REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

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Lebanon

EMERGING FROM CRISIS

Health Sector Response and Lessons Learned from The 2024 War on Lebanon

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We extend our deepest gratitude to all the participants who provided input and support throughout the process. Their collaboration and expertise were essential in shaping this comprehensive report.

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Ministry of Public Health, 2025

LIST OF ABBREVIATIONS

3W-5W: Who, What, Where (used for activity mapping in crises)-
AAH: Action Against Hunger
AFD: Agence Française de Dévelopement
AMAN: Web-based software for MoPH to request subsidized medicine
AWD: Acute Watery Diarrhea
CCC: Command and Control Center
COVID-19: Coronavirus Disease of 2019
CPHL: Central Public Health Laboratory
CSO: Civil Society Organization
DHIS2: District Health Information Software, version 2
EMS: Emergency Medical Services
EMTs: Emergency Medical Teams
ERM: Emergency Relief Model
ESU: Epidemiological Surveillance Unit
ePHEM: Public Health Emergency Management Software
ICRC: International Committee of the Red Cross
ICU: Intensive Care Unit
IDP: Internally Displaced Population
IMC: International Medical Corps
INGOs: International Non-Governmental Organizations
IOM: International Organization for Migration
IT: Information Technology
LMS: Logistics Management System
LPSP: Lebanese Primary Healthcare Subsidization Protocol
LRC: Lebanese Red Cross
MCI: Mass Casualty Incident
MCM: Mass Casualty Management
MdM: Médecins du Monde
Meditrack: A software application for MOPH to track and trace medicine
MERA: Mobile Electronic Reporting Application
MFM: Mass Fatality Management
MMUs: Mobile Medical Units
MoPH: Ministry of Public Health
MMR: Measles, Mumps, Rubella
NGOs: Non-Governmental Organizations
NHS: National Health Strategy
NHSWG: National Health Sector Working Group
NICU: Neonatal Intensive Care Unit
NPHI: National Public Health Institute
OPV: Oral Polio Vaccine
PHC: Primary Health Care
PHCCs: Primary Health Care Centers
PHENICS: Primary Healthcare Electronic Information and Coordination System
PHEOC: Public Health Emergency Operations Center
PSUs: Primary Health Satellite Units
PUI: Première Urgence Internationale
RDTs: Rapid Diagnostic Tests
RI: Relief International
SOPs: Standard Operating Procedures
SRH: Sexual and Reproductive Health
ToR: Terms of Reference
UHC: Universal Health Coverage
UNFPA: United Nations Fund for Population Activities
UNHCR: United Nations High Commissioner for Refugees
UNICEF: United Nations International Children's Emergency Fund
WB: World Bank
WHO: World Health Organization

FORWARD

The recent war on Lebanon by Israel brought devastating consequences, profoundly testing our health sector's capacity and resilience. In the face of immense challenges—loss of life, widespread injuries, heightened risks of disease outbreaks, and the destruction of critical healthcare infrastructure—our health workers, institutions, and partners demonstrated remarkable courage and determination. Among them were first responders and healthcare workers who lost their lives, martyred while fulfilling their duty. Their sacrifices are a testament to their unwavering dedication and commitment to safeguarding the health and well-being of others, even under the most trying circumstances.

Throughout this crisis, the Ministry of Public Health took the lead, fulfilling its responsibility to coordinate and guide the national health response. This decisive leadership was essential not only in addressing immediate needs but also in restoring confidence in public institutions. By stepping up during one of Lebanon's most challenging moments, the Ministry reaffirmed the critical role of public institutions in serving the people and fostering trust in their ability to protect and support the nation.

Aligned with Lebanon's National Health Strategy: Vision 2030, the Ministry remains committed to ensuring accessible, equitable, and high-quality healthcare for all. This strategy underscores the importance of leadership, preparedness, and solidarity, all of which were evident in our collective response to this crisis. Together, with the unwavering support of our local and international partners, we continue to strive toward building a resilient health system that can withstand future challenges while safeguarding the health and well-being of every individual in Lebanon.

In the aftermath of the crisis, this document reflects our collective pledge to accountability, transparency, and continuous improvement. It serves not only as a review of our response but also as a roadmap for building a stronger, more prepared health system. The lessons captured here, gathered through structured reflection and collaboration with our partners, aim to guide us in addressing gaps, amplifying strengths, and reinforcing the foundations of our healthcare system.

Finally, an essential aspect of this effort lies in recognizing and expressing gratitude to the remarkable staff at the Ministry as well as our local and international partners. Their unwavering dedication—not only in preparing for the response but also in carrying out their duties during the crisis, often at great personal risk and sacrifice—has been nothing short of extraordinary. Equally commendable was their willingness, post-crisis, to come together in a transparent, blame-free environment to reflect on the lessons learned. This collective effort demonstrates accountability and a commitment to excellence and sets an inspiring example for rebuilding institutions.

On behalf of myself, the communities served, and the entire country, I extend my deepest and most heartfelt gratitude to all those who played a role in this monumental effort. Your dedication, courage, and sacrifice will forever remain a source of inspiration and pride for Lebanon.

Dr. Firass Abiad
Minister of Public Health

EXECUTIVE SUMMARY

This report, Emerging from Crisis: Health Sector Response and Lessons Learned from The 2024 War on Lebanon, provides a comprehensive account of the health sector's resilience, adaptability, and strategic leadership during the Israeli aggression, which resulted in over 4,047 fatalities and 16,600 injuries. The attacks devastated Lebanon's healthcare infrastructure, leading to the destruction of seven hospitals, partial malfunctioning of others, and the closure of numerous PHC centers. Despite these challenges, the MoPH, supported by local and international partners, coordinated an effective response to address the immediate and long-term health needs of the population. This document derives lessons from these efforts, focusing on three primary pillars: casualty care, healthcare for internally displaced populations, and logistics, in addition to cross-cutting areas.

Casualty care was central to the response, coordinated through the PHEOC which oversaw hospital readiness assessments, capacity-building initiatives, and the implementation of a comprehensive Mass Casualty Management plan. Hospitals were classified into risk zones—green, yellow, and red—based on the severity of potential threats, allowing for strategic resource allocation. Emergency teams were trained on trauma and burn management, and MCI protocols were standardized and tested through hospital drills. During the crisis, EMTs were deployed to deliver specialized trauma care, ensuring timely and effective treatment. However, challenges such as blood shortages, inconsistent patient data entry, and insufficient mental health support for frontline workers highlighted the need for further improvements in planning and execution.

The healthcare needs of the IDPs were addressed through PHCs and mobile units, which provided essential services, including maternal and child health, vaccination, and chronic disease management. Despite the forced closure of 56 PHCs due to security threats, 241 centers remained operational, supported by 120 mobile units and 88 outreach teams. A co-payment waiver program, backed by local and international partners, ensured access to critical hospital services for displaced populations, including deliveries, chemotherapy, and emergency care. The crisis also underscored the need for mental health integration into emergency healthcare, with recommendations to expand inpatient mental health services and train healthcare workers in psychosocial support. Data collection and monitoring systems like DHIS2 and the MERA platform proved instrumental in managing IDP care, though further refinements in patient identification and referral processes are required to improve service delivery.

Logistics operations ensured the continuous supply of medications, vaccines, and medical supplies during the crisis. A centralized logistics hub was established to coordinate procurement, storage, and distribution, supported by real-time tracking systems. The Ministry prioritized transparency by utilizing digital dashboards to monitor stock levels and resource allocation. Despite these efforts, challenges included limited warehouse capacity, shortages of acute and chronic medications, and the complexity of managing large quantities of donations. Recommendations include expanding storage facilities, improving forecasting, and developing clear standard operating procedures for donation management.

Cross-cutting areas of the response including coordination, digitalization, and communication, played a critical role in its success. The MoPH led the NHSWG, fostering collaboration among stakeholders, including public and private healthcare providers, NGOs, and international partners. Digital platforms like PHENICS and MERA were pivotal in streamlining data management, service delivery, and supply chain operations. Offline functionalities were developed to ensure continuity in areas with limited connectivity, and new features supported vaccination campaigns and the equitable distribution of resources. Communication strategies prioritized transparency and public awareness, with regular updates provided through media channels, social media platforms, and call centers. These efforts established the MoPH as a trusted source of information during the crisis.

The lessons learned from Lebanon's emergency response emphasize the critical importance of preparedness, coordination, and adaptability in managing crises. At a general level, the response demonstrated that effective emergency management relies on the strength of pre-existing systems including strong leadership, the ability to mobilize resources swiftly, and the inclusion of diverse stakeholders in a unified framework.

EXECUTIVE SUMMARY CONTINUED

Strategic planning, strong governance, and transparent communication emerged as essential pillars in ensuring public trust and operational efficiency. The necessity of leveraging digital tools for real-time decision-making, enhancing mental health services, and addressing resource disparities were consistent themes throughout the discussions. A key insight was the value of structured reflection post-crisis, which not only highlights areas for improvement but also fosters a culture of accountability and continuous learning.

In casualty care, lessons underscored the importance of standardized protocols, efficient coordination mechanisms, and comprehensive training programs. The categorization of hospitals into risk zones (green, yellow, and red) proved effective for resource allocation, but gaps in patient data management and EMS coordination revealed the need for a more integrated approach. Specific recommendations included strengthening trauma centers, increasing blood bank capacity, and developing robust protocols for mass casualty management. Investments in mental health support and early rehabilitation services were identified as critical to improving patient outcomes.

In addressing the needs of internally displaced populations, the response highlighted the essential role of PHCs and mobile teams in delivering equitable healthcare during emergencies. While PHCs demonstrated resilience, challenges such as staff shortages, limited mental health integration, and gaps in financial coverage for critical interventions revealed areas for improvement. Discussions emphasized the need for refining PHC preparedness plans, establishing advanced care centers, and improving patient identification systems. The collaboration between MoPH and international partners to waive co-payment requirements for displaced individuals was recognized as a best practice that should be institutionalized for future crises.

Logistics operations provided valuable lessons on supply chain management and resource distribution during emergencies. The crisis exposed the limitations of warehouse capacity and the inefficiencies in donation management, particularly in handling large volumes of supplies with short shelf lives. To address these issues, participants recommended expanding storage facilities, improving forecasting and supply chain mechanisms, and implementing SOPs to standardize donation acceptance and distribution. Digital tools like dashboards were effective in monitoring and tracking supplies, but greater partner engagement and consistent data entry are needed to maximize their utility.

These discussions reflect a collective acknowledgment of both strengths and gaps in Lebanon's emergency response, setting the basis for a more resilient and efficient healthcare system. By building on the lessons learned in these areas, Lebanon is better positioned to address future challenges with enhanced preparedness, coordination, and inclusivity.

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INTRODUCTION

Lebanon has recently endured the devastating consequences of the Israeli aggression, which claimed the lives of at least 4,047 martyrs and left over 16,600 injured, with the majority of casualties occurring since mid-September 2024. The true toll is likely even higher, as many deaths remain unreported.

The Lebanese health system was placed under immense pressure during a time of profound health needs—providing life-saving casualty care, addressing the needs of displaced individuals, ensuring a steady supply of essential medications and supplies, and rapidly deploying disease surveillance systems. These challenges were further compounded by the destruction of vital medical infrastructure in Southern Lebanon, Bekaa, and Beirut suburb regions, which sustained significant damage from Israeli airstrikes. Over the past year, 222 healthcare workers have been killed, and 330 others injured. There have been 238 documented attacks on ambulances and 96 attacks on healthcare facilities, leading to the total closure of seven hospitals and the partial malfunctioning of three others. Additionally, at the peak of aggression, 56 PHCs were forced to close.

Despite these overwhelming and rapidly evolving adversities, healthcare professionals and facilities in Lebanon demonstrated remarkable resilience and adaptability. Many health providers, while responding to their call of duty, suffered war injuries, displacement, and even the loss of loved ones. Yet, despite it all, they persevered, continuing to provide essential care under dire conditions and ensuring the health and well-being of countless others.

In line with its commitment to accountability, objectivity, and process improvement, the MoPH initiated a comprehensive review of the emergency response's key elements by organizing a workshop titled Emerging from Crisis: Lessons Learned from Lebanon's Recent Emergency Response. This workshop provided an opportunity for health stakeholders to take a step back, analyze, learn, and document key lessons. It constituted a safe space to discuss openly and sincerely what worked, what didn't, and what could have been done better. The ultimate aim of this health sector self-reflection was not only to look back, but more importantly, to build back better and contribute to a more prepared and safer future.

OVERVIEW OF THE EMERGENCY RESPONSE

The health sector emergency response, led by the MoPH, revolved around three main pillars, namely casualty care, IDP care, and logistics, in addition to cross-cutting areas including coordination, digitalization, and communication. The emergency response to the recent crisis will be summarized in the section below.

CASUALTY CARE

The PHEOC is the cornerstone of Lebanon's efforts to manage public health crises effectively. Officially launched on October 9, 2023, in response to the escalating security threats at the Southern national borders and with the support of the WHO, the PHEOC represents a key milestone in implementing Lebanon's NHS. Its origins, however, trace back to the cholera outbreak in 2022, during which the PHEOC played a pivotal role in coordinating prevention and response efforts nationwide. This early experience laid the foundation for its current capacity to address complex public health emergencies.

In the wake of the recent attack by Israel, the PHEOC played a critical role in managing and coordinating the national emergency response, particularly in casualty care management, a major challenge during the crisis. PHEOC's response can be segregated into two main phases :

FIGURE 1. PHEOC MEETING ATTENDED BY THE PRIME MINISTER AND OTHER MINISTERS AND STAKEHOLDERS

The Pre-incident Preparedness Phase

The pre-incident preparedness phase targeted the healthcare system's readiness, based on a standardized assessment of hospitals' resources and capacities. Based on these assessments, an action plan was developed, encompassing capacity-building modules, establishment of coordination and communication channels, and other preparatory measures.

Hospital Assessment

The PHEOC implemented a preparedness plan by categorizing the country into three color-coded zones based on threat levels and risk of attacks, with the recognition that the entire country faced potential dangers. This zoning approach was informed by lessons learned from previous incidents and anticipated threats, and can be summarized as follows (Fig. 1):

- **Green Zone:** Areas least likely to be targeted
- **Yellow Zone:** Medium-risk areas typically bordering high-risk regions
- **Red Zone:** High-risk areas, including the South, Bekaa, and Beirut, at a high risk for attacks.

This categorization enabled strategic resource allocation and targeted interventions in the highest risk regions. Field assessments were prioritized to evaluate hospitals' resources and emergency preparedness, serving as the foundation for a comprehensive response plan.

Using a standardized checklist, the readiness of 101 hospitals for mass casualty events was assessed, covering hospital capacity, medical staff, critical infrastructure, available services (e.g., blood banks and chronic care), equipment, supplies, and MCI plans.

OVERVIEW OF THE EMERGENCY RESPONSE

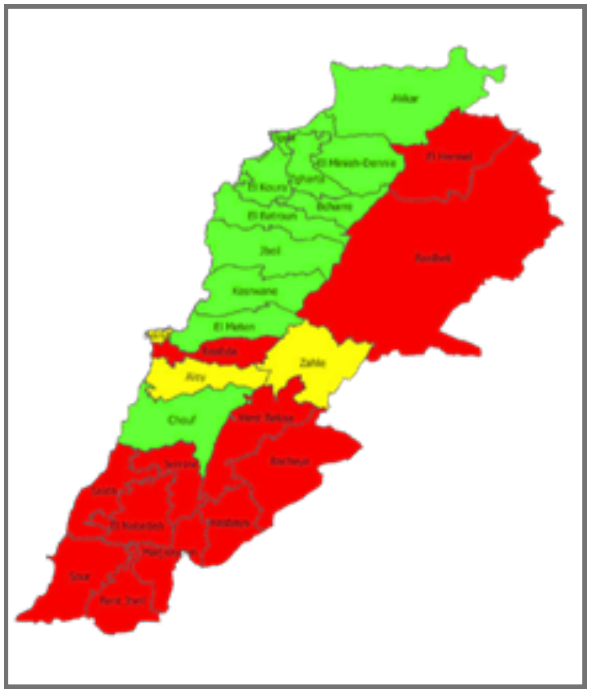


FIGURE 2. COLOR-CODED RISK ZONES

Capacity Building

As part of its capacity-building efforts, and in collaboration with relevant partners, the PHEOC organized emergency response training sessions to ensure standardized preparedness. Held between October 2023 and April 2024, eight-module sessions (see Annex 1) targeted hospitals and organizations involved in emergency response and encompassed various topics including emergency preparedness and response, mental health, forensic medicine, obstetrics care, among others.

A key component was the successful implementation of the MCM program, which trained 118 hospitals. These training modules were coupled with drills at the hospitals for real-life testing of plans **(Fig. 2).**

Casualty Care Coordination and Plan Communication

To enhance coordination during the crisis, the PHEOC implemented a comprehensive communication and governance framework involving key stakeholders:

Hospitals: WhatsApp groups for enhanced connectivity were established across the country, according to districts, with each hospital appointing a focal person to manage emergency communications. These groups facilitated the rapid exchange of critical information, including casualty data, supported by tailored communication tools to ensure efficiency.

Professional Orders: Decision-making processes were streamlined through active participation in PHEOC discussions, aligning actions and strategies across all health professionals.

Partners: Collaboration with international and local partners was strengthened through regular coordination meetings, ensuring the alignment of plans and fostering continued engagement in PHEOC activities.

Governorates: Local coordination was prioritized through regular discussions with governorate authorities, ensuring alignment with national strategies, particularly in crisis-affected areas.

Emergency Medical Services: Coordination with EMS was established through introductory meetings to define missions, clarify roles, and enhance collaboration.

FIGURE 3. EMERGENCY DRILL IN A HOSPITAL

OVERVIEW OF THE EMERGENCY RESPONSE

Command-and-Control Center: The establishment of the CCC (Fig. 3), located at Rafic Hariri University Hospital, further reinforced the EMS communication. The CCC integrated representatives from EMS and PHEOC to oversee patient dispatch to hospitals, facilitate real-time communication, and ensure a rapid, coordinated response to MCIs. This arrangement, under the MoPH oversight, optimized resource allocation, delineated roles and responsibilities, and coordinated the emergency response units for efficient crisis management.

The Incident Response Phase

The incident response phase addressed all levels of casualty care management, including evacuation, hospital alerts, patient referrals and transfers, and the establishment of trauma centers and wound care clinics. Furthermore, the timely communication of casualty statuses established the PHEOC as the primary trusted source of public information regarding casualties from the attacks.
This proactive approach not only countered misinformation but also bolstered public trust in the MoPH and other public institutions. All efforts were managed through the PHEOC and the CCC, ensuring a coordinated and effective response.

FIGURE 4. COMMAND AND CONTROL CENTER OPERATIONS ROOM

Incident Follow up and Alerts Activation

The PHEOC operated continuously, leveraging real-time data from various sources, including mainstream and social media outlets, EMS, and other alert systems, to monitor attacks as they occurred. Upon detecting an attack, PHEOC issued immediate alerts to nearby hospitals, ensuring timely awareness of the incident. This enabled rapid and updated assessment of hospital capacity to manage casualties, allowing field-based teams to direct casualties to appropriate facilities through established communication channels. Concurrently, a secondary alert was activated to notify neighboring hospitals, guaranteeing a heightened level of preparedness.

Evacuation Coordination and Casualty Distribution

Efficient casualty distribution was a priority, ensuring injured individuals were directed to hospitals based on proximity to the incident and hospital capacity. A standardized 'Medical Report' template (see Annex 2) completed by attending physicians, facilitated patient transfers and referrals. This report, disseminated through PHEOC, identified hospitals capable of providing necessary care and guided the timely movement of patients across health facilities to ensure appropriate treatment.

Establishment of Trauma and Wound Care Services

To address the shortage of surgeons during the emergency, the MoPH deployed EMTs composed of specialized physicians and nurses. Trauma and wound care services were activated in a number of public hospitals across Lebanon, including Rafik Hariri University Hospital, Sibline Governmental Hospital, Turkish Saida Governmental Hospital, Baabda Governmental University Hospital, and Elias Hrawi Governmental Hospital, therefore serving as critical hubs for specialized care.
EMTs stationed at these centers were on standby to manage severe injuries. A designated lead physician oversaw patient selection, ensuring that expertise aligned with medical needs and facilitating EMT deployment. Additionally, wound care clinics provided comprehensive post-discharge services, including physiotherapy, to support recovery from severe injuries.

OVERVIEW OF THE EMERGENCY RESPONSE

Data Management Process

The MoPH initially relied on its DHIS2 platform for data collection. However, due to the inability of hospitals to maintain timely entries during intense attacks, the PHEOC implemented a parallel manual data collection process.

A standardized Excel template (see Annex 3) was developed to capture key details such as patients' names, age, gender, injury status, location of origin, incident details, and transfer destinations. Hospitals' focal persons submitted this data via WhatsApp, which was consolidated electronically by the PHEOC team. Extensive data cleaning was conducted with a retrospective review of daily, weekly, and monthly entries to ensure accuracy. Data validation processes checked for duplicates and discrepancies between manual entries and DHIS2 submissions, ensuring consistency. Once validated, data was submitted to the Minister of Public Health office for public dissemination. Following the Minister's public release, PHEOC facilitated further data sharing with media outlets to respond to inquiries regarding casualty statistics.

To enhance data accessibility and analysis, the data was visualized using Power BI. A dynamic dashboard, updated with each DHIS2 entry, provided a comprehensive overview of casualty data, including key metrics and trends. Specific sheets within the dashboard were generated, such as the 'Tree Diagram Sheet' (see Annex 4) that summarized key casualty metrics for simplified data visualization and dissemination.

Follow Up and Support

The PHEOC maintained daily coordination with hospitals and EMS, offering a comprehensive support structure to ensure continuity of care and efficient hospital operations. This support encompassed the provision of blood units, medical supplies, resolution of logistical challenges (e.g., traffic management), and any additional assistance required to address emerging needs effectively.

HEALTH CARE OF THE INTERNALLY DISPLACED

Healthcare for IDPs during the emergency phase prioritized the delivery of essential services through PHCs and their affiliated mobile units while ensuring continuity of care and access to critical emergency hospital services. This approach aimed to address immediate health needs, including maternal and child health services, and sustain ongoing care for chronic conditions. Additionally, epidemiological surveillance systems were strengthened to monitor public health trends and detect potential disease outbreaks, enabling timely interventions to mitigate risks and safeguard the health of displaced communities. This comprehensive strategy was integral to maintaining health system resilience and ensuring equitable access to care during crises.

PHC Emergency Response

The role of PHCs during the emergency was critical for maintaining the provision of essential health services to both displaced and host communities, ensuring continuity of care, contributing to disease surveillance and outbreak detection, and supporting the management of minor injuries. Despite 56 PHCs being forced to close due to security threats or resulting damages, 241 centers remained operational, providing essential services to 1,100 shelters across the country. PHC services were crucial in maintaining the health and well-being of IDPs and host communities, particularly at times of crisis when access to healthcare became challenging.

OVERVIEW OF THE EMERGENCY RESPONSE

The PHC department at the MoPH led the development and implementation of response plans. As part of the efforts, the ERM was developed under the framework of the LPSP, enhancing the operational capacity of PHC service delivery during emergencies. Additionally, policies and procedures were established to create a centralized coordination structure and standardize the delivery of services at the levels of PHCs as well as through their affiliated mobile teams. Mechanisms were also implemented to ensure the continuity of medication and vaccine supply chains, preventing any interruptions in access.

To meet urgent care needs, PHCs were strategically equipped to handle emergencies at varying levels of complexity.

Level 1 centers were designated to manage mild emergencies, such as providing basic wound care and respiratory support.

Level 2 centers were prepared to respond to MCIs and deliver advanced urgent care services. Specific criteria were established to identify Level 2 centers and define the scope of services they would offer, including the implementation of emergency triage procedures to ensure effective patient flow management during high-pressure situations.

PHENICS was optimized to better serve IDPs, enabling the documentation of PHC services delivered, including those provided in shelters, through the offline MERA module. In this respect, staff across all PHCs nationwide were trained on using the updated features for streamlined reporting to the MoPH.

PSUs and MMUs were deployed with standardized operational protocols to enhance readiness and efficiency in addressing the health needs of displaced populations. Their number was expanded to ensure comprehensive coverage across all shelters nationwide. A total of 120 PSUs and MMUs, supported by 88 outreach teams deployed by Al-Salameh project, were actively providing healthcare services within shelter facilities.

Despite being directly impacted by the attacks, routine services were sustained during the emergency, including health consultations, vaccinations, medication provision, antenatal care and family planning services, and the distribution of infant formula and other essential nutritional supplements.

A summary of the services provided by PHCs and affiliated mobile units is presented in Table 1.

Hospital Care for Displaced Populations

Hospital care services provided to IDPs were essential in ensuring uninterrupted access to critical health interventions during the ongoing crisis as well as responding to acute health needs. A thorough plan for displaced health care was established as escalating security threats became imminent.

TABLE 1. SUMMARY OF PHC SERVICES DELIVERED TO IDPS

Number of IDPs who received medical consultations	165,443
Number of IDPs who received medications	124,450
Number of medication boxes distributed from the central warehouse	1, 746,027
Number of formula milk tins distributed from the central warehouse	52,854

As a result, a comprehensive range of services was made available to meet the diverse needs of both adults and children, addressing life-threatening conditions, responding to maternal and newborn health needs, managing chronic illnesses, and ensuring continuity of care. A dedicated team at the MoPH, connected to a call center with a hotline, was made available to support access to hospital services. One of the main functions of these dedicated personnel was to secure beds for displaced patients requiring specialized services such as dialysis and chemotherapy. In this regard, proactive contact with displaced patients enabled the swift transfer of their medical care to the nearest hospital close to their new locale where the service could be delivered, with a preference for public hospitals. Equally important, a hospitalization co-payment support program was developed with funds provided by the MoPH as well as local and international partners. This program eliminated financial barriers and ensured that IDPs could access essential hospital services without being impeded by financial hardships.

OVERVIEW OF THE EMERGENCY RESPONSE

In total, 5,476 patients were supported with access to hospital care, primarily for chemotherapy, dialysis, and births, along with other medical services, as detailed in the case breakdown in Table 2.

Additionally, for the first time, the MoPH developed and implemented a program for the coverage of emergency services, with patient copayment waived for IDPs. The MoPH also introduced a new program to waive copayments on chemotherapy fees for patients receiving treatment at the expense of the MoPH, while dialysis services continue to be fully covered. Moreover, a total of 2,735 Lebanese with various hospitalization needs received financial support through the waiver of patient share, which was covered by the MoPH and partners including WHO, UNICEF, UNFPA, PUI, IMC, La Chaîne de l'Espoir, ICRC, MdM, RI and AAH. Together with the MoPH, these organizations played a critical role in facilitating hospital care, ensuring that IDPs had access to the essential health services required for survival and recovery during this challenging period.

TABLE 2. SUMMARY OF IDPS WHO RECEIVED ACCESS SUPPORT TO HOSPITALS

Service	Number of Patients Supported with Access
Chemotherapy	2637
Delivery	647
Dialysis	354
Radiotherapy	33
Others	1805
Total	5476

Data updated until end of November 2024

TABLE 3. SUMMARY OF IDPS SUPPORTED FINANCIALLY FOR HOSPITAL CARE

Category	Number of Patients Supported Financial
Adult	129
Emergency Care	1165
Delivery	672
Pediatrics	702
Chemotherapy	34
Radiotherapy	33
Total	2735

Data updated until end of November 2024

Epidemiological Surveillance

The ESU played a vital role in detecting and monitoring disease outbreaks and ensuring timely responses to emerging health threats during the recent emergency. Its activities spanned across various areas, encompassing routine surveillance, capacity building, and community engagement, while leveraging advanced tools and partnerships to address public health threats effectively.

Routine Surveillance:

- Case-based surveillance continued to assess disease burden and detect outbreaks, complemented by weekly reporting through the DHIS2 platform. The surveillance team ensured timely and complete data submission by healthcare providers through consistent follow-ups.
- The Sentinel Network monitored specific health conditions, including respiratory infections and AWD, with a particular focus on cholera detection.

Active Surveillance:

- Enhanced disease detection included regular visits to hospitals and medical centers, logbook reviews, and close coordination with healthcare facilities.

Expanded Call Center Services was a critical step in enhancing surveillance capacity. Initially established in February 2020 for COVID-19 inquiries, the 1787 Call Center was expanded during the emergency to address a broader range of health issues, such as communicable diseases and the needs of displaced populations. Additional human resources were allocated to support this enhanced scope.

OVERVIEW OF THE EMERGENCY RESPONSE

The unit also prioritized training for healthcare workers, NGOs, municipalities, and other stakeholders to strengthen outbreak detection and public health emergency management. Training formats included face-to-face sessions, on-site visits, and online modules, ensuring wide accessibility.

To enhance community involvement, partnerships with municipalities were reinforced to train local authorities on water quality monitoring and disease surveillance. Additionally, online training engaged communities on early detection and reporting of health threats.

As for field visits, a total of 1,538 field missions were conducted to collect real-time data and insights from affected areas. Rapid Surveillance Teams focused on key conditions, conducting 531 RDTs for cholera during the reporting period.

Additionally, with the massive internal movement of IDPs, a dedicated system for health monitoring in shelters was established. Regular field visits and weekly calls with shelter focal points facilitated accurate health data reporting to the MoPH. By week 46 of 2024, 302 shelters reported 190 health conditions, offering critical insights into the health of displaced populations.

The Signal Follow-Up Process enabled detection, triaging, verification, and investigation of potential health threats. Risk assessments and alerts were issued based on identified public health risks:

FIGURE 5. SURVEILLANCE TEAM FIELD VISIT TO A SHELTER

A total of **248 alerts** were generated, with 64% originating from the Call Center and 28% from the public, highlighting the role of community engagement.

Key health threats included AWD **(41% of alerts)**, food poisoning **(23% of alerts)**, and dermatological conditions, mostly scabies and lice **(10.5% of alerts)**.

Through integrated efforts, including the use of the DHIS2 platform, field missions, shelter-based surveillance, and signal follow-up mechanisms, the surveillance program significantly improved its capacity to address dynamic health challenges.

Collaboration with local health authorities, NGOs, and partners ensured timely data reporting, effective monitoring, and rapid responses to public health emergencies. This comprehensive system successfully mitigated health threats during the crisis, safeguarding public health during ongoing conflict and displacement.

LOGISTICS

The logistics response plan was instrumental in mitigating the health consequences of the security attacks, ensuring the timely delivery of essential medical supplies and services amid unprecedented challenges. Developed in 2022 as part of Lebanon's NHS with the support of WHO, UNICEF, and UNFPA, this action plan was activated on October 9, 2023, in response to escalating security threats along Lebanon's Southern borders. It was designed to enable rapid, efficient, and coordinated logistics operations, therefore facilitating a vigorous health sector response to the needs of displaced populations and injured civilians.

FIGURE 6. WORKERS AT THE CENTRAL DRUG WAREHOUSE

OVERVIEW OF THE EMERGENCY RESPONSE

The initial phase of the logistics response focused on assessing immediate needs and mobilizing necessary resources. A comprehensive needs assessment was conducted to evaluate the medical requirements of the affected populations, identifying critical shortages in emergency and essential medicines, medical supplies, and healthcare personnel. Resource mobilization efforts involved leveraging domestic and international partnerships to secure the required medical supplies, equipment, and staff. These efforts included one-on-one consultations and follow-up meetings with health sector partners to address and close the identified gaps effectively.

The logistics response plan was rapidly activated to coordinate response efforts and manage the distribution of resources:

Donor Coordination: The MoPH identified and documented the health sector needs through published lists of medications, supplies, and equipment. These lists were periodically updated and shared with the Ministry of Foreign Affairs and Lebanese Embassies, consulates, Lebanese diaspora, in addition to donors and health sector partners. Moreover, the MoPH coordinated and facilitated the distribution of donations from multiple donors and healthcare partners, ensuring resources were allocated based on needs identified in collaboration with hospitals, NGOs, and local health facilities.

Central Logistics Hub: Established to support the procurement, storage, and distribution of critical medical materials to high-priority areas.

Real-Time Tracking System: Ensured proper storage, documentation, and real-time management of medical supplies, preventing shortages and minimizing waste.

Innovative Solutions: Developed alternative methods to overcome logistical barriers, including a decentralized storage plan, ensuring timely delivery of supplies and medications to critical locations.

Additionally, staff recruitment and training plans were activated with the rapid deployment of healthcare personnel, volunteers, and international medical teams to provide essential care to affected populations. Training and capacity building initiatives equipped teams to deliver emergency medications and supplies and optimize logistics under challenging conditions.

Despite the efficiency of the logistics response, several challenges impeded operations. These included security risks associated with the ongoing conflict that created barriers to transporting and distributing medications and supplies, particularly in high-risk areas. Another significant challenge was the health infrastructure damage, further complicating logistics operations. Moreover, demand for medical materials often exceeded available resources, leading to persistent challenges in meeting needs. Equally important, workforce strain and staff shortages overstretched the healthcare workforce thin, impacting the capacity to deliver care and manage logistics effectively.

Despite all, through its coordinated efforts, including needs assessments, resource mobilization, real-time tracking systems, and innovative transportation solutions, the MoPH logistics plan significantly enhanced the health sector's ability to respond to the crisis, playing a vital role in safeguarding public health during the war. Moreover, enhanced transparency, supported by advanced system digitalization and frequent reporting, contributed to rebuilding public trust and strengthening confidence within the donor community.

OVERVIEW OF THE EMERGENCY RESPONSE

CROSS CUTTING AREAS

In addition to the three main pillars summarized above, the emergency response plan encompassed three cross-cutting areas that spanned across all pillars and played an integral role in the response outcomes. A brief overview of the three cross-cutting areas is presented below.

Coordination

The NHSWG in Lebanon operates under the leadership of the MoPH and coordinates the emergency humanitarian responses. The coordination efforts within the sector are facilitated by WHO, UNHCR, and Amel Association in close collaboration with the MoPH, ensuring a unified and coherent response.

The health sector played a critical role during the crisis by facilitating real-time information sharing, aligned with updates from the MoPH. This was achieved through the creation of NHSWG Emergency Situation Reports, 3W-5W maps, and online dashboards. These tools provided up-to-date information on health services across the country including the linked collective shelters with their assigned PHCs, along with their focal persons. The dashboards, which were regularly updated, ensured that IDPs could access health services at the nearest available centers. By offering insights into the availability of healthcare resources and services, these information products aimed to enhance accessibility, particularly for vulnerable displaced populations during the crisis.

The health sector also played a central role in coordinating the efforts of various multisectoral actors, including government authorities, international organizations, local NGOs, civil society organizations, donors, and private healthcare providers. Through strategic meetings, joint working groups, and regular briefings, the sector ensured that response activities were aligned with MoPH strategies, optimizing resource allocation and minimizing duplication. Regular communication and information sharing, facilitated by PHEOC, enabled rapid decision-making and efficient mobilization of resources to address critical health needs, such as war-wound management, sexual and reproductive health services, mental health care, and infectious disease management.

Additionally, advocacy for health at all levels was a crucial part of the sector's coordination efforts. This included providing strategic guidance on resource mobilization and allocation, particularly concerning donor funding. Through efficient coordination, the health sector strengthened its response capacity and contributed to safeguarding public health during this challenging period.

Digitalization

In response to the escalating challenges of the ongoing conflict, the MoPH swiftly leveraged digital tools to maintain critical healthcare services, improve logistics, and enhance operational efficiency. Such rapid actions in the area of digitalization were fundamental for sustaining the Ministry's ability to respond and serve effectively, despite the disruptions caused by the crisis.

A crucial aspect of this effort involved relocating the MoPH's IT functions to a secondary site, ensuring secure and uninterrupted operations. This strategic move allowed the MoPH to sustain essential services, including the distribution of chronic medications for diseases such as cancer and other catastrophic conditions. Process agility ensured the continuous supply of medications, enabling beneficiaries to access their monthly supplies from alternative centers – whether at the Karantina warehouse, hospitals, community pharmacies, or subnational MoPH pharmacies– while preventing duplicate dispensing. Through continued use of Meditrack, enhanced monitoring and reporting was made possible, providing critical oversight. The AMAN portal, responsible for the medication application and approval processes, further supported this course by notifying patients when their medications were ready for collection.

OVERVIEW OF THE EMERGENCY RESPONSE

The Integrated LMS played a central role in the Ministry's digital response. Adapted to support critical functions such as donation management, milk distribution, and vaccination campaigns, the LMS was integrated with the PHENICS system to facilitate the accurate and timely processing of medication requests. This integration also improved the management of milk supplies for displaced children, with criteria introduced to allocate resources fairly based on age groups and limit quantities per user, ensuring efficient and equitable distribution and preventing misuse.

Recognizing the connectivity challenges in some areas, the MoPH upgraded offline platforms to ensure healthcare workers could continue delivering services. Offline forms were created as part of the MERA platform to include shelter-specific fields, allowing documentation and tracking of services in shelters. The MERA platform was also upgraded to provide PSU users with the necessary modules to support displaced beneficiaries, expanding the range of services available and improving operational efficiency.

The digital response also extended to vaccination campaigns. The MERA and PHENICS systems were updated to support efforts such as the distribution of the OPV and the MMR vaccine. These updates, completed in record time, ensured efficient execution and sound monitoring of the vaccination campaigns despite the ongoing crisis. Similarly, the PHENICS system was enhanced to incorporate modules related to emergency care provision. The modules covered areas including clinical data documentation, the approval process, and the provision of necessary documents for reimbursement.

A key outcome of the Ministry's digitalization efforts was enhanced access to data for informed decision-making. Custom dashboards and reports were developed for various aspects of the health response, including medication and milk distribution, vaccination campaigns, PSU monitoring, and emergency field visits, thereby providing real-time information for improved planning and decision making.

Communication

Effective crisis communication was crucial during the emergency. As part of its response, the MoPH implemented a communication strategy that emphasized speed, clarity, credibility, consistency, and collaboration. The aim was to keep the media and public, particularly IDPs, informed and engaged throughout the crisis. To achieve this, the MoPH utilized a diverse range of tools and platforms to disseminate information and sustain public awareness.

Mainstream media was reached through WhatsApp messages and broadcasts, with over 550 local and international journalists receiving critical updates. Direct engagement with media outlets was also facilitated via email communication with heads of local TV channels, ensuring the broadcast of awareness-raising TV spots. Media engagement included interviews, press conferences, and tours to maintain transparency and keep the public informed. Additionally, platforms such as the MoPH website and social media accounts including X, Facebook, Instagram, LinkedIn, and YouTube provided real-time updates on the unfolding situation.

Frequent updates, press releases, and detailed reports were shared by the Minister himself as well as other key individuals responsible for specific aspects of the response. Public communication prioritized covering essential aspects of the crisis, including services for the IDPs and casualty statistics. Reports on aid distribution and attacks on health providers and health facilities were also frequently generated. Content types ranged from posts and carousels to infographics, videos, and reels (see Annex 5).

OVERVIEW OF THE EMERGENCY RESPONSE

Importantly, the MoPH became the primary source of reliable and trustworthy information, especially regarding martyrs and casualties following each attack.

Additionally, the MoPH Call Centers (1214 and 1787) expanded their roles during the crisis to serve as a vital point of contact for individuals seeking assistance or information. The role of the National Lifeline (1564) was also expanded to cope up with the increased demand for mental health services. Moreover, emergency awareness messaging was paired with communication on non-emergency topics to maintain a comprehensive public heath approach. Together, all these efforts ensured communities remained informed and aware of available health services throughout the crisis.

FIGURE 7. PUBLIC HEALTH INFOGRAPHICS

METHODOLOGY

A series of preparatory meetings were held by the organizing team with key staff at the MoPH who were responsible for different aspects of the emergency response, with a focus on three main pillars: Casualty Care, Healthcare of IDPs, and Logistics.

The aim of these meetings was to review and document major elements of the emergency response, highlight challenges encountered during the implementation of response activities, set the tone for the upcoming workshop, and perform the overall needed preparations.

The workshop followed a structured methodology aiming at fostering open dialogue, critical reflection, and actionable insights for improving Lebanon's emergency health response. The workshop commenced following introductory statements and keynote speeches delivered by the Minister of Public Health, Dr. Firass Abiad, Acting WHO Representative in Lebanon Dr. Abdinasir Abubakar, delivered by WHO Team Lead in Lebanon, Dr. Alissar Rady, and the Senior Advisor to the Minister of Public Health, Dr. Nadeen Hilal. It began with a warm-up session led by MoPH staff, summarizing key aspects of the emergency response and highlighting the contributions of different response pillars. Participants, preassigned to one of three roundtable discussions based on their roles and areas of expertise, were then invited to join and actively participate in their respective discussions.

The roundtable discussions focused on the following elements:

Roundtable 1: Casualty Care - focused on the management of casualties, including trauma care, emergency response protocols, and hospital and pre-hospital preparedness.

Roundtable 2: Care for IDPs - concentrated on the healthcare needs of displaced populations, including primary and shelter-based healthcare, hospital care, mental health support, disease surveillance, and continuity of essential services.

Roundtable 3: Logistics - addressed the logistics of medical supply chains, procurement, distribution, donations management, and challenges related to ensuring the timely availability of medicines, medical equipment, and health human resources during crises.

Following the focused roundtable discussions, all participants convened back together to address cross-cutting areas essential to the overall effectiveness of the health response, including :

FIGURE 8. KEYNOTE SPEECH BY MINISTER ABIAD

FIGURE 9. ROUNDTABLE DISCUSSION 1

Coordination – this session focused on the coordination between various health actors, governmental bodies, humanitarian organizations, and donors during the emergency response.

Digitalization – this session examined the role of digital tools and systems in managing health data, improving connectivity, and enhancing decision-making during the crisis.

Communication – this discussion addressed the importance of clear, timely, and accurate communication among stakeholders, and reaching out to various populations including IDPs, media, health providers, partners, and the public.

METHODOLOGY

Throughout the discussions, technical staff at MoPH documented the proceedings through detailed notetaking.

Following the roundtable discussions, participants' feedback was presented under three categories, inspired by the traffic light sign: STOP, Continue, and Start, designated as follows:

Stop (Weaknesses)	Actions or activities that were inefficient or failed to achieve their intended impact were identified as weaknesses, with recommendations to discontinue them in future responses.
Continue (Strengths)	Successful and impactful actions were recognized as strengths, with recommendations to sustain and scale them up in future emergencies.
Start (Gaps)	Critical actions or activities that were missing were identified as gaps, with recommendations to address these deficiencies in future preparedness plans.

The discussions were further guided by critical reflections:

Internal vs. External Reflections: Participants were encouraged to evaluate their own activities during the crisis, either as individuals or representatives of their organizations (internal reflection), and to offer feedback on the response efforts carried out by other partners, international organizations, stakeholders, and the response as a whole (external reflection).

Strategic vs. Operational Feedback: Participants were encouraged to provide feedback on strategic-level decisions as well as operational execution, highlighting areas for improvement at both levels.

Throughout the workshop, the Chatham House Rule was applied to encourage candid and open discussions, ensuring that information shared could be used but without attributing it to specific individuals or organizations. The workshop also emphasized a constructive and solutions-oriented approach by avoiding unproductive discussions, finger-pointing, or assigning blame.

The focus remained on identifying practical solutions, learning from experiences, and ensuring a collaborative approach to strengthening Lebanon's health system for future emergencies. The names and affiliations of workshop participants can be found in Annex 6.

RESULTS

The following section provides highlights of the deliberations that took place during the round table discussions as well as during discussions of the cross-cutting areas. These may be recognized as the 'lessons learned' of the emergency response. Worth mentioning, discussions did not identify any activity or intervention that proved to be harmful, inefficient, or ineffective. As a result, the 'stop' sections were omitted. On the other hand, strengths identified during the sessions were highlighted for continuation and enhancement under 'continue', while gaps were recognized and emphasized in the sections denoted as 'start'.

The below presents the results of the roundtable discussions and deliberations on cross-cutting areas. To note, interventions were outlined and roughly ranked based on perceived priority and timeliness, starting with immediate life-saving measures, followed by critical operational and coordination activities, and concluding with systemic enhancements for future preparedness.

CASUALTY CARE

Several key issues and improvements were identified during the round table discussion. Inefficiencies in patient identification and blood shortages due to low donor rates were major concerns. Small-scale EMS did not align with MoPH guidelines, and the process for identifying fatalities was slow. Inconsistent data entry on the MoPH-PHEOC dashboard hindered patient tracking. In addition, the mental health of frontline workers required more robust support, and standardized rehabilitation care at the hospital level was emphasized.

Despite these shortcomings that required additional investment, improvements were noted in several areas, reflecting the effective and extensive preparations that were made. Field-based teams benefited from training, particularly for emergency and ICU hospital teams. The standardization of MCM plans and drills, alongside trauma and burn protocols, enhanced preparedness and response effectiveness. CCC emerged as a valuable asset, strengthening trust and coordination at both hospital and field levels. Other proceedings from the roundtable discussion are presented in Table 4.

TABLE 4. LESSONS LEARNED IN CASUALTY CARE

Continue	• Strengthen trauma centers across the country to ensure they are equipped and staffed to handle high volumes of trauma cases efficiently. Additionally, foster partnerships between EMTs and trauma centers to improve patient outcomes. • Provide advanced and practical training on trauma management to equip healthcare workers with the skills needed for rapid and efficient patient care. • Develop a comprehensive coordination action plan between PHCs and hospitals to define and strengthen the role of early rehabilitation in patient care pathways. • Finalize SOPs under MFM to standardize and improve operations.

RESULTS

	• Strengthen the referral pathways between healthcare facilities to improve patient flow and outcomes. • Maintain the efforts on standardizing all protocols and SOPs related to common conditions including trauma and burn management. • Strengthen collaboration with blood banks to ensure a reliable and timely supply of blood and respective materials. • Deliver specialized workshops and simulations on MCM protocols, emphasizing triage, patient flow, and resource management. • Enhance the documentation process for fatalities to support accountability and provide closure for families. • Enhance training programs to support early rehabilitation practices and improve patient recovery outcomes. • Finalize and harmonize MCM plans across all participating hospitals including unifying patient records and documentation processes to ensure consistency and quality. • Resume addressing other critical issues, such as cholera risk, mother and childcare, burn management, outbreak control, and other emerging public health challenges. • Strengthen training programs on mental health support, particularly in crisis intervention and managing stress among patients and frontline responders. • Finalize SOPs under CCC to enhance its functions and clarify its emergency response role.
Start	• Enhance the capacity of blood banks network to better support healthcare facilities during emergencies. • Develop an emergency stock list in coordination with the logistics team to ensure availability of essential supplies. • Facilitate capacity-building initiatives specifically designed for EMS. • Develop a unified framework to integrate all EMS teams across the country into the PHEOC action plan for enhanced coordination. • Develop clear and standardized SOPs to guide both the deployment of international EMT and their integration with local teams to enhance efficiency in coordination.

RESULTS

- Create protocols to define and regulate the roles of small-scale EMS teams to improve their integration into the national emergency response system and align their operation with MoPH guidelines to ensure consistency in their emergency response.
- Train healthcare workers on protocols for handling fatalities, including body recovery, identification, and respectful treatment of deceased individuals.
- Develop mechanisms for validating data specific to MCM and establish clear reporting indicators.
- Address inconsistencies in patient data entry by implementing standardized data collection and entry protocols.
- Establish a standardized ToR for hospital focal persons to ensure sustainability of the role and responsibilities. Additionally, train and assign multiple personnel to promptly fulfill responsibilities as needed during an emergency.
- Establish a system for continuous monitoring and evaluation of data management practices to ensure quality and reliability.
- Identify and integrate hospitals not currently part of the MCM framework, ensuring their inclusion in emergency preparedness strategies.
- Develop a structured schedule for regular MCM drills, incorporating both previously trained and newly included hospitals, while simulating various scenarios to test readiness and identify areas for improvement.
- Collaborate with the Accreditation Office at the MoPH to include MCM protocols and requirements within the national accreditation standards for hospitals.
- Work on piloting and updating ePHEM program in coordination with WHO.

CARE FOR THE INTERNALLY DISPLACED POPULATION

Several actions that may improve the response related to the care of IDPs were identified. The main points discussed included leveraging on the linkage between PHCs and shelters, developing preparedness plans, and utilizing geographical maps for effective coordination. The importance of addressing service gaps, conducting outreach community visits, and integrating mental health assessments was also emphasized. Additionally, the need for developing SOPs, recruiting skilled healthcare workers, and enhancing financial coverage for critical interventions was discussed. Moreover, improving patient identification and referral systems was highlighted. A crucial aspect of the response was the collaboration between MoPH and local and international partners for removing financial barriers to health care. This was achieved through the copayment mechanism for hospitalization, ensuring that essential health services remained both available and accessible to those most in need. A summary of the roundtable discussion is presented in Table 5.

RESULTS

TABLE 5. LESSONS LEARNED IN IDP CARE

Continue	• Establish and strengthen the linkage between PHCs and shelters, supported by a clear coordination mechanism. • Refine preparedness plans for primary healthcare in emergency settings. • Identify and address gaps in service provision to displaced populations during emergency responses. • Develop and implement emergency response plans for mental health to maintain continuity of services. • Integrate mental health assessments within PSUs to enhance comprehensive care. • Conduct outreach community visits by healthcare workers to ensure the continuous delivery of care. • Utilize DHIS2 for accurate data collection and effective monitoring of health trends. • Create and utilize geographical maps to coordinate and distribute PSUs and MMUs effectively across the country. • Facilitate the reporting of communicable diseases through the call center to ensure timely response. • Conduct training on community-based surveillance for healthcare workers, municipalities, shelters, and schools.
Start	• Recruit skilled nurses and physicians for PSUs and establish retention plans to reduce turnover. • Scale up services in the public sector by increasing human resources and bed capacity. • Develop SOPs for the PHC emergency response model to enhance efficiency. • Establish level 2 PHCs to manage cases requiring advanced care. • Enhance financial coverage for inpatient mental health services. • Expand healthcare coverage for vulnerable populations, including children. • Develop an emergency mental health plan using the minimum service package with clear indicators for reporting and monitoring. • Include mental health specialists in health teams at shelters to improve mental health care delivery.

RESULTS

	• Expand the patient identification system to ensure continuity of care. • Establish standardized procedures for patient referrals from the community to hospitals. • Develop a dashboard to monitor and ensure continuity of care and follow-up on provided services, particularly for the IDPs. • Increase the number of inpatient beds available for mental health services. • Build a national pool of mental health trainers and provide healthcare workers with basic psychosocial skills training. • Utilize local capacities to strengthen the PSU response and extend services to reach shelters effectively.
	• Increase financial coverage for critical interventions such as brain injuries, NICU care, and open-heart surgeries to minimize out-of-pocket expenses. • Standardize emergency care coverage and specialized diagnostic services in secondary care. • Strengthen MOPH subnational staff, including District Physicians and Public Health Officers, to improve local-level responses. • Decentralize laboratory services to improve accessibility and enhance efficiency.
	• Develop and implement policies and guidelines addressing the health impacts of chemical damage, with a focus on environmental health.

LOGISTICS

Discussions around logistics outlined several key actions to improve the distribution of medications and medical supplies and to manage donations effectively. Discussions emphasized the importance of strong leadership, ensuring the continuity of essential medical products, including vaccine supply chains as well as the rapid employment of warehouse staff. Effective management of warehouse stock and donations, proper storage, documentation, and tracking of medical supplies were highlighted. The roundtable discussion also stressed the need to develop clear procedures for donations management, addressing medication shortages, and expanding storage capacity. Additionally, it calls for the continuous utilization of dashboards, the development of a comprehensive logistics system, and the implementation of systematic follow-up mechanisms. Enhancing MoPH visibility, encouraging partners to allocate budgets, and increasing logistics human resources were also recommended. More details are provided in Table 6.

RESULTS

TABLE 6. LESSONS LEARNED IN LOGISTICS

Continue	• Operate under strong leadership. • Ensure the continuity of medication, supplies, and vaccine supply chains to prevent disruptions. • Rapidly employ new warehouse staff and prompt establishment of full operations while maintaining system integrity. • Manage current warehouse stock and donations effectively to optimize resource utilization. • Ensure proper storage, documentation, and tracking of medical supplies to maintain accountability.
Start	• Mitigate shortages of acute and chronic medications through improved forecasting and supply chain management and securing emergency stockpiles. • Expand storage capacity at the central warehouse. • Develop a comprehensive logistic system, supply chain mechanism, and detailed SOPs to enhance operations. • Manage large quantities of donations by prioritizing the receipt of medications with longer shelf lives to avoid nearing expiration dates. • Segregate kits based on modules and align donations with hospitals' specific needs to enhance efficiency and effectiveness. • Relaunch the medications and supplies dashboard with full commitment from partners to input their data, supported by SOPs for documentation. • Implement a robust, systematic follow-up mechanism between partners and the MoPH to eliminate reliance on individual-dependent processes. • Establish a framework to facilitate efficient transportation of donations from the airport to the warehouse. • Label all donations received to improve tracking and accountability. • Ensure that donor agencies provide the requested donation documents promptly to the MoPH logistics and operations management office, for proper processing. • Create SOPs to specify acceptable donations, considering emergency situations and prepackaged items. • Enhance MoPH visibility by showcasing efforts related to supported medications. • Encourage partners to define and allocate a minimum budget for the transfer of their deliverables. • Increase logistics human resources at the MoPH during non-emergency times to strengthen preparedness. • Prepare and maintain a list of surge team members for rapid deployment during emergencies.

RESULTS

CROSS CUTTING AREAS

Coordination

Discussions on coordination generated several key points for improving the health sector's emergency response. The main discussion points emphasized the leadership role of the MoPH in coordinating with other ministries and national authorities, maintaining continuous and clear communication channels among partners, and basing coordination on trusted information sources. The discussion also highlighted the need for advocating collectively with donors, ensuring accountability in resource allocation, and strengthening communication between the CCC, hospitals, and field operations. Furthermore, it called for conducting performance assessments of the health sector response, setting a framework for prioritizing proposals from NGOs, advocating for flexible funding, and establishing procedures for NGO coordination. Finally, participants recommended developing registries for individuals needing special services and improving coordination on funding proposals to avoid redundancies. More details are presented in Table 7.

TABLE 7. LESSONS LEARNED IN COORDINATION

Continue	• Enhance the leadership role of MoPH in coordinating the sector and partners and collaborate with other ministries and national authorities to ensure efficient and aligned operations. • Maintain continuous communication and coordination efforts among health sector partners including professional health orders and syndicates with PHEOC to enable rapid decision-making and resource mobilization for critical needs. • Strengthen and expand the communication between the CCC, hospitals, and field teams to better improve emergency operations. • Develop and share updates reports such as NHSWG Emergency Situation Reports, 3W-5W maps, and online dashboards for real-time information on health services, shelters, and responsible partners. • Base coordination among teams on shared trustful sources of information
	• Regularly update sector dashboards for improved access to healthcare services for IDPs, casualties, and other vulnerable populations. • Collectively advocate as implementing partners with donors based on the needs identified and announced by MoPH. • Conduct periodic and frequent coordination meetings on mental health services to align strategies and responses. • Ensure accountability in resource allocation, aligned with MoPH policies and strategies. • Maintain agility among agencies and organizations through reprograming their resources for emergency response.

RESULTS

Start	• Collaborate with relevant authorities and organizations to ensure effective communication and resource allocation during fatality management operations. • Improve coordination on funding proposals based on assessed needs while avoiding redundancies. • Enhance the prioritization process of proposals submitted by the increasing number of NGOs responding to emergencies. • Conduct performance assessments and monitoring activities of the health sector response as a whole. • Establish pre-defined procedures for NGO coordination platforms, with flexibility to adapt to crises and hold organizations accountable. • Develop registries for individuals requiring special services to ensure comprehensive care provision. • Advocate for flexible funding to adapt to varying emergency contexts.

Digitalization

As per the discussions, digitalization played a crucial role in the health response during emergencies and enhanced the inclusion of vulnerable communities, especially IDPs. Digitalization facilitated access to primary healthcare services by interconnecting and linking IDPs shelters with PHCs. Digital solutions also contributed to the equitable distribution of medications and supplies. The flexibility of digital solutions allowed for enhanced service provision and an effective integrated surveillance system for early detection and intervention in case of outbreaks, improving surveillance processes and data reporting. Additionally, digitalization proved essential for coordination and communication among partners, stakeholders, and involved parties, enabling immediate sharing of information and informed decision-making.

The first lesson learned is that digitalization requires three factors for success to have the expected impact: availability of resources including skilled IT staff, understanding of the Lebanese context, and system adaptability for rapid and swift interventions. Participants consensually recommended leveraging digitalization for data collection, monitoring, and decision-making; utilizing digital tools for timely information sharing; and enhancing offline systems to ensure functionality during internet interruptions. Additional lessons learned are presented in Table 8.

RESULTS

TABLE 8. LESSONS LEARNED IN DIGITALIZATION

Continue	• Build on digitalization efforts to enable rapid and timely responses during crises. • Develop and implement an Emergency Module integrated with PHENICS and other software to cover emergency services. • Digitize the drug distribution system for catastrophic medications across MoPH central and district pharmacies, hospitals, and community pharmacies, facilitated through the AMAN patient portal. • Ensure continuity of IT operations by relocating MoPH IT functionalities rapidly to secure locations. • Expand the use of unique patient identifier system to enable anonymous tracing and improve record management. • Leverage digitalization for data collection, monitoring, and decision-making through custom dashboards and reports. • Utilize digital tools to enable timely sharing of information, stock management, replenishment, and data analysis during crises. • Upgrade offline platforms, such as MERA platform, to assist healthcare workers in areas with limited connectivity, to address health and medical needs of IDPs effectively, including the rapid deployment of vaccination campaigns. • Collect and analyze large datasets for chronic disease patients to guide interventions. • Integrate donations into the LMS for enhanced tracking and accountability. • Strengthen support mechanisms provided by organizations such as INGOs and NGOs, while maintaining alignment with MoPH plans.
Start	• Ensure digital integration between entities like Disaster Risk Management Office, shelters, and field systems for enhanced collaboration. • Develop multi-level data summaries at the health facility and central levels, to allow operational decisions as well as strategic planning. • Centralize large assessments and summaries to ensure information is accessible and actionable when needed. • Enhance and expand offline systems to ensure functionality during internet interruptions. • Establish a digital solution to monitor received donations, customized for MoPH needs. • Recruit additional staff to support operations and reduce workload on individual employees. • Develop data access and data sharing policies during emergencies to support operations and address challenges. • Enhance data privacy protocols to protect information among stakeholders and partners. • Work on automating data management processes to improve accuracy, reduce human error, and enhance data accessibility.

RESULTS

Communication

The discussions around communication highlighted the importance of serving as the primary source of credible and transparent information during crises, releasing regular comprehensive reports, and maintaining effective communication with the public through diverse channels. It also emphasized the need to maintain strong media relationships and foster effective teamwork to strengthen crisis communication efforts.

Additionally, the discussion called for enhancing MoPH communication channels, developing clear protocols for emergency communication, and maintaining a set of ready-to-use awareness messages and materials for future crises. Further details are presented in Table 9.

TABLE 9. LESSONS LEARNED IN COMMUNICATION

Continue	• Serve as the primary source of credible and reliable information during crises. • Release regular, comprehensive reports on martyrs and casualties, available services, aid distribution, damage and losses incurred, and other data categories to maintain transparency and keep targeted populations well informed. • Communicate effectively with the public using diverse channels. • Maintain strong and collaborative relationships with the media. • Build effective and successful teamwork dynamics among key stakeholders to strengthen crisis communication efforts. • Expand the 'National Lifeline' section of the call center for mental health to handle large call volumes effectively. • Utilize the designated call centers as key components of crisis response to ensure strong coordination, communication, and timely referrals across services.
Start	• Enhance MoPH communication channels to ensure broad and timely outreach. • Develop clear protocols for emergency communication to ensure timely information sharing and decision-making during critical situations. • Develop and maintain a set of ready-to-use awareness messages and materials for dissemination during future crises.

DISCUSSION

Lebanon's unique context as a country frequently impacted by emergencies, whether due to geopolitical tensions, natural disasters, or public health crises, necessitates considerable investment in emergency preparedness. The devastation brought about by recent conflicts has placed unprecedented pressure on the health system, highlighting the critical need for preparedness strategies that are both comprehensive and adaptable.

Crises reveal the strength of systems, the resilience of individuals, and the importance of preparedness. Lebanon's health sector, tested to its limits during this recent emergency, demonstrated that readiness, coordination, and a commitment to continuous improvement are not only essential but life-saving. At the heart of this response was a profound lesson: 'Fortune favors the prepared'. The groundwork laid in previous crises, particularly the cholera outbreak of 2022, proved instrumental in shaping the response to this latest challenge. Each crisis offers a unique opportunity to learn, adapt, and prepare for the future, a principle that underscores the importance of this lessons-learned exercise.

Lessons Learned in Casualty Care

The ability to anticipate and prepare for emergencies was a cornerstone of the health sector's response. The proactive measures taken in the months leading up to the crisis, including the establishment of the PHEOC, the development of MCM plans, and the capacity-building efforts for health workers and health facilities, proved beneficial. The response effectiveness was amplified by partnerships with EMTs and pre-crisis capacity-building efforts. Regular MCM drills were essential in testing readiness and identifying areas for improvement. Preparedness extended beyond infrastructure and training, it also required the right mindset. By embedding a culture of readiness, the MoPH and its partners were able to create a system that could adapt to rapidly evolving challenges.

Accurate, real-time data is critical for managing MCIs. However, the response highlighted inconsistencies in data collection and entry that hindered effective decision-making. Addressing these inconsistencies requires standardized data collection protocols and efficient mechanisms for validating MCM data. Hospitals must adopt clear reporting indicators and use centralized systems for monitoring and evaluation. Piloting and updating systems like the ePHEM, in collaboration with the WHO, can further enhance data integration and streamline casualty care management.

The crisis reinforced the value of investing in continuous training and the importance of learning from each experience to strengthen the system. Providing advanced and practical training on trauma management was instrumental for equipping healthcare workers to respond effectively. Workshops and simulations focusing on MCM protocols, triage, and resource management enhanced readiness. Training healthcare workers on protocols for body recovery, identification, and respectful treatment ensured accountability and dignity, which are essential for public trust.

While the response showcased many strengths, significant gaps require attention to ensure resilience in future crises. Future efforts must focus on equipping and staffing centers to handle larger volumes of severe trauma cases. Additionally, reliable access to blood supplies was also indispensable during the crisis. Strengthening blood bank networks to ensure timely replenishment emerged as a key priority, with enhanced coordination between blood banks and healthcare facilities remaining vital. Moreover, initiatives designed specifically for EMS, including targeted training and resource allocation, will ensure that frontline responders are prepared for diverse emergencies. Hospitals not currently part of the MCM framework must be identified and integrated into emergency preparedness strategies. This inclusion will enhance the health system's overall capacity. Establishing standardized ToRs for hospital focal persons will ensure the sustainability of critical roles while training multiple personnel for these positions will reduce dependency on individuals and improve crisis management.

DISCUSSION

Lessons Learned in the Care of Displaced Populations

Preparedness played an essential role in enabling the health sector to respond to the needs of displaced populations. Strengthening the connection between PHCs and shelters was instrumental in ensuring continuous access to care for displaced individuals. Primary healthcare preparedness plans tailored to emergency settings were effective though requiring further refinement to address the dynamic needs of displaced populations. Additionally, utilizing geographical maps to coordinate the distribution of PSUs and MMUs improved equitable access to services, and this approach should be standardized for all emergencies. Moreover, leveraging local resources to strengthen PSU responses was effective, but greater focus is needed on training and mobilizing local healthcare workers to extend services efficiently.

It is well known that crisis and displacement often exacerbate psychological and mental health issues, making mental health support a critical component of emergency care. The crisis underscored the urgent need to integrate mental health services into the care of displaced populations and highlighted the importance of positioning mental health as an integral part of any health response, particularly at times of prolonged uncertainty and stress.

Data collection and monitoring systems were instrumental in managing care for displaced populations, but gaps in accuracy and utilization were evident. The DHIS2 platform enabled accurate data collection and monitoring of health trends among displaced populations. Continued investment in this platform will enhance real-time decision-making and resource allocation. Developing dashboards to monitor and follow up on care provided to displaced populations safeguarded transparency, accountability, and service continuity. Expanding patient identification systems will ensure continuity of care, minimize duplication of services, and support better monitoring of patient outcomes.

While the response demonstrated resilience, several gaps in capacity and coverage must be addressed to strengthen care for displaced populations in future crises. Standardized procedures for patient referrals from shelters and communities to hospitals were lacking in some areas. Developing these processes will ensure timely access to advanced care and reduce delays. Additionally, recruiting skilled nurses and physicians for PSUs and establishing retention plans is critical for maintaining a stable and effective workforce during emergencies. Additionally, enhancing financial coverage for inpatient services and critical interventions, such as brain injuries, NICU care, mental health care, and open-heart surgeries, will reduce out-of-pocket expenses for vulnerable populations. Moreover, scaling up services in the public sector by increasing human resources and bed capacity is essential to meet the growing demands of displaced populations. Addressing these gaps requires both immediate action and long-term investments in health infrastructure and workforce development.

DISCUSSION

Lessons Learned in Logistics

The crisis demonstrated that a sound logistics plan is fundamental to an effective emergency response. The ability to maintain uninterrupted supply chains for medications, vaccines, and supplies was a noteworthy achievement.

While donations were vital, challenges arose in managing large quantities of supplies, particularly items with short shelf lives. SOPs for acceptable donations and prioritizing items with longer usability were noted as critical improvements. The use of digital tools, including dashboards, improved tracking and allocation of supplies. However, their full potential was hindered by inconsistent partner engagement and incomplete data entries. Enhancing the use of digital tools, along with strong partner commitment and standardized documentation processes, shall further enhance transparency and resource management. Moreover, proper documentation of inventory, including labeling donations and tracking their use, ensured accountability and minimized waste. Expanding this practice across all operations shall enhance overall efficiency.

Limited storage capacity at central warehouses constrained operations. Expanding these facilities is essential to handle larger volumes of supplies during crises. On the other hand, chronic medication shortages during the crisis highlighted the need for improved forecasting and better supply chain management. Rapid recruitment of warehouse staff was a strength, but the need to expand storage capacity and enhance inventory systems remains critical. Developing a comprehensive logistics framework with detailed SOPs for all operations will ensure consistency and efficiency during future crises. Focusing on these areas will create a more effective logistics system capable of responding to complex emergencies with greater agility and precision.

Uniting the Sector

The leadership provided by the MoPH was instrumental in uniting stakeholders, fostering trust, and ensuring strategic and operational alignment in all response activities and interventions. A crucial lesson from this crisis was the unparalleled importance of coordination, digitalization, and communication. Effectively bringing together a diverse range of stakeholders including public and private healthcare providers, EMS teams, local and international partners, donors, professional orders, and civil society organizations was essential in delivering a unified and impactful response. Through effective coordination, advanced digital tools, and clear communication channels, efforts were aligned, resources were shared, and critical gaps were identified and addressed. The Ministry's leadership in driving these efforts not only demonstrated its commitment to responsibility but also highlighted the role of public institutions as unifying forces during national crises. This integrated approach, rooted in transparency, trust, and innovation, serves as a prototype for future responses, highlighting how collaboration, empowered by digitalization and effective communication, amplifies the impact of collective actions.

DISCUSSION

Alignment with Strategic Initiatives

Following this in-depth review of the response, the insights gained from this exercise align well with key concepts emphasized in the NHS: Vision 2030, particularly in the areas of leadership, collaborative governance, capacity building, health services delivery, digitalization, sound communication, effective surveillance, and inter-sectoral coordination, all of which may converge to serve the ultimate purpose of optimal emergency preparedness and response.

The essence of Universal Health Coverage, including financial protection was also at the core of the response, ensuring that vulnerable populations, including IDPs, can access quality healthcare without financial barriers. Additionally, the measures identified during the crisis, such as expanding healthcare infrastructure, enhancing service delivery, and integrating financial safeguards, reflect Lebanon's broader commitment to achieving Health for All. These efforts aim to establish a health system where all individuals, irrespective of socio-economic status or geographical location, have access to essential healthcare services. This workshop highlighted the need to strengthen the health system's foundations, ensuring that even in emergencies, healthcare services remain accessible, equitable, and of high quality. By addressing gaps, building on strengths, and adopting a culture of continuous improvement, Lebanon is progressing towards an inclusive health system that safeguards the health and well-being of its population in both stable and crisis situations.

Additionally, as Lebanon takes foundational steps toward establishing a NPHI and invests in critical public health initiatives, such as the Pandemic Fund for enhancing pandemic preparedness, the reactivation of the Central Public Health Laboratory, and the establishment of a health data hub, the insights from this workshop are timely and strategic. These proceedings shall complement and align with ongoing efforts, providing a valuable framework for shaping future public health interventions aimed at strengthening health security and system resilience.

THE WAY FORWARD

This exercise is not just a reflection on the past but a commitment to the future, showcasing Lebanon's determination to build a health system that is more resilient, prepared, and responsive. The proceedings of this workshop emphasize that preparedness is not merely about responding to crises but involves a continuous cycle of planning, execution, evaluation, and adaptation. This critical step of self-reflection and lessons generation constitutes the evaluation phase that undoubtedly needs to be followed by clear changes, both at strategic and operational levels.

Moving forward, it is essential to collectively work to incorporate the recommendations into decisions, strategies, programs, plans, daily practices, and mindsets. It is equally important to institutionalize the lessons learned through a clear legal framework coupled with a sound monitoring and evaluation system that can continuously document best practices and integrate lessons learned from previous, and potentially (God forbid) future crises. It is crucial to embrace the opportunity for continuous learning and adaptation.

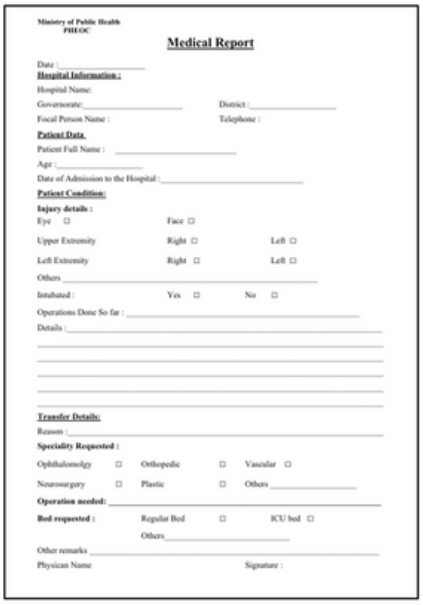
As Lebanon continues to face ongoing challenges, the proceedings of this review will be integral in building a more resilient and prepared health system. The lessons derived from this workshop shall inform stronger policies, better coordination mechanisms, and more durable frameworks for the years to come.

ANNEXES

Annex 1. Training Modules on Emergency Response

Module	Title	Hospitals / Organisation	# of participants
Module 1	Emergency Preparedness and Response	125	3092
Module 2	Mass Casualty Management	118	571
	MCM Activation Drill (1st Round)	112	
	MCM Activation Drill (2nd round)	7	
Module 3	Mental Health - Nurses	108	1725
	Management of Adult Psychiatric & Neurological Emergencies at ER - Physicians	58	160
	Breaking bad News	2	37
Module 4	Forensic	7	20
Module 5	Obstetric Emergency	10	191
Module 6	Surgical Skills in Conflict Situations (over 3 days)	5	20
Module 7	Damage Controlled	3	44
Module 8	Emergency and Critical Care in Conflict Situation (over 3 days) - Physicians	7	22

Annex 2. Medical Report Template



Ministry of Public Health
PHEOC

Medical Report

Date :

Hospital Information :

Hospital Name:

Governorate: District :

Focal Person Name : Telephone :

Patient Data

Patient Full Name :

Age :

Date of Admission to the Hospital :

Patient Condition:

Injury details :

Eye ☐ Face ☐

Upper Extremity Right ☐ Left ☐

Left Extremity Right ☐ Left ☐

Others

Intubated : Yes ☐ No ☐

Operations Done So far :

Details :

Transfer Details:

Reason :

Speciality Requested :

Ophthalomolgy ☐ Orthopedic ☐ Vascular ☐

Neurosurgery ☐ Plastic ☐ Others

Operation needed:

Bed requested : Regular Bed ☐ ICU bed ☐

Others

Other remarks

Physican Name Signature :

Annex 3. Causalities Reporting spreadsheet Template

الجمهورية اللبنانية
وزارة الصحة العامة

مركز عمليات طوارئ الصحة العامة (PHEOC)

نموذج حدث

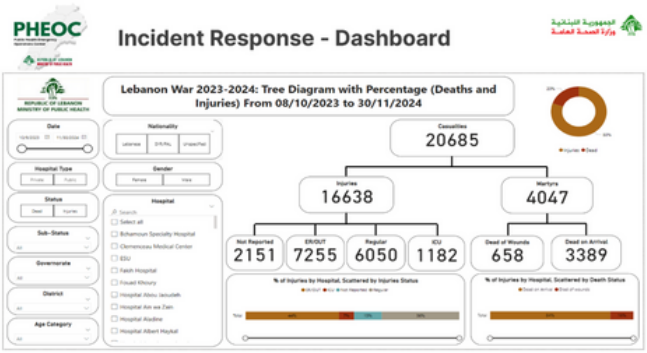
إسم المستشفى

الحدث :

التاريخ :

#	الاسم الثلاثي	الجنس	الجنسية	العمر	حالة المريض (طوارئ، دخول عادي، عناية فائقة ، شهيد)
1					
2					
3					
4					
5					

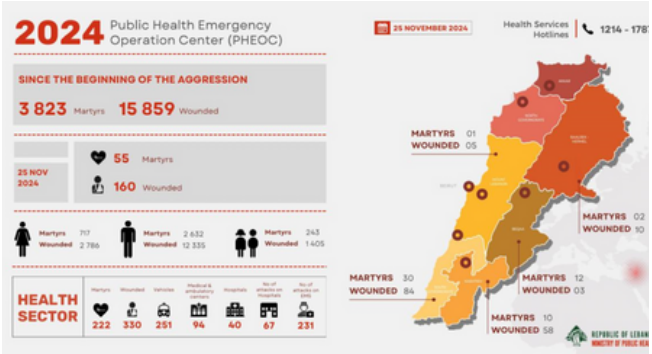
Annex 4. Tree diagram sheet – power bi dashboard



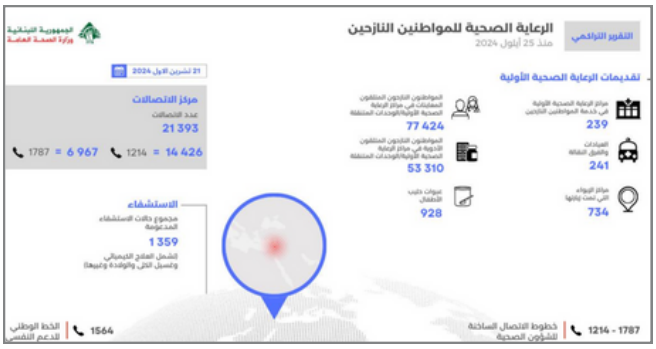
ANNEXES

Annex 5: Sample of Communication Material

Casualties and Martyrs



IDP Health Services



Annex 6. Workshop participants

Participants in Roundtable Discussions

Roundtable Title	Moderator	Technical Documentation	Participants and Affiliations
Casualty Care	Wahida Ghalayini	Marise Abboud	H.E. Dr. Firass Abiad (MoPH), Rawan Chehadeh (PHEOC), Mohammad Raad (PHEOC), Mohammad Ramadan (PHEOC), George Ghafari (LRC), Ali Hinnawi (AlRisala), Majid Nehmeh (IHS), Wissam Kobeissi (Civil Defense), Mohammad Hamadeh (Tebnin Hospital Director), Kamel Mroueh (Jabal Amel Hospital), Bassem Mteirek (Jabal Amel Hospital), Md Shajib Hossain (WHO-Health Sector), Myriam Sassine (WHO), Ghada Abou Mrad (WHO), Hedinn Halldorsson (WHO), Hilda Harb (M0PH), Mona Haddad (MoPH), Abbas Jouny (MoPH)
IDP Care	Nadeen Hilal	Tala Rammal	H.E. Dr. Firass Abiad (MoPH), Bassem Ghanem (MoPH), Norma Rizk (MoPH), Lynn Siblini (MoPH), Edwina Zoghbi (WHO), Solara Sinno (WHO), Faten Moustafa (MoPH), Nada Ghosn (MoPH), Betty Taslakian (MoPH), Rasha Askar (PUI), Nada Awada (IMC), Jalal Haydar (MoPH), Ali Roumani (MoPH), Bhrigu Kapuria (UNICEF), Rouba Khatib (AFD), Katia Cheaito (WB), Jinane Abi Ramia (MoPH)
Logistics	Hicham Fawaz	Zeina Nasreddine	H.E. Dr. Firass Abiad (MoPH), Ghada Joubrane (MoPH), Mahmoud Sabra (WHO), Dima Chams (MoPH), Aya Harkous (MoPH), Joseph Zgheib (IOM), Prince Agarwal (Rep from India Emb.), Maher El Tawil (Amel), Farah Asfahani (WB), Diana Kirkorian (ICRC), Michael Zanardi (UNICEF)

Participants Cross Cutting Areas Discussion

Cross Cutting Area	Presenter	Participants
Coordination	Md Shajib Hussein	H.E. Dr. Firass Abiad (MoPH), Rawan Chehadeh (PHEOC), Mohammad Raad (PHEOC), Mohammad Ramadan (PHEOC), George Ghafari (LRC), Ali Hinnawi (AlRisala), Majid Nehmeh (IHS), Wissam Kobeissi (Civil Defense), Mohammad Hamadeh (Tebnin Hospital Director), Kamel Mroueh (Jabal Amel Hospital), Bassem Mteirek (Jabal Amel Hospital), Md Shajib Hossain (WHO-Health Sector), Myriam Sassine (WHO), Ghada Abou Mrad (WHO), Hedinn Halldorsson (WHO), Hilda Harb (M0PH), Mona Haddad (MoPH), Abbas Jouny (MoPH), Bassem Ghanem (MoPH), Norma Rizk (MoPH), Lynn Siblini (MoPH), Edwina Zoghbi (WHO), Solara Sinno (WHO), Faten Moustafa (MoPH), Nada Ghosn (MoPH), Betty Taslakian (MoPH), Rasha Askar (PUI), Nada Awada (IMC), Jalal Haydar (MoPH), Ali Roumani (MoPH), Bhrigu Kapuria (UNICEF), Rouba Khatib (AFD), Katia Cheaito
Digitalization	Ali Roumani	
Communication	Ghada Joubrane	
		(WB), Jinane Abi Ramia (MoPH), Ghada Joubrane (MoPH), Mahmoud Sabra (WHO), Dima Chams (MoPH), Aya Harkous (MoPH), Joseph Zgheib (IOM), Prince Agarwal (Rep from India Emb.), Maher El Tawil (Amel), Farah Asfahani (WB), Diana Kirkorian (ICRC), Michael Zanardi (UNICEF)