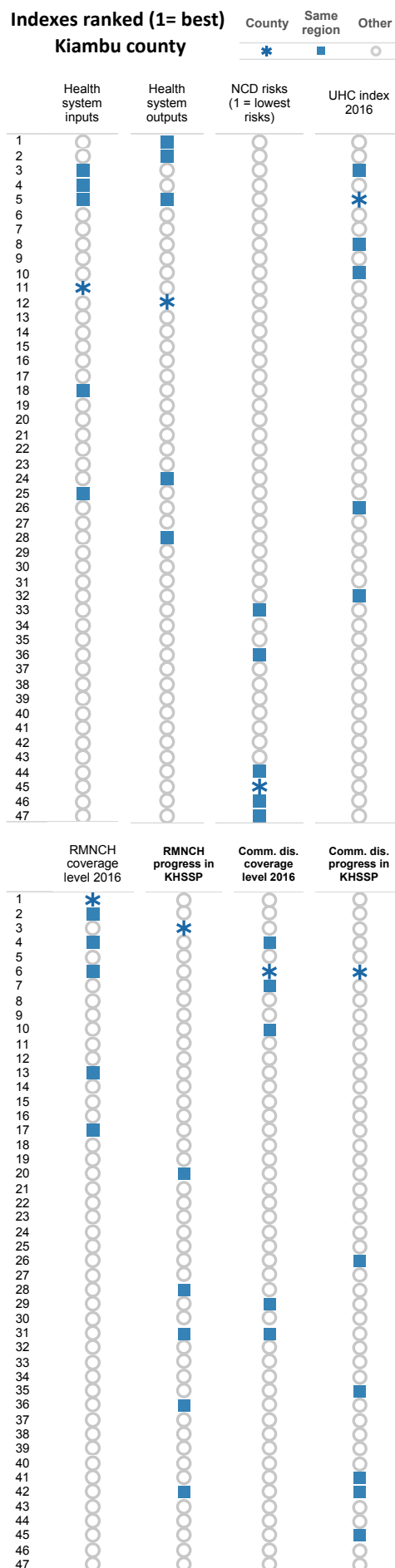
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

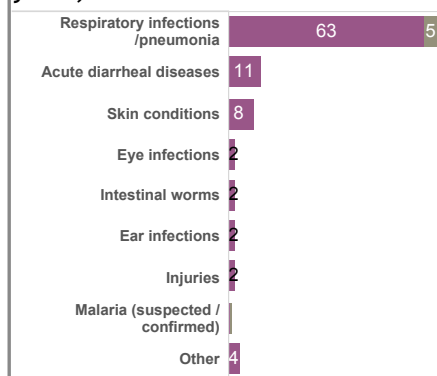
Kiambu county health statistics profile

Midterm review KHSSP 2014-18, November 2016

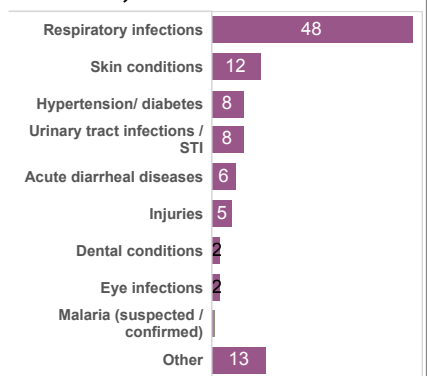
	Highest	Higher than average	Average	Lower than average	Lowest
	Kiambu		Kenya	Kiambu rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	1 849 262	44 733 470			
Births 2015/16 (estimated from DHIS)	53 861	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	2.7	3.9	2		
Female education (median years, KDHS 2014)	10.1	7.6	2		
Health service inputs					
Facilities per 10,000 population	2.6	2.2	17		
Facilities that are private for profit (%)	57.2	37.1			
Hospital beds per 10,000 population	11.8	8.8	10		
Core health professionals per 10,000 population (est.)	10.2	9.3	11		
County health budget per capita 2014/15 (KSh)	1757	1442	17		
County health budget per capita 2015/16 (KSh)	2104	1874	22		
Health status					
Under 5 mortality per 1000 live births (census 2009)	58	79	14		
Maternal mortality per 100,000 live births (census 2009)	230	495	7		
Life expectancy males (years) (census 2009)	63	58	5		
Life expectancy females (years) (census 2009)	64	61	10		
HIV prevalence 15 years and over (MOH 2016)	3.6	5.5	20		
HIV prevalence among antenatal women (DHIS 2015/16)	3.2	4.9	26		
TB notifications per 100,000 (DHIS / TIBU 2015)	204	187	34		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	15.7	26.0	3		
Wasting in children under 5 (%) (KDHS 2014)	2.3	4.0	11		
Underweight in children (%) (KDHS 2014)	5.1	11.0	3		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	46.6	33.6	42		
Obesity, women 15-49 (%)	19.9	10.6	45		
Overweight or obese, men 18-69 years (%)	37.5	17.6	47		
Obesity, men, 18-69 years (%)	12.3	4.3	47		
Tobacco use, men 18-69 (%)	28.2	23.2	32		
Raised blood glucose, both sexes 18-69 (%)	1.6	1.9	26		
Raised blood pressure, both sexes 18-69 (%)	35.1	22.7	43		
Cervical cancer screening, women 30-49 (%)	42.1	17.0	5		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



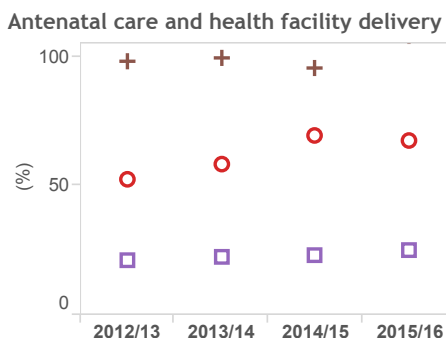
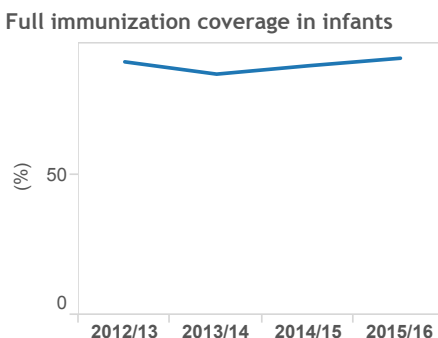
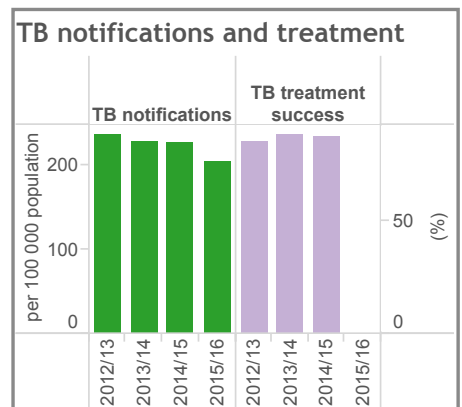
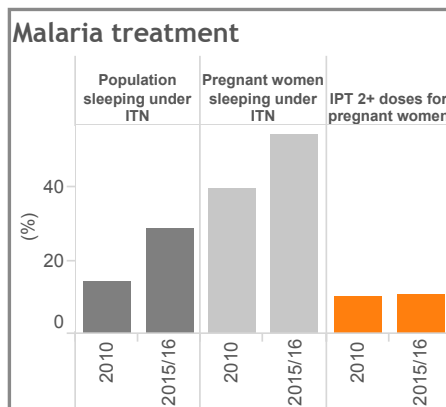
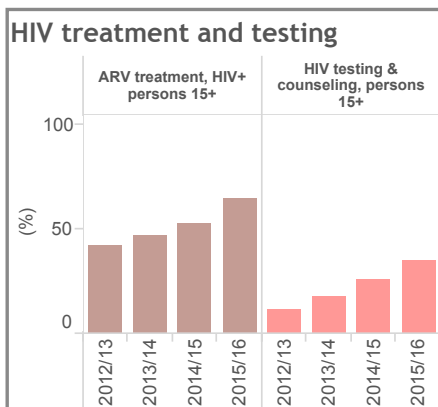
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kiambu county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2012/13	2013/14
DHIS Reporting index (%)		72	85	95	99	89	1	Strong progress	Some progress
Inpatient discharges per 100 population		6.6	6.8	6.9	6.9	5.7	37	Some decline	Large decline
Outpatient visits per person per year		1.7	2.0	2.2	2.1	2.0	29	Some decline	Large decline
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	51	64	65	66	67	60	3	Some decline	Large decline
Antenatal care 4 or more visits (%)		52	58	69	67	49	3	Some decline	Large decline
Delivery in health facility (%)	93	98	99	95	108	72	1	Some decline	Large decline
Caesarean Section in all deliveries (%)	20	21	22	23	25	10	1	Some decline	Large decline
Maternal mortality per 100,000 hospital deliveries		95	72	60	69	106	10	Some decline	Large decline
Fresh stillbirths per 1,000 births		9	9	9	8	12	5	Some decline	Large decline
Low birth weight per 100 births in health facilities (%)		5	5	5	4	5	8	Some decline	Large decline
Pentavalent vaccination 3rd dose, infants	99	91	90	90	97	86	1	Some decline	Large decline
Measles vaccination, infants	99	91	88	90	94	83	3	Some decline	Large decline
Full immunization coverage, infants	97	91	86	89	92	80	7	Some decline	Large decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	81					71	8	Some decline	Large decline
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		42	47	53	65	57	19	Some decline	Large decline
ART among HIV+ children under 15 (%)		149	97	93	99	46	6	Some decline	Large decline
PMTCT among HIV+ women who delivered (%)		58	79	111	108	80	1	Some decline	Large decline
HIV testing & counseling 15+ (%)	46	11	18	26	35	54	27	Some decline	Large decline
TB notifications per 100,000 population		236	228	227	204	187	34	Some decline	Large decline
TB treatment success rate (%)		84	88	87		89	33	Some decline	Large decline
Population sleeping under LLITN (%)*		14			28	41	38	Some decline	Large decline
Pregnant women sleeping under LLITN (%)*		40			54	51	27	Some decline	Large decline
IPT 2 or more doses for pregnant women (%)*		10			11	22	35	Some decline	Large decline
Children with fever taken to a health provider (%)*		69			68	72	41	Some decline	Large decline

* 2010 and 2015



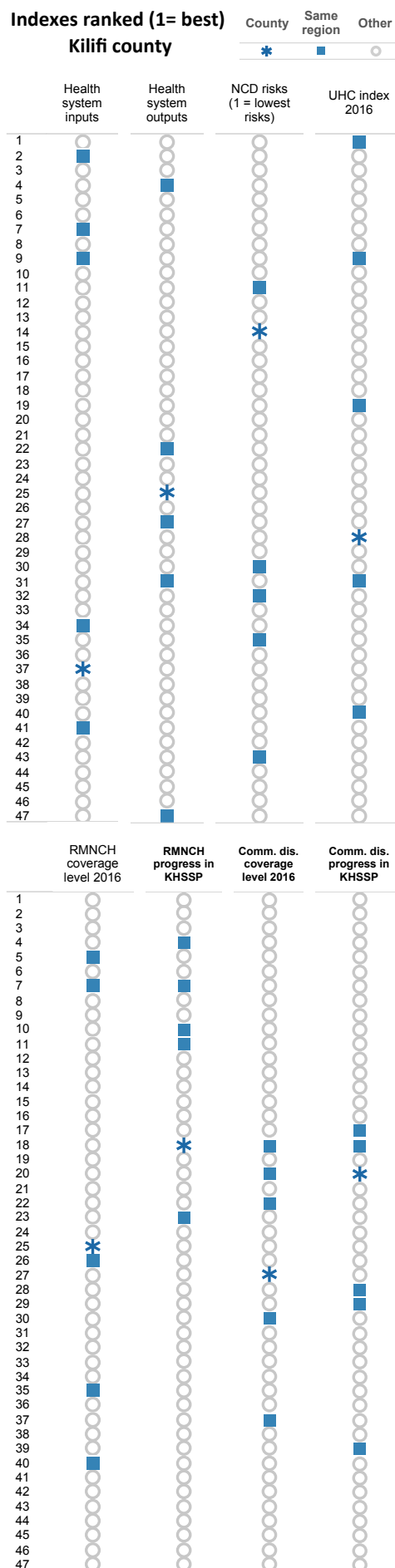
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

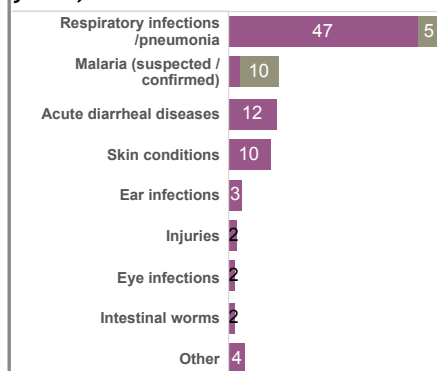
Kilifi county health statistics profile

Midterm review KHSSP 2014-18, November 2016

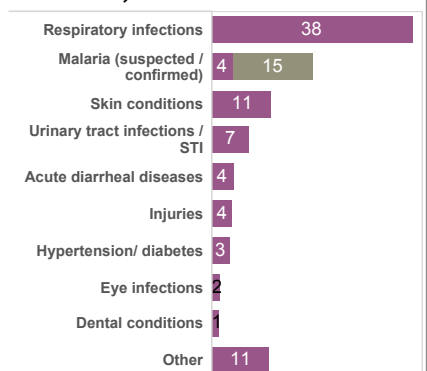
	Highest	Higher than average	Average	Lower than average	Lowest
	Kilifi		Kenya	Kilifi rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	1 375 039	44 733 470			
Births 2015/16 (estimated from DHIS)	48 635	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	4.7	3.9	31		
Female education (median years, KDHS 2014)	6.4	7.6	36		
Health service inputs					
Facilities per 10,000 population	1.8	2.2	31		
Facilities that are private for profit (%)	46.7	37.1			
Hospital beds per 10,000 population	5.0	8.8	34		
Core health professionals per 10,000 population (est.)	4.5	9.3	41		
County health budget per capita 2014/15 (KSh)	1340	1442	30		
County health budget per capita 2015/16 (KSh)	1771	1874	29		
Health status					
Under 5 mortality per 1000 live births (census 2009)	72	79	25		
Maternal mortality per 100,000 live births (census 2009)	290	495	14		
Life expectancy males (years) (census 2009)	57	58	20		
Life expectancy females (years) (census 2009)	62	61	17		
HIV prevalence 15 years and over (MOH 2016)	2.7	5.5	11		
HIV prevalence among antenatal women (DHIS 2015/16)	3.3	4.9	29		
TB notifications per 100,000 (DHIS / TIBU 2015)	142	187	13		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	39.1	26.0	45		
Wasting in children under 5 (%) (KDHS 2014)	4.1	4.0	27		
Underweight in children (%) (KDHS 2014)	16.9	11.0	38		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	19.9	33.6	8		
Obesity, women 15-49 (%)	5.2	10.6	14		
Overweight or obese, men 18-69 years (%)	7.1	17.6	13		
Obesity, men, 18-69 years (%)	0.0	4.3	1		
Tobacco use, men 18-69 (%)	32.3	23.2	35		
Raised blood glucose, both sexes 18-69 (%)	0.0	1.9	1		
Raised blood pressure, both sexes 18-69 (%)	11.4	22.7	4		
Cervical cancer screening, women 30-49 (%)	6.4	17.0	30		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



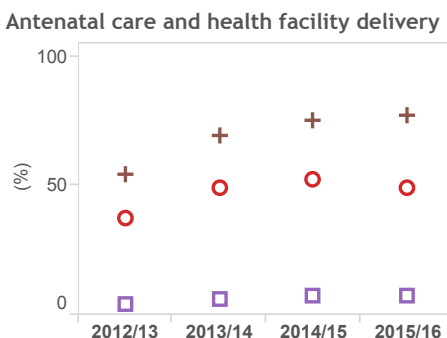
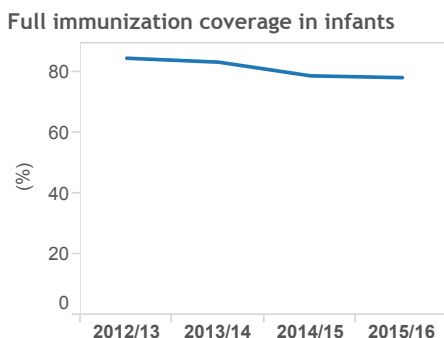
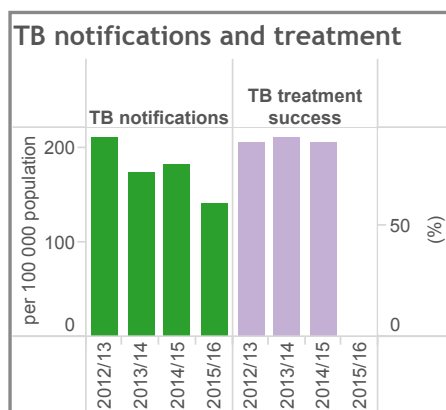
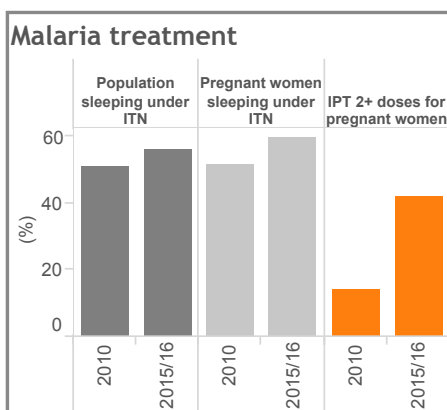
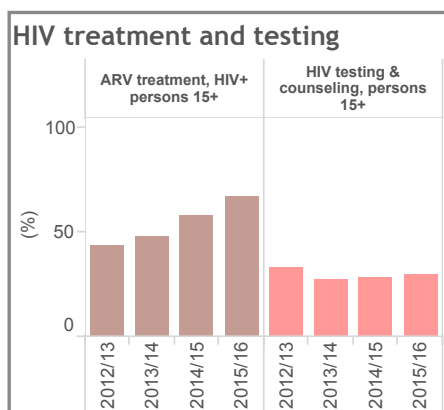
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kilifi county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
DHIS Reporting index (%)		75	82	82	90	89	27	
Inpatient discharges per 100 population		3.8	4.4	5.0	4.8	5.7	22	
Outpatient visits per person per year		1.6	1.8	2.0	1.9	2.0	22	
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	10	49	51	54	54	60	33	
Antenatal care 4 or more visits (%)		37	49	52	49	49	19	
Delivery in health facility (%)	53	54	69	75	77	72	16	
Caesarean Section in all deliveries (%)	4	4	6	7	7	10	20	
Maternal mortality per 100,000 hospital deliveries		193	99	93	98	106	25	
Fresh stillbirths per 1,000 births		27	19	19	14	12	26	
Low birth weight per 100 births in health facilities (%)		10	9	7	7	5	38	
Pentavalent vaccination 3rd dose, infants	88	92	93	93	87	86	15	
Measles vaccination, infants	84	86	85	86	80	83	30	
Full immunization coverage, infants	74	85	83	79	78	80	28	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	50					71	45	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		43	48	59	67	57	15	
ART among HIV+ children under 15 (%)		53	52	65	74	46	18	
PMTCT among HIV+ women who delivered (%)		46	54	72	69	80	36	
HIV testing & counseling 15+ (%)	48	33	27	28	30	54	33	
TB notifications per 100,000 population		211	174	183	142	187	13	
TB treatment success rate (%)		86	89	87		89	34	
Population sleeping under LLITN (%)*		51			56	41	12	
Pregnant women sleeping under LLITN (%)*		52			60	51	21	
IPT 2 or more doses for pregnant women (%)*		14			42	22	8	
Children with fever taken to a health provider (%)*		66			77	72	14	

* 2010 and 2015



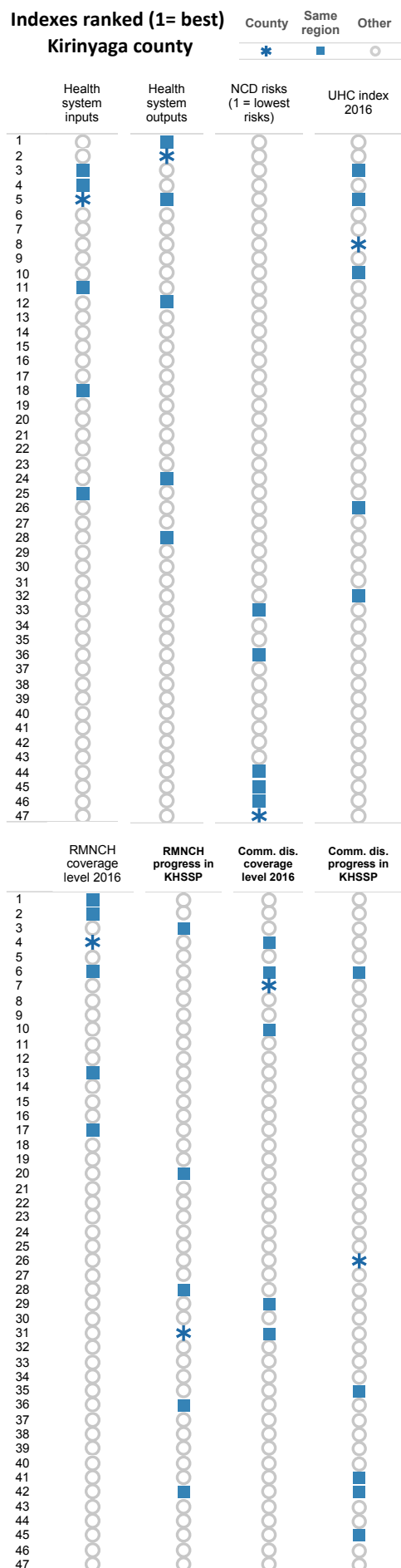
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

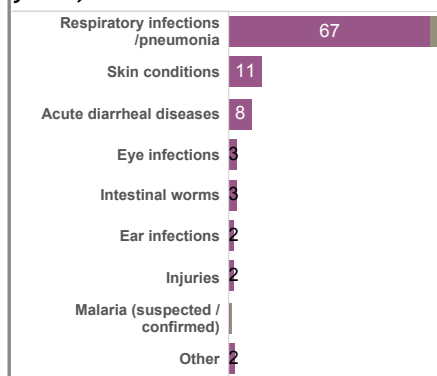
Kirinyaga county health statistics profile

Midterm review KHSSP 2014-18, November 2016

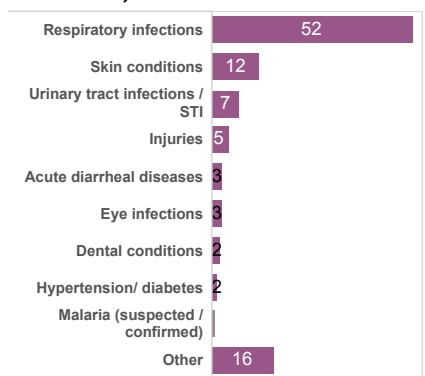
	Performance				
	Highest	Higher than average	Average	Lower than average	Lowest
	Kirinyaga	Kenya	Kirinyaga rank (1-47)		
General statistics					
Population, total 2015/16 (KNBS projection)	601 711	44 733 470			
Births 2015/16 (estimated from DHIS)	12 517	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	2.3	3.9	1		
Female education (median years, KDHS 2014)	7.7	7.6	14		
Health service inputs					
Facilities per 10,000 population	3.3	2.2	7		
Facilities that are private for profit (%)	48.2	37.1			
Hospital beds per 10,000 population	14.4	8.8	6		
Core health professionals per 10,000 population (est.)	8.8	9.3	16		
County health budget per capita 2014/15 (KSh)	658	1442	45		
County health budget per capita 2015/16 (KSh)	1883	1874	26		
Health status					
Under 5 mortality per 1000 live births (census 2009)	72	79	25		
Maternal mortality per 100,000 live births (census 2009)	298	495	15		
Life expectancy males (years) (census 2009)	61	58	9		
Life expectancy females (years) (census 2009)	64	61	10		
HIV prevalence 15 years and over (MOH 2016)	2.9	5.5	13		
HIV prevalence among antenatal women (DHIS 2015/16)	2.8	4.9	17		
TB notifications per 100,000 (DHIS / TIBU 2015)	231	187	40		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	17.2	26.0	4		
Wasting in children under 5 (%) (KDHS 2014)	3.9	4.0	23		
Underweight in children (%) (KDHS 2014)	7.7	11.0	9		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	53.1	33.6	47		
Obesity, women 15-49 (%)	17.9	10.6	43		
Overweight or obese, men 18-69 years (%)	15.0	17.6	25		
Obesity, men, 18-69 years (%)	1.6	4.3	19		
Tobacco use, men 18-69 (%)	51.0	23.2	46		
Raised blood glucose, both sexes 18-69 (%)	0.2	1.9	8		
Raised blood pressure, both sexes 18-69 (%)	35.7	22.7	44		
Cervical cancer screening, women 30-49 (%)	45.3	17.0	3		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



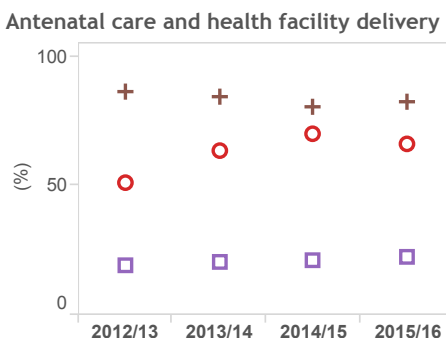
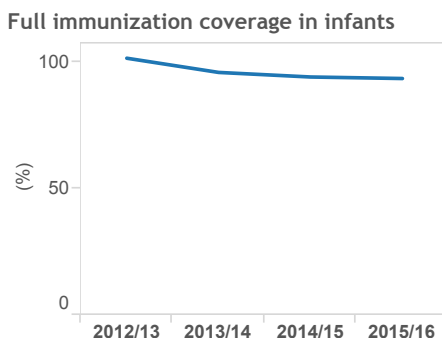
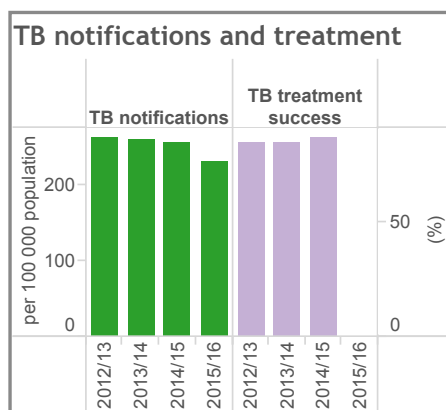
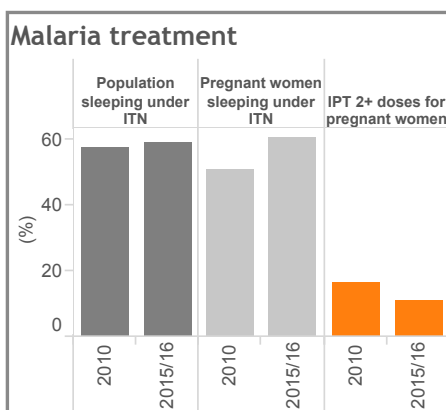
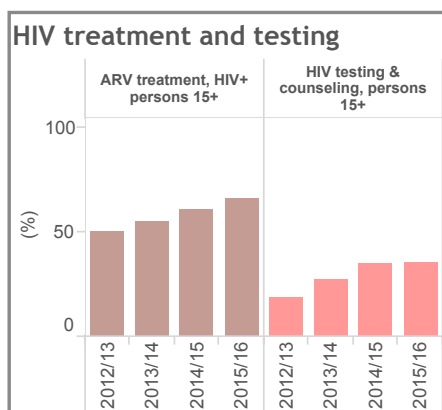
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kirinyaga county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2010 and 2015	2015/16
DHIS Reporting index (%)		73	83	89	94	89	13	Strong progress	Some decline
Inpatient discharges per 100 population		9.9	10.8	11.8	12.4	5.7	46	Some progress	Some decline
Outpatient visits per person per year		2.8	4.1	3.9	3.8	2.0	46	Some progress	Some decline
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	67	67	68	69	69	60	1	Strong progress	Some decline
Antenatal care 4 or more visits (%)		51	63	70	66	49	4	Strong progress	Some decline
Delivery in health facility (%)	92	86	84	80	82	72	9	Strong progress	Some decline
Caesarean Section in all deliveries (%)	15	19	20	21	22	10	3	Strong progress	Some decline
Maternal mortality per 100,000 hospital deliveries		85	53	157	89	106	20	Some progress	Large decline
Fresh stillbirths per 1,000 births		10	9	10	10	12	12	Some progress	Some decline
Low birth weight per 100 births in health facilities (%)		7	9	7	7	5	38	Some progress	Large decline
Pentavalent vaccination 3rd dose, infants	100	98	95	93	92	86	6	Some progress	Some decline
Measles vaccination, infants	100	101	96	94	93	83	5	Some progress	Some decline
Full immunization coverage, infants	92	101	96	94	93	80	3	Some progress	Some decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	77					71	17	Some progress	Some decline
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		50	55	61	66	57	16	Some progress	Some decline
ART among HIV+ children under 15 (%)		114	121	125	130	46	1	Some progress	Some decline
PMTCT among HIV+ women who delivered (%)		66	94	93	89	80	11	Some progress	Some decline
HIV testing & counseling 15+ (%)	5	18	27	35	35	54	26	Some progress	Some decline
TB notifications per 100,000 population		261	259	255	231	187	40	Some progress	Some decline
TB treatment success rate (%)		85	85	87		89	31	Some progress	Some decline
Population sleeping under LLITN (%)*		58			59	41	9	Some progress	Some decline
Pregnant women sleeping under LLITN (%)*		51			61	51	19	Some progress	Some decline
IPT 2 or more doses for pregnant women (%)*		16			11	22	33	Some progress	Some decline
Children with fever taken to a health provider (%)*		61			79	72	8	Some progress	Some decline

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

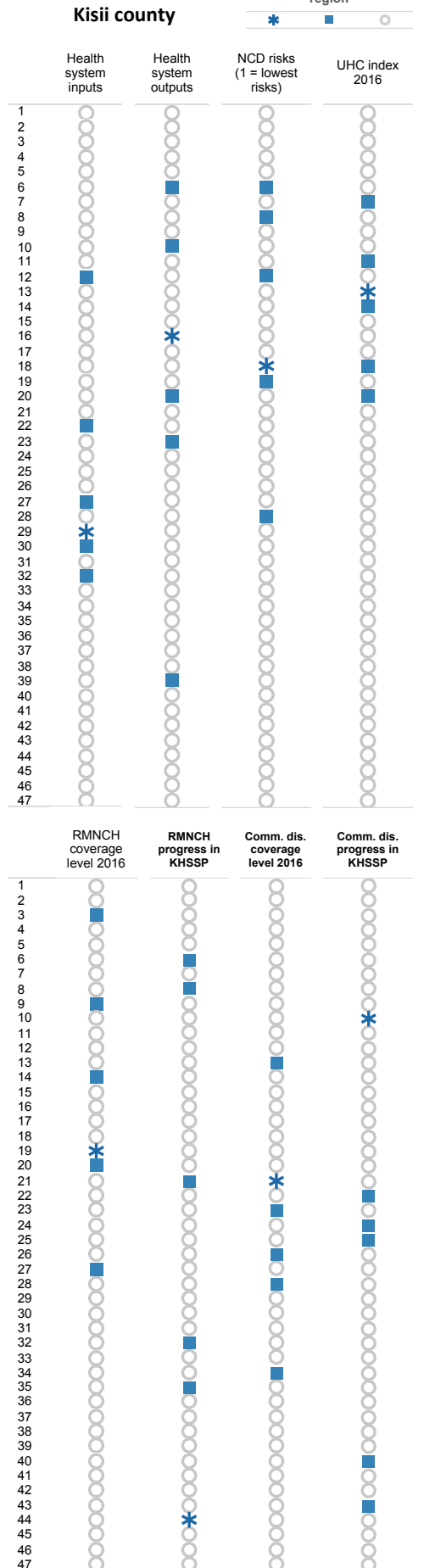
Midterm review KHSSP 2014-18, November 2016

Kisii county health statistics profile

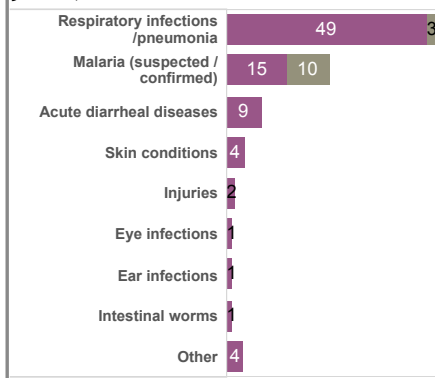
Midterm review KHSSP 2014-18, November 2016

	Performance			Kisii rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	1 331 384	44 733 470		
Births 2015/16 (estimated from DHIS)	40 180	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	3.7	3.9	17	
Female education (median years, KDHS 2014)	7.8	7.6	11	
Health service inputs				
Facilities per 10,000 population	1.2	2.2	45	
Facilities that are private for profit (%)	17.4	37.1		
Hospital beds per 10,000 population	15.6	8.8	3	
Core health professionals per 10,000 population (est.)	5.2	9.3	34	
County health budget per capita 2014/15 (KSh)	1481	1442	24	
County health budget per capita 2015/16 (KSh)	2026	1874	23	
Health status				
Under 5 mortality per 1000 live births (census 2009)	101	79	32	
Maternal mortality per 100,000 live births (census 2009)	302	495	17	
Life expectancy males (years) (census 2009)	57	58	20	
Life expectancy females (years) (census 2009)	59	61	24	
HIV prevalence 15 years and over (MOH 2016)	6.0	5.5	40	
HIV prevalence among antenatal women (DHIS 2015/16)	4.2	4.9	37	
TB notifications per 100,000 (DHIS / TIBU 2015)	127	187	10	
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	25.5	26.0	20	
Wasting in children under 5 (%) (KDHS 2014)	1.7	4.0	4	
Underweight in children (%) (KDHS 2014)	8.4	11.0	15	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	29.9	33.6	23	
Obesity, women 15-49 (%)	9.0	10.6	29	
Overweight or obese, men 18-69 years (%)	19.5	17.6	30	
Obesity, men, 18-69 years (%)	1.6	4.3	19	
Tobacco use, men 18-69 (%)	6.4	23.2	6	
Raised blood glucose, both sexes 18-69 (%)	0.0	1.9	1	
Raised blood pressure, both sexes 18-69 (%)	28.7	22.7	38	
Cervical cancer screening, women 30-49 (%)	15.9	17.0	17	

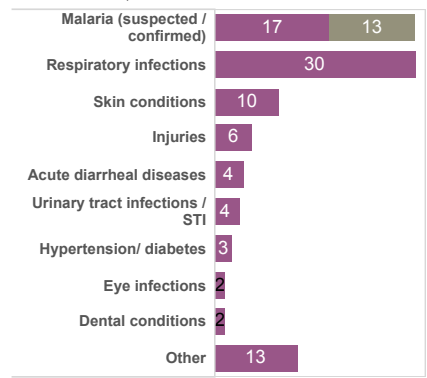
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



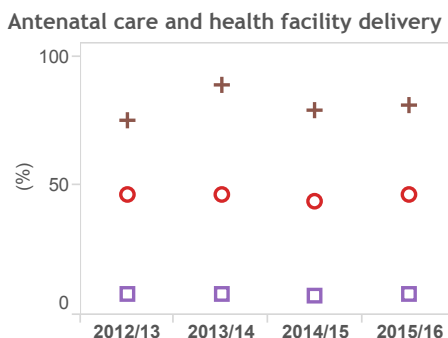
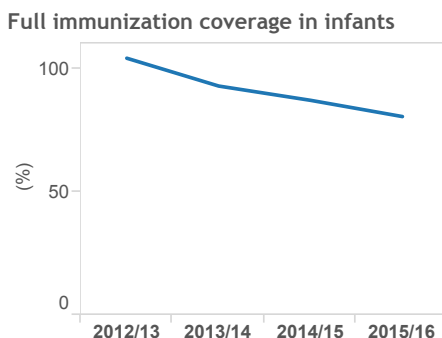
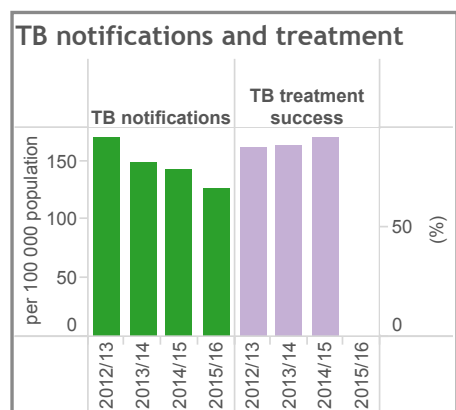
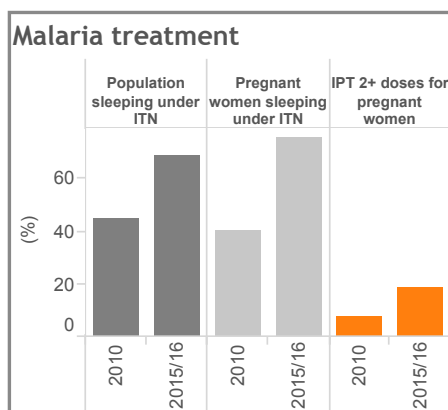
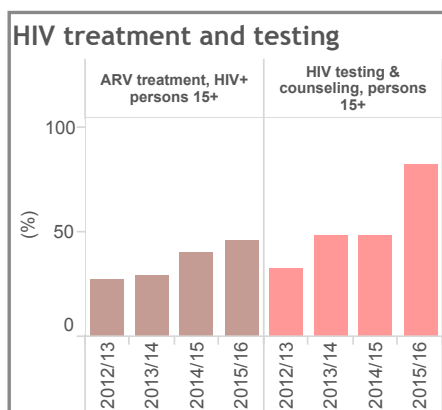
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kisii county health statistics profile

	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance Scale				
									Highest	Higher than average	Average	Lower than average	Lowest
General									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		80	88	94	97	89	4						
Inpatient discharges per 100 population		6.1	7.6	7.8	6.4	5.7	36						
Outpatient visits per person per year		1.3	1.6	1.7	1.5	2.0	7						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	65	61	60	60	62	60	18						
Antenatal care 4 or more visits (%)		46	46	44	46	49	26						
Delivery in health facility (%)	69	75	89	79	81	72	10						
Caesarean Section in all deliveries (%)	5	8	8	7	8	10	17						
Maternal mortality per 100,000 hospital deliveries		77	85	63	116	106	33						
Fresh stillbirths per 1,000 births		13	12	17	9	12	9						
Low birth weight per 100 births in health facilities (%)		3	4	4	5	5	23						
Pentavalent vaccination 3rd dose, infants	95	103	96	91	85	86	22						
Measles vaccination, infants	87	105	96	90	83	83	23						
Full immunization coverage, infants	82	104	93	87	81	80	23						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	55					71	44						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		28	29	40	46	57	31						
ART among HIV+ children under 15 (%)		28	30	41	48	46	33						
PMTCT among HIV+ women who delivered (%)		56	85	91	84	80	20						
HIV testing & counseling 15+ (%)	65	33	49	49	82	54	6						
TB notifications per 100,000 population		169	148	142	127	187	10						
TB treatment success rate (%)		86	87	91		89	9						
Population sleeping under LLITN (%)*		45			69	41	2						
Pregnant women sleeping under LLITN (%)*		40			76	51	5						
IPT 2 or more doses for pregnant women (%)*		8			19	22	20						
Children with fever taken to a health provider (%)*		50			81	72	4						

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

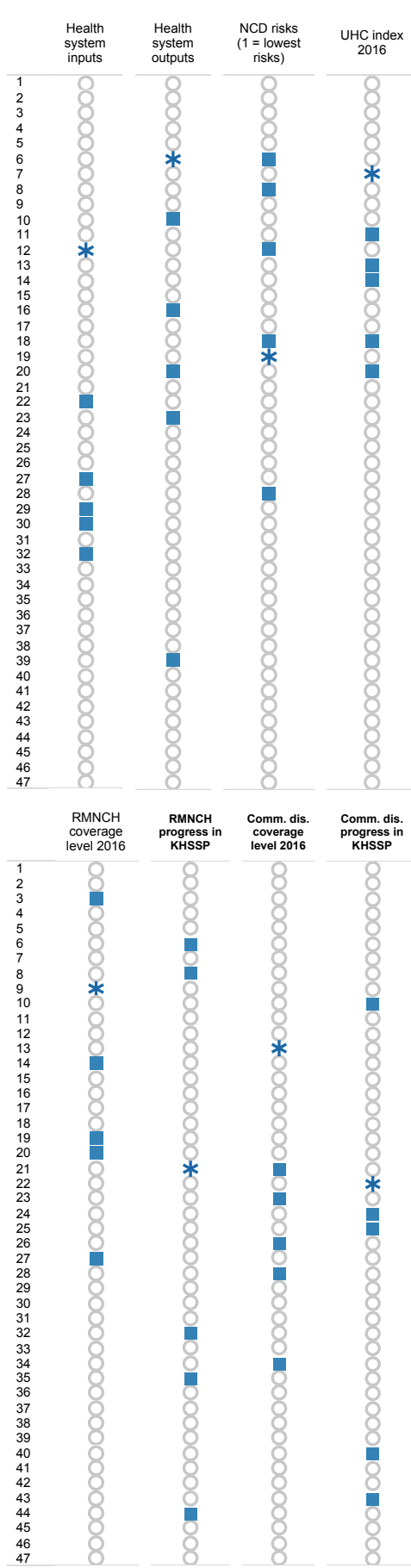
Midterm review KHSSP 2014-18, November 2016

Kisumu county health statistics profile

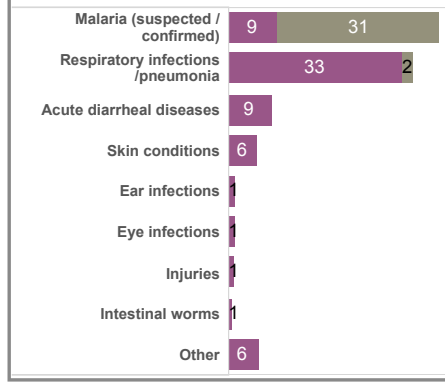
Midterm review KHSSP 2014-18, November 2016

	Performance			Kisumu rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	1 119 508	44 733 470		
Births 2015/16 (estimated from DHIS)	37 293	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	3.6	3.9	15	
Female education (median years, KDHS 2014)	7.9	7.6	7	
Health service inputs				
Facilities per 10,000 population	1.8	2.2	31	
Facilities that are private for profit (%)	23.9	37.1		
Hospital beds per 10,000 population	17.0	8.8	2	
Core health professionals per 10,000 population (est.)	8.1	9.3	19	
County health budget per capita 2014/15 (KSh)	2103	1442	10	
County health budget per capita 2015/16 (KSh)	2135	1874	19	
Health status				
Under 5 mortality per 1000 live births (census 2009)	182	79	46	
Maternal mortality per 100,000 live births (census 2009)	597	495	37	
Life expectancy males (years) (census 2009)	48	58	44	
Life expectancy females (years) (census 2009)	51	61	43	
HIV prevalence 15 years and over (MOH 2016)	20.2	5.5	45	
HIV prevalence among antenatal women (DHIS 2015/16)	15.8	4.9	45	
TB notifications per 100,000 (DHIS / TIBU 2015)	267	187	43	
Malaria parasite rate in children (MOH 2015)	20-49%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	18.0	26.0	6	
Wasting in children under 5 (%) (KDHS 2014)	0.8	4.0	2	
Underweight in children (%) (KDHS 2014)	6.6	11.0	7	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	34.0	33.6	33	
Obesity, women 15-49 (%)	9.2	10.6	30	
Overweight or obese, men 18-69 years (%)	21.7	17.6	38	
Obesity, men, 18-69 years (%)	11.1	4.3	44	
Tobacco use, men 18-69 (%)	7.3	23.2	7	
Raised blood glucose, both sexes 18-69 (%)	0.9	1.9	17	
Raised blood pressure, both sexes 18-69 (%)	21.6	22.7	24	
Cervical cancer screening, women 30-49 (%)	9.6	17.0	25	

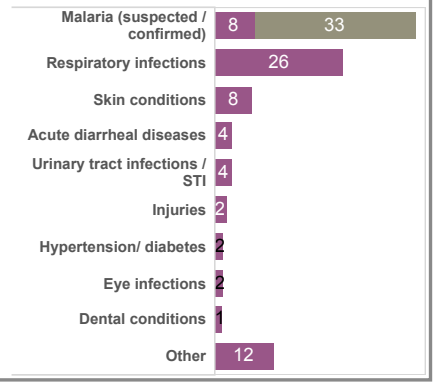
Indexes ranked (1= best) Kisumu county



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



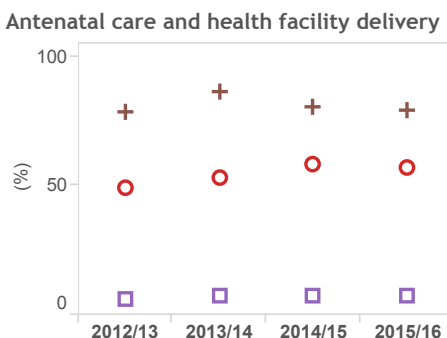
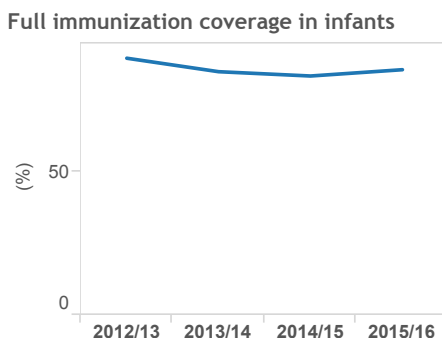
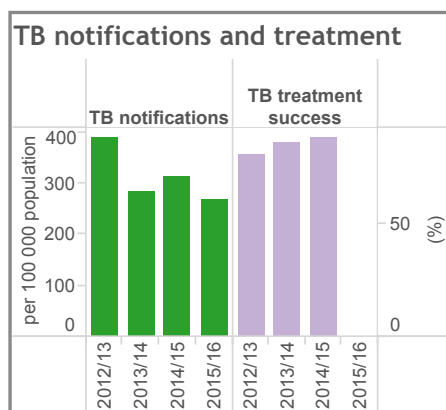
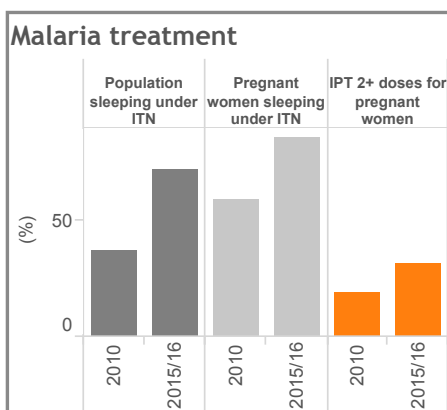
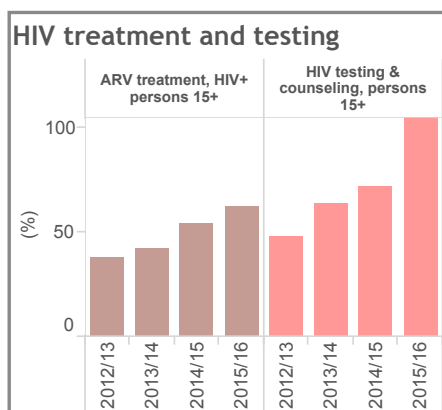
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kisumu county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance									
									Highest	Higher than average	Average	Lower than average	Lowest	Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		75	82	91	96	89	5											
Inpatient discharges per 100 population		10.1	11.0	10.5	9.7	5.7	43											
Outpatient visits per person per year		1.5	1.8	1.7	1.7	2.0	12											
Reproductive, maternal, newborn and child health																		
Modern contraceptive use, women 15-49	60	62	64	65	67	60	2											
Antenatal care 4 or more visits (%)		49	53	58	57	49	11											
Delivery in health facility (%)	70	78	86	80	79	72	13											
Caesarean Section in all deliveries (%)	7	6	7	7	7	10	20											
Maternal mortality per 100,000 hospital deliveries		154	158	193	222	106	45											
Fresh stillbirths per 1,000 births		19	12	15	16	12	37											
Low birth weight per 100 births in health facilities (%)		5	6	6	6	5	31											
Pentavalent vaccination 3rd dose, infants	87	98	94	85	86	86	19											
Measles vaccination, infants	90	97	90	86	86	83	17											
Full immunization coverage, infants	79	90	85	83	86	80	13											
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	74					71	24											
Communicable diseases																		
ART treatment, HIV+ persons 15+ (%)		38	42	54	62	57	22											
ART among HIV+ children under 15 (%)		42	44	54	59	46	23											
PMTCT among HIV+ women who delivered (%)		88	97	92	90	80	6											
HIV testing & counseling 15+ (%)	44	48	64	72	114	54	3											
TB notifications per 100,000 population		389	284	313	267	187	43											
TB treatment success rate (%)		81	85	88		89	29											
Population sleeping under LLITN (%)*		37			72	41	1											
Pregnant women sleeping under LLITN (%)*		59			86	51	1											
IPT 2 or more doses for pregnant women (%)*		19			31	22	12											
Children with fever taken to a health provider (%)*		62			73	72	28											

* 2010 and 2015



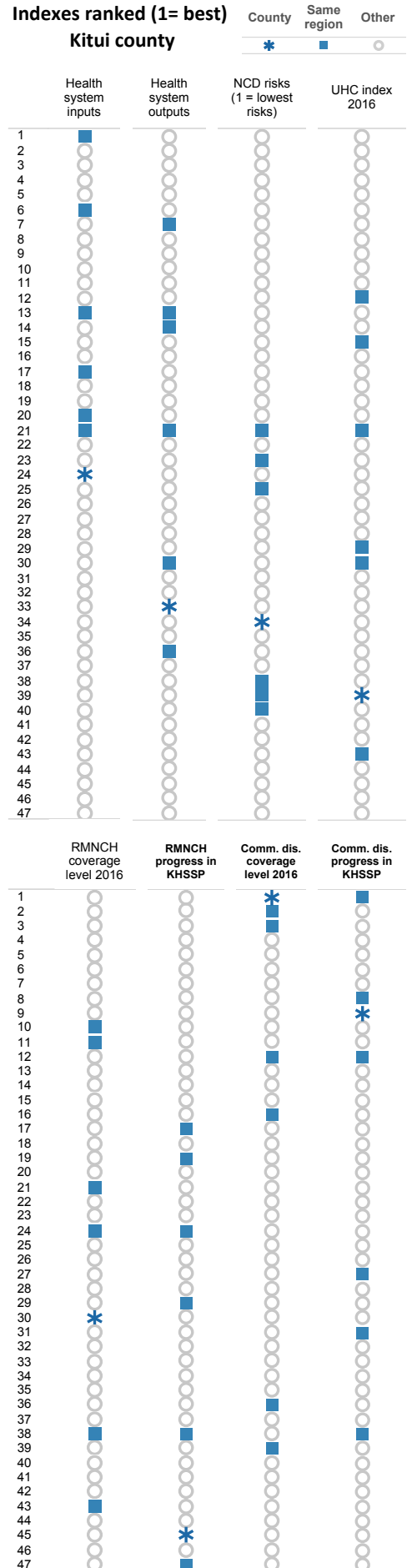
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

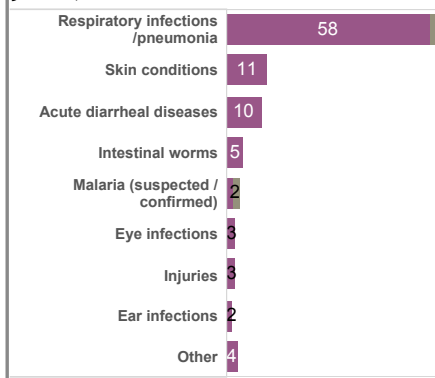
Kitui county health statistics profile

Midterm review KHSSP 2014-18, November 2016

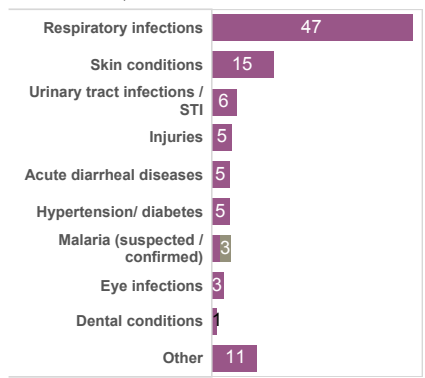
	Performance			Kitui rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	1 091 962	44 733 470		
Births 2015/16 (estimated from DHIS)	31 434	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	3.9	3.9	20	
Female education (median years, KDHS 2014)	7.3	7.6	26	
Health service inputs				
Facilities per 10,000 population	3.0	2.2	10	
Facilities that are private for profit (%)	22.4	37.1		
Hospital beds per 10,000 population	4.4	8.8	38	
Core health professionals per 10,000 population (est.)	7.6	9.3	22	
County health budget per capita 2014/15 (KSh)	1379	1442	27	
County health budget per capita 2015/16 (KSh)	2110	1874	21	
Health status				
Under 5 mortality per 1000 live births (census 2009)	57	79	13	
Maternal mortality per 100,000 live births (census 2009)	330	495	22	
Life expectancy males (years) (census 2009)	65	58	1	
Life expectancy females (years) (census 2009)	68	61	4	
HIV prevalence 15 years and over (MOH 2016)	3.2	5.5	15	
HIV prevalence among antenatal women (DHIS 2015/16)	3.0	4.9	25	
TB notifications per 100,000 (DHIS / TIBU 2015)	187	187	28	
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	45.8	26.0	46	
Wasting in children under 5 (%) (KDHS 2014)	3.4	4.0	22	
Underweight in children (%) (KDHS 2014)	19.7	11.0	40	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	30.2	33.6	24	
Obesity, women 15-49 (%)	5.7	10.6	16	
Overweight or obese, men 18-69 years (%)	5.5	17.6	8	
Obesity, men, 18-69 years (%)	0.0	4.3	1	
Tobacco use, men 18-69 (%)	41.4	23.2	40	
Raised blood glucose, both sexes 18-69 (%)	1.2	1.9	19	
Raised blood pressure, both sexes 18-69 (%)	38.6	22.7	46	
Cervical cancer screening, women 30-49 (%)	7.6	17.0	28	



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



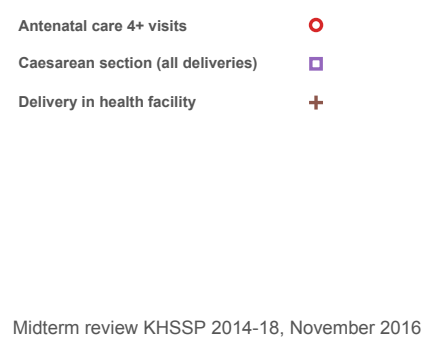
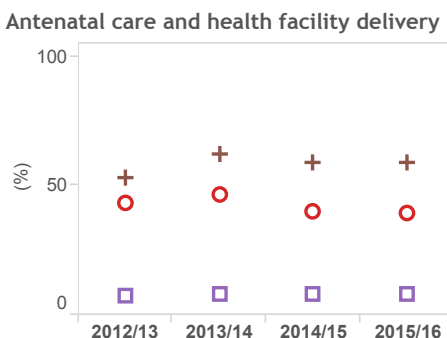
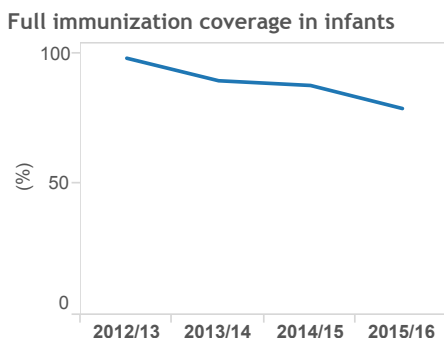
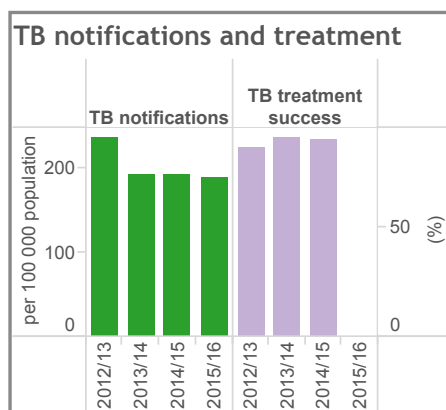
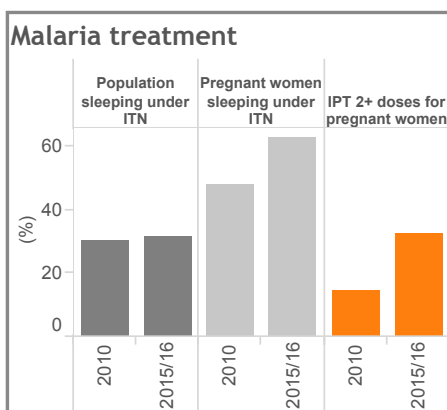
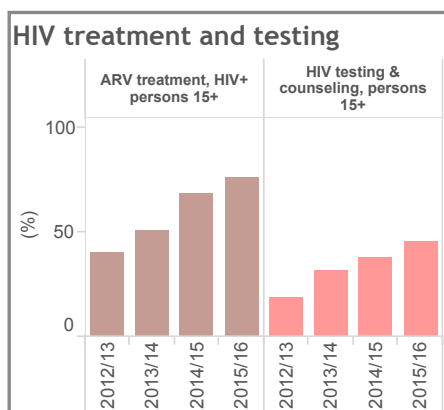
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kitui county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
Reproductive, maternal, newborn and child health								
DHIS Reporting index (%)		74	82	89	90	89	26	
Inpatient discharges per 100 population		2.7	2.3	3.0	3.7	5.7	11	
Outpatient visits per person per year		1.8	2.2	2.2	2.2	2.0	30	
Modern contraceptive use, women 15-49	20	59	59	60	60	60	23	
Antenatal care 4 or more visits (%)		43	46	40	39	49	36	
Delivery in health facility (%)	46	53	62	59	59	72	38	
Caesarean Section in all deliveries (%)	5	7	8	8	8	10	17	
Maternal mortality per 100,000 hospital deliveries		113	123	52	73	106	15	
Fresh stillbirths per 1,000 births		14	12	10	14	12	26	
Low birth weight per 100 births in health facilities (%)		6	5	6	6	5	31	
Pentavalent vaccination 3rd dose, infants	82	98	99	89	81	86	38	
Measles vaccination, infants	85	103	97	94	82	83	25	
Full immunization coverage, infants	57	98	89	88	79	80	26	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	85					71	4	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		40	51	69	76	57	5	
ART among HIV+ children under 15 (%)		56	71	90	87	46	11	
PMTCT among HIV+ women who delivered (%)		69	86	85	81	80	25	
HIV testing & counseling 15+ (%)	50	19	31	38	45	54	13	
TB notifications per 100,000 population		235	191	192	187	187	28	
TB treatment success rate (%)		86	91	90		89	18	
Population sleeping under LLITN (%)*		30			31	41	35	
Pregnant women sleeping under LLITN (%)*		48			63	51	14	
IPT 2 or more doses for pregnant women (%)*		14			32	22	11	
Children with fever taken to a health provider (%)*		69			78	72	10	

* 2010 and 2015



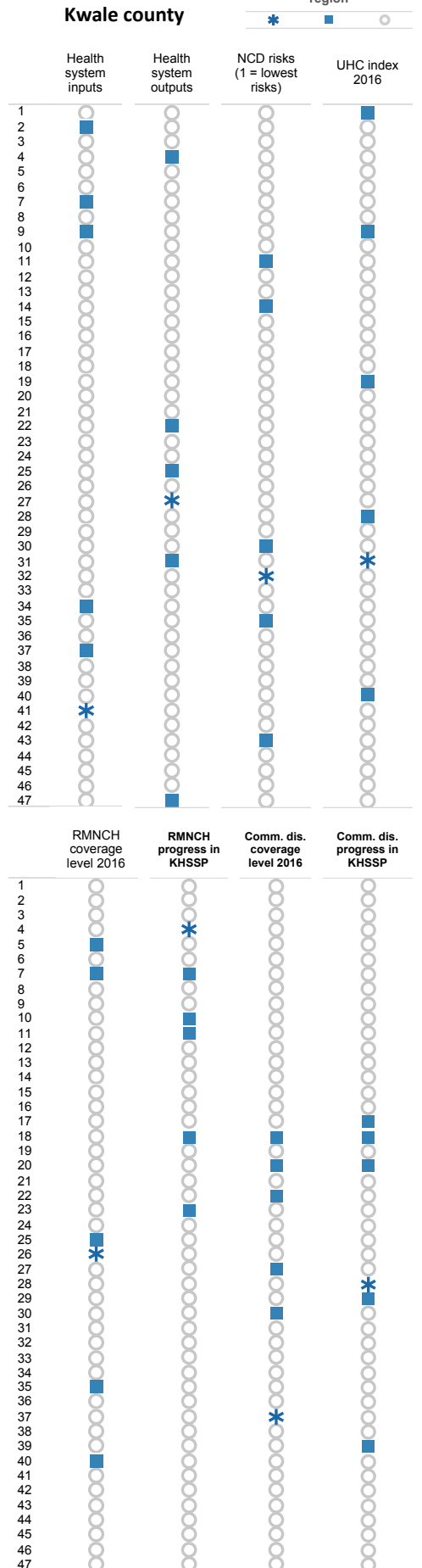
Midterm review KHSSP 2014-18, November 2016

Kwale county health statistics profile

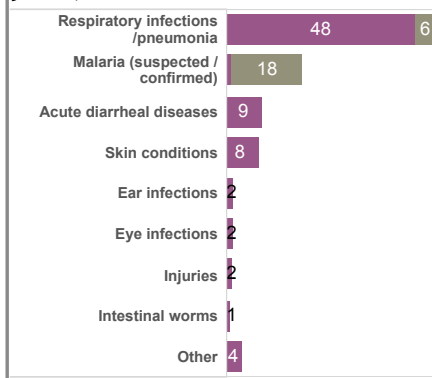
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Kwale		Kenya	Kwale rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	805 586	44 733 470			
Births 2015/16 (estimated from DHIS)	32 964	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.2	3.9	8		
Female education (median years, KDHS 2014)	6.1	7.6	38		
Health service inputs					
Facilities per 10,000 population	1.5	2.2	37		
Facilities that are private for profit (%)	28.2	37.1			
Hospital beds per 10,000 population	4.2	8.8	39		
Core health professionals per 10,000 population (est.)	4.8	9.3	40		
County health budget per capita 2014/15 (KSh)	1460	1442	25		
County health budget per capita 2015/16 (KSh)	2170	1874	18		
Health status					
Under 5 mortality per 1000 live births (census 2009)	77	79	28		
Maternal mortality per 100,000 live births (census 2009)	346	495	24		
Life expectancy males (years) (census 2009)	58	58	17		
Life expectancy females (years) (census 2009)	56	61	32		
HIV prevalence 15 years and over (MOH 2016)	3.6	5.5	20		
HIV prevalence among antenatal women (DHIS 2015/16)	2.9	4.9	20		
TB notifications per 100,000 (DHIS / TIBU 2015)	146	187	16		
Malaria parasite rate in children (MOH 2015)	5-9%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	29.7	26.0	36		
Wasting in children under 5 (%) (KDHS 2014)	4.4	4.0	32		
Underweight in children (%) (KDHS 2014)	11.8	11.0	29		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	32.0	33.6	29		
Obesity, women 15-49 (%)	8.3	10.6	28		
Overweight or obese, men 18-69 years (%)	11.6	17.6	21		
Obesity, men, 18-69 years (%)	7.1	4.3	37		
Tobacco use, men 18-69 (%)	49.4	23.2	44		
Raised blood glucose, both sexes 18-69 (%)	2.8	1.9	37		
Raised blood pressure, both sexes 18-69 (%)	20.3	22.7	20		
Cervical cancer screening, women 30-49 (%)	14.5	17.0	18		

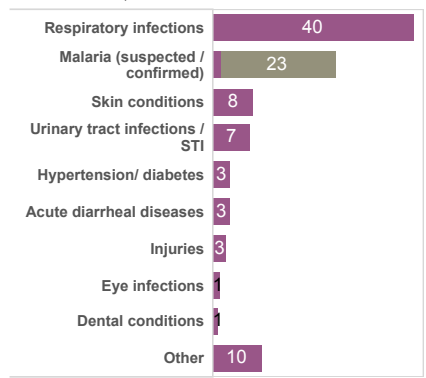
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



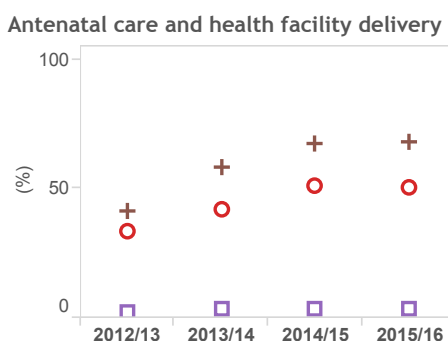
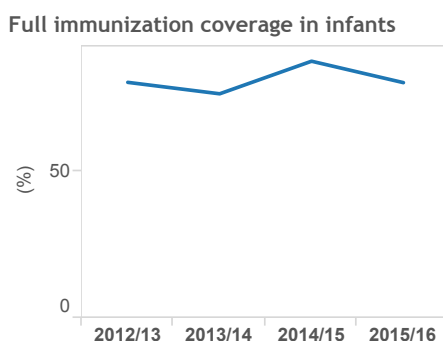
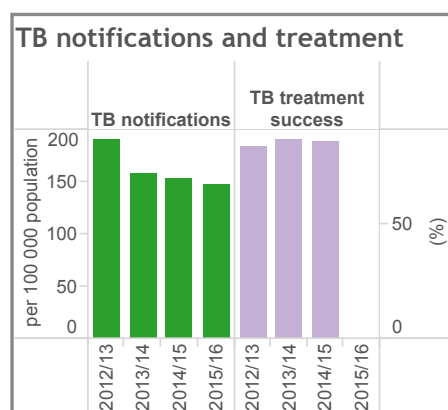
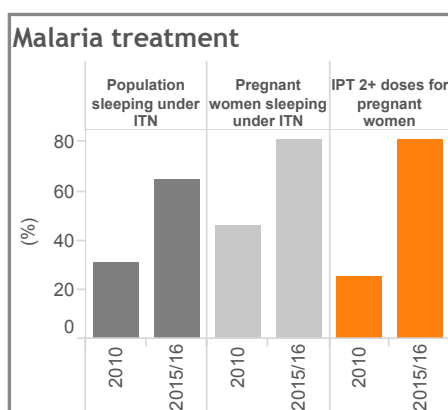
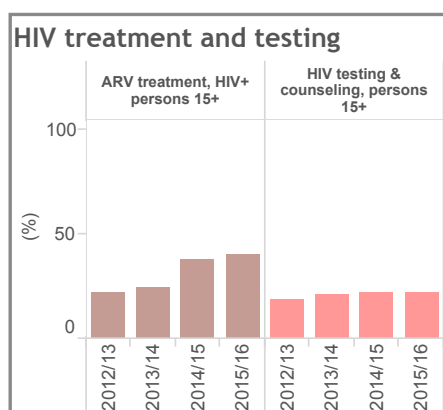
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Kwale county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		69	70	80	87	89	36	36	36
Inpatient discharges per 100 population		2.1	2.9	3.3	2.6	5.7	4	4	4
Outpatient visits per person per year		1.5	1.8	2.2	3.1	2.0	44	44	44
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	63	49	50	53	54	60	32	32	32
Antenatal care 4 or more visits (%)		33	42	51	50	49	17	17	17
Delivery in health facility (%)	49	41	58	67	68	72	21	21	21
Caesarean Section in all deliveries (%)	5	2	3	3	3	10	36	36	36
Maternal mortality per 100,000 hospital deliveries		153	104	59	124	106	35	35	35
Fresh stillbirths per 1,000 births		21	14	12	12	12	21	21	21
Low birth weight per 100 births in health facilities (%)		8	5	5	5	5	23	23	23
Pentavalent vaccination 3rd dose, infants	95	93	89	98	84	86	24	24	24
Measles vaccination, infants	91	85	83	91	83	83	24	24	24
Full immunization coverage, infants	85	80	76	88	80	80	24	24	24
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	87					71	3	3	3
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		22	24	38	40	57	35	35	35
ART among HIV+ children under 15 (%)		22	25	39	41	46	36	36	36
PMTCT among HIV+ women who delivered (%)		44	65	81	65	80	39	39	39
HIV testing & counseling 15+ (%)	48	19	21	22	22	54	42	42	42
TB notifications per 100,000 population		190	158	154	146	187	16	16	16
TB treatment success rate (%)		84	86	86		89	38	38	38
Population sleeping under LLITN (%)*		31			65	41	4	4	4
Pregnant women sleeping under LLITN (%)*		46			81	51	2	2	2
IPT 2 or more doses for pregnant women (%)*		26			81	22	1	1	1
Children with fever taken to a health provider (%)*		68			69	72	38	38	38

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

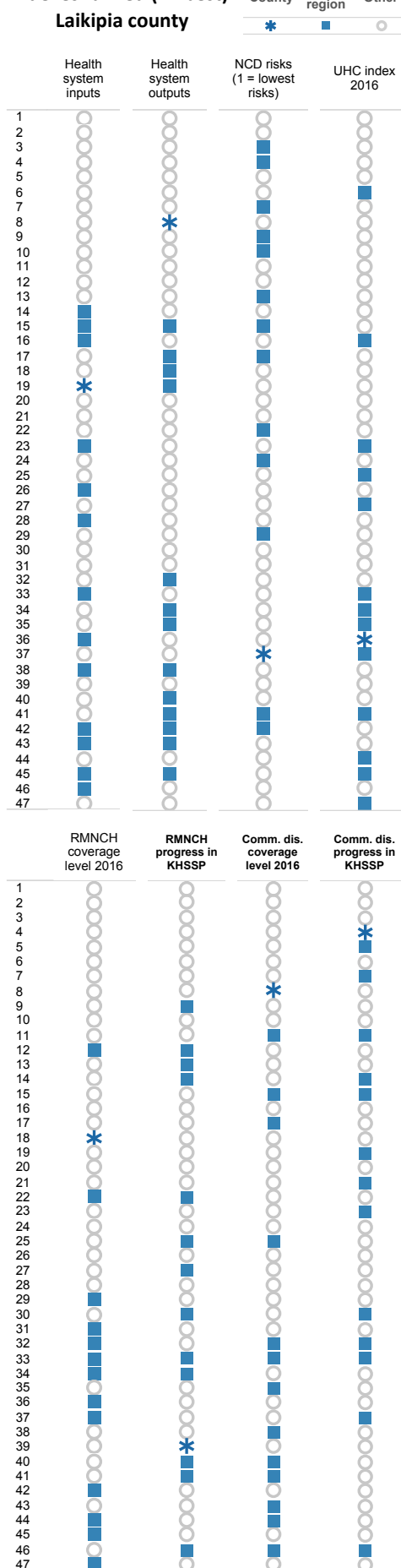
Midterm review KHSSP 2014-18, November 2016

Laikipia county health statistics profile

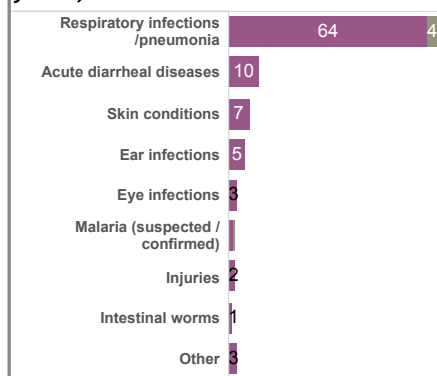
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Laikipia		Kenya	Laikipia rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	496 182	44 733 470			
Births 2015/16 (estimated from DHIS)	14 824	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.7	3.9	17		
Female education (median years, KDHS 2014)	7.6	7.6	18		
Health service inputs					
Facilities per 10,000 population	2.4	2.2	20		
Facilities that are private for profit (%)	30.2	37.1			
Hospital beds per 10,000 population	8.2	8.8	25		
Core health professionals per 10,000 population (est.)	12.7	9.3	7		
County health budget per capita 2014/15 (KSh)	359	1442	47		
County health budget per capita 2015/16 (KSh)	1095	1874	45		
Health status					
Under 5 mortality per 1000 live births (census 2009)	53	79	8		
Maternal mortality per 100,000 live births (census 2009)	374	495	26		
Life expectancy males (years) (census 2009)	53	58	35		
Life expectancy females (years) (census 2009)	57	61	29		
HIV prevalence 15 years and over (MOH 2016)	3.3	5.5	16		
HIV prevalence among antenatal women (DHIS 2015/16)	2.5	4.9	15		
TB notifications per 100,000 (DHIS / TIBU 2015)	150	187	17		
Malaria parasite rate in children (MOH 2015)	Free	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	26.9	26.0	27		
Wasting in children under 5 (%) (KDHS 2014)	4.4	4.0	32		
Underweight in children (%) (KDHS 2014)	13.9	11.0	36		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	38.1	33.6	36		
Obesity, women 15-49 (%)	13.2	10.6	36		
Overweight or obese, men 18-69 years (%)	0.9	17.6	2		
Obesity, men, 18-69 years (%)	0.0	4.3	1		
Tobacco use, men 18-69 (%)	55.1	23.2	47		
Raised blood glucose, both sexes 18-69 (%)	1.8	1.9	27		
Raised blood pressure, both sexes 18-69 (%)	24.5	22.7	29		
Cervical cancer screening, women 30-49 (%)	5.1	17.0	33		

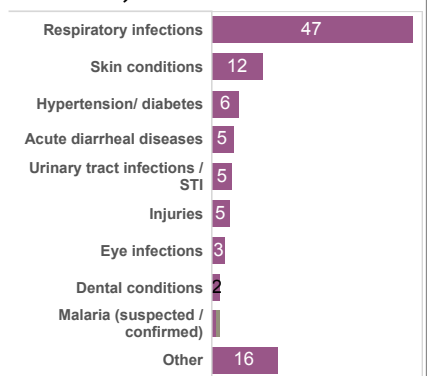
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



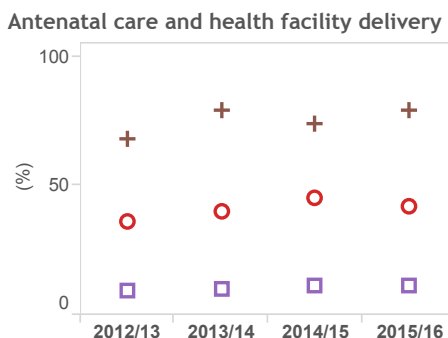
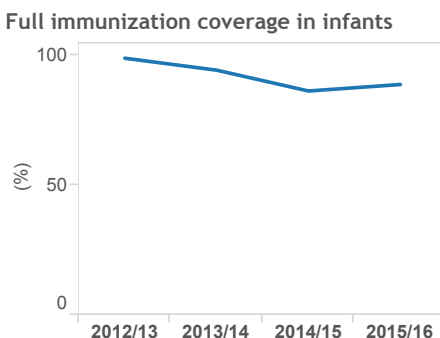
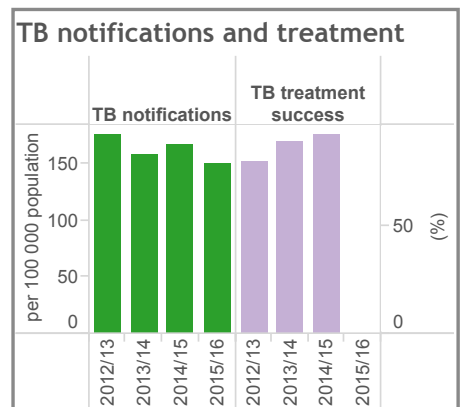
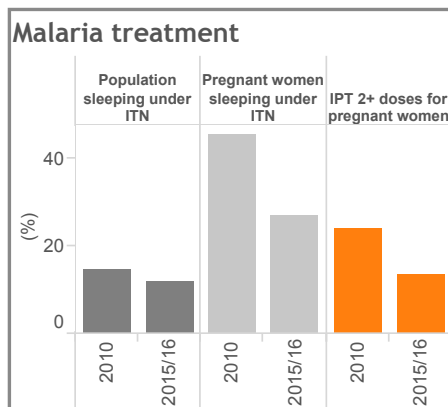
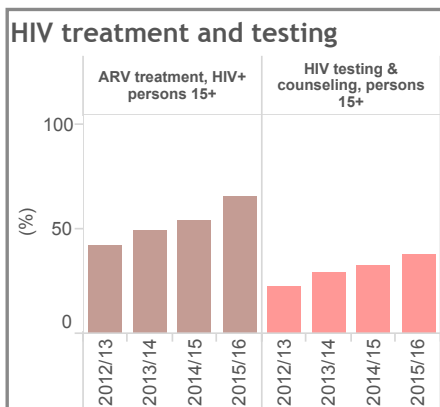
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Laikipia county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		92	87	86	92	89	19						
Inpatient discharges per 100 population		8.1	8.6	8.2	7.3	5.7	40						
Outpatient visits per person per year		2.1	2.6	2.3	2.4	2.0	37						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	61	63	58	59	57	60	28						
Antenatal care 4 or more visits (%)		36	40	45	42	49	32						
Delivery in health facility (%)	48	68	79	74	79	72	13						
Caesarean Section in all deliveries (%)	7	9	10	11	11	10	12						
Maternal mortality per 100,000 hospital deliveries		116	88	88	113	106	31						
Fresh stillbirths per 1,000 births		10	11	13	12	12	21						
Low birth weight per 100 births in health facilities (%)		5	7	7	7	5	38						
Pentavalent vaccination 3rd dose, infants	90	101	92	87	92	86	4						
Measles vaccination, infants	92	100	97	87	91	83	10						
Full immunization coverage, infants	79	99	94	86	89	80	11						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	90					71	1						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		42	49	54	65	57	17						
ART among HIV+ children under 15 (%)		70	70	73	88	46	9						
PMTCT among HIV+ women who delivered (%)		67	72	99	89	80	10						
HIV testing & counseling 15+ (%)	43	22	29	32	38	54	19						
TB notifications per 100,000 population		175	158	166	150	187	17						
TB treatment success rate (%)		79	89	92		89	7						
Population sleeping under LLITN (%)*		14			12	41	43						
Pregnant women sleeping under LLITN (%)*		45			27	51	42						
IPT 2 or more doses for pregnant women (%)*		24			13	22	27						
Children with fever taken to a health provider (%)*		53			76	72	20						

* 2010 and 2015



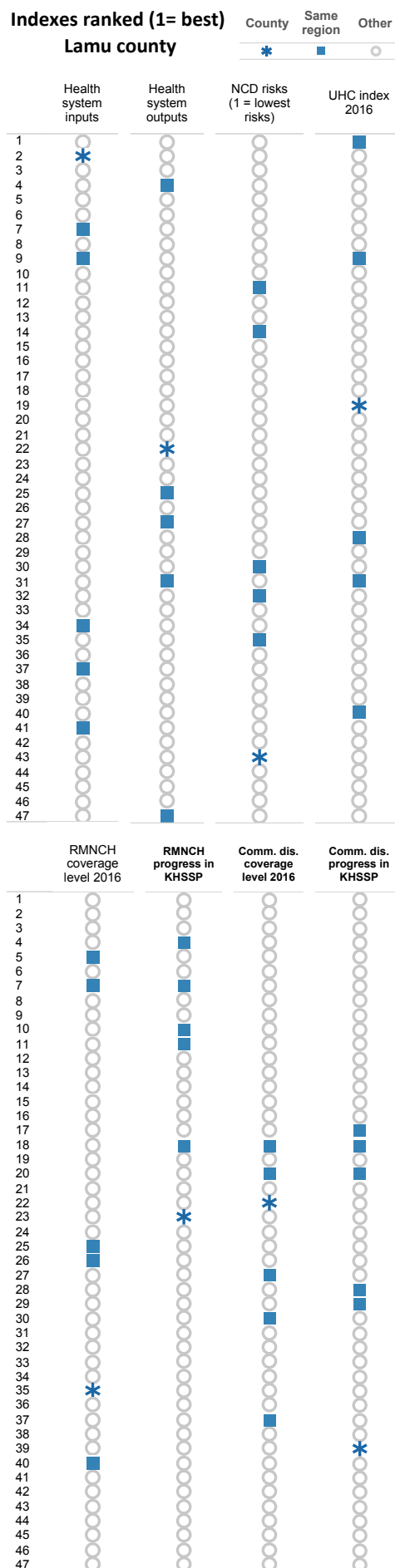
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

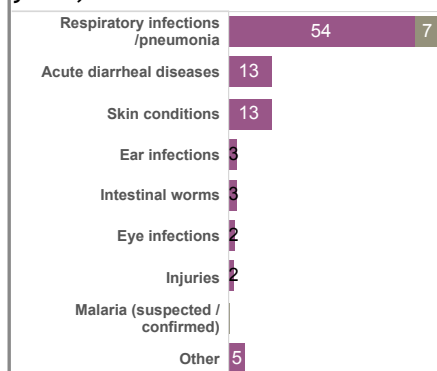
Lamu county health statistics profile

Midterm review KHSSP 2014-18, November 2016

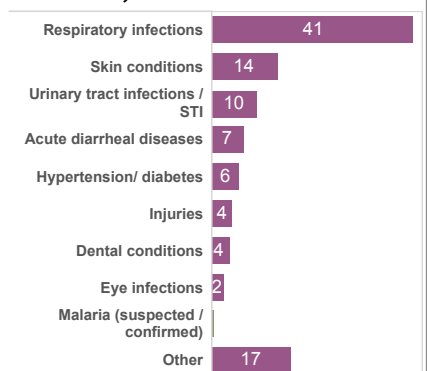
	Performance Level					Lamu	Kenya	Lamu rank (1-47)
	Highest	Higher than average	Average	Lower than average	Lowest			
General statistics								
Population, total 2015/16 (KNBS projection)						125 855	44 733 470	
Births 2015/16 (estimated from DHIS)						4628	1 442 952	
Total fertility rate (children per woman, KDHS 2014)						4.3	3.9	25
Female education (median years, KDHS 2014)						6.4	7.6	36
Health service inputs								
Facilities per 10,000 population						3.6	2.2	2
Facilities that are private for profit (%)						29.5	37.1	
Hospital beds per 10,000 population						12.8	8.8	9
Core health professionals per 10,000 population (est.)						14.6	9.3	4
County health budget per capita 2014/15 (KSh)						3835	1442	2
County health budget per capita 2015/16 (KSh)						5515	1874	1
Health status								
Under 5 mortality per 1000 live births (census 2009)						106	79	34
Maternal mortality per 100,000 live births (census 2009)						676	495	41
Life expectancy males (years) (census 2009)						58	58	17
Life expectancy females (years) (census 2009)						53	61	42
HIV prevalence 15 years and over (MOH 2016)						1.8	5.5	6
HIV prevalence among antenatal women (DHIS 2015/16)						2.4	4.9	13
TB notifications per 100,000 (DHIS / TIBU 2015)						171	187	22
Malaria parasite rate in children (MOH 2015)						<1%	1-4%	
Stunting in children under 5 (%) (KDHS 2014)						29.2	26.0	32
Wasting in children under 5 (%) (KDHS 2014)						4.2	4.0	30
Underweight in children (%) (KDHS 2014)						11.8	11.0	29
NCD Risk factors (STEPS 2015 & KDHS 2014)								
Overweight or obese, women 15-49 (%)						44.9	33.6	41
Obesity, women 15-49 (%)						23.1	10.6	47
Overweight or obese, men 18-69 years (%)						20.0	17.6	31
Obesity, men, 18-69 years (%)						12.0	4.3	46
Tobacco use, men 18-69 (%)						41.2	23.2	39
Raised blood glucose, both sexes 18-69 (%)						1.9	1.9	28
Raised blood pressure, both sexes 18-69 (%)						27.1	22.7	33
Cervical cancer screening, women 30-49 (%)						12.9	17.0	21



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



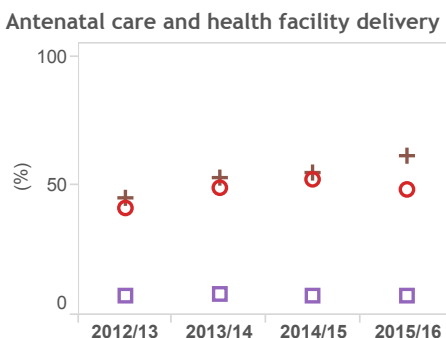
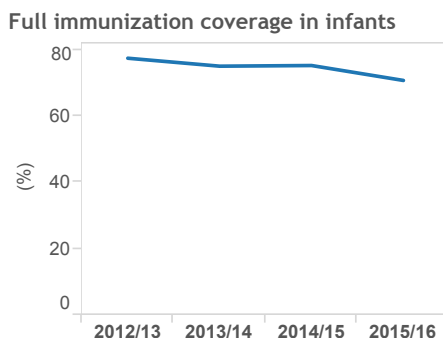
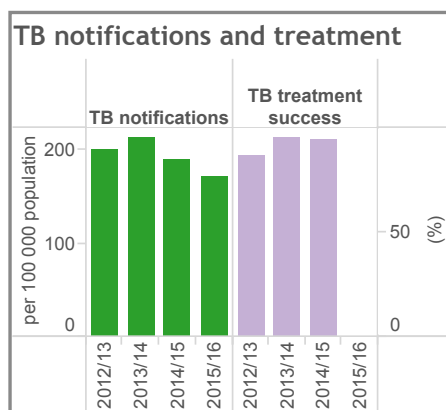
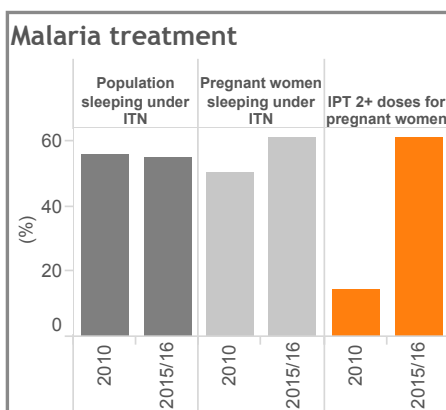
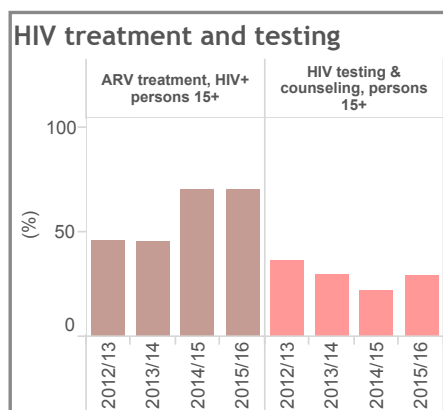
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Lamu county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2015/16	2016
DHIS Reporting index (%)		96	96	91	93	89	17	Some decline	Large decline
Inpatient discharges per 100 population		4.3	4.4	5.1	5.7	5.7	29	Some decline	Large decline
Outpatient visits per person per year		1.5	1.8	2.0	2.3	2.0	33	Some decline	Large decline
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	76	47	47	46	47	60	37	Some decline	Large decline
Antenatal care 4 or more visits (%)		41	49	52	48	49	22	Some decline	Large decline
Delivery in health facility (%)	44	45	53	55	61	72	33	Some decline	Large decline
Caesarean Section in all deliveries (%)	7	7	8	7	7	10	20	Some decline	Large decline
Maternal mortality per 100,000 hospital deliveries		245	80	181	192	106	43	Some decline	Large decline
Fresh stillbirths per 1,000 births		28	18	17	23	12	45	Some decline	Large decline
Low birth weight per 100 births in health facilities (%)		5	5	5	4	5	8	Some decline	Large decline
Pentavalent vaccination 3rd dose, infants	85	91	96	88	82	86	31	Some decline	Large decline
Measles vaccination, infants	83	83	87	79	76	83	38	Some decline	Large decline
Full immunization coverage, infants	67	77	75	75	71	80	36	Some decline	Large decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	77					71	16	Some decline	Large decline
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		46	45	70	71	57	9	Some decline	Large decline
ART among HIV+ children under 15 (%)		72	75	95	104	46	4	Some decline	Large decline
PMTCT among HIV+ women who delivered (%)		85	106	97	88	80	12	Some decline	Large decline
HIV testing & counseling 15+ (%)	41	36	30	22	29	54	34	Some decline	Large decline
TB notifications per 100,000 population		200	213	189	171	187	22	Some decline	Large decline
TB treatment success rate (%)		86	95	94		89	5	Some decline	Large decline
Population sleeping under LLITN (%)*		56			55	41	14	Some decline	Large decline
Pregnant women sleeping under LLITN (%)*		50			61	51	18	Some decline	Large decline
IPT 2 or more doses for pregnant women (%)*		15			61	22	3	Some decline	Large decline
Children with fever taken to a health provider (%)*		65			60	72	46	Some decline	Large decline

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

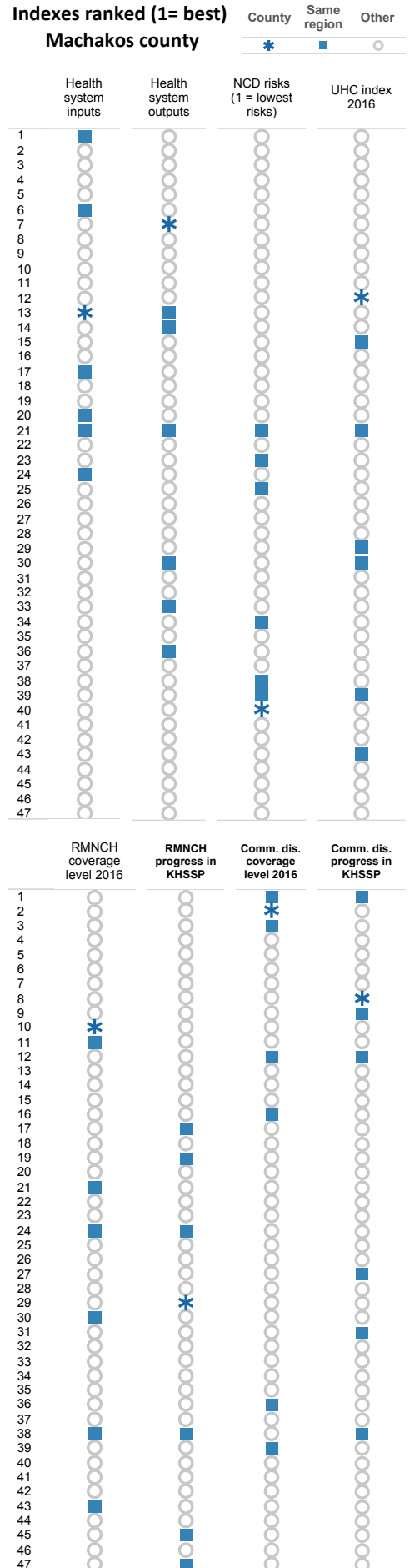
Machakos county health statistics profile

Midterm review KHSSP 2014-18, November 2016

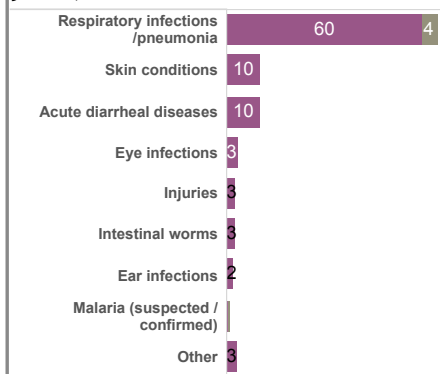
	Performance				
	Highest	Higher than average	Average	Lower than average	Lowest
	Machakos	Kenya	Machakos rank (1-47)		
General statistics					
Population, total 2015/16 (KNBS projection)	1 185 075	44 733 470			
Births 2015/16 (estimated from DHIS)	31 271	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.4	3.9	10		
Female education (median years, KDHS 2014)	7.8	7.6	11		
Health service inputs					
Facilities per 10,000 population	2.7	2.2	15		
Facilities that are private for profit (%)	44.3	37.1			
Hospital beds per 10,000 population	11.4	8.8	13		
Core health professionals per 10,000 population (est.)	10.2	9.3	12		
County health budget per capita 2014/15 (KSh)	1534	1442	19		
County health budget per capita 2015/16 (KSh)	1869	1874	27		
Health status					
Under 5 mortality per 1000 live births (census 2009)	56	79	11		
Maternal mortality per 100,000 live births (census 2009)	425	495	32		
Life expectancy males (years) (census 2009)	62	58	6		
Life expectancy females (years) (census 2009)	69	61	2		
HIV prevalence 15 years and over (MOH 2016)	3.9	5.5	25		
HIV prevalence among antenatal women (DHIS 2015/16)	3.5	4.9	33		
TB notifications per 100,000 (DHIS / TIBU 2015)	189	187	30		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	26.5	26.0	24		
Wasting in children under 5 (%) (KDHS 2014)	6.5	4.0	37		
Underweight in children (%) (KDHS 2014)	8.1	11.0	12		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	32.1	33.6	30		
Obesity, women 15-49 (%)	11.3	10.6	35		
Overweight or obese, men 18-69 years (%)	10.0	17.6	18		
Obesity, men, 18-69 years (%)	5.9	4.3	34		
Tobacco use, men 18-69 (%)	49.5	23.2	45		
Raised blood glucose, both sexes 18-69 (%)	2.1	1.9	32		
Raised blood pressure, both sexes 18-69 (%)	28.3	22.7	36		
Cervical cancer screening, women 30-49 (%)	20.7	17.0	12		

Indexes ranked (1= best)

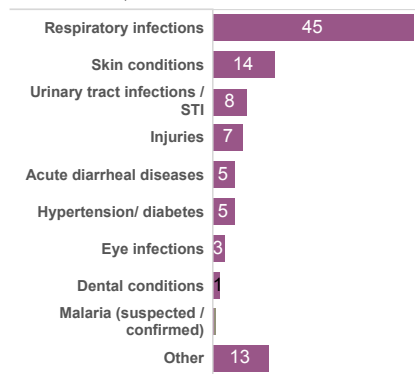
Machakos county



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



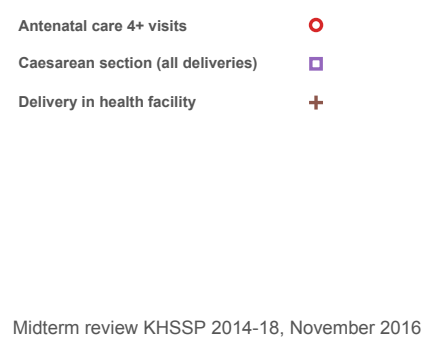
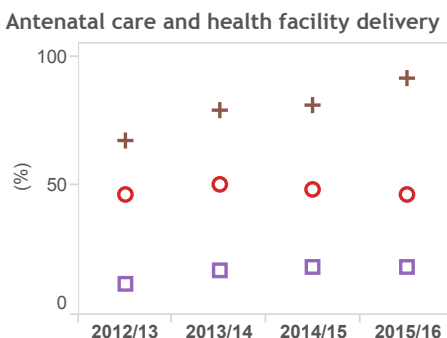
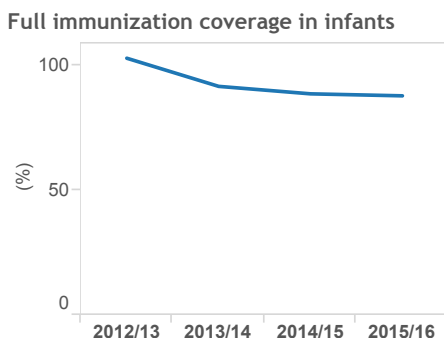
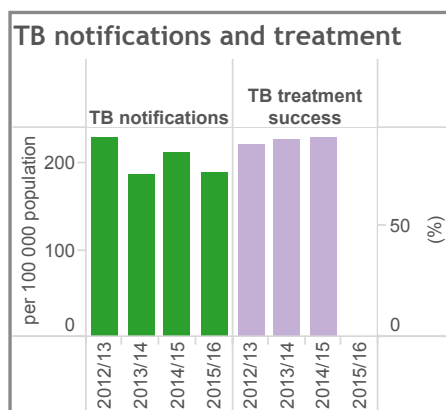
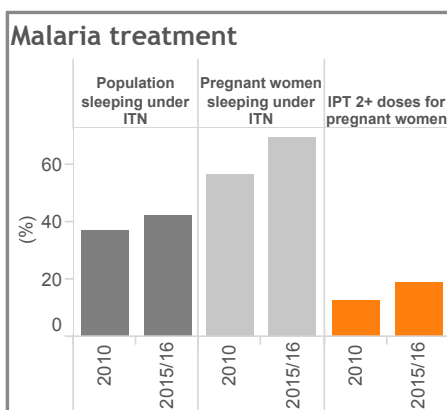
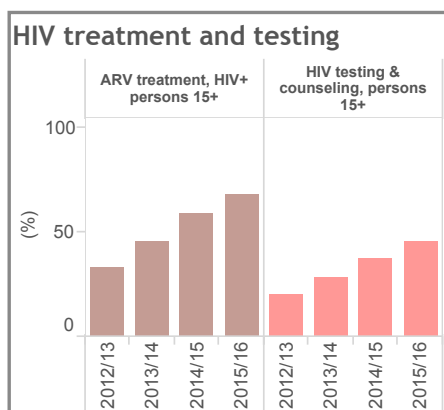
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Machakos county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		78	82	88	92	89	20		
Inpatient discharges per 100 population		6.5	7.9	8.3	7.3	5.7	40		
Outpatient visits per person per year		1.8	3.2	2.2	3.0	2.0	43		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	54	63	64	64	63	60	13		
Antenatal care 4 or more visits (%)		46	50	48	46	49	26		
Delivery in health facility (%)	63	67	79	81	91	72	4		
Caesarean Section in all deliveries (%)	11	12	17	18	18	10	5		
Maternal mortality per 100,000 hospital deliveries		112	58	53	56	106	6		
Fresh stillbirths per 1,000 births		12	11	8	7	12	3		
Low birth weight per 100 births in health facilities (%)		6	7	6	5	5	23		
Pentavalent vaccination 3rd dose, infants	98	98	98	91	89	86	13		
Measles vaccination, infants	97	106	95	93	92	83	8		
Full immunization coverage, infants	90	103	92	89	88	80	12		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	72					71	28		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		33	45	59	68	57	12		
ART among HIV+ children under 15 (%)		57	68	87	88	46	10		
PMTCT among HIV+ women who delivered (%)		83	86	97	88	80	12		
HIV testing & counseling 15+ (%)	42	20	28	37	46	54	12		
TB notifications per 100,000 population		229	186	211	189	187	30		
TB treatment success rate (%)		86	89	89		89	22		
Population sleeping under LLITN (%)*		37			43	41	24		
Pregnant women sleeping under LLITN (%)*		57			70	51	11		
IPT 2 or more doses for pregnant women (%)*		12			19	22	21		
Children with fever taken to a health provider (%)*		56			76	72	18		

* 2010 and 2015

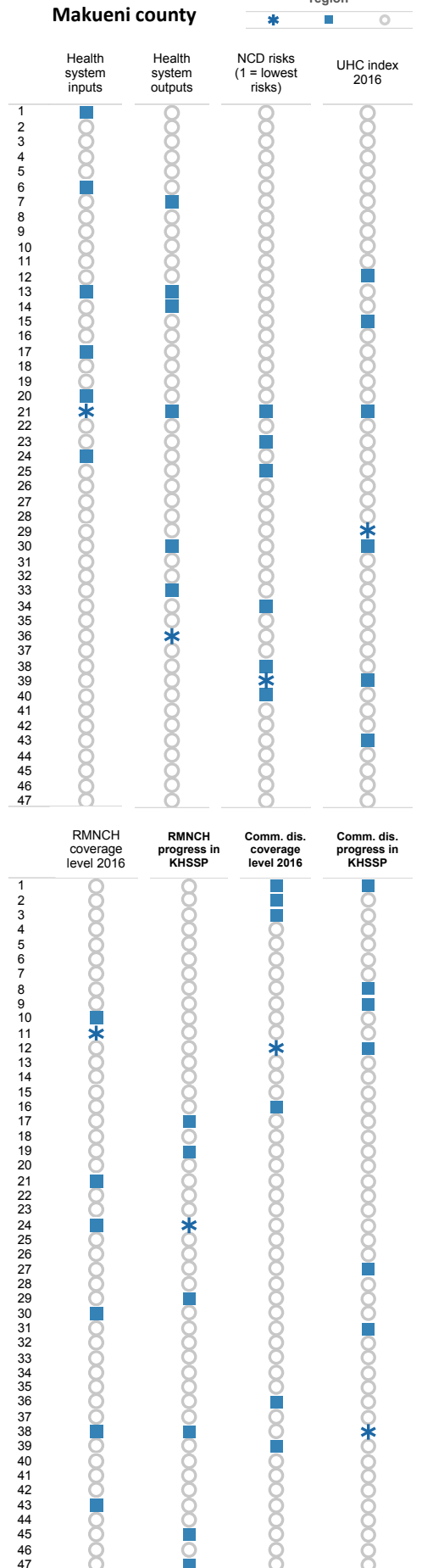


Makueni county health statistics profile

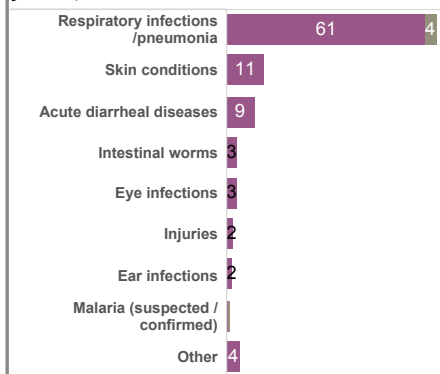
Midterm review KHSSP 2014-18, November 2016

	Performance Level				
	Highest	Higher than average	Average	Lower than average	Lowest
	Makueni	Kenya	Makueni rank (1-47)		
General statistics					
Population, total 2015/16 (KNBS projection)	954 004	44 733 470			
Births 2015/16 (estimated from DHIS)	24 325	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.4	3.9	10		
Female education (median years, KDHS 2014)	7.7	7.6	14		
Health service inputs					
Facilities per 10,000 population	2.4	2.2	20		
Facilities that are private for profit (%)	25.6	37.1			
Hospital beds per 10,000 population	7.6	8.8	27		
Core health professionals per 10,000 population (est.)	6.2	9.3	27		
County health budget per capita 2014/15 (KSh)	1764	1442	16		
County health budget per capita 2015/16 (KSh)	2231	1874	17		
Health status					
Under 5 mortality per 1000 live births (census 2009)	61	79	20		
Maternal mortality per 100,000 live births (census 2009)	400	495	30		
Life expectancy males (years) (census 2009)	65	58	1		
Life expectancy females (years) (census 2009)	69	61	2		
HIV prevalence 15 years and over (MOH 2016)	4.2	5.5	32		
HIV prevalence among antenatal women (DHIS 2015/16)	3.3	4.9	29		
TB notifications per 100,000 (DHIS / TIBU 2015)	173	187	23		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	25.1	26.0	18		
Wasting in children under 5 (%) (KDHS 2014)	2.1	4.0	9		
Underweight in children (%) (KDHS 2014)	10.2	11.0	22		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	30.2	33.6	24		
Obesity, women 15-49 (%)	7.4	10.6	23		
Overweight or obese, men 18-69 years (%)	15.8	17.6	27		
Obesity, men, 18-69 years (%)	6.5	4.3	35		
Tobacco use, men 18-69 (%)	36.0	23.2	37		
Raised blood glucose, both sexes 18-69 (%)	5.9	1.9	45		
Raised blood pressure, both sexes 18-69 (%)	33.8	22.7	42		
Cervical cancer screening, women 30-49 (%)	5.2	17.0	31		

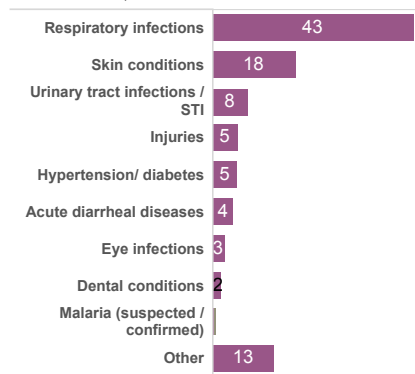
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



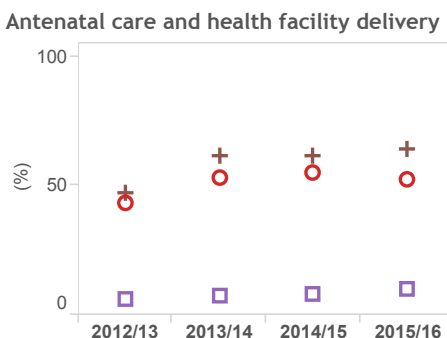
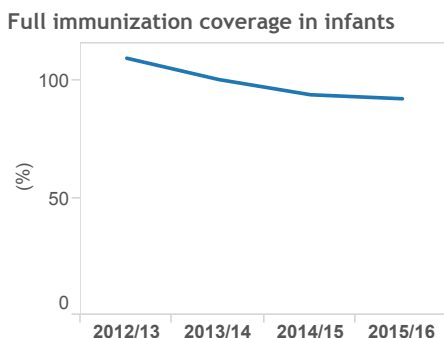
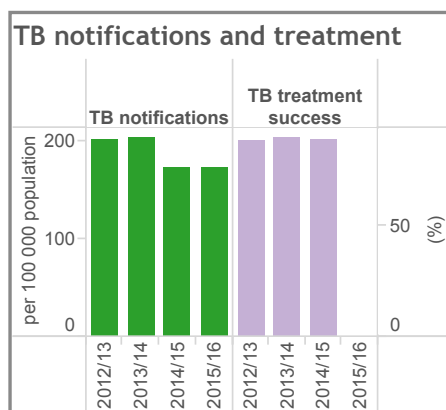
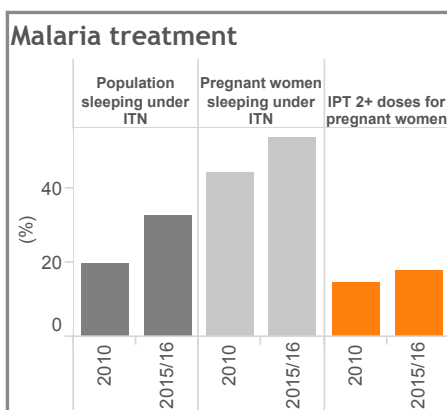
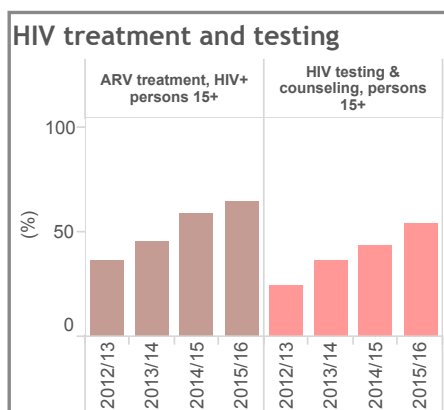
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Makueni county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		71	78	91	96	89	7						
Inpatient discharges per 100 population		2.9	2.7	3.1	2.9	5.7	8						
Outpatient visits per person per year		1.6	2.0	2.2	2.2	2.0	30						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	59	62	63	65	65	60	10						
Antenatal care 4 or more visits (%)		43	53	55	52	49	14						
Delivery in health facility (%)	53	47	61	61	64	72	28						
Caesarean Section in all deliveries (%)	10	6	7	8	10	10	14						
Maternal mortality per 100,000 hospital deliveries		146	33	87	81	106	18						
Fresh stillbirths per 1,000 births		28	17	14	11	12	16						
Low birth weight per 100 births in health facilities (%)		4	4	4	4	5	8						
Pentavalent vaccination 3rd dose, infants	99	109	103	89	84	86	25						
Measles vaccination, infants	97	114	105	96	93	83	4						
Full immunization coverage, infants	90	110	101	94	92	80	4						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	82					71	6						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		36	45	59	65	57	18						
ART among HIV+ children under 15 (%)		64	65	81	75	46	17						
PMTCT among HIV+ women who delivered (%)		90	90	87	72	80	33						
HIV testing & counseling 15+ (%)	63	24	36	44	54	54	9						
TB notifications per 100,000 population		202	203	173	173	187	23						
TB treatment success rate (%)		88	90	89		89	24						
Population sleeping under LLITN (%)*		20			33	41	32						
Pregnant women sleeping under LLITN (%)*		44			54	51	28						
IPT 2 or more doses for pregnant women (%)*		14			18	22	22						
Children with fever taken to a health provider (%)*		57			86	72	1						

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

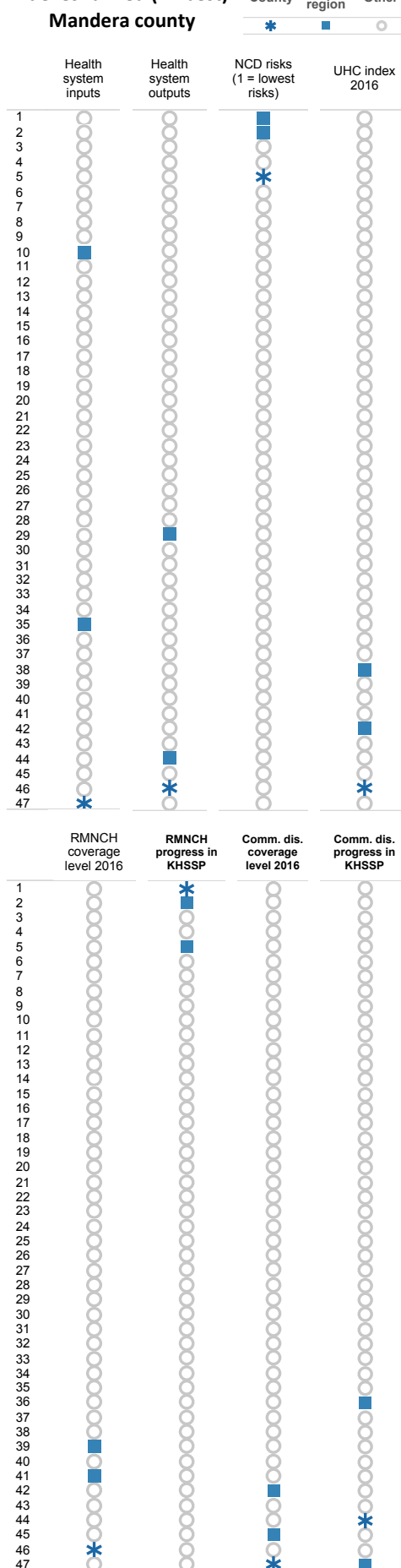
Midterm review KHSSP 2014-18, November 2016

Mandera county health statistics profile

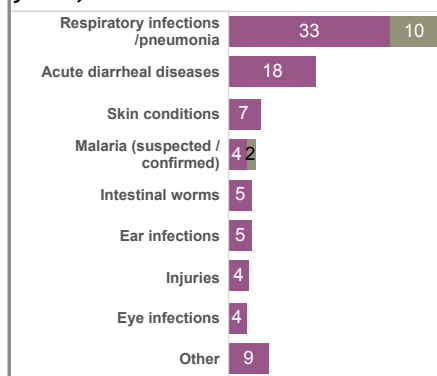
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Mandera		Kenya	Mandera rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	704 209	44 733 470			
Births 2015/16 (estimated from DHIS)	24 196	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	5.2	3.9	38		
Female education (median years, KDHS 2014)	0.0	7.6	42		
Health service inputs					
Facilities per 10,000 population	1.1	2.2	46		
Facilities that are private for profit (%)	34.2	37.1			
Hospital beds per 10,000 population	1.0	8.8	46		
Core health professionals per 10,000 population (est.)	3.1	9.3	46		
County health budget per capita 2014/15 (KSh)	2161	1442	8		
County health budget per capita 2015/16 (KSh)	2402	1874	14		
Health status					
Under 5 mortality per 1000 live births (census 2009)	155	79	42		
Maternal mortality per 100,000 live births (census 2009)	3795	495	47		
Life expectancy males (years) (census 2009)	51	58	39		
Life expectancy females (years) (census 2009)	55	61	35		
HIV prevalence 15 years and over (MOH 2016)	1.0	5.5	3		
HIV prevalence among antenatal women (DHIS 2015/16)	0.7	4.9	3		
TB notifications per 100,000 (DHIS / TIBU 2015)	90	187	2		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	36.1	26.0	44		
Wasting in children under 5 (%) (KDHS 2014)	14.8	4.0	45		
Underweight in children (%) (KDHS 2014)	24.9	11.0	43		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	15.6	33.6	5		
Obesity, women 15-49 (%)	3.7	10.6	4		
Overweight or obese, men 18-69 years (%)	21.3	17.6	37		
Obesity, men, 18-69 years (%)	0.0	4.3	1		
Tobacco use, men 18-69 (%)	0.0	23.2	1		
Raised blood glucose, both sexes 18-69 (%)	3.3	1.9	39		
Raised blood pressure, both sexes 18-69 (%)	13.1	22.7	9		
Cervical cancer screening, women 30-49 (%)	0.0	17.0	43		

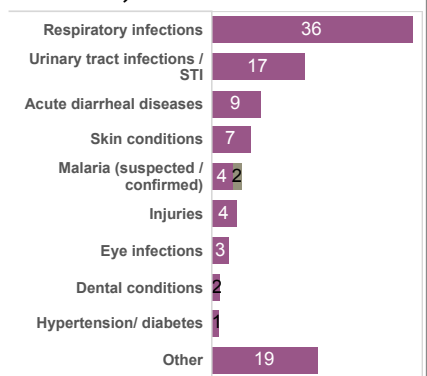
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



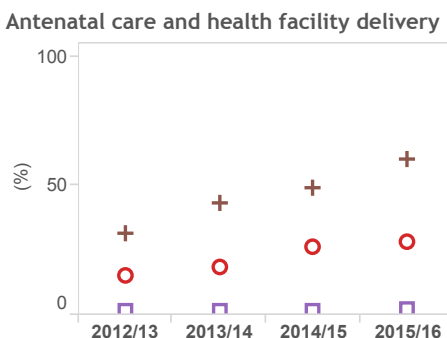
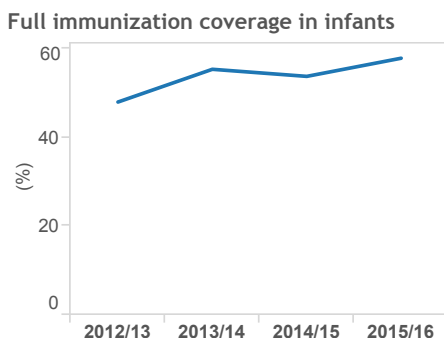
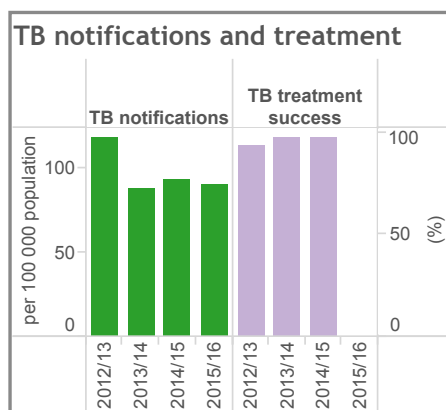
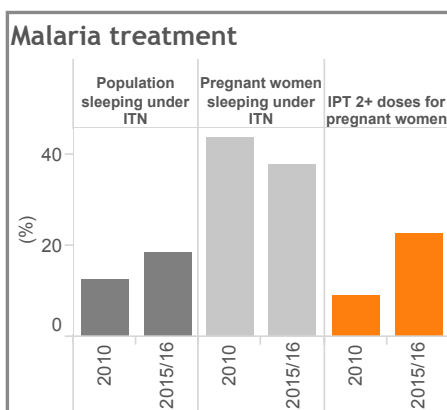
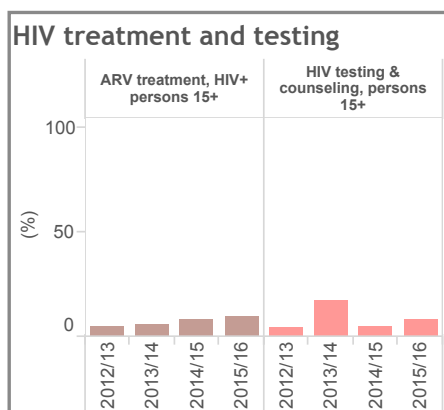
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Mandera county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
DHIS Reporting index (%)		37	46	47	52	89	47	Strong progress
Inpatient discharges per 100 population		1.4	1.7	1.9	2.7	5.7	6	Some decline
Outpatient visits per person per year		0.9	1.2	1.2	1.4	2.0	5	Some decline
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	54	9	9	10	11	60	47	Some decline
Antenatal care 4 or more visits (%)		15	18	26	28	49	45	Some decline
Delivery in health facility (%)	36	31	43	49	60	72	35	Some decline
Caesarean Section in all deliveries (%)	2	1	1	1	2	10	44	Some decline
Maternal mortality per 100,000 hospital deliveries		270	258	255	124	106	35	Some decline
Fresh stillbirths per 1,000 births		18	23	19	14	12	26	Some decline
Low birth weight per 100 births in health facilities (%)		1	1	3	2	5	1	Large decline
Pentavalent vaccination 3rd dose, infants	49	61	72	69	71	86	46	Some decline
Measles vaccination, infants	62	59	63	60	67	83	44	Some decline
Full immunization coverage, infants	43	48	56	54	58	80	45	Some decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	20					71	47	Some decline
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		5	6	8	9	57	47	Some decline
ART among HIV+ children under 15 (%)		1	1	2	4	46	47	Some decline
PMTCT among HIV+ women who delivered (%)		4	5	3	5	80	46	Some decline
HIV testing & counseling 15+ (%)	39	4	17	5	8	54	47	Some decline
TB notifications per 100,000 population		118	88	93	90	187	2	Some decline
TB treatment success rate (%)		93	97	97		89	2	Some decline
Population sleeping under LLITN (%)*		13			18	41	40	Some decline
Pregnant women sleeping under LLITN (%)*		44			38	51	39	Some decline
IPT 2 or more doses for pregnant women (%)*		9			23	22	18	Some decline
Children with fever taken to a health provider (%)*		61			71	72	32	Some decline

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

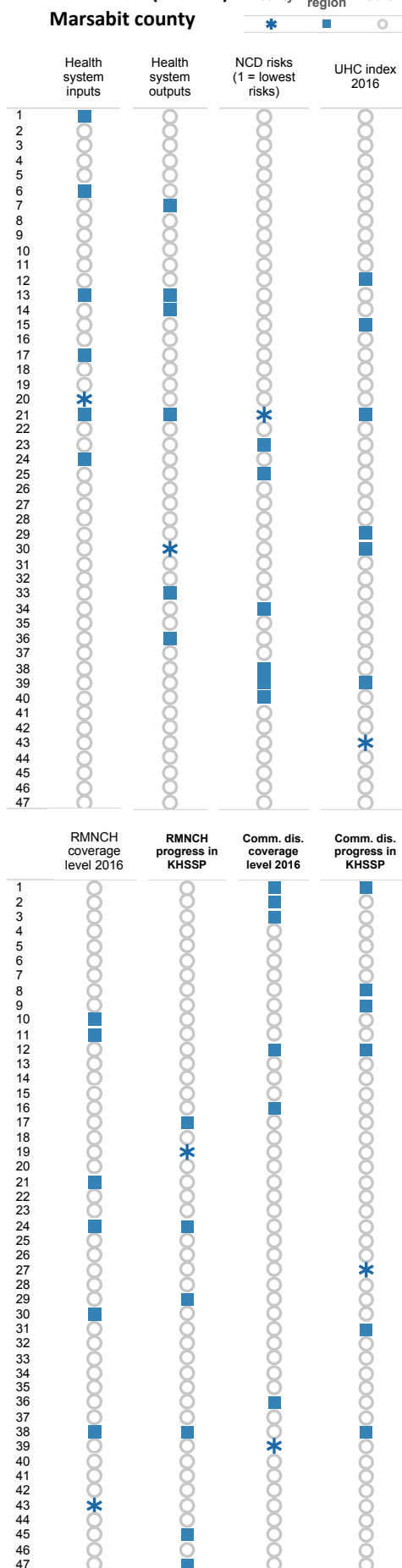
Midterm review KHSSP 2014-18, November 2016

Marsabit county health statistics profile

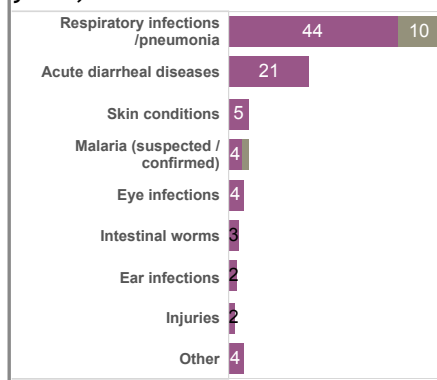
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Marsabit		Kenya	Marsabit rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	314 267	44 733 470			
Births 2015/16 (estimated from DHIS)	14 454	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	5.0	3.9	35		
Female education (median years, KDHS 2014)	0.0	7.6	42		
Health service inputs					
Facilities per 10,000 population	3.4	2.2	4		
Facilities that are private for profit (%)	21.9	37.1			
Hospital beds per 10,000 population	5.1	8.8	33		
Core health professionals per 10,000 population (est.)	12.4	9.3	8		
County health budget per capita 2014/15 (KSh)	1424	1442	26		
County health budget per capita 2015/16 (KSh)	3422	1874	4		
Health status					
Under 5 mortality per 1000 live births (census 2009)	51	79	7		
Maternal mortality per 100,000 live births (census 2009)	1127	495	44		
Life expectancy males (years) (census 2009)	65	58	1		
Life expectancy females (years) (census 2009)	64	61	10		
HIV prevalence 15 years and over (MOH 2016)	1.6	5.5	5		
HIV prevalence among antenatal women (DHIS 2015/16)	1.2	4.9	5		
TB notifications per 100,000 (DHIS / TIBU 2015)	206	187	36		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	26.5	26.0	24		
Wasting in children under 5 (%) (KDHS 2014)	16.3	4.0	46		
Underweight in children (%) (KDHS 2014)	30.1	11.0	45		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	13.9	33.6	4		
Obesity, women 15-49 (%)	3.7	10.6	4		
Overweight or obese, men 18-69 years (%)	7.5	17.6	14		
Obesity, men, 18-69 years (%)	2.2	4.3	23		
Tobacco use, men 18-69 (%)	47.6	23.2	43		
Raised blood glucose, both sexes 18-69 (%)	2.2	1.9	34		
Raised blood pressure, both sexes 18-69 (%)	14.8	22.7	11		
Cervical cancer screening, women 30-49 (%)	1.4	17.0	41		

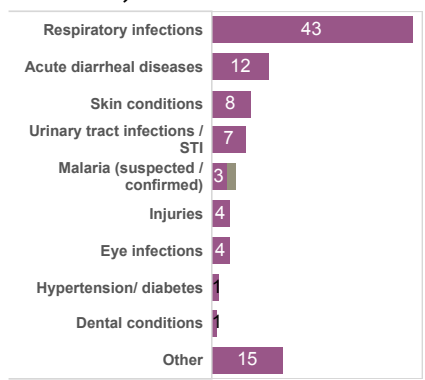
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



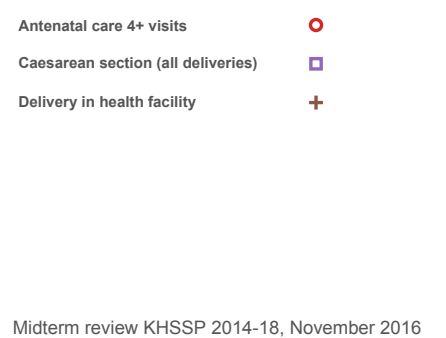
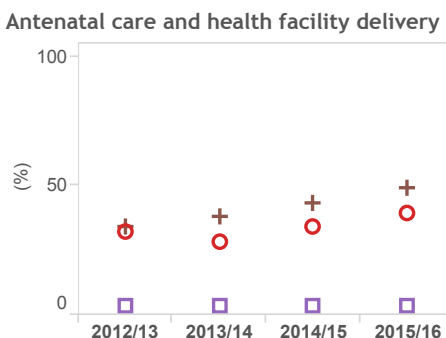
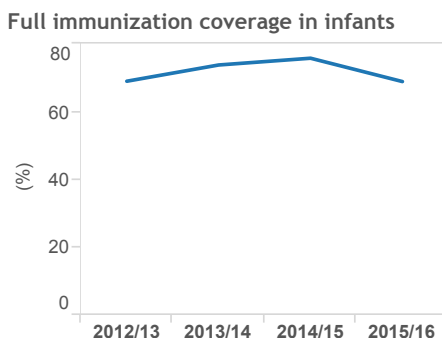
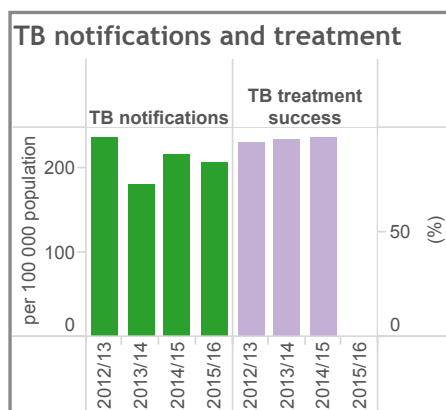
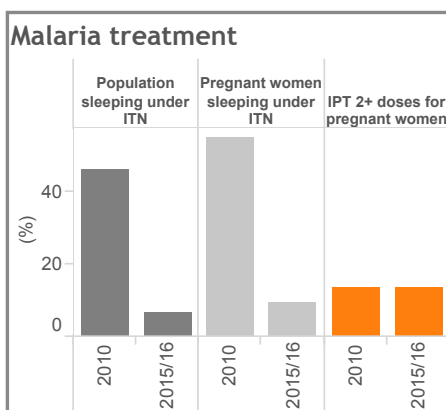
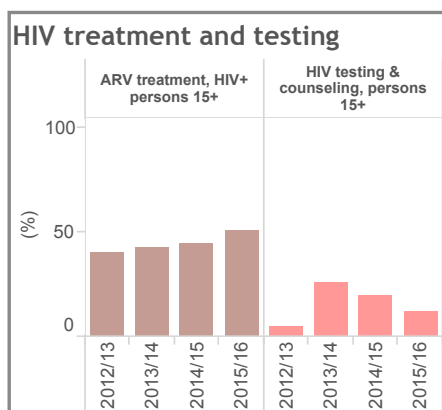
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Marsabit county health statistics profile

	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
 Strong progress Some progress Same level Some decline Large decline								
General								
DHIS Reporting index (%)		51	74	81	77	89	41	
Inpatient discharges per 100 population		3.3	3.1	4.7	4.5	5.7	20	
Outpatient visits per person per year		1.0	1.2	1.6	1.7	2.0	12	
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	33	25	25	25	25	60	43	
Antenatal care 4 or more visits (%)		32	28	34	39	49	36	
Delivery in health facility (%)	26	34	38	43	49	72	42	
Caesarean Section in all deliveries (%)	2	3	3	3	3	10	36	
Maternal mortality per 100,000 hospital deliveries		192	168	139	85	106	19	
Fresh stillbirths per 1,000 births		22	22	16	15	12	32	
Low birth weight per 100 births in health facilities (%)		4	3	4	4	5	8	
Pentavalent vaccination 3rd dose, infants	86	88	84	84	77	86	43	
Measles vaccination, infants	77	75	79	80	69	83	42	
Full immunization coverage, infants	68	69	74	76	69	80	39	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	65					71	37	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		40	43	44	51	57	25	
ART among HIV+ children under 15 (%)		42	42	43	44	46	34	
PMTCT among HIV+ women who delivered (%)		18	26	58	46	80	44	
HIV testing & counseling 15+ (%)	47	5	26	20	12	54	45	
TB notifications per 100,000 population		235	179	215	206	187	36	
TB treatment success rate (%)		92	94	95		89	4	
Population sleeping under LLITN (%)*		46			7	41	47	
Pregnant women sleeping under LLITN (%)*		55			9	51	47	
IPT 2 or more doses for pregnant women (%)*		14			13	22	27	
Children with fever taken to a health provider (%)*		59			67	72	43	

* 2010 and 2015

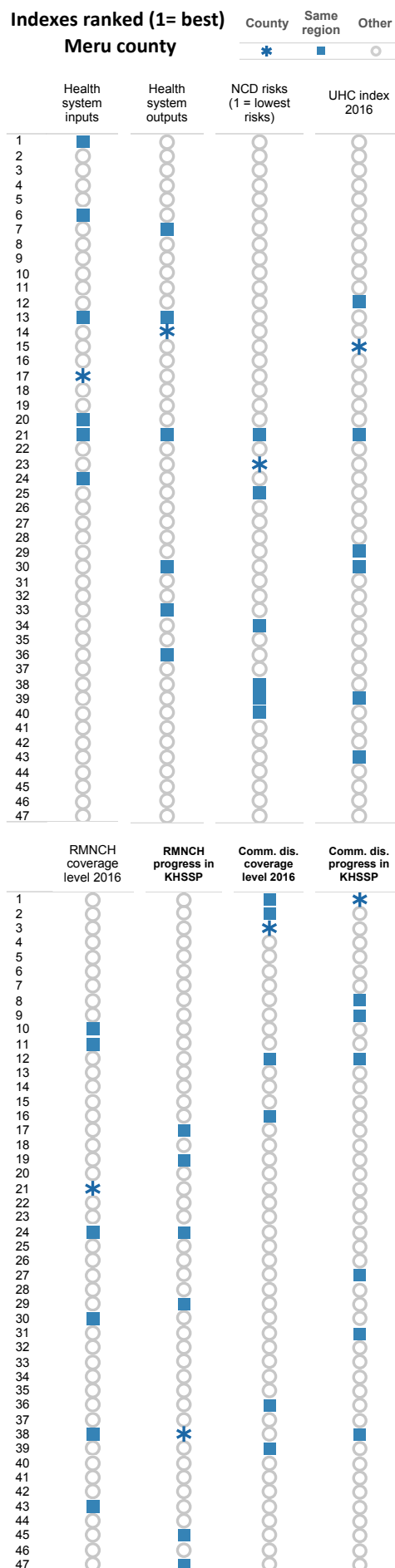


Midterm review KHSSP 2014-18, November 2016

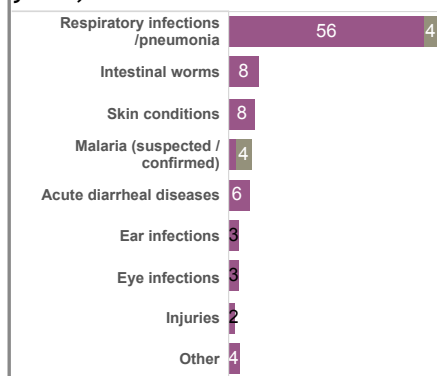
Meru county health statistics profile

Midterm review KHSSP 2014-18, November 2016

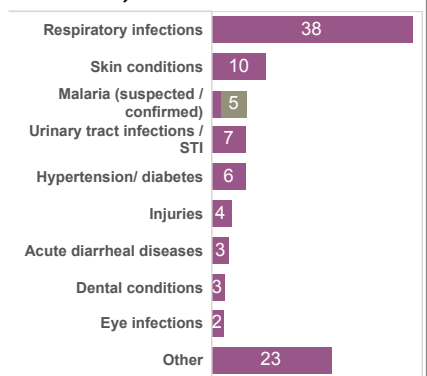
	Performance			Meru rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	1 463 087	44 733 470		
Births 2015/16 (estimated from DHIS)	39 425	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	3.1	3.9	6	
Female education (median years, KDHS 2014)	7.2	7.6	32	
Health service inputs				
Facilities per 10,000 population	2.8	2.2	13	
Facilities that are private for profit (%)	55.3	37.1		
Hospital beds per 10,000 population	10.1	8.8	19	
Core health professionals per 10,000 population (est.)	9.0	9.3	15	
County health budget per capita 2014/15 (KSh)	1015	1442	40	
County health budget per capita 2015/16 (KSh)	1312	1874	41	
Health status				
Under 5 mortality per 1000 live births (census 2009)	48	79	2	
Maternal mortality per 100,000 live births (census 2009)	262	495	13	
Life expectancy males (years) (census 2009)	62	58	6	
Life expectancy females (years) (census 2009)	66	61	6	
HIV prevalence 15 years and over (MOH 2016)	2.4	5.5	8	
HIV prevalence among antenatal women (DHIS 2015/16)	2.8	4.9	17	
TB notifications per 100,000 (DHIS / TIBU 2015)	236	187	41	
Malaria parasite rate in children (MOH 2015)	<1%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	25.2	26.0	19	
Wasting in children under 5 (%) (KDHS 2014)	2.9	4.0	17	
Underweight in children (%) (KDHS 2014)	8.1	11.0	12	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	33.1	33.6	32	
Obesity, women 15-49 (%)	11.0	10.6	34	
Overweight or obese, men 18-69 years (%)	5.9	17.6	10	
Obesity, men, 18-69 years (%)	0.5	4.3	12	
Tobacco use, men 18-69 (%)	28.0	23.2	31	
Raised blood glucose, both sexes 18-69 (%)	2.0	1.9	30	
Raised blood pressure, both sexes 18-69 (%)	24.7	22.7	31	
Cervical cancer screening, women 30-49 (%)	37.1	17.0	6	



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



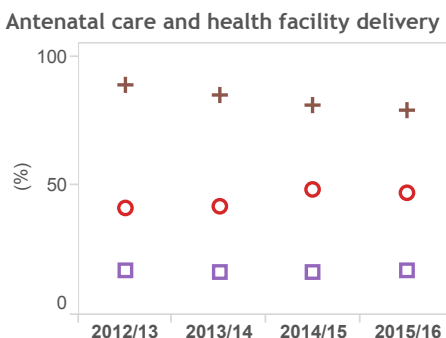
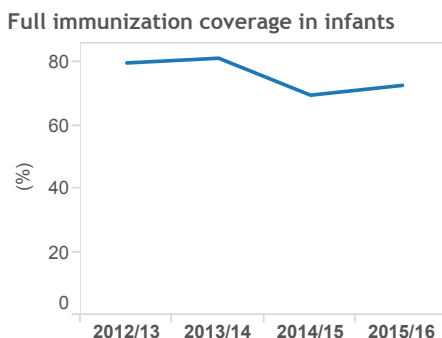
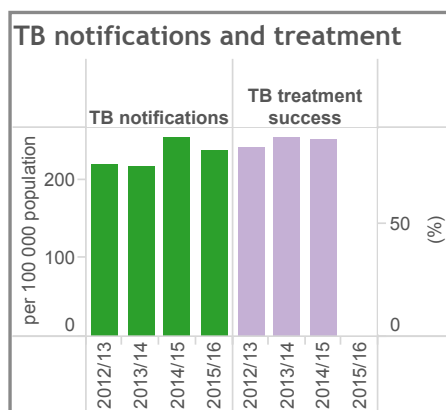
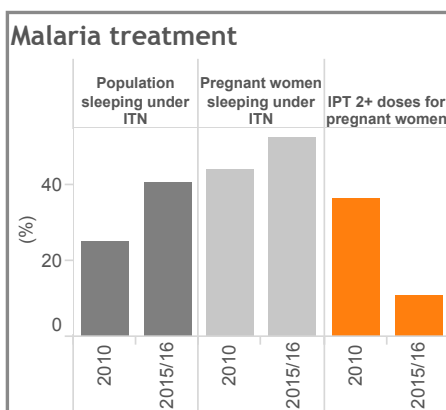
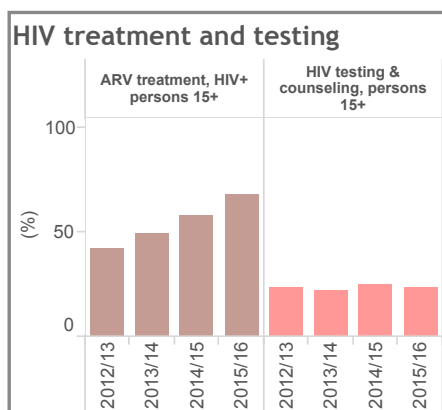
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Meru county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		75	83	87	91	89	23		
Inpatient discharges per 100 population		7.6	7.1	7.5	6.3	5.7	33		
Outpatient visits per person per year		2.4	2.6	2.1	1.7	2.0	12		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	59	62	62	63	64	60	12		
Antenatal care 4 or more visits (%)		41	42	48	47	49	25		
Delivery in health facility (%)	82	89	85	81	79	72	13		
Caesarean Section in all deliveries (%)	19	17	16	16	17	10	7		
Maternal mortality per 100,000 hospital deliveries		85	113	59	89	106	20		
Fresh stillbirths per 1,000 births		9	12	11	14	12	26		
Low birth weight per 100 births in health facilities (%)		5	6	5	6	5	31		
Pentavalent vaccination 3rd dose, infants	94	94	94	84	85	86	20		
Measles vaccination, infants	91	88	89	78	78	83	34		
Full immunization coverage, infants	84	80	81	70	73	80	34		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	60					71	41		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		42	49	58	68	57	13		
ART among HIV+ children under 15 (%)		64	77	81	89	46	8		
PMTCT among HIV+ women who delivered (%)		44	66	90	90	80	8		
HIV testing & counseling 15+ (%)	42	23	22	25	23	54	41		
TB notifications per 100,000 population		218	217	253	236	187	41		
TB treatment success rate (%)		83	88	87		89	31		
Population sleeping under LLITN (%)*		25			40	41	26		
Pregnant women sleeping under LLITN (%)*		44			52	51	29		
IPT 2 or more doses for pregnant women (%)*		36			11	22	34		
Children with fever taken to a health provider (%)*		58			76	72	19		

* 2010 and 2015



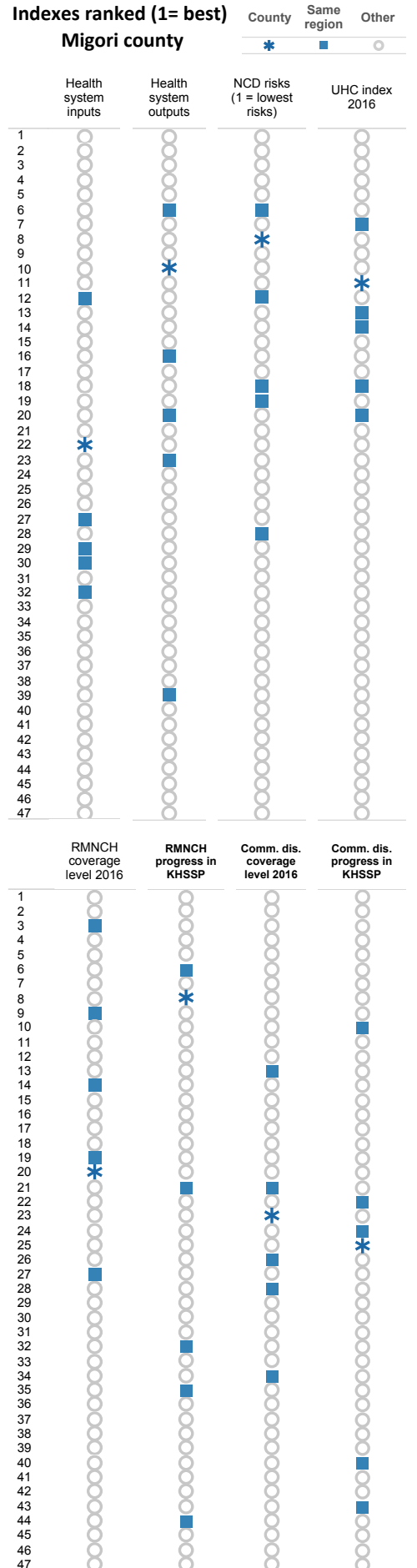
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

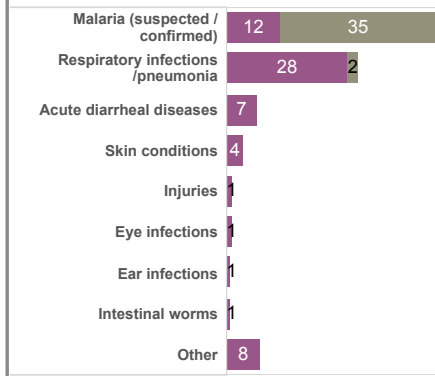
Migori county health statistics profile

Midterm review KHSSP 2014-18, November 2016

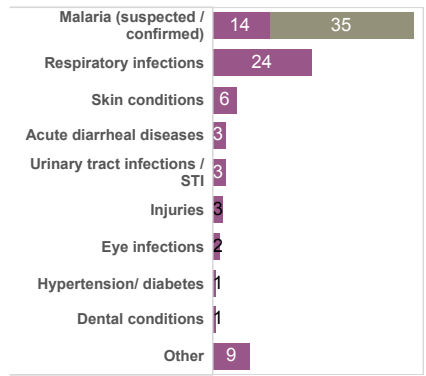
	Performance			Migori rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	1 059 728	44 733 470		
Births 2015/16 (estimated from DHIS)	45 272	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	5.3	3.9	41	
Female education (median years, KDHS 2014)	6.8	7.6	33	
Health service inputs				
Facilities per 10,000 population	2.0	2.2	29	
Facilities that are private for profit (%)	21.0	37.1		
Hospital beds per 10,000 population	14.7	8.8	5	
Core health professionals per 10,000 population (est.)	4.5	9.3	42	
County health budget per capita 2014/15 (KSh)	1027	1442	39	
County health budget per capita 2015/16 (KSh)	1070	1874	46	
Health status				
Under 5 mortality per 1000 live births (census 2009)	173	79	45	
Maternal mortality per 100,000 live births (census 2009)	583	495	36	
Life expectancy males (years) (census 2009)	50	58	41	
Life expectancy females (years) (census 2009)	54	61	40	
HIV prevalence 15 years and over (MOH 2016)	15.1	5.5	44	
HIV prevalence among antenatal women (DHIS 2015/16)	11.7	4.9	44	
TB notifications per 100,000 (DHIS / TIBU 2015)	185	187	26	
Malaria parasite rate in children (MOH 2015)	10-19%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	26.4	26.0	22	
Wasting in children under 5 (%) (KDHS 2014)	4.0	4.0	26	
Underweight in children (%) (KDHS 2014)	8.6	11.0	16	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	26.5	33.6	19	
Obesity, women 15-49 (%)	4.5	10.6	9	
Overweight or obese, men 18-69 years (%)	8.6	17.6	16	
Obesity, men, 18-69 years (%)	0.0	4.3	1	
Tobacco use, men 18-69 (%)	17.1	23.2	16	
Raised blood glucose, both sexes 18-69 (%)	1.4	1.9	23	
Raised blood pressure, both sexes 18-69 (%)	7.8	22.7	2	
Cervical cancer screening, women 30-49 (%)	3.8	17.0	35	



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



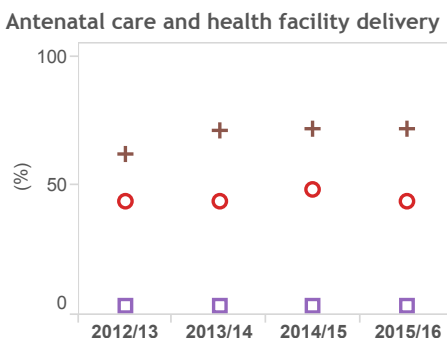
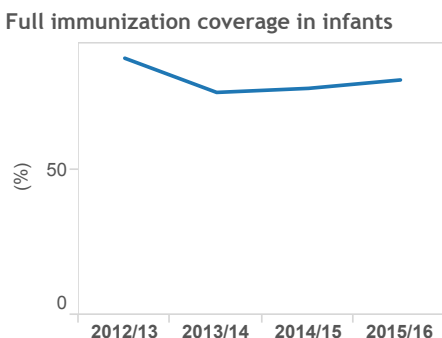
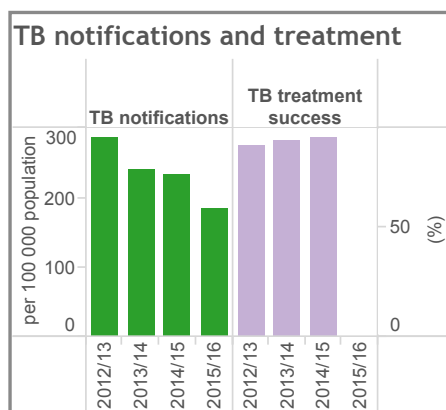
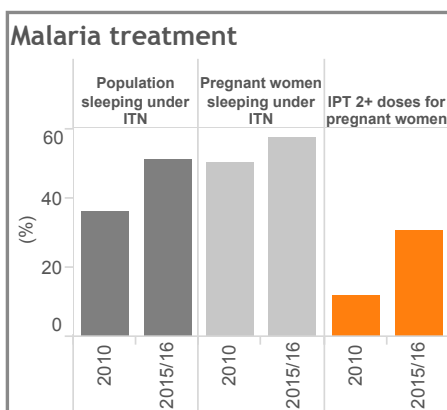
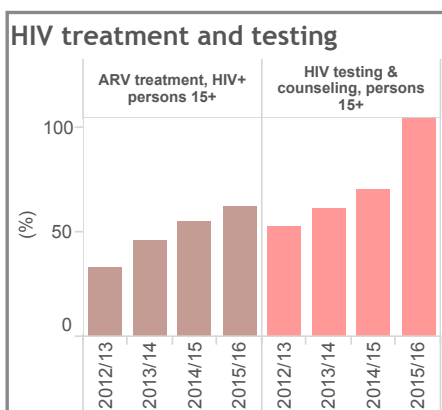
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Migori county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2012/13	2013/14
DHIS Reporting index (%)		79	84	91	92	89	18	Strong progress	Some progress
Inpatient discharges per 100 population		8.1	9.1	8.8	7.7	5.7	42	Some decline	Large decline
Outpatient visits per person per year		1.3	1.7	1.6	1.7	2.0	12	Some decline	Large decline
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	57	51	55	59	66	60	7	Strong progress	Some progress
Antenatal care 4 or more visits (%)		44	44	48	44	49	29	Some decline	Large decline
Delivery in health facility (%)	53	62	71	72	72	72	20	Some decline	Large decline
Caesarean Section in all deliveries (%)	7	3	3	3	3	10	36	Some decline	Large decline
Maternal mortality per 100,000 hospital deliveries		118	66	68	70	106	11	Strong progress	Some progress
Fresh stillbirths per 1,000 births		13	11	9	9	12	9	Strong progress	Some progress
Low birth weight per 100 births in health facilities (%)		2	2	2	4	5	8	Some decline	Large decline
Pentavalent vaccination 3rd dose, infants	90	96	92	86	89	86	11	Some decline	Large decline
Measles vaccination, infants	82	98	82	84	86	83	16	Some decline	Large decline
Full immunization coverage, infants	57	89	77	78	81	80	21	Some decline	Large decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	73					71	26	Some decline	Large decline
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		33	46	55	62	57	21	Strong progress	Some progress
ART among HIV+ children under 15 (%)		31	41	47	52	46	28	Strong progress	Some progress
PMTCT among HIV+ women who delivered (%)		69	87	90	83	80	21	Strong progress	Some progress
HIV testing & counseling 15+ (%)	47	52	62	71	110	54	4	Strong progress	Some progress
TB notifications per 100,000 population		286	240	232	185	187	26	Strong progress	Some progress
TB treatment success rate (%)		87	89	91		89	9	Strong progress	Some progress
Population sleeping under LLITN (%)*		36			51	41	18	Strong progress	Some progress
Pregnant women sleeping under LLITN (%)*		50			57	51	23	Strong progress	Some progress
IPT 2 or more doses for pregnant women (%)*		12			30	22	13	Strong progress	Some progress
Children with fever taken to a health provider (%)*		63			80	72	7	Strong progress	Some progress

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

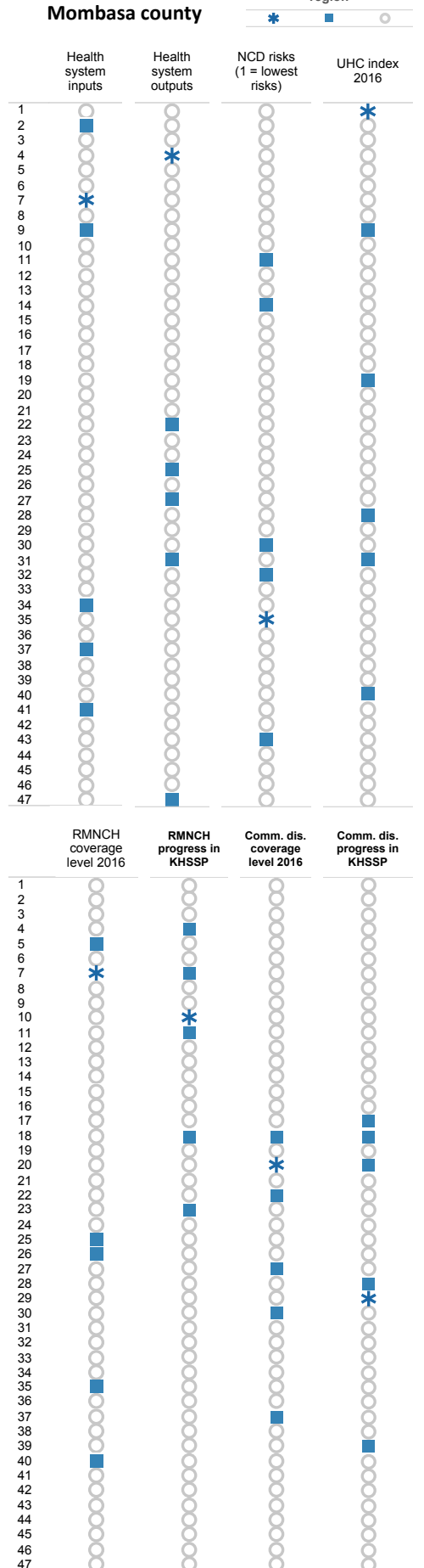
Midterm review KHSSP 2014-18, November 2016

Mombasa county health statistics profile

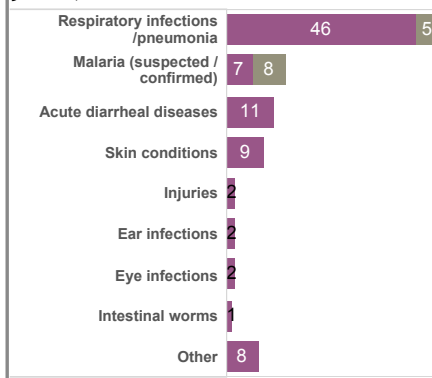
Midterm review KHSSP 2014-18, November 2016

	Performance			Mombasa rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	1 163 878	44 733 470		
Births 2015/16 (estimated from DHIS)	34 350	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	4.3	3.9	25	
Female education (median years, KDHS 2014)	7.9	7.6	7	
Health service inputs				
Facilities per 10,000 population	2.8	2.2	13	
Facilities that are private for profit (%)	74.9	37.1		
Hospital beds per 10,000 population	11.8	8.8	10	
Core health professionals per 10,000 population (est.)	24.5	9.3	2	
County health budget per capita 2014/15 (KSh)	1296	1442	32	
County health budget per capita 2015/16 (KSh)	2363	1874	15	
Health status				
Under 5 mortality per 1000 live births (census 2009)	115	79	37	
Maternal mortality per 100,000 live births (census 2009)	223	495	6	
Life expectancy males (years) (census 2009)	57	58	20	
Life expectancy females (years) (census 2009)	56	61	32	
HIV prevalence 15 years and over (MOH 2016)	7.5	5.5	43	
HIV prevalence among antenatal women (DHIS 2015/16)	6.1	4.9	42	
TB notifications per 100,000 (DHIS / TIBU 2015)	372	187	47	
Malaria parasite rate in children (MOH 2015)	5-9%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	21.1	26.0	11	
Wasting in children under 5 (%) (KDHS 2014)	4.1	4.0	27	
Underweight in children (%) (KDHS 2014)	9.6	11.0	19	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	48.7	33.6	44	
Obesity, women 15-49 (%)	21.4	10.6	46	
Overweight or obese, men 18-69 years (%)	29.2	17.6	42	
Obesity, men, 18-69 years (%)	7.8	4.3	39	
Tobacco use, men 18-69 (%)	20.1	23.2	21	
Raised blood glucose, both sexes 18-69 (%)	2.2	1.9	34	
Raised blood pressure, both sexes 18-69 (%)	17.2	22.7	15	
Cervical cancer screening, women 30-49 (%)	54.0	17.0	1	

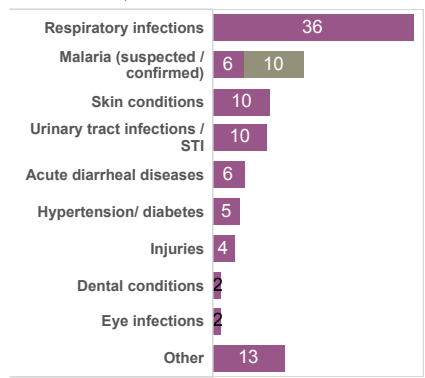
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



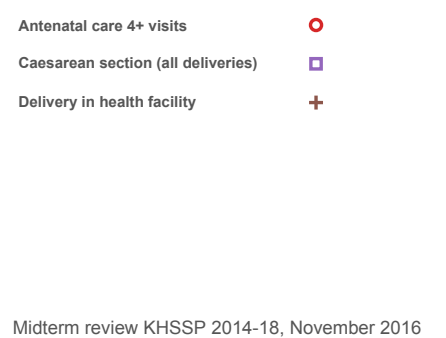
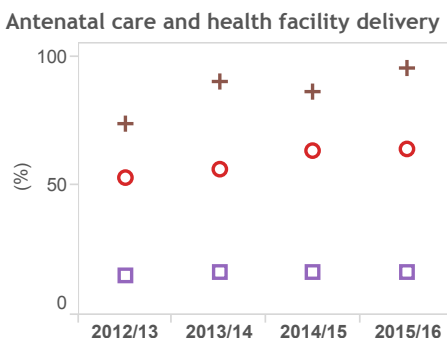
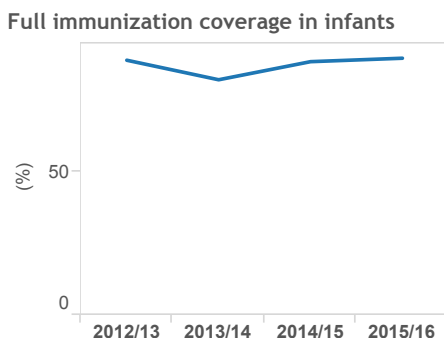
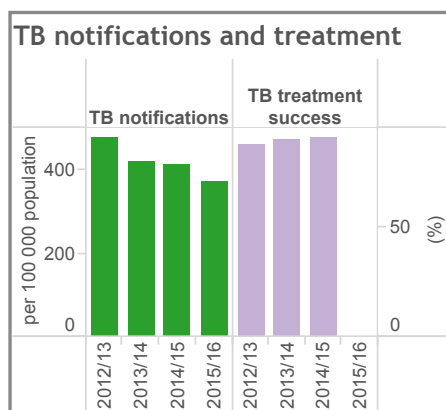
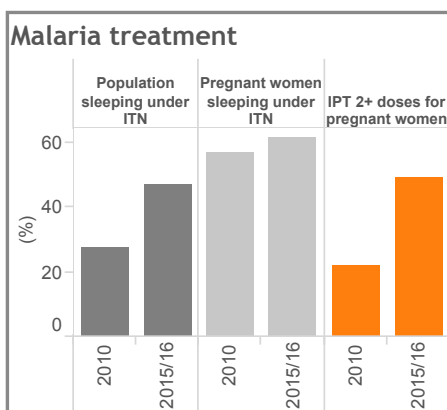
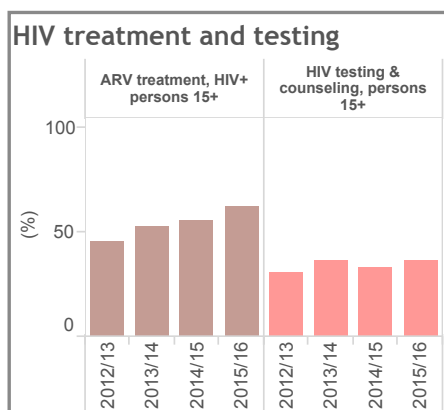
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Mombasa county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		69	77	84	85	89	37						
Inpatient discharges per 100 population		10.8	10.3	10.5	11.4	5.7	45						
Outpatient visits per person per year		3.0	2.8	2.5	2.6	2.0	38						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	57	55	55	55	52	60	35						
Antenatal care 4 or more visits (%)		53	56	63	64	49	5						
Delivery in health facility (%)	82	74	90	86	95	72	3						
Caesarean Section in all deliveries (%)	13	15	16	16	16	10	8						
Maternal mortality per 100,000 hospital deliveries		256	231	170	180	106	40						
Fresh stillbirths per 1,000 births		25	20	18	16	12	37						
Low birth weight per 100 births in health facilities (%)		8	6	6	8	5	43						
Pentavalent vaccination 3rd dose, infants	96	93	90	93	96	86	2						
Measles vaccination, infants	89	89	80	88	90	83	11						
Full immunization coverage, infants	79	89	82	88	89	80	9						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	82					71	7						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		45	53	56	62	57	22						
ART among HIV+ children under 15 (%)		64	74	78	80	46	14						
PMTCT among HIV+ women who delivered (%)		64	88	92	85	80	18						
HIV testing & counseling 15+ (%)	48	31	37	33	37	54	25						
TB notifications per 100,000 population		479	421	412	372	187	47						
TB treatment success rate (%)		88	90	91		89	12						
Population sleeping under LLITN (%)*		28			47	41	21						
Pregnant women sleeping under LLITN (%)*		57			61	51	17						
IPT 2 or more doses for pregnant women (%)*		22			49	22	6						
Children with fever taken to a health provider (%)*		66			84	72	2						

* 2010 and 2015



Midterm review KHSSP 2014-18, November 2016

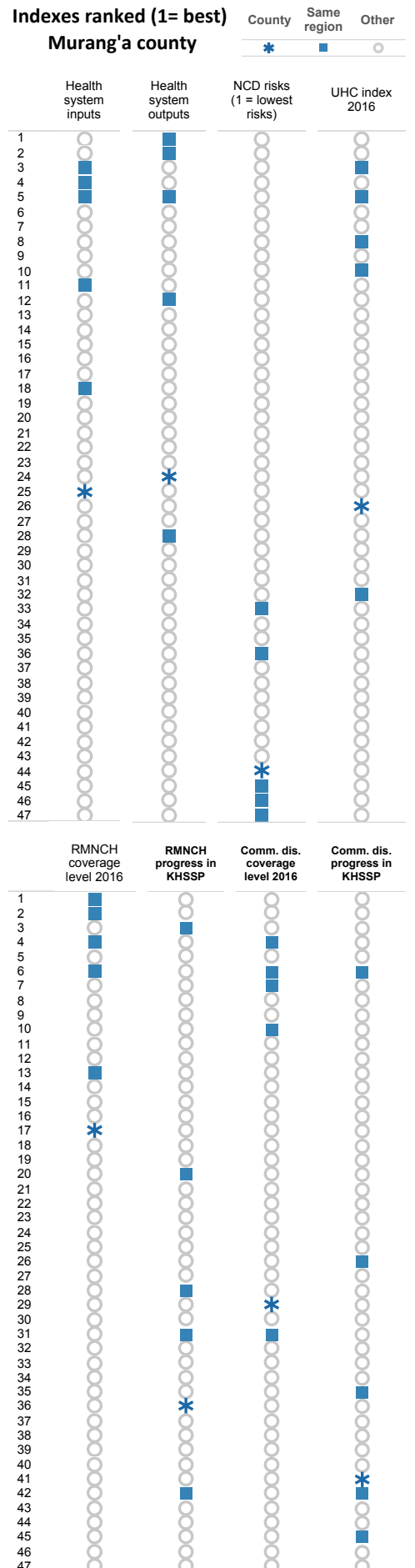
Murang'a county health statistics profile

Midterm review KHSSP 2014-18, November 2016

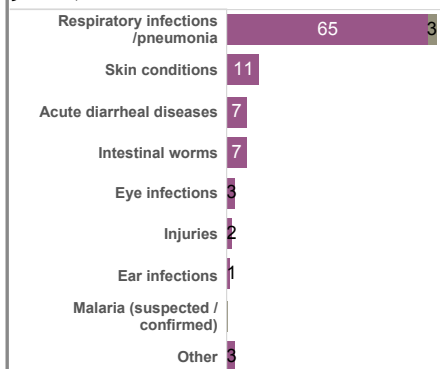
	Highest	Higher than average	Average	Lower than average	Lowest
	Murang'a		Kenya	Murang'a rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	1 073 861	44 733 470			
Births 2015/16 (estimated from DHIS)	23 403	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.0	3.9	5		
Female education (median years, KDHS 2014)	7.9	7.6	7		
Health service inputs					
Facilities per 10,000 population	2.4	2.2	20		
Facilities that are private for profit (%)	40.4	37.1			
Hospital beds per 10,000 population	6.9	8.8	30		
Core health professionals per 10,000 population (est.)	5.4	9.3	31		
County health budget per capita 2014/15 (KSh)	1193	1442	33		
County health budget per capita 2015/16 (KSh)	1447	1874	37		
Health status					
Under 5 mortality per 1000 live births (census 2009)	50	79	5		
Maternal mortality per 100,000 live births (census 2009)	329	495	21		
Life expectancy males (years) (census 2009)	60	58	11		
Life expectancy females (years) (census 2009)	62	61	17		
HIV prevalence 15 years and over (MOH 2016)	4.4	5.5	34		
HIV prevalence among antenatal women (DHIS 2015/16)	2.2	4.9	11		
TB notifications per 100,000 (DHIS / TIBU 2015)	180	187	25		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	19.3	26.0	10		
Wasting in children under 5 (%) (KDHS 2014)	1.4	4.0	3		
Underweight in children (%) (KDHS 2014)	5.6	11.0	5		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	48.9	33.6	45		
Obesity, women 15-49 (%)	18.1	10.6	44		
Overweight or obese, men 18-69 years (%)	20.1	17.6	33		
Obesity, men, 18-69 years (%)	7.0	4.3	36		
Tobacco use, men 18-69 (%)	35.7	23.2	36		
Raised blood glucose, both sexes 18-69 (%)	4.1	1.9	42		
Raised blood pressure, both sexes 18-69 (%)	38.4	22.7	45		
Cervical cancer screening, women 30-49 (%)	18.4	17.0	15		

Indexes ranked (1= best)

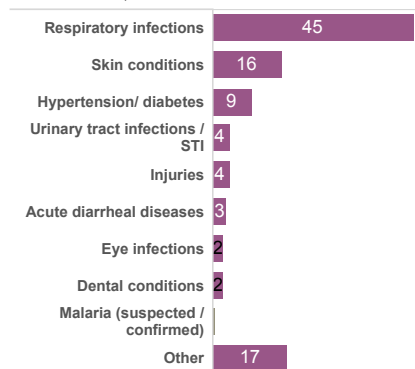
Murang'a county



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



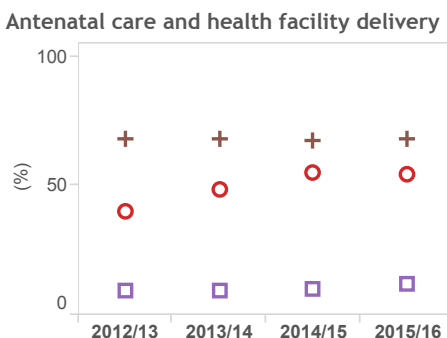
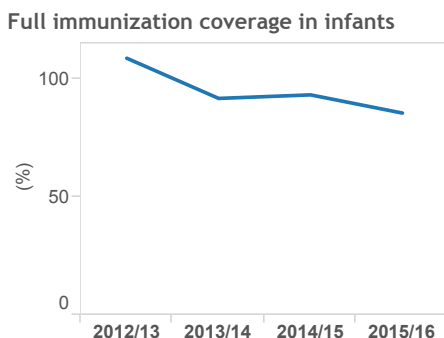
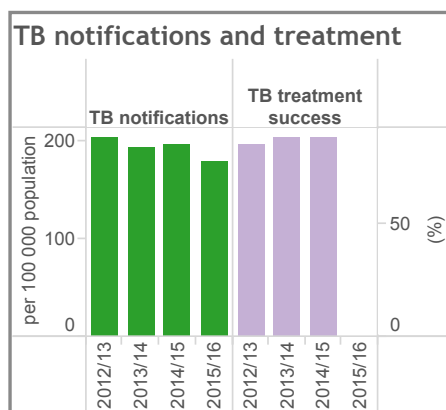
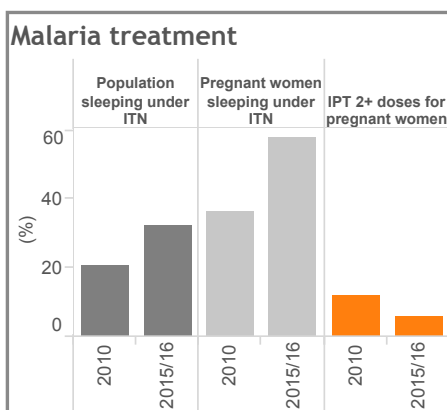
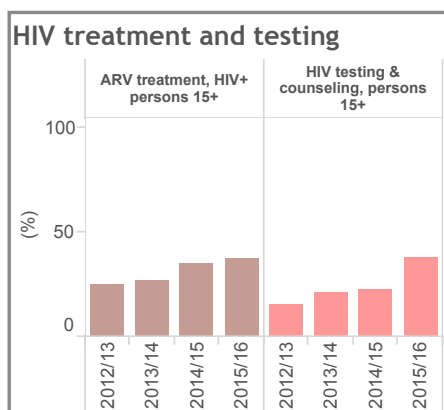
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Murang'a county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		81	83	92	94	89	12						
Inpatient discharges per 100 population		3.4	3.5	4.2	3.9	5.7	14						
Outpatient visits per person per year		1.8	2.6	2.9	2.7	2.0	40						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	40	61	63	64	62	60	16						
Antenatal care 4 or more visits (%)		40	48	55	54	49	13						
Delivery in health facility (%)	85	68	68	67	68	72	21						
Caesarean Section in all deliveries (%)	12	9	9	10	12	10	10						
Maternal mortality per 100,000 hospital deliveries		69	74	65	76	106	17						
Fresh stillbirths per 1,000 births		11	10	11	8	12	5						
Low birth weight per 100 births in health facilities (%)		5	6	5	4	5	8						
Pentavalent vaccination 3rd dose, infants	90	105	95	91	84	86	23						
Measles vaccination, infants	97	109	95	94	86	83	18						
Full immunization coverage, infants	86	109	92	93	85	80	14						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	76					71	18						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		25	27	35	37	57	37						
ART among HIV+ children under 15 (%)		60	63	73	71	46	19						
PMTCT among HIV+ women who delivered (%)		93	108	98	82	80	24						
HIV testing & counseling 15+ (%)	49	16	21	23	38	54	21						
TB notifications per 100,000 population		203	194	197	180	187	25						
TB treatment success rate (%)		85	88	88		89	27						
Population sleeping under LLITN (%)*		21			32	41	33						
Pregnant women sleeping under LLITN (%)*		37			58	51	22						
IPT 2 or more doses for pregnant women (%)*		12			6	22	45						
Children with fever taken to a health provider (%)*		44			80	72	5						

* 2010 and 2015



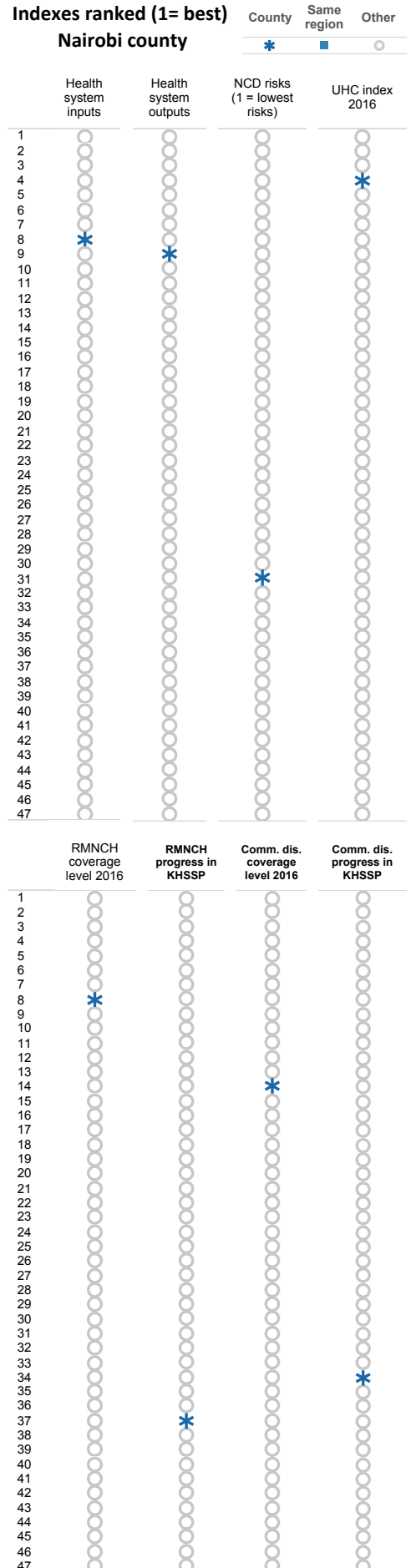
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

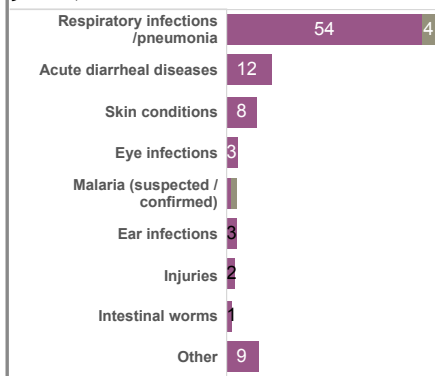
Nairobi county health statistics profile

Midterm review KHSSP 2014-18, November 2016

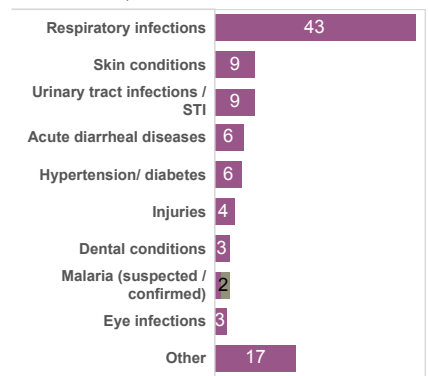
	Performance			Nairobi rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	4 337 803	44 733 470		
Births 2015/16 (estimated from DHIS)	144 523	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	2.7	3.9	2	
Female education (median years, KDHS 2014)	11.0	7.6	1	
Health service inputs				
Facilities per 10,000 population	2.1	2.2	26	
Facilities that are private for profit (%)	59.8	37.1		
Hospital beds per 10,000 population	9.2	8.8	22	
Core health professionals per 10,000 population (est.)	25.2	9.3	1	
County health budget per capita 2014/15 (KSh)	1491	1442	22	
County health budget per capita 2015/16 (KSh)	1569	1874	35	
Health status				
Under 5 mortality per 1000 live births (census 2009)	56	79	11	
Maternal mortality per 100,000 live births (census 2009)	212	495	4	
Life expectancy males (years) (census 2009)	62	58	6	
Life expectancy females (years) (census 2009)	63	61	16	
HIV prevalence 15 years and over (MOH 2016)	5.9	5.5	39	
HIV prevalence among antenatal women (DHIS 2015/16)	5.9	4.9	41	
TB notifications per 100,000 (DHIS / TIBU 2015)	298	187	45	
Malaria parasite rate in children (MOH 2015)	<1%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	17.2	26.0	4	
Wasting in children under 5 (%) (KDHS 2014)	2.5	4.0	15	
Underweight in children (%) (KDHS 2014)	3.8	11.0	2	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	47.8	33.6	43	
Obesity, women 15-49 (%)	16.6	10.6	40	
Overweight or obese, men 18-69 years (%)	20.0	17.6	31	
Obesity, men, 18-69 years (%)	4.9	4.3	33	
Tobacco use, men 18-69 (%)	25.6	23.2	28	
Raised blood glucose, both sexes 18-69 (%)	3.3	1.9	39	
Raised blood pressure, both sexes 18-69 (%)	17.7	22.7	16	
Cervical cancer screening, women 30-49 (%)	24.1	17.0	10	



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



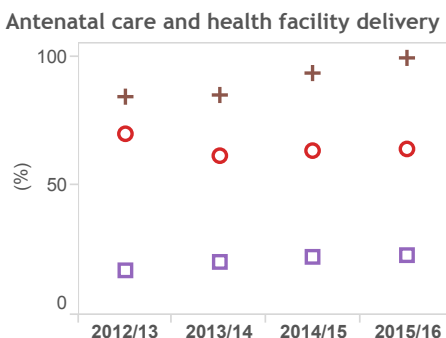
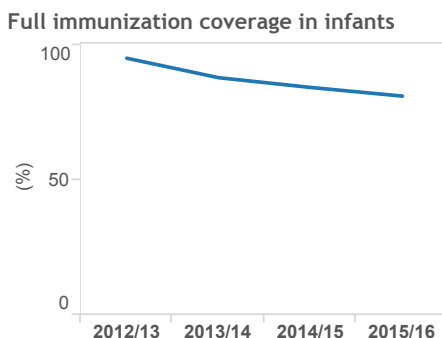
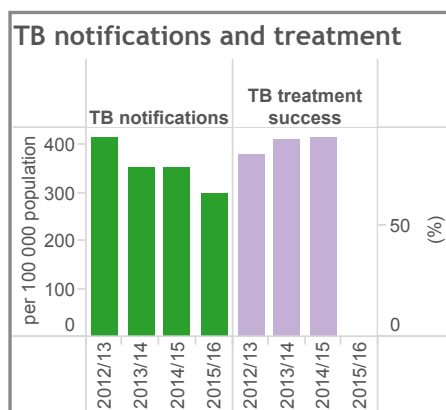
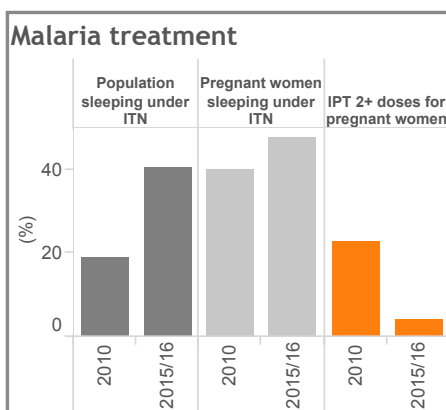
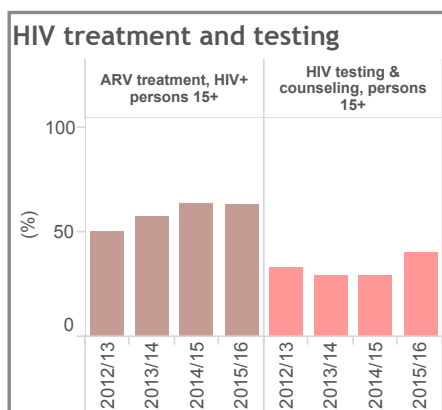
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Nairobi county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
Reproductive, maternal, newborn and child health								
DHIS Reporting index (%)		61	68	71	75	89	43	
Inpatient discharges per 100 population		6.5	6.3	7.5	5.9	5.7	30	
Outpatient visits per person per year		2.3	2.3	2.5	2.6	2.0	38	
Modern contraceptive use, women 15-49	11	60	61	60	58	60	25	
Antenatal care 4 or more visits (%)		70	61	63	64	49	5	
Delivery in health facility (%)	89	84	85	93	99	72	2	
Caesarean Section in all deliveries (%)	20	17	20	22	23	10	2	
Maternal mortality per 100,000 hospital deliveries		116	169	144	137	106	38	
Fresh stillbirths per 1,000 births		15	6	10	6	12	2	
Low birth weight per 100 births in health facilities (%)		4	5	5	5	5	23	
Pentavalent vaccination 3rd dose, infants	88	94	91	91	93	86	3	
Measles vaccination, infants	93	96	92	91	88	83	12	
Full immunization coverage, infants	74	95	88	84	81	80	22	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	78					71	15	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		50	57	64	63	57	20	
ART among HIV+ children under 15 (%)		140	122	128	99	46	5	
PMTCT among HIV+ women who delivered (%)		76	83	72	86	80	16	
HIV testing & counseling 15+ (%)	49	33	29	29	40	54	18	
TB notifications per 100,000 population		415	350	351	298	187	45	
TB treatment success rate (%)		82	89	90		89	19	
Population sleeping under LLITN (%)*		19			40	41	27	
Pregnant women sleeping under LLITN (%)*		40			48	51	35	
IPT 2 or more doses for pregnant women (%)*		23			4	22	47	
Children with fever taken to a health provider (%)*		61			71	72	31	

* 2010 and 2015



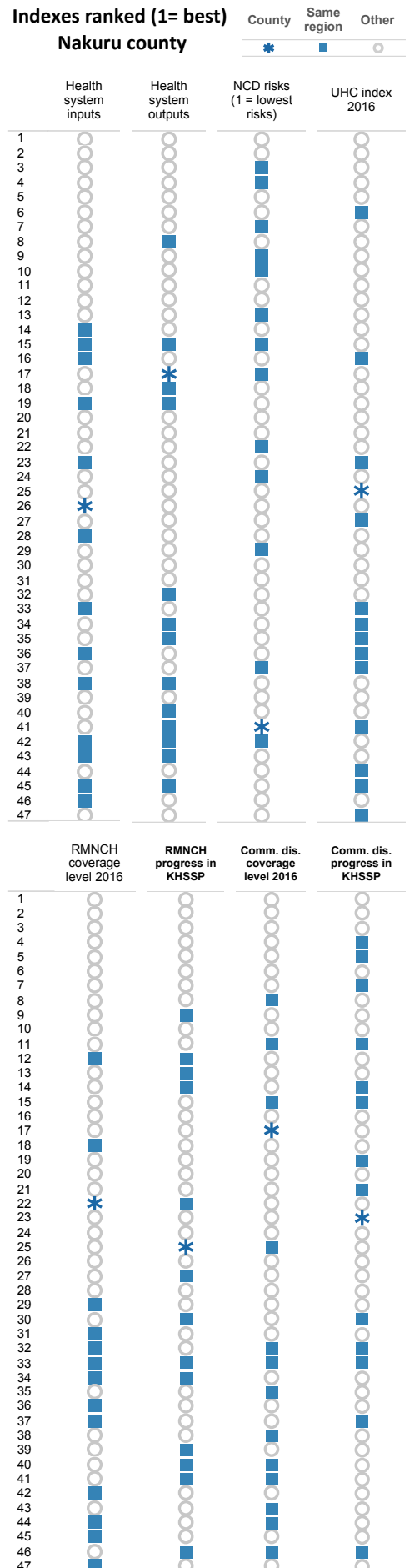
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

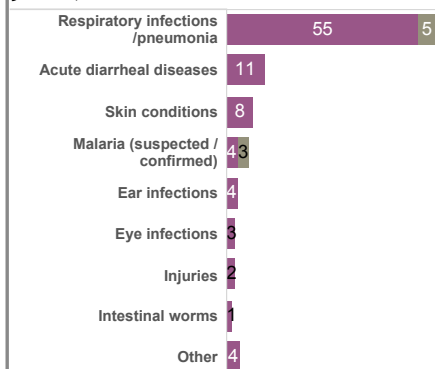
Nakuru county health statistics profile

Midterm review KHSSP 2014-18, November 2016

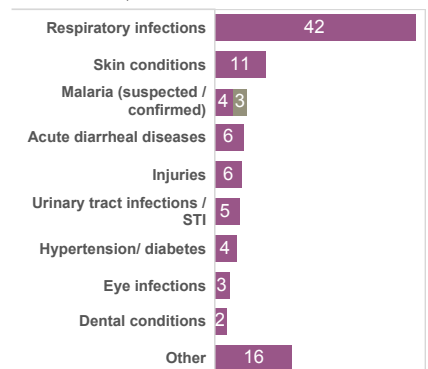
	Highest	Higher than average	Average	Lower than average	Lowest
	Nakuru		Kenya	Nakuru rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	1 993 009	44 733 470			
Births 2015/16 (estimated from DHIS)	64 965	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.7	3.9	17		
Female education (median years, KDHS 2014)	8.3	7.6	5		
Health service inputs					
Facilities per 10,000 population	2.1	2.2	26		
Facilities that are private for profit (%)	44.3	37.1			
Hospital beds per 10,000 population	10.5	8.8	16		
Core health professionals per 10,000 population (est.)	10.7	9.3	10		
County health budget per capita 2014/15 (KSh)	1610	1442	18		
County health budget per capita 2015/16 (KSh)	2114	1874	20		
Health status					
Under 5 mortality per 1000 live births (census 2009)	80	79	30		
Maternal mortality per 100,000 live births (census 2009)	191	495	2		
Life expectancy males (years) (census 2009)	52	58	38		
Life expectancy females (years) (census 2009)	55	61	35		
HIV prevalence 15 years and over (MOH 2016)	4.9	5.5	37		
HIV prevalence among antenatal women (DHIS 2015/16)	3.7	4.9	35		
TB notifications per 100,000 (DHIS / TIBU 2015)	188	187	29		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	27.6	26.0	28		
Wasting in children under 5 (%) (KDHS 2014)	4.5	4.0	34		
Underweight in children (%) (KDHS 2014)	10.2	11.0	22		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	40.0	33.6	37		
Obesity, women 15-49 (%)	9.4	10.6	33		
Overweight or obese, men 18-69 years (%)	31.9	17.6	44		
Obesity, men, 18-69 years (%)	9.5	4.3	42		
Tobacco use, men 18-69 (%)	17.6	23.2	17		
Raised blood glucose, both sexes 18-69 (%)	0.0	1.9	1		
Raised blood pressure, both sexes 18-69 (%)	33.2	22.7	40		
Cervical cancer screening, women 30-49 (%)	13.8	17.0	19		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



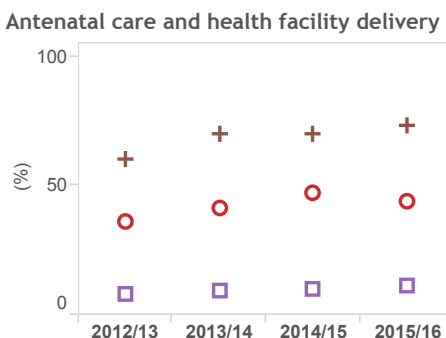
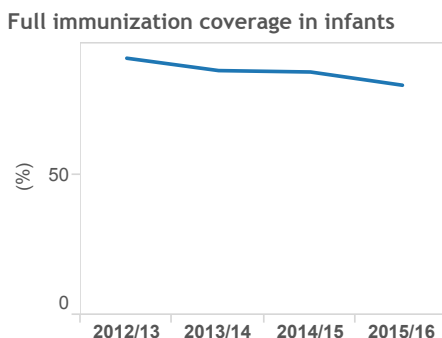
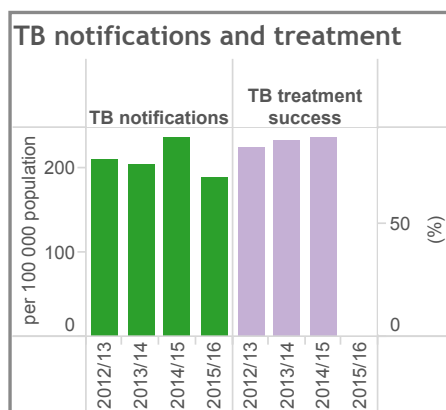
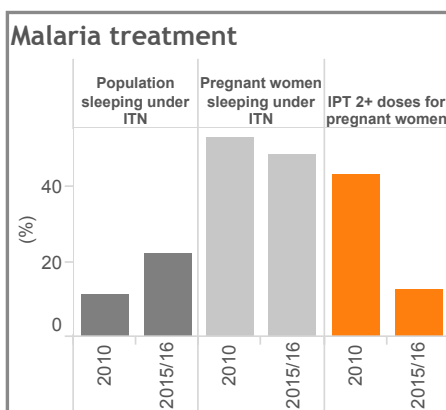
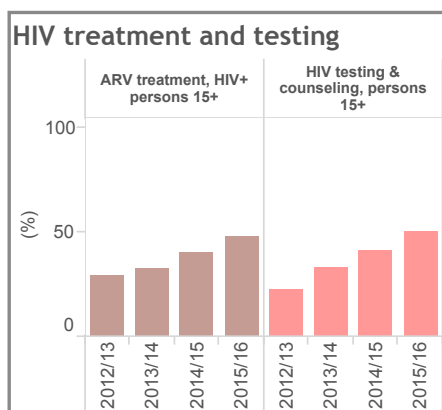
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Nakuru county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
Reproductive, maternal, newborn and child health								
DHIS Reporting index (%)		73	80	88	93	89	14	Strong progress
Inpatient discharges per 100 population		6.2	6.5	6.7	6.3	5.7	33	Some decline
Outpatient visits per person per year		1.6	1.9	2.0	1.8	2.0	17	Some decline
Modern contraceptive use, women 15-49	68	56	58	60	59	60	24	Some decline
Antenatal care 4 or more visits (%)		36	41	47	44	49	29	Some decline
Delivery in health facility (%)	70	60	70	70	73	72	19	Some decline
Caesarean Section in all deliveries (%)	7	8	9	10	11	10	12	Strong progress
Maternal mortality per 100,000 hospital deliveries		111	88	101	98	106	25	Some decline
Fresh stillbirths per 1,000 births		14	19	10	10	12	12	Strong progress
Low birth weight per 100 births in health facilities (%)		4	4	4	4	5	8	Some decline
Pentavalent vaccination 3rd dose, infants	91	93	94	93	91	86	9	Some decline
Measles vaccination, infants	86	97	90	90	85	83	20	Some decline
Full immunization coverage, infants	75	91	87	86	82	80	20	Some decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	74					71	25	Some decline
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		29	32	40	47	57	29	Strong progress
ART among HIV+ children under 15 (%)		34	39	47	58	46	24	Strong progress
PMTCT among HIV+ women who delivered (%)		73	83	98	94	80	3	Strong progress
HIV testing & counseling 15+ (%)	59	23	33	41	50	54	10	Strong progress
TB notifications per 100,000 population		211	205	236	188	187	29	Some decline
TB treatment success rate (%)		84	87	89		89	26	Some decline
Population sleeping under LLITN (%)*		11			22	41	39	Strong progress
Pregnant women sleeping under LLITN (%)*		53			49	51	33	Some decline
IPT 2 or more doses for pregnant women (%)*		44			13	22	29	Some decline
Children with fever taken to a health provider (%)*		68			74	72	26	Strong progress

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

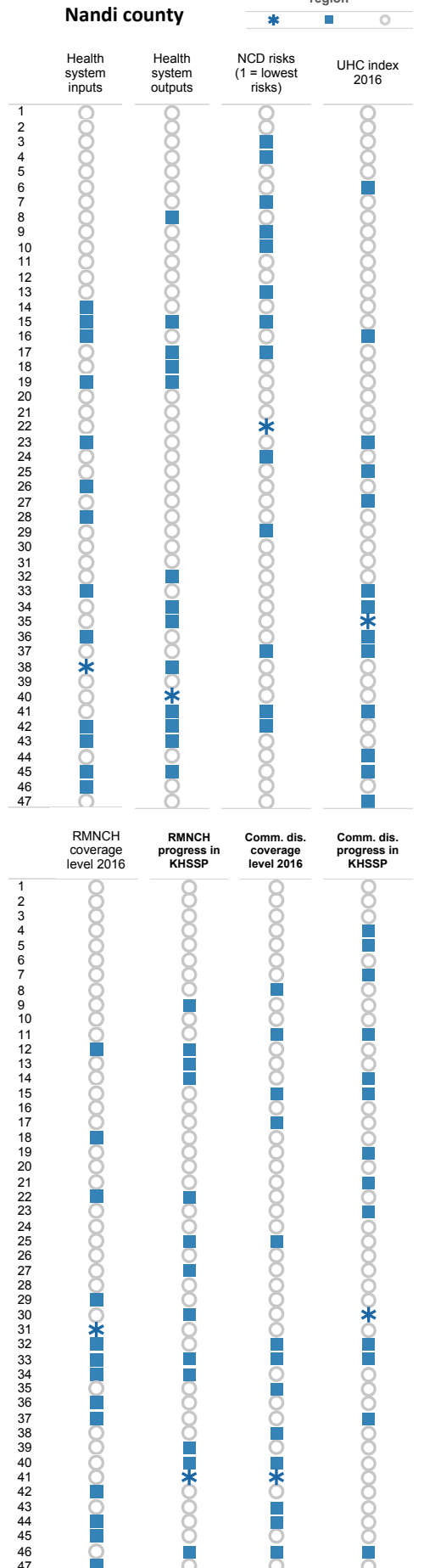
Midterm review KHSSP 2014-18, November 2016

Nandi county health statistics profile

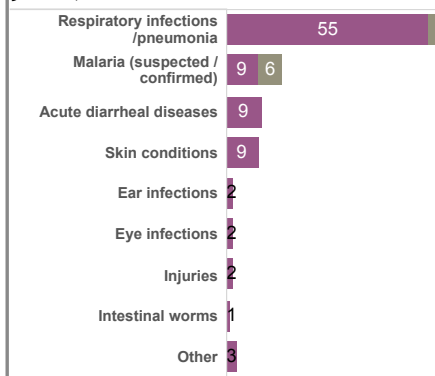
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Nandi		Kenya	Nandi rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	936 004	44 733 470			
Births 2015/16 (estimated from DHIS)	25 397	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	4.0	3.9	21		
Female education (median years, KDHS 2014)	7.4	7.6	22		
Health service inputs					
Facilities per 10,000 population	1.8	2.2	31		
Facilities that are private for profit (%)	11.9	37.1			
Hospital beds per 10,000 population	3.8	8.8	42		
Core health professionals per 10,000 population (est.)	4.9	9.3	39		
County health budget per capita 2014/15 (KSh)	1170	1442	34		
County health budget per capita 2015/16 (KSh)	1699	1874	33		
Health status					
Under 5 mortality per 1000 live births (census 2009)	49	79	3		
Maternal mortality per 100,000 live births (census 2009)	221	495	5		
Life expectancy males (years) (census 2009)	56	58	25		
Life expectancy females (years) (census 2009)	57	61	29		
HIV prevalence 15 years and over (MOH 2016)	3.9	5.5	25		
HIV prevalence among antenatal women (DHIS 2015/16)	2.9	4.9	20		
TB notifications per 100,000 (DHIS / TIBU 2015)	79	187	1		
Malaria parasite rate in children (MOH 2015)	5-9%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	29.9	26.0	37		
Wasting in children under 5 (%) (KDHS 2014)	3.9	4.0	23		
Underweight in children (%) (KDHS 2014)	11.1	11.0	25		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	25.2	33.6	17		
Obesity, women 15-49 (%)	7.1	10.6	21		
Overweight or obese, men 18-69 years (%)	10.9	17.6	19		
Obesity, men, 18-69 years (%)	0.7	4.3	14		
Tobacco use, men 18-69 (%)	19.4	23.2	20		
Raised blood glucose, both sexes 18-69 (%)	2.8	1.9	37		
Raised blood pressure, both sexes 18-69 (%)	29.0	22.7	39		
Cervical cancer screening, women 30-49 (%)	3.4	17.0	37		

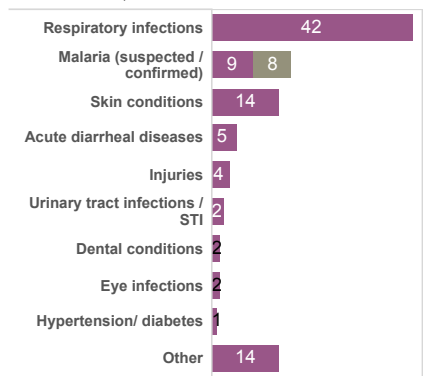
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



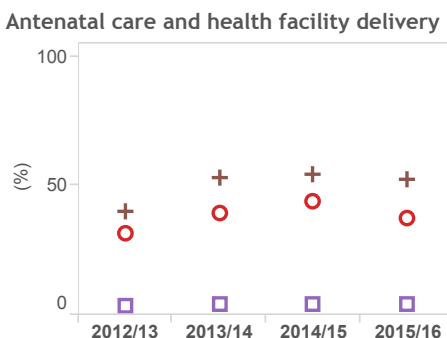
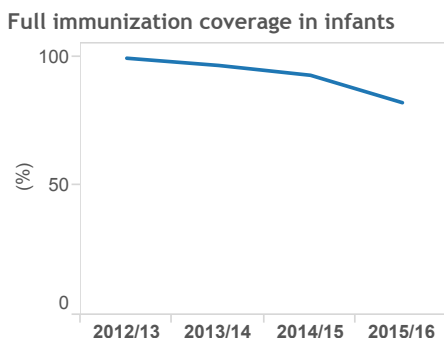
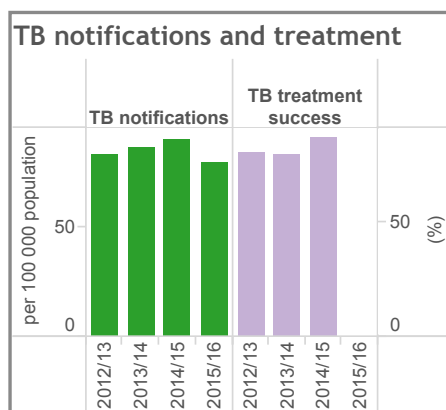
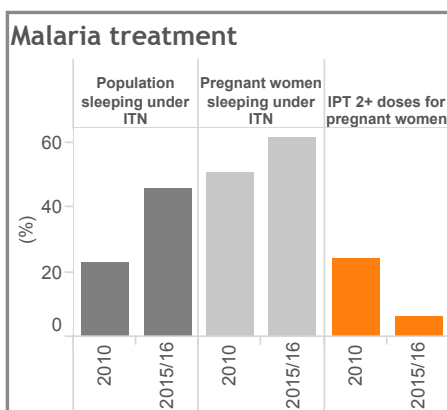
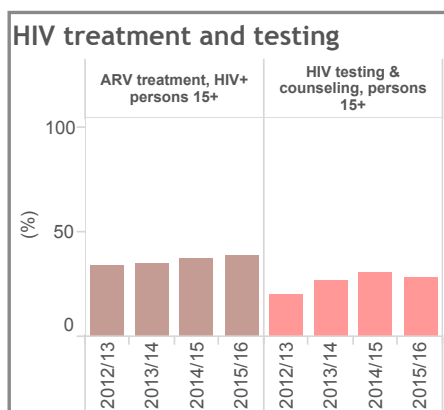
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Nandi county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
Reproductive, maternal, newborn and child health								
DHIS Reporting index (%)		78	85	92	92	89	21	
Inpatient discharges per 100 population		2.8	2.9	3.1	2.8	5.7	7	
Outpatient visits per person per year		1.5	2.2	2.0	1.6	2.0	10	
Modern contraceptive use, women 15-49	73	56	59	62	60	60	21	
Antenatal care 4 or more visits (%)		31	39	44	37	49	39	
Delivery in health facility (%)	47	40	53	54	52	72	39	
Caesarean Section in all deliveries (%)	3	3	4	4	4	10	31	
Maternal mortality per 100,000 hospital deliveries		87	100	67	94	106	22	
Fresh stillbirths per 1,000 births		46	16	16	18	12	40	
Low birth weight per 100 births in health facilities (%)		5	5	6	5	5	23	
Pentavalent vaccination 3rd dose, infants	99	101	100	94	79	86	41	
Measles vaccination, infants	98	103	99	95	80	83	29	
Full immunization coverage, infants	96	99	97	93	82	80	19	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	67					71	36	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		34	35	37	38	57	36	
ART among HIV+ children under 15 (%)		34	39	42	48	46	32	
PMTCT among HIV+ women who delivered (%)		36	54	82	75	80	32	
HIV testing & counseling 15+ (%)	43	20	27	31	28	54	36	
TB notifications per 100,000 population		83	86	90	79	187	1	
TB treatment success rate (%)		80	79	87		89	35	
Population sleeping under LLITN (%)*		23			46	41	23	
Pregnant women sleeping under LLITN (%)*		50			62	51	16	
IPT 2 or more doses for pregnant women (%)*		24			6	22	44	
Children with fever taken to a health provider (%)*		63			65	72	44	

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

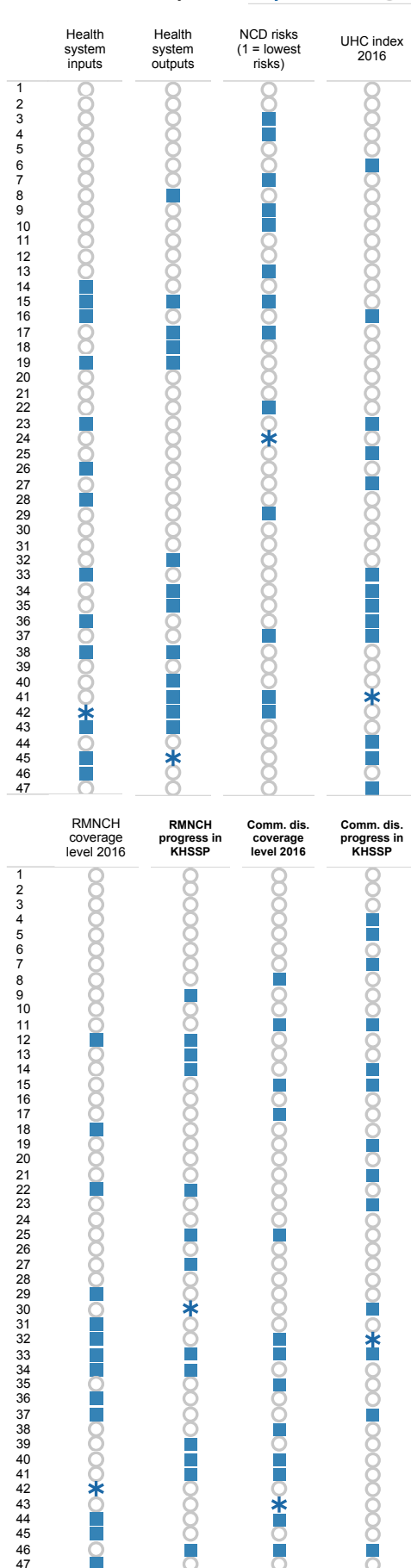
Midterm review KHSSP 2014-18, November 2016

Narok county health statistics profile

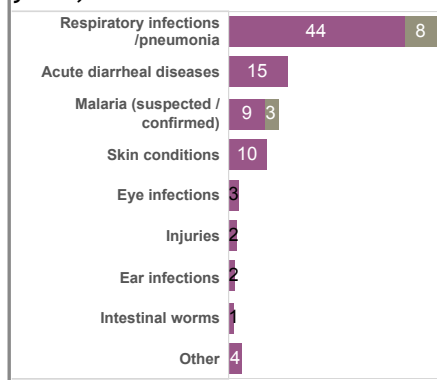
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Narok		Kenya	Narok rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	1 057 414	44 733 470			
Births 2015/16 (estimated from DHIS)	44 792	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	6.0	3.9	42		
Female education (median years, KDHS 2014)	6.6	7.6	34		
Health service inputs					
Facilities per 10,000 population	1.5	2.2	37		
Facilities that are private for profit (%)	13.3	37.1			
Hospital beds per 10,000 population	4.1	8.8	40		
Core health professionals per 10,000 population (est.)	4.2	9.3	43		
County health budget per capita 2014/15 (KSh)	1170	1442	34		
County health budget per capita 2015/16 (KSh)	1178	1874	43		
Health status					
Under 5 mortality per 1000 live births (census 2009)	58	79	14		
Maternal mortality per 100,000 live births (census 2009)	299	495	16		
Life expectancy males (years) (census 2009)	61	58	9		
Life expectancy females (years) (census 2009)	67	61	5		
HIV prevalence 15 years and over (MOH 2016)	4.8	5.5	36		
HIV prevalence among antenatal women (DHIS 2015/16)	1.9	4.9	9		
TB notifications per 100,000 (DHIS / TIBU 2015)	157	187	20		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	32.9	26.0	41		
Wasting in children under 5 (%) (KDHS 2014)	2.4	4.0	13		
Underweight in children (%) (KDHS 2014)	11.6	11.0	28		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	29.2	33.6	21		
Obesity, women 15-49 (%)	9.3	10.6	31		
Overweight or obese, men 18-69 years (%)	32.9	17.6	45		
Obesity, men, 18-69 years (%)	11.0	4.3	43		
Tobacco use, men 18-69 (%)	12.0	23.2	9		
Raised blood glucose, both sexes 18-69 (%)	0.0	1.9	1		
Raised blood pressure, both sexes 18-69 (%)	20.6	22.7	22		
Cervical cancer screening, women 30-49 (%)	2.6	17.0	40		

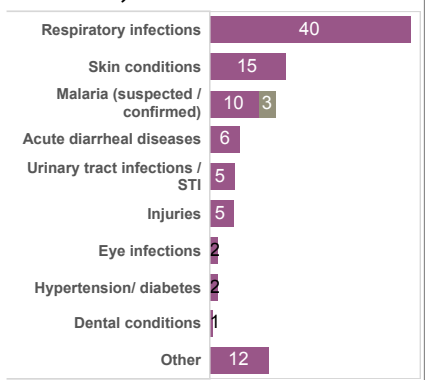
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



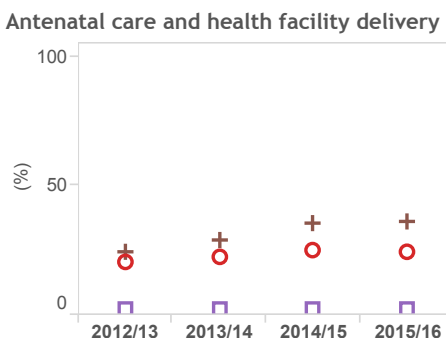
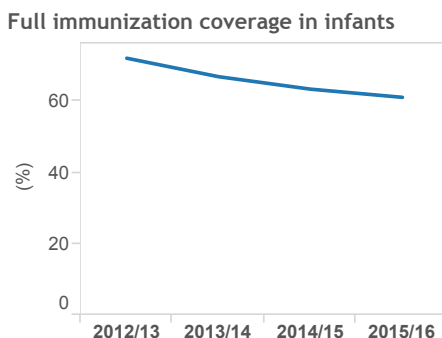
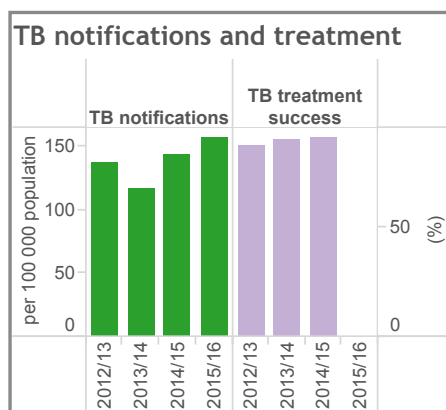
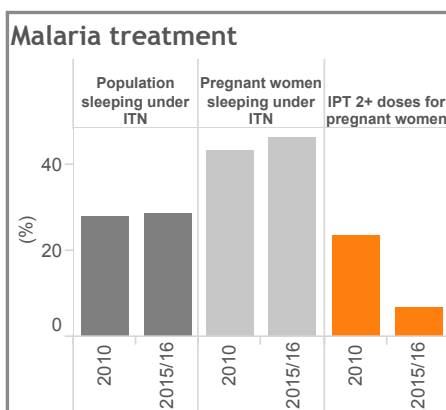
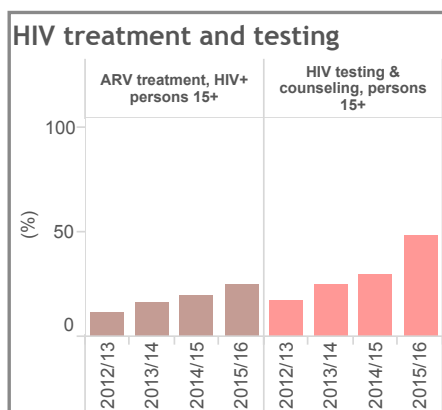
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Narok county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		67	73	81	88	89	31		
Inpatient discharges per 100 population		2.9	3.1	3.3	2.6	5.7	4		
Outpatient visits per person per year		1.3	1.2	1.3	1.1	2.0	3		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	6	45	46	46	47	60	36		
Antenatal care 4 or more visits (%)		20	22	25	24	49	46		
Delivery in health facility (%)	39	24	29	35	36	72	47		
Caesarean Section in all deliveries (%)	5	2	2	2	2	10	44		
Maternal mortality per 100,000 hospital deliveries		154	104	67	63	106	7		
Fresh stillbirths per 1,000 births		21	14	14	33	12	47		
Low birth weight per 100 births in health facilities (%)		5	4	3	3	5	5		
Pentavalent vaccination 3rd dose, infants	83	87	95	86	82	86	31		
Measles vaccination, infants	75	84	76	75	68	83	43		
Full immunization coverage, infants	59	72	67	64	61	80	44		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	58					71	43		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		11	16	20	25	57	44		
ART among HIV+ children under 15 (%)		10	17	20	28	46	42		
PMTCT among HIV+ women who delivered (%)		55	53	68	71	80	34		
HIV testing & counseling 15+ (%)	53	17	25	30	48	54	11		
TB notifications per 100,000 population		137	117	144	157	187	20		
TB treatment success rate (%)		87	90	91		89	13		
Population sleeping under LLITN (%)*		28			29	41	37		
Pregnant women sleeping under LLITN (%)*		43			46	51	36		
IPT 2 or more doses for pregnant women (%)*		24			7	22	41		
Children with fever taken to a health provider (%)*		57			78	72	11		

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

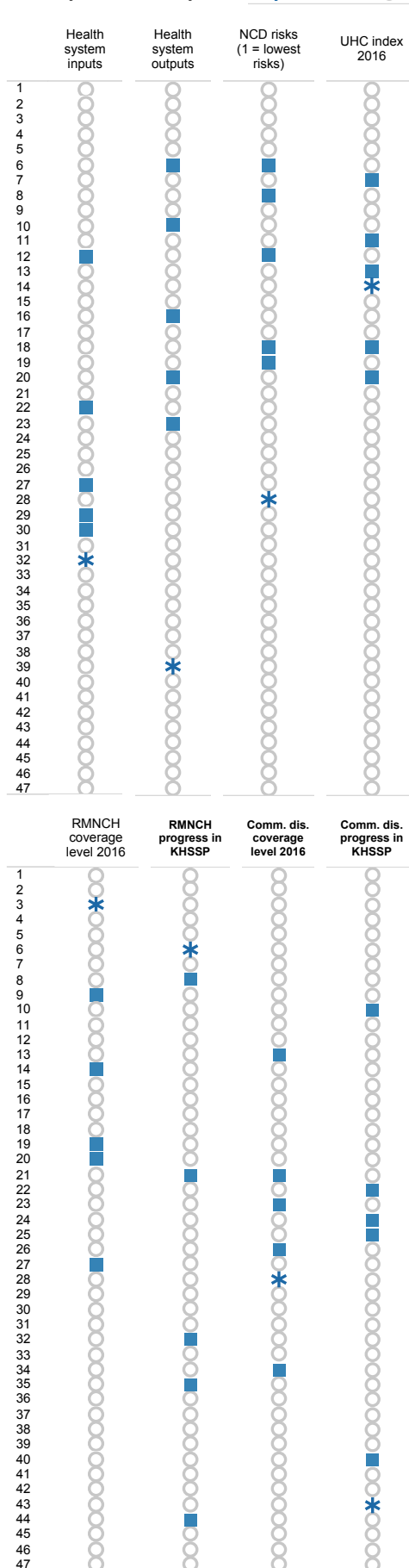
Midterm review KHSSP 2014-18, November 2016

Nyamira county health statistics profile

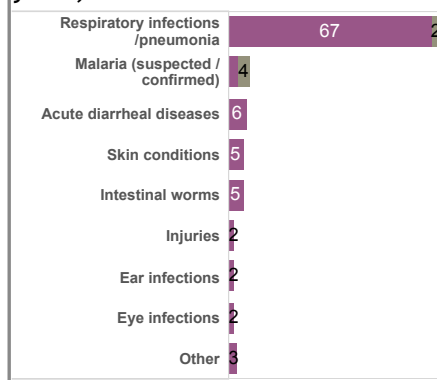
Midterm review KHSSP 2014-18, November 2016

	Performance Level				
	Highest	Higher than average	Average	Lower than average	Lowest
	Nyamira	Kenya	Nyamira rank (1-47)		
General statistics					
Population, total 2015/16 (KNBS projection)	691 236	44 733 470			
Births 2015/16 (estimated from DHIS)	20 857	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.5	3.9	13		
Female education (median years, KDHS 2014)	9.1	7.6	4		
Health service inputs					
Facilities per 10,000 population	1.9	2.2	30		
Facilities that are private for profit (%)	28.0	37.1			
Hospital beds per 10,000 population	9.2	8.8	22		
Core health professionals per 10,000 population (est.)	5.1	9.3	35		
County health budget per capita 2014/15 (KSh)	1788	1442	15		
County health budget per capita 2015/16 (KSh)	2301	1874	16		
Health status					
Under 5 mortality per 1000 live births (census 2009)	75	79	27		
Maternal mortality per 100,000 live births (census 2009)	385	495	27		
Life expectancy males (years) (census 2009)	58	58	17		
Life expectancy females (years) (census 2009)	60	61	21		
HIV prevalence 15 years and over (MOH 2016)	6.5	5.5	41		
HIV prevalence among antenatal women (DHIS 2015/16)	3.5	4.9	33		
TB notifications per 100,000 (DHIS / TIBU 2015)	107	187	5		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	25.5	26.0	20		
Wasting in children under 5 (%) (KDHS 2014)	4.1	4.0	27		
Underweight in children (%) (KDHS 2014)	9.6	11.0	19		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	31.2	33.6	27		
Obesity, women 15-49 (%)	8.1	10.6	27		
Overweight or obese, men 18-69 years (%)	35.6	17.6	46		
Obesity, men, 18-69 years (%)	3.4	4.3	27		
Tobacco use, men 18-69 (%)	3.3	23.2	3		
Raised blood glucose, both sexes 18-69 (%)	0.0	1.9	1		
Raised blood pressure, both sexes 18-69 (%)	26.3	22.7	32		
Cervical cancer screening, women 30-49 (%)	12.0	17.0	22		

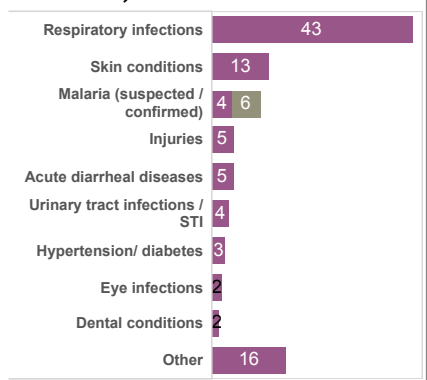
Indexes ranked (1= best) Nyamira county



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



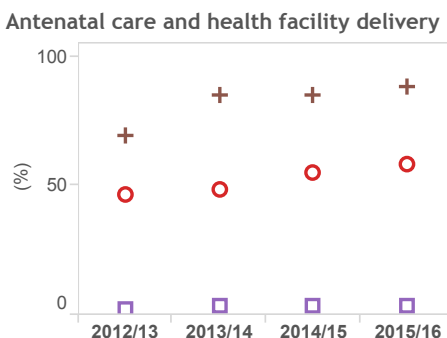
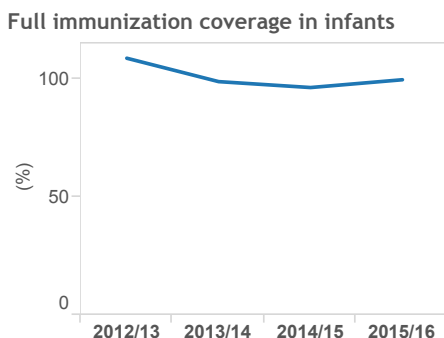
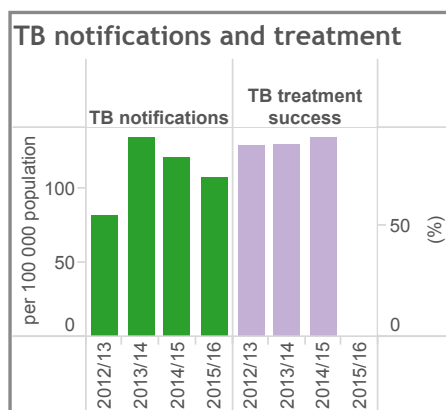
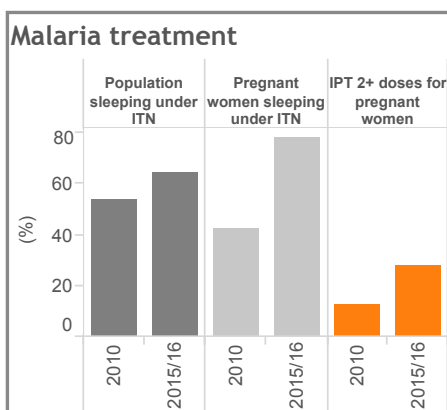
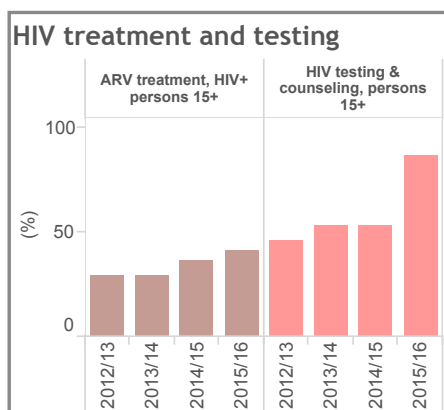
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Nyamira county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		86	91	95	97	89	3						
Inpatient discharges per 100 population		3.3	4.2	4.3	3.8	5.7	12						
Outpatient visits per person per year		1.1	1.5	1.6	1.5	2.0	7						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	58	62	64	64	67	60	4						
Antenatal care 4 or more visits (%)		46	48	55	58	49	10						
Delivery in health facility (%)	74	69	85	85	88	72	5						
Caesarean Section in all deliveries (%)	5	2	3	3	3	10	36						
Maternal mortality per 100,000 hospital deliveries		24	45	24	34	106	3						
Fresh stillbirths per 1,000 births		5	11	6	5	12	1						
Low birth weight per 100 births in health facilities (%)		3	2	4	5	5	23						
Pentavalent vaccination 3rd dose, infants	98	99	99	88	92	86	5						
Measles vaccination, infants	98	109	98	96	99	83	1						
Full immunization coverage, infants	92	109	99	96	100	80	1						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	75					71	22						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		29	29	37	41	57	34						
ART among HIV+ children under 15 (%)		23	32	42	48	46	30						
PMTCT among HIV+ women who delivered (%)		91	88	94	86	80	17						
HIV testing & counseling 15+ (%)	43	46	53	53	86	54	5						
TB notifications per 100,000 population		82	134	121	107	187	5						
TB treatment success rate (%)		85	87	90		89	21						
Population sleeping under LLITN (%)*		54			64	41	5						
Pregnant women sleeping under LLITN (%)*		43			78	51	4						
IPT 2 or more doses for pregnant women (%)*		13			28	22	14						
Children with fever taken to a health provider (%)*		68			77	72	13						

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

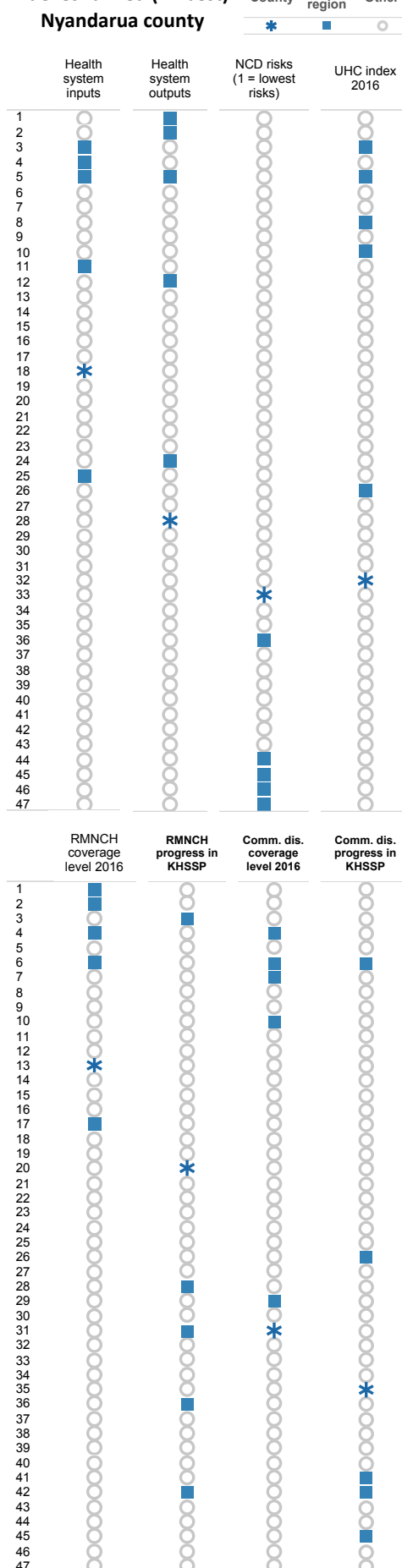
Midterm review KHSSP 2014-18, November 2016

Nyandarua county health statistics profile

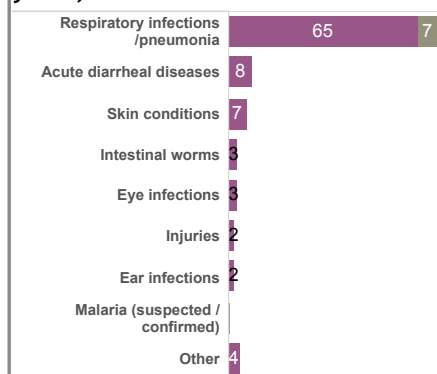
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Nyandarua		Kenya	Nyandarua rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	679 416	44 733 470			
Births 2015/16 (estimated from DHIS)	16 337	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.5	3.9	13		
Female education (median years, KDHS 2014)	7.8	7.6	11		
Health service inputs					
Facilities per 10,000 population	2.3	2.2	23		
Facilities that are private for profit (%)	46.2	37.1			
Hospital beds per 10,000 population	5.0	8.8	34		
Core health professionals per 10,000 population (est.)	8.3	9.3	18		
County health budget per capita 2014/15 (KSh)	712	1442	44		
County health budget per capita 2015/16 (KSh)	1370	1874	39		
Health status					
Under 5 mortality per 1000 live births (census 2009)	60	79	17		
Maternal mortality per 100,000 live births (census 2009)	364	495	25		
Life expectancy males (years) (census 2009)	60	58	11		
Life expectancy females (years) (census 2009)	60	61	21		
HIV prevalence 15 years and over (MOH 2016)	3.5	5.5	19		
HIV prevalence among antenatal women (DHIS 2015/16)	2.9	4.9	20		
TB notifications per 100,000 (DHIS / TIBU 2015)	112	187	6		
Malaria parasite rate in children (MOH 2015)	Free	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	29.4	26.0	34		
Wasting in children under 5 (%) (KDHS 2014)	2.0	4.0	8		
Underweight in children (%) (KDHS 2014)	6.8	11.0	8		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	42.1	33.6	39		
Obesity, women 15-49 (%)	14.7	10.6	38		
Overweight or obese, men 18-69 years (%)	23.7	17.6	39		
Obesity, men, 18-69 years (%)	4.3	4.3	30		
Tobacco use, men 18-69 (%)	22.0	23.2	23		
Raised blood glucose, both sexes 18-69 (%)	0.0	1.9	1		
Raised blood pressure, both sexes 18-69 (%)	28.6	22.7	37		
Cervical cancer screening, women 30-49 (%)	19.0	17.0	14		

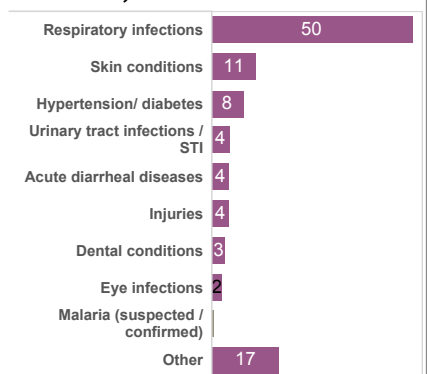
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



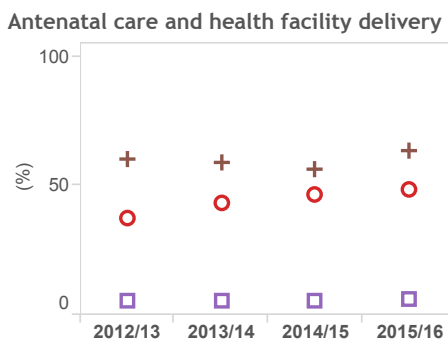
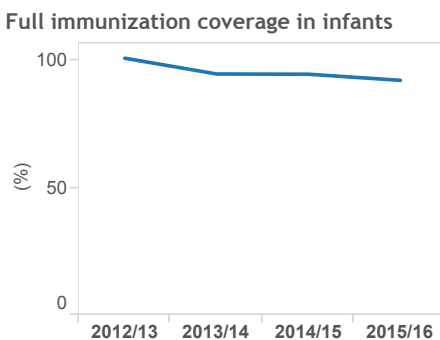
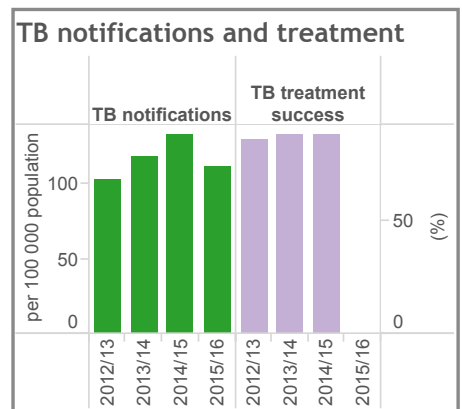
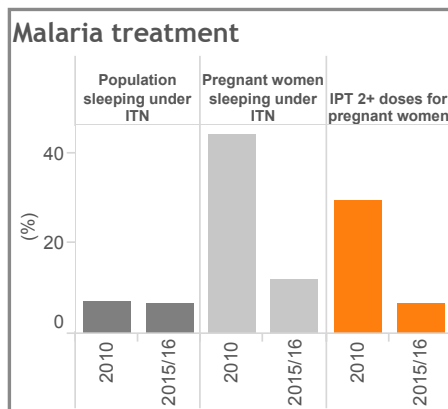
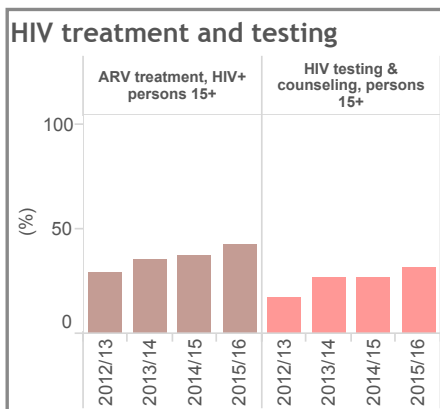
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Nyandarua county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		68	82	86	91	89	22		
Inpatient discharges per 100 population		3.8	3.8	3.4	4.2	5.7	18		
Outpatient visits per person per year		1.5	2.0	2.2	2.2	2.0	30		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	64	60	63	66	65	60	9		
Antenatal care 4 or more visits (%)		37	43	46	48	49	22		
Delivery in health facility (%)	86	60	59	56	63	72	29		
Caesarean Section in all deliveries (%)	9	5	5	5	6	10	26		
Maternal mortality per 100,000 hospital deliveries		0	81	137	20	106	1		
Fresh stillbirths per 1,000 births		9	7	7	9	12	9		
Low birth weight per 100 births in health facilities (%)		6	6	5	6	5	31		
Pentavalent vaccination 3rd dose, infants	91	104	97	93	91	86	8		
Measles vaccination, infants	95	101	102	95	92	83	6		
Full immunization coverage, infants	81	101	95	95	92	80	4		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	81					71	11		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		29	35	37	43	57	33		
ART among HIV+ children under 15 (%)		67	66	74	79	46	16		
PMTCT among HIV+ women who delivered (%)		66	80	80	80	80	27		
HIV testing & counseling 15+ (%)	50	17	26	27	32	54	31		
TB notifications per 100,000 population		103	119	133	112	187	6		
TB treatment success rate (%)		86	88	88		89	27		
Population sleeping under LLITN (%)*		7			7	41	46		
Pregnant women sleeping under LLITN (%)*		44			12	51	45		
IPT 2 or more doses for pregnant women (%)*		29			7	22	40		
Children with fever taken to a health provider (%)*		56			73	72	27		

* 2010 and 2015



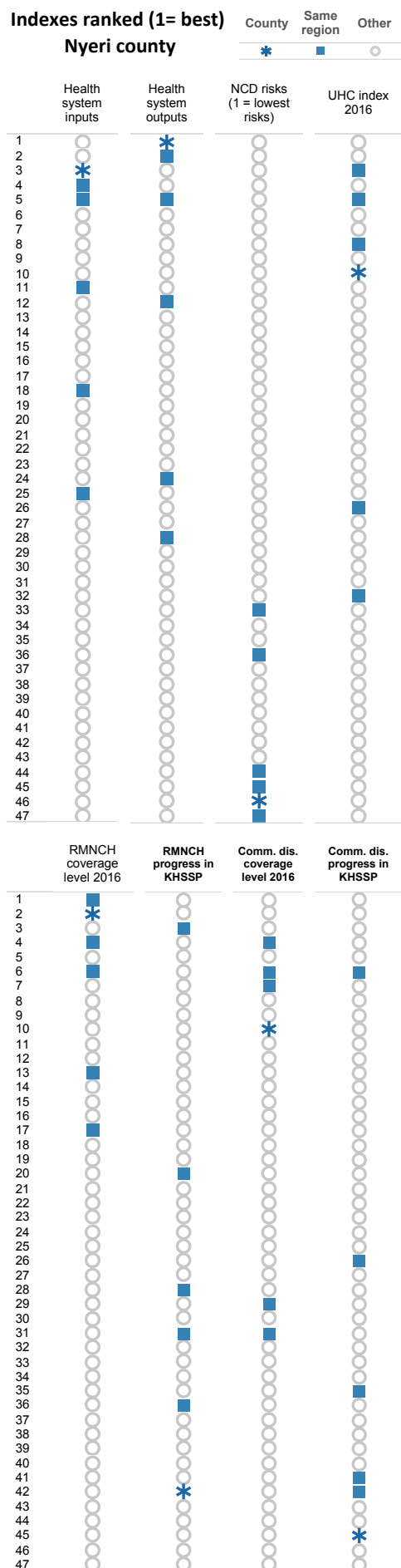
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

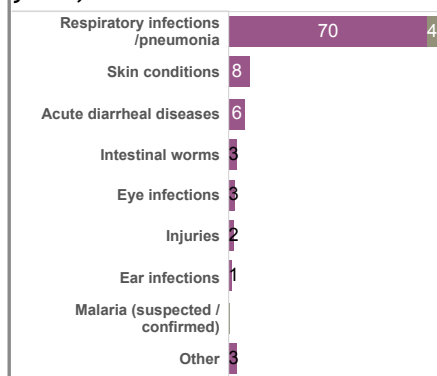
Nyeri county health statistics profile

Midterm review KHSSP 2014-18, November 2016

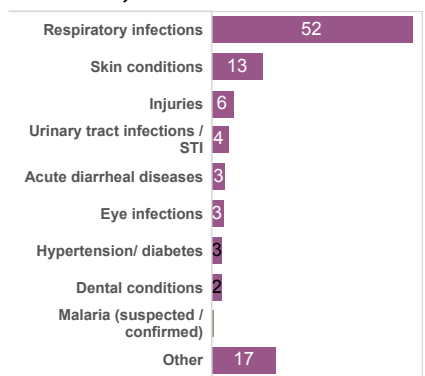
	Highest	Higher than average	Average	Lower than average	Lowest
	Nyeri		Kenya	Nyeri rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	790 327	44 733 470			
Births 2015/16 (estimated from DHIS)	17 018	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	2.7	3.9	2		
Female education (median years, KDHS 2014)	9.2	7.6	3		
Health service inputs					
Facilities per 10,000 population	5.2	2.2	1		
Facilities that are private for profit (%)	59.9	37.1			
Hospital beds per 10,000 population	18.7	8.8	1		
Core health professionals per 10,000 population (est.)	12.1	9.3	9		
County health budget per capita 2014/15 (KSh)	2582	1442	6		
County health budget per capita 2015/16 (KSh)	2905	1874	8		
Health status					
Under 5 mortality per 1000 live births (census 2009)	50	79	5		
Maternal mortality per 100,000 live births (census 2009)	318	495	20		
Life expectancy males (years) (census 2009)	60	58	11		
Life expectancy females (years) (census 2009)	60	61	21		
HIV prevalence 15 years and over (MOH 2016)	3.7	5.5	23		
HIV prevalence among antenatal women (DHIS 2015/16)	2.9	4.9	20		
TB notifications per 100,000 (DHIS / TIBU 2015)	175	187	24		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	15.1	26.0	1		
Wasting in children under 5 (%) (KDHS 2014)	2.4	4.0	13		
Underweight in children (%) (KDHS 2014)	2.5	11.0	1		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	50.2	33.6	46		
Obesity, women 15-49 (%)	16.0	10.6	39		
Overweight or obese, men 18-69 years (%)	23.9	17.6	40		
Obesity, men, 18-69 years (%)	7.3	4.3	38		
Tobacco use, men 18-69 (%)	18.5	23.2	19		
Raised blood glucose, both sexes 18-69 (%)	6.3	1.9	46		
Raised blood pressure, both sexes 18-69 (%)	51.3	22.7	47		
Cervical cancer screening, women 30-49 (%)	28.7	17.0	9		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



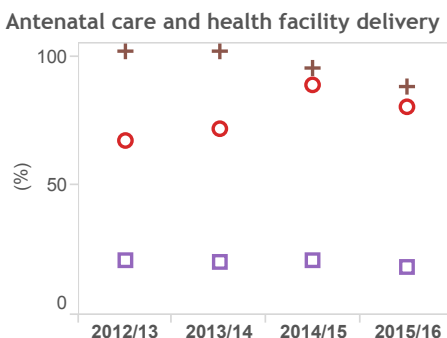
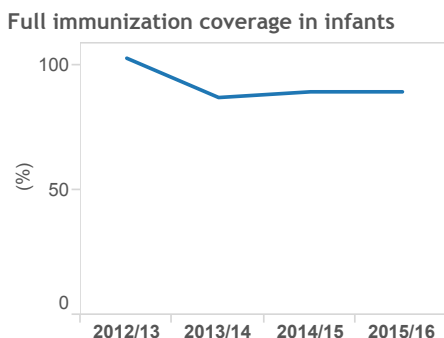
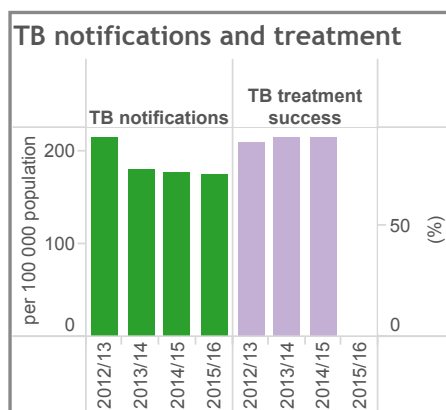
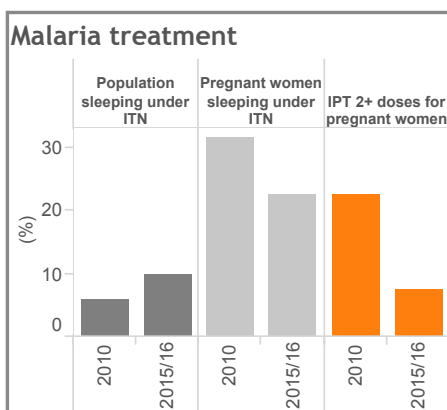
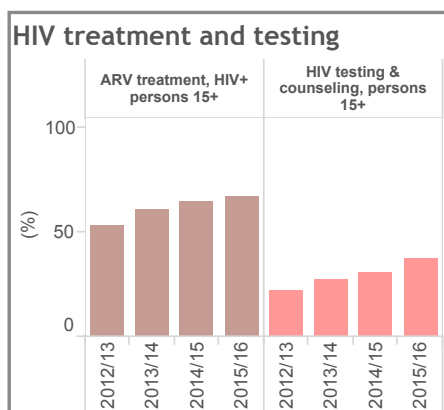
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Nyeri county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		75	80	86	89	89	30	25	10
Inpatient discharges per 100 population		10.8	11.3	11.2	9.9	5.7	44	40	4
Outpatient visits per person per year		2.9	4.0	4.1	3.9	2.0	47	43	4
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	38	67	67	68	66	60	6	10	10
Antenatal care 4 or more visits (%)		67	72	89	80	49	1	10	10
Delivery in health facility (%)	89	102	102	95	88	72	5	10	10
Caesarean Section in all deliveries (%)	14	21	20	21	18	10	5	10	10
Maternal mortality per 100,000 hospital deliveries		103	93	76	99	106	27	20	7
Fresh stillbirths per 1,000 births		8	7	7	7	12	3	10	10
Low birth weight per 100 births in health facilities (%)		6	6	7	6	5	31	20	11
Pentavalent vaccination 3rd dose, infants	95	102	95	88	83	86	28	20	8
Measles vaccination, infants	93	103	92	90	84	83	21	20	1
Full immunization coverage, infants	84	103	87	90	90	80	8	20	10
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	76					71	20	20	10
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		54	60	65	67	57	14	10	4
ART among HIV+ children under 15 (%)		160	132	128	116	46	2	10	10
PMTCT among HIV+ women who delivered (%)		104	92	102	90	80	7	10	10
HIV testing & counseling 15+ (%)	54	22	28	31	37	54	23	10	10
TB notifications per 100,000 population		215	181	177	175	187	24	10	10
TB treatment success rate (%)		87	89	89		89	23	10	10
Population sleeping under LLITN (%)*		6			10	41	44	10	10
Pregnant women sleeping under LLITN (%)*		32			23	51	43	10	10
IPT 2 or more doses for pregnant women (%)*		22			7	22	38	10	10
Children with fever taken to a health provider (%)*		62			70	72	35	10	10

* 2010 and 2015



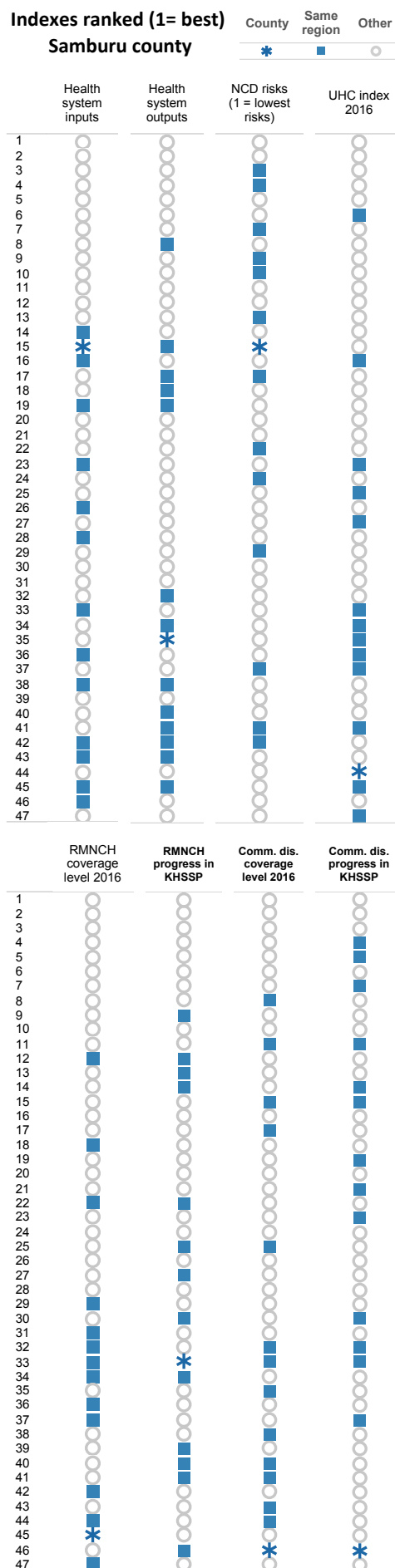
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

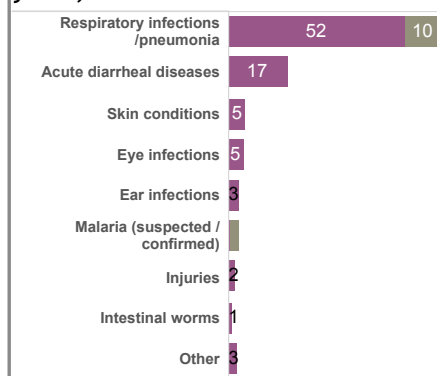
Samburu county health statistics profile

Midterm review KHSSP 2014-18, November 2016

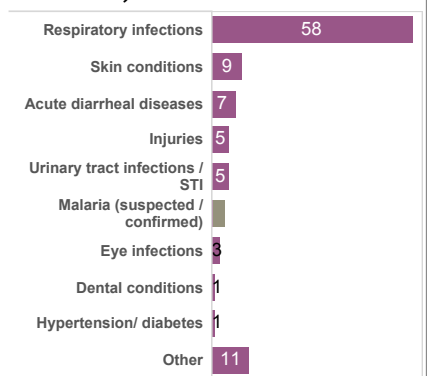
	Performance				
	Highest	Higher than average	Average	Lower than average	Lowest
	Samburu	Kenya	Samburu rank (1-47)		
General statistics					
Population, total 2015/16 (KNBS projection)	278 432	44 733 470			
Births 2015/16 (estimated from DHIS)	10 828	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	6.3	3.9	44		
Female education (median years, KDHS 2014)	0.0	7.6	42		
Health service inputs					
Facilities per 10,000 population	2.6	2.2	17		
Facilities that are private for profit (%)	20.8	37.1			
Hospital beds per 10,000 population	8.2	8.8	25		
Core health professionals per 10,000 population (est.)	9.7	9.3	14		
County health budget per capita 2014/15 (KSh)	2119	1442	9		
County health budget per capita 2015/16 (KSh)	2579	1874	12		
Health status					
Under 5 mortality per 1000 live births (census 2009)	60	79	17		
Maternal mortality per 100,000 live births (census 2009)	472	495	34		
Life expectancy males (years) (census 2009)	54	58	30		
Life expectancy females (years) (census 2009)	65	61	7		
HIV prevalence 15 years and over (MOH 2016)	4.7	5.5	35		
HIV prevalence among antenatal women (DHIS 2015/16)	1.2	4.9	5		
TB notifications per 100,000 (DHIS / TIBU 2015)	215	187	37		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	30.1	26.0	39		
Wasting in children under 5 (%) (KDHS 2014)	13.6	4.0	42		
Underweight in children (%) (KDHS 2014)	28.9	11.0	44		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	9.1	33.6	2		
Obesity, women 15-49 (%)	2.8	10.6	2		
Overweight or obese, men 18-69 years (%)	12.4	17.6	22		
Obesity, men, 18-69 years (%)	1.4	4.3	16		
Tobacco use, men 18-69 (%)	27.3	23.2	29		
Raised blood glucose, both sexes 18-69 (%)	0.7	1.9	14		
Raised blood pressure, both sexes 18-69 (%)	21.9	22.7	26		
Cervical cancer screening, women 30-49 (%)	0.0	17.0	43		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



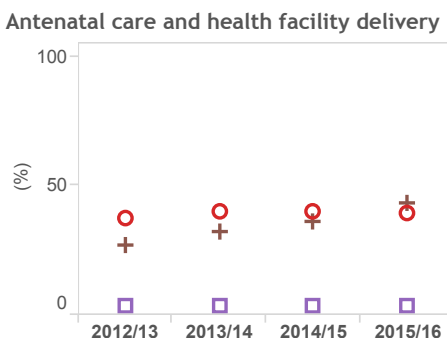
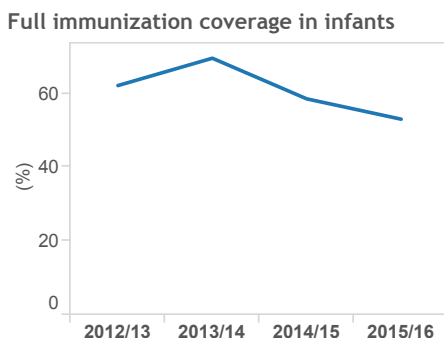
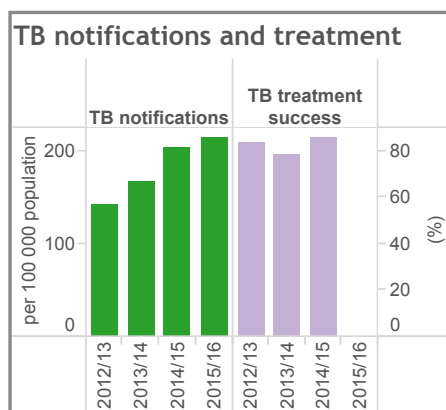
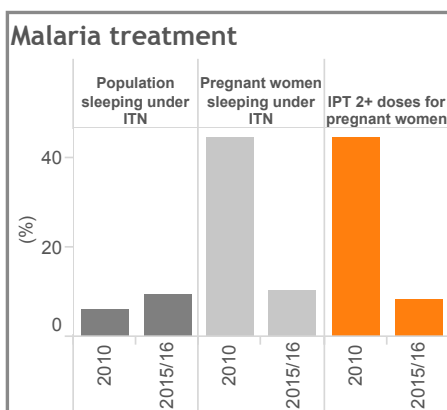
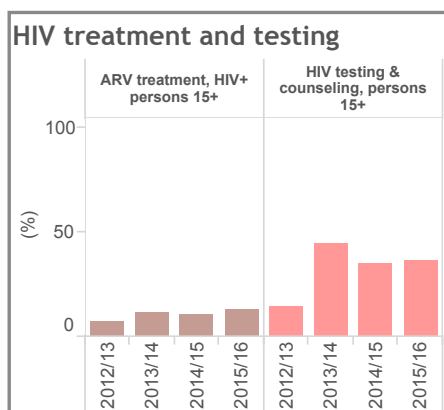
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Samburu county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		58	65	63	74	89	44		
Inpatient discharges per 100 population		3.2	2.2	3.3	2.9	5.7	8		
Outpatient visits per person per year		1.2	1.5	2.6	1.9	2.0	22		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	56	34	36	37	38	60	40		
Antenatal care 4 or more visits (%)		37	40	40	39	49	36		
Delivery in health facility (%)	25	27	32	36	43	72	44		
Caesarean Section in all deliveries (%)	3	3	3	3	3	10	36		
Maternal mortality per 100,000 hospital deliveries		443	236	66	188	106	42		
Fresh stillbirths per 1,000 births		16	20	12	16	12	37		
Low birth weight per 100 births in health facilities (%)		10	8	6	8	5	43		
Pentavalent vaccination 3rd dose, infants	87	81	89	79	77	86	42		
Measles vaccination, infants	72	68	75	66	59	83	46		
Full immunization coverage, infants	64	62	70	59	53	80	46		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	73					71	27		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		7	11	10	13	57	46		
ART among HIV+ children under 15 (%)		11	13	16	22	46	43		
PMTCT among HIV+ women who delivered (%)		36	49	71	44	80	45		
HIV testing & counseling 15+ (%)	51	15	44	35	37	54	24		
TB notifications per 100,000 population		143	167	204	215	187	37		
TB treatment success rate (%)		83	78	86		89	40		
Population sleeping under LLITN (%)*		6			10	41	45		
Pregnant women sleeping under LLITN (%)*		44			10	51	46		
IPT 2 or more doses for pregnant women (%)*		44			8	22	36		
Children with fever taken to a health provider (%)*		63			59	72	47		

* 2010 and 2015



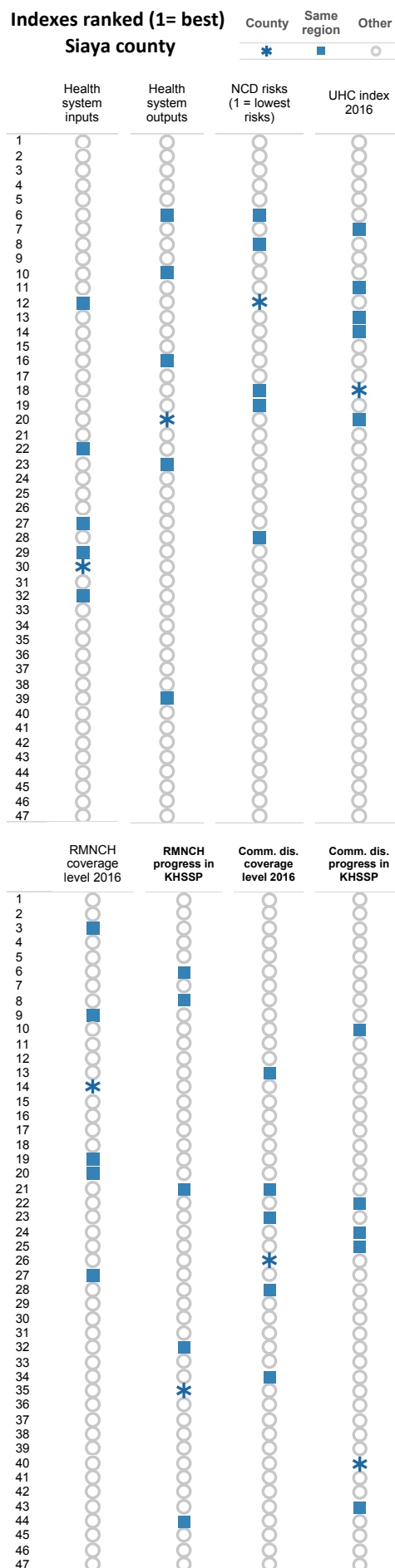
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

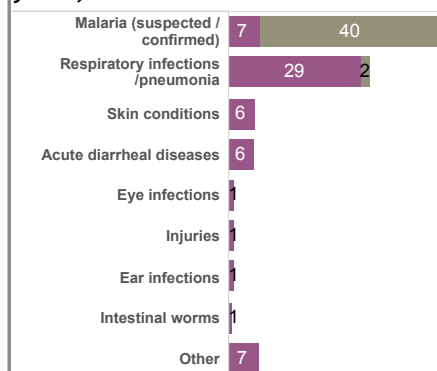
Siaya county health statistics profile

Midterm review KHSSP 2014-18, November 2016

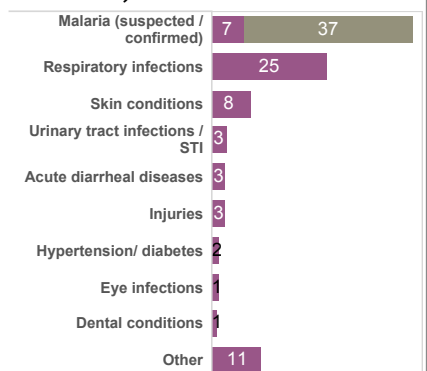
	Performance			Siaya rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	973 224	44 733 470		
Births 2015/16 (estimated from DHIS)	31 927	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	4.2	3.9	24	
Female education (median years, KDHS 2014)	7.4	7.6	22	
Health service inputs				
Facilities per 10,000 population	1.8	2.2	31	
Facilities that are private for profit (%)	17.1	37.1		
Hospital beds per 10,000 population	10.9	8.8	14	
Core health professionals per 10,000 population (est.)	5.2	9.3	33	
County health budget per capita 2014/15 (KSh)	1483	1442	23	
County health budget per capita 2015/16 (KSh)	1978	1874	25	
Health status				
Under 5 mortality per 1000 live births (census 2009)	227	79	47	
Maternal mortality per 100,000 live births (census 2009)	691	495	42	
Life expectancy males (years) (census 2009)	39	58	47	
Life expectancy females (years) (census 2009)	46	61	46	
HIV prevalence 15 years and over (MOH 2016)	22.9	5.5	46	
HIV prevalence among antenatal women (DHIS 2015/16)	17.5	4.9	46	
TB notifications per 100,000 (DHIS / TIBU 2015)	204	187	34	
Malaria parasite rate in children (MOH 2015)	20-49%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	24.7	26.0	17	
Wasting in children under 5 (%) (KDHS 2014)	0.2	4.0	1	
Underweight in children (%) (KDHS 2014)	7.8	11.0	10	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	24.7	33.6	15	
Obesity, women 15-49 (%)	6.8	10.6	20	
Overweight or obese, men 18-69 years (%)	11.5	17.6	20	
Obesity, men, 18-69 years (%)	8.7	4.3	40	
Tobacco use, men 18-69 (%)	15.6	23.2	13	
Raised blood glucose, both sexes 18-69 (%)	2.1	1.9	32	
Raised blood pressure, both sexes 18-69 (%)	13.1	22.7	9	
Cervical cancer screening, women 30-49 (%)	21.6	17.0	11	



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



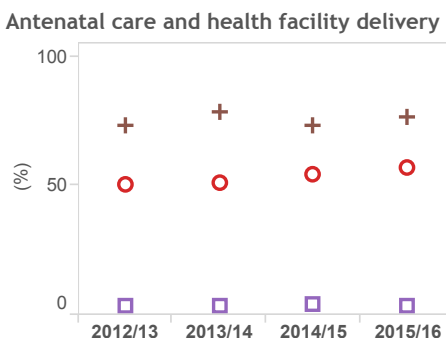
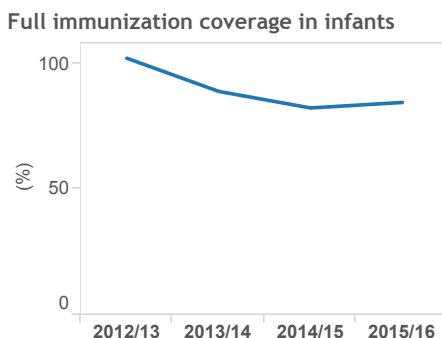
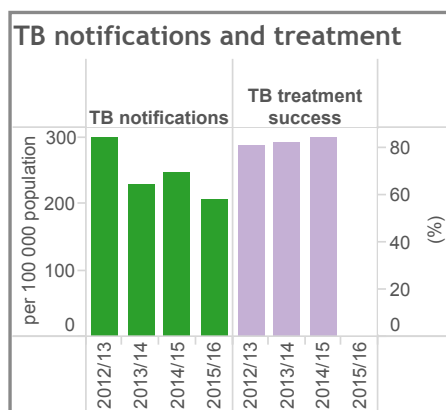
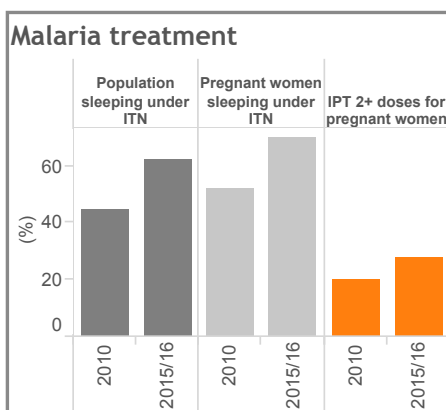
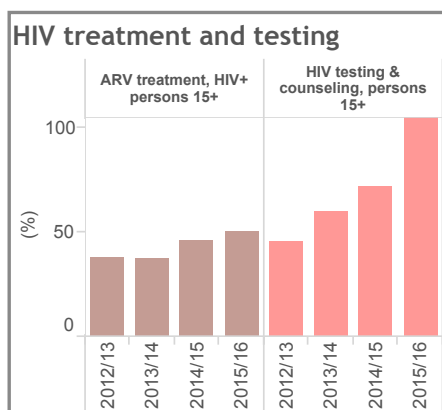
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Siaya county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance Level				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		88	92	95	96	89	8						
Inpatient discharges per 100 population		6.4	7.0	6.7	6.3	5.7	33						
Outpatient visits per person per year		1.7	2.0	1.9	1.8	2.0	17						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	60	56	60	59	60	60	22						
Antenatal care 4 or more visits (%)		50	51	54	57	49	11						
Delivery in health facility (%)	70	73	78	73	76	72	18						
Caesarean Section in all deliveries (%)	4	3	3	4	3	10	36						
Maternal mortality per 100,000 hospital deliveries		118	58	130	63	106	7						
Fresh stillbirths per 1,000 births		13	11	11	14	12	26						
Low birth weight per 100 births in health facilities (%)		4	4	4	4	5	8						
Pentavalent vaccination 3rd dose, infants	94	109	95	84	83	86	29						
Measles vaccination, infants	85	105	92	86	86	83	19						
Full immunization coverage, infants	78	102	89	82	85	80	16						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	61					71	40						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		38	37	46	50	57	26						
ART among HIV+ children under 15 (%)		37	38	48	50	46	29						
PMTCT among HIV+ women who delivered (%)		124	98	78	84	80	19						
HIV testing & counseling 15+ (%)	43	45	59	72	117	54	2						
TB notifications per 100,000 population		299	227	245	204	187	34						
TB treatment success rate (%)		80	82	84		89	46						
Population sleeping under LLITN (%)*		44			62	41	7						
Pregnant women sleeping under LLITN (%)*		52			70	51	10						
IPT 2 or more doses for pregnant women (%)*		20			28	22	15						
Children with fever taken to a health provider (%)*		52			80	72	5						

* 2010 and 2015



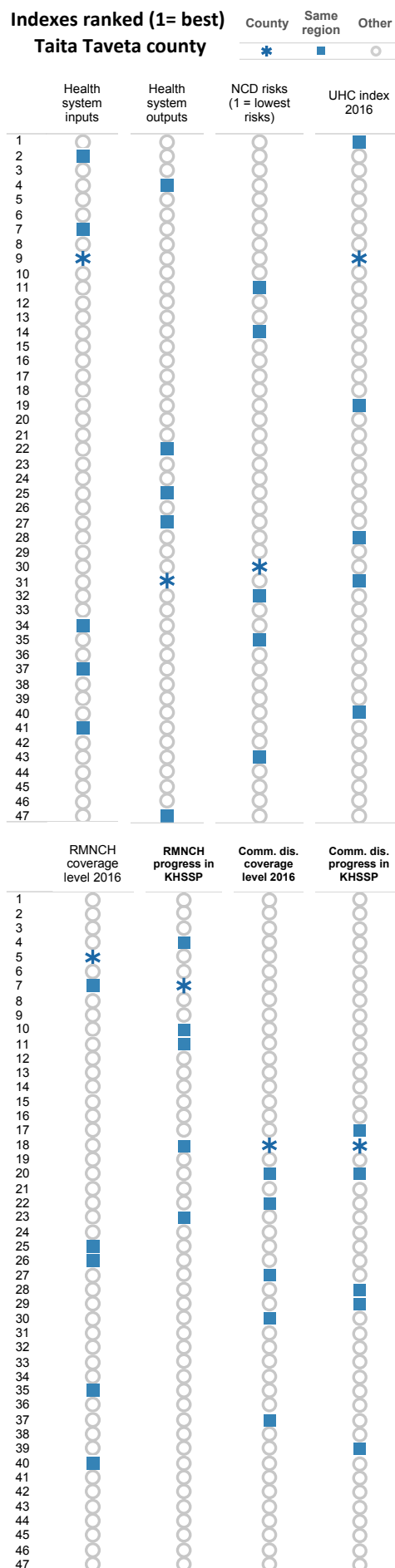
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

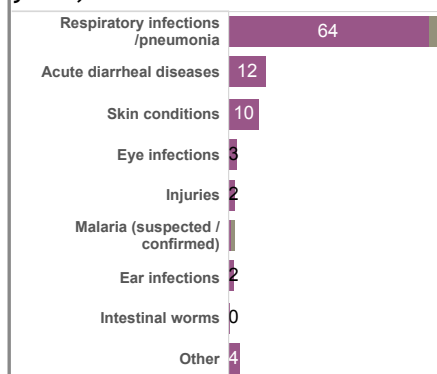
Taita Taveta county health statistics profile

Midterm review KHSSP 2014-18, November 2016

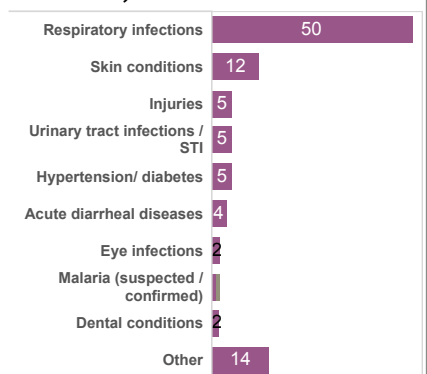
	Highest	Higher than average	Average	Lower than average	Lowest
General statistics					
	Taita Taveta	Kenya	Taita Taveta rank (1-47)		
Population, total 2015/16 (KNBS projection)	352 840	44 733 470			
Births 2015/16 (estimated from DHIS)	8437	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.2	3.9	8		
Female education (median years, KDHS 2014)	7.7	7.6	14		
Health service inputs					
Facilities per 10,000 population	2.5	2.2	19		
Facilities that are private for profit (%)	23.9	37.1			
Hospital beds per 10,000 population	9.8	8.8	20		
Core health professionals per 10,000 population (est.)	9.8	9.3	13		
County health budget per capita 2014/15 (KSh)	2869	1442	4		
County health budget per capita 2015/16 (KSh)	2902	1874	9		
Health status					
Under 5 mortality per 1000 live births (census 2009)	78	79	29		
Maternal mortality per 100,000 live births (census 2009)	603	495	38		
Life expectancy males (years) (census 2009)	53	58	35		
Life expectancy females (years) (census 2009)	51	61	43		
HIV prevalence 15 years and over (MOH 2016)	3.6	5.5	20		
HIV prevalence among antenatal women (DHIS 2015/16)	4.4	4.9	39		
TB notifications per 100,000 (DHIS / TIBU 2015)	154	187	19		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	23.8	26.0	14		
Wasting in children under 5 (%) (KDHS 2014)	7.2	4.0	39		
Underweight in children (%) (KDHS 2014)	7.8	11.0	10		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	44.0	33.6	40		
Obesity, women 15-49 (%)	17.1	10.6	42		
Overweight or obese, men 18-69 years (%)	12.7	17.6	23		
Obesity, men, 18-69 years (%)	1.5	4.3	18		
Tobacco use, men 18-69 (%)	23.9	23.2	26		
Raised blood glucose, both sexes 18-69 (%)	1.3	1.9	21		
Raised blood pressure, both sexes 18-69 (%)	27.3	22.7	34		
Cervical cancer screening, women 30-49 (%)	2.9	17.0	39		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



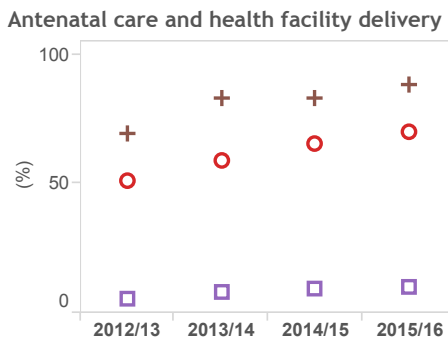
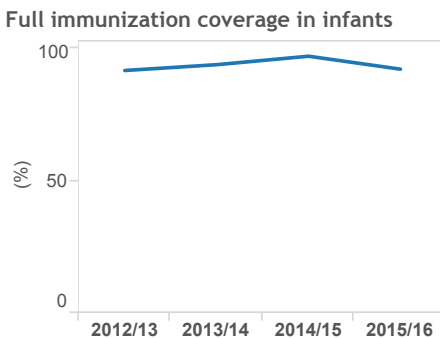
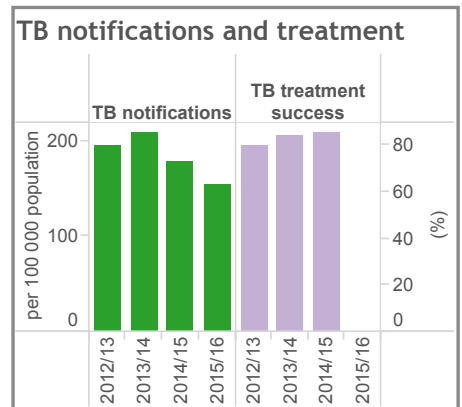
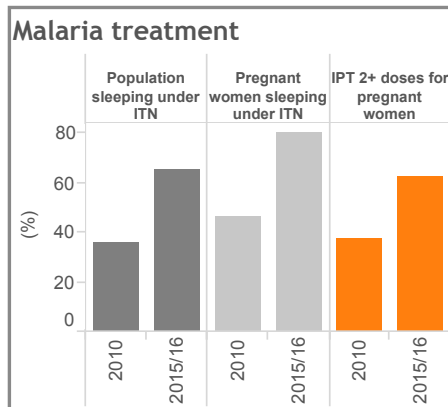
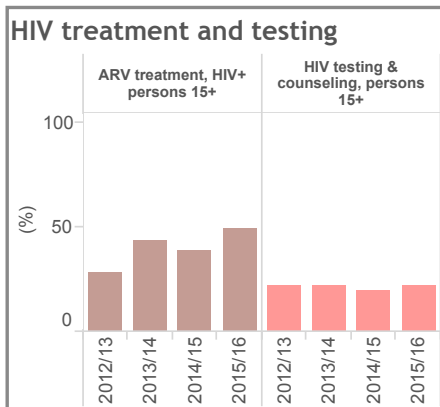
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Taita Taveta county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
DHIS Reporting index (%)		83	86	87	90	89	28	Strong progress
Inpatient discharges per 100 population		3.4	4.0	4.4	3.6	5.7	10	Some decline
Outpatient visits per person per year		1.7	1.9	2.1	1.9	2.0	22	Some decline
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	63	60	61	61	60	60	20	Some decline
Antenatal care 4 or more visits (%)		51	59	65	70	49	2	Strong progress
Delivery in health facility (%)	62	69	83	83	88	72	5	Strong progress
Caesarean Section in all deliveries (%)	9	5	8	9	10	10	14	Some decline
Maternal mortality per 100,000 hospital deliveries		81	162	91	113	106	31	Some decline
Fresh stillbirths per 1,000 births		18	8	13	10	12	12	Strong progress
Low birth weight per 100 births in health facilities (%)		7	8	5	4	5	8	Strong progress
Pentavalent vaccination 3rd dose, infants	98	97	95	94	92	86	6	Some decline
Measles vaccination, infants	93	94	95	97	91	83	9	Some decline
Full immunization coverage, infants	89	92	94	97	92	80	6	Some decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	79					71	13	Some decline
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		28	44	39	50	57	28	Strong progress
ART among HIV+ children under 15 (%)		49	72	56	62	46	22	Some decline
PMTCT among HIV+ women who delivered (%)		83	78	98	99	80	2	Strong progress
HIV testing & counseling 15+ (%)	43	22	22	20	22	54	42	Some decline
TB notifications per 100,000 population		195	208	179	154	187	19	Strong progress
TB treatment success rate (%)		79	84	85		89	41	Some decline
Population sleeping under LLITN (%)*		36			65	41	3	Strong progress
Pregnant women sleeping under LLITN (%)*		46			80	51	3	Strong progress
IPT 2 or more doses for pregnant women (%)*		37			63	22	2	Strong progress
Children with fever taken to a health provider (%)*		67			70	72	33	Some decline

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

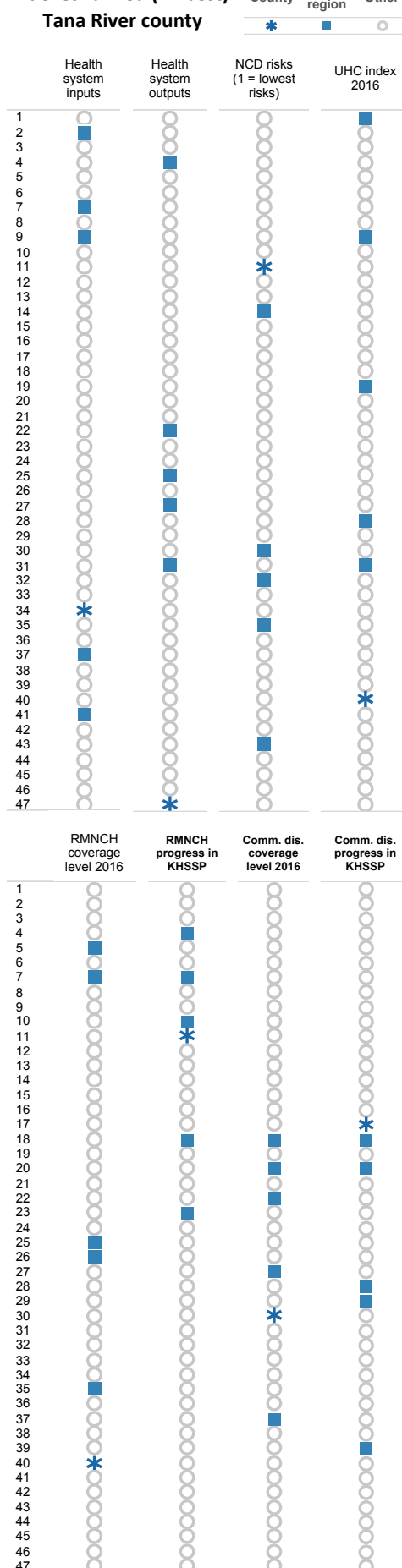
Midterm review KHSSP 2014-18, November 2016

Tana River county health statistics profile

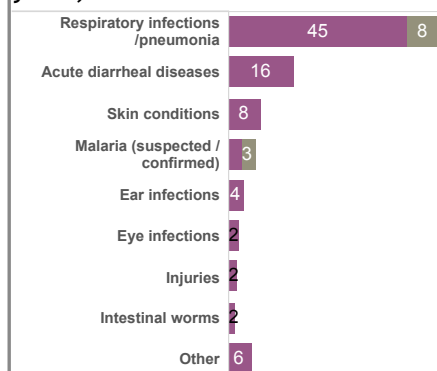
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
	Tana River		Kenya	Tana River rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	297 647	44 733 470			
Births 2015/16 (estimated from DHIS)	10 191	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	5.1	3.9	37		
Female education (median years, KDHS 2014)	2.4	7.6	41		
Health service inputs					
Facilities per 10,000 population	2.2	2.2	24		
Facilities that are private for profit (%)	12.7	37.1			
Hospital beds per 10,000 population	2.4	8.8	45		
Core health professionals per 10,000 population (est.)	5.0	9.3	37		
County health budget per capita 2014/15 (KSh)	394	1442	46		
County health budget per capita 2015/16 (KSh)	3860	1874	3		
Health status					
Under 5 mortality per 1000 live births (census 2009)	112	79	35		
Maternal mortality per 100,000 live births (census 2009)	395	495	29		
Life expectancy males (years) (census 2009)	56	58	25		
Life expectancy females (years) (census 2009)	56	61	32		
HIV prevalence 15 years and over (MOH 2016)	0.7	5.5	2		
HIV prevalence among antenatal women (DHIS 2015/16)	1.4	4.9	7		
TB notifications per 100,000 (DHIS / TIBU 2015)	145	187	14		
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	28.1	26.0	29		
Wasting in children under 5 (%) (KDHS 2014)	5.7	4.0	36		
Underweight in children (%) (KDHS 2014)	18.6	11.0	39		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	21.8	33.6	12		
Obesity, women 15-49 (%)	4.7	10.6	11		
Overweight or obese, men 18-69 years (%)	6.9	17.6	12		
Obesity, men, 18-69 years (%)	2.2	4.3	23		
Tobacco use, men 18-69 (%)	21.2	23.2	22		
Raised blood glucose, both sexes 18-69 (%)	0.3	1.9	11		
Raised blood pressure, both sexes 18-69 (%)	16.1	22.7	14		
Cervical cancer screening, women 30-49 (%)	4.9	17.0	34		

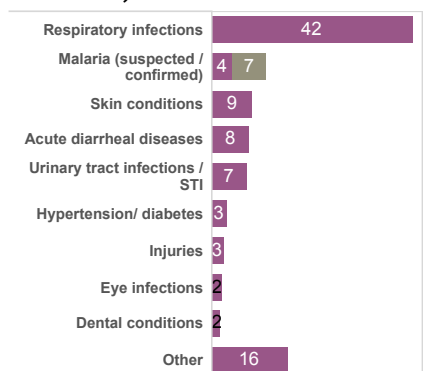
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



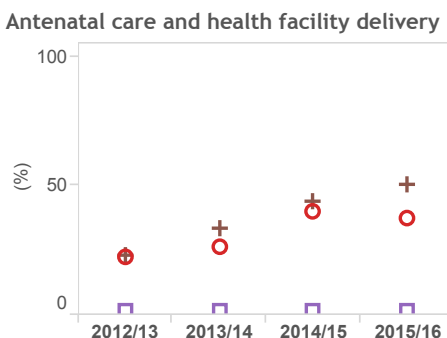
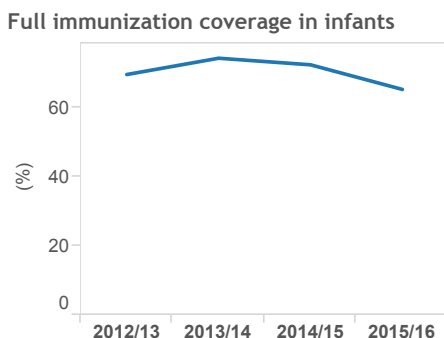
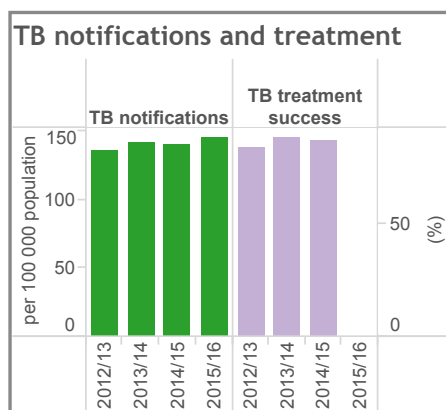
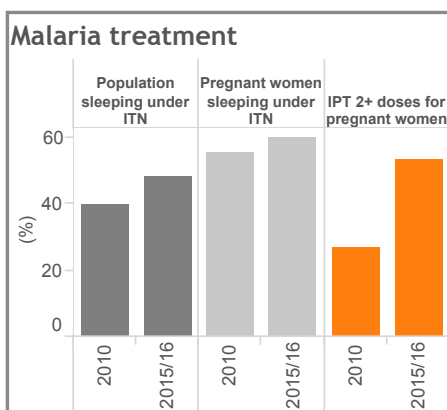
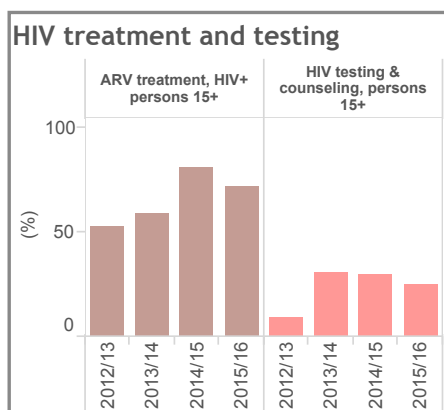
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Tana River county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		69	78	76	75	89	42		
Inpatient discharges per 100 population		0.6	0.4	0.7	1.2	5.7	1		
Outpatient visits per person per year		0.8	1.1	1.3	1.6	2.0	10		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	44	34	36	38	38	60	41		
Antenatal care 4 or more visits (%)		22	26	40	37	49	39		
Delivery in health facility (%)	32	23	33	44	50	72	41		
Caesarean Section in all deliveries (%)	2	1	1	1	1	10	46		
Maternal mortality per 100,000 hospital deliveries		144	33	140	197	106	44		
Fresh stillbirths per 1,000 births		12	8	13	22	12	43		
Low birth weight per 100 births in health facilities (%)		5	3	4	3	5	5		
Pentavalent vaccination 3rd dose, infants	90	78	91	95	85	86	21		
Measles vaccination, infants	78	77	86	84	80	83	32		
Full immunization coverage, infants	70	69	74	72	65	80	41		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	68					71	33		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		52	59	81	72	57	8		
ART among HIV+ children under 15 (%)		38	68	97	65	46	21		
PMTCT among HIV+ women who delivered (%)		16	53	66	50	80	43		
HIV testing & counseling 15+ (%)	59	9	31	30	25	54	40		
TB notifications per 100,000 population		136	142	141	145	187	14		
TB treatment success rate (%)		83	88	87		89	36		
Population sleeping under LLITN (%)*		40			48	41	20		
Pregnant women sleeping under LLITN (%)*		55			60	51	20		
IPT 2 or more doses for pregnant women (%)*		27			53	22	4		
Children with fever taken to a health provider (%)*		58			75	72	24		

* 2010 and 2015



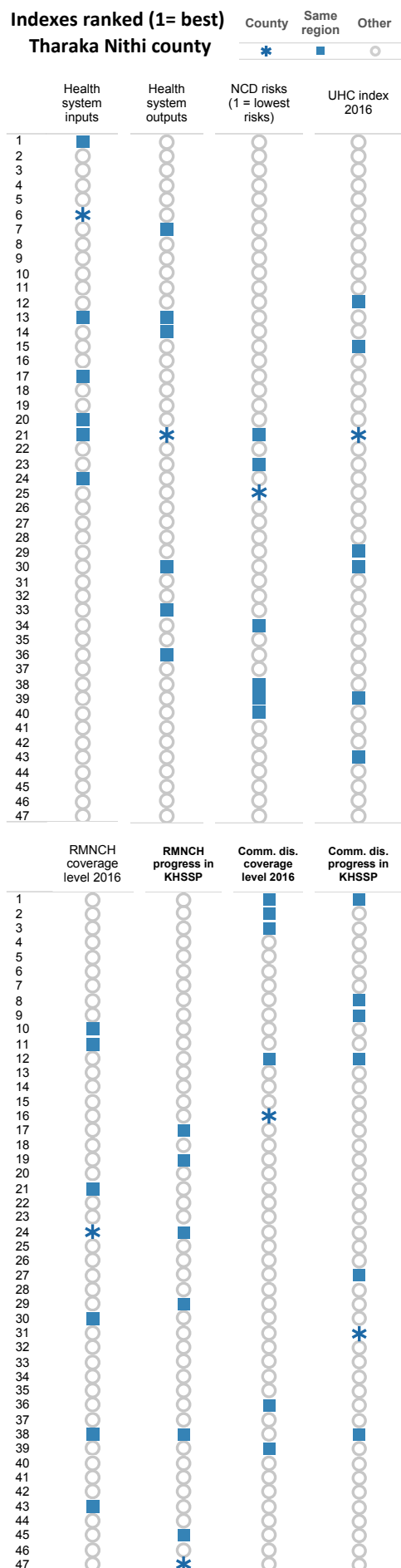
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

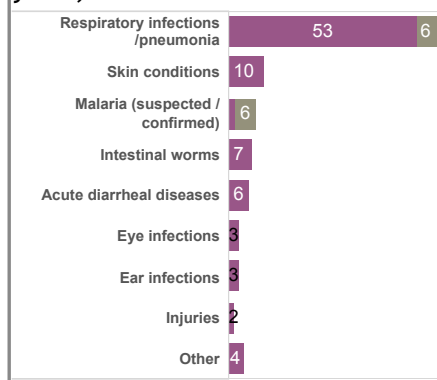
Tharaka Nithi county health statistics profile

Midterm review KHSSP 2014-18, November 2016

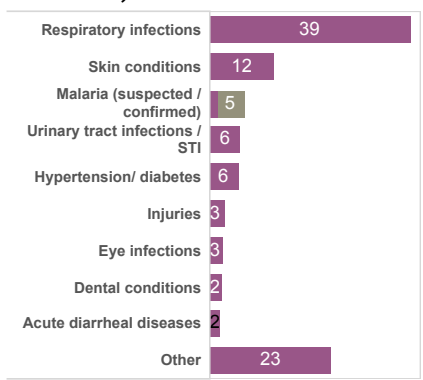
	Performance			Tharaka Nithi rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	394 041	44 733 470		
Births 2015/16 (estimated from DHIS)	10 229	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	3.4	3.9	10	
Female education (median years, KDHS 2014)	7.4	7.6	22	
Health service inputs				
Facilities per 10,000 population	3.3	2.2	7	
Facilities that are private for profit (%)	25.6	37.1		
Hospital beds per 10,000 population	11.5	8.8	12	
Core health professionals per 10,000 population (est.)	13.9	9.3	5	
County health budget per capita 2014/15 (KSh)	2356	1442	7	
County health budget per capita 2015/16 (KSh)	3086	1874	7	
Health status				
Under 5 mortality per 1000 live births (census 2009)	59	79	16	
Maternal mortality per 100,000 live births (census 2009)	191	495	2	
Life expectancy males (years) (census 2009)	60	58	11	
Life expectancy females (years) (census 2009)	64	61	10	
HIV prevalence 15 years and over (MOH 2016)	3.3	5.5	16	
HIV prevalence among antenatal women (DHIS 2015/16)	3.3	4.9	29	
TB notifications per 100,000 (DHIS / TIBU 2015)	253	187	42	
Malaria parasite rate in children (MOH 2015)	1-4%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	32.9	26.0	41	
Wasting in children under 5 (%) (KDHS 2014)	3.3	4.0	21	
Underweight in children (%) (KDHS 2014)	10.8	11.0	24	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	30.7	33.6	26	
Obesity, women 15-49 (%)	6.6	10.6	18	
Overweight or obese, men 18-69 years (%)	5.8	17.6	9	
Obesity, men, 18-69 years (%)	0.0	4.3	1	
Tobacco use, men 18-69 (%)	39.8	23.2	38	
Raised blood glucose, both sexes 18-69 (%)	4.2	1.9	43	
Raised blood pressure, both sexes 18-69 (%)	14.8	22.7	11	
Cervical cancer screening, women 30-49 (%)	20.3	17.0	13	



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



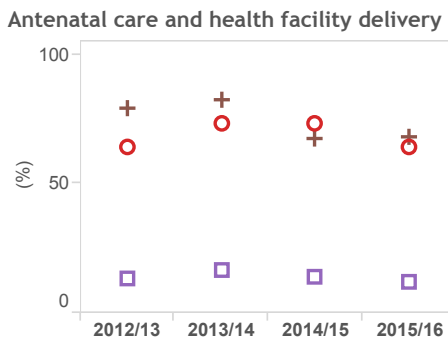
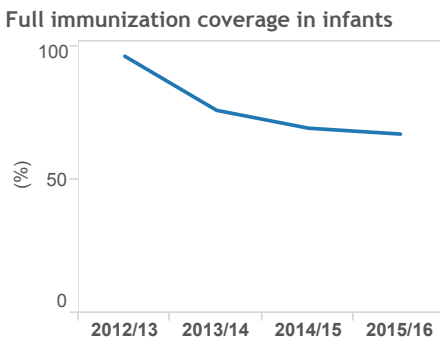
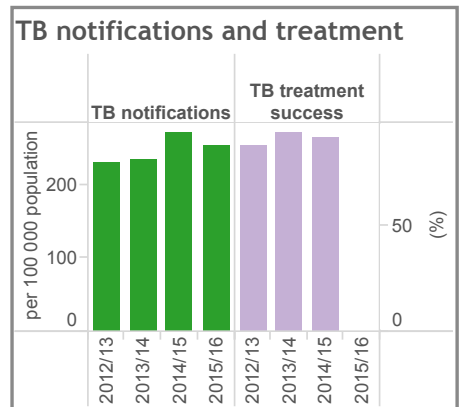
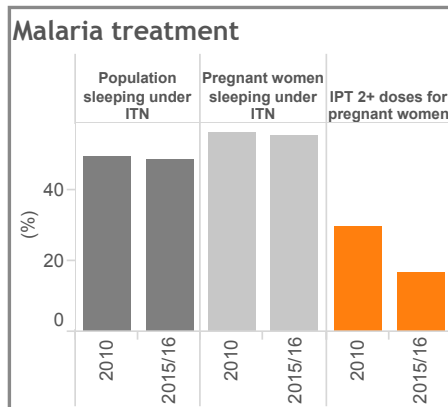
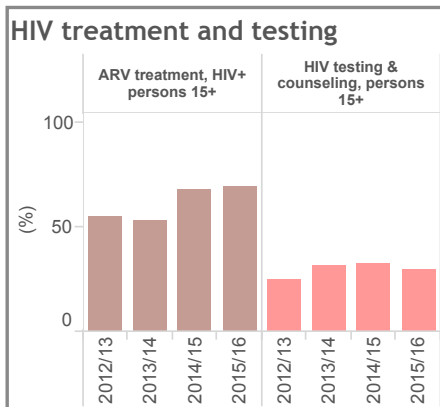
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Tharaka Nithi county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance Level				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		71	77	87	94	89	11						
Inpatient discharges per 100 population		7.1	6.5	5.6	5.0	5.7	24						
Outpatient visits per person per year		2.0	2.6	2.5	2.3	2.0	33						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	21	60	62	65	65	60	11						
Antenatal care 4 or more visits (%)		64	73	73	64	49	5						
Delivery in health facility (%)	78	79	82	67	68	72	21						
Caesarean Section in all deliveries (%)	15	13	16	14	12	10	10						
Maternal mortality per 100,000 hospital deliveries		31	14	66	96	106	23						
Fresh stillbirths per 1,000 births		8	10	9	8	12	5						
Low birth weight per 100 births in health facilities (%)		6	6	6	7	5	38						
Pentavalent vaccination 3rd dose, infants	97	102	97	82	81	86	37						
Measles vaccination, infants	99	106	102	85	78	83	36						
Full immunization coverage, infants	95	96	76	69	67	80	40						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	74					71	23						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		55	54	68	70	57	11						
ART among HIV+ children under 15 (%)		92	92	88	83	46	13						
PMTCT among HIV+ women who delivered (%)		63	69	64	68	80	37						
HIV testing & counseling 15+ (%)	40	25	31	33	30	54	32						
TB notifications per 100,000 population		229	235	271	253	187	42						
TB treatment success rate (%)		87	94	91		89	9						
Population sleeping under LLITN (%)*		50			49	41	19						
Pregnant women sleeping under LLITN (%)*		56			55	51	26						
IPT 2 or more doses for pregnant women (%)*		29			17	22	24						
Children with fever taken to a health provider (%)*		62			78	72	9						

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

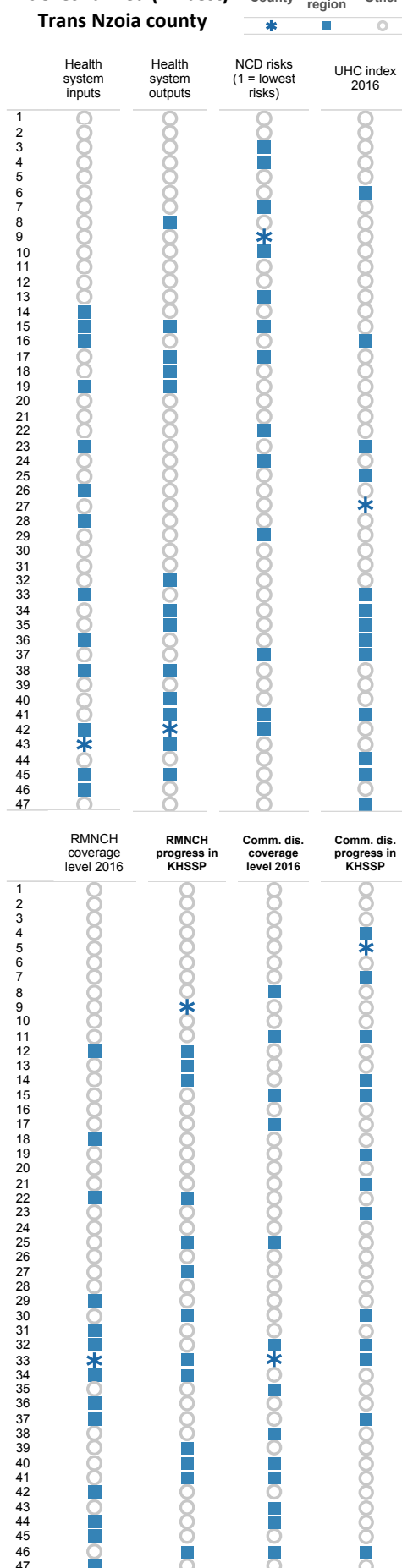
Midterm review KHSSP 2014-18, November 2016

Trans Nzoia county health statistics profile

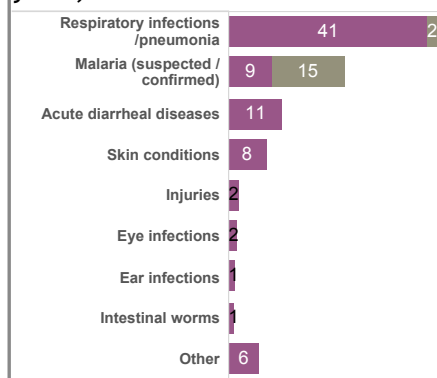
Midterm review KHSSP 2014-18, November 2016

	Highest	Higher than average	Average	Lower than average	Lowest
General statistics					
Population, total 2015/16 (KNBS projection)					
Births 2015/16 (estimated from DHIS)					
Total fertility rate (children per woman, KDHS 2014)					
Female education (median years, KDHS 2014)					
Health service inputs					
Facilities per 10,000 population					
Facilities that are private for profit (%)					
Hospital beds per 10,000 population					
Core health professionals per 10,000 population (est.)					
County health budget per capita 2014/15 (KSh)					
County health budget per capita 2015/16 (KSh)					
Health status					
Under 5 mortality per 1000 live births (census 2009)					
Maternal mortality per 100,000 live births (census 2009)					
Life expectancy males (years) (census 2009)					
Life expectancy females (years) (census 2009)					
HIV prevalence 15 years and over (MOH 2016)					
HIV prevalence among antenatal women (DHIS 2015/16)					
TB notifications per 100,000 (DHIS / TIBU 2015)					
Malaria parasite rate in children (MOH 2015)					
Stunting in children under 5 (%) (KDHS 2014)					
Wasting in children under 5 (%) (KDHS 2014)					
Underweight in children (%) (KDHS 2014)					
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)					
Obesity, women 15-49 (%)					
Overweight or obese, men 18-69 years (%)					
Obesity, men, 18-69 years (%)					
Tobacco use, men 18-69 (%)					
Raised blood glucose, both sexes 18-69 (%)					
Raised blood pressure, both sexes 18-69 (%)					
Cervical cancer screening, women 30-49 (%)					

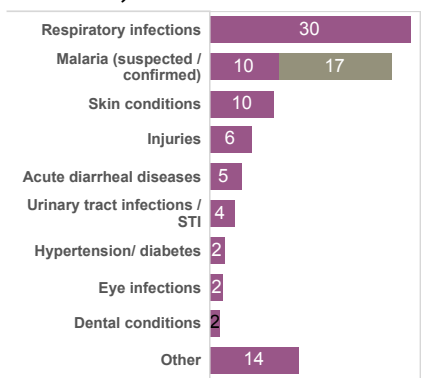
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16

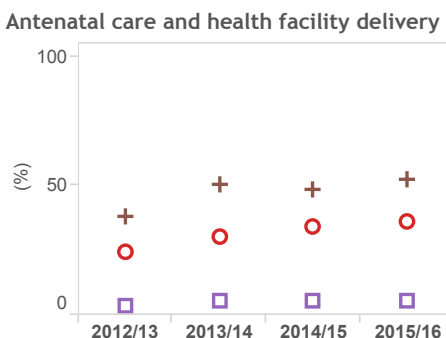
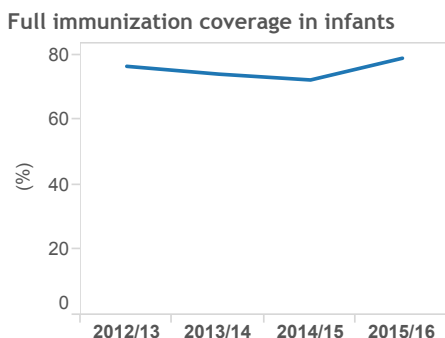
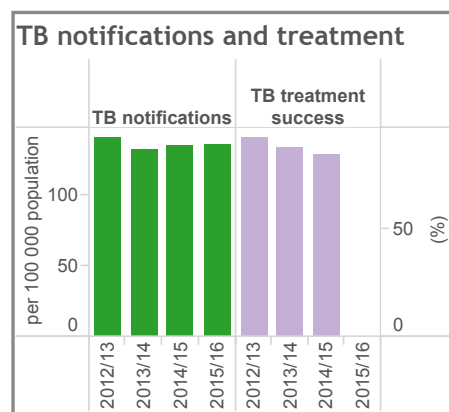
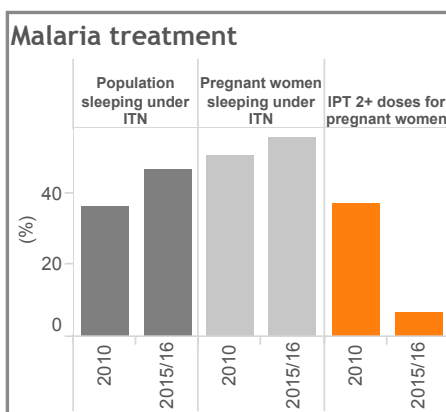
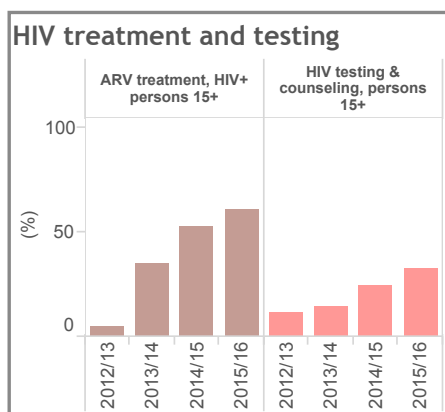


Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Trans Nzoia county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2010 and 2015	2015/16
DHIS Reporting index (%)		71	76	92	96	89	6	Strong progress	Some progress
Inpatient discharges per 100 population		3.3	3.9	4.6	4.0	5.7	15	Some decline	Large decline
Outpatient visits per person per year		0.9	1.0	1.0	0.9	2.0	1	Some decline	Large decline
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	2	53	54	56	57	60	29	Some decline	Large decline
Antenatal care 4 or more visits (%)		24	30	34	36	49	41	Some decline	Large decline
Delivery in health facility (%)	42	38	50	48	52	72	39	Some decline	Large decline
Caesarean Section in all deliveries (%)	5	3	5	5	5	10	28	Some decline	Large decline
Maternal mortality per 100,000 hospital deliveries		128	199	118	183	106	41	Some decline	Large decline
Fresh stillbirths per 1,000 births		16	15	20	15	12	32	Some decline	Large decline
Low birth weight per 100 births in health facilities (%)		3	4	5	5	5	23	Some decline	Large decline
Pentavalent vaccination 3rd dose, infants	78	93	95	85	82	86	33	Some decline	Large decline
Measles vaccination, infants	85	83	80	77	82	83	25	Some decline	Large decline
Full immunization coverage, infants	64	77	74	72	79	80	25	Some decline	Large decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	70					71	29	Some decline	Large decline
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		5	34	53	60	57	24	Some decline	Large decline
ART among HIV+ children under 15 (%)		6	38	79	85	46	12	Some decline	Large decline
PMTCT among HIV+ women who delivered (%)		32	51	80	76	80	30	Some decline	Large decline
HIV testing & counseling 15+ (%)	55	12	15	25	32	54	30	Some decline	Large decline
TB notifications per 100,000 population		140	131	134	135	187	12	Some decline	Large decline
TB treatment success rate (%)		92	87	85		89	45	Some decline	Large decline
Population sleeping under LLITN (%)*		36			46	41	22	Some decline	Large decline
Pregnant women sleeping under LLITN (%)*		50			55	51	25	Some decline	Large decline
IPT 2 or more doses for pregnant women (%)*		37			7	22	41	Some decline	Large decline
Children with fever taken to a health provider (%)*		62			72	72	29	Some decline	Large decline



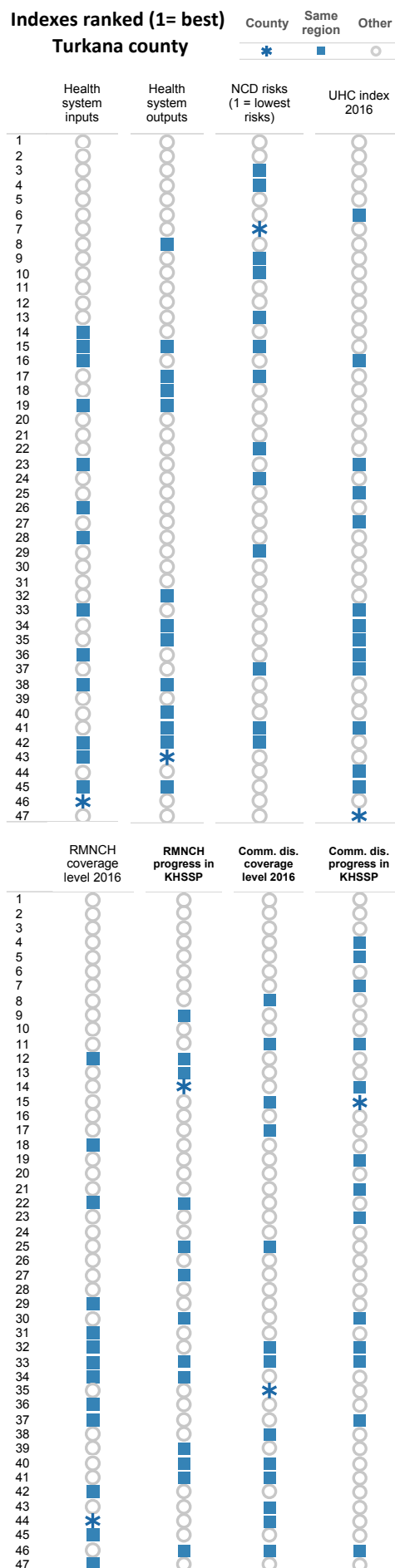
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

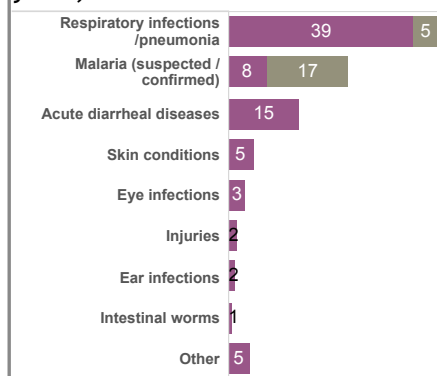
Turkana county health statistics profile

Midterm review KHSSP 2014-18, November 2016

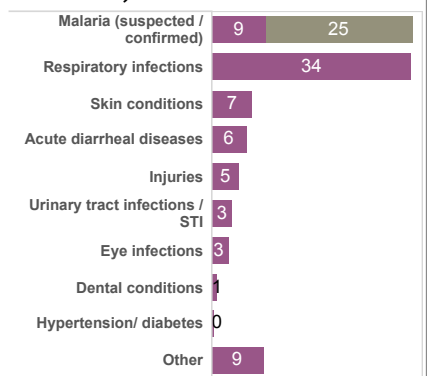
	Performance			Turkana rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	1 063 253	44 733 470		
Births 2015/16 (estimated from DHIS)	33 861	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	6.9	3.9		45
Female education (median years, KDHS 2014)	0.0	7.6		42
Health service inputs				
Facilities per 10,000 population	1.4	2.2		40
Facilities that are private for profit (%)	12.3	37.1		
Hospital beds per 10,000 population	4.5	8.8		37
Core health professionals per 10,000 population (est.)	2.4	9.3		47
County health budget per capita 2014/15 (KSh)	2070	1442		12
County health budget per capita 2015/16 (KSh)	1121	1874		44
Health status				
Under 5 mortality per 1000 live births (census 2009)	121	79		39
Maternal mortality per 100,000 live births (census 2009)	1594	495		45
Life expectancy males (years) (census 2009)	50	58		41
Life expectancy females (years) (census 2009)	55	61		35
HIV prevalence 15 years and over (MOH 2016)	3.3	5.5		16
HIV prevalence among antenatal women (DHIS 2015/16)	2.4	4.9		13
TB notifications per 100,000 (DHIS / TIBU 2015)	215	187		37
Malaria parasite rate in children (MOH 2015)	5-9%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	23.9	26.0		15
Wasting in children under 5 (%) (KDHS 2014)	22.9	4.0		47
Underweight in children (%) (KDHS 2014)	34.0	11.0		46
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	4.0	33.6		1
Obesity, women 15-49 (%)	0.9	10.6		1
Overweight or obese, men 18-69 years (%)	0.0	17.6		1
Obesity, men, 18-69 years (%)	0.0	4.3		1
Tobacco use, men 18-69 (%)	41.6	23.2		41
Raised blood glucose, both sexes 18-69 (%)	2.0	1.9		30
Raised blood pressure, both sexes 18-69 (%)	11.9	22.7		5
Cervical cancer screening, women 30-49 (%)	0.7	17.0		42



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



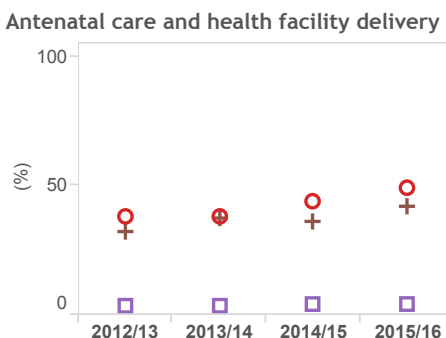
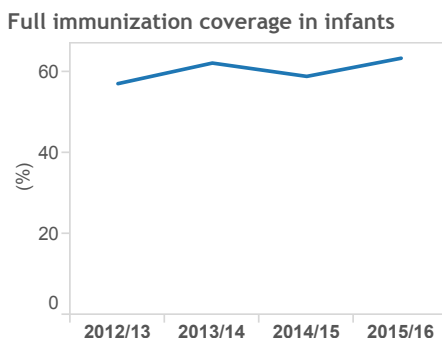
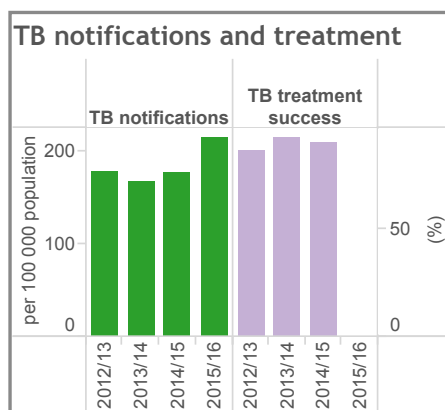
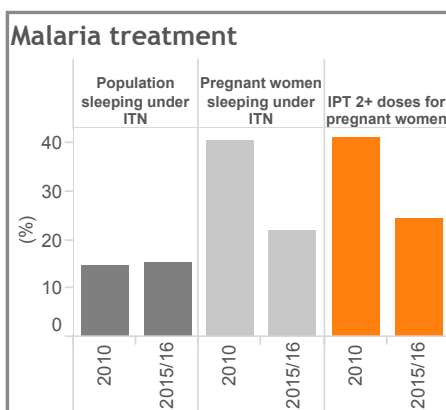
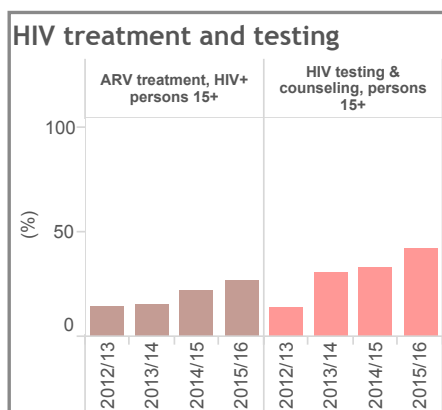
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Turkana county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2016	2017
DHIS Reporting index (%)		41	58	69	84	89	39	Strong progress	Some progress
Inpatient discharges per 100 population		3.3	2.6	3.2	4.0	5.7	15	Some decline	Large decline
Outpatient visits per person per year		1.0	1.0	1.2	1.3	2.0	4	Some decline	Large decline
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	53	23	23	23	24	60	44	Some decline	Large decline
Antenatal care 4 or more visits (%)		38	38	44	49	49	19	Some decline	Large decline
Delivery in health facility (%)	23	32	37	36	42	72	45	Some decline	Large decline
Caesarean Section in all deliveries (%)	1	3	3	4	4	10	31	Some decline	Large decline
Maternal mortality per 100,000 hospital deliveries		276	355	271	367	106	47	Some decline	Large decline
Fresh stillbirths per 1,000 births		9	12	19	15	12	32	Some decline	Large decline
Low birth weight per 100 births in health facilities (%)		7	6	7	13	5	47	Some decline	Large decline
Pentavalent vaccination 3rd dose, infants	86	78	79	78	76	86	44	Some decline	Large decline
Measles vaccination, infants	72	77	71	65	66	83	45	Some decline	Large decline
Full immunization coverage, infants	62	57	62	59	64	80	42	Some decline	Large decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	70					71	31	Some decline	Large decline
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		15	15	22	26	57	43	Some decline	Large decline
ART among HIV+ children under 15 (%)		22	25	25	38	46	38	Some decline	Large decline
PMTCT among HIV+ women who delivered (%)		45	51	63	75	80	31	Some decline	Large decline
HIV testing & counseling 15+ (%)	27	14	31	33	42	54	16	Some decline	Large decline
TB notifications per 100,000 population		179	168	176	215	187	37	Some decline	Large decline
TB treatment success rate (%)		86	93	91		89	15	Some decline	Large decline
Population sleeping under LLITN (%)*		15			15	41	41	Some decline	Large decline
Pregnant women sleeping under LLITN (%)*		40			22	51	44	Some decline	Large decline
IPT 2 or more doses for pregnant women (%)*		41			24	22	17	Some decline	Large decline
Children with fever taken to a health provider (%)*		72			76	72	17	Some decline	Large decline

* 2010 and 2015



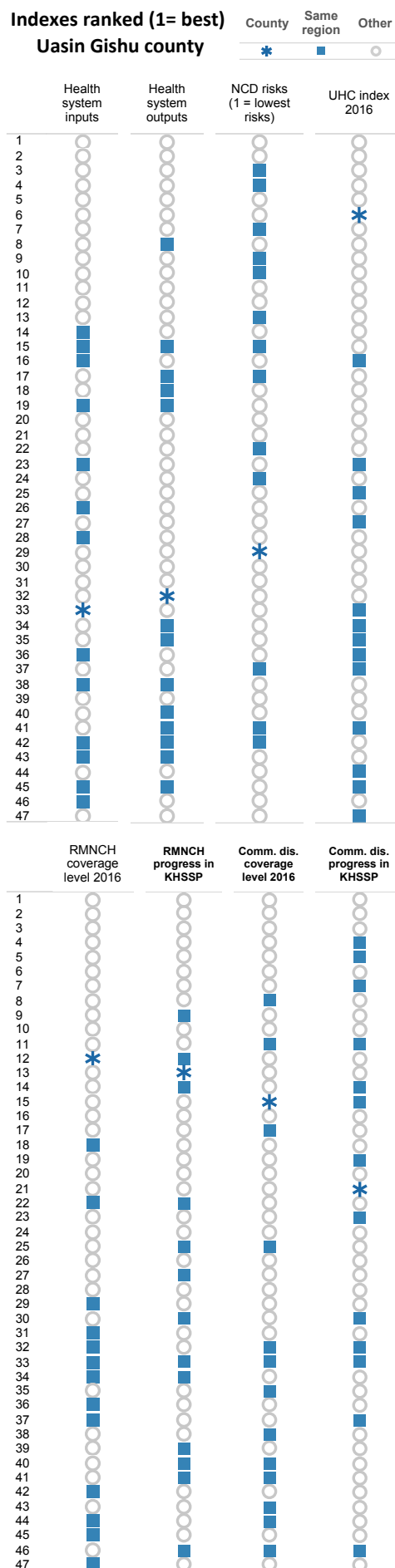
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

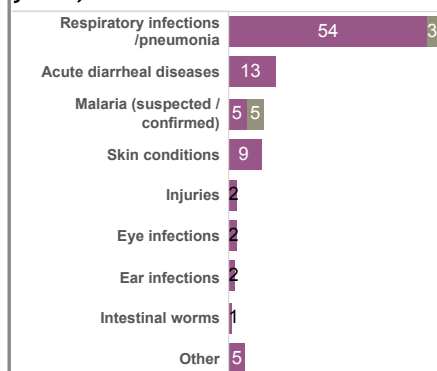
Uasin Gishu county health statistics profile

Midterm review KHSSP 2014-18, November 2016

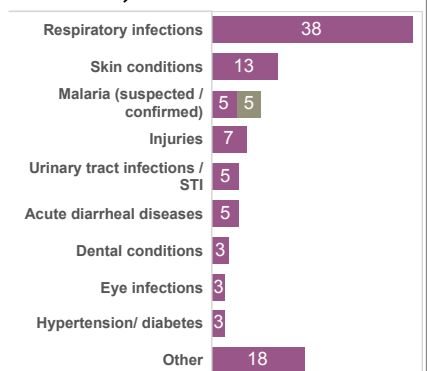
	Highest	Higher than average	Average	Lower than average	Lowest
	Uasin Gishu		Kenya	Uasin Gishu rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	1 111 275	44 733 470			
Births 2015/16 (estimated from DHIS)	34 751	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	3.6	3.9	15		
Female education (median years, KDHS 2014)	7.9	7.6	7		
Health service inputs					
Facilities per 10,000 population	1.6	2.2	36		
Facilities that are private for profit (%)	26.8	37.1			
Hospital beds per 10,000 population	3.4	8.8	43		
Core health professionals per 10,000 population (est.)	7.7	9.3	21		
County health budget per capita 2014/15 (KSh)	950	1442	41		
County health budget per capita 2015/16 (KSh)	1384	1874	38		
Health status					
Under 5 mortality per 1000 live births (census 2009)	61	79	20		
Maternal mortality per 100,000 live births (census 2009)	187	495	1		
Life expectancy males (years) (census 2009)	54	58	30		
Life expectancy females (years) (census 2009)	57	61	29		
HIV prevalence 15 years and over (MOH 2016)	4.1	5.5	29		
HIV prevalence among antenatal women (DHIS 2015/16)	3.7	4.9	35		
TB notifications per 100,000 (DHIS / TIBU 2015)	152	187	18		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	31.2	26.0	40		
Wasting in children under 5 (%) (KDHS 2014)	3.0	4.0	18		
Underweight in children (%) (KDHS 2014)	11.5	11.0	27		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	32.1	33.6	30		
Obesity, women 15-49 (%)	9.3	10.6	31		
Overweight or obese, men 18-69 years (%)	17.8	17.6	29		
Obesity, men, 18-69 years (%)	1.9	4.3	22		
Tobacco use, men 18-69 (%)	24.9	23.2	27		
Raised blood glucose, both sexes 18-69 (%)	0.2	1.9	8		
Raised blood pressure, both sexes 18-69 (%)	24.6	22.7	30		
Cervical cancer screening, women 30-49 (%)	30.7	17.0	8		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



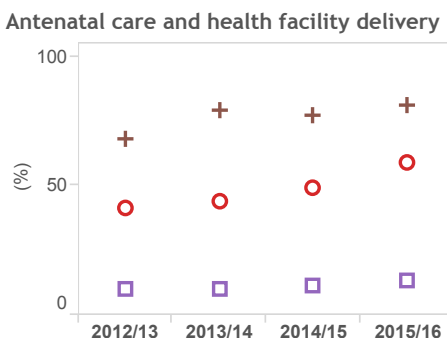
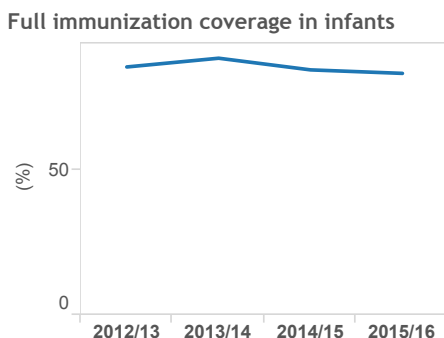
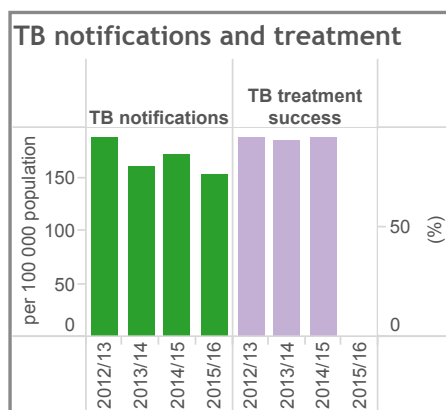
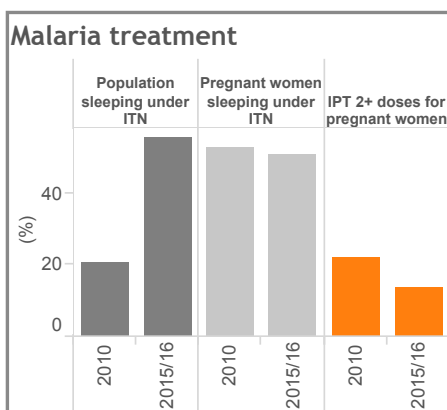
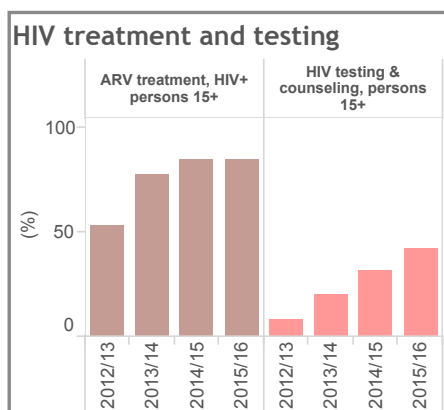
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Uasin Gishu county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
DHIS Reporting index (%)		54	64	71	84	89	40	Strong progress
Inpatient discharges per 100 population		5.5	3.0	3.7	5.2	5.7	26	Some decline
Outpatient visits per person per year		1.5	2.0	1.9	1.8	2.0	17	Some decline
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	13	55	58	59	61	60	19	Some decline
Antenatal care 4 or more visits (%)		41	44	49	59	49	9	Strong progress
Delivery in health facility (%)	57	68	79	77	81	72	10	Strong progress
Caesarean Section in all deliveries (%)	5	10	10	11	13	10	9	Strong progress
Maternal mortality per 100,000 hospital deliveries		286	205	110	111	106	30	Strong progress
Fresh stillbirths per 1,000 births		14	11	12	11	12	16	Strong progress
Low birth weight per 100 births in health facilities (%)		8	10	8	8	5	43	Large decline
Pentavalent vaccination 3rd dose, infants	92	94	99	86	90	86	10	Some decline
Measles vaccination, infants	91	90	91	83	83	83	22	Some decline
Full immunization coverage, infants	72	85	88	84	83	80	18	Some decline
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	69					71	32	Some decline
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		53	78	85	85	57	4	Strong progress
ART among HIV+ children under 15 (%)		65	90	102	90	46	7	Strong progress
PMTCT among HIV+ women who delivered (%)		57	80	79	83	80	23	Some decline
HIV testing & counseling 15+ (%)	44	8	20	32	42	54	17	Strong progress
TB notifications per 100,000 population		187	160	172	152	187	18	Strong progress
TB treatment success rate (%)		90	89	90		89	17	Some decline
Population sleeping under LLITN (%)*		20			55	41	13	Strong progress
Pregnant women sleeping under LLITN (%)*		52			51	51	30	Some decline
IPT 2 or more doses for pregnant women (%)*		22			13	22	26	Large decline
Children with fever taken to a health provider (%)*		74			68	72	40	Some decline

* 2010 and 2015



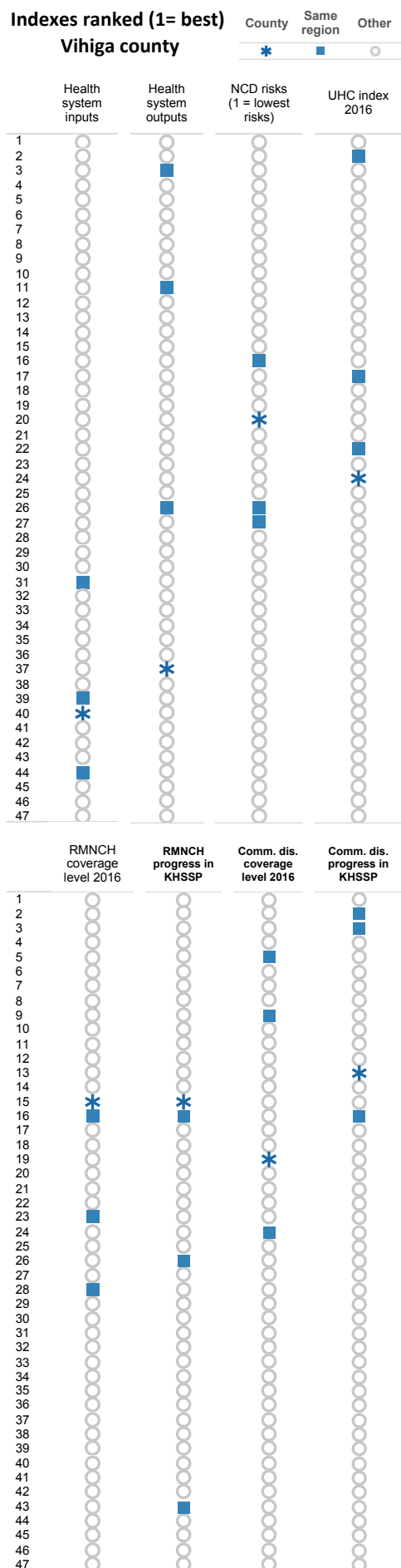
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

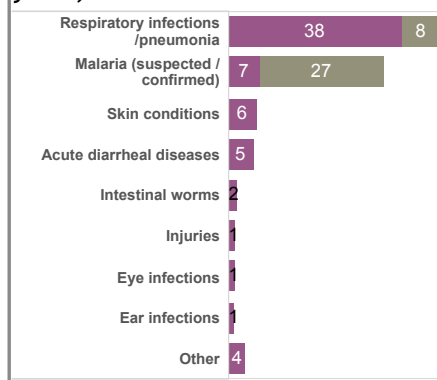
Vihiga county health statistics profile

Midterm review KHSSP 2014-18, November 2016

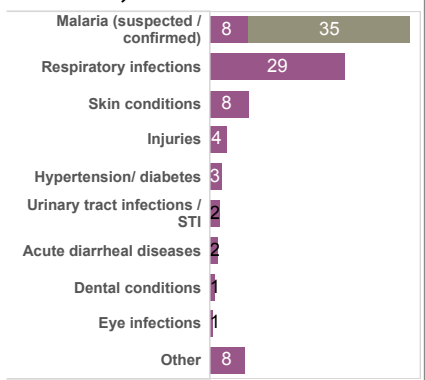
	Performance			Vihiga rank (1-47)
	Highest	Higher than average	Average	
General statistics				
Population, total 2015/16 (KNBS projection)	620 990	44 733 470		
Births 2015/16 (estimated from DHIS)	19 779	1 442 952		
Total fertility rate (children per woman, KDHS 2014)	4.5	3.9	29	
Female education (median years, KDHS 2014)	7.6	7.6	18	
Health service inputs				
Facilities per 10,000 population	1.4	2.2	40	
Facilities that are private for profit (%)	34.9	37.1		
Hospital beds per 10,000 population	7.2	8.8	28	
Core health professionals per 10,000 population (est.)	5.7	9.3	30	
County health budget per capita 2014/15 (KSh)	1164	1442	36	
County health budget per capita 2015/16 (KSh)	1710	1874	31	
Health status				
Under 5 mortality per 1000 live births (census 2009)	94	79	31	
Maternal mortality per 100,000 live births (census 2009)	531	495	35	
Life expectancy males (years) (census 2009)	49	58	43	
Life expectancy females (years) (census 2009)	49	61	45	
HIV prevalence 15 years and over (MOH 2016)	4.1	5.5	29	
HIV prevalence among antenatal women (DHIS 2015/16)	5.0	4.9	40	
TB notifications per 100,000 (DHIS / TIBU 2015)	134	187	11	
Malaria parasite rate in children (MOH 2015)	20-49%	1-4%		
Stunting in children under 5 (%) (KDHS 2014)	23.5	26.0	13	
Wasting in children under 5 (%) (KDHS 2014)	2.6	4.0	16	
Underweight in children (%) (KDHS 2014)	5.9	11.0	6	
NCD Risk factors (STEPS 2015 & KDHS 2014)				
Overweight or obese, women 15-49 (%)	31.6	33.6	28	
Obesity, women 15-49 (%)	7.1	10.6	21	
Overweight or obese, men 18-69 years (%)	4.1	17.6	6	
Obesity, men, 18-69 years (%)	0.0	4.3	1	
Tobacco use, men 18-69 (%)	30.0	23.2	33	
Raised blood glucose, both sexes 18-69 (%)	1.5	1.9	24	
Raised blood pressure, both sexes 18-69 (%)	18.8	22.7	19	
Cervical cancer screening, women 30-49 (%)	11.4	17.0	23	



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



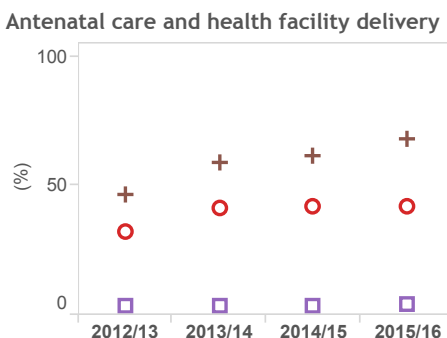
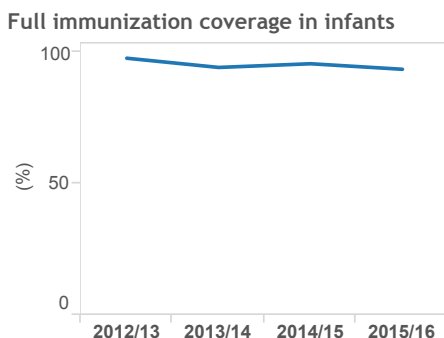
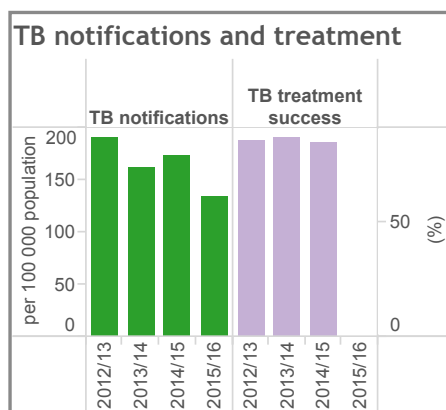
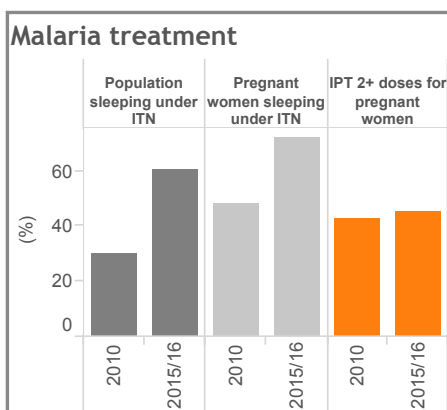
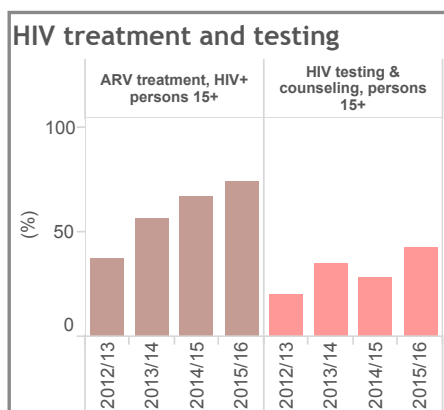
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Vihiga county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	
								2015/16	2016
DHIS Reporting index (%)		83	89	93	90	89	25		
Inpatient discharges per 100 population		4.8	5.4	4.6	4.3	5.7	19		
Outpatient visits per person per year		1.0	1.3	1.5	1.5	2.0	7		
Reproductive, maternal, newborn and child health									
Modern contraceptive use, women 15-49	50	59	60	64	62	60	15		
Antenatal care 4 or more visits (%)		32	41	42	42	49	32		
Delivery in health facility (%)	50	46	59	61	68	72	21		
Caesarean Section in all deliveries (%)	7	3	3	3	4	10	31		
Maternal mortality per 100,000 hospital deliveries		130	160	57	70	106	11		
Fresh stillbirths per 1,000 births		12	12	7	8	12	5		
Low birth weight per 100 births in health facilities (%)		2	1	1	2	5	1		
Pentavalent vaccination 3rd dose, infants	98	98	99	89	89	86	12		
Measles vaccination, infants	98	101	101	99	97	83	2		
Full immunization coverage, infants	94	98	94	95	93	80	2		
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	76					71	19		
Communicable diseases									
ART treatment, HIV+ persons 15+ (%)		37	57	67	75	57	6		
ART among HIV+ children under 15 (%)		35	53	67	69	46	20		
PMTCT among HIV+ women who delivered (%)		74	69	76	76	80	29		
HIV testing & counseling 15+ (%)	51	20	35	28	43	54	15		
TB notifications per 100,000 population		190	162	172	134	187	11		
TB treatment success rate (%)		86	87	85		89	41		
Population sleeping under LLITN (%)*		30			60	41	8		
Pregnant women sleeping under LLITN (%)*		48			72	51	8		
IPT 2 or more doses for pregnant women (%)*		43			45	22	7		
Children with fever taken to a health provider (%)*		59			70	72	34		

* 2010 and 2015



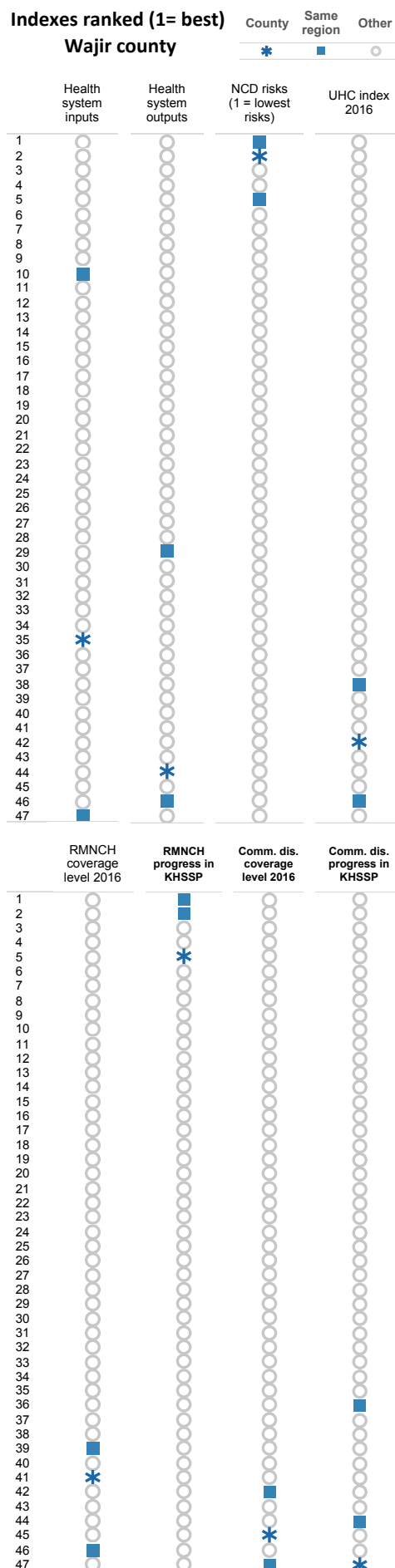
Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

Midterm review KHSSP 2014-18, November 2016

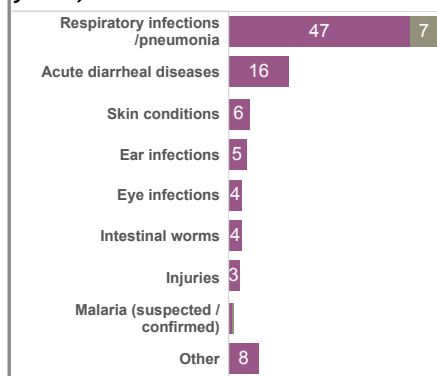
Wajir county health statistics profile

Midterm review KHSSP 2014-18, November 2016

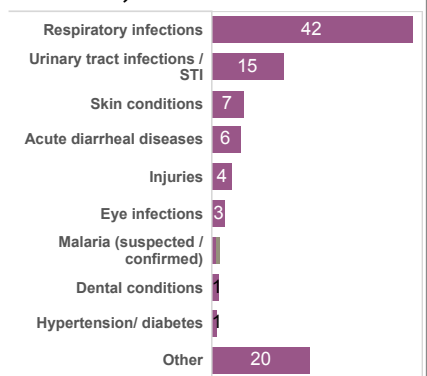
	Highest	Higher than average	Average	Lower than average	Lowest
	Wajir		Kenya	Wajir rank (1-47)	
General statistics					
Population, total 2015/16 (KNBS projection)	454 442	44 733 470			
Births 2015/16 (estimated from DHIS)	19 710	1 442 952			
Total fertility rate (children per woman, KDHS 2014)	7.8	3.9	47		
Female education (median years, KDHS 2014)	0.0	7.6	42		
Health service inputs					
Facilities per 10,000 population	2.9	2.2	12		
Facilities that are private for profit (%)	31.5	37.1			
Hospital beds per 10,000 population	0.9	8.8	47		
Core health professionals per 10,000 population (est.)	6.0	9.3	28		
County health budget per capita 2014/15 (KSh)	2592	1442	5		
County health budget per capita 2015/16 (KSh)	2496	1874	13		
Health status					
Under 5 mortality per 1000 live births (census 2009)	158	79	43		
Maternal mortality per 100,000 live births (census 2009)	1683	495	46		
Life expectancy males (years) (census 2009)	42	58	46		
Life expectancy females (years) (census 2009)	44	61	47		
HIV prevalence 15 years and over (MOH 2016)	0.2	5.5	1		
HIV prevalence among antenatal women (DHIS 2015/16)	0.3	4.9	1		
TB notifications per 100,000 (DHIS / TIBU 2015)	120	187	9		
Malaria parasite rate in children (MOH 2015)	<1%	1-4%			
Stunting in children under 5 (%) (KDHS 2014)	26.4	26.0	22		
Wasting in children under 5 (%) (KDHS 2014)	14.2	4.0	43		
Underweight in children (%) (KDHS 2014)	21.1	11.0	42		
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)	25.0	33.6	16		
Obesity, women 15-49 (%)	4.7	10.6	11		
Overweight or obese, men 18-69 years (%)	4.1	17.6	6		
Obesity, men, 18-69 years (%)	0.0	4.3	1		
Tobacco use, men 18-69 (%)	5.0	23.2	4		
Raised blood glucose, both sexes 18-69 (%)	2.5	1.9	36		
Raised blood pressure, both sexes 18-69 (%)	5.8	22.7	1		
Cervical cancer screening, women 30-49 (%)	0.0	17.0	43		



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



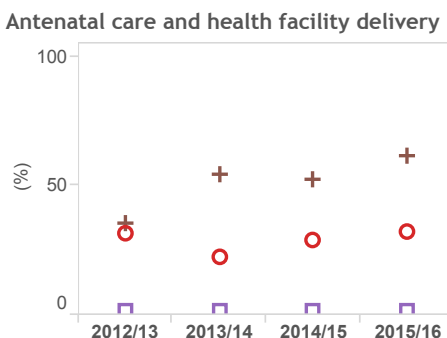
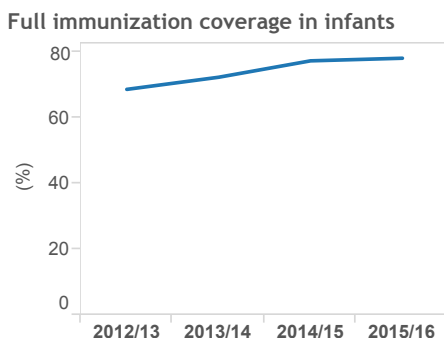
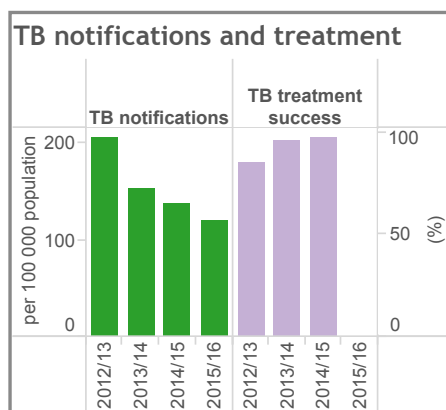
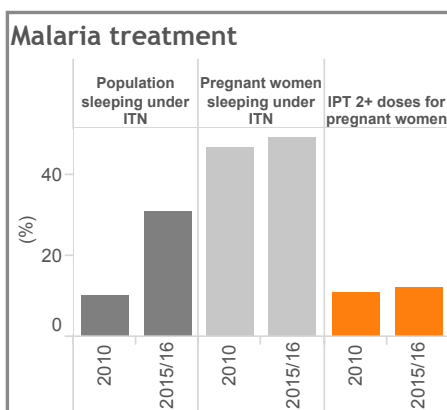
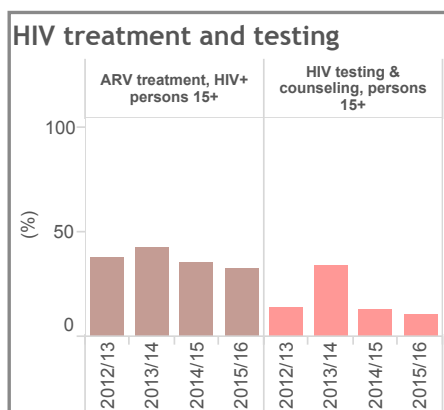
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



Wajir county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP
DHIS Reporting index (%)		49	56	62	60	89	46	
Inpatient discharges per 100 population		2.2	2.2	2.4	2.3	5.7	3	
Outpatient visits per person per year		1.2	1.6	1.7	1.7	2.0	12	
Reproductive, maternal, newborn and child health								
Modern contraceptive use, women 15-49	33	13	11	11	14	60	46	
Antenatal care 4 or more visits (%)		31	22	29	32	49	43	
Delivery in health facility (%)	18	35	54	52	61	72	33	
Caesarean Section in all deliveries (%)	1	1	1	1	1	10	46	
Maternal mortality per 100,000 hospital deliveries		62	104	138	104	106	28	
Fresh stillbirths per 1,000 births		12	12	11	13	12	23	
Low birth weight per 100 births in health facilities (%)		3	1	2	2	5	1	
Pentavalent vaccination 3rd dose, infants	79	83	92	84	83	86	27	
Measles vaccination, infants	65	80	85	83	86	83	15	
Full immunization coverage, infants	50	69	73	78	78	80	27	
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	59					71	42	
Communicable diseases								
ART treatment, HIV+ persons 15+ (%)		38	43	36	32	57	39	
ART among HIV+ children under 15 (%)		12	21	13	9	46	46	
PMTCT among HIV+ women who delivered (%)		2	12	12	2	80	47	
HIV testing & counseling 15+ (%)	27	14	34	13	10	54	46	
TB notifications per 100,000 population		205	153	137	120	187	9	
TB treatment success rate (%)		85	96	97		89	1	
Population sleeping under LLITN (%)*		10			31	41	36	
Pregnant women sleeping under LLITN (%)*		47			49	51	32	
IPT 2 or more doses for pregnant women (%)*		11			12	22	31	
Children with fever taken to a health provider (%)*		68			77	72	16	

* 2010 and 2015



Antenatal care 4+ visits ○
 Caesarean section (all deliveries) □
 Delivery in health facility +

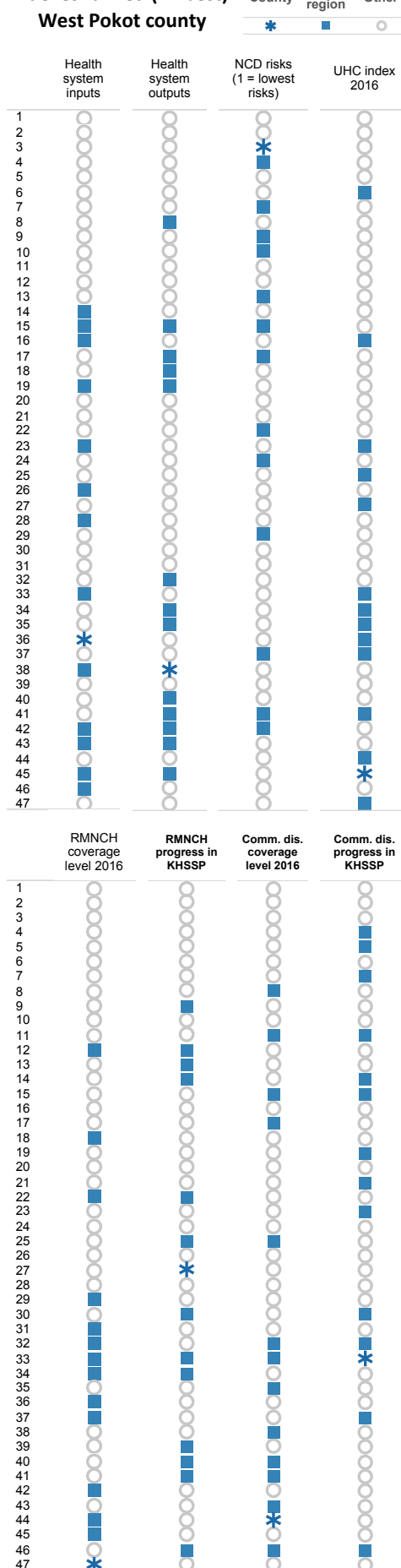
Midterm review KHSSP 2014-18, November 2016

West Pokot county health statistics profile

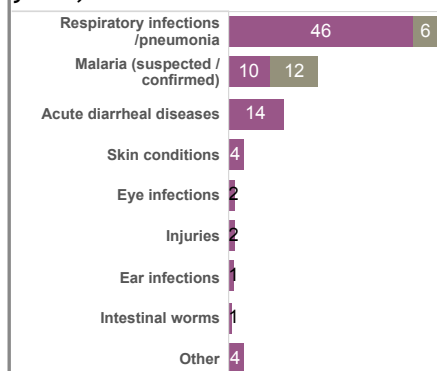
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	Highest	Higher than average	Average	Lower than average	Lowest
General statistics					
Population, total 2015/16 (KNBS projection)					
Births 2015/16 (estimated from DHIS)					
Total fertility rate (children per woman, KDHS 2014)					46
Female education (median years, KDHS 2014)					40
Health service inputs					
Facilities per 10,000 population					31
Facilities that are private for profit (%)					
Hospital beds per 10,000 population					36
Core health professionals per 10,000 population (est.)					23
County health budget per capita 2014/15 (KSh)					20
County health budget per capita 2015/16 (KSh)					24
Health status					
Under 5 mortality per 1000 live births (census 2009)					33
Maternal mortality per 100,000 live births (census 2009)					33
Life expectancy males (years) (census 2009)					30
Life expectancy females (years) (census 2009)					10
HIV prevalence 15 years and over (MOH 2016)					9
HIV prevalence among antenatal women (DHIS 2015/16)					4
TB notifications per 100,000 (DHIS / TIBU 2015)					39
Malaria parasite rate in children (MOH 2015)					
Stunting in children under 5 (%) (KDHS 2014)					47
Wasting in children under 5 (%) (KDHS 2014)					44
Underweight in children (%) (KDHS 2014)					47
NCD Risk factors (STEPS 2015 & KDHS 2014)					
Overweight or obese, women 15-49 (%)					3
Obesity, women 15-49 (%)					3
Overweight or obese, men 18-69 years (%)					3
Obesity, men, 18-69 years (%)					1
Tobacco use, men 18-69 (%)					15
Raised blood glucose, both sexes 18-69 (%)					8
Raised blood pressure, both sexes 18-69 (%)					17
Cervical cancer screening, women 30-49 (%)					43

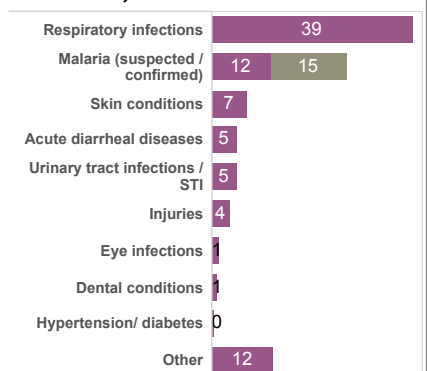
Indexes ranked (1= best)



Leading OPD diagnoses (%), under 5 years, DHIS 2015/16



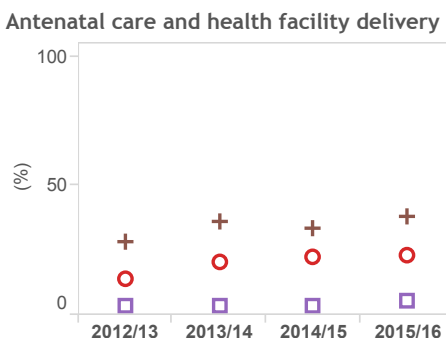
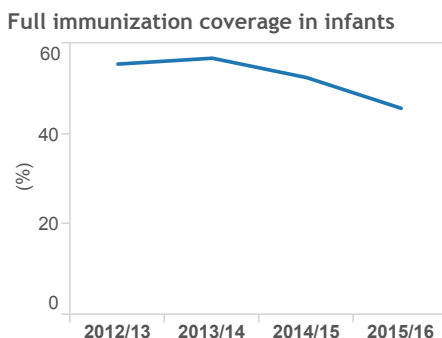
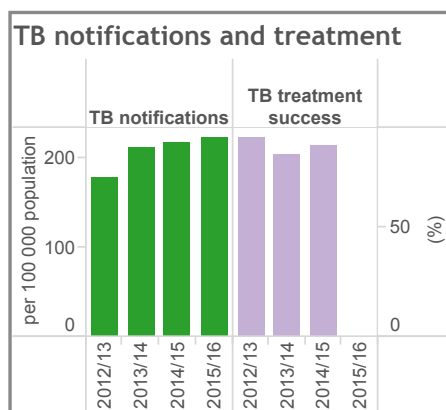
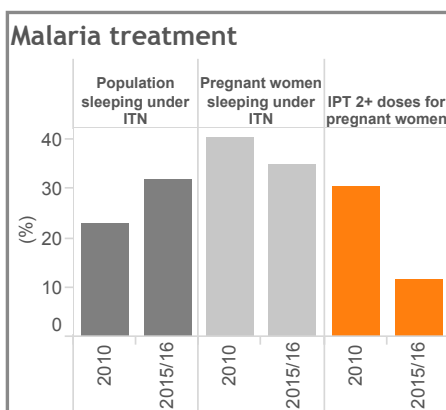
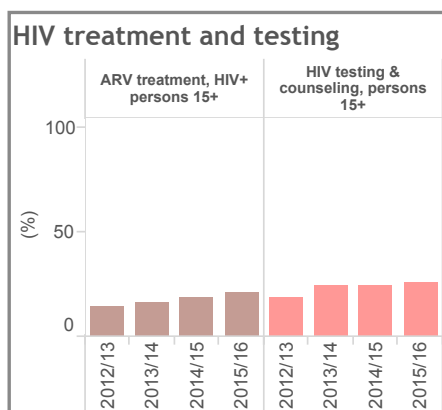
Leading OPD diagnoses (%), 5 years and older, DHIS 2015/16



West Pokot county health statistics profile

General	2014 KDHS	DHIS 2012/13	DHIS 2013/14	DHIS 2014/15	DHIS 2015/16	Kenya 2015/16	County rank 2016	Progress in KHSSP	Performance				
									Highest	Higher than average	Average	Lower than average	Lowest
									Strong progress	Some progress	Same level	Some decline	Large decline
DHIS Reporting index (%)		60	71	92	98	89	2						
Inpatient discharges per 100 population		4.2	4.8	4.6	4.0	5.7	15						
Outpatient visits per person per year		0.9	1.3	1.6	1.4	2.0	5						
Reproductive, maternal, newborn and child health													
Modern contraceptive use, women 15-49	2	29	30	33	34	60	42						
Antenatal care 4 or more visits (%)		14	20	22	23	49	47						
Delivery in health facility (%)	26	28	36	33	38	72	46						
Caesarean Section in all deliveries (%)	2	3	3	3	5	10	28						
Maternal mortality per 100,000 hospital deliveries		326	107	170	156	106	39						
Fresh stillbirths per 1,000 births		38	31	27	30	12	46						
Low birth weight per 100 births in health facilities (%)		8	9	9	8	5	43						
Pentavalent vaccination 3rd dose, infants	68	83	92	74	67	86	47						
Measles vaccination, infants	58	64	68	59	54	83	47						
Full immunization coverage, infants	31	56	57	53	46	80	47						
Vitamin A supplementation in last 6 mos, 12-59 mos. (%)	64					71	39						
Communicable diseases													
ART treatment, HIV+ persons 15+ (%)		15	16	18	21	57	45						
ART among HIV+ children under 15 (%)		7	14	14	17	46	44						
PMTCT among HIV+ women who delivered (%)		39	41	46	66	80	38						
HIV testing & counseling 15+ (%)	48	19	24	24	26	54	39						
TB notifications per 100,000 population		178	213	218	223	187	39						
TB treatment success rate (%)		91	83	88		89	30						
Population sleeping under LLITN (%)*		23			32	41	34						
Pregnant women sleeping under LLITN (%)*		40			35	51	40						
IPT 2 or more doses for pregnant women (%)*		30			12	22	32						
Children with fever taken to a health provider (%)*		68			82	72	3						

* 2010 and 2015



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