

Question 2: *What are effective and sustainable mechanisms or processes to integrate local, community, sub-national, national, and regional voices, priorities, and contributions into health system strengthening efforts?*



HEALTH SYSTEMS
STRENGTHENING
ACCELERATOR

Strengthening Capacities for High-Quality Post COVID-19 ICU Care

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Context

From the outset of the COVID-19 pandemic in March 2020, the USAID-funded Local Health System Sustainability Project (LHSS) recognized the need to strengthen the absorptive and adaptive capacities of the Jordanian local health system, particularly its capacity to manage emergencies. In response to the pandemic, the project focused on strengthening the capacity of healthcare providers (HCPs) to improve the quality of intensive care unit (ICUs) services to combat the virus. To support this effort, LHSS project worked closely with multiple stakeholders from the public health sector, private entities and implementing partners to conduct an assessment of ICUs in Ministry of Health (MOH) field hospitals. Results from this assessment informed the design a robust training program to build the capacity of health care personnel (HCPs) to provide COVID-19 services and establish a Continuing Professional Development (CPD) system linked to Jordan's HCP relicensure system. The goal of this work is to improve quality of care across the public and private sectors, especially in maternal and child health (MCH).

The government's response to the pandemic exposed health system gaps pointed to a pressing need to strengthen Jordan's health systems, and to ensure high-quality services are delivered by qualified HCPs. Specific gaps included the inability of ICUs to provide quality care due to lack of training and certification in critical care competencies among providers. In instances where HCP capacity strengthening interventions were yielding positive results, there remained acute needs in priority areas. These included standardizing case management protocols, guidelines and clinical pathways, updating policies and procedures, and updating ICU staff job descriptions with greater specificity qualification requirements and position responsibilities. To address these challenges, LHSS supported the government's efforts to refocus on building a national CPD system. With guidance from the project, the MOH is collaborating with professional councils and private sector entities to design and implement this new system.

After concluding its COVID-19 emergency response, the MOH recognized the need to integrate consistency, sustainability, and a mechanism to transfer institutional knowledge to ensure that ICUs can provide safe, effective, and equitable patient-centered care.

Activity Description

To strengthen the Jordan Health System and improve the quality care provided in ICUs, LHSS engaged with the MOH and its hospitals, professional associations, and private sector stakeholders to institutionalize capacity strengthening activities aimed at expanding critical care competencies among HCPs in Jordan. These included developing and implementing an ICU competency-based framework for interdisciplinary teams, introducing interprofessional training opportunities, launching a critical care fellowship program, and creating a digital platform to expand access to CPD offerings. LHSS used a systems thinking approach to strengthen the quality of ICU services with targeted interventions, informed by evidence and assessments, and facilitated cross-sectoral partnerships.

1. Developing a competency framework for ICU Health Care Providers

To institutionalize and sustain LHSS's initial training activities, the project is working closely with the MOH to develop a competency-based framework (CFW) for the interdisciplinary ICU teams to update required qualifications and scopes of work.

2. Creating and piloting a competency-based training program for ICU teams in three geographically representative MOH hospitals

LHSS is collaborating with the MOH to develop competency-based training programs for multidisciplinary ICU teams in three hospitals representing the north, south and middle regions of Jordan. The program provides specialized training for nurses, pharmacists, respiratory therapists, and nutritionists practicing critical care medicine. The training modules cover areas such as adult post-natal and pediatric ICU care, infection prevention and control, and cross-cutting competencies such as provider-client communication, leadership and gender sensitization. Specific trainings include:

- Advanced accredited critical nursing training
- Specialized training clinical pharmacists and nutritionists serving ICUs
- Customized leadership training for ICU leadership teams
- Interdisciplinary team management

LHSS is also supporting the MOH in obtaining the Advanced Cardiac Life Support (ACLS) training certification from the American Heart Association and establishing Respiratory Therapy Units (RTUs) at three MOH hospitals and the Al-Hussein Royal Medical Services (RMS) hospital.

3. Supporting a fellowship program for intensivists

LHSS is partnering with the Jordanian American Physicians Association (JAPA) to support the Adult Critical Care Fellowship Program (ACCFP). This fellowship offers clinical 'boot camps' in specialized topics, grand rounds (including case- or topic-based presentations), online didactic training, "Up to Date" medical subscriptions, and monthly journal club memberships. First-year fellows participate in five-day teaching rounds under the supervision of an ICU-trained physician and are mentored by second-year fellows. Graduates of the intensivist fellowship can immediately apply their new skills in ICU settings.

4. Developing a CPD accredited online training program.

LHSS is supporting the MOH in developing an accredited online CPD training platform. The project awarded three grants to private sector organizations to create 12 CPD-accredited courses HCPs. This initiative is establishing an important partnership between CPD organizations and private sector health providers. LHSS also awarded a grant to Between the Lines, a communications and event planning agency, to carry out a communications campaign to bring private sector health workers up to speed on CPD relicensing requirements.

Activity Impact

Human resource development:

- LHSS facilitated the creation of new positions on the MOH hospital organogram, developing job descriptions that clarify responsibilities and qualification requirements for respiratory therapists and ICU intensivists.
- LHSS supported the MOH in adopting a competency-based framework for ICU providers featuring new learning modules and competency measurement tools, this is expected to improve the quality of ICU services.

Capacity strengthening

- LHSS in partnered with the Jordanian American Physician Association to establish the **MOH's first intensivist fellowship program**. Graduating fellows Intensivists who graduate from the ACCFP can transfer the knowledge and expertise they gain from the program to other HCPs outside of the program.
- LHSS collaborated with the MOH in creating the **first competency-based training program for interdisciplinary ICU teams** comprised of ICU nurses, pharmacists, nutritionists, and respiratory therapists.
- LHSS collaborated with the MOH in establishing AHA-accredited ACLS and Basic Life Support (BLS) training programs. The **MOH now allocates \$1.3 million annually** for these programs, improving the **quality of critical care services**, particularly for vulnerable groups including **pregnant women**. Clinical staff report having more confidence in their skills and decision-making ability when faced with emergency situations that require quick thinking and decisive action (e.g., respiratory events and cardiac arrests).
- LHSS initiated leadership training program for ICU leadership teams on implementing the interdisciplinary team approach will **strengthen the ICU management capacity to implement the process of decision making** as appropriate.

By strengthening the capacity of multidisciplinary ICU teams and institutionalizing accredited CPD training programs, ICU health workers in MOH hospitals will be able to provide a broader range of specialized critical care services and improved overall quality of care.

Digital Health:

- LHSS supported the launch of two digital platforms at the MOH and a private sector partner) where intensivists can access 20 accredited CPD courses. Creating virtual learning platforms will enhance equitable access to specialized training among more HCPs, including female providers and those in remote areas. The digital platform allows the MOH to meet its relicensing mandate and represents a major step toward establishing a national sustainable CPD system.
- LHSS supported the MOH in developing a legislative framework on telemedicine which is currently in its final approval stages at the legislative bureau

Evidence

- Final draft of job descriptions for the respiratory therapist and the intensivist specialties that stipulate the qualifications required for candidates applying for these positions. These references will ensure those hired have the skills to deliver high-quality ICU services
- Local ownership and coordination:
 - LHSS supported the formation of an advisory committee of ACCFP directors from different entities (MOH, RMS, Jordan University Hospital, King Hussein Cancer Center). The committee meets quarterly to improve collaboration and integration among different programs.
 - Six JAPA fellows completed the first year ACCFP curriculum. In addition, the MOH accepted 10 new doctors into the fellowship program. Fellows who have completed their second year will mentor first years, ensuring local transfer of knowledge and program sustainability.
 - LHSS established a unique relationship with Jordan Nursing Council (JNC), securing permission to utilize the JNC's fully equipped simulation lab for the respiratory therapy training program.
 - The MOH was awarded AHA ACLS accreditation and has retained seven certified instructors to ensure continuous capacity development at national and sub-national levels.
 - The MOH issued official statements confirming the allocation of annual budget support for ACLS and BLS to be used to strengthen MOH staff capacity in critical care skills. The MOH has trained 1,680 HCPs on BLS out of 4,000 planned for 2023, and nearly 200 HCPs on ACLS out of 1,100 planned for 2023.
- Jordanian American Physician Association has established a CPD-accredited fully functional online training platform that can be used by intensivist fellows and clinical pharmacists.
- Competency-based framework training materials have been created for and shared with interdisciplinary ICU teams at three selected MOH hospitals. Staff trained in these competencies will be able to conduct cascade training to facilitate intensivist competency skills mainstreaming in public sector facilities.
- Aligned with Jordan's vision for economic modernization, the final draft of the national telemedicine bylaws is in place, setting the stage for more inclusive to health services at a decreased costs. This bylaw will provide a legal framework to regulate the health sector.
- Launch of the MOH's official CPD informational and training platform (www.masar.moh.gov.jo) and the private sector E Jawda training platform with free accessible training courses (www.ejawda.hcac.com.jo).
- Leadership training program and policies for ICU leadership teams are in place to mainstream implementation of the interdisciplinary team approach



Facilitators

- **Creating National Ownership:** LHSS fostered MOH ownership by supporting the creation of national committees including the ICU Competency Framework national committee, the Respiratory Unit committee.
- **Utilizing the private sector:** LHSS utilized top notch American Jordanian doctors to support the MOH's intensivist fellowship program by developing a partnership with the Jordanian American Physician Association.
- **Fostering ownership through national partnerships:** LHSS partnered with the Jordan Nursing Council to support national efforts to create the Respiratory Therapist specialization in Jordan and developed a partnership with the National CPD Committee to ensure CPD accreditation of all intensivist trainings.

Challenges

- It was initially difficult for LHSS to identify training facilities and national expertise to train intensivists for the new ICU roles being created in MOH hospitals. To address this challenge, the project partnered with international organizations and contracted with organizations such as the Jordanian American Physician Association to fill these gaps.
- Interdisciplinary teamwork requires significant behavior change on the part of providers and managers. When implementing the interdisciplinary team approach, many of the positions were not available in the ICUs, such as the pharm D and nutritionists. LHSS is working with the MOH to ensure that these functions are available at the MOH pilot hospitals where the interdisciplinary team approach is being implemented.
- Frequent leadership changes at the MOH highlights the importance of having internal champions to advocate for the CPD program. LHSS supports the MOH in verifying that individuals enrolled in CPD training are committed to remaining within the program.

Lessons Learned

- **Mainstreaming the interdisciplinary approach from the outset is critical to creating a comprehensive program:** The interdisciplinary team approach was integrated into all phases of the project. It is part of the competency framework and included as a session in each of the training programs for the intensivists and other positions including pharm D, nutritionists, the ICU nurses and respiratory therapists. The competency framework is also integrated into the leadership training program.
- **Creating national ownership is vital:** It was pivotal to work through national committees to ensure that the MOH integrates the interdisciplinary approach in its policies and job descriptions. This gave the project the authority to introduce the approach and ensure its implementation in the targeted ICUs. Accrediting the CPD training program also created an incentive for the MOH staff to enroll in the training program.
- **Integrating digital health creates sustainability and equity:** Developing an online training platform at the MOH provides sustainability for training programs that can be widely utilized by a large number of health care providers. The telemedicine by laws will also allow for quality tele counselling services in rural areas.
- **Establishing private public partnerships:** Creating a partnership with the Jordanian American Physician Association allowed the MOH to utilize top notch Jordanian American doctors to support the country's first intensivist fellowship program. This partnership filled a critical gap in local physicians who had the expertise and credentials to offer this specialized training.
- **Introducing CPD programs creates positive synergy to sustain system-wide changes:** Working closely with MOH on ICU improvements resulted in positive and durable changes in the field of ICU medicine. Creation of the Intensivist fellowship program required the MOH to recognize and address systemic capacity gaps by supporting ACCF training. Similarly, the intensivist fellowship program addressed a shortfall in local trainers credentialed to teach this specialized field. Each of these enhancements contributed to improved overall quality of ICU services through hiring and training the qualified staff, offering specialized diagnostics, and reduced wait time for laboratory results.