Closing the gap:
Why achieving universal health coverage in Malawi now requires targeted investment in underperforming and underserved districts

Key messages:

01 While governments around the world are keen to achieve universal health coverage, limited resources for health means that they must prioritize areas of investments where needs and benefits are greatest. This requires developing a deep understanding of the barriers to health service access, including at the subnational level.

02 Leveraging data from the 2018/19 Malawi Harmonised Health Assessment, this policy brief explores health system gaps across the three dimensions of health service availability, service readiness, and clinical knowledge at district level. It also proposes priority areas of investments to make progress on universal health coverage and enhance equity.

03 While Malawi’s overall availability of essential health services could be improved, in the short term the government may want to focus on making existing facilities and providers more ‘ready’ to provide effective care, especially in underperforming districts. As more resources become available, it could gradually expand availability of essential services more widely.

04 Low levels of provider competency, especially for child health conditions, was the most notable barrier to service readiness. Almost a third of districts had serious gaps in clinical knowledge. Monitoring knowledge and competencies is an integral part of the universal health coverage agenda and should be integrated in routine information systems.
Most countries now agree that striving for universal health coverage (UHC) is important as it helps ensure health for all, while enhancing health security nationally, regionally and globally. What is more, UHC – defined as ensuring “access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost”[1] – also contributes towards reducing poverty and promoting gender equality. The Government of Malawi is no exception and is actively working towards UHC following an explicit constitutional commitment “to provide adequate health care, commensurate with the health needs of Malawian society and international standards of health care”[2]. The country’s Health Sector Strategic Plan II also refers to the desire to achieve UHC by ensuring that everyone has access to Malawi’s Essential Health Package (EHP)[3].

Launched in 2004, the EHP has already gone some way towards increasing access to health services and improving health outcomes[4]. However, critical health system gaps, including inadequate numbers and distribution of health facilities, and severe shortages of health workers, are commonly identified as barriers to the implementation of the EHP[5]. For example, a recent study looking at gaps in UHC in rural Malawi found that there is a significant geographical disparity in the distribution of health facilities[6]. This has resulted in inequities in effective population coverage, financial protection, and access to quality health services.

To overcome inequities and improve health outcomes, quality service coverage to all people must be expanded. But resources for health are limited, which means that governments need to prioritize areas of investments where needs and benefits are greatest. This requires developing a deep understanding of the barriers to health service access, including at the subnational level. Only with this information can decision makers effectively target resources and policies to advance UHC, ensuring access for all people, regardless of where they live.

This policy brief explores Malawi’s health system gaps and geographic variations across the three key dimensions of service availability, service readiness, and clinical knowledge of providers. It also offers recommendations for prioritized investments that tackle inequities in access to effective care as a way to close the gap in achieving UHC in Malawi. It draws on Malawi’s 2018/19 Harmonised Health Facility Assessment (HHFA), which provides critical evidence on key issues affecting service delivery. The 2018/19 HHFA offers one of the most comprehensive assessments of the health sector in Malawi because it includes information about service availability and readiness; providers’ presence and clinical knowledge; and patient-perceived quality of care drawn from the Service Availability and Readiness Assessment* and the Service Delivery Indicators†. These were combined into a single tool with five modules: facility inventory, health worker roster, clinical vignettes, facility finances and governance and client exit interviews. Data was collected from all health facilities in the country (1,106 health facilities) including government, faith-based, CHAM (Christian Health Association of Malawi) and private for-profit facilities between November 2018 and March 2019.

**Health system performance by district**

How available were essential health services across districts in Malawi?

The goal of the EHP is to offer an essential package of health services to everyone in Malawi and on average, facilities offered about 70% of what they were supposed to be delivering. There was also considerable variation across districts in terms of service availability. The 2018/19 HHFA found that only about half of districts (16 out of 29), offered between 50% and 75% of the essential...
health services they are expected to offer, while the remaining 13 offered more than 75% of these services (see Figure 1, where districts are marked in yellow and green respectively). This leaves significant room for improvement with regards to service availability throughout the country and suggests that an overall lack of health services exists. On the positive side, the survey did not identify any districts with significantly lower service availability than the others (negative outliers). The service availability score was calculated using the average number of essential health services offered at health facilities (see Box 1).

**Box 1: Service Availability Score Definition**

The service availability score was defined as the average number of health services offered at health facilities. Services included in this calculation are as follows: family planning; antenatal care; delivery; immunisation; child preventative and curative care; malnutrition diagnosis and treatment; malaria; tuberculosis; and HIV/AIDS.

These services were selected to align with the Malawi EHP and the data collected in the 2018/19 HHFA survey.

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![Figure 1: Service availability score by district](image_url)

**Service availability score**

- **<50% Serious gap**
- **50% - 75% Room for improvement**
- **> 75% Progressing towards target**
- **Lakes**

Source: 2018/19 Harmonised Health Facility Assessment, 2019
How ready were districts to offer essential services in terms of key health system inputs?

On average, facilities had just over 60% of the critical health system inputs needed to deliver high quality EHP services, with all districts in Malawi scoring within the 50-75% range. ‘Readiness’ to offer services was calculated based on whether health facilities had a standard set of trained staff and guidelines, equipment, essential medicines and commodities and diagnostics required to deliver EHP services, among those that were offering the service (see Box 2). An average readiness score of just over 60% suggests there is overall room for improvement in terms of service readiness. In Chitipa, facilities had only half of the inputs required to deliver EHP services. Higher performing districts such as Ntchisi and Salima did better and had around two-thirds of essential inputs available (see Figure 2).

What is more, while there was some variability in facility readiness by district, no district had more than three-quarters of the critical inputs required to deliver EHP services, demonstrating significant gaps in the availability of essential inputs required to deliver quality health services across the country. This highlights the need to monitor service readiness along with service availability, if effective care is to be provided.

Box 2: Service Readiness Score Definition

The service readiness score was defined as the average facility readiness score across EHP health services as defined in Box 1. Services that were not offered at a facility were excluded from the service readiness score for that facility. Individual items required to be ‘ready’ for a service were defined by the WHO Service Availability and Readiness Assessment indicators and refined based on country guidelines.
Clinical competence: What did healthcare providers know?

The national provider competency score, calculated by measuring health workers’ clinical knowledge across six conditions using patient vignettes (see Box 3), was 58%. This means that, on average, providers were able to identify the correct diagnosis and treatment for just over half of clinical cases presented. Additionally, only 6% of providers (less than one in ten) offered the correct diagnosis and treatment for all conditions. The 2018/19 HHFA found that clinical knowledge varied substantially by district, from a low of 45% in Neno district to a high of 76% in Machinga district.

Out of the 29 districts in Malawi, almost one-third (8 out of 29) had serious gaps in terms of clinical knowledge, with providers able to identify and treat less than half of the health conditions (see Figure 3). The variability in provider competency was revealed to be one of the most critical barriers to offering effective care as availability of inputs alone will not translate into better health outcomes unless providers also have the knowledge, skills, and competencies to clinically care for patients[7].

Box 3: Provider Competency Score Definition

The provider competency score was defined as the average percentage of selected conditions for which a provider gave the correct diagnosis and correct treatment. A total of six tracer conditions were included in this indicator calculation: diarrhoea and dehydration, pneumonia, diabetes, tuberculosis, malaria with anaemia, and anaemia in pregnancy. Data was collected through the administration of patient vignettes.
<table>
<thead>
<tr>
<th>District</th>
<th>Service Availability Score</th>
<th>Service Readiness Score</th>
<th>Provider Knowledge Score</th>
</tr>
</thead>
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<tr>
<td>Balaka</td>
<td>74.7%</td>
<td>68.9%</td>
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<td>Blantyre</td>
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<td>Dedza</td>
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<td>Dowa</td>
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<td>Zomba</td>
<td>77.1%</td>
<td>69.7%</td>
<td>60.8%</td>
</tr>
</tbody>
</table>

**Key**

- **<50%** Serious Gaps
- **50%-75%** Room for improvement
- **>75%** Progressing towards target

Source: 2018/19 Harmonised Health Facility Assessment, 2019
How and where should investments be prioritized to make progress on UHC in Malawi?

The findings of the 2018/19 HHFA point to areas where critical health system support is needed, and highlight particular districts that are underperforming relative to others. The heatmap in Table 1 summarizes the scores across three areas (service availability, service readiness, and provider clinical knowledge) for each district and the colour scheme identifies where serious gaps exist (red); where there is room for improvement (yellow); and where districts are progressing towards the target (green).

Districts performed best in terms of service availability, but their service readiness and provider knowledge scores were weaker. This suggests a need to focus on making existing facilities more ‘ready’ to provide effective care by ensuring that critical inputs are available and providers have the knowledge to adequately diagnose and treat health conditions. Provider knowledge strikes as the most critical and urgent gap to be filled, given that eight out of 29 districts have serious gaps (a score below 50%) in adequately diagnosing and treating patients for common health conditions (Chiradzulu, Dedza, Dowa, Mwanza, Mzimba South, Neno, Ntchisi, and Phalombe).

Health providers at all levels of care need to be able to appropriately assess, diagnose, and manage common childhood and adult illnesses. This is critical to prevent complications, reduce disease progression and severity, improve neonatal and pregnancy outcomes and, in the case of communicable diseases, lower disease transmission. A recent study estimated that in 2016 alone 5 million people died due to poor quality of care in LMICs[8].

To further investigate the clinical performance of providers in districts with the most serious gaps, the 2018/19 HHFA gathered data on competency to correctly diagnose and treat common conditions. Figure 5 summarizes the findings for six conditions separately. Across the lowest performing districts, providers demonstrated the highest knowledge for adult health conditions such as diagnosis and treatment of diabetes and tuberculosis. Provider knowledge was the lowest across districts for childhood illnesses such as diagnosis and treatment of acute diarrhoea and severe dehydration, as well as malaria and anaemia. When looking at diagnosis and treatment of malaria with anaemia, it is important to note that without accounting for the co-morbidity of anaemia, provider competency was substantially higher and in some districts on par with knowledge for diagnosis and treatment of adult conditions. However, the same was not found for diagnosis and treatment of acute diarrhoea with severe dehydration: even without accounting for the co-morbidity of severe dehydration, competency of acute diarrhoea was low. Malawi achieved MDG 4 for child survival through the scale-up of interventions that are effective against the major causes of child deaths including malaria, pneumonia, and diarrhoea[9]. However, to build on this success, sustain these gains, and make progress on child survival, it is paramount to ensure that providers have the clinical knowledge to adequately and effectively care for patients.
Figure 5:
Provider competency to correctly diagnose and treat common conditions for under-performing districts

Key:
- Acute diarrhoea and severe dehydration
- Acute diarrhoea only
- Malaria and anaemia
- Malaria only
- Pneumonia
- Normal pregnancy with anaemia
- Diabetes
- Tuberculosis

Source: 2018/19 Harmonised Health Facility Assessment, 2019

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Closing the gap
While Malawi would benefit from expanding the availability of essential health services throughout the country, the 2018/19 HHFA highlights the need to prioritize the use of limited resources for health by making existing facilities and providers ‘ready’ to provide effective care in districts with the most serious gaps. These include Chiradzulu, Dedza, Dowa, Mwanza, Mzimba South, Neno, Ntchisi and Phalombe.

Ensuring that patients seeking care at existing facilities receive effective treatment is a critical step to maximize health outcomes, ensure value for money, and maintain trust in public sector health care.

Improving provider competency to diagnose, treat and manage common health conditions is one of the most critical human resource interventions needed for improving the clinical quality of care to Malawians and therefore health outcomes. In particular, there is urgent need to close the clinical knowledge gaps around child illness and co-morbidities, in which providers showed the lowest levels of clinical knowledge.

To inform a roadmap for action, further analysis is needed to gain
a deeper understanding of what drives Malawi’s difference in performance. This includes understanding why some providers perform better than others in terms of clinical care, and what interventions are the best fit to address the gaps. While the 2018/19 HHFA offers insights on the level of clinical knowledge of healthcare providers, it does not go so far as to provide information on the actual care delivered. As such, further research to unpack the ‘know-do’ gap will be needed.

Monitoring and improving provider knowledge and competencies should be included as a core element of the UHC agenda. Investing in routine monitoring of clinical knowledge and competencies as part of routine supervision and evaluation activities could offer an effective mechanism to do this. This would help identify service quality gaps and inform plans for ‘hands on’ training, refresher courses, and mentoring as needed. Implementing this monitoring agenda would provide a critical accountability framework to ensure Malawians received effective care and health financing resources achieve the highest return on investment.
Endnotes

* The Service Availability and Readiness Assessment is a health facility assessment tool designed to assess and monitor the service availability and readiness of the health sector and to generate evidence to support the planning and managing of a health system. It is designed as a systematic survey to generate a set of tracer indicators of service availability and readiness.

† The Service Delivery Indicators are sets of health and education indicators that examine health workers’ and teachers’ effort and ability, as well as the availability of key inputs and resources that contribute to the functioning of a health facility or school.

References


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