
EVALUATION OF

MSF MATERNAL HEALTH PROJECT
IN KHOST, AFGHANISTAN
(2016 – 2024)

SUMMARY REPORT

MARCH 2025

This publication was produced at the request of Médecins Sans Frontières (MSF) – Operational Centre Brussels (OCB) under the management of the Stockholm Evaluation Unit (SEU).

All evaluators contracted by the SEU are subject to the SEU Ethical Guidelines for Evaluations.

The evaluation was conducted independently by the Knowledge House.

This report is a summarized version of the full evaluation report and was developed by the SEU.

DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of Médecins sans Frontières and the Stockholm Evaluation Unit.

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INTRODUCTION

This summary report presents the findings of the evaluation of the Khost Maternal Health Project, implemented by Médecins Sans Frontières (MSF), Operational Centre of Brussels. The full evaluation report is accessible both on the [OCB intranet](#) (internal/all MSF) and on the MSF [Evaluation website](#), and remains the document of reference.

The Khost Maternal Health Project is a critical intervention in Khost, Afghanistan, aiming to reduce maternal and neonatal mortality by providing Comprehensive Emergency Obstetric and Neonatal Care (CEmONC). This evaluation was conducted by The Knowledge House (TKH) from June to December 2024, deploying a ten-member team including six field researchers. It was carried out in strong collaboration with the MSF Stockholm Evaluation Unit (SEU) and the Consultation Group (CG) and examines the project's relevance, effectiveness, impact, sustainability and resilience, offering evidence-based recommendations for future improvements. Afghanistan's challenging healthcare landscape and Khost's growing population underscore the urgency of improving maternal health services in the province.

BACKGROUND

AFGHANISTAN'S HEALTH SECTOR

Afghanistan's population is estimated at 34.26 million, with 71% residing in rural areas, 24% in urban settings, and 5% as nomads¹. Due to the absence of a comprehensive census or national vital registration system, these estimates rely on the 1979 census and the 2003–2005 household listing. The lack of accurate data and ongoing population movements pose significant challenges for health and development planning, particularly for resource allocation mechanisms like the Basic Package of Health Services (BPHS) which applies cost-per-capita budget allocation.

Afghanistan's health infrastructure has historically been inadequate, with limited urban-centered facilities. In 1965, the country had only 19 primary health centres and 60 hospitals serving a population of 12.5 million. The prolonged conflict since 1978 has further exacerbated the situation, placing Afghanistan among the worst in global health indicators. In 2002, life expectancy was 55 years, maternal mortality stood at 1,600 per 100,000 live births, and under-five mortality was 172 per 1,000 live births. Malnutrition was also prevalent, with 8.7% of children acutely malnourished and 60.5% stunted.

Since 2002, the health sector has improved, with the introduction of BPHS and the Essential Package for Hospital Services (EPHS), expanding healthcare access from 8.5% to over 60%². Life expectancy increased to 64 years³, and maternal and child mortality declined². Infant mortality decreased from 115 per 1,000 live births in 2003 to 46 in 2023, and under-five mortality dropped from 172 to 55. However, Afghanistan still faces one of the highest maternal mortality rates, with an estimated 661

¹ National Statistics and Information Authority (2023). *Afghanistan Population Estimates for the Year 1401 (2022 – 2023)*: NSIA, Kabul.

² Afghanistan Health Survey 2018: Ministry of Public Health (MoPH) (2019). *Afghanistan Health Survey 2018*. [online] Kabul: NSIA and KIT Royal Tropical Institute. Available at: <https://www.kit.nl/wp-content/uploads/2019/07/AHS-2018-report-FINAL-15-4-2019.pdf> [Accessed 26 May 2024].

³ WHO. (n.d.). *Afghanistan data* | World Health Organization. [online] Available at: <https://data.who.int/countries/004>.

per 100,000 live births in 2020⁴. Many BEmONC facilities lack adequate staffing, equipment, and medical supplies to perform related services.

Afghanistan faces an additional burden of disease alongside maternal and child health issues, with a high incidence of non-communicable diseases (NCD), injuries and ischemic heart diseases for which the BPHS and EPHS packages have not been updated.

KHOST PROVINCE

Khost province, located in southeastern Afghanistan, has a complex demographic structure, with six major Pashtun tribes and deep-rooted traditional customs. Official population estimates range from 659,102 (National Statistics and Information Authority, 2023) to 1.5 million (Essential Programme on Immunisation). The province has also received significant influx of Pakistani nationals from North Waziristan, impacting local demographics, yet this has not been accounted for by the NSIA. The forced return of over 733,000 Afghans from Pakistan between October 2023 and October 2024 further complicates the population estimates.

Despite challenges, Khost has made significant progress in improving maternal and neonatal health. Home births declined from 81.6% in 2003⁵ to 15.9% in 2022-23⁶, and deliveries assisted by unskilled attendants dropped to 29.7%⁷, lower than national and rural averages. Neonatal mortality reduced from 24 per 1,000 live births in 2015⁶ to 19 in 2022-23⁷. However, the rate of Caesarean sections remains lower than national averages⁸.

KHOST MATERNAL HEALTH PROJECT

Initiated in 2011, Khost Maternal Health Project stands as one of MSF's largest maternal health improvement initiatives globally. The project aims to reduce neonatal and maternal mortality in Khost province by providing Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) services at the MSF-operated Khost Maternity Hospital (KMH). The primary target group includes women of childbearing age in Khost province experiencing pregnancy-related complications, ensuring they receive the critical care they need.

The Khost Maternity Hospital (KMH) is one of three CEmONC centres in the province. Key services included a 60-bed maternity unit, a 32-bed neonatal unit, ICU care for critical obstetrical cases, and 24/7 availability of obstetrical surgeries and BTL services. It also established a referral system and intervenes with community awareness activities on sexual and reproductive health to ensure timely care for at-risk pregnancies.

In 2016, the KMH project extended its support to Khost Provincial Hospital, Nadirshah Kot CHC+, and Gurbaz CHC. In 2017 it further included Lakan, Khulbesat/Sabari, and Ali Sher CHCs, and in 2021, Jaji

⁴ WHO. (n.d.). *Afghanistan data* | World Health Organization. [online] Available at: <https://data.who.int/countries/004>.

⁵ UNICEF (n.d.). *Afghanistan - Progress of Provinces (Multiple Indicator Cluster Survey 2003)*. [online] www.unicef.org. UNICEF. Available at: https://mics-surveys-prod.s3.amazonaws.com/MICS2/South%20Asia/Afghanistan/2003/Final/Afghanistan_English.pdf [Accessed 26 May 2024].

⁶ U.S. Agency for International Development. (2016). *Afghanistan Demographic and Health Survey 2015 - Key Indicators Report | Document / Afghanistan*. [online] Available at: <https://www.usaid.gov/afghanistan/document/afghanistan-demographic-and-health-survey-2015-key-indicators-report> [Accessed 27 May 2024].

⁷ UNICEF (2023). *Afghanistan Multiple Indicator Cluster Survey (MICS), 2022-2023 | UNICEF Afghanistan*. [online] Available at: <https://www.unicef.org/afghanistan/reports/afghanistan-multiple-indicator-cluster-survey-mics-2022-2023>.

⁸ Ebd.

Maidan and Daragai/Tani CHCs, along with Zorkot/Musa Khel CHC+. This support included (i) salary funding for additional midwives, (ii) supplying medical consumables, and (iii) offering training to allow women without obstetric complications to give birth closer to their homes. Additionally, (iv) MSF donates medicines and supplies to Khost Provincial Hospital. MSF also rehabilitated the Terezai (Ali Sher), Jaji Maidan, Zarkot (Musa Khel), and Mandozai CHCs, along with extending the maternity ward at Khost Provincial Hospital.

EVALUATION DESIGN

EVALUATION OBJECTIVES

The primary objectives of this evaluation were to document key successes, derive lessons learned, and offer practical recommendations to support informed institutional decision-making. The evaluation provides a comprehensive assessment of the implementation of the Khost Maternal Health project from 2016 to 2024, focusing on its performance across key evaluation criteria. In addition, the evaluation sought to identify factors contributing to the dependency on KMH for maternal healthcare. The following questions were approached:

Evaluation Criteria	Key Questions
Relevance	How relevant is the project when considering the needs and expressed needs of the population and the principles and priorities of the organisation?
Appropriateness	Given the context and the project objective of promoting resiliency of the health system and actively engaging communities, how appropriate is the approach taken by MSF to reducing morbidity and mortality for women with pregnancy-related complications?
Coherence	Is MSF's intervention coherent and compatible with maternal health policies and other interventions in Khost?
Effectiveness	How can the project become more effective in achieving its objectives and promoting resilience and sustainability of local health systems?
Impact	What has been the positive impact of MSF's maternal health intervention in Khost, and how can it improve its potential for impact? Have there been unintended or negative consequences of MSF's intervention, and how can MSF improve mitigation?
Efficiency	How can MSF improve the efficiency of the resources being used in the project?
Sustainability	How can MSF improve the sustainability of its intervention by ensuring net benefits are preserved in the long term?

















EVALUATION METHODOLOGY

TKH employed a mixed-method (qualitative and quantitative) design exploring demand side and supply side perspectives to achieve the evaluation objectives. The methodology included conducting a detailed review of relevant literature and project documents, analysing secondary data, and collecting primary qualitative and quantitative data.

Evaluation Conceptual Framework

SUPPLY SIDE (KMH, KPH, & 8 CHCS/CHC+ AT THE DISTRICT LEVEL)		DEMAND SIDE (COMMUNITY AND PATIENTS/CLIENTS)
<p>Capacity for Service Provision:</p> <ul style="list-style-type: none"> ▪ Equipment functionality ▪ Drug availability ▪ Staffing guidelines ▪ Provider knowledge ▪ Staff training ▪ Clinical guidelines ▪ Infrastructure ▪ Patient record <p>Provision of B/C EmONC Services:</p> <ul style="list-style-type: none"> ▪ Patient-Provider Care Index ▪ Infection prevention ▪ Average B/C EmONC services ▪ Delivery care 	<p>How can the Khost Maternal Health Project enhance its effectiveness in reducing morbidity and mortality among women with pregnancy-related complications, while promoting the resilience and sustainability of local health systems and ensuring long-term benefits with reduced reliance on MSF's presence?</p>	<p>Patients/Clients Perception:</p> <ul style="list-style-type: none"> ▪ Patient perceptions of Quality ▪ Overall Patient Satisfaction <p>Community Engagement:</p> <ul style="list-style-type: none"> ▪ Awareness of maternal healthcare services. ▪ Engagement of health Shuras. ▪ Healthcare (maternal health) seeking behaviour.

The following methodological samples were applied:

Method	Sample size	Participants
 Exit Survey Interviews	 180	Beneficiaries in all included health facilities.
 Key Informant Interviews (KIIs)	 12	6 female & 6 male major stakeholders.
 Focus Group Discussions (FGDs)	 8	6 female FGDs (42 participants), 2 male FGDs (17 participants).
 In-Depth Interviews (IDIs)	 29	8 female & 21 male community elders, Shura members, CHWs.
 Health Worker Interviews	 24	7 Doctors, 14 Midwives, 3 Obstetrics Specialists (all female).
 Health Facility Assessments	 9 Facilities	MSF-supported CHCs/CHC+, KPH, KMH.
 Secondary Data Analysis	 Multiple	Routine medical data from KMH, KPH, CHCs.
 Review of External & Internal Documents	 Various	External publications & internal documents.

KEY FINDINGS

RELEVANCE

The Khost Maternal Health Project addressed critical gaps in maternal and neonatal health services in Khost province, aligning with both community needs and global healthcare standards. On the demand side, the evaluation explored community preferences and priorities regarding maternal and neonatal care, revealing a strong preference for institutional deliveries over home births. Findings indicated a significant increase in facility-based childbirths over the years, with 83.5% of deliveries occurring in health facilities in 2023, compared to just 18.4% in 2003. This shift was attributed to growing awareness of the benefits of institutional deliveries and the availability of free services at health centers. However, several barriers to accessing facility-based deliveries were identified, including economic constraints, lack of transportation, adverse weather conditions, and cultural and domestic issues. Some families, particularly in conservative areas, were unable to take pregnant women to health facilities due to social norms that limited women's mobility.

From the supply side, Khost province has 55 health facilities providing childbirth services, but only a small proportion offer comprehensive emergency obstetric and neonatal care (CEmONC) services. Of these facilities, only KMH and KPH were designated as CEmONC centres, with KMH being the only fully functional facility capable of handling complicated pregnancies. The facility assessment revealed KPH lacked the necessary staffing, equipment, and supplies to provide comprehensive care for high-risk obstetric cases. This gap in services underscored the relevance of KMH in providing life-saving maternal and neonatal healthcare. The evaluation further highlighted the crucial role of MSF's support to 6 CHCs and 2 CHC+ in delivering basic emergency obstetric and neonatal care (BEmONC) services, ensuring that essential initial care and stabilization could be provided at the community level before referring complicated cases to higher-level facilities.

The evaluation further assessed the readiness of KMH and MSF-supported facilities in terms of medical equipment, essential medicines, and service delivery. While KMH, Nadershakot CHC+, and Gurbaz CHC were found to be well-equipped, other facilities faced significant shortages of essential medical supplies. Key gaps included the absence of sterile towels for newborns, 16- and 18-gauge needles needed for administering critical medications, hand scrubbing brushes for infection control, and neonatal resuscitation trolleys, among other items. These shortages limited the ability of certain facilities to provide high-quality maternal and neonatal care. Similarly, gaps in the availability of essential medicines, such as anti-tetanus serum, Ringer lactate, glucose solutions, and uterotonics like ergometrine, posed significant challenges, particularly in facilities like KPH and several CHCs.

Community members expressed satisfaction with improvements in service availability and quality at MSF-supported health centres. Despite the progress made, the province's maternal health infrastructure remained uneven, with many facilities unable to fully meet minimum service delivery standards due to equipment and staffing gaps.

APPROPRIATENESS

KMH's services was appropriate considering its role as a fully operational CEmONC centre, successfully delivering maternal and neonatal care while adhering to local cultural norms and maintaining high standards of care. However, the project identified areas for improvement in postpartum care, as

discharged mothers were not consistently tracked or connected to follow-up services, and there was a need for enhanced breastfeeding counselling and post-discharge support, especially for low-birthweight infants. While KMH's care was culturally sensitive and of high-quality, the lack of a system for tracking mothers post-discharge was a gap in its appropriateness.

MSF's support to CHCs and KPH also aimed to improve service availability at the community level, but it revealed challenges in the appropriateness to deliver this care. The addition of staff at CHCs improved access to services, but issues like inadequate medical supplies and healthcare worker behaviour undermined the quality of care. This impacted community trust, with many opting for services at KMH or private facilities. KPH benefitted from additional staff but faced resource shortages, suboptimal infection control, and gaps in staff training, highlighting that staffing alone was insufficient to ensure appropriate quality of care at the facility.

Community engagement initiatives were culturally appropriate as the project included engaging local community leaders, such as elders and Mullahs, which helped adapt services to cultural norms and gain support. However, outreach health promotion activities were limited by targeting a small geographic area and covering too many topics without specificities around maternal and child health relevant themes, resulting in limited community impact. Additionally, gaps in awareness about KMH services, admission criteria, and birth preparedness led to misconceptions and delays in maternal care.

COHERENCE

The MSF Khost Maternal Health Project's interventions were well-aligned with Afghanistan's maternal health policies and the health system in Khost province. By delivering CEmONC and supporting EPHS facilities (CHCs, CHC+, and PH), the project addressed critical gaps in maternal and neonatal healthcare. However, the project did not fully capitalise on potential synergies with other health actors in Khost. Greater collaboration with stakeholders such as CARE International, IRC, provincial health authorities, and Khost Teaching Hospital could have strengthened referral pathways, enhanced the dissemination of KMH's admission criteria, and improved health promotion strategies.

Similarly, establishing an engagement mechanism with private health care providers could have addressed gaps in KMH's admission criteria. This would enable them to appropriately manage uncomplicated deliveries, reducing unnecessary referrals, promote mutual learning, and reduce the burden on KMH's resources.

EFFECTIVENESS

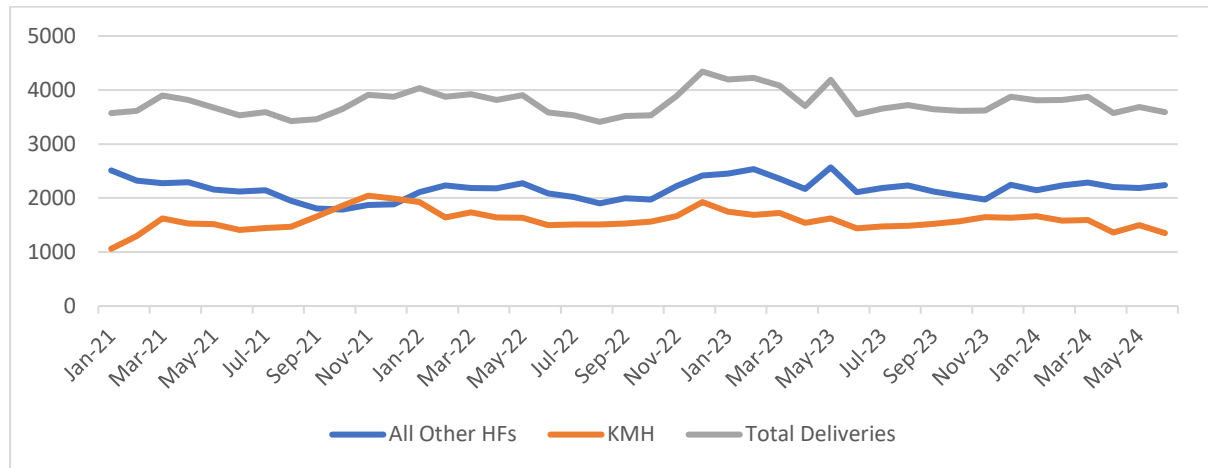
The project has effectively reduced maternal and neonatal morbidity and mortality in Khost. KMH provided life-saving services, managing high-risk pregnancies and complicated deliveries that could not be handled by other facilities. The hospital's comprehensive care included emergency obstetric surgeries, neonatal intensive care, and robust infection control measures. Additionally, the support provided to Khost Provincial Hospital (KPH) and eight district-level health centres strengthened the healthcare delivery ecosystem, ensuring that normal and less complicated births could be managed closer to patients' homes. This approach reduced travel time for families and minimised the risk of delays in receiving care.

The evaluation revealed persistent gaps in service delivery at the CHCs level. Key facilities lacked essential medical equipment and medicines, which hindered their capacity to manage obstetric

complications effectively. For example, shortages of lifesaving medications such as ergometrine and neonatal resuscitation tools at several CHCs limited their readiness to handle emergencies. These gaps forced patients to rely heavily on KMH, even for manageable cases, straining its capacity.

Effectiveness was assessed through a dual lens, examining both supply and demand aspects and their interaction in delivering maternal and neonatal healthcare services.

Considering the **performance of the health facilities**, KMH has played a crucial role by handling over 40% of institutional births and managing a majority of direct obstetric complications.



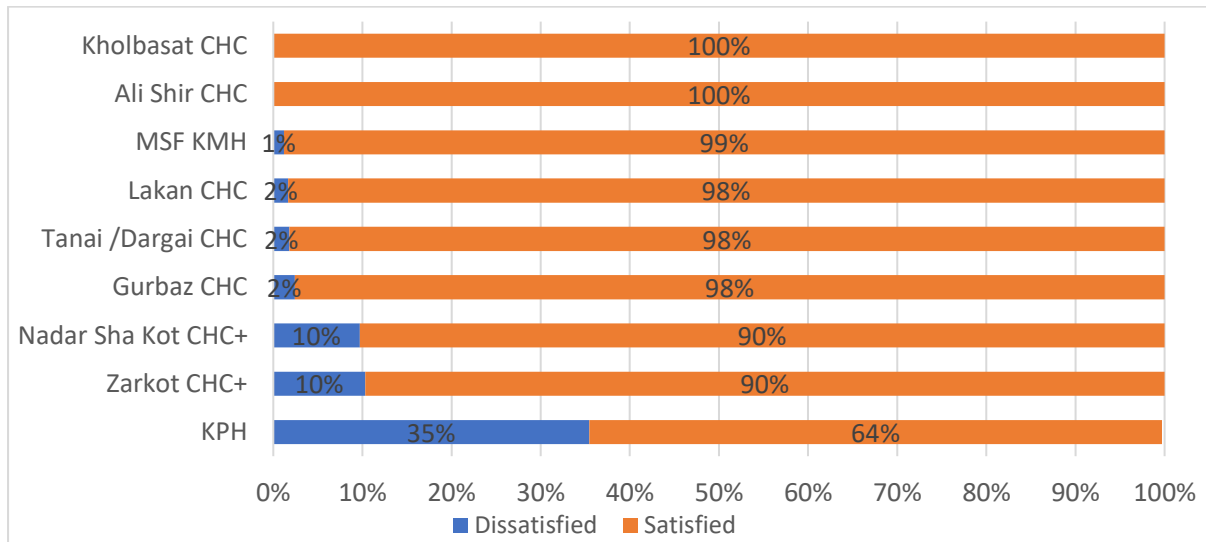
Three-Year Trend of Institutional Birth Deliveries in Khost and KMH Share

While the total number of deliveries at KMH declined slightly in 2024, which could be related to an increased use of private healthcare and referrals, the proportion of high-risk cases (DOC) it managed per month rose to 22%, surpassing project targets. The hospital maintained a low maternal mortality rate, with only two deaths in 2024, and a neonatal case fatality rate of 7.2%, staying below the 10% project target. KMH also performed 70% of all C-sections in the province, with rates rising to 6% in 2024.

The **referral system** in Khost province revealed gaps in its effectiveness for high-risk pregnancies. While community health workers (CHWs) promoted facility-based deliveries, they discussed to lack adequate training and materials to identify danger signs in pregnancies or understand KMH's admission criteria, limiting their ability to properly refer women to healthcare facilities. Referrals from other health centres to KMH and KPH were relatively low, with private healthcare providers playing a significant role in referrals. The absence of a formal mechanism to coordinate referrals with the private sector, as well as coordinated follow-up care for mothers and newborns indicates areas for improvement, particularly in ensuring continuity of care after discharge.

The evaluation revealed significant gaps in **training among health workers** at various health facilities. Of the 24 health workers interviewed, only a few had received training in essential areas like diagnosing and treating postpartum infections, using partographs, and managing eclampsia, pre-eclampsia, and postpartum hemorrhage (PPH). Many facilities reported no staff trained in key procedures such as administering antibiotics for premature rupture of membranes (PROM) or corticosteroids for preterm labour. Inconsistent use of important procedures negatively impacts the quality of care, leading to higher risks of complications. This further diminished community trust in primary healthcare centres, with patients opting for private clinics or KMH.

Exit interviews with 180 mothers across various health facilities revealed concerns around **patient satisfaction**, included the availability of medicines, healthcare workers' behaviour, the quality of care, and privacy during delivery. While some facilities like Kholbasat/Sabari and Ali Shir CHCs had high satisfaction levels, KPH revealed the highest dissatisfaction, particularly regarding the availability of medicines, healthcare workers' behaviour, and out-of-pocket expenses. These concerns are likely to affect community trust in these facilities and could lead to more women seeking care elsewhere, such as private clinics or KMH.



Overall Patient Satisfaction by Health Facility

The findings further highlight cultural and logistical **barriers** preventing women in Khost from accessing timely care. KMH was identified as a culturally sensitive, women-friendly facility, which significantly contributed to a shift in healthcare-seeking behaviour, reducing home births and increasing institutional deliveries. Despite these advancements, challenges such as the cost of transportation, gender norms requiring male consent, and delays in decision-making and reaching health facilities persisted. These factors contributed to the three delays in childbirth: delayed decision-making, travel to facilities, and receiving timely care.

IMPACT

The project had a transformative impact on maternal and neonatal health outcomes in Khost. To evaluate the impact, mortality trends reported in national surveys over the years, along with proxy indicators, were analyzed.

While direct maternal mortality data for Khost is unavailable, national surveys indicate a substantial increase in skilled birth attendance, rising from 17.8% in 2003 to 70.3% in 2023, along with a modest rise in C-section deliveries. Neonatal mortality has declined in Khost, contrasting with national trends. While the neonatal mortality rate in the province was 24 per 1,000 live births in 2015, higher than the national average, it dropped to 19 per 1,000 by 2023, even as the national figure rose. KMH’s 32-bed neonatal care unit and its central role in managing obstetric complications have likely contributed to this decline.

Beyond clinical outcomes, MSF has fostered a major shift in healthcare-seeking behaviours. Community trust in facility-based childbirth has increased, with institutional deliveries becoming the preferred choice over traditional home births. This shift is largely attributed to KMH's culturally adaptive approach, which respects local norms while ensuring high-quality care. Engagement with community elders and responsiveness to local needs have further strengthened confidence in institutional services. Since MSF began operations in 2012, institutional births have surged, marking a lasting transformation in maternal healthcare practices and reinforcing the long-term impact of MSF's interventions in Khost.

The reliance on KMH for normal deliveries highlighted also a systemic dependency on MSF. While MSF-supported CHCs played an essential role in providing basic care, their limited capacity to manage obstetric complications necessitated families bypassing CHCs in favour of KMH.

EFFICIENCY

The efficient utilisation of resources was evident in KMH's ability to manage a high volume of complex cases while maintaining quality standards. Despite handling over 1,800 admissions monthly and most obstetric complications in the province, KMH maintains operational efficiency, minimised stockouts and service disruptions. In contrast, CHCs, CHC+, and KPH faced significant shortages in essential medicines and equipment, particularly in KPH, where over two-thirds of exit interview respondents expressed dissatisfaction with medicine availability. One of the primary reasons for these inefficiencies was the limited BPHS-HER funding, set at just \$5 per capita annually, which failed to meet the growing population's healthcare needs.

KMH and MSF-supported facilities operated 24/7, ensuring continuous maternal and neonatal care. While KMH maintained uninterrupted services with well-structured staffing, CHCs and CHC+ experienced emergency response delays due to workforce shortages. KPH, the province's main referral hospital, also struggled with staffing inefficiencies, with over a third of patients reporting delays of more than 30 minutes to receive emergency care.

CHWs were found to be not fully and effectively integrated into maternal and neonatal healthcare services. Their efforts focused more on general health promotion than critical interventions like birth preparedness and risk identification. A lack of structured training and job-aid materials further hindered their effectiveness. Strengthening CHW integration through managing agencies (HN-TPO and CARE) and equipping them with accurate information and resources could improve maternal health awareness, reduce misconceptions about facility-based care, and ease KMH's burden by ensuring appropriate healthcare facility use.

SUSTAINABILITY

Sustainability remains a critical concern for the Khost Maternal Health Project. While MSF's interventions have improved maternal and neonatal healthcare outcomes, their long-term impact depends on the capacity of local health systems to sustain these gains. The evaluation highlighted significant gaps in the resilience of the local health infrastructure, with many facilities reliant on MSF's support for staffing, equipment, and supplies.

Training local healthcare workers, midwives, and doctors is essential for sustainability, but the evaluation found gaps in capacity-building efforts. While MSF has likely contributed to skill

enhancement through its operations, there is little structured training or mentorship reported that explicitly aims to prepare local personnel to take over MSF's roles.

Findings from 13 in-depth interviews (IDIs) with community leaders, many of whom also served as members of Health Facility Shuras (Community Boards), revealed a strong prioritisation of maternal services due to Pakhtunwali traditions emphasising women's privacy. However, despite this prioritisation, community leaders and members have had limited involvement in addressing issues at their local health facilities. Beyond promoting institutional childbirth, there is untapped potential for communities to contribute, either in cash or in kind, to improving healthcare services at CHCs and CHC+ facilities instead of solely relying on NGOs or the government. In Khulbesat/Sabari CHC, health workers also reported challenges in maintaining infection prevention and control (IPC) in the maternal and child health unit due to infrastructure issues.

Addressing such infrastructure gaps, like constructing separate waiting areas or resolving drainage issues, presents an opportunity for community involvement. Leveraging local resources and community contributions could enhance service delivery, increase ownership, and improve sustainability, especially in light of uncertainties surrounding BPHS continuity.

RESILIENCE OF THE LOCAL HEALTH SYSTEM

The resilience of the local health system, particularly the MSF-supported CHCs, CHC+, and KPH, remained constrained by systemic gaps that limited their ability to deliver consistent and quality maternal and neonatal healthcare services. While MSF's support was instrumental in ensuring 24/7 service availability at eight CHCs/CHC+ and enabling KPH to manage increased obstetric and neonatal caseloads, broader challenges persisted.

Key gaps in essential resources, including shortages of medicines and critical medical equipment, significantly impacted the readiness of these facilities to manage normal deliveries and obstetric emergencies effectively. Training deficiencies in key practices, such as neonatal resuscitation, the management of postpartum haemorrhage, and the use of partographs, further limited the capacity of these facilities to deliver high-quality care.

Workforce limitations were compounded by concerns about healthcare worker behaviour, with instances of delayed patient attendance and disrespectful treatment reported during FGDs and exit interviews, undermining community trust. Addressing these workforce challenges is key to improving facility resilience and ensuring better maternal and neonatal health outcomes.

The evaluation also highlighted limited community engagement and contribution. While community leaders recognize the importance of maternal healthcare, their engagement has been largely passive, missing opportunities to contribute to infrastructure improvements, maintenance, and operational support. Encouraging active participation from the community, such as addressing infrastructural gaps or supporting maintenance, could foster a greater sense of ownership and therefore influencing the resilience of healthcare facilities.

The evaluation identified a strong dependency on KMH for maternal and neonatal service, with the facility accounting for over 40% of institutional deliveries and managing approximately 70% of obstetric complications in Khost province. This reliance is primarily attributed to a lack of trust in local health facilities (CHCs, CHC+, and KPH) surging from the already discussed factors including shortage of essential medicines, inadequate medical equipment, and concerns regarding healthcare worker conduct. Misconceptions regarding quality maternal care, wherein community members associate

advanced medical interventions with superior healthcare, have further contributed to their preference for KMH. Furthermore, a widespread lack of awareness regarding KMH's admission criteria has resulted in a high number of routine cases that could otherwise be managed at local facilities.

Strengthening resilience will require a multifaceted approach that addresses these supply-side and demand-side gaps while leveraging MSF's support to build a stronger and more sustainable local health system.

CONCLUSION

The Khost Maternal Health Project has played a **relevant and effective** role in improving maternal and neonatal health outcomes in Khost province through its culturally sensitive, patient-centred, and high-quality maternal and neonatal healthcare services. KMH, as the only fully functional CEmONC facility in the province, accounted for over 40% of all public sector institutional deliveries and managed a significant share of high-risk obstetric cases (70% of total DOC cases). Its **impact** was revealed through its contributing towards reductions in maternal and neonatal mortality rates. The project is highly **appropriate** in its alignment with cultural norms that have contributed to a significant shift in healthcare-seeking behaviour, with a significant rise in institutional deliveries since MSF began its operations in 2012.

However, systemic challenges must be addressed to ensure the long-term **sustainability** and foster **resilience** of the maternal health system. The evaluation identified gaps in the readiness and capacity of CHCs, CHC+, and KPH to deliver BEmONC and CEmONC services. These gaps, including shortages of essential medicines, equipment, adequately trained staff, and behaviour of health workers, have undermined the quality and community trust in local health services. The heavy reliance on KMH for normal deliveries is driven by gaps of other facilities (CHCs, CHC+, and KPH), community misconceptions about what constitutes quality maternal healthcare (such as the perceived necessity of lab tests, injectable medications, and imaging for all deliveries), and a lack of awareness regarding KMH admission criteria. These **inefficiencies** and the **reliance** have overstretched KMH's resources, highlighting the critical need to address the afore-mentioned factors to increase the share of other health facilities in handling normal deliveries and reduce the burden on KMH.

The findings underscore the necessity of a multi-stakeholder approach. By collective efforts building the capacity of local health facilities, equipping healthcare providers with the necessary skills and resources, and actively engaging communities, MSF, in collaboration with other actors in the province, can enhance the resilience of Khost's maternal and neonatal health system.

RECOMMENDATIONS

Based on the evaluation findings the following recommendations aim to enhance maternal and neonatal health services in Khost province, focusing on relevance, appropriateness, sustainability, effectiveness, and community engagement:

⇒ **Recommendation 1: Enhancing BEmONC Services at CHCs/CHC+**

MSF's supported CHCs and CHC+ were not fully functional as BEmONC centres due to issues such as the unavailability of basic essential medicines, equipment, and medical supplies. This led to a lack of community confidence and prompted families to bypass these centres even for normal deliveries. It is recommended to actively collaborate, and potentially formalize in MoUs, with the BPHS implementing organisation to ensure systemic improvements.

⇒ **Recommendation 2: Enhancing Neonatal Healthcare Services**

Only 13% of interviewed health workers had received training in newborn resuscitation and there was a shortage of basic equipment for neonatal resuscitation at CHCs/CHC+ identified. Further gaps in breastfeeding counselling were revealed and hands-on training for mothers, especially for low-birth-weight babies, at KMH. It is recommended to enhance breastfeeding and neonatal care counselling services at KMH and include capacity development opportunities for CHCs/CHC+ personnel. Also, active collaboration, and potentially formalize with MoUs, with BPHS implementing organisation is essential to ensure the availability of critical neonatal equipment.

⇒ **Recommendation 3: Enhancing Postnatal Care at KMH**

KMH does not provide PNC services for mothers discharged earlier than 24 hours. Since more than 60% of maternal deaths occur during the postpartum period, it is recommended to undertake pre-discharge counselling, issue PNC cards, and provide pictorial information leaflets containing details on postnatal care, family planning, and exclusive breastfeeding. Measures as such will also strengthen the linkages with local health facilities.

⇒ **Recommendation 4: Health Promotion**

The current outreach model relies on a small number of health promoters covering diverse topics in a limited geographic area, but they fell short in addressing specific maternal and neonatal health needs. Empowering CHWs and other health facility staff with tailored information, education, and communication (IEC) packages could enable more effective dissemination of health messages. Engaging all organisations involved in healthcare delivery to harmonise health promotion efforts could amplify the impact. It is recommended that MSF expand its institutional approach towards health promotion and community engagement by collaborating with the BPHS implementing organisation and CARE to reach all 676 CHWs in the province.

⇒ **Recommendation 5: Promote Local Ownership**

Findings from this evaluation revealed a strong emphasis on the importance of maternal health services to the communities due to Pakhtunwali traditions concerning women's privacy. Nevertheless, community leaders and members have had limited involvement in addressing issues at their local health facilities. Beyond promoting institutional childbirth, there is untapped potential for communities to contribute, either in cash or in kind, to improving healthcare services at CHCs and CHC+ facilities instead of solely relying on NGOs or the government. It is recommended to collaborate with the BPHS implementing organisation in Khost to initiate and promote community contributions aimed at addressing infrastructure initially and expanding to other areas such as supply gaps. This approach would foster a stronger sense of ownership, enhance the sustainability of healthcare services and can further strengthen BPHS implementor's capacity to mobilize community involvement effectively.

⇒ **Recommendation 6: Collaboration with Other Actors**

The evaluation found that the project's potential for synergy with other health actors in Khost province was not fully realised. Stronger collaboration with other stakeholders (CARE, IRC, or private healthcare providers) could have enhanced the coherence of interventions. It is recommended to establish stronger partnerships with these stakeholders to maximise the project's impact and ensure a more integrated approach to healthcare delivery.

⇒ **Recommendation 7: Referral system**

While community health workers actively promoted institutional birth delivery, they lacked awareness to identify and refer high-risk pregnancies. Referrals from CHCs and CHC+ were very low, with private healthcare providers emerging as the primary referral source. It is recommended to raise awareness about KMH admission criteria among private healthcare providers and the general community. Empowering Khost's 676 active CHWs (365 female CHWs) through training could significantly improve the referral system.