

Health Response to the Situation in Ar-Raqqa

Establishing trauma referral pathways to provide urgent life-saving assistance for displaced populations and civilians remaining in Ar-Raqqa



Report of a WHO assessment mission
to Al-Hasakeh and Ar-Raqqa governorates

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**World Health
Organization**

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EXECUTIVE SUMMARY

Tens of thousands of civilians have fled Ar-Raqqa city in Ar-Raqqa governorate since the Syrian Defence Forces (SDF) began their offensive to retake control of the city from the Islamic State of Iraq and the Levant (ISIL). Around 190 000 people have been displaced; another 30 000 to 50 000 people are thought to remain inside Ar-Raqqa city. In July 2017, a WHO team comprising an external trauma care specialist and two WHO staff members visited the governorates of Ar-Raqqa and neighbouring Al-Hasakeh to assess the situation. The purpose of their mission was two-fold:

1. to assess the health situation in Ar-Raqqa (available health services, geographical scope required) and propose optimal response modalities;
2. to develop an operational plan to set up trauma referral pathways for WHO's health emergency response in north-east Syria.

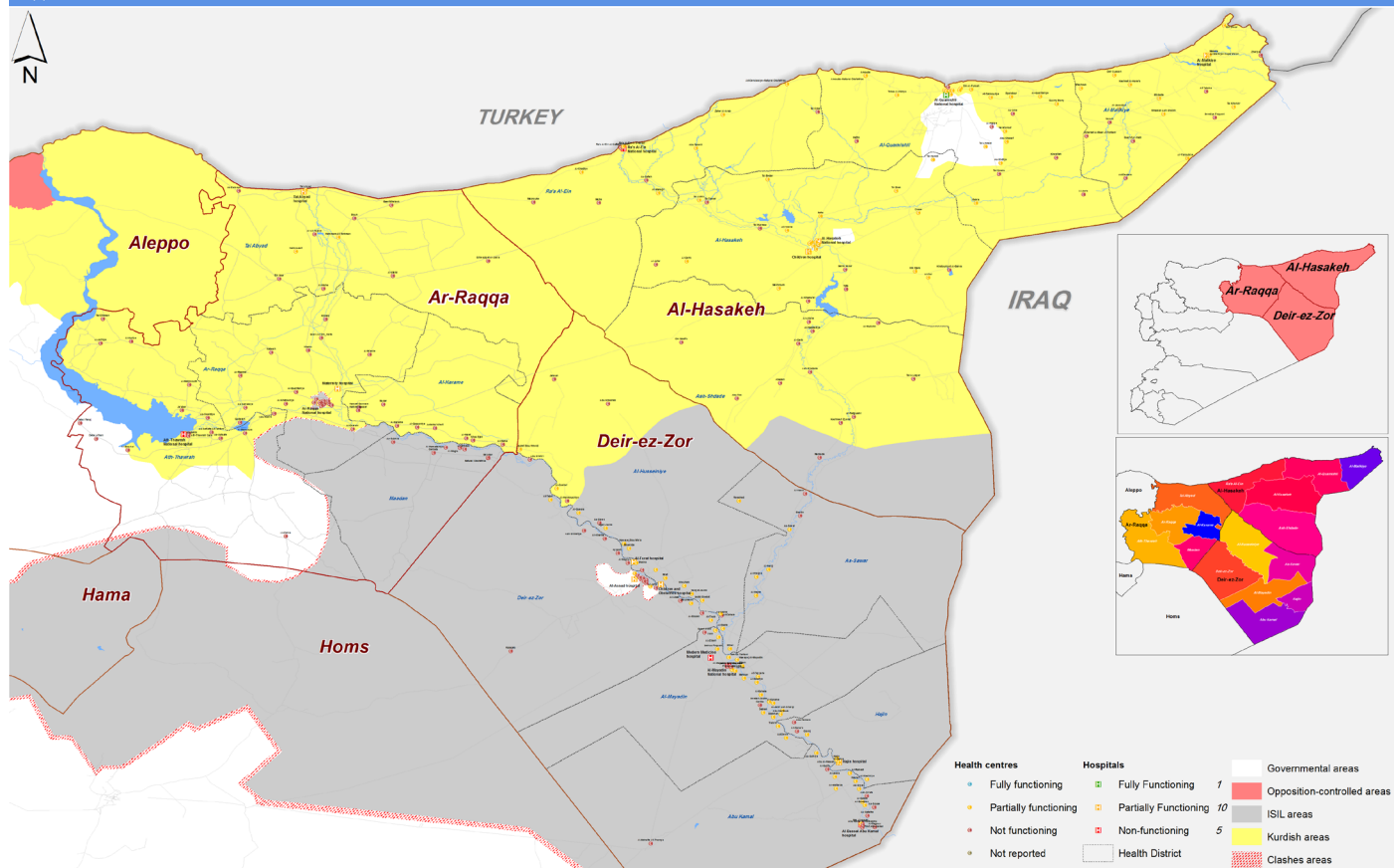
The team visited eight hospitals and health care facilities in Ar-Raqqa and Al-Hasakeh governorates to assess their capacities and infrastructures. It also met with representatives of eight NGOs to discuss collaboration and coordination for potential evacuation pathways for severely injured patients. The team's main findings and recommendations are summarized below:

Findings

1. Health care services in Ar-Raqqa governorate have been severely disrupted because of the ongoing military campaign, massive population displacements and damaged health care facilities.
2. Currently, health care services are being provided by private and government hospitals as well as hospitals under Kurdish control and by NGOs such as KRC and Medecins Sans Frontieres.
3. The number of casualties as a result of the Ar-Raqqa offensive is rising, and hence increasing the workload of all hospitals in the region.
4. Thus far, only one trauma stabilization point (TSP) north of Ar-Raqqa is working. Two more are expected to be up and running in the next few days. Kurdish organizations and European NGOs plan to open three more TSPs in the vicinity of Ar-Raqqa city. (TSPs serve to triage and resuscitate patients. Once stabilized, seriously wounded patients from Ar-Raqqa are transported by ambulance from TSPs to Tal Abyad public hospital.)
5. Tal Abyad hospital has temporarily suspended elective surgery due to the number of patients requiring emergency surgery. (NB WHO has since been informed by one of its NGO partners that elective surgery in this hospital restarted the week of 17 July.) According to the hospital staff interviewed by the assessment team, some patients treated in this hospital are currently being transported to Qamishli for secondary surgery.
6. Al Tabqa hospital, within an acceptable distance from Ar-Raqqa city, is currently not working.
7. Mine and sniper injuries are occurring east of Ar-Raqqa and north and west of Deir-ez-Zor. Patients on the eastern frontline are evacuated by private car, since there are no TSPs for civilians in this area. These patients are treated mainly in private hospitals in Al-Hasakeh before being evacuated to the government hospital in Qamishli.
8. Hospitals in Al-Hasakeh are admitting injured patients on a daily basis and handling moderate mass casualty events every one or two weeks.
9. The battle zone is expected to move eastwards. Work is ongoing to transform a public clinic into an emergency hospital to handle the caseload.
10. The government hospital in Al-Hasakeh is being re-equipped to make it functional.
11. Hospitals in Ain Arab (Kobane) and Ras el Ain are working and receiving casualties. However, they are too far away from the conflict zone to be able to perform damage control surgery.

Recommendations

1. Improve evacuation pathways for wounded patients from Ar-Raqqa.
2. Improve the functioning of hospitals and trauma stabilization points.
3. Establish a field hospital in Tabqa.
4. Establish modalities for evacuating patients from role 2 to role 3 and 4 facilities based on NATO's trauma care principles.
5. Identify and secure a land route to bring supplies and equipment into the area.
6. Secure government approval for a route to evacuate patients to Aleppo and Damascus for advanced medical treatment.
7. Set up mechanisms to coordinate and manage the Ar-Raqqa response.
8. Identify and organize evacuation pathways for the frontline north of Deir-ez-Zor in anticipation of escalating hostilities in that area.



BACKGROUND

Ar-Raqqa governorate

Since the offensive began in Ar-Raqqa city in early 2017, heavy clashes, shelling and airstrikes have resulted in the exodus of tens of thousands of people and significant civilian casualties. In June 2017, the humanitarian situation further deteriorated as the Syrian Defence Forces (SDF) closed in on the city after seizing control of Al-Qadisiya district. As of 27 June 2017, the SDF had encircled the entire city after securing control of the southern area on the north bank of the Euphrates river.

As of the end of June 2017, between 30 000 and 50 000 people were thought to remain in the city. (The precise number is difficult to verify due to the situation on the ground.) Unconfirmed reports indicate that airstrikes in and around the city have resulted in the deaths and injuries of civilians. Unexploded ordnance continues to pose a threat to civilians who are in the city or attempting to flee.

City hospitals are no longer functional, mostly they have been bombed or because health care staff have fled. A significant number of other health care facilities are no longer operational. Those that remain open lack vital supplies and equipment. The city's electricity grid, water and sanitation services and other infrastructures have been damaged by air strikes.

Access to clean drinking water is severely limited. Residents depend on untreated water from the Euphrates river, exposing them to the risk of waterborne diseases. Since the start of the military operations, approximately 27 civilians have been killed and dozens more wounded while fetching water from the river. Food and medicines are reported to be scarce; most bakeries and markets have been closed for several weeks.

Although ISIL is reportedly preventing civilians from leaving the city, residents are attempting to flee with the help of smugglers. Between 100 and 200 families per day are reportedly managing to escape. They travel through unsafe roads and damaged bridges in the east and west, and often end up in informal settlements or camps in SDF-controlled areas. Over 190 000 people have been displaced since 1 April 2017.

Deir-ez-Zor governorate

Throughout June 2017, the Government of Syria and the Allied Forces continued to advance into Deir-ez-Zor governorate from the neighbouring governorate of Homs. Airstrikes continued against ISIL-held areas along the Euphrates River south-east of Deir-ez-Zor.

On 28 June 2017, local media sources reported that at least 40 people including five children and two women had been killed by airstrikes on Dablan town in southern Deir-ez-Zor. Another five people in the town of Sur were reportedly killed.

Civilians have limited access to humanitarian aid and basic services, especially medical care. The UN continues to provide basic food, nutrition, water and sanitation supplies, medicines and non-food items to people in need in the besieged parts of Deir-ez-Zor city through WFP-led airdrops. However, the delivery of humanitarian aid will be jeopardized if landing sites for airdrops become unsafe.



TRAUMA CARE PRINCIPLES

The trauma response plan for injuries issued by the North Atlantic Treaty Organization (NATO) in 2012 was based on research data from international military operations since 2004. The plan aims to reduce the number of preventable deaths from injuries. It sets out the following recommended standards:

1. Enhanced first aid

Immediate life-saving measures should be applied by personnel trained in tactical combat casualty care. Stemming bleeding and clearing the airways of severely injured patients should be achieved within 10 minutes of wounding.

2. Damage control and resuscitation

Measures should be commenced by emergency medical personnel within one hour of wounding.

3. Damage control surgery

Depending on specific and individual requirements, damage control surgery should take place within one hour and no later than two hours of wounding.

To reach goal 1 above, today's soldiers are equipped and trained to perform enhanced first aid.

To reach goal 2 above, damage control and resuscitation are performed at a "role 1" facility where medical personnel are trained to intubate, insert chest tubes, pack wounds and triage patients for transportation to a "role2" facility.

A role 2 facility should be staffed and equipped to perform damage control surgery such as controlling abdominal bleeding by packing wounds, controlling bleeding extremities by packing wounds or vascular surgery, temporarily setting fractures through external fixations, etc. A role 2 facility could in theory comprise a surgical team with only a surgeon, an anaesthesia nurse, scrub nurse and medic. There are, however, some indications that this might delay other life-saving surgeries that are beyond the scope of a minimum capacity role 2 facility. Therefore, the most common role 2 facility consists of a field hospital capable of performing final abdominal, orthopaedic, and simple thoracic and/or vascular surgery.

To reach goal 3 above, patients should be moved to a role 3 facility as quickly as possible. Role 3 facilities are able to perform more advanced surgery and follow up complications such as infections and organ dysfunction. Patients should be transferred from role 2 to role 3 facilities as soon as possible, both to ensure better health outcomes and to free up role 2 facilities for new patients.

Soldiers in international military operations are repatriated as quickly as possible from role 3 to role 4 facilities (university hospitals) for follow-up surgery (e.g., for extensive burns, complicated infections, spinal injuries etc.).



Evacuation pathway for critically wounded patients



The aim of classifying health care facilities by their roles is to:

1. Provide advanced life-saving care as soon as possible;
2. Move patients to safe zones as quickly as possible;
3. Reduce the burden on lower level facilities.

Civilians rely on civilian health care systems for follow-up surgery and rehabilitation as well as emergency aid that may be provided by local or international NGOs. Providing emergency care to wounded civilians following NATO's guidelines has proved to be difficult. However, emergency response planning should, as far as the situation allows, adhere to the trauma care principles described above.

Challenges

The challenges involved in adapting the emergency response in Syria to the NATO model are:

1. **Enhanced first aid** (within ten minutes). Lack of trained first responders, lack of bandages, medicines, oxygen, etc. Political and security issues.
2. **Damage control and resuscitation** (within one hour). In most cases (depending on the security situation) trauma stabilization points (TSPs) can be established as close as possible to battle zones. The TSPs can also triage patients to be transferred to hospitals. In the evacuation chain, TSPs correspond to NATO's role 1 facility.
3. **Damage control surgery** (within one to two hours). Lack of emergency-trained staff and equipment in hospitals within the one-hour zone is often a challenge. Security concerns may prevent trained staff reaching the one-hour zone and may hamper the transportation of patients and resources from role 1 to role 2 facilities. The same security concerns mean that international NGOs often locate their role 2 facilities outside the two-hour zone, too far from combat scenes. In Ar-Raqqa, however, it is possible to establish role 2 facilities within acceptable distances from the battle zone, and therefore offer damage control surgery within an acceptable timeframe.
4. **Evacuation to role 3 and 4 facilities for advanced surgery, infection management and rehabilitation** (within 1-7 days). Experiences from Iraq and Syria have shown that even if patients are stabilized in role 1 facilities and survive the initial trauma, their evacuation for further treatment is fraught with difficulties. Obstacles include the lack of nearby hospitals, lack of money to buy tertiary care, and political issues that, for example, prohibit the medial evacuation of patients.

In Syria, university/referral hospitals in Damascus and Aleppo can serve as role 4 facilities. The transportation of patients to these locations will involve complex negotiations with partners on the ground, as well as patient consent. (For example, patients may be reluctant to travel to government-controlled areas.) Moreover, transportation will have to be available and facilitated and the receiving facilities must be able to provide the specialized care required. The assessment team explored the possibility of transferring patients by road from east Manbej to role 4 facilities in Aleppo city. Alternatively, patients could be transported by air from east Qamishli to role 4 facilities in Damascus. In addition to patient consent, this would require negotiation with key partners.

THE CRITICAL ROLE OF TRAUMA STABILIZATION POINTS

Role: Role: to stabilize critically injured patients and triage them for transportation to role 2 or 3 facilities.

Staffing levels: 1-2 doctors, preferably with surgical skills, 4 paramedics, porters and other support staff.

Triage: Assess and classify patients as red, yellow or green and ensure their rapid transfer according to their triage classification¹.

Patient classification:

Code red. Seriously wounded patients who need surgery as soon as possible

- Airway: Injuries such as burns or penetrating injuries to the face: airway may need to be secured, e.g., by endotracheal intubation or tracheostomy.
- Breathing: Tension pneumothorax or suspicion of a major hemothorax.
- Control of bleeding and circulation: Internal bleedings (chest, abdomen, pelvis) or injuries to major vessels of the extremities.
- Traumatic amputation.

Code yellow. Seriously wounded patients who need, but can wait for, surgery

- Penetrating abdominal injury without any signs of internal bleeding, patient is circulatory stable but may have an injury to stomach and/or bowels.
- Penetrating head injuries but patients remain conscious, (Glasgow Coma Scale (GCS) >8) and can maintain their airway. When endotracheal intubation or tracheostomy is necessary, these patients will be classified as category 1 provided respiratory support is available during transport and at arrival.
- Compound fractures.
- Major soft tissue wounds or a large number of wounds.

Code green. Superficially wounded patients who can be treated through ambulatory care.

- Patients with superficial wounds who do not need hospitalization or surgery requiring general anaesthesia.
- These patients, often called “the walking wounded”, frequently present wounds that can be treated under local anaesthesia.

Code black. Patients with injuries so severe that they are unlikely to survive.

- Penetrating head injuries with GCS < 8.
- Quadriplegia.
- Burns > 50% of body surface
- Major blood loss and no available blood transfusion.

Stabilizing red patients²

- A. Airway compromised.** Secure airway if needed with oro-pharyngeal or naso-pharyngeal adjunct (no endotracheal intubation!). Give oxygen if available.
- B. Respiratory failure.** If tension pneumothorax is suspected, insert a chest needle to decompress in the second intercostal space in the mid-clavicular line.
- C. Circulation.** Control external bleeding of the limbs by packing the wound with gauze before applying pressure bandages. If not successful, try tourniquet. Patients with thoracic/abdominal or pelvic uncontrolled bleedings need rapid transportation to hospitals. An intravenous needle should be inserted, but keep infusion of clear fluids to a minimum or avoid it as long as systolic blood pressure is above 80 mm Hg. Tension pneumothorax must be managed by emergency chest pressure relief in the first intercostal space with the patient sitting up. Keep the patient warm.
- D. Disability** (head injuries): When patient is unconscious (GCS < 8) and if continuous respiratory support is necessary, s/he may not be salvageable. A, B and C should be managed as suggested above.
- E. Exposure:** Examine the entire body for injuries. All suspected fractures should be stabilized with splints. Pain relief may be administered orally and/or intravenously.

The above steps should be completed within 15 minutes.

¹ See ICRC triage categories. <https://www.icrc.org/eng/assets/files/other/icrc-002-0973.pdf>

² These recommendations are based on the WHO trauma guidelines but adapted to the current conflict situation in Mosul with limited human and material resources. They can therefore be changed depending on the evolution of the conflict. For Emergency (Foreign) Medical Teams classification and standards (EMT 1-3) see EMT 1-3

In Ar-Raqqa, there are TSPs with ambulances and trained staff at acceptable distances from the city centre. At least one hospital (in Tal Abyad) is less than two hours from the conflict zones and can serve as a role 2 facility. For the Ar-Raqqa response, it is therefore feasible to create a system to help avoid preventable deaths. A preventable death is defined as a patient who dies from either a) compromised airways, b) respiratory failure (most often pneumothorax), or c) uncontrolled bleeding (mostly abdominal or vascular, or resulting from large bone fractures).

During patients' transportation from role 1 to role 2 facilities, it is likely that only minimal or no monitoring will be available.

Only minor surgery should be performed at TSPs, since general anaesthesia should not be administered³.



SITUATION ASSESSMENT

Because of the prevailing insecurity, the WHO assessment team was not able to visit hospitals in Ar-Raqqa city or Kobane (Aleppo governorate)⁴. (However, the team visited several locations in Ar-Raqqa and Al-Hasakeh governorates. (See Appendix 1.)

The number of casualties is increasing. All hospitals in the region are admitting and treating wounded patients. Tal Abyad hospital – the closest functioning hospital to Ar Raqqa city – is around 40 kilometres from Ar-Raqqa city. At the time of the team's visit, elective surgery had been suspended in order to be able to treat all trauma patients coming from Ar-Raqqa. (The team understands that one of the operating theatres has been re-opened following refurbishment, and elective surgery has now been reactivated.) The private Al Hekma hospital in Tal Abyad is the same distance away from Ar-Raqqa city. This hospital is also admitting wounded patients on a daily basis, but it does not have an emergency department.

On the eastern frontline (north of Deir-ez-Zor), Al-Hasakeh is the closest city with functioning hospitals. The government hospital is under Kurdish control and is not working. In addition to the five private hospitals in the city, the Syrian health authorities are transforming a clinic into an emergency hospital. Currently, Al-Hekma private hospital is receiving the bulk of injured patients from the eastern part of the region. The hospital treats casualties on a daily basis and occasionally handles mass casualty events.

Four of the eight health care facilities visited reported that they had insufficient power supplies. Essential equipment (e.g., development processors for X-rays) is not working. In the Kurdish-controlled areas, supplies are brought across the border from Iraq or procured from private vendors in Manbej (Aleppo governorate).

In Tal-Abyad and Kobane, patients are generally transported by ambulance. In Al-Hasakeh most patients are taken to hospital by private car; many of them die en route. The establishment of TSPs within acceptable distances north, east and west of the frontline is key to ensuring that patients can be promptly stabilized before they reach hospitals. TSPs will have to be supported by improved ambulance services: this will result in better survival rates for seriously injured patients who will have a better chance of reaching hospitals alive than if they had been taken by private car without the benefit of first-aid or stabilization. Hospitals will need to be equipped to manage the increased caseload.

Appendix 1 contains a detailed assessment of all hospitals and health care facilities visited by the team. The team also met with eight NGOs and health actors that are supporting health care services in north-east Syria, either inside the country or through cross-border operations from neighbouring Iraq. Appendix 2 summarizes the background, history, capacity and current/prospective activities of each organization.

³ Field manual for management of limb injuries in disasters and conflict 2016. See also Husum H, Ang SC, Fosse E. War surgery field manual, 2 ed. Third world network 2012 (<https://www.scribd.com/doc/149550726/War-Surgery-Field-manual>).

⁴ WHO has a sub-office in Aleppo and WHO staff in the city have extensively assessed health care facilities there.

RECOMMENDED ACTIONS

1. Improve evacuation pathways for wounded patients from Ar-Raqqa.
2. Improve the functioning of hospitals and trauma stabilization points.
3. Establish a field hospital in Tabqa.
4. Establish modalities for evacuating patients from role 2 to role 3 and 4 facilities based on NATO's trauma care principles.
5. Identify and secure a land route to bring supplies and equipment into the area.
6. Secure government approval for a route to evacuate patients to Aleppo and Damascus for advanced medical treatment.
7. Set up mechanisms to coordinate and manage the Ar-Raqqa response.
8. Identify and organize evacuation pathways for the frontline north of Deir-ez-Zor in anticipation of escalating hostilities in that area.

1. Improve evacuation pathways for wounded patients from Ar-Raqqa

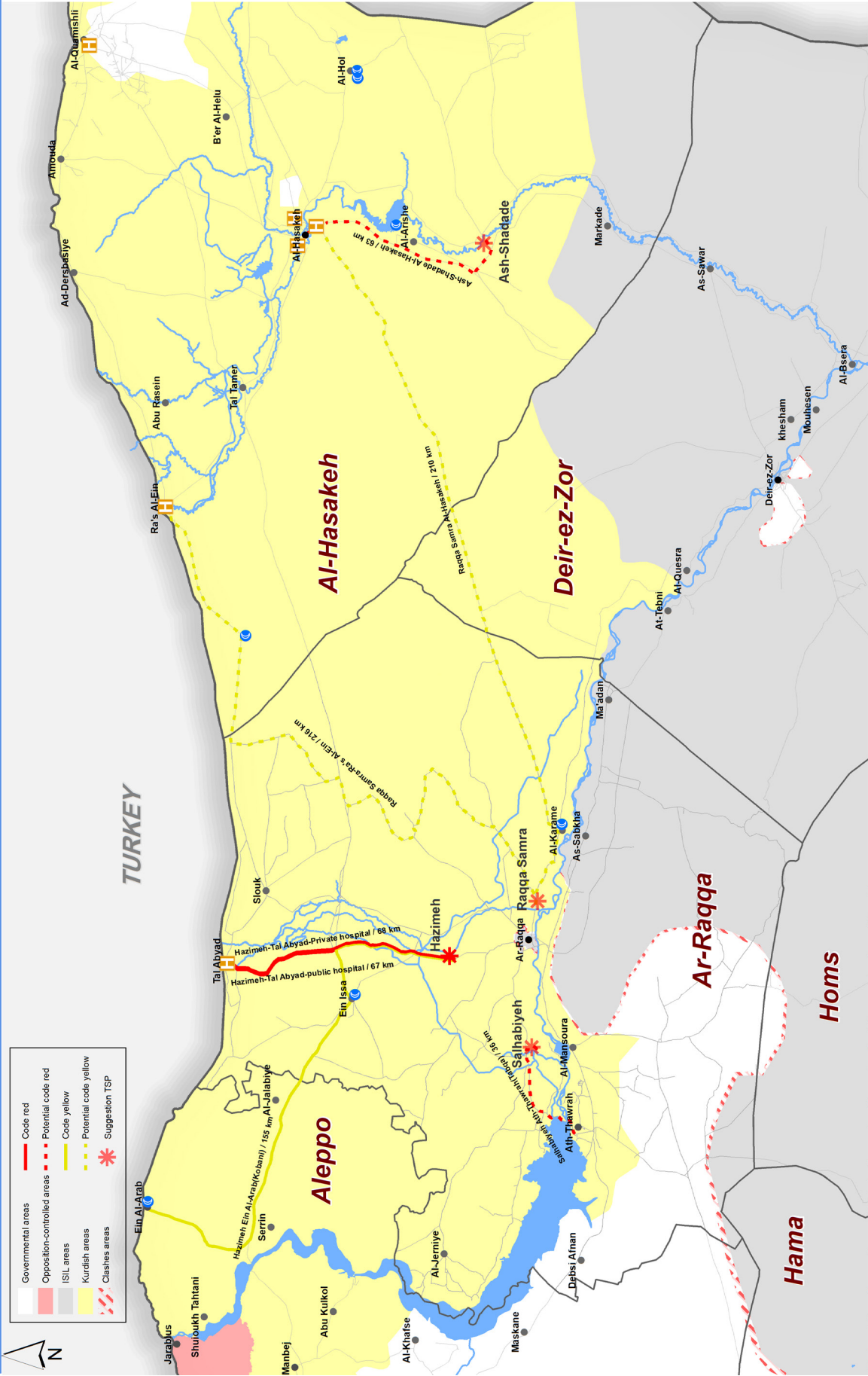
Evacuation pathway	Facilities	Status	Role category	Distance from Ar-Raqqa centre	Estimated travel time	Patient category
West	TSP Salhabiya	Not yet established (check with MSF)	1	10 km	10 minutes	Red Yellow
	Taqba hospital	Not working. Needs comprehensive investment, e.g., a light field hospital.	2	40 km	50 minutes	Red
North	TSP Al Hazimah	Working	1	20 km	30 minutes	Red Yellow
	Tal Abyad public hospital	Working. MSF deploying orthopaedic surgeon within two weeks.	2	67 km	60 minutes	Yellow
North-west	TSP Al Hazimah	Working	1	20 km	30 minutes	
	Kobane	Working	2	155 km	3 hours	Yellow
East	TSP Raqqa Samra	Not working	1	9km	10 minutes	
	Al Hekma hospital Al Hasakeh	Working	3	210 km	3.5 hours	Yellow
	Government health clinic Al Hasakeh	Being converted into a small hospital	3	210 km	3.5 hours	Yellow
North-east	TSP Raqqa as Samra	Not working	1	9 km	10 minutes	Red
	Ras el Ain hospital	Working, can expand capacity. Good orthopaedic support.	3	216 km	3.5 hours	
	Qamishly national hospital	Working	3			Yellow

KRC together with the international NGO Un ponte per (UPP) is planning to establish three new TSPs around Raqqa. Since fighting is ongoing around Al-Karame, the establishment of a TSP in that area should be considered.

1. Map of suggested evacuation pathways



Syrian Arab Republic : The immediate organization of viable evacuation pathways for patients injured in clashes in and surrounding Raqqa city, July 2017



Evacuation pathways for code red patients (damage control surgery not more than 1-2 hrs after injury) are marked in red. Evacuation pathways for code yellow patients (in need of acute surgery, but can wait for >2 hrs) are marked in yellow. Dotted lines indicate evacuation pathways not yet running. TSPs are indicated by with a black dot in a red circle. As of 10 July 2017, only the TSP in Hazimeh was working.

An emergency unit is being established at the national hospital in Al-Hasakeh. The unit should be ready in the next two months. Depending on whether and when the battle zone moves east towards Deir-ez-Zor, this hospital could serve as a role 2 facility pending staffing confirmation.

2. Improve the functioning of hospitals and trauma stabilization points

Hospitals and health care facilities need uninterrupted power supplies, properly maintained equipment, and reliable stocks of essential medicines and supplies. Although X-ray machines are a critical component of trauma care, most hospitals are processing images manually since development processors have broken down. To maintain the speed of patient turnover, the above issues have to be addressed. WHO has identified the most urgent needs and is procuring generators, trauma kits, and emergency supplies and equipment.

MSF Holland partners with local health actors to support the hospital in Tal Abyad. A field hospital and generators are urgently required for Tabqa, where the hospital is out of action. It appears that health care staff in the area would be able and willing to run the field hospital provided they are paid.



3. Establish a field hospital in Tabqa

Tabqa, which is located north-west of Ar-Raqqa city, is considered to be critical because of its proximity to the front line, meaning that large numbers of civilians are fleeing to this area. Tabqa is currently hosting around 40 000 IDPs from Ar-Raqqa, Hama, Homs and Deir-ez-Zor. Unlike many areas, the town is freely accessible and living conditions are reasonably good.

Furthermore, as reported from recent assessment missions by WHO focal points, the medical staff in the area (under the supervision of local health authorities) have begun to set up outpatient clinics to address critical medical needs. WHO is exploring modalities to strengthen emergency services in the city. Since the main hospital in Taqba is closed, a field hospital should be deployed to Tabqa as soon as possible. WHO is exploring possibilities in this regard.

4. Establish modalities for evacuating patients from role 2 to role 3 and 4 facilities

Patients must be safely transported from role 2 to role 3 facilities in order to free up capacity in the former and secure adequate follow-up treatment in the latter. Many injured patients have open, infected wounds; a substantial number need hospital care for one to two weeks, even after they are out of the critical phase.

Subject to their consent, patients initially treated in Tal Abyad public hospital and who have injuries that do not require specialized management can be transported to hospitals in Kobane or Ras el Ain. The hospital in Ras el Ain has adequate human and technological resources and can be scaled up to treat more than twice the number of patients it currently admits. The private Al Hekma hospital in Tal Abyad can also receive additional patients, WHO is exploring contractual modalities to support free-of-charge services for trauma cases and life-saving surgery.

Patients in Al-Hasakeh hospital should be transported to the national hospital in Qamishli for further treatment. Patients in Kobane and Tal Abyad hospitals who require advanced medical care are currently transported to Qamishli. This lengthy journey should be avoided unless patients require medical care that is available only in Qamishli. From Qamishli they can be transported by plane to Damascus.

5. Identify and secure a land route for supplies and equipment

The road to Aleppo via Manbej is now open, but the journey from Qamishli takes 10 hours. The crossing between Kurdish- and Syrian government-controlled areas in Manbej may take several hours. The Damascus-Qamishli airlift is operating at full capacity (two flights a day, six days a week). Over 1000m³ of urgently needed food, education, and shelter commodities were airlifted to Qamishli between 15 and 21 June 2017. As a result of the reopening of the road to Qamishli, the Logistics Cluster announced on 21 June that the air-bridge from Damascus to Qamishli would be discontinued. The last airlift occurred on Saturday 24 June 2017. (OCHA Situation Report No. 10 (19-26 June 2017).)

The agreement of all parties agree to transport medical supplies and heavy medical equipment by road from Damascus (via Aleppo and Manbej) must be secured. Without these additional supplies, the hospitals and TSPs will be unable to cope.

6. Secure evacuation routes to Aleppo and Damascus

The hospitals that previously provided good tertiary care are located in Ar-Raqqa city, and they are no longer available. Some patients admitted to the national hospital in Qamishli are being transported by plane to Damascus. For patients injured in the western and north western axis, the closest advanced treatment facilities are in Aleppo. The assessment team explored the possibility of transporting patients from these areas to Aleppo via Manbej. This is by far the best option, but it would require the Kurdish authorities and the Syrian national authorities to reach agreement. Patients must also agree to be transported using this route.

7. Coordinate and manage the response

The trauma care and referral services envisaged using the identified pathways will involve both government- and Kurdish-controlled areas. International and national NGOs and private hospitals are providing health care services in these areas. Currently there are no real data on the number of casualties and changes in hospital caseloads. To obtain a better overview of the need for casualty management and support planning efforts, WHO should deploy a coordinator to Qamishli. The coordinator should remain in daily contact with the health institutions involved in the evacuation pathways and register numbers of casualties and supply needs.

8. Identify and organize evacuation pathways for Deir-ez-Zor

The assessment team also visited facilities in Al-Hasakeh in anticipation of the conflict zone moving east. The team identified one potential evacuation pathway, e.g., through establishing a TSP in Ash Shadade and increasing hospital capacity in Al-Hasakeh.

Evacuation pathway	Facilities	Status	Role category	Patient category
East	TSP Ash Shadade	Not working	1	
	Al Hekma hospital Al-Hasakeh	Working	2	Red Yellow
	Government health clinic Al-Hasakeh	Being converted into a small hospital	3	Yellow

APPENDIX 1. HOSPITAL ASSESSMENT

Name of Hospital	History	Affiliation	Governorate	City	Location	Human Resources	Technical Resources	Requirements for proper functioning	Accessibility	Comment
Governmental health clinic (being transformed into a small hospital)	Ceased to function following its takeover by the Kurdish authorities. Health authorities are converting it into a small hospital.	MOH	Hasakeh	Hasakeh City	City centre (the part of the city under government control). Small stand-alone building. Easy access for cars, but no emergency entrance.	1 general surgeon, 1 paediatrician, 1 cardiologist, 8 specialists in total. Radiology technician but no radiologist. Another 155 staff including 60 nurses, 5 midwives and 46 technicians (anaesthesiology, radiology, pharmacy, laboratory).	20-bed capacity including 4 ICUs. WHO has donated an X-ray machine with floating table. Technicians from Damascus are installing the equipment, but a film processor is missing and urgently required. A room is being converted into an operating theatre (OT) with lamps, a new operating table and anaesthesia machine. 4 ventilators, each with 1.5 hour battery capacity.	An autoclave, a dry sterilizer and 3 monitors. Currently the clinic relies on the public power system. At least one 65 KVA generator and a smaller back-up generator are required. The clinic plans to move to a new location that has 60-bed capacity. Moving the equipment now being installed in the current premises to the new location may take several weeks.	Accessible. Patients have to travel through Kurdish-controlled areas in the south and west to reach the facility.	Many more resources required to be able to perform serious damage control surgery. The main concern is the power supply. The facility could be up and running in a few weeks. It can play a role if casualties start coming from Deir-ez-Zor.
Al Hekma private hospital, Hasakeh	Private, long-established hospital located in an ordinary building in the city centre.	Private	Hasakeh	Hasakeh City	City centre, on the border between Kurdish- and government-controlled areas. Access through a mini-market with a staircase and an elevator to the floors above. Emergency patients have to be wheeled through the market (15 metres). A ramp allows patients to be wheeled into the elevator.	3 general surgeons, 1 thoracic surgeon, 1 vascular surgeon, 1 gynaecologist and 1 orthopaedic surgeon.	40-bed capacity including 6 ICUs. Echo machine, X-ray machine, laparoscopic rack, autoclave, 2 heat sterilizers, 2 incubators, 2 ventilators. Five operating theatres (3 general surgery, 1 orthopaedic, 1 gynaecology). Power supply is provided by 5 generators. Hospital receives blood from the blood bank at the government hospital under Kurdish control. Private hospital: patients pay for services. Very poor patients are treated free of charge before being referred to the national hospital in Qamishli. The hospital performs laparoscopic cholecystectomy and splenectomy provided patients can pay. On average 34- casualties per day; mass casualties (510- injured) every 12- weeks. Doctors on call 24/7. They perform 15 surgeries/day including 34- trauma surgery (not always war-related). Almost all injured patients have extremity injuries; very few patients with torso injuries reach the hospital. Patients are usually brought to the hospital by private car, and very few of them receive first aid. The hospital director believes 4 out of 7 injured patients die before reaching the hospital.	The hospital will need to waive patient fees.	Accessible for everybody that manages to get into Hasakeh	Examples of treatments evaluated by the team: A 15-year old girl shot in the face, major skin loss in face and mandibular fracture. Referred first to Ain Arab (Kobani), then to Hasakeh. The patient arrived 12 hours after injury, having received no treatment. Acute tracheostomy and plate stabilization of mandibula. Skin flap performed after ten days, very professionally done. Other injuries seemed to be properly treated. Many patients (poor people in rural areas) cannot pay. Standard prices: appendectomy \$100; plaster cast for fracture \$ 2030-; femur fracture \$2001500- according to method and what patients can afford. 80 patients per day are admitted to the emergency department (mostly for internal medicine, gynaecology etc.). Patients often pay more for transport than for the actual treatment.

Name of Hospital	History	Affiliation	Governorate	City	Location	Human Resources	Technical Resources	Requirements for proper functioning	Accessibility	Comment
Hayat Hospital, Hasakeh	Private hospital located in the city centre.	Private	Hasakeh	Hasakeh City	City centre, on the border between Kurdish- and government-controlled areas. Fourth floor of hospital is occupied by Kurdish security forces.	1 general surgeon, 2 orthopaedic surgeons, 2 neurosurgeons, 1 chest surgeon, 1 vascular and OB/GYN (probably the same surgeons as in the other hospital), 30 nurses and technicians.	31 beds operating, but can expand by 20 beds. Expansion would however have to be on the fourth floor (currently occupied by Kurdish security forces). The building has previously been attacked. GE cat-lab not working due to software problem. Laparoscopy rack. Power supply: Public system and 1 generator, not adequate. The hospital gets blood from the central blood bank at the national hospital. The day before the team's visit, the hospital handled 25 emergencies, 7 surgeries including 5 Caesarean sections, 1 exploratory laparotomy and one thoracoscopy. Type of injuries: almost all extremity, orthopaedic and vascular injuries. Some patients require chest tubes. One or two patients had been treated professionally before arrival (one patient with abdominal injuries came with packing of the abdomen (packing the abdominal cavity with compresses and just minimal closure of the abdomen (skin) to stop bleeding for final surgery)). The hospital believes these patients had been operated in American or French military hospitals. Occasionally they receive mass casualties (>5).	The hospital will need to waive patient fees.	Accessible for everybody that manages to get into Hasakeh	Not suitable for managing mass casualties but can receive patients for secondary surgery and wound care.
Hasakeh national hospital	Before the crisis, was the main health care provider in the city of Hasakeh and surrounding areas. Hospital currently under Kurdish authorities and not functioning.	Kurdish Health authorities (except blood bank which is under MOH)	Hasakeh	Hasakeh City	Kurdish sector of Hasakeh city	Currently not working: needs human and material resources to make it operational.	4-storey building with 200-bed capacity. Only ground floor is being used (to partially provide emergency services). Functioning blood bank (under the supervision of the national blood bank) and dialysis unit. Blood bank gets test kits from WHO and delivers blood to all health facilities in Hasakeh Kurdish and Arab. One Abbot screening machine was out of order. Dialysis unit not working on day of visit (out of fluids). Only two out of four dialysis machines were working.	Important to maintain and probably increase capacity of blood bank and dialysis unit. Other than that it seems futile to rehabilitate this hospital for the current crisis.	Would be accessible once functional	Hospital services to be re-established. This should take around two months; work should start immediately.

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4

Name of Hospital	History	Affiliation	Governorate	City	Location	Human Resources	Technical Resources	Requirements for proper functioning	Accessibility	Comment
Qamishli national hospital	<p>One of 18 hospitals built by the European Union in Syria in 2005, all with the same structure. The two-storey complex forms an H with a 200-bed capacity.</p> <ul style="list-style-type: none"> • First floor: main entrance, administration, emergency, major and minor (separate) operating theatres for surgery and gynaecology, delivery and intensive care, laboratories, X-ray. • Second floor: wards. <p>The EU hospital was built on the same location as a previous hospital dating back to 1982. The sewage and water network is 35 years old and has started to break down.</p>	MoH	Hasakeh	Qamishli City	Qamishli city next to the airport	<p>Before the crisis, had over 110 doctors supported by nurses and technicians. Currently staffed by 50 doctors covering internal medicine; ophthalmology; ENT; gynaecology ; orthopaedic surgery; gastroenterology; nephrology; neurology; neurosurgery; general surgery; thoracic surgery; vascular surgery; plastic surgery; paediatric care; urology. The specialists share the wards.</p>	<p>200-bed capacity including 8 intensive care beds (but monitors do not function systematically). Haemodialysis unit with 9 functioning machines. Six operating theatres. Hospital requires additional equipment and maintenance support. 3 X-ray machines but only one working. One Toshiba CT is available but cannot be used (no contrast pump). Two development processors, both of which are out of order. (Films are developed manually). Power supply: Minimum supplies of regular electricity. One 650 KVA generator that is prone to breaking down. No back-up generator.</p>	<p>Requires specialized doctors, nurses and technicians for general care, burn management, equipment maintenance. Back-up generator required.</p>	<p>Before the conflict, served as the main referral hospital in the north-east between Manbej and Hasakeh. The hospital director estimates that 500 000700-000 patients use Qamishli as their local or referral hospital.</p>	<p>No real treatment for cancer (cancer patients are referred to Damascus). Many patients are admitted with burns (domestic accidents when people refine their own oil). Increasing numbers of patients are presenting with injuries from mines and mortars. The day of team's visit, the hospital did 12 ENT, 3 gynaecological, 3 orthopaedic and 2 urologic surgeries. Patients are mainly from Raqqa or Deir-ez-Zor. New patients are not admitted every day, but sometimes up to 10 can be admitted at the same time. Patients from Deir-ez-Zor come by helicopter. Patients from all other places travel by private car.</p>
5										
Ras el Ain Hospital	<p>One of 18 hospitals built by the EU in 2005. Had to be evacuated to other locations in 2012 -13 due to the war. Moved back to its original location less than a year ago. Rehabilitated by ICRC. Private with reimbursement, patients pay part of their treatment costs. Cost per night in wards: 500-1,000 Syrian pounds. (Other hospitals charge 3,000 per night.) Only first floor of the building is used. Second floor consists of a nursing school that offers 4-month nursing courses. Hospital delivers the following services: maternity care, internal medicine, general surgery, orthopaedic and paediatric care.</p>	Semi-private	Hasakeh	Ras el Ain	Ras el Ain has 40000 inhabitants but this number has increased. The hospital serves a district of 200 000 people.	<p>2 general surgeons, 2 gynaecologists and 3 orthopaedic specialists. All doctors have private practices and bring their patients to the hospital. Daily physiotherapy is provided by Handicap International. 23- patients per week admitted with acute injuries. Many patients are injured trying to cross the wall to Turkey (they are shot by snipers).</p>	<p>Sufficient medical equipment, including one portable X ray and one C bow in the OT. 40-bed capacity including paediatric ward. Has own blood bank, but screens only for hepatitis A, B & C. Bed capacity can be expanded. One large generator that meets all hospital's electricity requirements. One back-up generator. Shortages of anaesthetics and no haemodialysis services. Hospitals performs most surgeries (except neurosurgery) and handles around 6 Caesarean sections and 6 normal deliveries per day. Have received patients from Kobane and Tai Abyad</p>	<p>The hospital will need to waive patient fees.</p>	<p>Could function as a Role 2 or Role 3</p>	<p>Too far away for code red, but seem like a well-managed hospital with good resources. Strong orthopaedic presence.</p>
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Name of Hospital	History	Affiliation	Governorate	City	Location	Human Resources	Technical Resources	Requirements for proper functioning	Accessibility	Comment
Tal Abyad National hospital	Originally a stable for animals, but converted to a government hospital. Rehabilitated & funded in 2012/2013- by NORWAC, Qatar Red Crescent Society and International Medical Corps (IMC) (USA). IMC donated an oxygen concentrator, 2 OTs, a dialysis unit, a paediatric unit with incubators, a blood bank and a cardiology unit. When IS left in 2015 they destroyed the oxygen concentrator & took most of the equipment. Hospital refurbished by MSF in 2016. 3 OTs, and several small generators that can be attached directly to equipment. NGO Soudan supported a new dialysis unit and paediatric department with incubators. Equipment procured locally in Manbij & administered by Kurdish health authorities.	Kurdish Health authorities supported by MSF Holland	Ar Raqqa	Tal Abyad	Tal Abyad city (approximately 11.5- hour drive from the frontline in Ar-Raqqa city).	MSF Holland pays the salaries of local staff (204 employees and 20 doctors) and has strengthened the hospital's surgical and trauma service capacity (with additional general and orthopaedic capacity and cross-departmental hospital support).	60-bed capacity including 18 surgical beds and 3 OTs (2 general and 1 GYN). Receives 5060- patients/day and handles 30 surgeries/week. Most supplies provided by MSF are for surgery. 50% of cases are war injuries, 3035%- from Raqqa referred from outside Hazima, a TSP north of Raqqa run by KRC with one ambulance. Patients who require repeated wound debridement and cleaning may stay 23- weeks. They need to be referred more quickly: evacuation to Qamishli and Kobane should be considered. Hospital is considering increasing bed capacity. Hospital has received patients whom they believe have been treated in ISIL-controlled hospitals. Orthopaedic injuries are adequately treated. 60 major operations were performed on trauma cases from Raqqa over the last three weeks. General surgery has 20 admissions, 3 procedures daily. Elective surgery suspended one month ago (waiting list is now three months). Patients are referred to Qamishli or Kobane (hospital management is reluctant to send patients to Aleppo). MSF has equipped blood bank with comprehensive test kits. Dialysis machines and incubators are on their way from Iraq. Hospital ventilators work thanks to MSF generators. Hospital has Dräger ventilators that must be attached to the electricity grid. MSF procures equipment in Amsterdam and delivers it through Iraq. The process can take up to six months due to cross-border issues.	Requires specialists, especially orthopaedics in addition to equipment such as oxygen concentrator (station), CT scan, orthopaedic supplies and lab supplies.	Main referral hospital receiving cases from the front-line. Some cases are referred to Kobani Ras El Ain or Qamishli.	According to local sources, patients are afraid of coming to the hospital because they may be arrested. Thus males between 1530- years old stay away. Hospital staff say they already have a problem with patients in need of prolonged wound care (patients stay 23-weeks if they cannot be referred).

Name of Hospital	History	Affiliation	Governorate	City	Location	Human Resources	Technical Resources	Requirements for proper functioning	Accessibility	Comment
Al Hekma private hospital Tal Abyad	Private hospital established in 2013 by doctors from Ar-Raqqa. Many doctors have left over the past year.	Private	Ar-Raqqa	Tal Abyad	Tal Abyad city accessible by all.	40 doctors available working with the hospital. Doctors, specialists and residents who have fled from Raqqa end up here. 15 gynaecologists, 1 orthopaedic and 6 general surgeons; 1 urologist; 15 nurses; 4 assistants, 4 scrub nurses. ENT surgeon visits from Turkey.	Too small for major trauma surgery. The hospital conducts 9 operations/24 hrs on average when in continuous use. 8 incubators, no CT scanner either here or in the public hospital. Supplies are procured from Manbej. An oxygenator supplying the whole district is needed.	Supports reinstalling oxygen concentrator at governmental hospital. Hospital has to buy bottled oxygen from Manbej at 5 times the previous cost.	Accessible for everybody but no emergency entrance and therefore not suitable as a trauma hospital.	8 deliveries/day on average. High frequency of Caesarean sections. Workload has increased 300% over the last three weeks. Elective surgery takes place at night. Patients have difficulties reaching the hospital because of checkpoints. This hospital can help reduce the caseload of the national hospital (see row above). According to the hospital director, patients do not want to be referred to Qamishli because its hospital has a bad reputation. Patients are also unwilling to be referred to Aleppo because they do not know if they are wanted by the secret police.
8										
Tabqa National Hospital (not visited by the assessment team; information provided by the WHO focal point in the area).	Not functioning. Infrastructure is intact but hospital has been looted of all equipment, beds and supplies. Because of the urgent need for a medical point/emergency centre, the health authorities have set up outpatient clinics for IDPs.	NA	Ar-Raqqa	Tabqa	Within Tabqa city, but not functional	Currently not staffed, but local health care staff could be recalled for duty.	Infrastructure partially damaged and needs to be repaired. Equipment destroyed. Electricity and water are not available, and there is no generator. 3 haemodialysis machines, 2 incubators and 4 ambulances. Haemodialysis machines and incubators need maintenance.	Building may be mined/booby trapped. A field hospital located on the premises could provide the best immediate solution once the area has been cleared of mines.	May be accessible for IDPs once operational	Health services in Tabqa are limited and most public health centres are closed. There are 35 private clinics, 6 pharmacies, 3 private medicine warehouses, 3 labs and 2 X-ray clinics with limited services. 75 nursing staff. Most of the medical staff in Al Tabqa are originally from Al Raqqa city. A private clinic for emergency cases was established recently in the city. The clinic refers urgent cases to the military hospital, which provides limited services and emergency surgery. The hospital refers injured people to Ain Al Arab and Tel Abyad hospitals. An INGO has provided the hospital with an ambulance to transport referred cases. There is a need to strengthen emergency health services by providing equipment such as mobile imaging device + ultrasound + micro surgical instruments + necessary medicines. It could be possible to install a field hospital in the building, together with a generator. It could work as a role 2 for code red on the western pathway.
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APPENDIX 2. HEALTH PARTNERS OPERATING IN THE REGION

(The information in this appendix has been drafted by health partners and submitted to WHO. The text below is reproduced verbatim, and has not been edited by WHO.)

UN PONTE PER (UPP)

Presence in the area

In 2015 UPP, with private funding, launched its operation in North East Syria (NES) by providing medicine to primary health care (PHC) and hospitals all over the area. A solid partnership was built with the Kurdish Red Crescent (KRC) and during 2015 three inter-agency emergency health kits (IEHK) were received. Tents were donated to set up the Mabrouka camp in late 2015. In 2016 UPP, opened an office in Al Malykye-Derik and ran two programs supporting 6 of the partners' clinics. The clinics are also providing support to internally displaced persons (IDPs) from Raqqa.

Current activities

In October 2016, UPP set up a PHC in Al Hol Camp to respond to the Mosul refugee crisis. The program has been renewed for all 2017 and is providing health assistance and services to more than 20,000 persons, including Roj and Newroz camp and IDPs from Deir ez Zor. UPP and its implementing partner are also providing emergency services at the Iraq-Syria border, with ambulances referring severe cases to Hassakeh hospital. Since the beginning of 2017, UPP is coordinating the Health Working Group in the coordination mechanism for NES. UPP is supporting KRC in the construction of the Til Temer Hospital, so far entirely built using private donations.

UPP Syria is supported by UPP Iraq in logistics, security and procurements. UPP has been working in Iraq since 26 years and built a strong network in the country. UPP was involved in the Mosul Emergency Response Planning. UPP has been part of the Refugee Response Plan (RRP) since its beginning and has been elected, as Syria INGO Regional Forum (SIRF) member, to represent NGOs in the 3RP committee.

UPP together with KRC has the capacity to provide assistance in hard to reach areas all over NES. KRC is the main local health NGO working in NES. Founded in 2012 KRC is managing 15 PHC in NES, supporting the Ras el Ain hospital, and building a new one in Tel Temer. With more than 650 staff and volunteers, KRC provides assistance, in accordance with the ICRC Code of Conduct and Geneva Conventions. KRC is managing the ambulance system in various cities of NES and in Qamishlo. It is already working for Raqqa response through the following actions:

- Medical point in Ein Issa camp, with the support of MSF.
- In Karama camp there are volunteers at the medical point.
- Three ambulances working in the newly retaken areas of Raqqa district and following the demining operations.
- Secondary health care in Kobane and Ras Al Ain, supported by MSF.

Plans to support hospitals

N/A

Plans to support TSPs

Outpatient Emergency Care for injuries and other significant health care needs through 3 specialized teams (ambulances) managed by the KRC and UPP, deployed across the main routes of the offensive on Raqqa and the nearest frontlines.

Each team per TSP will be composed of: 2 fully equipped ambulances, 2 nurses, 2 drivers and 2 paramedics with 24/7 coverage. There will be 1 back-up vehicle at each TSP to ensure continued mobility of patients in case of ambulance overload.

Services:

- Stabilization and referral of severe trauma and non-trauma emergencies;
- Definitive care for minor trauma and non-trauma emergencies;
- Providing a life-saving support, protection to the most vulnerable and avoid discrimination (according to do no harm principles) by including civilians and prisoners of war in the target group.

Inpatient Emergency triage, assessment and advanced life support:

Establishment of 3 equipped TSPs on the 3 main roads, located maximum 10 km from the frontline.

Services:

- Surgical triage, assessment and advanced life support
- Definitive wound and basic fracture management
- Damage control surgery
- Inpatient care for non-trauma emergencies
- Basic anaesthesia,
- Workplace patient card and referral services

An international physician will be in charge of all check-ups as well as monitoring, assisting, and training KRC humanitarian staff. A second UPP physician international expert will be on site for monitoring during the project.

Inpatient Referral Care:

A specialized team will be deployed in each TSP to ensure transfers for patients in need of surgical treatment to more specialized health facilities in the region - evaluating both the distance from the TSP and hospital capacity. Each TSP focal point will be in direct communication with the hospital focal point. Each TSP referral team in charge of the transfer of stabilized patients will be composed of: 3 fully equipped ambulances, 3 nurses, 3 paramedics, 3 drivers with 24/7 coverage. The ambulances will be always available on site.

Hospitalization:

After a monitoring visit, the UPP emergency team selected 3 health facilities capable of the treatments:

1. (west) Ain al Arab KRC hospital (2 fully equipped surgeon rooms; capacity of 500 surgical interventions per month, supported by MSF);
2. (north) Tel Abiad hospital (2 fully equipped surgeon rooms, rehabilitated and supported by MSF; capacity of 500 surgical interventions per month);
3. (east) Ras Al Ain - Roj hospital (managed by KRC, rehabilitated by ICRC, 4 surgeon rooms with capacity of over 500 surgical intervention per month).

Ras Al Ain hospital is facing a shortage of minor surgical equipment and UPP will cover the gap. UPP will support 3 surgical teams in the hospitals with salaries. All procurement of items will be conducted making use of the international hub.

The union of doctors in NE Syria will provide support for intensive care treatments not available in the public hospitals (neurosurgery, cardiology surgery, ophthalmic). An MoU will be signed with these hospitals.

In case of mass casualties, UPP identified health facilities as back up options: Thawrah military hospital; Menbij public hospital; Hassakeh public and private hospitals.

Transit permission for the wounded will be managed by KRC. An MoU will be signed on organizational level.

PFA trainings to front-line respondents on management of civilian casualties, training on decontamination after chemical attack and mine awareness.

It proved to be an effective tool for those working on the frontline. UPP PFA trainings are intended to facilitate medical and paramedical staff capacity to address trauma victims needs. Training on decontamination will be arranged together with experts and NES NGOs in the field who have this expertise.

Support requested from WHO

IDDK_Infusion_Module	4
IEHK2006 Basic unit	3
IEHK2006 renewables	10
IEHK2006 supply 2 Equipment	4
Translation of pneumonia kit A	12
Translation of pneumonia kit B	12
Translation_Minor_surgery_instruments	4
Translation_of_IHEK_Supplementary_Unit	3
Translation_of_Italian_Trauma_Kit_A	5
Translation_of_Italian_Trauma_Kit_B	5
Translation_of_Surgical_Kit	6

MSF HOLLAND

Presence in the area

MSFH have been working in N. Syria since 2012.

Current activities

MSFH supports activities in Kobane, Menbij and Ar Raqqa Governorate. MSFH support the maternity unit and a number of PHCs in Kobane. MSFH recently started support to Menbji Hospital (ER and OPD) and surrounds. In Ar Raqqa MSFH support vaccination teams and some mobile PHC.

MSFH has supported Tal Abyad Hospital intermittently since 2013. Currently MSFH support hospital staff salaries, medical supply of the Hospital with technical and managerial support. Since June 2016, MSFH has strengthened the surgical and trauma service capacity(with additional general and orthopaedic capacity) and cross departmental hospital support.

Plans to support hospitals

With surge capacity since 4 weeks to scale up surgical and emergency services, cleaned up the 3 existing operating theatres including (elective, trauma and OB/GYN) in addition to strengthening capacity for the 18 post-operation beds/lab and blood bank.

Plans to support TSPs

MSFH supports several TSPs with supervision, training, supplies, staffing and provides ambulance and retrieval care.

Supported requested from WHO

They sought clarification for clear referral lines and triage criteria for other trauma actors, and clear understanding for all actors (military and non military) of post operative capacity/limitations in the region.

Presence in the area

Since beginning June 2017

Current activities

Direct MSF France support in Ein Issa Camp,

PHCC in Ein Issa Camp for the population of the camp and surrounding villages, 6 days/week, 200 consultation /day. 3 doctors and 4 nurses providing consultation, medication, dressings and referral.

+Malnutrition screening (6m =>5yo) with therapeutic feeding program for MAM and non-complicated SAM

+Milk donation for <6month

+20 Community workers for surveillance system and hygiene promotion

+WASH; all water trucking for the camp (9truck by day), chlorination of the water

Plans to support hospitals

Primarily, they support Kobane hospital with expat care. 90% of patients coming from Kobane are IDPs from Raqqa or from camps, some car accidents, but not much wounded or war casualties received. There is a military hospital on the premises.

Kobane is in postwar context and MSFF aims to strengthen trauma care and surgical care. They are working in improving the emergency capability of the hospital and developing systems for emergency and mass casualty handling. People from Raqqa go to Menbej hospital in Menbej out of order some most referred to Tal Abiad. The capacity of the hospital can be increased in Kobane to 50 beds. There is no humanitarian corridor. More patients are referred to Tal Abiad than to Kobane

Recently there is a Tweiheha informal settlement in the countryside. There is a need for mobile clinics in Raqqa and Tabqa countryside to provide PHC

Tabqa: There are very few doctors, 2 paediatricians, 1 internist, 1 gynecologist. They are discussing with local authorities to establish PHC. Casualties of mine accidents in Tabqa are referred to Kobane. Menbej Hospital does not have sufficient capacity to receive any surgery cases only few clinics are operational. In Kobane there is a military patient hospital, KRC hospital and private hospital. Capacity in Menbej could be increased; MSF Holland is working on that. The building is big but only one floor running. Some minor surgeries are done in some private clinics in Menbej. The proposal to open PHCC in the center of the Tabqa town is under discussion as an objective is to provide free medical care in Tabqa for IDPs and host population where there is absence of any health actors.

In Tabqa PHCC we are planning too to build referral system by MSF ambulances to Kobane hospital.

Manbij Hospital, is running ER and minor surgery. For further treatments or surgery the patients are referred to Kobane hospital.

Kobane Hospital

Direct support for Kobane hospital (running as an General Hospital) with the very wild catchment area, from Kobane town to Tabqa, Menbij. Population from canton of Kobane and the IDPs from Raqqa, Kobane and Menbij canton.

The referral system from Coalition and SDF stabilization points, Ein Issa IDP camp, Tal Abiad hospital

MSF France expat team is present in the hospital, ER doctor, anesthetist, OT nurse, Medical Activity Manager, Nurse, Logistic team and soon a surgeon and physiotherapist. They work with the KRC partnership work on the increase of the Hospital capacity and improvement of the quality care.

Current capacity is 54 beds , with the surgical/medical ward and pediatric ward.

Main morbidity; car accidents, mine wounded, medical cases and civil war trauma.

Other war trauma cases are referred to military hospital in Kobane.

Plans to support TSPs

N/A

Support requested from WHO

N/A

MSF SWITZERLAND

Presence in area

MSF Switzerland supports several health facilities and PHC clinics in Northern Syria.

Support requested from WHO

N/A

KRC

Presence in area

Information not provided.

Current activities

KRC is the only providing ambulatory services. 6 Afrin, 6 Kobane, 20 in the Raqqa and Hassakeh area. 32 in total and are expecting the 15 from UPP in two weeks. Locally procured/set up.

PHC services are provided at camps: Karama, Ein Issa, Areesheh, Al Hol.

No collaboration with SARC at the moment. There is a SARC unit in Qamishli.

Plans to support hospitals

Emergency response and possible role 2 locations: Kobane, Al Qamishli, Tal Abiad, Ein Issa, Ras el Ain. Evacuate from camps near Raqqa. There is possible evacuation of patients from Raqqa to Tabqa and further to Menbej but difficult at the moment.

The most equipped hospital at this point is Kobane. They run a hospital with 80 beds. They also support Tal Abiad Hospital. Dr. Fosse reiterated the need for referral of cases after stabilization to be referred to a second facility. KRC is currently rehabilitating a hospital in Tal Tamer and will require equipment support from INGOs or WHO. The facility will have 26 beds and 2 operating theatres. This can be important if there are fighting around Deir ez Zor

Plans to support TSPs

KRC has assessed Raqqa situation and have almost decided where to place the TSPs, 10-15 km from frontline, with ambulances provided by UPP in addition to Abu Khashab to Hassakeh. KRC confirmed the information provided by UPP concerning the TSPs and 15 ambulances. One of the TSPs is the most convenient location for a CH decontamination site(s).

Everybody fleeing Raqqa has to pass through the Ein Issa camp for security check before they are allowed to move further.

Support requested from WHO

Agreed on four issues:

1. Evacuation through Aleppo and referral pathways
2. WHO support with kits (Trauma kits)
3. Decontamination unit with TSP
4. Primary medical care/ Contracting private facilities

Support with medicine and supplies to Camps

NGO SOUSAN

Presence in area

Information not provided.

Current activities

Supporting PHC services and hemodialysis services in Tal Abiad Hospital and city. Have requested support to strengthen PHC services in the northern Raqqa region through in-kind support.

RAQQA LOCAL COUNCIL – HEALTH DELEGATE

Presence in area

They are recently established (2 months ago).

Current activities

The council has one active center in Hazimeh (MSF-H supported) and another in Ein Issa Camp. One center in Mahmoudli is still under rehabilitation. In Hazimeh Health center, 4 doctors and 20 nurses operate the centre.

Plans to support Primary Health Care

They have agreed with the Coalition to establish 5 additional centers (Salhabiyeh, Tabqa, Mazraat Tishreen, Hamrat, Mazraat Rasheed) to bring them to a total of 8 health centres.

MEETING WITH THE SYRIAN ARAB RED CRESCENT (SARC)

The meeting with the President of SARC was held to propose collaboration with SARC to i) assist with transport of medical supplies and equipment to northern east Syria via road or air transport; ii) explore possibility of transfer of patients (injured) requiring secondary and tertiary health care from Menbej (as a collection point) to Aleppo city via road transport, or from Qamishli to Damascus via air transport. When discussing possible immediate transfer of patients from KRC-operated ambulances to SARC ambulances, the SARC president clearly expressed the resistance to the proposal as the collaboration with KRC is prohibited. KRC is not considered part of the international RC movement as it defies the unity principle of one RC movement in one country. However, SARC President reassured that the structure of the SARC branch in Al Hasakeh is being reviewed with new management and staff that would improve their access and movement on the ground scaling up SARC operations. As a follow up, a letter is to be sent to SARC-HQ with WHO's proposal so they could provide an official response. Meeting with SARC in Al Hasakeh, they have limited access in the area, only two functioning PHC centres (limited capacity) and one ambulance. They are restricted in movement within the governorate.