**CASE STUDY 14**

PUBLIC SERVICES: LAND, PORTS, HEALTHCARE

# Reforms in the Health Sector in Ukraine

Revolutionizing care: Ukraine's sectoral approach to anti-corruption in health

## Overview

Following the 2014 Euromaidan Revolution, Ukraine embarked on a national reform program to reduce widespread corruption within government. In the health sector, the government introduced several complementary reforms that aimed to improve the health outcomes of Ukrainian citizens, but designed in such a way that they would also reduce corruption. The reforms included reconfiguring primary care financing and essential medicines reimbursement under the newly formed National Health Service of Ukraine; raising the remuneration of health professionals; introducing a transparent, merit-based, process for medical university admissions; and initiating development of an eHealth digital records system. As of early 2020, these reforms have improved overall value for money, lowered out-of-pocket expenditure, reduced the number of acute medical events, and increased patient satisfaction with their care providers. Such indications of change are encouraging, although it may be too early to tell if these ongoing reforms will sustainably reduce levels of corruption on a national scale. In the coming years, it will be critical that anti-corruption momentum is maintained to allow for the full realization of the sectoral reforms.

## Introduction

In 2011, 4-year-old Christina Babiak from Kherson Oblast was diagnosed with congenital aplastic anemia and needed an urgent bone marrow transplant. As such a treatment was only available abroad, Christina's parents appealed to the Ministry of Health, which granted them almost USD200,000 for Christina to receive the procedure at Debrecen Scientific University in Hungary. Christina's parents were later told that the procedure was to take place at a municipal clinic in Miskolc that was affiliated with the Debrecen Scientific University and they reluctantly agreed to the treatment. It turned out that the clinic and university were not affiliated at all and Debrecen Scientific University was in fact not equipped to perform pediatric bone marrow transplants. The ministry had employed a mediator to arrange the treatment and handle the funds. The clinic received approximately USD160,000 and the rest went missing. Three days after the botched procedure Christina died.[44]

There is no shortage of literature describing the failure of the Ukrainian health system to provide for its citizens. Historically, modern Ukraine's political system has been described as a kleptocracy and earned

Ukraine the title of being "the most corrupt country in Europe".[45] In the health sector, rampant corruption has resulted in poorly maintained, funded, staffed and supplied health institutions, and high levels of out-of-pocket and informal payments across all levels of care. Unsurprisingly, Ukrainians were recorded as having the second lowest life expectancy compared to all other European countries after Moldova.[46]

The procedures for financing Ukraine's health system facilitated both corruption and poor health outcomes. Health facilities received lump sums to cover costs of inputs, regardless of the level of patient flow or conditions treated, and patients were assigned a practitioner based on their place of residence, giving them little to no recourse when provided poor or fraudulent services. This was coupled with severely low wages for health personnel. For example, in 2014, the average monthly salary for health workers in Ukraine was approximately 2,500 Ukrainian hryvnia (UAH) or USD100.[47] Such low wages incentivized medical personnel to expect informal payments or in-kind gifts for better quality care.[48,49] Data from 2010 indicated that 53% of Ukrainians had made informal cash payments and 42% had provided gifts in-kind to personnel at health facilities.[50]

In addition to corruption within health institutions, the medical education system was also infamous for corruption schemes, including students paying bribes to deans and professors for study entry, exam results, and qualifications. According to OECD, unlike other higher education institutions, applicants to medical universities did not have to complete so-called External Independent Testing, which was successfully used in other university subjects to ensure students were accepted based on independently verified merit. Rather, applicants to medical universities wielded their social and financial capital in order to be accepted to the coveted, state-funded positions at medical universities by paying bribes to those responsible for admissions.[51] This problem also traveled beyond borders, as Ukraine educated many medical students from other countries, including India, Nigeria and Turkey.[52]

In an effort to steer away from scattered, isolated interventions or broad national-level approaches, there has been increasing global advocacy for a sectoral approach to tackling corruption in health that prioritizes improvement in health outcomes as the key indicator of success. Advocates of this approach have suggested that by moving away from a zero-tolerance stance that

relies predominantly on financial control mechanisms, the possibility of bringing strategic health sector improvements through an anti-corruption lens opens up.[53]

Following the 2014 Euromaidan Revolution, when months of sustained protests ousted the president and large swathes of the political establishment, the new administration chose to attempt a sectoral approach to reducing corruption in the health system. The subsequent Law on the Prevention of Corruption bolstered further support for anti-corruption reforms in the country, including for the Ministry of Health to tackle rampant corruption within the system as part of centralized reform efforts, in addition to public procurement reforms.

The ministry embedded these anti-corruption reforms in the National Healthcare Reform Strategy 2015-2020,[54] developed by a group of 12 Ukrainian and international experts with financial and technical support from the International Renaissance Foundation, the World Bank, and the World Health Organization (WHO). The strategy set out a plan to overhaul Ukraine's healthcare system, highlighting the importance of tackling inefficiency and corruption as a cornerstone for providing services that met patients' needs.

## The implementation process

The ambitious reforms included in the strategy aimed primarily to improve service delivery and control costs, but also lent themselves to reducing corruption. The reforms included establishing a national health service and reimbursement plan, improving compensation for health personnel, introducing transparent processes for medical university admissions and career progression, and developing an eHealth system for digital health records and reimbursement. The Acting Minister of Health Ulana Suprun led these reform efforts from 2016 to 2019. In May 2017 the ministry also conducted a Corruption Risk Assessment and shortly thereafter established an anti-corruption program[55] to improve overall transparency and accountability within the ministry itself.

The health ministry established the National Health Service of Ukraine (NHSU) in March 2018 as a national insurer and the main institution responsible for

promoting and implementing a revised healthcare financing mechanism. The new mechanism, known as "money follows the patient", employed output-based purchasing through capitation[56] adjusted for age. Using this approach, the NHSU funded patients' servicing, rather than providing lump sums to finance facilities, doctors, or other staff. Under this scheme, expanded to cover specialized outpatient care and hospitals in 2020, all public facilities and any private facilities requiring or desiring public financial support, had to sign up to the NHSU scheme.

As part of this scheme at the primary care level[57,58] patients signed a "declaration" with their practitioner and financial reimbursements were calculated based on the number of patients registered to a facility. To sign a declaration, patients had to present their passport, individual tax number and include their registered address on declarations. Declarations were confirmed using patients' mobile phones connected to their registered address. Signed declarations underwent central vetting in the NHSU and eZdorovya (described below) data systems that used digital algorithms to prevent fraudulent or multiple submissions. Further data cleaning was undertaken regularly to remove from the registry duplications, as well as those who had emigrated or were deceased. A key component of this reform was that patients could change providers if they were dissatisfied with the services provided. As of early 2020, 97% of all primary care facilities had signed onto the NHSU and by March 2020 nearly two-thirds of the Ukrainian population had signed declarations (29.3 million). The government kept a transparent, online record of all primary healthcare facilities and the number of signed declarations on the NHSU open data platform.[59,60] In 2020, the NHSU went beyond primary care and integrated secondary and tertiary care into the reimbursement scheme with a second phase of NHSU integration commencing in April 2020.

Prior to the establishment of the NHSU, the Ministry of Health developed a medicines governance program in 2017 called, the Affordable Medicines Programme, which was then integrated into the NHSU reimbursement scheme. The program set out a list of essential medicines for three chronic diseases that were covered by the NHSU outpatient reimbursement program, namely, hypertension, diabetes type 2, and asthma. Patients were provided with information about which medicines were covered and which were not. This increased overall access to medicines and led to a huge reduction in patient co-payments.[61] This system was complemented by a weekly-updated, online resource, "There is a Medicine" (ELiky)[62], where patients could search for information on all available, state-funded stock at a given health facility. This resource also provided links to information about the cost and reimbursement of medicines.

Through the NHSU's primary care financing reforms, provider salaries have increased.[63] As part of the "money follows the patient" model, primary care providers whose facilities have joined the NHSU scheme have seen an increase in salaries based on the number of patients with whom they sign declarations. Some providers saw a tripling of their salaries. For example, in the months immediately after the implementation of the model, the Ministry of Health reported that a family doctor in the Odessa Oblast, who had signed 1,795 patient declarations, earned UAH16,011 (USD640) after tax in July, as opposed to UAH5,834 (USD230) the previous month.[64] Such an incentive can act as a quality assurance model and a deterrent for informal payments as, under the NHSU, patients were able to change their provider if they were dissatisfied with services. The impact of increased salaries was reflected in a reduction in reported levels of bribery in an October 2018 poll, which found that 7% of polled patients paid a bribe compared with 15% four months earlier in June 2018, and 20% in August 2017.[65]

The ministry identified two further points of intervention to concentrate on that presented a corruption risk to the healthcare profession more broadly, namely, medical university admissions and appointment procedures for Senior Healthcare Managers.[66,67] In both instances, merit-based requirements were put in place. Previously, those aiming to study medicine could apply to any of the medical universities in the country using their final high-school results without any external admissions testing. However, starting in 2018, students for the specialties of dentistry, medicine and pediatrics were required to achieve a higher minimum score on entrance criteria in relevant subjects reviewed by external independent evaluators. Further initiatives to improve medical school examinations, such as standardized interim and exit exams, were also introduced. For example, in 2019 the Ministry of Health set the Unified State Qualification Exam, which expanded the existing "Krok" examination schedule to include the standardized "International Foundations of Medicine" exam.[68] In addition to providing greater quality assurance of knowledge and skills of students and graduates, this reform aimed to weed out those

who bought their university placements.[69]

The process for the appointment of senior health staff was also adapted to be relatively transparent and merit-based from 2018 onward.[70] Using the new procedure, a hiring panel was assigned, consisting of representatives from the administrative body, selected members of the public and staff delegates—any interested individual could apply to become an interviewing board member. In one example, this procedure was applied for the appointment of the Director of the Department of Health for the Poltava Oblast in January 2020. Three shortlisted candidates were required to complete a written test, a professional exam, and an interview with an independent selection committee, which culminated in an objective numerical score. The recruitment procedure and the results of the outcome were made public in the local news.[71]

Finally, in 2018 the ministry launched a further initiative that ties many of the reforms together, eZdorovya[72], which was an e-Health system accessible by patients, providers and administrators alike that aimed to digitize all appointments and medical records, including prescriptions, thereby making paper-based record-keeping obsolete. Paper-based records present a risk for fraudulent practices and can hinder accurate medical surveillance, whereas e-Health records can facilitate better quality and faster care, rule out loss of patients' medical data, enable more efficient resource management, improve price-setting accuracy and ensure better overall quality control. The eZdorovya system was initially developed and tested by Transparency International Ukraine in 2017 to support the restructuring of health financing and allow for better management of public spending. The system was later transferred to the ministry in 2018, after which it became a state-owned enterprise.[73] Already by the end of July 2019, over 29 million patients (as part of signing declarations), over 24,500 doctors, nearly 11,000 pharmacists, over 2,000 medical establishments and over 1,000 pharmacies had joined the system. At the same time, more than 4 million electronic prescriptions were filled under the NHSU reimbursement program and over 3 million e-prescriptions issued by pharmacies were reimbursed.[74,75] The next steps for eZdorovya are the roll-out of digital patient health records and the integration of the secondary and tertiary care levels into the system as part of the NHSU health sector financing reforms planned for 2020.

## Reflections

The health sector reforms undertaken in Ukraine began in 2014 and in a short period of time considerable gains were made. The sectoral approach that was adopted shows how diverse health system reforms that prioritize health outcomes and improvements to system efficiency can be coupled with anti-corruption objectives in order to achieve both ends. This is encouraging, as it can be immensely challenging to acquire resources needed to implement a sustainable anti-corruption reform, especially in the health system.

There are three distinct cornerstones of Ukraine's reforms, namely, supportive legislative change, diverse reform implementation that targets the corruption causing the greatest harm, and civic participation. Particularly for reforms carried out in primary care, it appears that collectively these initiatives had a positive impact. According to a series of surveys, rates of reported bribery when accessing health services decreased from 20% in August 2017 to 7% in October 2018.[76] This is encouraging, as bribery and out-of-pocket expenses were listed among the major reasons for catastrophic loss[77] in Ukraine.[78] Also, increased access to essential medicines has led to a decrease in the total number of acute events, such as heart attack or stroke.[79] This has all occurred in spite of a decrease in overall % GDP expenditure on health since 2013—7.3% in 2013, 6.7% in 2016.[80]

However, it would be premature to declare it all a success; as the reform process in the Ukrainian healthcare system continues, considerable corruption risks and challenges still remain, and reversals cannot be ruled out. For example, while there has been a reduction in out-of-pocket expenses in primary care, an increase in secondary and tertiary care—not yet integrated into the NHSU reimbursement system—has been observed.[81] This illustrates the critical need for sustained momentum on health system improvement and anti-corruption to ensure Ukraine reaches its goal of having a healthcare *ecosystem in which the very causes of corruption will be impossible*".[82]

## Notes

1.  Rose-Ackerman, Susan & Palifka, Bonnie J. (2016). Reducing Incentives and Increasing Costs. Chapter 4 of Corruption and Government: Causes, Consequences, and Reform. Cambridge University Press. Page 126.

2.  For a definition of grand corruption, see: http://files. transparency.org/content/download/2033/13144/file/ GrandCorruption_LegalDefinition.pdf

3.  Benjamin A. Olken & Rohini Pande, 2012. "Corruption in Developing Countries," Annual Review of Economics, Annual Reviews, vol. 4(1), p. 479- 509, 07.

4.  Yuriy Gorodnichenko & Klara Sabirianova Peter (2007). Public sector pay and corruption: Measuring bribery from micro data, Journal of Public Economics, Volume 91, Issues 5–6, p. 963-991.

5.  Pyman, Mark (2019). Sectors as the primary locus for corruption reform. https://curbingcorruption.com/mark-pyman-sectors-as-the-primary- locus-for-corruption-reform-april-2019/.

6.  Incentives for grand and petty corruption do not always go hand in hand. For example, Bussell (2013) argues that the incentives to do away with petty corruption in India by introducing digitization and one-stop shops depend on the reformers' access to grand corruption rents.

7.  See https://curbingcorruption.com/about/.

8.  Rose-Ackerman & Palifka, 2016, page 443.

9.  Transparency International Rwanda (2009), 'Ville de Kigali: Etude sur la transparence et l'intégrité dans les services d'urbanisme et du cadastre'.

10. For a full typology see Koechlin, L., Quan, J. and Mulukutla, H. (2016), Tackling corruption in land governance. A LEGEND analytical paper. https://landportal.org/library/resources/ legend-analytical-paper-1/tackling-corruption-land-governance..

11. Parts of this case study draw from: Schreiber, Leon (2017), Securing land rights: making land titling work in Rwanda, 2012-17, Innovations for Successful Societies, Princeton University.

12. African Development Bank (2011), Land tenure regularization in Rwanda: good practices in land reform: case study.

13. In implementing this program, the land agency also took different names, with the government also changing its governance structure on two occasions. The National Land Centre began the mapping and titling program before it was integrated into the Rwanda Natural Resources Authority (RNRA) in 2011. In 2017 the agency was renamed the Rwanda Land Use and Management Authority and re-established as an independent body.

14. African Development Bank, 2011.

15. Schreiber, 2017.

16. Ibid

17. Ibid

18. Centre for Public Impact (2017). Land reform in Rwanda. https://www.centreforpublicimpact.org/case-study/land-reform-rwanda/.

19. African Development Bank, 2011.

20. World Bank (2017). A tool for sustainable land use management in Rwanda. https://www.worldbank.org/en/ news/feature/2017/06/06/a-tool- for-sustainable-land-use-management-in-rwanda.

21. Transparency International Kenya (2015). 'The East African Bribery Index: trends analysis 2010–2014'.

22. Transparency International Kenya (2017). 'The East African Bribery Index 2017'.; Camargo, C. and Gatwa, T. (2018). Informal governance and corruption – transcending the principal agent and collective action paradigms. Basel Institute on Governance. https://www.baselgovernance.org/publications/ informal-governance-and-corruption-transcending-principal-agent-and-collective-1.; and

    Sebudubudu, D., Khatib, L. and Bozzini, A. (2017). 'The atypical achievers: Botswana, Qatar and Rwanda' in Mungiu-Pippidi, A. and Johnston, M. (eds), *Transitions to Good Governance: Creating Virtuous Circles of Anti-Corruption,* Cheltenham: Edward Elgar Publishing.

23. Sebudubudu et. al., 2017.

24. Parts of this case study draw from: MACN (2018). Nigeria Collective Action: MACN Impact Report. Basel Institute on Governance. https://www.baselgovernance.org/publications/ nigeria-collective-action-macn-impact-report. The author is also grateful to Cecilia Müller Torbrand, Executive Director of the MACN, and Soji Apampa, CEO of the Convention on Business Integrity, for further information and insight provided in interviews in February 2019.

25. The Lagos Chamber of Commerce & Industry (2018), 'Costs of Maritime Port Challenges in Nigeria'.

26. Chatham House (2015), 'Nigeria's Booming Borders: The Drivers and Consequences of Unrecorded Trade'.

27. Data compiled by Dynamar, a Dutch maritime intelligence and consulting firm and cited in Quartz Africa (2018), 'The Never-Ending Congestion at Nigeria's Largest Port is Starting to Get Very Expensive'.

28. The Lagos Chamber of Commerce & Industry, 2018.

29. Background on the organization is available on its website, http://www.maritime-acn.org/about-macn

30. MACN, 2018.

31. UNDP (2017), 'Corruption Risk Assessment and Integrity Planning'. https://www.ng.undp.org/content/nigeria/en/ home/library/democratic_governance/corruption-risk-assessment-and-integrity-planning.html.

32. Ibid

33. MACN, 2018

34. Ship Technology (2016), 'Nigeria ramps up port anti-corruption'.

35. Sequeira, S. and Djankov, S. (2010), 'An empirical study of corruption in ports'.

36. MACN, 2018.

37. Ship Technology, 2016.

38. MACN, 2018.

39. Proshare Business (2019)., 'CBi and MACN explain inefficiency at Nigerian ports; corruption still a problem'.

40. The Lagos Chamber of Commerce & Industry, 2018.

41. UNDP, 2016.

42. Center for the Advancement of Public Integrity (2017), 'The Maritime Anti-Corruption Network. A Model for Public-Private Cooperation against Graft'.

43. MACN (2018), '2018 Annual Report', https://www.maritime-acn.org/news/2019/6/17/macn-2018-annual-report-available.

44. TCN, 2011, The Death of a 4-Year-Old Child from Kherson Revealed a Pattern of Corruption in the MOH, 26 June 2011, https://tsn.ua/ukrayina/smert-4-richnoyi-ditini-z-hersona-rozkrila-shemu-korupciyi-v-moz.html.

45. Bullough O, 2015, Welcome to Ukraine, the most corrupt nation in Europe, in: The Guardian, 06 February 2015, https://www.theguardian.com/news/2015/feb/04/welcome-to-the-most-corrupt-nation-in-europe-ukraine.

46. World Health Organization, 2018, Life expectancy at birth (years), WHO European Region, European Health Information Gateway, https://gateway.euro.who.int/en/indicators/hfa_43-1010-life-expectancy-at-birth-years/.

47. State Statistic Service of Ukraine (2014). http://ukrstat.gov.ua/.

48. Lekhan VN, Rudiy VM, Shevchenko MV, Nitzan Kaluski D, Richardson E., 2015, Ukraine: Health system review. Health Systems in Transition, 2015; 17(2): 1–153.

49. Yabchanka O, 2016, A Ukrainian doctor's choice: be a beggar or a racketeer, in: Euromaidan Press, http://euromaidanpress.com/2016/03/04/a-ukrainian-doctors-choice-be-a-beggar-or-a-racketeer/.

50. Stepurko TG, Pavlova M, Gryga I, Murauskiene L & W Groot, 2015, Informal payments for health care services: The case of Lithuania, Poland and Ukraine, Journal of Eurasian Studies, 6(1): 46-58.

51. OECD, 2017, OECD Reviews of Integrity in Education: Ukraine 2017: Chapter 7 -Corrupt access to higher education in Ukraine, OECD Publishing, Paris.

52. Osipian A, 2018, Corruption in Ukraine's Medical Universities, 30 July 2018, https://www.insidehighered.com/blogs/world-view/corruption-ukraine%E2%80%99s-medical-universities.

53. Bauhoff S, Oroxom R, Steingrüber S & A Wierzynska, 2018, Rethinking corruption risk management for global health programmes, Public Administration Review, 23 October 2018, https://www.publicadministrationreview.com/2018/10/23/666/.

54. See Ministry of Health of Ukraine, 2015, National Health Reform Strategy for Ukraine 2015-2020, Kiev, https://en.moz.gov.ua/uploads/0/16-strategy_eng.pdf.

55. See https://moz.gov.ua/uploads/0/1410-dn_20170914_1086_dod_programa.pdf.

56. Capitation is a payment arrangement for healthcare providers that sets an amount for each enrolled person, per period of time, whether or not that person seeks care. It incentivizes preventative healthcare, as there is a greater financial reward for preventing rather than treating disease. In Ukraine, capitation is set on a clear list of services provided at primary healthcare centers and payment is calculated based on the number of citizens that have signed declarations with primary care providers.

57. Resolution No. 1013-r; National legislation "On Approval of the Concept of Reform of Financing of Health Care System".

58. Order No. 503; National legislation "On Approval of the Procedure for Selection of Primary Care Doctor and Forms of Declaration for Selection of Primary Care Doctor" https://zakon.rada.gov.ua/laws/show/z0347-18?lang=en

59. Government Portal-Ukraine, 2019, Health Care System Reform, https://www.kmu.gov.ua/en/reformi/rozvitok-lyudskogo-kapitalu/reforma-sistemi-ohoroni-zdorovya.

60. National Health Service of Ukraine, 2020, Declarations on the selection of a PMD physician submitted to the WHO, https://data.gov.ua/dataset/a8228262-5576-4a14-beb8-789573573546.

61. World Health Organization, 2019, Evaluation Of The Affordable Medicines Programme In Ukraine, WHO Regional Office for Europe, Copenhagen.

62. See https://eliky.in.ua/.

63. Ministry of Health of Ukraine, 2018a, Primary care physicians' salaries increase starting July 2018, https://en.moz.gov.ua/article/news/primary-care-physicians'-salaries-increase-starting-july-2018.

64. MoH Ukraine, 2018a.

65. RATING Sociological Group, 2019, Assessment Of The State Of Healthcare In Ukraine, http://ratinggroup.ua/en/research/ukraine/ocenka_medicinskoy_sfery_v_ukraine_21-29_maya_2019_goda.html.

66. Ministry of Health of Ukraine, 2018b, Fighting corruption is key to improving healthcare: Ukraine implements transparent and merit-based selection of senior healthcare managers, 15 November 2018, https://en.moz.gov.ua/article/news/fighting-corruption-is-key-to-improving-healthcare-ukraine-implements-transparent-and-merit-based-selection-of-senior-healthcare-managers.

67. Government Portal of Ukraine, 2019.

68. Vox Ukraine, 2019a, How the Ministry of Healthcare is Trying to Make Ukrainian Medical Students Take American Exams, https://voxukraine.org/en/how-the-ministry-of-healthcare-is-trying-to-make-ukrainian-medical-students-take-american-exams/.

69. Vox Ukraine, 2019b, How a Former Rector of the Kharkiv University of Radioelectronics Became a Scourge for Students, https://voxukraine.org/en/how-a-former-rector-of-the-kharkiv-university-of-radioelectronics-became-a-scourge-for-students/.

70. Resolution No. 1094 "On Approval of the Procedure for selecting heads of state and municipal healthcare institutions through an open competition".

71. Lisogor M, 2020, Victoria Loza Won The Competition For The Position Of Director Of The Department Of Health, in: Poltavshchyna, 28 January 2020, https://poltava.to/news/54162/.

72. See https://ehealth.gov.ua/.

73. Transparency International Ukraine, 2018, The Project Office Provided The MoH with the eHealth System, https://ti-ukraine.org/news/proektnyi-ofis-peredav-moz-systemu-ehealth/.

74. National Health Service of Ukraine, 2020.

75. Ukrinform, 2019, Leading IT companies will join the development of eZdorovya, https://www.ukrinform.ua/rubric-society/2750237-providni-itkompanii-dolucatsa-do-rozrobki-ezdorovya.html.

76. RATING, 2019.

77. Catastrophic loss or catastrophic health expenditure refers to health expenses that are in such disproportion to an individual or household income that it results in a financial catastrophe for the individual or household.

78. Lekhan et al., 2015.

79. Government Portal-Ukraine, 2018, The Ministry of Healthcare of Ukraine implements seven strategic programs to eliminate corruption in the health sector, 01 October 2018, https://www.kmu.gov.ua/en/news/7-napryamiv-roboti-moz-shcho-dolayut-korupciyu.

80. World Bank, 2020, Current health expenditure (% of GDP) – Ukraine, https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=UA.

81. Stepurko TG, Semygina TV, Barska YG, Zahozha V & N Kharchenko, 2019, Health Index Ukraine 2018: Results of the National Survey, Kyiv.

82. Ministry of Health of Ukraine, 2019, How the healthcare system has changed, 15 April 2019, https://en.moz.gov.ua/article/news/how-the- healthcare-system-has-changed.

# References

Benjamin A. Olken & Rohini Pande, (2012). "Corruption in Developing Countries," Annual Review of Economics, Annual Reviews, vol. 4(1), p. 479-509, 07.

Pyman, Mark (2019). Sectors as the primary locus for corruption reform. https://curbingcorruption.com/mark-pyman-sectors-as-the-primary-locus-for-corruption-reform-april-2019/.

Rose-Ackerman, Susan & Palifka, Bonnie J. (2016). Corruption and Government: Causes, Consequences, and Reform. Cambridge University Press.

Yuriy Gorodnichenko & Klara Sabirianova Peter (2007). Public sector pay and corruption: Measuring bribery from micro data, Journal of Public Economics, Volume 91, Issues 5–6, p. 963-991.

## Case Study 12: Land Administration Reforms in Rwanda

African Development Bank (2011), Land tenure regularization in Rwanda: good practices in land reform: case study.

Camargo, C. and Gatwa, T. (2018). Informal governance and corruption – transcending the principal agent and collective action paradigms. Basel Institute on Governance. https://www.baselgovernance.org/publications/informal-governance-and-corruption-transcending-principal-agent-and-collective-1.

Centre for Public Impact (2017). Land reform in Rwanda. https://www.centreforpublicimpact.org/case-study/land-reform-rwanda/.

Koechlin, L., Quan, J. and Mulukutla, H. (2016), Tackling corruption in land governance. A LEGEND analytical paper. https://landportal.org/library/resources/legend-analytical-paper-1/tackling-corruption-land-governance.

Schreiber, Leon (2017), Securing land rights: making land titling work in Rwanda, 2012-17, Innovations for Successful Societies, Princeton University.

Sebudubudu, D., Khatib, L. and Bozzini, A. (2017). 'The atypical achievers: Botswana, Qatar and Rwanda' in Mungiu-Pippidi, A. and Johnston, M. (eds), Transitions to Good Governance: Creating Virtuous Circles of Anti-Corruption, Cheltenham: Edward Elgar Publishing.

Transparency International Kenya (2015). 'The East African Bribery Index: trends analysis 2010–2014'.

Transparency International Kenya (2017). 'The East African Bribery Index 2017'.

Transparency International Rwanda (2009), 'Ville de Kigali: Etude sur la transparence et l'intégrité dans les services d'urbanisme et du cadastre'.

World Bank (2017). A tool for sustainable land use management in Rwanda. https://www.worldbank.org/en/news/feature/2017/06/06/a-tool-for-sustainable-land-use-management-in-Rrwa

## Case Study 13: Collective Action for Reforms in Nigeria Ports

Center for the Advancement of Public Integrity (2017), 'The Maritime Anti-Corruption Network. A Model for Public-Private Cooperation against Graft'.

Chatham House (2015), 'Nigeria's Booming Borders: The Drivers and Consequences of Unrecorded Trade'.

MACN (2018), '2018 Annual Report', https://www.maritime-acn.org/news/2019/6/17/macn-2018-annual-report-available.

MACN (2018). Nigeria Collective Action: MACN Impact Report. Basel Institute on Governance. https://www.baselgovernance.org/publications/nigeria-collective-action-macn-impact-report

Proshare Business (2019)., 'CBi and MACN explain inefficiency at Nigerian ports; corruption still a problem'.

Quartz Africa (2018), 'The Never-Ending Congestion at Nigeria's Largest Port is Starting to Get Very Expensive'.

Sequeira, S. and Djankov, S. (2010), 'An empirical study of corruption in ports'.

Ship Technology (2016), 'Nigeria ramps up port anti-corruption'.

The Lagos Chamber of Commerce & Industry (2018), 'Costs of Maritime Port Challenges in Nigeria'.

UNDP (2017), 'Corruption Risk Assessment and Integrity Planning'. https://www.ng.undp.org/content/nigeria/en/home/library/democratic_governance/corruption-risk-assessment-and-integrity-planning.html.

## Case Study 14: Reforms in the Health Sector in Ukraine

Bauhoff S, Oroxom R, Steingrüber S & A Wierzynska, (2018), Rethinking corruption risk management for global health programmes, Public Administration Review, 23 October 2018, https://www.publicadministrationreview.com/2018/10/23/66/.

Bullough O, (2015), Welcome to Ukraine, the most corrupt nation in Europe, in: The Guardian, 06 February 2015, https://www.theguardian.com/news/2015/feb/04/welcome-to-the-most-corrupt-nation-in-europe-ukraine.

Government Portal-Ukraine, (2018), The Ministry of Healthcare of Ukraine implements seven strategic programs to eliminate corruption in the health sector, 01 October 2018, https://www.kmu.gov.ua/en/news/7-napryamiv-roboti-moz-shcho-dolayut-korupciyu.

Government Portal-Ukraine, (2019), Health Care System Reform, https://www.kmu.gov.ua/en/reformi/rozvitok-lyudskogo-kapitalu/reforma-sistemi-ohoroni-zdorovya.

Lekhan VN, Rudiy VM, Shevchenko MV, Nitzan Kaluski D, Richardson E. Ukraine: Health system review. Health Systems in Transition, 2015; 17(2): 1–153.

Lisogor M, (2020), Victoria Loza Won The Competition For The Position Of Director Of The Department Of Health, in: Poltavshchyna, 28 January 2020, https://poltava.to/news/54162/.

Management Sciences for Health, 2019, USAID's Safemed Activity Provides Support To Open Medical Central Procurement Agency, 13 November 2019, https://www.msh.org/news-events/stories/usaid's-safemed-activity-provides-support-to-open-medical-central-procurement.

Ministry of Health of Ukraine, 2015, National Health Reform Strategy for Ukraine 2015-2020, Kiev, https://en.moz.gov.ua/uploads/0/16-strategy_eng.pdf.

Ministry of Health of Ukraine, 2018a, Primary care physicians' salaries increase starting July 2018, https://en.moz.gov.ua/article/news/primary-care-physicians'-salaries-increase-starting-july-2018.

Ministry of Health of Ukraine, 2018b, Fighting corruption is key to improving healthcare: Ukraine implements transparent and merit-based selection of senior healthcare managers, 15 November 2018, https://en.moz.gov.ua/article/news/fighting-corruption-is-key-to-improving-healthcare-ukraine-implements-transparent-and-merit-based-selection-of-senior-healthcare-managers.

Ministry of Health of Ukraine, 2019, How the healthcare system has changed, 15 April 2019, https://en.moz.gov.ua/article/news/how-the-healthcare-system-has-changed.

Ministry of Health of Ukraine, (n.d.), How to choose your family doctor, https://en.moz.gov.ua/how-to-choose-your-family-doctor.

National Health Service of Ukraine, 2020, Declarations on the selection of a PMD physician submitted to the WHO, https://data.gov.ua/dataset/a8228262-5576-4a14-beb8-789573573546.

OECD, 2017, OECD Reviews of Integrity in Education: Ukraine 2017: Chapter 7 -Corrupt access to higher education in Ukraine, OECD Publishing, Paris.

Osipian A, 2018, Corruption in Ukraine's Medical Universities, 30 July 2018, https://www.insidehighered.com/blogs/world-view/corruption-ukraine%E2%80%99s-medical-universities.

RATING Sociological Group, 2019, Assessment Of The State Of Healthcare In Ukraine, http://ratinggroup.ua/en/research/ukraine/ocenka_medicinskoy_sfery_v_ukraine_21-29_maya_2019_goda.html.

Romaniuk, P & T Semigina, 2018, Ukrainian health care system and its chances for successful transition from Soviet legacies, *Globalization and Health*, 14:116.

State Statistic Service of Ukraine (2014). http://ukrstat.gov.ua/.

Stepurko TG, Pavlova M, Gryga I, Murauskiene L & W Groot, 2015, Informal payments for health care services: The case of Lithuania, Poland and Ukraine, *Journal of Eurasian Studies*, 6(1): 46-58.

Stepurko TG, Semygina TV, Barska YG, Zahozha V & N Kharchenko, 2019, Health Index Ukraine 2018: Results of the National Survey, Kyiv.

TCN, 2011, The Death of a 4-Year-Old Child from Kherson Revealed a Pattern of Corruption in the MOH, 26 June 2011, https://tsn.ua/ukrayina/smert-4-richnoyi-ditini-z-hersona-rozkrila-shemu-korupciyi-v-moz.html.

Transparency International Ukraine, 2018, The Project Office Provided The MoH with the eHealth System, https://ti-ukraine.org/news/proektnyi-ofis-peredav-moz-systemu-ehealth/.

Ukrinform, 2019, Leading IT companies will join the development of eZdorovya, https://www.ukrinform.ua/rubric-society/2750237-providni-itkompanii-dolucatsa-do-rozrobki-ezdorovya.html.

Vox Ukraine, 2019a, How the Ministry of Healthcare is Trying to Make Ukrainian Medical Students Take American Exams, https://voxukraine.org/en/how-the-ministry-of-healthcare-is-trying-to-make-ukrainian-medical-students-take-american-exams/.

Vox Ukraine, 2019b, How a Former Rector of the Kharkiv University of Radioelectronics Became a Scourge for Students, https://voxukraine.org/en/how-a-former-rector-of-the-kharkiv-university-of-radioelectronics-became-a-scourge-for-students/.

World Bank, 2020, Current health expenditure (% of GDP) – Ukraine, https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=UA.

World Health Organization, 2018, Life expectancy at birth (years), WHO European Region, European Health Information Gateway, https://gateway.euro.who.int/en/indicators/hfa_43-1010-life-expectancy-at-birth-years/.

World Health Organization, 2019, *Evaluation Of The Affordable Medicines Programme In Ukraine,* WHO Regional Office for Europe, Copenhagen.

World Health Organization, 2020, Global Health Expenditure Data: Out-of-pocket expenditure per capita in $US - 2013-2017, http://apps.who.int/nha/database/ViewData/Indicators/en.

Yabchanka O, 2016, A Ukrainian doctor's choice: be a beggar or a racketeer, in: Euromaidan Press, http://euromaidanpress.com/2016/03/04/a-ukrainian-doctors-choice-be-a-beggar-or-a-racketeer/.