FIRST LINE OF DEFENSE

GLOBAL IOM SUPPORT TO THE UNITED NATIONS IN THE PROVISION OF HEALTH SERVICES CONSEQUENTIAL TO COVID-19

July 2020 - July 2021
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<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACLS</td>
<td>advanced cardiovascular life support</td>
</tr>
<tr>
<td>AEFI</td>
<td>adverse event following immunization</td>
</tr>
<tr>
<td>BLS</td>
<td>basic life support</td>
</tr>
<tr>
<td>CCC</td>
<td>Clinical Credentialing Committee</td>
</tr>
<tr>
<td>FLoD</td>
<td>First Line of Defense (of the United Nations)</td>
</tr>
<tr>
<td>HQ</td>
<td>headquarters</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology (of IOM)</td>
</tr>
<tr>
<td>ICU</td>
<td>intensive care unit</td>
</tr>
<tr>
<td>INGO</td>
<td>international non-governmental organization</td>
</tr>
<tr>
<td>INRB</td>
<td>Institut National de Recherche Biomédicale (of the Democratic Republic of the Congo)</td>
</tr>
<tr>
<td>IOM</td>
<td>International Organization for Migration</td>
</tr>
<tr>
<td>IPC</td>
<td>infection prevention and control</td>
</tr>
<tr>
<td>IT</td>
<td>information technology</td>
</tr>
<tr>
<td>LIMS</td>
<td>laboratory information management system</td>
</tr>
<tr>
<td>MEDEVAC</td>
<td>medical evacuation</td>
</tr>
<tr>
<td>MHAC</td>
<td>migration health assessment centre</td>
</tr>
<tr>
<td>MHI</td>
<td>Migration Health Informatics</td>
</tr>
<tr>
<td>MiMOSA</td>
<td>Migrant Management Operational System Application (of IOM)</td>
</tr>
<tr>
<td>MoU</td>
<td>memorandum of understanding</td>
</tr>
<tr>
<td>PPE</td>
<td>personal protective equipment</td>
</tr>
<tr>
<td>RC</td>
<td>Resident Coordinator (of the United Nations)</td>
</tr>
<tr>
<td>(RT-)PCR</td>
<td>(reverse transcription) polymerase chain reaction</td>
</tr>
<tr>
<td>SARS-CoV-2</td>
<td>severe acute respiratory syndrome coronavirus 2</td>
</tr>
<tr>
<td>SOP</td>
<td>standard operating procedure</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCT</td>
<td>United Nations Country Team</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UNJMS</td>
<td>United Nations Joint Medical Service</td>
</tr>
<tr>
<td>UNMD</td>
<td>United Nations Medical Directors network</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

For decades and at the request of receiving governments, IOM has been providing pre-migration health services (screenings, diagnostic, treatment or preventive services, health-related travel assistance) to assist migrants with their regular migration processes. Services are delivered through approximately 70 IOM migration health assessment centres (MHACs) and mobile teams in 50 countries across Africa, Asia, Europe and the Middle East, with an experienced health workforce over 800 physicians, nurses and other health specialized staff (laboratory, radiology and medical information technology, and more).

In July 2020, in the context of the COVID-19 pandemic, IOM signed an agreement with the United Nations (UN) to provide health services to eligible UN personnel and dependents and ensure the safety and health of the UN workforce and their families.

Activities within this “First Line of Defence” (FLoD) framework encompassed a range of clinical care services, including laboratory services, clinical services, tele-health and medical movement support.

The project was implemented in 18 countries, with 9 countries providing laboratory services only, 2 countries providing clinical services only, and 7 providing both.

The United Nations advanced USD 13.6 million to IOM for the provision of FLoD services for six months.

Challenges in the roll-out of the project were several (see “LESSONS LEARNT” section of this report):
• Legal (such as delays in signing the global and country-specific memorandums of understanding, and strict COVID-19-related governmental regulations).
• Financial (the central funding mechanism did not cover high-value equipment and items, and external funding had to be found).
• Related to role definition between UN entities at country level and communication on the availability of services to UN staff.
• Linked to procurement issues, with global shortages of test kits and personal protective equipment during the pandemic.

Overall, it is clear that the project contributed to ensuring access to high-quality, reliable health services in contexts where health-care systems may be overwhelmed and is likely to have reduced the need for medical evacuations. The feedback received from beneficiaries of IOM services within this framework was positive across all 18 countries.

Among other achievements, between July 2020 and July 2021 (see “OUTCOMES” section of the report):
• at least 37 UN agencies benefitted from IOM FLoD services;
• over 22,850 services were provided;
• over 10,600 people benefited from at least one service delivered by IOM within this framework;
• close to 14,750 COVID-19 tests were performed for clinical reasons;
• more than 4,250 people received in-home monitoring;
• 411 persons received psychosocial support;
• 202 were referred for medical evacuation.

After the discontinuation of services under central UN funding, 14 countries continued to provide FLoD services under self-payer or local cost-sharing financial mechanisms.

In addition, IOM MHACs have been supporting the UN System-wide vaccination efforts.

Details on all these activities can be found in the “COUNTRY REPORTS” chapter.
GLOBAL OVERVIEW

BACKGROUND

At the request of receiving country governments, IOM provides migrants with pre-migration health services for the purpose of assisting them with resettlement, international employment, obtainment of temporary or permanent visas, or enrolment in specific migrant assistance programmes. Pre-migration health activities are one of IOM’s best-established migration management services. They may entail any number of screenings, diagnostic, treatment or preventive services, as well as health-related travel assistance.

IOM currently undertakes operations through approximately 70 IOM migration health assessment centres (MHACs) in 50 countries across Africa, Asia, Europe and the Middle East. In addition, there are mobile teams, which conduct migration health assessments for refugees in remote areas. IOM has an experienced health workforce engaged in pre-migration health activities, including over 800 physicians, nurses and other health staff specialized in areas such as laboratory, radiology and medical information technology (IT).

Figure 1. IOM migration health assessment centres, 2021

This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by IOM.
On 13 July 2020, IOM entered into an agreement with the United Nations (UN) Department of Operational Support to provide health services to eligible UN personnel, dependents and other persons in need of care referred by the UN.

On 14 May 2020, IOM MHACs had been endorsed by the United Nations Medical Directors Network (UNMD) and the Division of Health Management and Occupational Safety and Health to undertake this activity. Through this project, IOM provided health services consequential to COVID-19 to the UN, thereby saving lives, supporting staff and making it possible for the UN to continue to operate. The project framework, named “First Line of Defense” (FLoD), was designed to ensure that personnel deemed eligible by the UN and their dependents have access to high-quality, reliable health services in contexts where health care systems may be overwhelmed and thereby minimize the need for medical evacuations (MEDEVACs), considered to be the “second line of defense”.

The main objective of this framework was to contribute to the operational continuity of humanitarian work in the context of COVID-19 pandemic, support the United Nations’ duty of care for their personnel, and to ensure the safety and health of the UN workforce and their families through provision of COVID-19-related and other health-care services. IOM was approached by United Nations Country Teams (UNCTs) and offered the UN and other humanitarian actors access to its network of health centres and laboratories as a way of enhancing the capacity of existing UN clinics or of treating UN personnel at IOM health centres in duty stations where there are no UN health facilities available.

The United Nations advanced USD 13.6 million to IOM for the provision of FLoD services for six months.

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**IOM FIRST LINE OF DEFENCE ACTIVITIES**

Activities encompassed a range of clinical care services, including:

- **LABORATORY SERVICES**: Testing for COVID-19 and other laboratory tests.
- **CLINICAL SERVICES**: Management of COVID-19 patients and contacts, medical prescribing, isolation and quarantine facilities, primary care for other conditions, mental health and psychosocial support, women’s and children’s health, preventive health care and health promotion, radiology and referral for higher levels of care, including hospitalization and medical evacuation, where needed.
- **TELE-HEALTH**: In-home monitoring and treatment of COVID-19 patients and patients with other medical conditions (either within countries or internationally) and specialist consultations.
- **MEDICAL MOVEMENT SUPPORT**: Assisting COVID-19 patients to the airport, provision of medical escorts for non-COVID-19 patients.
PROJECT OVERVIEW

Initially, the United Nations approved IOM FLoD services in 20 countries.

Services classified by the UN as “health care” were approved for 21 countries, which were at the time considered to be high-risk or priority countries. These countries included Burundi, Chad, Ethiopia, Kenya, Niger, the United Republic of Tanzania, Uganda, Bangladesh and Cambodia.

In countries with IOM laboratories equipped with GeneXpert instruments, IOM was designated to provide COVID-19 testing. These countries included Bangladesh, Burundi, Cambodia, the Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, Jordan, Nepal, Nigeria, the Philippines, Rwanda, South Africa, Sri Lanka, the United Republic of Tanzania, Thailand and Uganda.

The countries where IOM was requested to provide both COVID-19 testing and health-care services included Burundi, Cambodia, Ethiopia, Kenya, the United Republic of Tanzania and Uganda.

During the preparation and implementation phases of the project, there were several developments which changed the geographic coverage and programmatic scope:

- The UNCTs in Chad, Niger and Bangladesh decided to withdraw from the project.
- The UNCT in Kenya limited IOM services to testing only.
- IOM Ukraine and IOM Kazakhstan were added to provide health-care services in their respective countries, as well as tele-health services to Kyrgyzstan and Uzbekistan.
- Due to a significant deterioration of the epidemiological situations in Jordan and Nepal, health-care services were added to the testing services.

During project implementation, the United Nations decided that COVID-19 testing for administrative purposes should not be covered by the central funding mechanism and should instead be covered on a fee-for-service basis. To solve this issue, the IOM Office of Legal Affairs and the United Nations Office of Legal Affairs created an amendment to the global memorandum of understanding (MoU) – Amendment 1 – signed on 20 October 2020.

On 11 December 2020, the UN and IOM signed Amendment 2 to the MoU, where the parties agreed to extend the MoU for 12 months, until 31 December 2021.

In January 2021, the UNMD assessed the level of uptake and impact of IOM FLoD services and made the following recommendations:

- to discontinue services in Ghana, Jordan, the Philippines, Rwanda, South Africa, Sri Lanka and Thailand;
- to continue services in Burundi, the Democratic Republic of the Congo, Ethiopia, Kenya, Nepal, Nigeria, the United Republic of Tanzania, Uganda and Ukraine;
- to recommend to the UN Resident Coordinator (RC) and UNCT to self-finance the continuation of services in Cambodia and Kazakhstan.

The recommendations were endorsed by the FLoD Task Force. As of 1 May 2021, IOM discontinued services under the central funding mechanism in Cambodia, Ghana, Jordan, Kazakhstan, the Philippines, Rwanda, South Africa, Sri Lanka and Thailand.

Due to the global worsening of the epidemiological situation in 2021, however, it became clear that the continuation of FLoD services would be needed in most countries. In several countries designated for
discontinuation of services under the central funding mechanism, the UNCTs requested IOM to extend FLoD services under local cost-sharing arrangements. These countries initially included Cambodia, Jordan, Kazakhstan and the Philippines (the latter provided tele-health services under this arrangement).

As of 1 July 2021, IOM discontinued services under the central funding mechanism in the Democratic Republic of the Congo, Ethiopia, Kenya, Nepal, Nigeria, the United Republic of Tanzania, Uganda and Ukraine, while in Burundi, FLoD services under the central funding continued until 1 August 2021, based on the decision of the FLoD Task Force.

After the discontinuation of services under central UN funding, several countries continued to provide FLoD services under self-payer or local cost-sharing financial mechanisms, namely Burundi, Cambodia, Jordan, Kazakhstan, Malaysia, Nepal, Nigeria, North Macedonia, the Philippines, Sri Lanka, South Africa, Thailand, Uganda and Ukraine.

In addition, IOM migration health assessment centres have been supporting the UN System-wide vaccination efforts. Details can be found in the “COUNTRY REPORTS” chapter of this report.
## OUTCOMES

### ACHIEVEMENTS AT A GLANCE, JULY 2020 – JULY 2021

<table>
<thead>
<tr>
<th>18 country-specific MoUs signed</th>
<th>Services available in 18 countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10,625</strong> people received at least one service (excluding webinars)</td>
<td><strong>311</strong> clinical staff accredited to provide FLoD services</td>
</tr>
<tr>
<td><strong>3</strong> isolation facilities established with <strong>49</strong> beds total</td>
<td><strong>2</strong> Thermo Fisher and <strong>27</strong> Molbio testing systems procured and installed</td>
</tr>
<tr>
<td><strong>64,000</strong> Xpert Xpress and Molbio SARS-CoV-2 testing cartridges procured</td>
<td><strong>14,745</strong> PCR tests performed for clinical reasons</td>
</tr>
<tr>
<td><strong>4,261</strong> people received in-home monitoring</td>
<td><strong>1,702</strong> clinical visits conducted</td>
</tr>
<tr>
<td><strong>411</strong> people received psychosocial support</td>
<td><strong>202</strong> people referred for hospitalization or MEDEVAC</td>
</tr>
<tr>
<td><strong>1,374</strong> home kits distributed</td>
<td><strong>5,804</strong> people attended webinars and information sessions on COVID-19</td>
</tr>
</tbody>
</table>
DATA ANALYSIS

Please note there are several limitations to this analysis, including multiple potential confounders and biases that have not been accounted for. Consequently, the results of this data analysis should be interpreted with caution.

Population description and service uptake

During the period of 13 July 2020 to 31 July 2021, 10,500 beneficiaries received at least one FLoD service, in 18 countries within the framework of the UN FLoD programme under the central funding mechanism. Among them, 5,269 (50.1%) beneficiaries were female, which received 11,485 (50.3%) services. Overall, 75 per cent of the beneficiaries were national staff and their dependents; they received 78 per cent of services (see Table 1).

Note that “services” in this section do not include webinars and information sessions, unless specifically indicated.

Table 1. Number of beneficiaries by beneficiary type

<table>
<thead>
<tr>
<th>BENEFICIARY TYPE</th>
<th>INDIVIDUALS</th>
<th>SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>International, staff</td>
<td>1,602</td>
<td>3,285</td>
</tr>
<tr>
<td>International, dependent</td>
<td>976</td>
<td>1,683</td>
</tr>
<tr>
<td>National, staff</td>
<td>4,698</td>
<td>10,980</td>
</tr>
<tr>
<td>National, dependent</td>
<td>3,251</td>
<td>6,907</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,527</td>
<td>22,855</td>
</tr>
</tbody>
</table>

The median age of the beneficiaries was 37 years, with a range of 0 to 88 years. The median age of staff beneficiaries, including retirees, was 31 years (range 21–86 years), while the median age of dependents was 16 years (range 0–88 years). The age distribution is presented in Figure 2.

Figure 2. Beneficiary age distribution

![Beneficiary age distribution, staff](image1)

![Beneficiary age distribution, dependents](image2)
A total of 22,855 services were provided. At least 37 UN agencies benefitted from IOM FLoD services, with almost 75 per cent of services provided to seven agencies (Table 2).

Table 2. Distribution of service uptake by UN agencies

<table>
<thead>
<tr>
<th>UN AGENCY</th>
<th>SERVICES RECEIVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Organization for Migration (IOM)</td>
<td>4,219</td>
</tr>
<tr>
<td>UN Development Programme (UNDP)</td>
<td>2,981</td>
</tr>
<tr>
<td>UN High Commissioner for Refugees (UNHCR)</td>
<td>2,808</td>
</tr>
<tr>
<td>UN Children’s Fund (UNICEF)</td>
<td>2,522</td>
</tr>
<tr>
<td>World Food Programme (WFP)</td>
<td>2,264</td>
</tr>
<tr>
<td>World Health Organization (WHO)</td>
<td>1,248</td>
</tr>
<tr>
<td>UN Population Fund (UNFPA)</td>
<td>954</td>
</tr>
<tr>
<td>Other 30 agencies</td>
<td>5,812</td>
</tr>
<tr>
<td>Missing data</td>
<td>47</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>22,855</strong></td>
</tr>
</tbody>
</table>

The most frequently provided services were COVID-19 tests and clinical evaluations for COVID-19, as well as for other conditions (Table 3).

Table 3. Categories of services delivered

<table>
<thead>
<tr>
<th>TYPE OF SERVICE</th>
<th>SERVICES DELIVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 test</td>
<td>14,745</td>
</tr>
<tr>
<td>Clinical evaluation</td>
<td>6,639</td>
</tr>
<tr>
<td>Laboratory testing other than COVID-19</td>
<td>1,043</td>
</tr>
<tr>
<td>Counselling</td>
<td>255</td>
</tr>
<tr>
<td>Specialist consultations</td>
<td>133</td>
</tr>
<tr>
<td>Other investigations</td>
<td>40</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>22,855</strong></td>
</tr>
</tbody>
</table>

An IOM nurse in Thailand MHAC provides support over the phone. ©IOM 2020
The dynamics of service provision and uptake are presented in Figure 3. The implementation of the project was significantly delayed for reasons described in the “LESSONS LEARNT” section, and the project gained momentum only in November 2020, three and a half months after its start.

![Figure 3: Service uptake, July 2020—July 2021](image)

**COVID-19 testing**

A total of 14,745 COVID-19 tests for clinical reasons were performed, of which 11,093 tests (75.2%) were diagnostic and 3,652 were follow-up. A diagnostic test was defined as a test that could potentially lead to the diagnosis of COVID-19. A follow-up test was defined as the test after a positive diagnostic test.

The results of 10,484 diagnostic tests were captured in the IOM database; of these, three were indeterminate and were excluded from further analysis. The following reasons were considered “clinical” for the purpose of testing: 1) symptoms of COVID-19 and 2) known or presumed contact with a COVID-19 patient.

Of the 11,093 diagnostic tests, 6,405 (61.1%) were performed for staff and 4,076 (38.9%) were performed for dependents.

An analysis was undertaken of the association of diagnostic test positivity with symptom status (symptomatic versus asymptomatic), contact status (history of contact with a COVID-19 patient versus no contact) and type of beneficiary (staff versus dependent).

The overall positivity of diagnostic tests was 27.4 per cent (see Table 4).

<table>
<thead>
<tr>
<th>SYMPTOM STATUS</th>
<th>NEGATIVE</th>
<th>POSITIVE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptomatic</td>
<td>2,119 (58.7%)</td>
<td>1,488 (41.3%)</td>
<td>3,607 (100%)</td>
</tr>
<tr>
<td>Asymptomatic</td>
<td>5,488 (79.8%)</td>
<td>1,386 (20.2%)</td>
<td>6,874 (100%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>7,607 (72.6%)</td>
<td>2,874 (27.4%)</td>
<td>10,481 (100%)</td>
</tr>
</tbody>
</table>

Symptomatic patients were more likely to have a positive test result than asymptomatic patients (unadjusted OR 2.8, 95% CI 2.5-3.0, p < 0.0001). The estimate remained almost the same following adjustment for contact status and type of beneficiary (OR 2.9, 95% CI 2.6-3.2, p < 0.0001).
Test positivity among non-contacts was higher than among contacts (unadjusted OR 1.8, 95% CI 1.6-1.9, p < 0.0001); however, after adjusting for symptom status and type of beneficiary, the odds of test positivity were the same for contacts and non-contacts (OR 1.0, 95% CI 0.9-1.1, p = 0.8).

Dependents were more likely to have a positive diagnostic test result than staff (unadjusted OR 1.4, 95% CI 1.3-1.5, p < 0.0001), although they were less likely to be symptomatic (unadjusted OR 0.83, 95% CI 0.8-0.9, p < 0.0001). After adjusting for symptom status and contact status, the association between beneficiary type and test result remained almost the same (OR 1.5, 95% CI 1.4-1.7, p < 0.0001).

Clinical services

Among the people who received clinical services, 4,261 beneficiaries received remote home monitoring (see Table 5). Reasons for remote home monitoring. Of them, 2,196 (51.5%) were female and 2,065 were male (48.5%); 2,544 (59.7%) were staff and 1,717 (40.3%) were dependents.

<table>
<thead>
<tr>
<th>REASON</th>
<th>REMOTE HOME MONITORING</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 contact, quarantine</td>
<td>2,029 (47.6%)</td>
</tr>
<tr>
<td>Quarantine upon return to duty station</td>
<td>173 (4.1%)</td>
</tr>
<tr>
<td>COVID-19 patient, isolation</td>
<td>2,059 (48.3%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,261 (100%)</td>
</tr>
</tbody>
</table>

Among the 2,029 beneficiaries who received remote home monitoring during the quarantine period as contacts and the 173 who were monitored after return to their duty station, 104 (5.1%) and 1 respectively tested positive for COVID-19 and were further monitored in isolation.

In addition, 1,374 home monitoring kits were distributed.

Most COVID-19 patients were managed remotely; however, there were 1,702 visits to the IOM FLoD health facilities (1,598 for COVID-19 and 104 for non-COVID-19 conditions) and 133 referrals for specialist consultation and management. Overall, 51 beneficiaries (mostly national staff and dependents) were isolated and 4 were quarantined in the three IOM isolation facilities, while another 9 were monitored in non-IOM isolation facilities. A total of 868 beneficiaries received medication from IOM and 411 beneficiaries received psychosocial support from dedicated counsellors or psychologists.

Finally, 202 beneficiaries received referrals for escalation of care, either for hospitalization in-country or referral for MEDEVAC, which likely contributed to saving lives. Moreover, the timely provision of both outpatient and inpatient care likely helped reduce the need for MEDEVACs.

Other services

IOM provided 226 webinars and information sessions, attended by more than 5,800 UN staff and dependents. These sessions covered a wide spectrum of health issues from COVID-19 prevention to psychosocial support to children in lockdown.

Although not strictly a FLoD activity, IOM actively supported the UN System-wide vaccination effort through the coordination of country vaccine deployment teams, provision of staff and clinical premises for registration and vaccinations, and directly administering vaccines. Until 31 July 2021, IOM administered 9,107 doses of vaccines to UN staff and beneficiaries from 38 UN agencies (international non-governmental organizations are not included in this count). Moreover, IOM supported the influenza vaccination campaign for UN staff in Egypt.
SUMMARY OF LESSONS LEARNT

• **POSITIVE IMPACT:** The UN FLoD project contributed to ensuring access to high-quality, reliable health services in contexts where health-care systems may be overwhelmed and is likely to have reduced the need for medical evacuations.

• **COMPLEMENTARY CAPACITIES:** IOM’s capacities to provide health care complemented the capacities of UN clinics in situations where capacities were insufficient. In the future, IOM may assist the UN with a continuation of FLoD services, provision of COVID-19 and other vaccinations, laboratory testing, periodical medical examinations and other services.

• **LONG-TERM:** In order to continue collaborating, the UN and IOM would need to enter into a long-term agreement, which may be based on the current FLoD MoU.

• **JOINT APPROACHES:** Joint IOM and UN RC interactions with host governments proved a powerful instrument of overcoming country-specific legal and administrative barriers to provision of the life-saving services.

• **FUNDING:** Central funding proved to be an important mechanism for building capacities and, therefore, preparedness to address complex public health situations. However, IOM had to seek additional funding to purchase high-value laboratory equipment and cover indirect costs, which were essential for uninterrupted project implementation. Inclusion of these elements in the budgets should be considered in the future.

• **ROLE DEFINITION:** A clear distribution of roles between IOM and UNCTs before projects begin increases efficiencies; consistent and repeated communications with UN staff may increase uptake of life-saving services.

• **SECURING EQUIPMENT:** Establishing direct links with relevant manufacturers proved an effective procurement mechanism, and diversification of diagnostic platforms played an important role in maintaining testing capacities amid global supply shortages.

• **STANDARDIZATION:** Establishing clear guidelines and requirements at the beginning of projects facilitates the standardization of different aspects of project implementation. Trainings for both IOM and UN health professionals build staff capacities and contribute to the standardization of service provision.
IOM health capacities

More than 70 IOM migration health assessment centres in more than 50 countries and 27 laboratories represent a significant clinical capacity able to supplement and support the network of the UN medical facilities in responding to outbreaks and meeting demands for provision of several types of health-care services to UN staff and their dependents. Services include diagnostic services, vaccination for COVID-19 and other diseases, health promotion, psychosocial support, periodical medical examinations, in-home monitoring and curative care. Such services can be provided in health emergencies, such as epidemics or pandemics, as well as in regular situations in locations with IOM MHACs, where there are no UN clinics or where their capacities are limited.

Legal issues

Legal issues proved to be challenging at various levels and were one of the main contributors to the delayed start of IOM’s FLoD service provision.

Negotiations between the UN Department of Operational Support and IOM regarding the provision of FLoD services started in April 2020; however, the global MoU was only signed three months later, on 13 July 2020. The current MoU expires on 31 December 2021. Should the UN be interested in continued collaboration with IOM for the provision of health services to UN staff, a new longer-term MoU would need to be negotiated for a wider scope of services. The main clauses of the current MoU could serve as a basis for any future agreements.

The finalization of the country-specific agreements was also delayed due to challenges related to the complexities of the legal language and an incomplete understanding of the UN FLoD framework and IOM’s role. To avoid similar situations in the future, it may be helpful to have the agreement templates reviewed by the UN RCs and to conduct Q&A sessions with RCs of participating countries.

In several countries, delays in the start of service provision were due to strict regulations of COVID-19-related activities by host governments. In some countries (such as Cambodia and Sri Lanka), IOM laboratories did not receive permits to provide testing until the end of the project under the central funding despite having the technical capacities, and IOM’s role was limited to facilitating sample collection and liaison with the government laboratories. In some countries, IOM and the UNCT witnessed extreme politicization of public health issues. In other countries, the host government questioned IOM’s mandate to provide health services to a population they considered to be non-migrant. IOM appreciated the support it received from the RCs in negotiating permits with the host governments; such joint efforts were particularly successful in Burundi, the United Republic of Tanzania and other countries, and can be regarded as a best practice.

Financial issues

Upfront central funding for FLoD activities proved to be essential to ensure preparedness and flexibility of response. With it, IOM was able to significantly increase capacities through recruitment of additional staff, modification of medical facilities to accommodate additional clients, ensuring infection prevention and control (IPC) measures, establishing isolation units, stockpiling personal protective equipment (PPE) and laboratory supplies, and procurement of equipment. Importantly, the central funding allowed the UNCTs to buy time amid the chaos of the pandemic to ensure access to life-saving services and reorganize themselves for continuation of services. Moreover, payment-free arrangements likely increased service uptake and allowed IOM to decrease the number of contacts between its staff and beneficiaries and provide remote health care, and. This funding mechanism also enabled IOM to preserve necessary capacities during periods of low service uptake and quickly respond to sudden increases in the caseload.

Many UNCTs decided to continue collaborating with IOM for FLoD services after discontinuation of the central funding, using self-payment and local cost-sharing mechanisms. A self-payment mechanism was able to be applied
to services whose costs were straightforward to quantify, for example, laboratory tests or imaging studies, as these require a fixed amount of staff time and operational costs and consequently do not need to be covered through the central funding. Services requiring variable staff time and consumables, such as remote home monitoring, clinical care with multiple follow-ups or psychosocial support, should be funded centrally or through local cost-sharing mechanisms.

FLoD central funding did not allow for the procurement of high-value equipment or coverage of non-direct costs, which would have been an impediment if IOM had not secured external funding (voluntary contribution of the Bureau of Population, Refugee and Migration, US Department of State) through its Organizational Appeal. This funding allowed IOM to procure additional laboratory equipment and monitoring equipment for isolation units, stockpile COVID-19 test kits and thus continue providing critical testing services amid the global shortage of COVID-19 testing equipment as well as to partially cover indirect costs essential for the smooth implementation of the project. Should a similar initiative be repeated in the future, inclusion of any high-value equipment and indirect costs into the budget should be renegotiated.

**Coordination and communication**

For the entire period of project implementation, IOM enjoyed an excellent relationship with UN agencies and RCs. Yet, there were a few misunderstandings concerning the distribution of roles and responsibilities in the escalation of care. While these misunderstandings were successfully resolved and IOM remains ready to provide any additional support needed, IOM and RCs should have discussed responsibilities and established a clear communication protocol at the inception of the project.

Service uptake was variable and depended on the epidemiological situation, local context, including the government stance (for example in the case of the United Republic of Tanzania), availability of alternative service providers, attitudes (such as stigmatization) and UN staff awareness. The details of service uptake can be found in the “COUNTRY REPORTS” chapter. Stigmatization around COVID-19 and the fear of losing jobs were the main reasons for late referrals to IOM and consequently for the escalation of care, which in some cases resulted in death, despite all efforts made to save lives.

To raise awareness about service availability and address the issues of stigmatization and importance of early medical care, IOM developed a standard information package, established different platforms for booking appointments, including the World Food Programme (WFP) Humanitarian Booking Hub, which was already familiar to UN staff, and coordinated with RCs to conduct townhall meetings and webinars on COVID-19 and FLoD. Such an information campaign should be conceptualized and conducted at the beginning of the project.

**Procurement**

The shortage of PPE at the beginning of the pandemic was resolved relatively quickly and IOM was able to preposition enough PPE by the start of the project.

The situation with the procurement of COVID-19 test kits was less sanguine; a global shortage of test systems persisted throughout 2020. As a result of its traditional migration health services, IOM laboratories were already equipped with GeneXpert instruments prior to the pandemic, which could be used for COVID-19 testing. In April 2020, IOM Kenya succeeded in procuring 30,000 test kits, which enabled IOM to provide COVID-19 testing for FLoD beneficiaries. After the initial procurement, however, the shortage of test kits became a major challenge and, in several countries, IOM had to limit its testing services to clinical purposes only. IOM, along with other UN agencies, became a member of the procurement consortium; however, efforts to procure test kits through the consortium proved unsuccessful.
To ensure continuity of essential testing services, IOM established direct contact with the relevant manufacturers and procured additional COVID-19 testing platforms and test kits using alternative funds, as described in the “Financial issues” section. However, the delivery of testing instruments and validation of the new testing platforms by the host governments presented additional challenges. In early 2021, IOM managed to procure GeneXpert test kits directly from Cepheid. Despite the challenges, IOM was able to create solid capacities for COVID-19 testing and to resume testing for non-clinical purposes. Please see the “LABORATORY SERVICES” section for further details.

Overall, direct procurement from the relevant manufacturers proved more effective than procurement through the consortium, and the diversification of diagnostic modalities was a useful strategy given the shortage of test kits. Upfront funding should be available for the implementation of alternative solutions, whenever needed.

**Guidance, standard operating procedures (SOPs) and reporting requirements**

IOM appreciates close cooperation with and support by the network of UN Medical Directors; however, all protocols and global SOPs (further details in the “CLINICAL GUIDELINES AND TRAINING” section) were developed by IOM without UNMD’s contribution and were only validated later, during project implementation. IOM is not aware if similar protocols and SOPs were applied to non-IOM FLoD providers; if not, this could contribute to inconsistencies in service delivery.

Likewise, reporting requirements were discussed and agreed upon months after the beginning of the project, which necessitated late adjustments to data collection procedures and have resulted in the loss of some data or inaccuracies in data from the early phase of implementation. Reporting requirements and guidance documents should be developed collaboratively at the outset of the project and universally applied to all service providers. A good example of this approach is the guidance developed for the UN System-wide vaccination programme, which set clear expectations and implementation standards.

**Staff training**

The novelty of COVID-19 and near-daily development of knowledge on the pandemic, with corresponding changes in medical guidance and practices, warranted extensive continuous training of clinical staff. One of the best practices observed during the implementation of FLoD was a series of clinical webinars organized by the UN and the inclusion of IOM clinical personnel into these webinars. IOM also conducted a series of internal interactive clinical webinars on various topics. IOM would welcome UNMD’s contributions to these webinars and would be happy to extend the webinars to non-IOM UN FLoD service providers.
THEMATIC AREAS

LABORATORY SERVICES

In the context of pre-migration health activities, IOM operates 27 laboratories across Africa, Asia and the Middle East and collaborates with external partner laboratories. Before the pandemic, 18 of IOM’s laboratories were equipped with GeneXpert instruments for tuberculosis diagnostics; this existing capacity enabled IOM to provide rapid, real-time reverse transcription polymerase chain reaction (RT-PCR)-based COVID-19 testing.

Achievements

- In July 2020, IOM was able to obtain a shipment of 32,000 Xpert Xpress cartridges using the UN Children’s Fund (UNICEF) as the procurement agent. This allowed IOM to establish a strategic reserve of cartridges that ensured the continuity of testing services for clinical cases under FLoD.

- Given the initial limitations in the availability of Xpert Xpress cartridges, IOM introduced a pooled testing strategy as a mechanism to conserve test cartridges. This approach combines aliquots from different specimens to reduce the number of cartridges needed to screen asymptomatic individuals for COVID-19. This approach allowed IOM to provide COVID-19 testing for administrative purposes to facilitate travel for UN staff.

- The supply of viral transport media needed to transport nasopharyngeal swabs from collection points to laboratories was also limited. IOM opted to use PrimeStore Molecular Transport Media, from Texas Longhorn (Texas, United States of America), as an alternative to the viral transport media. PrimeStore is a United States Food and Drug Administration-approved transport media that inactivates viruses and bacteria and stabilizes the nucleic acid for subsequent testing. IOM benefited from a donation of 118,000 molecular transport media tubes from Texas Longhorn to support its testing services. This opportunity created significant cost savings for IOM and helped mitigate the risks of laboratory-acquired infections by inactivating any viruses present in the samples.

- Due to the perpetual supply constraints for RT-PCR test kits, IOM developed a multiplatform diagnostic approach, procuring COVID-19 equipment and test kits through IOM’s procurement unit and bilateral coordination with test manufacturers. IOM procured 27 four-module Molbio Truenat instruments and distributed approximately 32,000 tests as an alternative to GeneXpert for cartridge-based COVID-19 testing. The dual system approach provided flexibility in the platform used for COVID-19 testing and allowed IOM to procure different tests depending on availability. As an additional measure, IOM implemented the high throughput Thermo Fisher system in Nairobi, Kenya, and Abuja, Nigeria, where the workload for COVID-19 testing was high and where IOM had a skilled workforce of laboratory technicians.

- SOPs were developed for each of the different tests, including on the recording and reporting of test results. This standardized approach ensured consistency in the testing, interpretation and reporting of results across implementing locations.

- IOM developed a laboratory information management system (LIMS) dedicated to FLoD activities, which enabled the reporting of accurate performance indicators concerning workload, positivity rates and indeterminate results to the UN. Furthermore, IOM employed a diagnostic supply inventory management system, IOM MedStock, to maintain reliable information on the number of available tests and their expiry dates to minimize wastage. These systems were operationalized and optimized over the past 18 months.
• The periods of lockdown during the pandemic provided an opportunity to enhance the quality of IOM laboratory services through the implementation of external quality assurance activities and provision of training for laboratory technicians in laboratory quality management systems. IOM also improved laboratory biosafety through the procurement of additional biosafety cabinets for some IOM laboratories.

Challenges and lessons learnt

• At the start of the pandemic, IOM employed the GeneXpert system as its main molecular diagnostic platform, as it is suitable for use in laboratories without complex infrastructure. The limited availability of GeneXpert cartridges, however, highlighted the need for IOM to diversify its testing platforms.

• IOM was able to overcome the initial shortage of tests for the detection of COVID-19 by liaising directly with the test manufacturers and developing a procurement plan with realistic estimates of anticipated test needs, to help manufacturers plan the allocation of test kits for IOM. The Organization subsequently established a strategic reserve of tests that could be deployed to laboratories as needed. The procurement plan helped to ensure the continuity of testing and allow flexibility to switch testing platforms based on the availability of limited supplies.

• Building strong partnerships with diagnostic manufacturers such as Cepheid, Molbio, Thermo Fisher and Texas Longhorn allowed IOM to gain priority for the allocation of tests and to benefit from donations of tests and reagents. IOM gained credibility as a partner with these manufacturers and will continue to maintain these solid and collaborative relationships.

• Implementing the high throughput Thermo Fisher platform was successful in Nairobi and Abuja, where workload was high; however, the use of the platform is complex, due to multiple different equipment accessories and consumables required, as well as the challenge of procuring the various components from different suppliers. Further expansion of this system should be based on good estimates of test volumes, the availability of skilled laboratory technicians and a strong supply chain for the different components needed for testing.

• Despite IOM’s success in making available testing equipment and kits, some laboratories began testing at a later stage of project implementation, or could not provide testing at all, due to a lengthy accreditation process and strict government regulations.

• IOM continued to develop its laboratory infrastructure as the pandemic evolved, establishing ribonucleic acid (RNA) sequencing capacity at its laboratory in Nairobi, which allowed for the detection of COVID-19 mutants. RNA sequencing is the reference method for the determination of variants of interest and variants of concern through the detection of specific mutations, but the approach is costly. IOM also established an alternative, less expensive approach to identifying severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) variants using one-step RT-PCR single nucleotide polymorphism assay tests, donated by Thermo Fisher in a reflection of IOM’s strong partnership with the manufacturer. The combined use of the TaqMan SARS-CoV-2 mutation panel with RNA sequencing allowed IOM to better monitor the prevalence of new and emerging variants at a fraction of the cost of sequencing all strains.
MIGRATION HEALTH INFORMATICS (MHI)

FLoD IT architecture and resources

Due to the high level of confidentiality and sensitivity of UN personal and medical data, based on the data protection recommendations of the IOM Office of Legal Affairs and Information and Communication Technology (ICT) Division, IOM set up a new and completely isolated IT architecture of its corporate medical record and laboratory information management systems (MiMOSA and LIMS, respectively) at the outset of project implementation. This separate architecture, referred to as MiMOSA FLoD, is hosted at IOM headquarters (HQ) premises in Geneva, Switzerland, to ensure that UN staff data is completely segregated from other IOM beneficiary data. The isolated environment also allowed for a more restrictive user access policy, limiting access of IOM medical staff to the front-end of the platform and support and system administrator staff to the back-end databases.

MedStock, the IOM inventory management system for vaccines, drugs, laboratory and other medical supplies, was configured and updated to accommodate locations utilizing the system for FLoD. All locations providing FLoD testing services and inventory items related to FLoD activities were added to the platform; FLoD-implementing missions use the platform to manage their COVID-19 PCR tests kits and future vaccine stocks.

The Call and Query Registry Tool is another web application that was developed for FLoD and used to record and report incoming calls or messages received by FLoD clinic receptions and call centres.

ICT global user support

ICT Global User Support trained selected staff and designated the handling of FLoD centralized user access authorization to ensure maximum control over the IOM staff who have access to the data management systems hosting UN staff data. Furthermore, a 24/7 help desk function, providing tier-one support, database administration and software development and configuration, was assigned to selected ICT and MHI staff.

Over the course of project implementation, the ICT global user support staff configured and enabled all FLoD-implementing IOM MHACs in the relevant IT systems and trained medical staff to use them. All training material, guidelines, forms, documents and other information about FLoD IT systems and data management have been made accessible on a specially designed IOM SharePoint site.

FLoD online appointment system

In 2020, IOM signed an agreement with WFP to enable UN staff to conveniently book their appointments with all IOM FLoD clinics online using the WFP Humanitarian Booking Hub platform. UN staff already use the Humanitarian Booking Hub platform to make accommodation and driver bookings and can access the site using their UN email accounts, with no need for additional registration.

The Humanitarian Booking Hub was rolled out to 18 IOM FLoD clinics in 13 countries. The system has mainly been used in the Democratic Republic of the Congo and Thailand. Feedback was obtained from users and incremental improvements to the system are released regularly by the WFP. All UN clinics with access to the digital office and accommodating online appointments can be found here.

FLoD telemedicine

To provide telemedicine and remote medical consultations services to UN staff, in 2020, an IOM workgroup was established to identify the functional and technical requirements of a telemedicine solution. After reviewing several commercial products, the workgroup decided to develop the system as an in-house platform hosted on-
premises in the IOM data centre to ensure that sensitive personal data, including medical data, is stored securely and encrypted on IOM servers, rather than hosted by a third party.

The following high-level functionalities were included in the first phase of the telemedicine platform, which went live in June 2021:

- online appointments;
- virtual waiting room with walk-in and service selection functionalities;
- video and audio conferencing;
- recording and transmission of self-monitoring observations (using IOM COVID-19 remote home monitoring guidelines and tools); and
- SMS, mobile network and web-based communications.

The workgroup collaborated with the IOM Change Management team to develop a communications and training package to ensure the highest possible uptake and success of the application. The application is currently live in Ethiopia, Uganda, Ukraine and Kazakhstan.

**FLoD feedback management**

To respond to any complaints, questions or feedback from UN staff members about IOM FLoD services, IOM developed and implemented the following resources:

- an electronic mailbox dedicated to FLoD feedback management;
- four MHI staff assigned to monitor the mailbox and handle incoming messages;
- guidelines for FLoD feedback and incident management; and
- acquisition of a commercial incident management system for the management of FLoD-related feedback.
Call and Query Registry (CQR) tool

The CQR is a web-based application deployed to IOM FLoD clinics in late 2020 to record and report incoming calls or messages within IOM hotline services. The application served to collate data from services provided to UN staff that were not captured in MiMOSA FLoD, such as providing information over the phone.

Licensing and Credentialing Tool (LCT)

The LCT is a web-based application that was developed to record and manage clinical staff qualifications, license validity (where applicable), trainings and accreditations. It streamlines the credentialing process for IOM doctors, nurses and laboratory staff that apply to provide FLoD services. LCT version 2.0, the latest release, improves the overall user experience and data capture capability of the application, and includes various back-end optimizations to enhance system performance.

FLoD data management

Based on the IOM Guidelines on Managing COVID-19 Patients in IOM Health Facilities and the IOM Guidelines on Managing COVID-19 Patients via Remote Home Monitoring, IOM ICT and MHI teams developed the following customized forms for electronic data capture in MiMOSA FLoD:

- remote monitoring form for COVID-19 contacts;
- remote monitoring form for COVID-19 cases;
- IOM facility patient monitoring form for COVID-19;
- report form for contacts of COVID-19 cases; and
- general medical record form for COVID-19 co-morbidities or non-COVID-19-related medical conditions.

To support IOM FLoD clinics with operational and administrative planning and management of FLoD activities, and to facilitate reporting obligations to UN agencies, MHI developed a series of paginated web reports published on a dedicated reporting server.

Reporting and data quality assurance

IOM defined indicators for statistical reporting to the UN, for which the MHI team developed data extraction procedures and web-based dashboards that allow the data to be visualized in real time and facilitate sharing the data with UN partners and other stakeholders. The dashboards and web reports are regularly updated and enhanced, and include:

- FLoD remote home monitoring data query and data validation dashboard;
- FLoD facility-based patient monitoring data query and data validation dashboard; and
- CQR data query and data validation dashboard.

Based on the rigorous data validation and quality control procedures applied to its migrant beneficiary medical data repository, the IOM MHI data quality assurance team developed a series of quality control checks and integrated them in the data validation dashboards. These checks serve to flag and identify data errors and quality issues to be corrected by designated data focal points in the respective IOM FLoD-implementing missions. Additional dashboards for the quality control of contact monitoring and laboratory testing services were designed. Three data validation webinars were conducted for IOM FLoD-implementing missions in the Africa region to help to circumvent future data validation issues.
CLINICAL GUIDELINES AND TRAINING

Stringent clinical governance processes were implemented across all IOM health facilities delivering FLoD clinical services. Global guidelines and resources for COVID-19 care management, IPC, and screening and triage protocols were developed at the commencement of FLoD services. These resources were continuously updated to reflect emerging evidence of best clinical practice in the context of the COVID-19 pandemic.

More recently, a range of vaccine resources were developed and collated to support IOM’s role in the global distribution and administration of COVID-19 vaccines and to ensure IOM’s staff capacity in delivering safe and effective COVID-19 vaccine programmes. Regular training and interactive sessions supported a strong understanding by staff of best practice guidelines and the operationalization of the protocols within IOM sites. To support countries with the development of country-level SOPs, SOP templates were prepared by IOM HQ for each of the global guidelines. The country-level SOPs subsequently developed by the FLOD-implementing missions served to provide clear direction and guidance across each FLoD site, according to the different country contexts and clinical services being administered.

Strengths, challenges and opportunities for improvement

The rapid response and high-quality clinical services delivered by IOM for FLoD operations deserve substantial acknowledgement and credit. IOM’s capacity to diversify its health services and develop new systems and clinical care procedures during an unprecedented global pandemic, when pressures and demands were already high, reflects the adaptable and flexible nature of IOM’s services. Like any new system being implemented, however, initial challenges were encountered and opportunities for clinical improvement were noted throughout IOM’s delivery of FLoD services. The following provides a brief analysis of the strengths, challenges and opportunities for improvement, should IOM consider further support for FLoD or related clinical services in the future.

Quality assurance and clinical oversight

Multiple resources were developed to guide quality assurance and to support clinical managers in the application of clinical global guidelines and best practice standards. Clinical checklists and tools were established to monitor standards and implementation of clinical practices across FLoD-implementing missions and facilitate oversight by regional and HQ staff.

Strong and reliable clinical oversight on a regular basis is required by all managers to ensure adherence to best-practice procedures. Senior management should encourage and facilitate greater adherence to guidelines and standards, including through routine procedural checks, staff mentoring and monitoring, and emergency practice drills at the local level.

Operationalization of clinical guidelines

Dedicated resources and training materials were developed to ensure best-practice standards and to reinforce the practical implementation of clinical practices in the field. The support provided by the creation of SOP templates was reflected in the development of comprehensive country-level SOPs across FLoD-implementing missions. Each country-level SOP was submitted to IOM HQ for approval prior to their implementation.

Clinical staff in the field dedicated enormous efforts and demonstrated a clear understanding of the global guidelines. In some circumstances, however, concern was raised about the extent to which these standards were reliably operationalized, and the level of accountability placed on staff to ensure consistent implementation. Concerns were noted during the limited number of field visits HQ staff were able to make to FLoD-implementing missions and, on occasion, sub-standard practices were noted and followed-up on for course correction.
Though travel was restricted by the pandemic, more frequent on-site collaboration with both regional and HQ staff would have likely improved the clinical operationalization of global guidelines and resulted in greater adherence to procedures detailed in approved country SOPs. Noting that restrictions to travel may continue for the foreseeable future, local managers and senior clinical staff must assume greater accountability for this oversight, be familiar with global guidelines, and ensure measures are in place to monitor staff compliance and understanding of recommended practices.

**Escalation and management of deteriorating patients**

Requirements were mandated for procedures and protocols to document escalation plans and detail agreements with external health services to manage patients whose condition had deteriorated and whose need for care exceeded the capacity of the IOM FLoD clinic. This process was undertaken across all FLoD sites. Additionally, emergency drills and re-enactment of these escalation plans were carried out at some sites to support staff preparedness and address any unforeseen issues.

For many sites, this was a new arrangement with external services and, in some cases, barriers arose to formalizing agreements and transportation logistics to transfer deteriorating patients who required more advanced care to higher level facilities. It is recommended that these relationships be maintained, and efforts continued to build relationships with external services to ensure collaboration and facilitate future arrangements.

It is also recommended that IOM health facilities continue to coordinate emergency drills and initiatives for staff to practice the steps involved in escalation plans, to test procedures in place and ensure all staff are well-versed in emergency procedures.

**Targeted training strategy**

Formal and informal training sessions were facilitated by both IOM HQ and external services to address a range of clinical, laboratory and reporting issues raised by colleagues in the field. These training sessions included regular interactive discussions facilitated by IOM HQ, which provided an opportunity for colleagues to present specific areas of concern or case studies to the group for discussion and best-practice recommendations.

These interactive sessions also presented opportunities for staff to share their experiences and discuss specific clinical activities being delivered, which showcased and acknowledged the impact of services being provided. The trainings were remote-based and facilitated as either recorded webinars or a series of facilitator-led sessions, targeting a limited number of participants.

There was high uptake of these trainings, as staff attended wherever possible; the participants expressed satisfaction with and appreciation for these opportunities. A survey was undertaken in the first quarter of 2021 to identify the learning needs and targeted areas for future training. The results highlighted the need for future sessions addressing a range of clinical areas, including COVID-19 testing practices, management of acute and deteriorating patients, and provision of mental health and psychosocial support.

The implementation of FLoD exposed the need for greater efforts towards a formalized global training strategy driving the continuous professional development of IOM clinical staff. Such a training strategy should address identified learning gaps and design formalized trainings according to the clinical programmes delivered by IOM.

It is recommended that trainings be structured as a series of web-based, self-paced interactive learning tools, with assessment components included to measure competency and comprehension of learning outcomes by staff.
**CLINICAL CREDENTIALING**

**The objectives of clinical credentialing**

Credentialing is a formal process used to verify the qualifications, experience, professional standing and other relevant professional attributes of medical practitioners for the purpose of forming a view about their competence, performance and professional suitability to provide safe, high-quality health-care services within specific organizational environments. The credentialing process aims to ensure a high standard of patient care by matching the work that a practitioner wishes to perform with demonstrated skill and competence in a clinic with the delineated role of the clinic.

To this end, IOM designed and implemented a credentialing process to validate the clinical skills of IOM health staff and approve the level of service they can provide in the context of IOM FLoD activities.

**Achievements**

- IOM developed SOPs and credentialing application forms for IOM staff accreditation, prior to their involvement in FLoD activities.

- The Clinical Credentialing Committee (CCC) was established to assess the skills and capability of staff providing clinical and laboratory services in coordination with the Chief Migration Health Officers of the IOM mission, initially for those implementing FLoD, but ultimately aiming to address all clinical activities. The CCC comprised seven members representing four technical areas, namely, physician, nurse, laboratory and human resources.

- A credentialing process was established, entailing the following steps:

  - IOM staff self-assess their capacity and scope of practice, and submit completed application forms, along with supporting documentation, to the respective Chief Migration Health Officers.

  - The Chief Migration Health Officer takes responsibility for working with staff to develop their applications and ensure the appropriate level of staffing and skills are available within the clinical team. The Chief Migration Health Officers review, endorse and forward individual applications to the CCC.

  - The CCC assesses submitted applications. Final accreditation decisions are made by consensus, based on the submitted documents; once an application is approved, the CCC issues a certificate of accreditation to the staff member.

<table>
<thead>
<tr>
<th>PHYSICIAN</th>
<th>NURSE</th>
<th>LABORATORY</th>
<th>MENTAL HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1: Telemedicine</td>
<td>Level 1: Specimen collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 2: Telemedicine, primary health care, excluding COVID-19</td>
<td>Level 2: Specimen collection, telemedicine, primary health care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 3: Telemedicine, primary health care</td>
<td>Level 3: Specimen collection, telemedicine, primary health care, clinical management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 4: Telemedicine, primary health care, advanced clinical management</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 6. Classification of accreditation levels**
• Over the course of project implementation, a total of 359 applications were submitted from 23 countries, and 311 clinical and laboratory staff were accredited. Some countries submitted more staff for consideration than originally proposed, to account for IOM staff rotation cycles and to ensure clinical capacity on 24-hour shifts, where required. Clinical credentialing was applied to all countries delivering FLoD services under central funding, self-payment or local cost-sharing modalities.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Physician</th>
<th>Nurse</th>
<th>Laboratory</th>
<th>Mental health</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh*</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Burundi</td>
<td>7</td>
<td>10</td>
<td>4</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Cambodia</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>DR Congo</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Egypt**</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>0</td>
<td>16</td>
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<tr>
<td>Ghana</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Jordan</td>
<td>6</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Kenya</td>
<td>8</td>
<td>15</td>
<td>9</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>Malaysia**</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Nepal</td>
<td>7</td>
<td>6</td>
<td>11</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Nigeria</td>
<td>6</td>
<td>5</td>
<td>9</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>North Macedonia**</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Philippines</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Rwanda</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>South Africa</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Tanzania</td>
<td>9</td>
<td>10</td>
<td>3</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Thailand</td>
<td>4</td>
<td>10</td>
<td>7</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Uganda</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Ukraine</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>101</td>
<td>128</td>
<td>76</td>
<td>6</td>
<td>311</td>
</tr>
</tbody>
</table>

* Credentialing took place before Bangladesh withdrew from the project.
** Country providing FLoD services under self-funding or local cost-sharing basis.

• Based on the insights obtained from the credentialing process, the CCC provided technical feedback to Chief Migration Health Officers regarding staff training needs and areas for improvement.
Challenges and lessons learnt

1. The CCC rapidly established and implemented a staff credentialing review process for FLoD activities. The process fully complied with the objectives and requirements outlined in the “SOPs for IOM staff accreditation prior to involvement in FLoD provision of health services consequential to COVID-19”.

2. IOM clinical staff were recruited and trained to meet the IOM Standards for Migration Health Assessments, which prioritizes the clinical skills pertaining to the identification and treatment of a specific set of health conditions and the management of complex medical conditions prior to travel. The clinical activities related to COVID-19 and possible management of related care required different clinical and laboratory skills to address the specific needs of beneficiaries. The FLoD project provided a new opportunity for IOM to thoroughly re-evaluate its internal capacity as well as introduce a new system of governance to manage the technical capacity of IOM health professionals engaged in broader clinical activities.

3. Time constraints hampered the achievement of an optimal level of efficiency in the credentialing process and required an intensive workload from the CCC members.
COUNTRY REPORTS

SUB-SAHARAN AFRICA

BURUNDI

Country-specific agreement signed: 7 September 2020
Period of service provision: 3 December 2020 – 31 July 2021
Scope of services: Laboratory testing for COVID-19, clinical services

Context

Though the agreement was signed in early September 2020, IOM Burundi started delivering FLoD services in early December 2020, after obtaining authorization from the national authorities.

In January 2021, the country’s epidemiological situation deteriorated, with a significant increase in COVID-19 cases, likely due to end-of-year festivities and social gatherings. A corresponding increase in demand for IOM FLoD services was observed.

From 7 January 2021 on, the number of daily visits, PCR tests and positive cases identified, continued to increase, putting the IOM FLoD team under extreme pressure. However, in February and March 2021, the number of cases decreased in line with the country’s epidemiological trend. In April, Burundi experienced another significant peak in numbers, likely linked to Easter festivities and social gatherings.

Figure 4. Epidemiological curve, Burundi, January 2020 – August 2021. Source: WHO

13,070 cases, 10 deaths
Contact tracing was not initially included in IOM FLoD services in Burundi, as it fell under the responsibility of the local public health authorities.

As the number of cases increased in January, however, the Emergency Health Unit of the Ministry of Health requested IOM’s support to conduct contact tracing for UN personnel. Consequently, IOM incorporated active contact tracing and management of contacts into its FLoD services, which increased the workload of the team and necessitated additional staff and resources to respond to the increasing need for services.

Contrary to World Health Organization (WHO) guidelines, the national protocol to provide medical clearance for confirmed COVID-19 cases in Burundi required control or follow-up tests every three days from day seven following diagnosis. Two consecutive negative tests were required to clear confirmed cases from isolation.

From mid-May, IOM Burundi observed a decrease in the number of services requested, including the number of tests. This trend was in line with the overall national detection rate.

**Capacity-building**

When IOM Burundi started implementing FLoD activities, it relied on the clinical and technical staff from its MHAC. When pre-migration health activities began to increase in June 2020, new staff were needed to augment IOM’s FLoD capacity. Accordingly, two doctors and five nurses were recruited to work exclusively on the FLoD project. One medical officer and one nurse were also deployed from IOM Lebanon on short-term assignment to assist in the technical supervision and coordination of FLoD activities.

To cope with the increased demand for testing in February 2021, IOM procured two four-chamber Molbio TrueNat PCR analyzers and 3,000 COVID-19 testing kits, enhancing the capacity of the FLoD laboratory.

Due to limited options for the escalation of care in Burundi, the IOM FLoD facility needed to increase its capacity to provide patients with emergency care and oxygen therapy, while coordinating the referral of patients to hospitals or MEDEVAC services. Four oxygen concentrators were obtained from the UN for use as needed.

The IOM FLoD facility was originally established within the IOM refugee transit centre, as refugee resettlement departures had been suspended for most of 2020 due to COVID-19-related restrictions. While the original plan was to close FLoD services by the end of December 2020, coinciding with resumption of refugees’ departures in early 2021, the need to maintain FLoD services was recognized as critical by the UNCT, as well as the ad interim RC.

To maintain the provision of FLoD services without interruption once resettlement departures restarted, IOM arranged to keep the laboratory and the clinical service area in the transit centre and established a separate isolation facility in new premises. The new IOM isolation centre opened on 16 April 2021. In June 2021, an electric generator was procured for the new isolation centre to meet the operational and security requirements.

IOM Burundi procured 80 pulse oximeters and 80 thermometers for use in home monitoring kits.

Trainings in basic life support (BLS) and advanced cardiovascular life support (ACLS) by accredited providers were organized by IOM; two doctors and four nurses providing FLoD services successfully completed the training.
**Demand for services**

In 2020, the demand for FLoD services was very low, as the project only started on 17 November 2020. However, from 7 January 2021 on, demand sharply increased. The numbers decreased in mid-February, but rose again in mid-March; by April, the number of patients and services had doubled compared to March.

The demand for FLoD services decreased from the second half of May through July 2021, including the number of cases requiring monitoring services, as there were few new cases and existing cases were cleared over the last few weeks of the reporting period.

![Figure 5: UN staff/dependents who received at least one IOM FLoD service, by week, in Burundi, December 2020 – July 2021](image)

**Service uptake**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May-July 2021</th>
<th>December 2020 – July 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>432</td>
<td>1,629</td>
</tr>
<tr>
<td>Remote home monitoring beneficiaries (for any reason)</td>
<td>161</td>
<td>705</td>
</tr>
<tr>
<td>Clinical visits</td>
<td>407</td>
<td>1,591</td>
</tr>
<tr>
<td>Individuals who required escalation of care</td>
<td>10</td>
<td>38</td>
</tr>
<tr>
<td>Individuals who were isolated or quarantined in IOM facilities</td>
<td>2</td>
<td>49</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>225</td>
<td>846</td>
</tr>
<tr>
<td>Webinars and information sessions for the UN staff</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 8: IOM FLoD service uptake in Burundi
Feedback

The feedback received from the beneficiaries of IOM Burundi’s FLoD services has, in most cases, been positive. Overall, beneficiaries expressed satisfaction with and appreciation for the services received from IOM. The main feedback received was a message from the UN RC to IOM Burundi FLoD staff, expressing thanks on behalf of herself and the UN heads of agencies, and conveying support for FLoD activities.

Way forward

The UNCT estimates that the need for the FLoD services remains important. Despite the stable epidemiological situation in Burundi during the last weeks of the reporting period, the regional context concerning neighbouring countries shows signs of a new wave on the horizon.

The UNCT and IOM agreed to extend laboratory testing and clinical FLoD services for three months and Annex A2 was signed on 2 July 2021. The complete scope of services under FLoD will therefore continue, except for the operation of the IOM FLoD isolation facility. Services under the new agreement were available as of 1 August 2021.
Context

The first case of COVID-19 in the Democratic Republic of the Congo occurred in March 2020. As of 11 July 2021, the cumulative number of confirmed cases was 44,332, with 984 deaths. The pandemic hit the country in three waves, the first of which was in mid-2020, the second from the end of 2020 to February 2021, and the third from the end of May 2021. The country’s COVID-19 testing capacity improved over time, with a progressive increase in testing facilities under the overall guidance and management of the Institut National de Recherche Biomédicale (INRB).

IOM Democratic Republic of the Congo signed an agreement with the UNCT in October 2020 for the provision of COVID-19 laboratory testing services for clinical purposes; the IOM facility was subsequently evaluated and approved for the provision of testing for clinical purposes by the Ministry of Health.

An international procurement process was launched in September 2020 to purchase laboratory equipment and consumables for a high-throughput Thermo Fisher platform, under the guidance of the IOM technical team in Nairobi. Discussions were also held with the INRB to allow IOM to import and use the Molbio platform, which was more accessible at the time, but without success. While awaiting the conclusion of the international procurement process, the second wave hit, and it was decided to begin testing service provision with the existing GeneXpert machine. Unfortunately, procurement for the Thermo Fisher platform was never able to be completed, as certain parts were not available on the market and part of the procurement process had to be cancelled.
The initial plan to open two clinics, one in Kinshasa and one in Goma, was disrupted by procurement problems and therefore only the clinic in Kinshasa was opened, on 19 December 2020.

The initial agreement signed with the UNCT noted the UN Development Programme (UNDP) clinic, the reference facility for UN staff in Kinshasa, as the only clinic mandated to prescribe COVID-19 testing and refer patients to the IOM FLoD clinic. This drastically limited the uptake of IOM FLoD services. A series of meetings were held with the administrations of the main UN agencies and their staff to inform them of IOM FLoD services available and to explain the modalities to access them. In April 2021, a change of human resources at the UNDP clinic contributed to increased collaboration with the IOM FLoD clinic.

As a result, service uptake progressively increased, reflected in the number of tests performed during the implementation period. Due to the onset of the third COVID-19 wave in May and June 2021, there was a steep increase in cases in the country, resulting in a higher demand for testing services. Finally, the initiation of COVID-19 vaccination services at the IOM FLoD clinic as part of the UN System-wide COVID-19 vaccination programme, also led to an increase in COVID-19 testing services.

In May 2021, the IOM FLoD clinic was granted approval from the INRB to start providing COVID-19 testing services for non-clinical purposes to UN staff and dependents. However, the technical validation process with the Ministry of Health was still ongoing as the FLoD project reached the end of implementation under central funding.

The mission plans to integrate COVID-19 testing services within its existing MHAC in Kinshasa, and discussions were initiated with the UNCT regarding a new agreement based on service fees and encompassing both clinical and non-clinical testing services.

Capacity-building

Over the course of project implementation, IOM Democratic Republic of the Congo refurbished its clinical and laboratory premises, procured one GeneXpert machine and 1,150 cartridges for COVID-19 testing.

To handle potential medical emergencies, portable oxygenators, hospital beds, pulse oximeters, medical carts and other medical equipment were procured.

The team received training – including both theoretical and practical sessions - in triage, IPC, COVID-19 sampling, and data protection and management using MiMOSA FLoD and FLoD indicators guide review. The staff also completed WHO trainings on COVID-19 vaccine administration mandated by UNMD and IOM.

To improve the client service experience at the IOM FLoD clinic, appointment-making for COVID-19 testing was integrated into the WFP Humanitarian Booking Hub, with a QR code automatically generated for each booking. This functionality allowed the IOM FLoD clinic to minimize exposure time for staff and clients and to provide more efficient service delivery.

The IOM team organized both online and in-person meetings with the UN agency COVID-19 focal points to provide information and raise awareness regarding the IOM FLoD clinic. To date, staff and dependents from nine UN agencies accessed IOM FLoD services.

The IOM FLoD clinic developed a partnership with the national laboratory and conducted a COVID-19 laboratory testing quality control exercise. The results of the exercise showed 80 per cent concordance in test results between IOM and the national laboratory; however, the testing methods used by the two laboratories differed. The IOM FLoD clinic subsequently consulted with regional and global IOM laboratory experts regarding the discrepancy.
Demand for services

While testing for clinical purposes progressively decreased over time, in line with the decreasing epidemic trend in the country, the demand for testing increased dramatically in May and June 2021, with 64 per cent of all tests provided completed during this period. IOM FLoD services were recognized for their reliability and the rapid availability of results. Collaboration with UN agency COVID-19 focal points and UN clinic physicians was also strengthened during this period and the demand for services increased as a result.

Service uptake

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May – June 2021</th>
<th>December 2020 – June 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>479</td>
<td>751</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>381</td>
<td>530</td>
</tr>
<tr>
<td>Webinars and information sessions for the UN staff</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Feedback

Beneficiaries reported high levels of satisfaction in most cases and expressed appreciation for the service. Positive comments regarding the location of the facility and on the facility itself were also received.

Way forward

An agreement is under discussion with MONUSCO and the UNCT for the continued provision of the following services on a self-payer basis:

- COVID-19 testing for clinical purposes, such as testing of symptomatic persons, contacts of COVID-19 patients and persons in quarantine;
- COVID-19 testing for non-clinical purposes, such as testing for the purposes of official travel (“non-clinical testing”).
ETHIOPIA

Country-specific agreement signed: 18 August 2020
Period of service provision: 17 September 2020 – 30 June 2021
Scope of services: Laboratory testing for COVID-19, clinical services

Context

As of the end of the project implementation period, the national positivity rate was 9.5 per cent, a decrease from 15 per cent in the previous reporting period, while the fatality rate was 1.6 per cent. The overall decline in COVID-19 positivity was also reflected in the UN community. COVID-19 hospital and intensive care unit (ICU) beds were accessible overall compared to the previous reporting period.

COVID-19 vaccination campaigns were launched both nationally and through the UN vaccination deployment programme. Both campaigns completed a round of first doses and the provision of second doses commenced in the week of 12 July 2021.

Capacity-building

At the FLoD clinic, IOM constructed two triage cubicles as well as two COVID-19 sample collection cubicles, and renovated the laboratory.

In addition, 110 home monitoring kits were procured, including pulse oximeters, digital thermometers, masks, gloves and hand sanitizer. To respond to potential medical emergencies, oxygen cylinders and other medical equipment were obtained.

The Molbio Truenat system and other laboratory equipment were procured, and IOM laboratory technicians were trained to use them.
IOM FLoD clinicians received trainings in triage, IPC, COVID-19 sampling, data protection and management, and LIMS and FLoD indicators guide review; staff also completed WHO trainings on COVID-19 vaccination administration, mandated by UNMD and IOM.

IOM also participated in a microplanning exercise for the roll-out of COVID-19 vaccination services.

Demand for services

The demand for services and the positivity rate reflected changes in the epidemiological situation.

IOM was involved in the MEDEVAC of four UN staff (moderate COVID-19 positive and suspected cases) from the field, where health facilities are inadequate, to the capital, Addis Ababa.

Service uptake

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Service uptake

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May – June 2021</th>
<th>September 2020 – June 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>609</td>
<td>4,306</td>
</tr>
<tr>
<td>Remote home monitoring beneficiaries (for any reason)</td>
<td>27</td>
<td>299</td>
</tr>
<tr>
<td>Individuals who required escalation of care</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>396</td>
<td>2,614</td>
</tr>
</tbody>
</table>

Way forward

IOM did not discuss the continuation of services with the UNCT but IOM offered to provide COVID-19 testing services on a service fee basis.

Assistance to UN vaccination efforts

To support the UN System-wide vaccination programme, IOM seconded two nurses to the Addis Ababa UN Health-Care Centre, mainly for registration and vaccination sessions outside of Addis Ababa and supplied cold boxes for carrying vaccines in remote areas within the country.
**Context**

The IOM FLoD service in Ghana, which commenced in September 2020, suffered initial low service uptake through December 2020. However, in January and February 2021, new COVID-19 variants began circulating in Ghana and an increase in new cases contributed to the worsening epidemiological situation in early 2021. This increase in cases led to an increased demand for IOM FLoD testing services.

The UN in Ghana received more than 1,000 doses of the AstraZeneca vaccine though the Government of Ghana and through its collaboration with the UN Clinic and the Ghana Health services. UN staff received their first dose of COVID-19 vaccine in March 2021 and second dose in June 2021. The demand for IOM FLoD services declined sharply from the second week of March to the end of April, largely due to low number of new cases nationally and progress with COVID-19 vaccinations, and possibly also as a result of compliance with safety protocols.

**Capacity-building**

Trainings undertaken by the IOM FLoD team in Ghana included theoretical and practical sessions on IPC and FLoD indicators guide review.

An initial 200 Xpert Xpress SARS-CoV-2 cartridges were procured in August 2020 for use in IOM FLoD testing services, and an additional 50 were received in March 2021.
IOM Ghana also received and calibrated the Molbio system for COVID-19 testing and is awaiting the necessary national approvals. IOM Ghana’s new laboratory set-up is estimated to be completed by the end of September 2021.

Demand for services

Service uptake

A total of 209 tests were completed since the start of IOM FLoD testing services in September 2020. Overall, 74 out of the 209 tests (35.4%) were positive and none of the cases needed escalation of care services.

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>January – April 2021</th>
<th>September 2020 – April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>165</td>
<td>209</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>118</td>
<td>146</td>
</tr>
</tbody>
</table>

Way forward

The IOM Ghana Chief of Mission is in discussions with the UNCT and UN RC concerning the possible continuation of FLoD services based on local cost-sharing arrangements or on a self-payer basis.
Context

Kenya’s COVID-19 positivity rate greatly varied during the pandemic. However, testing availability was low, with many cases going unreported; IOM FloD services aimed to close the testing gap within the population of UN staff and their dependents. Numbers tested were largely reflective of the waves. Toward the end of the project, the positivity rate was low, at 1 per cent during the final three weeks of the reporting period. The low rate could possibly be explained by an increase in the uptake of vaccination services by UN staff and their dependents. Approximately 10,000 COVID-19 vaccine doses were administered to eligible UN personnel, diplomats, personnel of international non-governmental organizations (INGOs), retirees and their eligible dependents, representing a coverage of 35 per cent for the first dose and 16.2 per cent for the completed series in this population.

However, surges continued to be reported in the western part of the country and the epidemiological context could shift, considering the risk of new variants spreading and the extremely low vaccination rates in the country.

Capacity-building

IOM Kenya refurbished its clinical and laboratory premises and procured equipment for the management of medical emergencies.

In addition to the GeneXpert systems already available in the IOM laboratory, IOM Kenya procured and installed the Molbio and Thermo Fisher systems and purchased test kits for the three platforms.
IOM Kenya laboratory staff were trained in the use of the Molbio and Thermo Fisher systems. IPC refresher sessions were held for clinical staff and integrated into monthly clinical meetings.

A total of 24 physicians and nurses completed the mandatory WHO COVID-19 vaccination training for health workers, while 21 physicians and nurses completed the WHO Vaccine Safety Basics e-learning course, mandated by UNMD and IOM. In addition, 23 nurses and physicians were trained in ACLS, while 15 nurses underwent BLS training in June 2021.

### Demand for services

![Figure 13: UN staff/dependents who received at least one IOM FLoD service, by week, in Kenya, September 2020 – June 2021](image)

### Service uptake

The demand for services was driven by the epidemiological situation.

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May – June 2021</th>
<th>July 2020 – June 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>155</td>
<td>1,970</td>
</tr>
<tr>
<td>Individuals who required escalation of care</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>131</td>
<td>1,285</td>
</tr>
</tbody>
</table>
Feedback

The feedback received from beneficiaries was positive, as illustrated by the examples below:

“Congratulations for your beautiful work!”

“To receive a test result the same day is highly commendable; some first-world countries have not reached this standard.”

“I have received lots of appreciation from the UNCT and entire UN family for the excellent service IOM is providing in regard to COVID-19 testing. The professionalism and turnaround time particularly highlighted as very exemplary.”

“I have done dozens of COVID tests, all over the world, and I must say that the organization, efficiency and professionalism at the Nairobi MHAC is the best that I have seen.”

Way forward

The self-payer FLoD service for UN personnel began in Kenya alongside the centrally funded FLoD service in July 2020 and has continued beyond the end of the centrally funded project on 30 June 2021.

Testing has also been made available for all travellers to utilize the immense capacities built over the project implementation period.
NIGERIA

Country-specific agreement signed: 26 August 2020
Period of service provision: 6 July 2020 – 30 June 2021
Scope of services: Laboratory testing for COVID-19

Context

A second wave of the COVID-19 pandemic hit Nigeria in December 2020 and tapered off in March 2021, leading to an increase in the positive yield from tests conducted at IOM FLoD laboratories in Nigeria.

Testing capacity within the country was overstretched and the IOM FLoD clinic facilitated testing in this challenging situation.

The trend of COVID-19 among the UN community in Nigeria rapidly decreased over March and April 2021. However, Nigeria re-instituted some of the stringent IPC measures for the control of infection due to the increase in COVID-19 variants and infections in several countries, global delay and disruption in vaccine supply, and lack of compliance with public health and social measures within the country.

In May and June 2021, the number of cases continued to decrease, with sporadic spikes in some states.

Capacity-building

IOM Nigeria renovated their laboratory facilities and procured Molbio and Thermo Fisher platforms and test kits, as well as medical equipment and supplies for managing emergency situations (such as oxygen concentrators, pulse oximeters and other equipment).

The staff received training to use the two new testing platforms (Molbio and Thermo Fisher).

All IOM staff involved in the FLoD project were trained on COVID-19 vaccination in accordance with the Nigeria Centre for Disease Control’s technical requirements. Physicians and nurses underwent all trainings mandated...
by UNMD and IOM, including the WHO COVID-19 vaccination training for health workers, the WHO Vaccine Safety Basics e-learning course, and the data management course by the WHO Case Management team. IOM physicians received a refresher training in BLS and ACLS as well as a clinical adverse event following immunization (AEFI) management training in May 2021.

IOM laboratory staff were trained on IPC measures, including donning and doffing PPE, basic biology of COVID-19, sample collection, transportation, and processing on various testing machines, as well as on LIMS FLoD data entry. Following updates to MIMOSA FLoD and LIMS FLoD, IOM staff received additional trainings on COVID-19 data management and reporting processes.

The UN HQ in New York trained select IOM FLoD staff on the use of the UN Everbridge platform for vaccination registration and scheduling of appointments. The Nigeria Centre for Disease Control conducted training for IOM FLoD staff on the Surveillance Outbreak Response Management and Analysis System.

### Demand for services

The initial increase in cases and positive testing yields observed in early January 2021 was partly due to the holiday period in December 2020. Prior to this, testing for administrative purposes had been discontinued due to a shortage of test cartridges. Testing for administrative purposes resumed on 4 March 2021 and the demand for tests increased; however, by late April 2021, the demand for testing decreased. IOM continues to support the operation of the isolation centres in Abuja and Maiduguri, as well laboratory services in Abuja, Lagos and Maiduguri.

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**Figure 15.** UN staff/dependents who received at least one IOM FLoD service, by week, in Nigeria, July 2020 – April 2021

**Table 13.** IOM FLoD service uptake in Nigeria

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May – June 2021</th>
<th>July 2020 – June 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>0</td>
<td>1,022</td>
</tr>
<tr>
<td>Individuals who required escalation of care</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>0</td>
<td>735</td>
</tr>
<tr>
<td>Webinars and information sessions for the UN staff</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>
Feedback

Since project inception, feedback from within and outside Nigeria has been positive and encouraging. UN staff, dependents, INGO staff and diplomats have expressed satisfaction with the quality and professionalism of services received, as demonstrated by the quote below.

“I found the facility to be ‘excellent’. The comfort and ambience of the environment certainly took the sting of a positive COVID-19 test out from day one.”

Way forward

IOM has an agreement with UNDP and received funding to continue supporting the operations of the isolation and treatment centre and COVID-19 testing services through 30 September 2021. IOM laboratories in Abuja, Lagos and Maiduguri will continue supporting COVID-19 testing for outbound travellers.

Assistance to UN vaccination efforts

The IOM FLoD team facilitated the roll-out of COVID-19 vaccinations for the UN staff and their dependents. Vaccination roll-out for the first dose was performed from 28 March to 14 May 2021, while the roll-out of the second dose took place from 23 June – 8 July 2021. Over 70 per cent of vaccines were administered in Abuja, Borno State, Lagos city and Lagos State.
Due to the global shortage of GeneXpert cartridges, IOM Rwanda was unable to provide COVID-19 testing for administrative purposes for several weeks in early 2021; however, from March 2021 onward, administrative testing services resumed.

IOM procured the Molbio system and supplies for RT-PCR testing for COVID-19, however, the validation of the platform by the Ministry of Health in Kigali was a lengthy process and only concluded after centrally funded FLoD activities had ended in Rwanda. The equipment and supplies are now being used to provide testing services to UN staff under different financial arrangements as well as for the other programmes.

**Capacity-building**

As IOM had procured the Molbio system for COVID-19 testing, staff was trained to use it.

IOM established and equipped a clinical unit to respond to medical emergencies.

IOM staff received training on IPC, laboratory procedures, escalation of care and data entry and reporting. Per UNMD and IOM requirements, the IOM FLoD clinical staff also completed the WHO COVID-19 vaccination training and stands ready to support the UN clinic's roll-out of COVID-19 vaccination for UN staff and their dependents.
Demand for services

The IOM FLoD team in Kigali assisted the UN clinic with inquiries related to COVID-19 testing. The UNCT provided their full support and expressed appreciation for IOM’s FLoD services to UN staff members.

A noted advantage of IOM’s FLoD services in Rwanda was their efficiency. The IOM FLoD clinic provided a faster turnaround time for COVID-19 results than other testing sites, often within hours and always on the same day. Another advantage was that the IOM COVID-19 testing site maintained stringent requirements for IPC, and provided privacy and ensured confidentiality for the UN community in Kigali.

Service uptake

Service users repeatedly expressed their satisfaction with the services provided by the IOM FLoD clinic. They noted that it was easy to approach IOM staff and receive professional counselling and clarifications, in addition to testing services.

Way forward

IOM FLoD testing services for clinical purposes under the central funding mechanism ended on 30 April 2021, but IOM offers testing under fee-based arrangements.
SOUTH AFRICA

Country-specific agreement signed: 17 August 2020
Period of service provision: 15 October 2020 – 30 April 2021
Scope of services: Laboratory testing for COVID-19

Context
From January to March 2021, South Africa experienced a second wave of COVID-19 cases, with an accompanying increase in the number of tests provided by the IOM FLoD project. From the end of March to April 2021, the second wave waned and the number of tests provided decreased.

South Africa officially entered into a third wave of COVID-19 in June 2021, which continued through the end of project implementation.

The Government of South Africa intensified its efforts to roll out the national vaccination campaign and included UN personnel and dependents into the roll-out. IOM South Africa participated in the roll-out and seconded its clinical staff and facility to support the UNCT’s and the Government’s efforts.

The main challenge in the implementation of FLoD was the government accreditation process for the IOM laboratory to provide COVID-19 testing and the registration of the Molbio testing platform.

Capacity-building
All IOM FLoD physicians and nurses, as well as the laboratory technician and radiologist, completed BLS training on 12 March 2021.

A biosafety cabinet was procured for the laboratory.
To augment the testing capacity of the IOM laboratory, the Molbio PCR testing platform and cartridges were procured.

**Demand for services**

![Figure 19. UN staff/dependents who received at least one IOM FLoD service, by week, in South Africa, October 2020 – April 2021](image)

**Service uptake**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>January - April 2021</th>
<th>October 2020 – April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>86</td>
<td>121</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>74</td>
<td>100</td>
</tr>
</tbody>
</table>

**Feedback**

UN staff and dependents expressed a high level of satisfaction with IOM’s FLoD services, which was echoed by the UN RC during townhall meetings. Various heads of agencies also expressed their satisfaction with IOM FLoD services.

**Way forward**

Following the discontinuation of services under the central funding mechanism in April 2021, the IOM FLoD clinic continued to offer COVID-19 testing for UN staff and dependents on a self-payer basis.

The IOM FLoD clinic also contributes to the COVID-19 vaccination roll-out for UN staff by providing space and medical staff to administer the vaccine, monitor side effects and register beneficiaries in the UN Everbridge platform.
**Context**

Following the inauguration of the new President of the United Republic of Tanzania, a COVID-19 taskforce of specialists was formed to determine the national course of action. Community transmission of COVID-19 continued across the country, including in the Kigoma region, where IOM implemented FLoD activities and where COVID-19 testing services had been discretely established in Makere, following discussions with the UNCT and UN RC.

Over the final months of FLoD implementation, IOM Tanzania continued to align with WHO recommendations on the management of COVID-19. The IOM isolation facility in Makere has been the only available COVID-19 isolation facility for UN personnel and their dependents in the northwestern region of the country since mid-2020, when the previous Government closed all public isolation facilities and declared an end to the pandemic.

The new administration took a more open stance toward the COVID-19 pandemic, despite the lack of formal data by WHO on the situation in the United Republic of Tanzania. The pandemic affected many countries in the region and the effects of its spread were also seen in the Kigoma region of Tanzania, including Kasulu District. Religious institutions are calling for transmission-based precautions.

Testing in the country remains centralized and not accessible to most of the population in the UN’s area of operation. Data on the spread of the disease is not available to forecast trends and plan. Earlier efforts for the IOM FLoD project to provide testing and psychosocial support to other locations in the country (such as Arusha, Zanzibar, Dar es Salaam and Dodoma) were hindered by the authorities delaying their authorization for the importation of test kits.
Risk communication and public health messaging was uncoordinated and the community around the area of operation is not well-informed as a result.

A random screening exercise among the UNHCR staff during the last week of the IOM FLoD implementation revealed three positive cases. In parallel, the positive case detection rate in refugee populations is also on the rise; many hospitals in the region are likewise reporting increased case detection.

Accordingly, the uptake of IOM FLoD services by UN staff in the Kigoma region is increasing and during the final week of the project, four UN staff were referred to Kasulu for testing, isolation and remote home monitoring. Seven UN staff were referred in a two-week span, whereas previously, the project received one referral per month. In this context, the local UN Security Management Team and heads of office strongly support the continuation of the critical assistance provided by IOM's FLoD services in Makere: the IOM-run isolation facility was essential in managing mild cases which would otherwise have required evacuation to Dar Es Salam, impacting the UN's work on the ground. The MoU for the provision of FLoD services ended on 30 June 2021, and IOM continues to explore funding options to continue providing FLoD services.

**Capacity-building**

IOM Tanzania established an isolation facility, which was later extended through the installation of four prefabricated containers, including a multi-use office and accommodation space. The isolation facility was equipped with two patient wheelchairs, two oxygen concentrators, two defibrillators, two cardiac monitors, pulse oximeters, laryngoscope sets and endotracheal tubes, two nebulizer machines, portable electrocardiogram machines and other medical equipment for the management of patients with COVID-19, medical emergencies and other conditions.

COVID-19 test kits were also procured and delivered to Makere.

IOM Tanzania hired and trained additional physicians, nurses and support staff, and deployed an international physician to Kasulu to support the IOM FLoD team.

Trainings on the following topics were organized for IOM FLoD Staff:

- COVID-19 laboratory testing;
- IPC measures in a COVID-19 health facility;
- training on environmental cleaning and disinfection for cleaning staff;
- management of mild COVID-19 cases; and
- COVID-19 immunization preparedness (OpenWHO course).
Demand for services

Figure 21. UN staff/dependents who received at least one IOM FLoD service, by week, in the United Republic of Tanzania, February – June 2021

Service uptake

Table 16. IOM FLoD service uptake in the United Republic of Tanzania

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May – June 2021</th>
<th>December 2020 – June 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Individuals who received in-home monitoring for any reason</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Clinical visits</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Individuals who were isolated or quarantined in IOM facilities</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
</table>

Feedback

UN staff who benefited from IOM’s FLoD services greatly appreciated the quality of services provided. One beneficiary reported that “[the] IOM isolation centre is a like a facility in London”. The UN doctor also sent several complimentary notes regarding the management of UN staff care.

Way forward

IOM Tanzania submitted a proposal to the UNCT to fund IOM FLoD services from July to September 2021; the scope of proposed services in Annex A2 is the same as those provided under the central funding mechanism.
Context

The first case of COVID-19 in Uganda was confirmed on 21 March 2020. After peaking in mid-December 2020, the number of cases rapidly decreased and stabilized around January 2021. In mid-May 2021, however, Uganda was hit with a more severe second wave, with nearly twice as many cases as during the previous wave. During both waves, the national medical facilities, particularly ICU beds and ventilators, were rapidly overwhelmed.

Additionally, the supply of oxygen was in severe shortage during the second wave. Consequently, the Ministry of Health changed its earlier policy regarding COVID-19 case management, allowing moderate and clinically stable COVID-19 cases to join mild cases in home-based care and remote monitoring. The IOM FLoD SOPs were revised accordingly.

The evolution of COVID-19 cases within the local UN community generally followed the national pattern.

Capacity-building

IOM created a dedicated unit for the FLoD response, recruiting two physicians, four nurses, three laboratory technicians, two data processing assistants and two receptionists. A brand-new sampling area was established and refurbished within the IOM MHAC to establish a separate workflow for testing UN beneficiaries.

An efficient new appointment system was also developed and implemented, and biodata was electronically recorded to enable the easy and rapid exchange of information between different medical units of the facility (i.e. triage, physicians, laboratory and data unit).

In October 2020, IOM MHAC was granted permission by the Ministry of Health to provide COVID-19-related services for eligible UN staff and their dependents. Initially, the GeneXpert platform was used to provide
COVID-19 RT-PCR testing services. To provide additional testing capacity, the Molbio platform was procured and was received in February 2021; following the mandatory accreditation procedure by the Uganda Virus Research Institute, which lasted three months, the platform was approved for use by IOM.

Weekly case management meetings were held for cases under remote monitoring, together with the UN COVID-19 Medical Coordinator and medical focal points from WHO, the UN clinic and local medical facilities.

In May 2021, the IOM MHAC – which already provided COVID-19 vaccinations for migrant beneficiaries – received formal accreditation by the Ministry of Health to extend COVID-19 vaccination services to UN staff and dependents.

The IOM FLoD team undertook regular trainings offered by WHO, the Ministry of Health and IOM.

**Demand for services**

The trends in demand for services within the UN community generally followed the national pattern. After a decrease from January to March 2021, demand for both laboratory and clinical services began to rise in early April 2021.

![Figure 23. UN staff/dependents who received at least one IOM FLoD service, by week, in Uganda, July 2020 – June 2021](image)

**Service uptake**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May – June 2021</th>
<th>July 2020 – June 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>1,553</td>
<td>2,965</td>
</tr>
<tr>
<td>Remote home monitoring beneficiaries (for any reason)</td>
<td>848</td>
<td>1,635</td>
</tr>
<tr>
<td>Individuals who required escalation of care</td>
<td>19</td>
<td>49</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>1,066</td>
<td>1,831</td>
</tr>
</tbody>
</table>
Feedback

The IOM FLoD team received positive feedback regarding its professionalism and efficiency, as in this example:

Dear Doctor Marius,

On behalf of my family and mine, I would like to express our heartfelt thanks for saving my life when I was sick.

You and your Team gave me hope when I was hopeless and thought I was going. Thank you so much for taking good care of me. I and my family continue to be humbled by the level of commitment and professionalism you and your Team (Prisssy, Moses, Joseph, Paul, Ursula, etc...) have in doing your work during this most difficult, stressful, and hard times.

We appreciate you all so much and always be blessed

Kindest Regards

Way forward

IOM FLoD activities, including COVID-19 vaccination, continue beyond 1 July 2021 under a local arrangement with the UN. The UNCT approved the proposed scope of COVID-19 services (namely, testing, monitoring and vaccination) and a budget for July-September 2021.

Assistance to UN vaccination efforts

The IOM MHAC received formal Ministry-of-Health accreditation to provide COVID-19 vaccination services on 4 June 2021 and started activities on 8 June 2021, under the Ugandan National COVID-19 Vaccination Programme.

In June 2021, some 1,000 UN staff and dependents received their first and/or second doses of vaccine. Several high-level UN staff requested IOM vaccination services, including the IOM Regional Director, the UN RC and a significant number of UN agency representatives.

The IOM MHAC also organized three mobile vaccination teams to provide immunization services across different regions of Uganda for UN staff based in the field.
The first year of the COVID-19 pandemic in Cambodia included two community outbreaks which amounted to fewer than 600 identified cases and no deaths in 2020. However, a third community outbreak, which started in the first half of 2021, brought the total number of COVID-19 cases to 50,385, with 602 deaths, as of 30 June 2021. The vast majority of cases identified were concentrated in the Phnom Penh garment district and local markets. As a result, Phnom Penh and Takhmao City were under lockdown from 14 April to 7 May 2021, with movement restrictions based on travellers’ medical needs.

In response to the third outbreak, the Government increased its testing capacity by implementing rapid antigen testing in high-risk areas to facilitate early intervention. Additionally, the Government decided to allow, after the necessary approvals, private hospitals and clinics to perform the rapid testing and to treat COVID-19 patients, given how stretched the national health system was. The Government’s latest statement referred to 11 million vaccination kits available, with another 4 million extra expected in August 2021; the Government also plans to extend vaccination eligibility to younger populations.

**Capacity-building**

With the increase in cases during the third wave and to reduce the burden on the health-care system, the Ministry of Health revised its guidelines to allow home-based isolation and care for asymptomatic cases or cases with mild symptoms and no-risk factors.
As part of its remote home monitoring services, the IOM FLdD team distributed home isolation and monitoring kits, which included a pulse oximeter, thermometer, PPE, color-coded plastic bags for infectious and non-infectious materials, paracetamol and a monitoring sheet. Each bag was handed over to the beneficiary and their family members to monitor and care for themselves during the home isolation period.

In line with the Government’s roll-out of rapid antigen testing, the Ministry of Health approved IOM to provide COVID-19 rapid testing. IOM purchased 1,500 rapid antigen tests for use with UN staff and dependents. Additionally, IOM FLdD is facilitating COVID-19 PCR testing for administrative purposes.

Adequate PPE supplies were purchased in advance to be prepared to assist on a larger scale, should the outbreak continue.

Preparations are underway to provide ACLS and BLS training for core medical staff remotely, as in-person training is on hold due to the outbreak.

Demand for services

The demand for IOM FLdD services increased significantly from 20 February 2021, as a result of the third community outbreak. The Government of Cambodia extended vaccination eligibility to all eligible UN staff and their dependents; the IOM FLdD team supported the campaign by responding to queries and providing consultations through a dedicated hotline, as well as providing post-vaccination consultations for side effects.

The overall demand for IOM FLdD services increased by 83.9 per cent in the third community outbreak and more UN staff and dependents tested positive for COVID-19 or were identified as contacts than during the first two waves. This increased the need for remote home monitoring during isolation and quarantine periods. There were also COVID-19 cases within the UN family that needed extra monitoring support from the IOM FLdD team during hospitalization. The IOM FLdD team also arranged tele-health specialist consultations for those who needed specialist services.

In light of the daily increase in caseload, the UNCT decided to continue IOM FLdD services beyond April 2021.
Service uptake

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>January – April 2021</th>
<th>August 2020 – April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>2</td>
<td>149</td>
</tr>
<tr>
<td>Remote home monitoring beneficiaries (for any reason)</td>
<td>159</td>
<td>311</td>
</tr>
<tr>
<td>Referrals for tele-consultation with specialist or with IOM physician/nurse</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>149</td>
<td>293</td>
</tr>
</tbody>
</table>

IOM developed a list of specialists, hospitals and ambulance services which were available during lockdown, curfew or other emergency periods.

Feedback

The UNCT expressed its appreciation for IOM FLoD services. IOM provided regular updates during UN Crisis Management Team meetings, as well as Duty of Care meetings. Regular briefings were also provided to the COVID-19 Country Focal Point. IOM was actively involved in providing updates through the communication part of the vaccination programme in Cambodia.

IOM FLoD services received positive feedback from beneficiaries and UN agencies in-country, as seen below:

UN Assistance to the Khmer Rouge Trials beneficiary: “I take this opportunity also to thank the fantastic work done at IOM taking care of myself and my family in all sense: medical, logistic, psychologic, advising.”

Asian Development Bank beneficiary: “I am writing to express my appreciation for the support that Yin Setheka has provided in organizing a COVID-19 PCR test to facilitate travel. She has helped me so much, going above and beyond to help organize a test at short notice and follow up by phone and email. Really excellent.”

Way forward

IOM FLoD services continued under a local cost-sharing mechanism after the closure of the central funding mechanism in April 2021. All UN agencies agreed to be part of the local cost-sharing mechanism. Services will also be extended to the World Bank, the Asian Development Bank and the International Monetary Fund. The country-specific agreement between the UN RC and IOM was signed on 31 May 2021.

As part of its preparedness measures, IOM plans to purchase portable oxygen concentrators and pulse oximeters.
NEPAL

Country-specific agreement signed: 22 September 2020
Period of service provision: 12 October 2020 – 30 April 2021
Scope of services: Laboratory testing for COVID-19, clinical services

Context

In line with the global MoU between the UN and IOM, Nepal was categorized as a level-2 country for COVID-19 testing. On 2 September 2020, IOM Nepal and the UNCT signed a local MoU for the provision of COVID-19 testing for clinical purposes to eligible UN personnel and their dependents. However, to increase the access of international and national UN personnel and their dependents to health services consequential to COVID-19, the UNMD agreed that IOM would additionally operate as the UN COVID-19 clinic for Nepal.

In response to the first wave of COVID-19 in Nepal in November 2020 and increase in new cases among UN staff and dependents, the UN RC requested IOM to provide tele-health services to UN staff. IOM allocated four IOM FLoD physicians to provide remote consultations. Due to another deterioration in the epidemiological situation, which stretched the capacity of the health-care system, the UNCT requested IOM to expand its services to encompass COVID-19 testing, clinical care and follow-up, assistance with MEDEVAC (both domestic and international), and support with identifying available hospital beds for those requiring hospitalization.

The model of care proved successful and lives were saved with the timely interventions of the IOM-managed UN COVID-19 clinic. The clinic’s activities were extended in both Kathmandu and in six remaining provinces until the end of 2021 through a local self-funding agreement with the UNCT, the World Bank and the Asian Development Bank. The model of care was also expanded to focus on identifying mild and moderate cases, and providing isolation beds and direct medical care to reduce the burden on overstretched public hospitals, as well as to minimize the risk of co-infections by providing care in a UN-managed treatment facility.
Capacity-building

The IOM laboratory was strengthened with additional diagnostic machines for COVID-19 RT-PCR testing, namely two GeneXpert instruments and two Molbio instruments, as well as test kits for both platforms. The laboratory underwent certification by the Nepal Public Health Laboratory and was listed as a nationally certified laboratory for COVID-19 PCR testing. Furthermore, IOM FLoD laboratory services were expanded to include biochemistry and inflammatory and coagulation indicators, which are essential for the clinical management of mild and moderate COVID-19 patients.

To ensure the safe transportation of sick patients, an IOM van was converted into a fully equipped ambulance.

IOM’s capacity to treat mild and moderate COVID-19 patients was strengthened through the procurement of equipment for oxygen therapy (i.e. oxygen cylinders and high-capacity concentrators), vital sign monitors, electrocardiogram and respiratory function testing equipment, as well as infrastructural and environmental adaptations in both the clinic and isolation unit (i.e. air sterilizers, enhanced ventilation and aeration).

Following a spike in COVID-19 cases among UN staff and dependents in mid-May 2021 and the limited availability of hospital beds for those needing oxygen or ICU care, including ventilators, the UNCT requested that the IOM-managed UN COVID-19 clinic open an isolation centre with a 12-bed capacity to care for moderate COVID-19 cases. Consequently, the IOM planned, equipped and transformed a hotel wing into a modern isolation centre with 24/7 care, an ambulance service and hospital beds with capacity for both moderate and high-flow oxygen therapy.

In total, 21 IOM staff were engaged in the provision of FLoD services and were trained in IPC, clinical management of COVID-19 patients, COVID-19 laboratory testing, escalation of care and data management.

Demand for services

In April and May 2021, IOM Nepal observed a steep rise in the demand for its services. Major drivers may include the detection and spread of new variants, the rise in cases requiring hospitalization and the limited capacity of public hospital services in Nepal. Consequently, more UN staff and dependents sought tele-health consultations and PCR testing at the IOM FLoD facility.

Figure 27. UN staff/dependents who received at least one IOM FLoD service, by week, in Nepal, October 2020 – June 2021
Service uptake

### Table 19. IOM FLoD service uptake in Nepal

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May – June 2021</th>
<th>October 2020 – April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>190</td>
<td>397</td>
</tr>
<tr>
<td>Remote home monitoring beneficiaries (for any reason)</td>
<td>137</td>
<td>263</td>
</tr>
<tr>
<td>Clinical visits</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Individuals who required escalation of care</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Individuals who were treated in the IOM UN Clinic isolation centre</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chest X-rays</td>
<td>125</td>
<td>187</td>
</tr>
<tr>
<td>Laboratory tests</td>
<td>557</td>
<td>912</td>
</tr>
<tr>
<td>Clinical assessments</td>
<td>205</td>
<td>416</td>
</tr>
<tr>
<td>International MEDEVAC</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Domestic MEDEVAC</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>257</td>
<td>479</td>
</tr>
<tr>
<td>Webinars and information sessions for UN staff*</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

*Training on COVID-19 for UN drivers, cleaners and townhall meeting guidance for UN staff and eligible personnel

Feedback

The UN RC and UNCT in Nepal expressed sincere appreciation for the work of the IOM-managed UN COVID-19 clinic, as well as for the staff members’ commitment and dedication to the provision of quality medical services, as indicated below.
Way forward

The UNCT decided to extend the work of the clinic on a cost-sharing basis for the period of July – December 2021. The World Bank and the Asian Development Bank also joined as service recipients and participated in the funding mechanism. An MoU is in the process of being finalized.

The UNCT voted to keep an option to open isolation centres in Kathmandu and Nepalgunj, with six-bed and five-bed capacity respectively, which will be used to manage moderate cases.

Assistance to UN vaccination efforts

The IOM-managed UN COVID-19 clinic provided COVID-19 vaccination to all UN staff and dependents, including the staff of the INGOs who were recognized as UN partner agencies. The vaccination programme at the clinic began on 17 May 2021, with support from the Government of Nepal. From 20 May 2021, the clinic also provided vaccinations under the UN System-wide vaccination programme.

The IOM-managed UN COVID-19 clinic received a donation from the Government of Nepal consisting of doses of the Sinopharm (Vero Cell) and AstraZeneca (Covishield) vaccines, which were administered at the IOM-managed clinic, in coordination with UNDP (as the Vaccine Deployment Coordinator in Nepal is the UNDP Nepal Representative).

As of 30 June 2021, the IOM clinic vaccinated 803 UN staff and dependents with the donated Sinopharm Vero Cell and AstraZeneca (Covishield) vaccines, and 1,030 UN staff, INGO staff, retirees and dependents were vaccinated with AstraZeneca (Covishield) under the UN System-wide vaccination programme.

The clinic also received Sinopharm (Vero Cell) and AstraZeneca (Covishield) vaccines from the Government of Nepal as donation, which in coordination with and with the help of UNDP were administered at the IOM-managed UN COVID-19 Clinic.

All clinical staff providing vaccination services were trained in BLS and ACLS as well as management of anaphylactic reactions. Trainings included drills and simulations to evaluate the team’s management of anaphylaxis. Additionally, all staff were trained to manage and refer cases to the appropriate clinical centre if necessary. A UN ambulance was also on standby during vaccination sessions should it be needed for referrals to hospital facilities. Public information messages around vaccination and potential side effects were included in the UN bulletin, and displayed at the IOM premises, with the option to scan a QR code for further information.
THE PHILIPPINES

Country-specific agreement signed: 10 August 2020
Period of service provision: 30 October 2020 – 30 April 2021
Scope of services: Laboratory testing for COVID-19

Context

The Philippines experienced a surge in COVID-19 cases in the first quarter of 2021, with between 8,000 and 10,000 laboratory-confirmed cases reported daily at the end of March 2021 and a positivity rate of 25 per cent in the National Capital Region – Metro Manila. Consequently, the Government introduced a new lockdown from 28 March to 11 April 2021. Health facilities were overwhelmed with new cases and major hospitals in Manila operated beyond normal capacity.

Many of them announced that they were unable to receive new cases.

Figure 28. Epidemiological curve, the Philippines, January 2020 – August 2021. Source: WHO

Capacity-building

The following measures were taken by the IOM FLoD facility to enhance its capacity:

- procurement of an additional GeneXpert machine;
- procurement of additional Xpert Xpress cartridges and swab collection materials;
- procurement of PPE; and
- regular training of medical staff on vaccine administration.
Demand for services

In April 2021, there were 77 confirmed COVID-19 cases among international and national UN personnel and their dependents. There was also an increased demand for SARS-CoV-2 testing services for clinical purposes, as UN requests for testing tripled over the first four months of 2021. Out of the 77 positive cases, 37 were detected in the IOM FLoD laboratory. There was also increased demand for case monitoring and management of confirmed cases among UN personnel, especially for facilitating their admission into hospitals.

Service uptake

Specimen collection for IOM FLoD testing services was organized through home collection, as many offices and buildings such as hotels did not allow sample collection.

Feedback

Very positive feedback was received from all UN agencies, noting IOM’s rapid, responsive and secure testing services. During briefing webinars and updates on MEDEVAC, many heads of UN agencies and colleagues acknowledged IOM’s good work.

Way forward

The IOM FLoD team in the Philippines continued its activities after closure of the central funding mechanism based on local agreements. Two separate MoUs were signed with the UNCT, the first relating to the continuation of SARS-CoV-2 testing under a fee-for-service model and the second relating to remote home monitoring, based on a cost-sharing arrangement.

Under the second MoU, IOM prepared and launched its tele-health services for UN staff and dependents in May 2021. The tele-health service covers the Metro Manila and Mindanao area, where most of UN staff and their
dependents live, but other regions are not excluded, as enrollment into the remote monitoring programme is not dependent on the actual location of clients. The only requirement is an endorsement by the head of agency and/or COVID-19 coordinator. Additionally, the IOM FLoD tele-health service responds to inquiries and requests for medical advice, though this is not captured in the service statistics.

IOM FLoD actively collaborates with all UNCT members, in coordination with UNICEF and WHO, to provide second doses under the UN System-wide COVID-19 vaccination programme, including AEFI monitoring. IOM was also appointed as a MEDEVAC coordinator and continuously supports the needs of the UN to that end.

IOM actively works with various donors to enhance the response to SARS-CoV-2 testing in Mindanao, including a joint survey on laboratory capacity and a plan to enhance the cold chain arrangements in Mindanao, including an additional purchase of 6-10 module GeneXpert system to perform SARS-CoV-2 testing. The increased capacity will also provide co-benefits for tuberculosis programmes.

**Assistance to UN vaccination efforts**

The UNCT appointed IOM as a local vaccine deployment coordinator for the Philippines’ UN System-wide vaccination programme, in coordination with UNICEF and WHO. The IOM FLoD team also undertook the role of registrar and scheduler for the IOM vaccination site. The roll-out of the vaccination programme commenced on 3 June and the administration of first doses was successfully finished on 6 July 2021. A total of 2,000 doses were administered with no wastage. Vaccination covered the areas of Metro Manila and Mindanao, where most of the UN and INGO staff and dependents live. Vaccines were mainly administered at the IOM FLoD clinic in Manila (1,450 doses or 72.5%), while 360 doses were administered by the WHO Western Pacific Regional Office and 190 doses by IOM in Cotabato, through the local hospital.

Based on the e-feedback system established at the start of the UN System-wide vaccination programme at the IOM FLoD clinic in Manila, 95 per cent of respondents (232 out of the 244 responses received) declared that their overall vaccination experience at IOM was “excellent”, while 5 per cent indicated that it was “quite satisfactory”. Many respondents also noted that their concerns and queries during the vaccination process were “thoroughly addressed”. Respondents indicated that the IPC measures implemented in the IOM FLoD clinic made them “feel safer and more protected” from the virus, and commented on the efficient and well-organized process. However, it was the passion and dedication of the IOM staff involved in the implementation of the UN vaccination programme that received the most appreciation from beneficiaries.
SAI LANKA

Country-specific agreement signed: 23 October 2020
Period of service provision: 26 October 2020 – 30 April 2021
Scope of services: Laboratory testing for COVID-19

Context
A surge in COVID-19 cases in mid-April 2021 increased the demand for SARS-CoV-2 testing within the country, including from the IOM FLoD project. Services were provided through an outsourced laboratory accredited by the Ministry of Health, with a capacity of 10 tests per day. An external service provider collects samples from beneficiaries in their homes and transfers them to the laboratory for testing. If requested, however, samples can also be collected at the IOM FLoD facility.

Figure 30. Epidemiological curve, Sri Lanka, January 2020 – August 2021. Source: WHO

Capacity-building
IOM received a biosafety cabinet and GeneXpert four-module machine to enhance in-house capacity for testing and is discussing the possibility of providing SARS-CoV-2 testing services through the GeneXpert platform with the Ministry of Health.

IOM FLoD staff received refresher trainings on IPC measures and testing protocols. SOPs on reporting were also streamlined and enhanced.
Demand for services

From 19 April, the daily number of cases reported nationwide increased exponentially and, by the end of April, there were over 1,000 cases per day (up from about 200 per day in March).

![Figure 31. UN staff/dependents who received at least one IOM FLoD service, by week, in Sri Lanka, November 2020 – April 2021]

Service uptake

The IOM FLoD team assisted beneficiaries by coordinating the sample collection at the earliest opportunity; as sample collections were home-based, it was sometimes challenging to get the service provider to each location, though solutions were always found.

![Table 21. IOM FLoD service uptake in Sri Lanka]

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>January – April 2021</th>
<th>October 2020 – April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>27</td>
<td>35</td>
</tr>
</tbody>
</table>

Feedback

IOM FLoD services received great appreciation from all beneficiaries. There was a request to include testing for administrative purposes into the scope of services provided, which is in the process of implementation.

Examples of the feedback received are provided below:

“This is impressive, and the coordination procedures seem to be working super-fast.”

“Much appreciated, especially looking at the email generated at 23hrs last night and sample collected this morning.”

“Excellent and Immediate service of lab testing provided.”

“Lab service was quick and efficient and collection at home was easy.”
Way forward

The centrally funded FLoD SARS-CoV-2 testing service ended in April 2021. However, as there was an explicit request to provide testing for both clinical and administrative purposes, IOM Sri Lanka offered to continue providing SARS-CoV-2 testing services under self-payment arrangements, and the MoU between IOM and the UNCT was signed on 7 May 2021.

Assistance to the UN vaccination efforts

IOM FLoD Sri Lanka played a key role in driving the UN vaccination efforts in the country. Though most UN staff were vaccinated through the Government’s programme, there was a need to organize second doses for some staff at UN premises. IOM supported the UNCT to this end by providing a venue and assisting the vaccination team with registration and screening for contraindications and precautions at the IOM FLoD clinic in Colombo in May 2021, which was highly appreciated by the UNCT.
THAILAND

Country-specific agreement signed: 30 September 2020
Period of service provision: 12 October 2020 – 30 April 2021
Scope of services: Laboratory testing for COVID-19

Context

The second wave of the COVID-19 outbreak started in December 2020 and continued until February 2021, with new cases reported daily. Until March 2021, the number of new daily cases reported countrywide ranged from 59 to 401. Of these new confirmed cases from the second wave, around half were local transmission cases associated with occupational risks, visits to crowded places, or known contacts. The other half were detected through active case finding, including among migrant workers.

Thailand is currently experiencing a third wave of the COVID-19 outbreak, which started at the beginning of April 2021. New cases were found in entertainment venues, owing to the rise in recently infected cases in and around Bangkok, and has spread to most of the provinces. Many provinces have imposed entry restrictions for travellers from high-risk red zones and, in many cases, requires a 14-day quarantine. Some provinces allow travellers to forego quarantine if they perform a rapid onsite test. IOM Thailand maintains only essential staff on site since 20 April 2021. However, IOM FLoD services continued to be provided.

Figure 32. Epidemiological curve, Thailand, January 2020 – August 2021. Source: WHO

Capacity-building

IOM FLoD activities were carried out on top of pre-migration health activities in the IOM MHAC, where space is limited. However, the team took it as an opportunity to review and implement additional IPC measures. The space within the clinic was reorganized to ensure professional, safe and efficient service provision for both
groups of beneficiaries (UN staff and dependents, as well as immigrants and refugees), and staff were trained to enhance their knowledge of COVID-19 and standard precautions required.

To enhance its testing capacity, the IOM FLoD facility established a cartridge-based QIAstat-Dx SARS-CoV-2 respiratory panel testing system in Bangkok and Mae Sot. The IOM laboratory in Bangkok has a capacity of 14 tests per day, while 21 tests per day can be conducted in the Mae Sot IOM laboratory.

The IOM FLoD team participated in the following trainings:

- Interactive Series #8 - Managing Deteriorating Patients within IOM Facilities (by IOM);
- Digital health during COVID-19, opportunities and challenges (by the International Medical Informatics Association);
- Humanitarian Booking Hub Implementation (by IOM); and
- IPC training (by the American Society for Microbiology).

**Demand for services**

Due to the high number of confirmed cases since early April 2021, requests to IOM FLoD for SARS-CoV-2 testing increased. This was also likely due to the lack of testing capacity in private hospitals, where UN staff usually prefer to access services.

![Figure 33. UN staff/dependents who received at least one IOM FLoD service, by week, in Thailand, November 2020 – April 2021](image)

**Service uptake**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>January – April 2021</th>
<th>October 2020 – April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>50</td>
<td>54</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>50</td>
<td>53</td>
</tr>
</tbody>
</table>
Feedback

Many UN staff complimented the IOM FLoD team on their professionalism, supportiveness and quality of services.

Way forward

IOM Thailand offered to continue SARS-CoV-2 testing services under FLoD thorough a self-payer modality and a country-specific agreement was signed to this effect. The demand for testing from UN staff for administrative purposes (generally for travel) increased as IOM is able to provide results within the same day. IOM Thailand is pursuing other sources of funding to expand the facility, particularly to upgrade the waiting area, facilitate physical distancing and enable the creation of specimen collection areas to cope with the increase in demand.

Assistance to UN vaccination efforts

The UN-System wide vaccination programme officially rolled out on 30 June 2021 at Bumrungrad Hospital in Bangkok. The IOM Chief Migration Health Officer was appointed as co-Coordinator and Logistics Officer for the mission, together with colleagues from the UN Economic and Social Commission for Asia and the Pacific, and was heavily involved in the planning and implementation of the UN vaccination programme in the country.

IOM offered to assist with the reception and transportation of 2,000 doses of the AstraZeneca COVID-19 vaccine from the airport to the clinic, and then from the clinic to Bumrungrad Hospital, maintaining proper cold chain.

For field locations, coordination is still ongoing with local hospitals in Mae Sot and Chiang Mai; once completed, the IOM team in Bangkok will assist with the transportation of remaining vaccines to the field hospital.
EASTERN EUROPE AND CENTRAL ASIA, AND THE MIDDLE EAST AND NORTH AFRICA

JORDAN

Country-specific agreement signed: December 2020
Period of service provision: 14 December 2020 – 30 April 2021
Scope of services: Laboratory testing for COVID-19, clinical services

Context

Jordan has seen an increase in COVID-19 cases, with a second peak in March 2021. In response to the increase in cases, the Government of Jordan announced curfews across the country, in addition to the re-closure of some public spaces, like gyms and parks. However, none of these measures required significant changes to the IOM FLoD operational context.

Minor changes were made in terms of staff allocation, to ensure an appropriate redistribution of work between the rest of the UN and IOM. Another significant event was the start of the national COVID-19 vaccination campaign: any individual residing in Jordan is eligible to receive the vaccine free-of-charge.

Capacity-building

In view of the rising cases and increasing hospital occupancy rates, IOM procured additional oxygen cylinders and oxygen concentrators as a contingency plan, in the event that hospital beds were not available. In coordination with WHO, UNICEF, UNHCR and the UN RC, a contingency plan for home care was also developed.
In coordination with WHO, COVID-19 vaccination awareness sessions were prepared and delivered to staff in IOM, WFP, UN Women, WHO, the UN Population Fund (UNFPA), the UN Relief and Works Agency for Palestine Refugees in the Near East, UNHCR, the UN Department for Safety and Security and the embassies of several countries (i.e. United States of America, Ireland, Belgium, Spain and the Netherlands).

**Demand for services**

During the implementation period, the demand for services increased due to the increasing number of cases in Jordan, also among the UN family. There was also an increase in hospitalization among staff and dependents, indicating the increasing severity of cases.

![Figure 35. UN staff/dependents who received at least one IOM FLoD service, by week, in Jordan, December 2020 – April 2021](image)

**Service uptake**

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>January-April 2021</th>
<th>July 2020 - April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARS-CoV-2 tests for clinical reasons</td>
<td>562</td>
<td>592</td>
</tr>
<tr>
<td>Remote home monitoring beneficiaries (for any reason)</td>
<td>550</td>
<td>606</td>
</tr>
<tr>
<td>Individuals who required escalation of care</td>
<td>75</td>
<td>77</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>683</td>
<td>728</td>
</tr>
<tr>
<td>Webinars and information sessions for the UN staff</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

A series of videos were developed by the IOM FLoD team as part of a vaccine awareness-raising campaign. The videos were in Arabic with English subtitles and aimed to explain how COVID-19 vaccines work and measures to be followed after vaccination.
Feedback

Overall, the feedback received was positive, as noted in messages received from staff and heads of UN agencies. An example from a UN agency head is below:

“Super-efficient IOM. Thank you! very good service. Just got my kits! Monitoring form and phone call”.

Positive feedback was also received from the UN RC, who organized a virtual meeting with the IOM FLoD team to extend his appreciation. Some other feedback received highlighted delays in laboratory appointments and results, especially during the peak of the second wave.

Way forward

The country-specific agreement between the UN and IOM was signed on 5 May 2021. The duration of the initial agreement covered the period from 1 May to 31 December 2021. IOM FLoD continues to provide the same services to the UN family under the new agreement.
From January to March 2021, the epidemiological situation in Kazakhstan was favorable overall; however, this period was followed by a steady growth in new COVID-19 cases, which peaked in April, exceeding 2,800 new cases per day. This caused an increase in the demand for FLoD services by in-country beneficiaries, with a greater focus on COVID-19-related services.

This coincided with the roll-out of the national COVID-19 vaccination campaign in February and the beginning of mass vaccination at the end of March. This new development resulted in an increase in requests related to vaccination and an increased uptake in services, with more trust among beneficiaries. To meet the demand, the IOM FLoD team worked under pressure during the month of April.

**Capacity-building**

The IOM FLoD clinical team underwent regular trainings provided by IOM and WHO, attended global UN COVID-19 update meetings, and completed two formal certified Continuing Medical Education courses (108 hours total) at the national level on the management of patients with infectious diseases in the context of COVID-19, as well as BLS and ACLS.
Demand for services

The IOM FLoD team observed several shifts in the demand for services over the project implementation period:

- There was a steady growth in requests for assistance with both administrative and medical issues, such as assistance with finding specialists, investigations, medications, language support and more. Support with these requests was especially appreciated by international beneficiaries.

- It was noted that the uptake of services by international and national beneficiaries was similar, though the presence of national staff is greater in the country.

- The webinars of the “Psychology for life” programme for adults and the regular “Magic workshops” for children conducted by an IOM FLoD psychologist were regularly attended with good levels of interaction. The number of requests for individual consultations went up, which can be explained by greater awareness of individual mental health needs by beneficiaries and their willingness to seek help and work towards positive change.

Service uptake

Table 24. IOM FLoD service uptake in Kazakhstan

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>January-April 2021</th>
<th>July 2020 – April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote home monitoring beneficiaries (for any reason)</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>Clinical visits</td>
<td>68</td>
<td>96</td>
</tr>
<tr>
<td>Instances of health-related and hospital support</td>
<td>454</td>
<td>516</td>
</tr>
<tr>
<td>Individuals who received psychosocial support</td>
<td>42</td>
<td>68</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding</td>
<td>126</td>
<td>141</td>
</tr>
<tr>
<td>(excluding webinars and info calls)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Webinars and information sessions for the UN staff</td>
<td>62</td>
<td>86</td>
</tr>
</tbody>
</table>
Feedback

Feedback was primarily received by email and in Russian, for example:

Subject: “Good day, Thank you for such a wonderful project and such professionalism”

“On 11 November 2020, I sought consultation from FLoD project. In that respect, I would like to highlight the following:

1. From the first minutes of the phone call, I received comprehensive information regarding the services provided.

2. In accordance with the provisional diagnosis, I was referred to a doctor of the highest category Bilyalova Galiya Nurbekovna, tentatively agreed on the time of appointment.

3. The doctor started the appointment on time.

4. Mrs. Bilyalova listened to me attentively, professionally performed the necessary procedures and prescribed treatment.

5. Today, unfortunately, we are accustomed to doctors being often angry and treating patients disparagingly, or, even worse, making money off the patients by prescribing unnecessary investigations and medications. But with FLoD doctors, I was pleasantly surprised to notice this was not the case.

Taking this opportunity, I would like to express my gratitude to the project Sub-regional Coordination Office for Central Asia, IOM, and the entire First Line of Defense team.”

Way forward

The country-specific agreement between the UN and IOM in Kazakhstan was signed on 25 April 2021. The duration of the initial agreement covers the period from 1 May to 31 October 2021. The scope of services includes:

- general practice services (described as services in “level 1 facilities”);
- medical prescribing;
- pharmaceutical supply;
- mental health and psychosocial support;
- preventive health-care services and health promotion; and
- Tele-health services, including in-home monitoring (via telephone or videoconference), provision of home support kits, and telemedicine specialist consultations.
UKRAINE

**Country-specific agreement signed:** 28 August 2020  
**Period of service provision:** 7 September 2020 – 30 June 2021  
**Scope of services:** Clinical services

**Context**

During the project implementation period, Ukraine experienced two waves of COVID-19, with the highest peak in March 2021.

From May 2021, the number of COVID-19 cases gradually decreased as a result of quarantine measures in place, as well as the ongoing national vaccination campaign. The number of new cases decreased from approximately 36,000 weekly at the beginning of May 2021 to 3,600 cases weekly by the end of June 2021. From 1 May to end June, the number of individuals who received at least one dose of a vaccine increased from 1.7 per cent to 4.4 per cent of the population, and the number of fully vaccinated individuals in Ukraine had reached 1.5 per cent as of 29 June 2021.

In June, mass vaccination centres were set up in the major cities, including Kyiv. Vaccines used include Covishield AstraZeneca, Sinovac and Pfizer.

![Epidemiological curve, Ukraine, January 2020 - August 2021. Source: WHO](image)

**Capacity-building**

IOM successfully procured 16 portable oxygen concentrators as a contingency plan, in case hospital beds became unavailable. The IOM FLoD team also procured an additional GeneXpert machine for COVID-19 testing.

The IOM FLoD team received 1,700 rapid antigen COVID-19 test kits from WHO, which further increased IOM FLoD’s diagnostic capacity. The kits were distributed to different locations where UN operations are present.
Demand for services

Service uptake
Several challenges were encountered during the implementation of the FLoD project in Ukraine, such as the lack of a UN-designated physician to provide treatment before admission to the hospital, inadequate referral pathways, lack of advanced ambulance services and in-country air ambulance, and the drastic lack of available beds for the treatment of moderate cases, as well as the lack of ICU beds all over Ukraine.

Another major challenge was the discrepancy between the national protocol for hospitalization and the IOM FLoD protocol; the national protocol had stricter criteria than the IOM FLoD protocol.

Table 25. IOM FLoD service uptake in Ukraine

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>May-June 2021</th>
<th>September 2020- June 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote home monitoring beneficiaries (for any reason)</td>
<td>41</td>
<td>385</td>
</tr>
<tr>
<td>Home kits distributed</td>
<td>13</td>
<td>72</td>
</tr>
<tr>
<td>Clinical visits</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Home visit</td>
<td>7</td>
<td>41</td>
</tr>
<tr>
<td>Individuals who required escalation of care</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Calls received for UN staff and their dependents</td>
<td>369</td>
<td>1,462</td>
</tr>
<tr>
<td>Individuals who received psychosocial support</td>
<td>19</td>
<td>88</td>
</tr>
<tr>
<td>Individuals who received at least one service under central funding (excluding webinars and info calls)</td>
<td>64</td>
<td>429</td>
</tr>
<tr>
<td>Webinars and information sessions for UN staff</td>
<td>18</td>
<td>107</td>
</tr>
<tr>
<td>Webinar participants</td>
<td>539</td>
<td>3,096</td>
</tr>
</tbody>
</table>
Feedback

During the project implementation period, the IOM FLoD team in Ukraine received positive feedback from UN staff, heads of agencies and the UN RC. Some examples are included below:

“I really enjoyed the FLoD approach, very nice to have you supporting the UN family. Also, let me express great appreciation for your support during the two weeks of self-isolation! It was of immense help!”

“All the work and support that you provide to the UN team in Ukraine is very much valued during these difficult times!”

“The doctors acted with kindness and great attention. The idea that I have the possibility to ask for professional advice, keeps me calm and confident. A HUGE thank you and sincere appreciation from myself and my family for supporting us in this difficult and uncertain period!”

“Your consultations, professional advice and support were invaluable to guide us through the disease and help us to recover!”

Way forward

The UN COVID-19 Coordinator submitted a brief concept note to the UN RC to extend IOM FLoD activities in Ukraine beyond 30 June 2021, until December 2021. The need to continue the IOM FLoD activities beyond June 2021 in Ukraine was also discussed in UNCT meetings.

According to the revised plan, the IOM FLoD hotline will be operational 14 to 15 hours per day and the psychosocial component was removed from the service. IOM is in the process of signing the country-specific agreement.

Assistance to UN vaccination efforts

IOM FLoD staff in Ukraine facilitated the importation of COVID-19 vaccines and organized a clinical setting for vaccine administration within their partner clinic in Kyiv, “Healthy and Happy”. More than 1,100 UN staff and their dependents from Kyiv and non-government-controlled areas were assisted in receiving their first dose of COVID-19 vaccine between May and June 2021. Facilitation of the administration of second doses will be implemented under the new country-specific agreement.