

COVID-19 in Luhansk Oblast (GCA)

Hospital Readiness and Capacity assessment

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Contacts:

brunie@who.int

kovali@who.int

abrosimovao@who.int



Acronyms and abbreviations

WHO World Health Organization

MDM Medicos del Mundo

UNICEF United Nations Children's Fund, Office in Ukraine

ICU Intensive care unit

PCR Polymerase chain reaction

NHS National Health Service

IDU Infectious disease unit

NHSU The National Health Service of Ukraine

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I. Overview

With the recent increase of COVID 19 cases in conflict affected zones of Ukraine, the impact on health services (bed occupancy, laboratories and other services) is reaching cornering levels. Under the coordination of Health Cluster, involved partners conducted a rapid assessment in the newly designated COVID-19 hospitals in Luhansk (see detailed list below) to assess hospital governance, structures, plans and protocols to help rapidly determine current capacities and gaps, identify key areas that require investment and action and collectively develop a robust plan.

Assessment was based on a WHO validated checklist), previously used in Ukraine and other countries, with some adaptation to a local context. The assessment aims to produce recommendations to support interventions and response, as well as engage government and donors to allocate additional financial and other resources.

II. Background

The assessment of capacity and readiness of designated COVID-19 hospitals and facilities in Luhansk oblast was conducted through a harmonized and validated form agreed among the partners. The targeted hospitals and health facilities included:

1. Stanitsa Luhanska Rayon Territorial Medical Association (Infectious Disease Ward is in Petropavlivka)
2. Novopskovske Rayon Territorial Medical association
3. Svativskiy Multidisciplinary Hospital
4. Luhansk Regional Pediatric Hospital (is in Lysyhansk)
5. Novoaidarskiy Multidisciplinary Hospital
6. Popasna Central District Hospital

This report aims to analyze the current situation with the readiness of hospitals in Luhanska oblast (GCA) to cope with COVID-19 outbreak. The assessment focuses on current state of hospitals in terms of preparedness to deal with COVID-19 situation, as well as identifying gaps and providing recommendations for the future.

Team composition

The assessment team was coordinated by the Health Cluster and consisted of three organizations: UNICEF, MDM, and WHO.

Ethics

The assessment has been authorized by Luhansk Health Department.

III. Methodology

The assessment form is based on a pre-validated WHO tool (see ANNEX 1) with adaptation to context and restricted to a limited number of questions (mandatory and optional questions). The form was revised collectively by partners participating in the assessment. It includes references to referral system of non-COVID 19 patients (particularly in relation to pediatric care), as well as some questions on oxygen capacity. Data has been collected through KoBo toolbox, a free open-source tool for mobile data collection.

Data collection took place between 4 November and 15 November 2020 and involved:

- Online/phone call questions. Ideally, conducted by phone by data collector in contact with hospitals focal points in order to complete forms during phone call (1st week of November)
- On site visit to verify the assessment- i.e. IPC component (3rd week of November)

This checklist can be used for hospital governance, structures, plans and protocols to rapidly determine the current capacities of hospitals to respond to the COVID-19 pandemic and to identify gaps and major areas that require investment and action for the development of hospital readiness improvement plans. The tool can be used periodically to monitor hospital emergency operational readiness capacity development.

As per WHO checklist, the criteria for evaluation are divided in:

- 1) Planned but not started
- 2) In progress (on the way to be implemented)
- 3) Completed (implemented and functional)

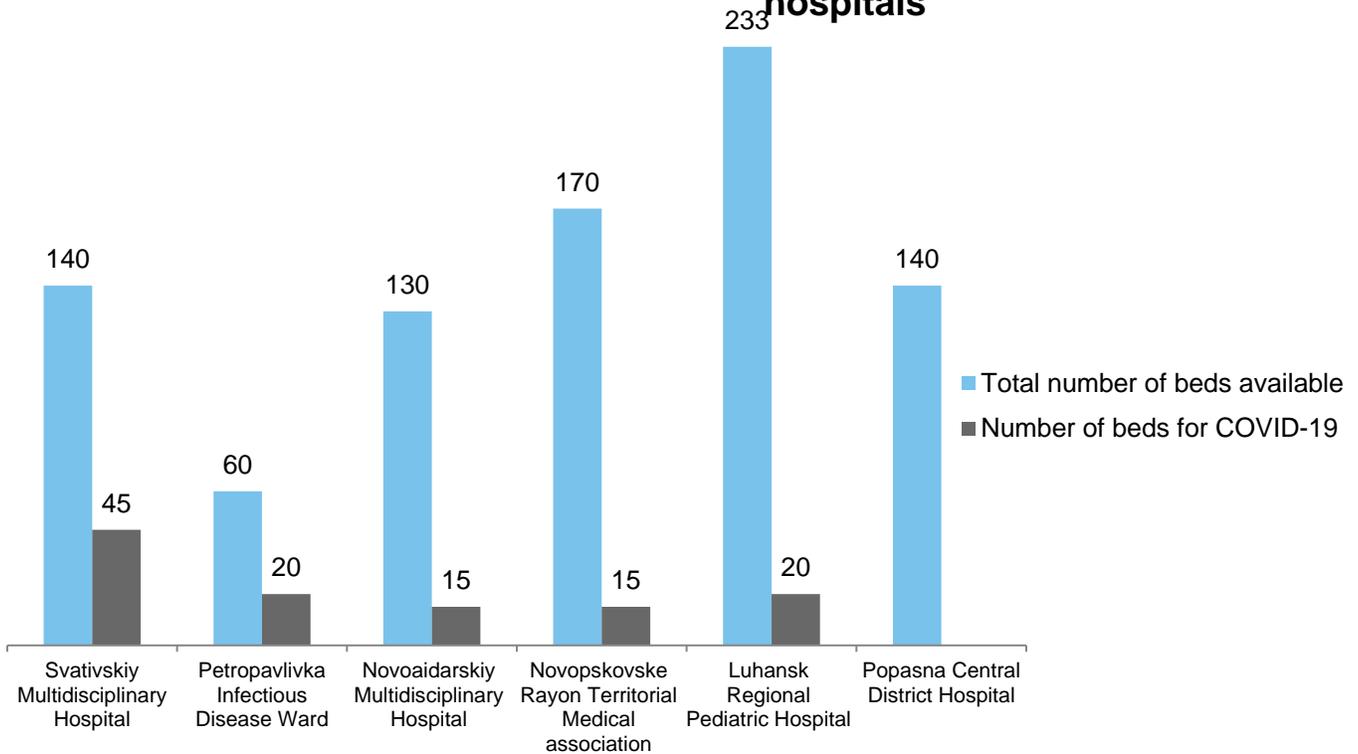
IV. Results

This section presents main findings from the data obtained by participating organizations. It consists of ten content areas:

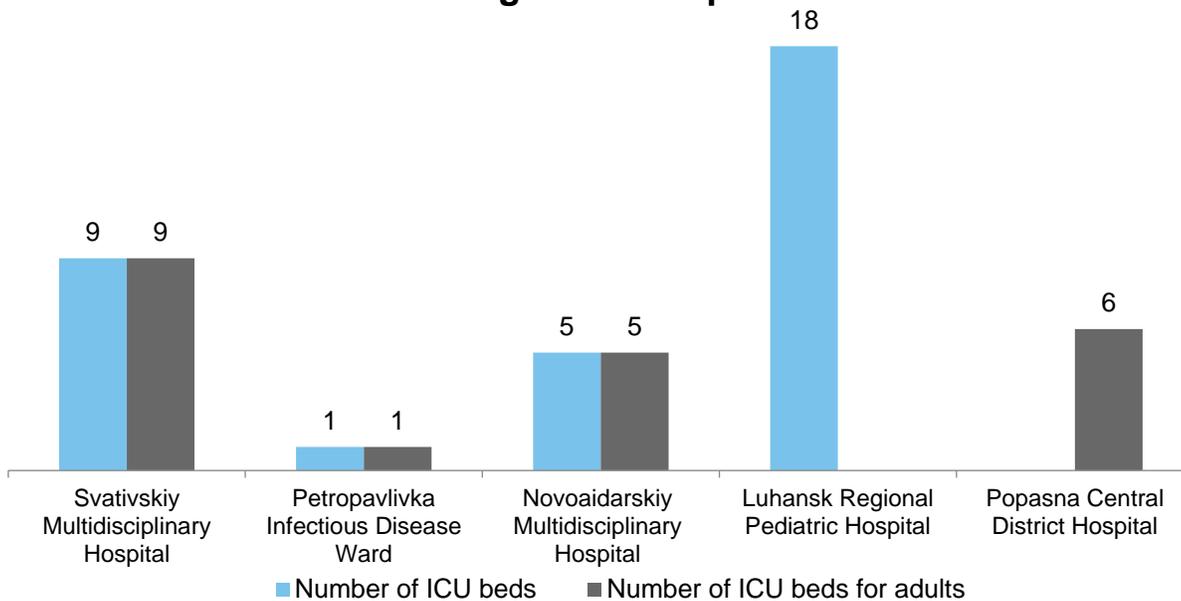
1. Hospitals general information
2. Incident Management System
3. Surge Capacity
4. Infection Prevention Control
5. Case Management
6. Human Resources
7. Continuity of essential health services and patient care,
8. Surveillance, early warning and monitoring,
9. Communication and Logistics
10. Management of supplies.

Hospitals general information

Number of beds available in COVID 19 designated hospitals



Number of beds for adults available in COVID 19 designated hospitals



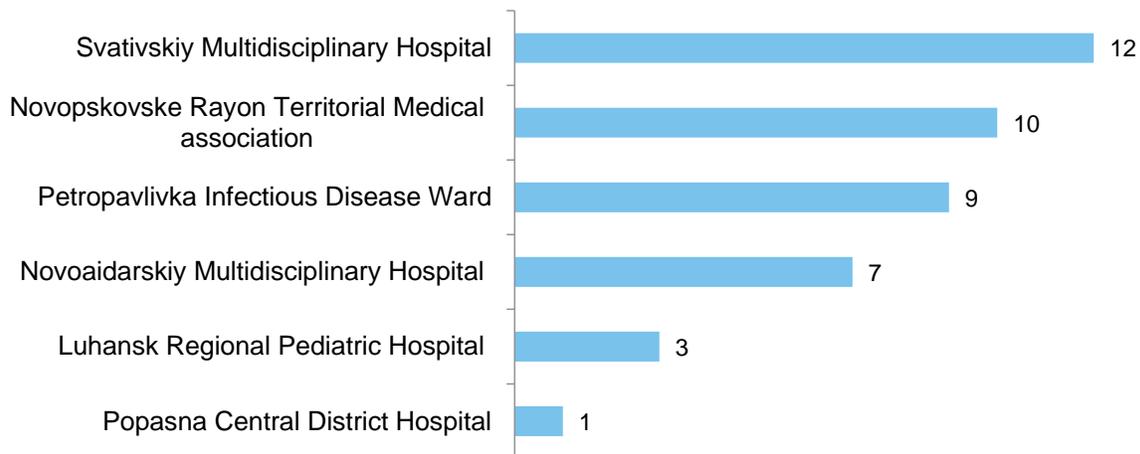
* based on available data

Luhansk Regional Pediatric Hospital presents:

Beds for pediatrics and – 18

Beds for neonatology – 3

Number of isolation rooms



Incident Management System

Emergency response planning situation:

Completed	In progress	Planned but not started
Svativskiy Multidisciplinary Hospital Luhansk Regional Pediatric Hospital Popasna Central District Hospital	Petropavlivka Infectious Disease Ward Novopskovske Rayon Territorial Medical association	Novoaidarskiy Multidisciplinary Hospital

Availability of Hospital Emergency Operation Centre with appointed lead responsible for components of responses, as well as appointment of prospective replacements for Senior Management to guarantee the continuity of decision-making:

Completed	In progress
Svativskiy Multidisciplinary Hospital Novoaidarskiy Multidisciplinary Hospital	Petropavlivka Infectious Disease Ward Novopskovske Rayon Territorial Medical association

Luhansk Regional Pediatric Hospital
Popasna Central District Hospital

**data for Petropavlivka infectious disease ward is not available*

COVID-19 management:

4 hospitals are well aware of the national, regional guides and recommendations on COVID-19 management:

- Svativskiy Multidisciplinary Hospital
- Novoaidarskiy Multidisciplinary Hospital
- Luhansk Regional Pediatric Hospital
- Popasna Central District Hospital

Other medical institutions still adjust their processes.

Readiness of hospitals for meeting potential increased demand and anticipation the impact of COVID-19 on food supply of hospitals and essential lifelines, including water, power, and oxygen

Completed



- Svativskiy Multidisciplinary Hospital
- Novoaidarskiy Multidisciplinary Hospital
- Luhansk Regional Pediatric Hospital
- Popasna Central District Hospital

In progress



Novopkovske Rayon Territorial Medical association

It is worth mentioning that as fo Nov 2020, Svativskiy Multidisciplinary Hospital has declared lack of oxygen among the other missing essential lifelines.

Determining potential security constraints and optimizing the control of facility access, essential pharmaceutical stocks, patient flow, traffic, parking by hospital security:

Completed	In progress	Planned but not started
Novoaidarskiy Multidisciplinary Hospital Popasna Central District Hospital	Novopkovske Rayon Territorial Medical association Luhansk Regional Pediatric Hospital	Svativskiy Multidisciplinary Hospital

Svativskiy Multidisciplinary Hospital does not have a security service and declared that - if necessary - will rely on the morgue of the psychiatric hospital. The hospital covers 3 additional raions - Troitske, Markivka and Bilokurakyne, which can potentially lead to an overload.

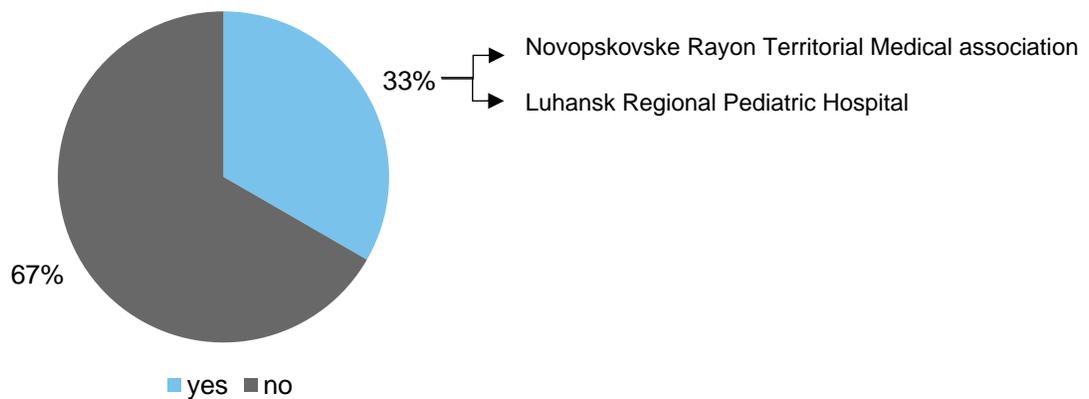
Designation of an area for use as a temporary morgue and ensuring the adequate supply of body bags and shroud packs:

Completed	In progress	Planned but not started
Novoaidarskiy Multidisciplinary Hospital Luhansk Regional Pediatric Hospital	Novopskovske Rayon Territorial Medical association	Svativskiy Multidisciplinary Hospital Popasna Central District Hospital

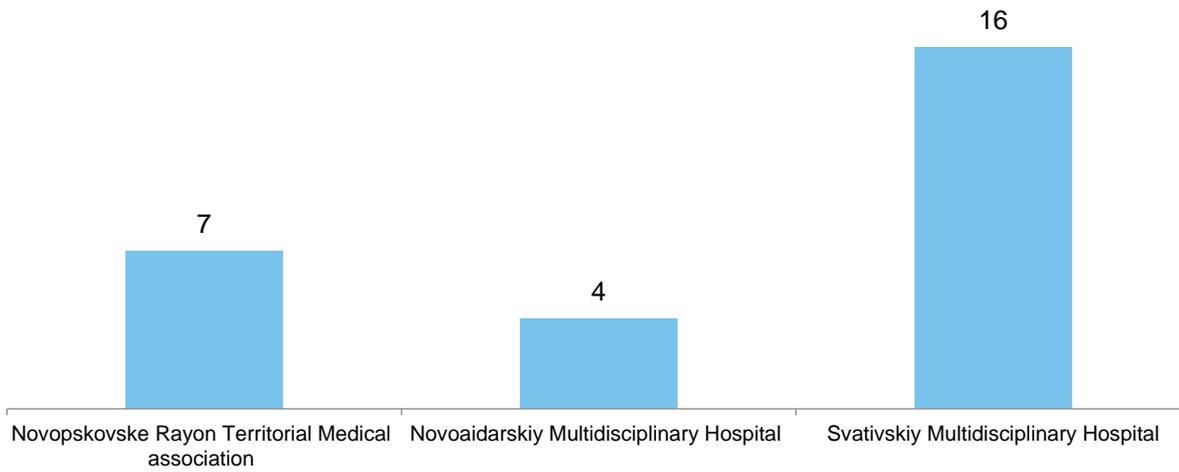
Surge Capacity

Maximal case admission capacity for infectious disease unit (IDU) is 42 patients for all hospitals (individual placement; isolation);

Availability of central oxygen supply

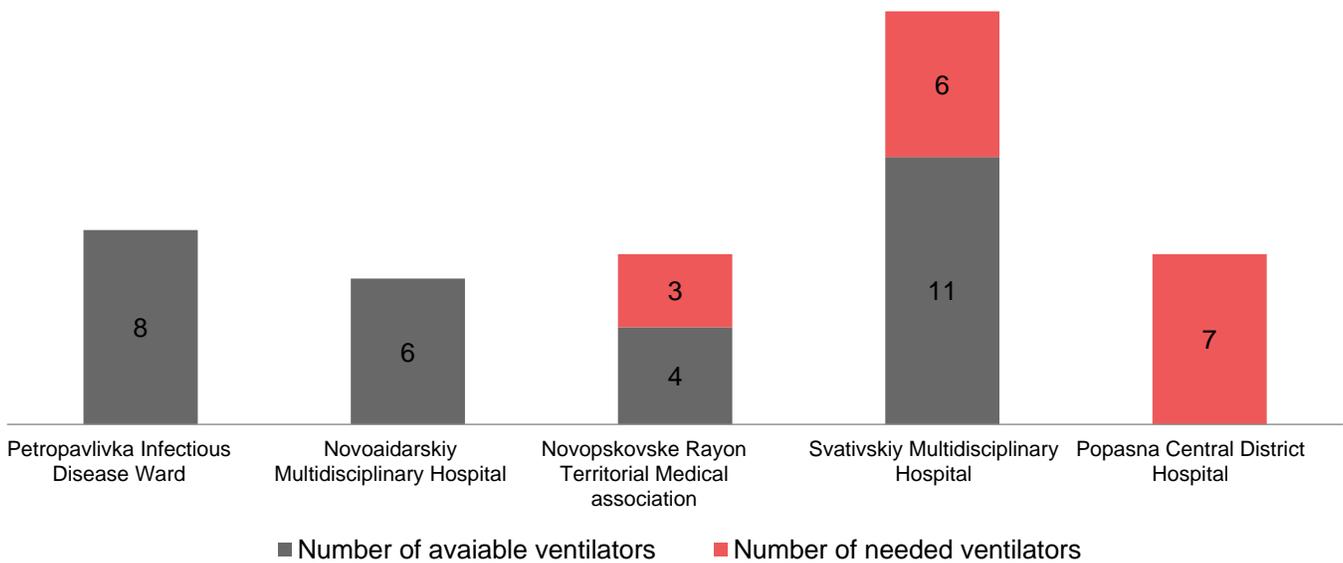


Number of oxygen outputs



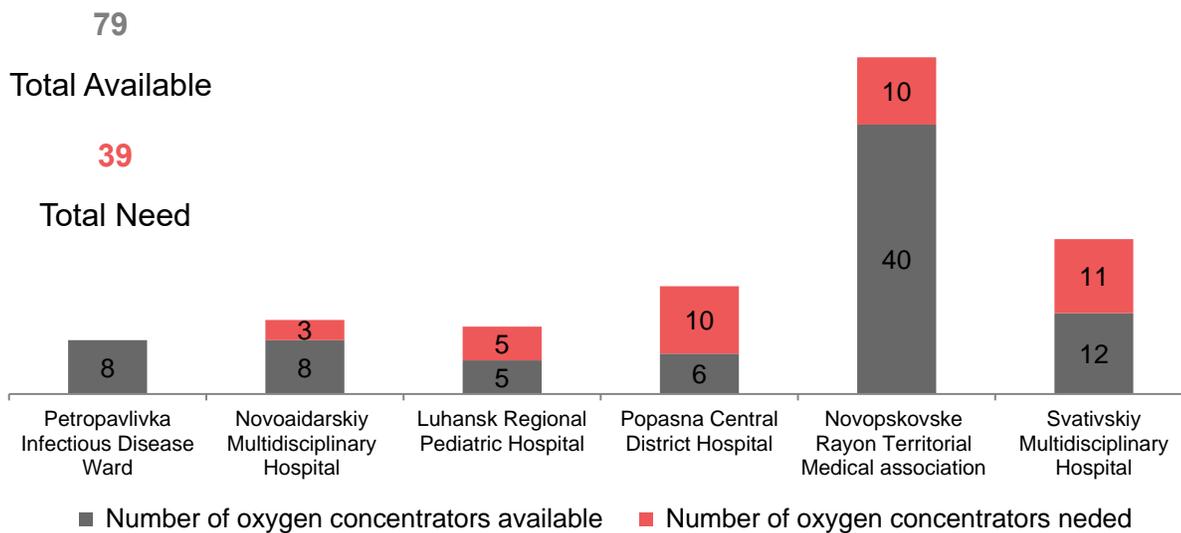
**Petropavlivka infectious disease ward and Popasna Central District Hospital reported 0 oxygen outputs*

Number of ventilators available and additionally needed



Ventilators are unavailable in half of the assessed hospitals. Popasna Central District Hospital found itself in the most critical situation among others. Petropavlivka Infectious Disease Ward and Novoaidarskiy Multidisciplinary Hospital do not mention the need in additional ventilators.

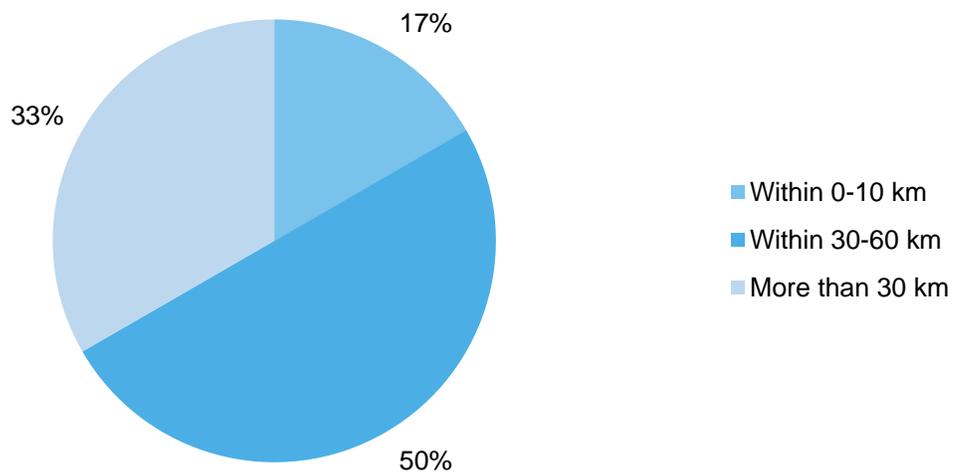
Number of oxygen concentrators available and additionally needed



A large majority of hospitals need additional oxygen concentrators (according to the data – 39 oxygen concentrators in total). None of the hospitals has a PCR laboratory.

Distance to the nearest laboratory is represented on the graph below:

Distance to the nearest PCR laboratory



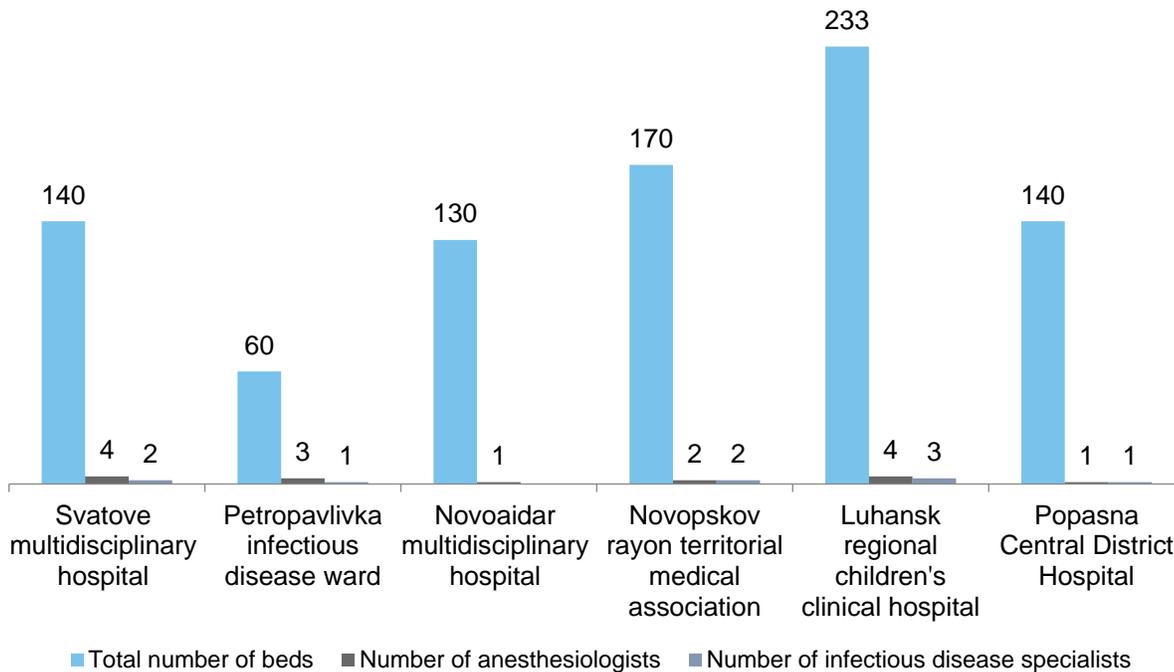
50% of hospitals reported that nearest PCR laboratory situated within 30-60 km distance. 17% reported that the laboratory is located 30 km away.

On average, it takes about 1.5 days to obtain results from the PCR laboratory. Novopskovske Rayon Territorial Medical association reported that the hospital sent PCR samples to Severodonetsk two times a week. On average, the number of samples is 40-50 per week.

In terms health workforce, assessment counted a total of: 227 MDs, 701 nurses, 15 anesthesiologists and 9 infectious disease specialists working in the hospitals.

The disaggregated data are available below:

Number of medical staff presened at the hospitals



Novoaidarskiy Multidisciplinary Hospital reported the need of young aged specialists, such as infection physicians and anesthesiologists, having a majority of them aged over 65 years old. In addition, at the time of the assessment, the hospital was not legally recognized as a COVID 19 hospital. This result in a negative impact on the access to emergency funds for COVID 19 response.

Infection Prevention Control

All hospitals reported the presence of focal point responsible for Infection Prevention and Control, while the position of epidemiologist is not filled among all hospitals.

As per assessment date (Nov 2020), only 2 out of 6 hospitals conducted relevant trainings on infection prevention and control and clinical management.

Half of the hospitals assessed provided informational materials and made staff and patients aware of respiratory and hand hygiene for prevention of healthcare-associated infections. The other 3 hospitals are still adjusting their processes.

Staff presents high level of COVID-19 awareness in 4 hospitals:

- Svativskiy Multidisciplinary Hospital
- Novoaidarskiy Multidisciplinary Hospital
- Luhansk Regional Pediatric Hospital
- Popasna Central District Hospital

According to the data, 2 hospitals reported taking complete precautions such as provision of single-use and disposable equipment and disinfection of shared items (Svativskiy Multidisciplinary Hospital and Novoaidarskiy Multidisciplinary Hospital). For the other 4 hospitals the process is still under development.

Svativskiy Multidisciplinary Hospital reported absence of capacity for domestic support measures (travel, childcare, care of ill or disabled family members).

In terms of *staff testing for COVID-19*, Novoaidarskiy Multidisciplinary Hospital has been testing its staff for IgM every two weeks. Petropavlivka Infectious Disease Ward undertake PCR tests twice a month, and Petropavlivka infectious disease hospital provides compensation to all staff members who worked with COVID-19 patients.

Hand hygiene stations (water, soap, paper towel, alcohol-hand rub) are available at 33% of the hospitals.

Svativskiy Multidisciplinary Hospital and Luhansk Regional Pediatric Hospital ensured complete application of standard precautions for all patients. The work for other hospitals is still in progress.

Case Management

The process of recruiting and training of additional staff for reinforcing case management is not established in the most hospitals. Svativskiy Multidisciplinary Hospital reported the absence of resources to complete this step.

The staff of 2 hospitals (in Svatove and Luhansk) has been familiarized with working on high-demand areas, such as infectious disease wards, emergency and intensive care units.

Mechanisms to implement triage are currently implemented only by Luhansk Regional Pediatric Hospital. Other 5 hospitals still develop such mechanisms.

Designation of exclusive waiting and examination areas for individuals presenting with respiratory symptoms and/or fever are done at Luhansk Regional Pediatric Hospital and Popasna Central District Hospital.

Home care for mild cases of COVID-19 acute respiratory infection in individuals with no comorbidities, recognized as posing a risk for severe or fatal disease associated with COVID-19 is implemented at Novoaidarskiy Multidisciplinary Hospital and Popasna Central District Hospital.

Hospital admission for cases of COVID-19 acute respiratory infection is done at Popasna hospital only.

All hospitals reported huge lack of resources for bedding for COVID 19 patients.

Availability of oxygen seems to be a challenge for most of the hospitals, except Luhansk Regional Pediatric Hospital.

Petropavlivka Infectious Disease Ward reported an absence of central oxygen supply for the 20 beds designated for COVID-19, 8 oxygen concentrators and 8 ventilators are available.

Novopskovske Rayon Territorial Medical association is yet to receive a signed contract from the NHSU for the management of patients with COVID-19, which means that the medical staff does not receive allowances and the hospital does not receive funding to treat patients with COVID-19.

Human Resources

According to the data received, more than 70% of MD positions are filled at Svativskiy Multidisciplinary Hospital. Novoaidarskiy Multidisciplinary Hospital, Novopskovske Rayon Territorial Medical association and Popasna Central District Hospital reported that only 50%-70% of all doctors` positions are filled. A concerning lack of staff capacity of doctors (less than 50 %) has been reported by Petropavlivka infectious disease ward and Luhansk Regional Pediatric Hospital has less than 50% of doctors.

In terms of availability of nurses and other medical stuff, 3 out of 6 hospitals work at full capacity:

- Svativskiy Multidisciplinary Hospital
- Novoaidarskiy Multidisciplinary Hospital
- Popasna Central District Hospital

More than 70% of positions are filled at Novopskovske Rayon Territorial Medical association and Luhansk Regional Pediatric Hospital. Petropavlivka infectious disease ward operates below its capacity, with 50-70% positions filled.

Continuity of essential health services and patient care

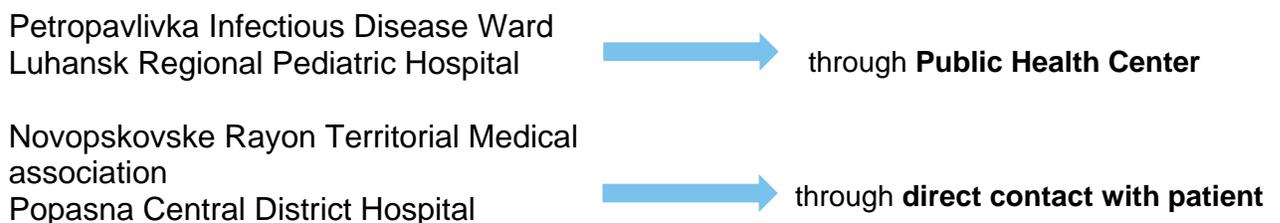
The list of essential services that facility must provide at all times is made by half of the hospitals, however the majority of hospitals do not identify the resources (human resources and logistics) available to ensure the continuity of processes.

2 hospitals reported to have preparedness mechanisms across the local healthcare network – Novoaidarskiy Multidisciplinary Hospital and Luhansk Regional Pediatric Hospital.

Surveillance: early warning and monitoring

As of November 2020, all hospitals reported to have planned but implemented yet the appointment of a hospital epidemiologist with the responsibility for activities related to early warning, contact-tracing and surveillance.

However, 4 out of 6 hospitals have organized full contact-tracing related activities:



Svativskiy Multidisciplinary Hospital organized contact-tracing partially, while Novoaidarskiy Multidisciplinary Hospital does not trace contacts at all.

Reporting of unusual health events (COVID-19) by healthcare workers (by establishing communication channels and procedures within the hospital and with public health authorities) is developed in Svativskiy Multidisciplinary Hospital, Novoaidarskiy Multidisciplinary Hospital and Luhansk Regional Pediatric Hospital.

Consistency with standardized COVID-19 definitions is implemented by Svativskiy Multidisciplinary Hospital and Novoaidarskiy Multidisciplinary Hospital. Other 4 hospitals have not implemented the standard procedures.

Communication

Mechanism of communication and information sharing between administration and unit heads exists in the majority of hospitals (4 out of 6).

Public information spokesperson is appointed in 4 hospitals:

- Svativskiy Multidisciplinary Hospital
- Novoaidarskiy Multidisciplinary Hospital
- Luhansk Regional Pediatric Hospital

- Popasna Central District Hospital

Back-up communication systems and access to updated contact lists are developed in half of the hospitals which participated in the assessment.

Logistics and management of supplies

Updated inventory of all equipment, supplies, and pharmaceuticals was fully implemented in 3 hospitals located in Svatove, Novoidar and Luhansk respectively.

Consultations with authorities to ensure the continuous provision of essential medications and supplies were conducted by almost all hospitals.

Planning of contingency items supply and establishment of contingency agreements were partially done in all 6 hospitals.

V. Conclusions/Recommendations

Proposed recommendations/actions	Implementation level
1. Support provision of oxygen concentrators to all hospitals	Hospitals
2. Improve hospitals' surge capacity	
3. Implement a triage system	
4. Conduct gap analysis at the oblast level in order to improve the HR situation (e.g. verify implementation of HR incentives)	Oblast
5. Finalize the contract between NHSU and hospitals (Novopskovske Rayon Territorial Medical association and Novoaidarskiy Multidisciplinary Hospital) for reimbursement of payments eligible to the COVID-19 assigned hospitals.	National & Hospitals
6. Conduct analysis of the status of COVID packages hospitals get from NHSU	
7. Improve surveillance and contact tracing	National

Annexes

Annex 1. Dataset

hospital_readiness_to_COVID_19_outbreak_English.xlsx