LEVERAGING TELEMEDICINE TO EXPAND HEALTH CARE ACCESS IN UKRAINE

PROGRESS UPDATE - JANUARY 2023

Since Russia's February 2022 invasion, 747 verified attacks on Ukrainian medical facilities and infrastructure have been recorded, resulting in 101 deaths.[1] In addition, many areas face shortages of medical professionals due to the massive movement of people resulting from the war. Residents are often reluctant to leave their homes to seek health services due to the conflict, making telemedicine a critical tool for maintaining access to services. USAID's Local Health System Sustainability Project (LHSS) has collaborated with Ukraine's Ministry of Health to introduce eight new telemedicine solutions, train 1,060 medical personnel to use them, and conduct 2,521 sessions with patients.

Securing access to health services

Ukraine's Ministry of Health (MOH) prioritizes telemedicine as a way to restore and maintain access to critical health services disrupted by the war. Many private companies have offered to donate access to telemedicine solutions to address these wartime needs. In turn, the MOH must identify priority solutions, test them, develop implementation systems and capacities, and plan for their integration into the health system.

LHSS and the eHealth State Owned Enterprise helped the MOH institutionalize a standardized approach to assessing, testing, selecting, and implementing the proposed solutions. The MOH formally adopted the methodology in July 2022 and has used it to select and deploy eight telemedicine solutions. These include telemedical counseling for gunshot, burn, and explosion injuries; telerehabilitation gaming for neurosensory disorders; virtual operating rooms; and remote monitoring, including fetal heartrate monitoring for pregnant mothers.

As of January 2023, patients have connected to over 296 health facilities and received over 2,521 consultations using telemedicine.

A patient receiving services through the "HomeDoctor" medical device, which monitors vital signs remotely.

Ensuring locally owned solutions

Using fixed criteria and a testing methodology applicable to all solutions, LHSS assisted the MOH in screening proposals to ensure its needs would be appropriately addressed by the selected solutions. This included discussions to clarify what specific services would be included in the solution, what licenses and/or technical equipment would be included in the donation, and how the solution could

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[1] https://extranet.who.int/ssa/Index.aspx

be applied across Ukraine. LHSS also facilitated dialogue to ensure all parties clearly understood their roles and responsibilities during installation, training, implementation, and handover to the MOH.

> "The diagnostic process was very fast, and [my doctor] demonstrated the results of examination with the help of this device, but [remotely] by a specialist. I am very grateful to the doctor and suppliers of this device, who provided medical care during my stay in the hospital."
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> *– Pregnant patient who used remote fetal monitoring at a district hospital to connect with an obstetrician*

Testing to assure quality

Once a solution is tentatively selected, rigorous testing must occur to ensure it meets MOH standards. Together with the eHealth State Owned Enterprise, LHSS conducts pilot testing that verifies technological functions, technical equipment capabilities, and data security features including for storing and transferring data. LHSS provides technical assistance to evaluate integration ability into the eHealth system and into Ukraine's healthcare system. These evaluations support recommendations to the MOH's Testing Committee, which informs the Committee's decisions on solution selection.

Preparing providers for effective use

To effectively meet the needs of the patients and providers who use the telemedicine solutions, the donating company, the MOH, and LHSS all need to understand the end user context. LHSS collaborates with the donating company and the MOH to ensure a shared understanding of how the solution will function, and then holds workshops and training sessions for health facilities, physicians, and patients.

Because health facilities operate day and night, LHSS provides 24/7 technical support.

In addition, LHSS designs instruction manuals and videos that providers and patients can continue to reference after LHSS support has ended. LHSS also monitors solution implementation and shares findings with the MOH to inform decision-making.

> "When I became a member of the project on providing telemedical care to patients with burn injuries, I was very skeptical at first. After all, there is a lot of work, and here you need to master a new information technology. I thank the technical support team who demonstrated and even made me conduct at least one telemedical consultation. I had one very difficult patient who needed [complex] surgery. Through this telemedicine platform, we organized an extensive consultation involving doctors from Lviv and Kyiv. Afterwards, the treatment was adjusted, the recommended procedures were carried out, and the patient began to recover. Thank you for changing my attitude to telemedicine."
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> *–A Ukrainian physician discussing their experience with an LHSS-supported telemedicine solution*

Building resiliency

Ukraine is facing extraordinary challenges to its people and its health system. Through these telemedicine solutions, the MOH is able to rapidly address the population's urgent health needs. It has also gained valuable know-how in accessing private resources and managing effective public-private relationships. These experiences position Ukraine to continue leveraging public-private partnerships as it rebuilds its health system.