



REVIEW ARTICLE

Optimising Informal Medical Outreach for Universal Health Coverage and Health System Strengthening in Low- and Middle-Income Countries

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Keywords

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ABSTRACT

Background: Access to health services is limited in many parts of the world, particularly in low- and middle-income countries (LMICs), where the health system is weak and often excludes many people living in hard-to-reach areas. Medical outreach (MO) is a means of extending essential health services to such underserved populations. It is one of the tools used in the pursuit of universal health coverage (UHC), which envisions a world where all citizens have access to quality health services whenever they need them, regardless of where they live or their socioeconomic circumstances, without experiencing financial hardship in the process

Objective: This narrative review describes informal medical outreach (IMO), a type of MO, explains the nexus between IMO and the six building blocks of the World Health Organization's health systems framework, and highlights how its optimal use can expedite the achievement of UHC and strengthen the weak health systems of LMICs.

Findings: IMO has been used for several years to provide essential health services to excluded populations. It is conducted by various organisations for different reasons. Despite its contribution to closing the healthcare coverage gap, its non-integration with the local or national health system has undermined its impact.

Conclusion: Informal medical outreach remains a useful strategy for delivering essential care to underserved populations. By addressing potential obstacles, its integration with the existing health system using a systems thinking approach can optimise its contribution to the achievement of UHC and a strengthened health system in many LMICs.

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INTRODUCTION

The World Health Organization (WHO) and governments of the world failed to deliver “Health for All by the year 2000”.¹ Since then, WHO has been championing several initiatives to ensure that all the people of the world attain the highest possible level of health that will enable them to lead a socially and economically productive life.² In what constitutes a relaunch of the unfulfilled promise, Universal Health Coverage (UHC) adopted by the United Nations General Assembly in 2015 aims to make quality health services accessible to all people whenever they need them and wherever they live without financial hardship.³ This transformative initiative has targets that are expected to be met by all countries by 2030.³

Accessibility is a *sine qua non* for achieving UHC, which is inherent in its definition. However, despite an increase in the proportion of the population covered by essential health services globally since 2015, more than half of the world population (about 4.5 billion) still lacked access to full coverage.⁴ Regrettably, the majority of these deprived people live in low- and middle-income countries (LMICs), which have most of the worst health indices globally and are in dire need of urgent interventions. The service coverage index (SCI), an indicator of progress with UHC, shows a wide variation between and within countries, with a higher service coverage observed among persons living in more affluent households, urban dwellers and those with higher education.⁴ This poignant evidence of

maldistribution of available health goods and services negates the principle of “leaving no one behind” of the sustainable development goals.⁵ With barely six years left to achieve the targets of 2030, there is a need to rapidly expand access through innovative mechanisms that will close the yawning gaps in service coverage and contribute to health system strengthening on a sustainable basis, particularly in LMICs.

One existing strategy that can serve this dual purpose is medical outreach – an intervention that provides medical services to underserved, remote, rural, or marginalised populations.⁶

Medical outreach as an intervention

For this article, we classify medical outreach as formal and informal. Formal medical outreach (FMO) is an integral part of the services rendered by many health facilities. It is an essential component of many public health interventions that aim to provide population-wide coverage in a service or project area.^{7–13} In Nigeria, for instance, medical outreach is employed in the implementation of the Maternal, Newborn, and Child health week (MNCHW) aimed at accelerating population coverage with proven MNCH services.¹⁰ During the week, usually done twice a year nationally, health facilities are expected to extend the package of services to hard-to-reach catchment areas. In immunisation programming, health facilities have catchment populations far from the facilities and are expected to be reached with vaccination services.¹¹ Other projects/programmes attend to some key populations that may not readily access

services at the designated centres and would have to be reached with the needed care wherever they live.^{12,14} These populations, served by FMOs, are included in the annual operational plan (AOP) of the facility or implementing organisation and data from such outreach are captured in the health management information system (HMIS) of the subnational area and ultimately in that of the respective country.

Informal medical outreach

Informal medical outreach (IMO) preceded formal medical outreach (FMO) as a complementary effort to reach the unserved or underserved populations with medical services. The intervention started as medical missions in about the 18th century by British and American missionaries who used it as an instrument for the uptake of Christian religion in the continents of Asia and Africa.^{15–18} It diminished in importance and gave way to FMO when health facilities were established in hitherto unreached places. However, it continues to be relevant in populations that do not have functional facilities, thereby lacking access to regular health services.^{7,19} Informal medical outreach is sometimes referred to as mobile clinic, but the latter more appropriately describes a formal medical outreach when it originates from a health facility.^{7–9} These outreaches serve an appreciable size of the population in many countries. The organisers are multifarious and include religious bodies, non-governmental organisations, foundations, corporate organisations, and individuals who do it as a means of philanthropy

or corporate social responsibility (CSR).^{20–26} It is usually conducted as part of the celebrations to mark an individual's landmark birthday or to honour someone with a notable contribution to society,²⁷ as part of corporate anniversaries, or WHO/United Nations official days e.g. World AIDS Day.²⁰ Informal medical outreach has also been organised as part of the response to disease outbreaks or humanitarian disaster management as a stopgap solution to cater to the medical needs of the affected persons while working on restoring normal health care delivery in the affected area.²⁸ Of late, in what seems to be a frenzied response to the call for non-state providers to join the efforts to achieve UHC,²⁹ there has been an increase in the number and size of IMOs being conducted, even by governments.^{13,30} Services rendered in an IMO include screening for diseases (communicable and non-communicable),^{31,32} treatment of common ailments, and distribution of health goods e.g. insecticide-treated nets (ITNs).^{13,30,33,34} Big IMOs may offer specialised services like eye care, dental care and surgeries.^{35,36} Populations covered range from hundreds to millions of young and old people. IMOs complement the efforts of the formal sector in providing essential health services thereby increasing the service coverage index (SCI) and improving indicator 3.8.1 of the sustainable development goal (SDG).⁴

While IMOs have supported the achievement of UHC, their potential to enhance the health system has largely gone untapped. By their sporadic

nature and source, IMO are not part of the AOP of any facilities or planned interventions, and they are usually not integrated into the health system of the area where they are carried out. This lack of formal recognition and absence of a register to record their occurrence makes it impossible to have a valid estimate of the number organised globally or nationally on an annual basis. Existing information about IMOs is mainly obtained from the news or publications. Outreach efforts are often organised as one-off events without proper planning and alignment with local health authorities, neglecting the eventual needs

of beneficiaries who may have chronic conditions or require long-term follow-up care.

Having participated in and led many IMOs, we believe this public health intervention has much more to offer than what is currently obtainable. To our knowledge, no publication has classified medical outreach as we have done in this paper and we have not seen any that tried to situate informal medical outreach in the broad context of health systems strengthening. We hereby suggest ways in which IMOs can influence every component of the WHO's six building blocks of the health system while contributing to the goal of achieving UHC (Figure 1).

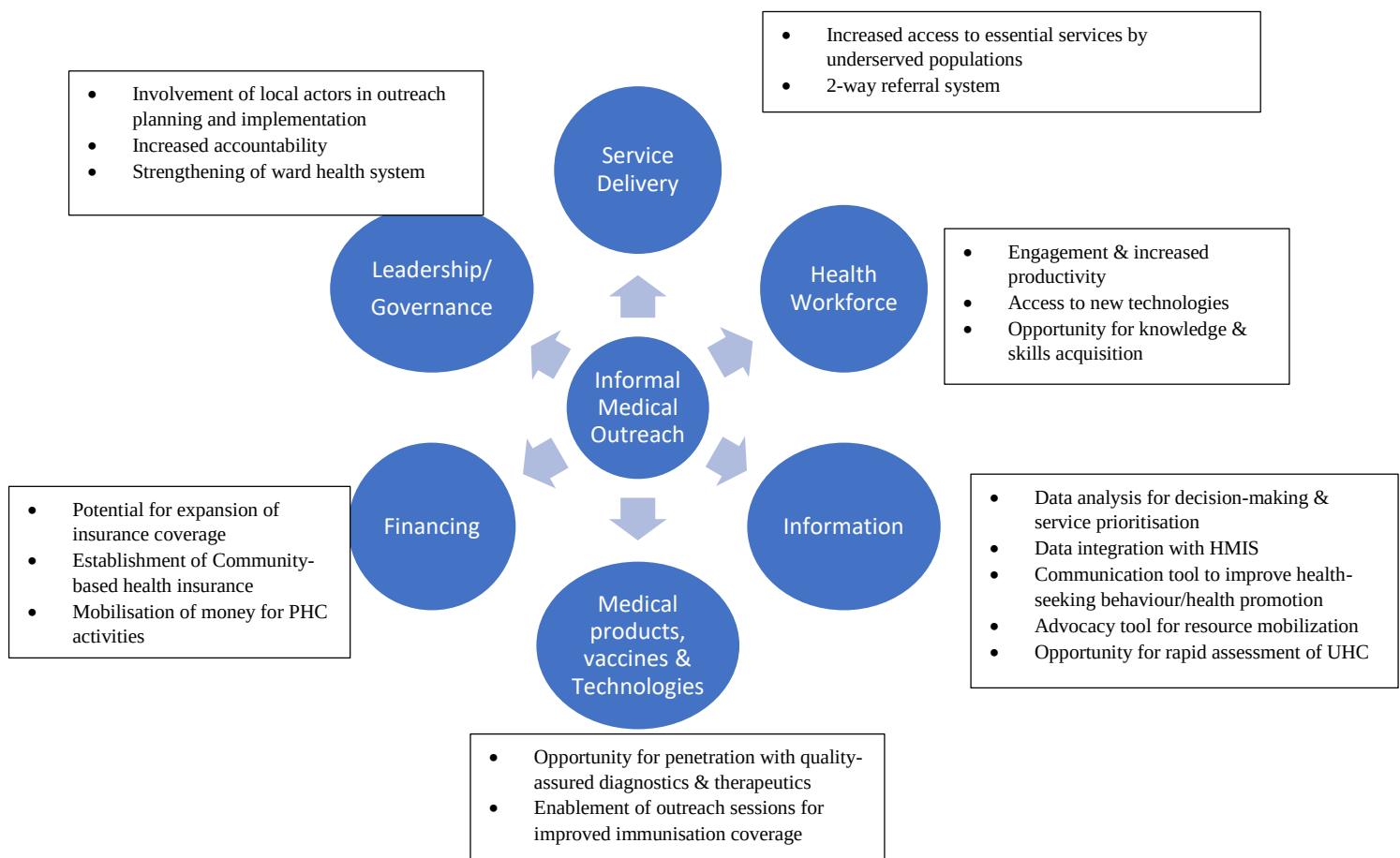


Figure 1. The nexus between informal medical outreach and WHO's health systems building blocks

Informal medical outreach and the six building blocks of WHO's health systems framework

Service delivery: This is the main role IMO is playing at present. It expands access to essential health services and helps reach underserved populations not regularly covered. An IMO should preferably be held in a health facility located in the community. This will increase patronage of the facility post-outreach, and if the facility has been hitherto under-utilised or moribund, the exercise can resuscitate it. Arrangements should be made with a referral hospital that can be called for emergencies. Experience shows that many patients referred to a higher level of care from an outreach often do not report at the referral centre for many reasons, including lack of finance, poor communication, and lack of motivation.³⁵ Involving healthcare workers (HCWs) who are members of staff of the host facility in outreach will ensure follow-up of such patients. This can help overcome the barriers that prevent the patients from visiting the referral hospital.

Health workforce: IMO is an opportunity to engage, build the capacity, and motivate local HCWs who may have been under-utilised in underserved populations. Healthcare workers serving at the facility hosting the outreach may include doctors, nurses and other health professionals of different cadres depending on the type of facility used for the outreach. Organisers of outreach often go with a full complement of staff recruited from their base. An outreach that

utilises local staff will get them engaged for the day/days of the outreach, and they would continue to serve outreach beneficiaries that need follow-up. Innovative technologies produced mainly for use in resource-poor settings, e.g., rapid diagnostic test kits, are often deployed in such an outreach. The HCWs get introduced to these technologies and, given the right circumstances, may continue to use them, thus improving evidence-based management of diseases. Large outreach involving big organisations and medical missions from high-income countries often perform high-tech procedures in collaboration with their local counterparts.^{25,37} All these lead to knowledge, skills, and technology transfer and can improve the proficiency of the resident HCWs in managing prevalent health conditions. This is a cost-effective way of training and motivating local health staff and may help in health worker retention, especially when the collaboration is maintained through telemedicine.³⁸

Information: Since many IMOs are usually planned and executed without the active involvement of the local health authority, the data generated are lost and do not contribute to the subnational or national HMIS reports. This results in underreporting of services provided, which may include management of important cases, particularly neglected tropical diseases and diseases targeted for elimination that may be found in rural areas.

Collaborating and conducting outreach with the HCWs will enable them to include such data in

their reports. They will also have first-hand information about the prevalence and burden of diseases in the area, which will enhance equitable resource allocation, prioritise service provision, and serve as an advocacy tool for resource mobilisation. Data from IMO can also be used for behavioural change communication with community members. Showing them the conditions found in their community may facilitate their adoption of appropriate interventions to mitigate such conditions. Conducting a national or subnational survey to track UHC ought to be done regularly and frequently as we approach 2030. However, few LMICs have the resources to do this. IMO can be used for a rapid assessment of UHC in any locality where it is carried out. For instance, a short questionnaire can be designed to collect data on the two indicators of UHC - coverage of essential health services and catastrophic spending on health.⁴ Aggregating data from such small surveys can prove useful for monitoring progress and for programmatic decision-making.⁴

Medical products, vaccines, and technologies:

As mentioned earlier, IMO provides an opportunity to get genuine diagnostics and therapeutics into the outreach area. The organisers, who are expected to purchase standard drugs, equipment, and other supplies from certified dealers or manufacturers can link the local facilities to such sources and thus ensure the regular supply of genuine products in the area and its environs. Immunisation staff are often constrained by funds for transport to conduct

planned outreach sessions. They can piggyback on the outreach team to vaccinate children in the community and nearby catchment areas.

Financing: Many LMICs are still struggling to achieve good coverage with health insurance. Enrolling community members who are not civil servants or engaged in organised private sector has been a major challenge for many insurance agencies. IMO, when planned with stakeholders including community leaders, can be a rallying point to initiate discussion about establishing a community-based health insurance scheme (CBHIS). Through the agency of IMO, well-meaning individuals or organisations may be moved to donate in cash or kind for the follow-up care of indigent patients, upgrading of the host facility, or toward the establishment of a CBHIS. Some countries have a social initiative to care for indigent, vulnerable and marginalised persons, e.g., Nigeria's Basic Health Care Provision Fund (BHC PF),³⁹ the Ghanaian National Insurance Scheme (NHIS),⁴⁰ and Senegal's Plan Sesame.⁴¹ Though the initiatives have 'purchased' health services for these people, a lot of them live in communities that are out of the reach of the closest health facility. IMO can be the gateway through which such individuals are identified and enrolled.³⁰

Leadership/governance: Community ownership is fostered when community leaders co-lead the planning and conduct of an outreach. This will most likely lead to more effective community mobilisation for the outreach. The local health managers can also be assigned

responsibilities, and working with the community leaders, there will be a sense of accountability for every aspect of the outreach. This approach can potentially establish a relationship between the community or ward development committee (CDC/WDC) and the facility staff where none exists or strengthen an existing one, thus enhancing community ownership and ultimately improving the utilisation of services that transcends the outreach. Community participation is one of the cardinal principles of primary health care.⁴² When communities, led by their chosen representatives, are actively involved in a community- or ward-level programme meant to improve their health, they tend to own it and work to ensure its success.^{43–45}

Potential obstacles

The systems thinking approach to IMO presented here is by no means an easy task to accomplish; foreseeable challenges will need to be overcome for it to work. First, like other public health interventions that used the approach,^{46–48} it involves a paradigm shift from the set, largely unilateral way of organising and conducting outreach to a more demanding multi-stakeholder engagement. The typical style is for the organiser to conclude arrangements for outreach and merely inform the outreach community of their intention. Oftentimes, there is no adequate engagement with the local actors and the dominant mindset is that of a one-off event. The new approach will involve a few planning meetings that will bring all the stakeholders together. This has financial implications and the

organiser may not be ready for this process. If not carefully managed, it may lead to cancellation of the outreach. The onus is on the community and the local health staff to communicate this new arrangement to would-be organiser and make them see the long-term benefits of the extra investment of time and resources that would be required. Second, this optimisation of IMO presumes a close working relationship between the community and the health facility, which is expected in a functional primary health care system.⁴² Outreach organisers usually communicate with the community structure. Where there is weak or no interaction between the CDC/WDC and the health facility, the latter may not be aware of the outreach until the D-day. Having a strong and functional health facility committee can mitigate this challenge.⁴³ Third, the subnational/regional health system that coordinates health programmes in the area will need to be involved since the data emanating from the outreach will eventually get there. If the managers at that level are obtrusive or obstructive, they may introduce unnecessary bureaucracy that can frustrate the organisers and make them suspend the outreach. It will take conscientious managers who are genuinely interested in having a strong health system to facilitate the necessary adjustments that are needed.

Future direction

A successful IMO should not be a one-off or an isolated intervention that can potentially disrupt the health dynamics of the benefitting population.

It should be one that will positively impact every block of the WHO's health systems framework and one whose gains will remain ad infinitum. While informal medical outreach is a useful intervention, it happens sporadically and cannot be counted as a dependable strategy in the UHC toolkit. Investing in and retooling existing facilities to enable them to conduct more formal outreach services thereby reducing the size of their catchment populations that are not regularly served should be the medium-term goal to pursue. Having a functional health facility within every individual's reach is UHC's long-term goal. When this state is reached, individuals or organisations interested in improving population health can work with and/or donate their resources to the respective facility or appropriate health authority to support its activities. Governments at all levels have the responsibility to communicate this approach to public-spirited persons and organisations who may want to sponsor outreach in their jurisdiction.

CONCLUSION

There is no gainsaying the fact that we need more innovative interventions to make the goal of universal health coverage attainable, particularly in LMICs. However, it is wise to consolidate and optimise existing strategies that are effective. Informal medical outreach (IMO) will remain a

desirable intervention for a long time as limited resources may impair the ability of available health facilities to extend their formal outreach activities and many communities may not have a fully operational health facility by 2030. IMO is a good example of the multiplier effect a public health intervention can have when carefully designed and implemented with a systems thinking lens. Efforts should be made to convert informal to formal medical outreach; the additional investment needed to achieve this feat can yield an unprecedented gain for the health system and fast-track the achievement of universal health coverage if not by 2030, but in the near future.

Conflict of interest: The authors declare no conflict of interest

Authors contribution:

AO: conceptualisation, literature search, writing-original draft, review of the final version of the manuscript; NO, BA: literature search, review and editing of subsequent drafts and final version of the manuscript; WS, EO, IC, DO: review and editing of subsequent drafts and final version of the manuscript. All authors read and approved the manuscript for submission.

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