District Health Performance Improvement Evaluation report

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**Acronyms**

ANC       Antenatal Care
ARV       Antiretroviral
BA        Bottleneck Analysis
CCM       Community Case Management
CHAM      Christian Health Association of Malawi
CO        Country Office
CoM       College of Medicine
DC        District Commissioner
DEC       District Executive Committee
DHMT      District Health Management Team
DHO       District Health Office/District Health Officer
DHPI      District Health Performance Improvement
DHS       Demographic Health Survey
DHPI      District Health Systems Strengthening
DIP       District Implementation Plan
DIVA      Diagnose, Intervene, Verify, Adjust
DMO       District Medical Officer
EHP       Essential Health Package
EID       Early Infant Diagnosis
EPI       Expanded Programme on Immunization
FGD       Focus Group Discussion
GoM       Government of Malawi
HFS       Health Facility Surveys
HIV       Human Immunodeficiency Virus
HQ        Headquarters
HSA       Health Surveillance Assistant
HSSP      Health Sector Strategic Plan
iCCM      Integrated Community Case Management
IMCI      Integrated Management of Child Illnesses
KII       Key informant interviews
LQAS      Lot Quality Assurance Survey
LSTM      Liverpool School of Tropical Medicine
MoH       Ministry of Health
MoLG&RD   Ministry of Local Government and Rural Development
MNCH      Maternal, Newborn and Child Health
MNHP      Malawi National Health Policy
MoFEP&D   Ministry of Finance, Economic Planning and Development
MoH       Ministry of Health
MSH       Management Sciences for Health
NLGFC     National Local Government Finance Committee
SA        Supervision Areas
SH        Secretary for Health
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<tr>
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<tr>
<td>SSDI</td>
<td>Support for Service Delivery Integration</td>
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<tr>
<td>UHC</td>
<td>Universal Health Coverage</td>
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<tr>
<td>UNICEF</td>
<td>United Nation Children’s Fund</td>
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<tr>
<td>WASH</td>
<td>Water, sanitation and hygiene</td>
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<td>ZHSO</td>
<td>Zonal Health Support Office</td>
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Acknowledgements

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Disclosure statement
Gerald Manthalu was hired as an independent consultant for the evaluation. At the time of the assignment, he worked as Chief Economist in the Department of Planning and Policy Development in the Ministry of Health and had to take time off his job to do the work. He was, however, not involved in the DHPI implementation process because he was on study leave outside Malawi from March 2011 to April 2015. Nevertheless, the evaluator is very familiar with the planning and budgeting process in the Ministry of Health prior to DHPI. This contributed to his analysis of the DHPI process.
Executive Summary

Introduction
As part of the process of improving the performance of the district health system, UNICEF is supporting the Ministry of Health (MoH) implement an approach called District Health Performance Improvement (DHPI), a contextualised version of UNICEF’s District Health Systems Strengthening (DHSS) approach. DHPI is a systematic outcome-based approach to equitable programming and real-time monitoring that strengthens the district health system. It complements and builds on institutional planning and monitoring activities that already exist in a country. The DHPI approach helps strengthen performance and accountability for equitable health outcomes at the district level by identifying sub-populations or sub-geographical areas within the district that are not being adequately reached with essential health interventions and addressing the specific bottlenecks to the effective coverage of the interventions. Through the DHPI approach, District Health Management Teams (DHMTs) assess the root causes of identified bottlenecks and consultatively determine and prioritise bottleneck solutions that are included in district implementation plans (DIPs). The Ministry of Health, with support from UNICEF has been implementing DHPI since 2012. The approach was first piloted in 3 districts and later scaled up to an additional 18 districts.

Evaluation purpose and objectives
The purpose of the evaluation was to conduct a retrospective process evaluation of DHPI activities in districts that began implementation of the approach in Phase II of the introduction of DHPI in Malawi (2013/14 fiscal year). Phase II was selected over Phase I, because the evaluation team considered Phase I as an experimental phase, where the DHPI approach was being tailored to the Malawi context. Phase I districts also benefited from extensive technical and financial support which was not replicated in later phases. The following Phase II districts were selected for inclusion in the evaluation: Karonga, Balaka, Chiradzulu and Mwanza. The objectives of the evaluation were to document the implementation of the DHPI approach in Malawi, describe the changes that resulted from the programme, document the enablers and barriers of implementation and describe resources needed to sustain/improve DHPI implementation. The evaluation criteria that this study considered were relevance, effectiveness and sustainability. The evaluation sought to answer the following questions:

Relevance
- What was the context in which DHPI was implemented and did the assumptions required for successful implementation of DHPI hold?
- How is DHPI understood in the context of MoH district planning processes by key stakeholders at the district level and national levels and do stakeholders believe it adds value?

**Effectiveness**
- How were DHPI activities implemented in the evaluation districts?
- What changes did district manager(s) effect in Malawi following the implementation of DHPI?
- Is there evidence of improved planning and coordination of stakeholders as a result of the DHPI process?

**Sustainability**
- What were the barriers and enablers of DHPI implementation and what resources are needed to support continuation of the approach?
- How might the DHPI intervention be improved or designed differently?

**Methods**
Primary and secondary data were used to assess the performance of the DHPI approach. Primary data were collected through key informant interviews at district level (District Health Office and local Non-Governmental Organisations (NGOs) working in the health sector) and health partners and MoH officials at central level. Secondary data included 2014/15 fiscal year (FY) District Implementation Plans (DIPs) for the evaluation districts, 2014/15 FY DIP review reports, case studies of DHPI implementation for the evaluation districts, DHIS2 data and other relevant documents.

Qualitative data analysis was conducted in Microsoft Excel. For each research question, codes were assigned based on pre-defined sub-questions. The codes were identified by two individuals and compared and reviewed. Additional codes were added if new themes emerged throughout the analysis. Results from this analysis were triangulated with the DIPs, quarterly review reports and DHPI case studies.

Limitations of the evaluation include recall bias, potential evaluator bias, potential social desirability bias, not being able to collect primary data from all relevant stakeholders such as communities and health workers at lower level facilities and missing secondary data.
Findings
The evaluation found that some of the key assumptions for successful implementation of DHPI initiative held while some did not. Assumption (i), MoH buy-in and support including no major staff turnover, was partially satisfied; there was MoH buy-in and support while there was high staff turnover. Assumption (ii), DHMT motivation, support and resources to implement action plans, also partially held; there was DHMT motivation and support while there were insufficient resources to implement DHPI solutions. DHPI was introduced in a context where donors had withdrawn budget support to Government and health budgets had consequently declined. Assumption (iii), DHMT understanding and acceptance of DHPI after its introduction; assumption (iv), stakeholder and community engagement in the process; and assumption (v), no major emergency, shocks or other major initiatives disrupt DHPI implementation held.

National level MoH staff and district health management teams (DHMTs) who were involved in the DHPI process had a good understanding of the concept and the relationship between DHPI and the DIP process. Beyond DHPI coordinators at national and district-level, understanding of the approach was weak. Understanding of DHPI was better for staff at the district health office (DHO) than for health partners in districts. At the national level, knowledge of the DHPI approach was greater among UNICEF staff and consultants, than amongst Government officers and other partners. A shortcoming in the process of introducing DHPI was that there was no prior assessment of the DIP process to determine its strengths and weaknesses so that DHPI could be tailored to focus on strengthening parts of the DIP process that may have been considered weak or absent.

Stakeholders interviewed considered the value of DHPI to be i) the use of bottleneck and causality analysis ii) enhanced use of evidence in planning i.e. use of current data and community participation, which gave a clear picture of the situation on the ground iii) strengthened community involvement in problem and solution identification iv) greater involvement of DHO staff apart from the DHMT in planning v) directing resources to removing bottlenecks – DIP process before DHPI focused on routine activities. vi) helping DHOs advocate for support based on rigorously identified priorities.

Implementation of bottleneck solutions was variable across the four evaluation districts due to limited Government budgets. Districts that implemented bottleneck
solutions relied more on resources from local health partners who were flexible enough to fund DHO priorities. Many health partners would not reprogramme their activities to fund DHPI solutions. This might have been exacerbated by their lack of knowledge of the approach and its potential benefits. With respect to sustenance of DHPI activities, there was no evidence in any of the evaluation districts that DHPI was continued beyond the planning phase. The evaluation districts associated DHPI with the planning phase of the DIP process. This was evident from how they perceived DHPI’s added value; most of the areas they mentioned related to the planning and none to implementation and monitoring.

DHPI enabling factors included high-level MoH buy-in, ongoing decentralization reforms that have placed greater value in strengthening planning capacities of District Councils, an established district planning process (i.e. the DIP) that the DHPI approach could build on, designation of DIP Coordinators as DHPI focal persons, designation of DHPI champions (MoH officials who were DHPI trainers and facilitators) and commitment and financial support from UNICEF Country Office (CO). DHPI challenges included high staff turnover, lack of follow-up at district-level during and after the planning phase by MoH and UNICEF, lack of involvement of MoH planners which led to DHPI being perceived as a UNICEF approach rather than an MoH process, weak collaboration between UNICEF-hired consultants and the MoH and non-involvement of the National Local Government Finance Committee (NLGFC); NLGFC is the institution mandated with planning and budgeting and implementation and monitoring of all public sector activities at the district level.

Conclusions
The evidence shows that the DHPI approach was relevant and added value to the DIP process. There was buy in for the approach and DHOs were motivated to implement it. DHPI was valued in terms of improved use of real time evidence, community engagement, and bottleneck and causality analysis. Although DHPI was deemed relevant, there was no prior assessment of the DIP process to inform any specific areas that DHPI had to strengthen. There were hence DHPI elements which duplicated the pre-existing DIP process. In addition, some of the critical assumptions of the DHPI theory of change did not hold.

The effectiveness of DHPI was partial. On the positive side, DHPI assisted districts identify solutions that would increase coverage of interventions and address inequities in health and health services utilization. There was also evidence in the evaluation districts that health partners made higher allocations to bottleneck solutions than
DHOs. Nevertheless, poor coordination and incoherence of health partner resources was still a challenge. Evaluation districts gave mixed opinions on whether DHPI affected district resource allocation and improved data quality. There was also no evidence of bottleneck reduction monitoring during implementation and none of the evaluation districts showed evidence of sustained use of bottleneck analysis at the time of the evaluation.

Enabling factors for the sustainability of DHPI included the buy-in and value that national level Government officials and health partners attached to the process, the decentralization process that placed greater value in strengthening the planning capacities of district councils and the designation of DHPI champions. Sustainability was, however, threatened by high staff turnover, the perception that the DHPI process was a UNICEF initiative as opposed to MoH’s, lack of involvement of the Planning and Budgeting Unit at MoH and District Council planners and lack of follow-up to districts during and after DHPI planning by both MoH and UNICEF.

**Key recommendations**

**For the MoH Department of Planning and Policy Development**

- The Department of Planning and Policy Development should fully integrate in Multi-year and DIP guidelines DHPI principles which added value to the DIP process to ensure that there is only one source of district planning guidance. The Multiyear and DIP guidelines of 2013 incorporated DHPI elements which this evaluation found added value to the DIP process i.e. bottleneck and root cause analysis, use of evidence and community participation. There might be need, however, to review the guidelines again in light of the evolution of the DHPI approach.
- The Department of Planning and Policy Development should coordinate all district planning technical assistance for institutionalization and to ensure compliance by DHOs.
- The Department of Planning and Policy Development should strengthen the process of developing multiyear plans to reduce vertical programme planning, which was evident in 2014/15 DIPs and enhance a systems approach.
- The MoH should work with the Ministry of Local Government and Rural Development to strengthen the oversight roles of relevant community health structures. The DHPI process strengthened community participation in planning but with the ongoing decentralization reform, strengthening the oversight capacity
of community structures is seen as a pre-condition for improving the performance and accountability of the district health system.

- Formalise the district health stakeholders’ forum, where all health partners operating in a district meet and discuss health and health care provision in order to strengthen coordination.
- Establish a national DIP forum where DHOs, DIP coordinators and chairpersons of the district health stakeholders’ forum meet to discuss implementation successes and challenges in order to promote accountability for good planning and follow-through.
- Local health partners should sign Memoranda of Understanding with district assemblies in which they will commit that they will implement priorities of the DHO.
- Collaborate with the Department of Health Policy and Systems at the University of Malawi, College of Medicine, to build local capacity in district health planning.
- The Department of Planning and Policy Development should harmonise national and district planning and M&E frameworks.

For UNICEF

- Since Multiyear planning and DIP guidelines have incorporated DHPI principles, UNICEF should focus on supporting the multiyear and DIP processes and not have DHPI as a parallel process.
- UNICEF should ensure that consultants working on district health planning are linked and report to the Directorate of Planning and Policy Development at MoH.
- UNICEF in collaboration with the Department of Planning and Policy Development in MoH should re-train DHMTs that have experienced high staff turnover in district health planning.
- UNICEF should ensure that the bottleneck analysis tool is fully localised and DHO capacity in using it is built.

For DHOs

- Strengthen the application of Multi-year and DIP guidelines throughout the planning cycle.
- Enforce coherence and coordination by signing Memoranda of Understanding with local health partners.
- Include bottleneck reduction monitoring as part of DIP/HMIS quarterly reviews.
- Assume oversight over health related activities in the district.

For the future evaluation of the DHPI programme
• Clarify what specific areas of the existing DIP process DHPI aims to strengthen so that future evaluation of the programme can focus on those areas.
• Define the outcomes of interest for the evaluation more specifically.
• Take into account parallel initiatives at national and district levels aimed at strengthening district health performance.
1. Introduction

Over the period of three recent health sector strategic documents, national health plan (NHP) (1999-2003), Program of Work (2004-2010) and health sector strategic plan (HSSP) (2011-2016), the Ministry of health and health partners have focussed on reducing the burden of disease and improving health outcomes in general and in particular meeting the health millennium development goals (MDGs) 4, 5 and 6: reducing child mortality, improving maternal health and combating HIV/AIDS, malaria and other diseases, respectively. It was recognised internationally and locally that in order to achieve the MDGs, in addition to mobilising more resources for the health sector, partners in the health sector needed to focus on proven cost-effective interventions and strengthen health systems, specifically focusing on increasing efficiency and equity. In Malawi, an Essential Health Package (EHP) recommended in the NHP (1999-2003) was introduced in 2004 and implemented during the Program of Work (PoW) (2004-2010) and the Health Sector Strategic Plan (HSSP) (2011-2016). The current EHP consists of cost-effective interventions targeting the top 14 diseases and conditions in terms of burden of disease. The rationale for introducing the EHP was that targeting the top causes of morbidity and mortality with cost-effective interventions would significantly reduce the burden of disease and improve health outcomes. A Sector Wide Approach (SWAp) was introduced in 2004 while Government wide decentralisation reforms laid out in the Decentralisation Policy (1998) gained pace in the same year. These reforms aimed at enhancing coherence, efficiency and equity.

Due to the various health sector reforms and focus on an EHP, there have been notable improvements in health outcomes. For example, HIV prevalence among adults (15–49) reduced from 16.4% in 1999 to 10.3% in 2013. The maternal mortality ratio declined from 984/100,000 live births in 2004 to 574/100,000 live births in 2014. Under-five mortality was estimated at 85 per 1,000 live births in 2014 down from 146 per 1,000 live births 10-14 years earlier. Malawi managed to achieve millennium development goal (MDG) 4 of reducing child mortality by two thirds by 2015.

Challenges still remain, nevertheless. The disease burden continues to be high, with major contributors including malaria, diarrhoea, HIV and AIDS and maternal and neonatal conditions. Non-communicable diseases are also on the increase. Regarding health financing, Malawi’s annual per capita health expenditure is declining, estimated at US$29 in 2015 from US$39 in 2011. There is, therefore, an even greater need for
reconfiguring a more efficient health care system, specifically focusing on the district health system where the bulk of health services are delivered.

1.1. Background and rationale for DHPI in Malawi

Since 2011, UNICEF has been supporting the MoH implement an approach called District Health Performance Improvement (DHPI). DHPI aims to strengthen performance and accountability for equitable health outcomes at the district level. This is meant to be achieved through identifying sub-populations and sub-geographies within the district that have sub-optimal coverage of essential health interventions and addressing the bottlenecks that inhibit them. UNICEF introduced DHPI in order to:

- Improve planning and monitoring of activities carried out at district level to increase equitable coverage of essential health services in Malawi
- Undertake evidence based and equity centred planning for acceleration towards MDGs 4 & 5
- Improve use of HMIS and programme data by managers for MNCH programme planning, management and monitoring within the DIP
- Guide rational resource re-allocation to resolve documented bottlenecks hampering adequate coverage of high impact interventions for MNCH

The DHPI approach is an adaptation of UNICEF’s District Health Systems Strengthening (DHSS) approach that follows a Diagnose, Intervene, Verify, Adjust logic. In DHSS, diagnosis involves identifying inequities and health system bottlenecks across different population sub-groups and geographic areas and understanding their causes; intervening entails integrating prioritised strategies and solutions to bottlenecks into district plans and implementing them in an inclusive manner; verification involves short term systematic monitoring of progress towards resolving critical bottlenecks and adjusting involves an iterative process of adjusting solutions and strategies based on the results of continuous monitoring (see Wilhelmsen et al. 2015).

1.2. DHPI theory of change

The DHPI theory of change assumes a causal and logical link that maps inputs, activities, outputs, outcomes and intended impact (See 1.1.1.1.1Annex A). The theory propounds that district health systems performance can be improved through the use of better data on bottlenecks in the provision of priority health services and of tools to support decision makers make more informed managerial decisions to address such
bottlenecks. DHPI activities involve the collection of data on key health interventions, an analysis and planning exercise comprising bottleneck analysis, consultations to develop locally tailored solutions to address the bottlenecks, development of an operational plan and frequent monitoring of bottlenecks reduction during implementation.

Certain assumptions must be satisfied for the DHPI theory of change to work. These assumptions include: MoH buy-in and support and no major staff turnover; DHMT motivation, support and resources to implement action plans; understanding and acceptance of DHPI by DHMTs; engagement of stakeholders and communities in the DHPI process and no major emergencies, shocks or other major initiatives that disrupt DHPI implementation.

### 1.3. Routine Planning process for DHOs

One of the objectives for introducing the DHPI approach was to strengthen district planning. This section provides an overview of the district planning process. Prior to DHPI introduction in 2012, district health planning was guided by annual DIP guidelines. In the 2012/13 FY, new guidelines titled “multiyear district health plan and annual district implementation plan” were introduced which incorporated DHPI principles and processes. The rationale for the new guidelines was to move away from short term planning to medium term planning in line with the health sector strategic plan (HSSP) 2011-2016 of the Ministry of Health and the medium term expenditure framework (MTEF) of the Ministry of Finance, Economic Planning and Development and to strengthen the DIP process. DIPs are meant to be derived from the multi-year plan. The key steps in developing DIPs are described below.

The DHO meets and conducts a stakeholder analysis to identify which local stakeholders should be involved in the development of the DIP and at what stage in the process. Then a situation analysis is conducted which describes the health status of the population in the district, related risk factors and health care delivery in the district. The revised guidelines have incorporated bottleneck and causality analysis elements of the DHPI process as part of the situation analysis. After the situation analysis, problems are identified and prioritised. Cost-effective interventions to address those problems are then identified. DHOs are encouraged to involve communities and health facilities in problem identification and analysis. Pre-2012/13 DIP guidelines used Basic Priority Rating System (BPRS) and PEARL (Propriety, Economics, Acceptability, Resources, Legality) analysis for problem prioritisation. The
details are provided in Annex B. The current multiyear planning guidelines focus on the same prioritisation principles though defined in a slightly different way. The next step is definition of priorities in terms of objectives, outputs, output targets and activities. Afterwards, the plan is costed and submitted to the District Council with copies sent to the MoH.

The district health budget is extracted from the DIP and is consolidated by the District Council with other sectoral budgets and gets approved by Parliament as part of the District Council vote. Budget ceilings are usually received when draft health budgets have already been submitted to the District Council. When the ceilings are out, DHOs have to revise their budgets accordingly. Due to time constraints, especially during the final days prior to submission of the District Council budget to the National Local Government Finance Committee (NLGFC) and capacity challenges, mostly only the budget is revised without revising the DIP. This introduces a disconnect between the DIP and budget which can lead to inadequate or ad hoc implementation.

DHOs develop their annual plans together with local health partners with support from the Department of Planning and Policy Development (DPPD) in the MoH and Zonal Health Support Offices (ZHOSOs).

1.4. DHPI roll out in Malawi
UNICEF introduced the DHPI approach to the Ministry of Health through the Secretary for Health who also became the national champion of the approach in 2011. Within the MoH, the Department of Planning and Policy Development was identified as the anchor of the approach to fast-track institutionalization within Government. While taking a health systems approach, the initiative used the integrated community case management (iCCM) programme as an entry point for introducing the approach. Initially, ten districts where iCCM was being introduced were targeted for DHPI in order to capitalize on the synergy between iCCM and the DIP. In 2013, Malawi also received UNICEF support for its PMTCT programme’s implementation of the relatively new Option B+ protocol. This provided an opportunity for using DHPI to identify the priority bottlenecks to the successful implementation of Option B+ at the district level, and provided more in-depth baseline data. While the MoH requested that the DHPI be implemented in all districts, the approach was originally piloted in three districts to provide a learning opportunity so that key barriers to scale up were addressed before expanding to more districts. To date, in 2016, DHPI has been introduced in 21 districts.
out of 30 DHOs nationally. Figure 1 shows specific timelines for DHPI introduction in Malawi.

In Phase I, a UNICEF staff member supported DHPI introduction and DHPI training in each district alongside the College of Medicine (CoM) of the University of Malawi (UoM). DHOs received an orientation in DHPI as well as training in data collection methodologies. Data were collected through household surveys using the lot quality assurance survey (LQAS) methodology, focus group discussions (FGDs) and health facility and HSA surveys. Liverpool School of Tropical Medicine (LSTM) provided classroom and field training to facilitators in LQAS for conducting household surveys. The household surveys were used to collect baseline data in each of the phase I districts. CoM provided training on FGDs, translated the FGD guide in Chichewa and trained facilitators in the guide. UNICEF staff oriented data collectors to the health facility survey and Health Surveillance Assistant (HSA) survey. The 3 Phase I districts completed the data collection and bottleneck analysis and incorporated the DHPI results into their DIPs\(^1\). From DHPI introduction to incorporation of DHPI solutions in the DIP, the process took 9 months to complete. An overview of the DHPI process is provided in

\(^1\) More detail on DHPI roll-out in Malawi can be found in Wilhelmsen et al. (2015).
Timeline to Initiate and Launch DHPI in Initial Districts

National-Level Engagement

December 13, 2011: Initial presentation to the PS and the director of planning at the MoH
June 25-27, 2012: Initial training of national facilitators on the DHPI approach (UNICEF and MoH)
June 28, 2012: DHPI roll out presentation to MoH planning department, WHO, and college of medicine
January 29 – February 1, 2013: Hands-on training of facilitators on analysis and planning exercises

District-Level Engagement

Phase I (Kasungu, Dedza, Ntcheu, 2012/13 FY)
July 2012: Orientation on DHPI (college of medicine, representatives from three DHMT of initial districts, WHO)
September 2012: LQAS and DIP training (UNICEF, college of medicine, nutrition partners, LSTM)
October 2012: Orientation to DHPI in each district
October-December 2012: Quantitative data collection
December 2012: FGD training by COM
January 2013: Qualitative data collection
February 2013: Bottleneck analysis workshops

Phase II (Karonga, Mzimba North and South, Lilongwe, Balaka, Chiradzulu, Phalombe, Mwanza, Nsanje, 2013/14 FY)
October-December 2013: Intro to DHPI and collection of data
January-March 2014: BA
April 2014: Incorporate into DIPs and MYPs

Phase III (Mangochi, Chikwawa, Dowa, Chitipa, 2014/15 FY)
January-March 2014: Intro to DHPI and collection of data
May/June 2014: BA
July/August 2014: Incorporate into DIPs and MYPs

Phase IV (Mchinji, Blantyre, Zomba, Thyolo, Mulanje, 2015/16 FY)

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<th>Level of Planning</th>
<th>Action Taken</th>
<th>Average Time*</th>
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<td>Adaptation of the DIVA approach to Malawi context</td>
<td>One month</td>
<td>UNICEF HQ, UNICEF COM</td>
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<td>Identified interventions</td>
<td>Two months</td>
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<tr>
<td>District level</td>
<td>•Introduced, advocated, and sensitized stakeholders to DHPI: one day</td>
<td>One week in each district</td>
<td>UNICEF, MoH</td>
</tr>
<tr>
<td></td>
<td>• Identify interventions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identified information sources (supervision areas: six-seven)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Conducted village listing (by supervision area): three-five days</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trained on data collection methodologies (classroom/field) and random sampling</td>
<td>Two weeks</td>
<td>Data collectors, area supervisors</td>
</tr>
<tr>
<td></td>
<td>• Household survey: LQAS (two days/three days)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• HFS (one day/one day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Health Surveillance Survey (one day/one day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FGD (two days/one day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desk review of available data</td>
<td>Two days</td>
<td>DHMT</td>
</tr>
<tr>
<td></td>
<td>Household survey data collected, tabulated, and summarized</td>
<td>Two weeks</td>
<td>Two data collectors, One area supervisor, data collector</td>
</tr>
<tr>
<td></td>
<td>• HF data collected (five days) and data entry (four days)</td>
<td>Five days/four days</td>
<td>District team</td>
</tr>
<tr>
<td>Level of Planning</td>
<td>Action Taken</td>
<td>Average Time*</td>
<td>Who was Involved</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• HSA survey data collected and data entry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FGDs, transcription, analysis of results, and summary report</td>
<td>Three days/two days</td>
<td>District team and Coordination team</td>
</tr>
<tr>
<td></td>
<td>• KII</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data consolidation and preparation for bottleneck analysis discussions</td>
<td>One week</td>
<td>UNICEF HQ</td>
</tr>
<tr>
<td></td>
<td>Analysis and planning workshop (bottleneck identification, causality analysis, solution identification, tentative operational plan and budget, monitoring plan)</td>
<td>Five days</td>
<td>Extended DHMT, MoH, UNICEF, NGOs (up to 50 people)</td>
</tr>
<tr>
<td></td>
<td>DEC meeting and presentation of results</td>
<td>One day</td>
<td>DMHT</td>
</tr>
<tr>
<td></td>
<td>Strategies and solutions incorporated into local planning and budgeting</td>
<td>Three days</td>
<td>DHMT, data collectors</td>
</tr>
<tr>
<td></td>
<td>Final report on DHPI</td>
<td>One week</td>
<td>DHMT</td>
</tr>
<tr>
<td></td>
<td>Developing DIP</td>
<td>-</td>
<td>DHMT</td>
</tr>
<tr>
<td></td>
<td>Developing multi-year plan</td>
<td>-</td>
<td>DHMT</td>
</tr>
</tbody>
</table>

*Note that the average time indicated does not include prep time for logistics.

Approximately 12 weeks or 3 months (without gaps in implementation and not including national level introduction, interventions, indicators)

**Source:** Wilhelmsen et al. (2015)

### 1.4.1. Adjustments Made after the Initial Phase

The approach was further tailored to the context and needs of districts based on the experience in the first three districts. The main changes included:
• CoM refined the training aids for FGDs and increased time for training for the additional districts. Results from the FGDs had indicated that the materials developed by CoM and the training based on the materials were not as comprehensive as necessary.
• Key informant interviews (KII) were dropped because they did not add much value to the FGDs results.
• UNICEF made post-quality assurance changes to indicators for the bottleneck analysis after identifying data collection challenges. Household survey questions were changed as a result.
• Four local national level consultants were recruited in place of CoM because CoM was not able to serve as a technical partner any longer.

The DHPI approach has been modified in Phase 4, where Management Sciences for Health (MSH) was recruited to support district implementation. In the revised approach, LQAS has been dropped and health facility routine data are used instead after data quality is checked. Also, the number of indicators used was reduced. Currently, tracer indicators are being used; much fewer indicators than were used initially. Indicators were redefined to suit the national M&E framework and routine data sources. In addition, GIS data are being used to map geographical access. In terms of capacity building, DHPI champions (mostly MoH health management information system (HMIS) focal persons who were initially trained in DHPI) are being used as well as expertise from NGOs.
2. Evaluation Purpose and Objectives

The purpose of this evaluation was to conduct a retrospective process evaluation of the introduction and implementation of the DHPI activities in Malawi (See Terms of Reference in 1.1.1.1Annex E). The evaluation criteria that this study considered were relevance, effectiveness and sustainability. Efficiency and impact criteria were not applicable, the former because the evaluation did not set out to measure the effect of DHPI on health care input-output relationships and the latter because the duration of implementation was not sufficient. The specific objectives of the DHPI evaluation in Malawi were to:

- Describe how the DHPI approach was actually implemented
- Identify key facilitators and barriers to DHPI implementation
- Understand how DHPI may have affected managerial practices
- Provide important lessons to strengthen DHPI nationally, including districts that have not yet scaled up
- Field test evaluation tools that can be helpful in other international contexts
- Measure any changes in short term outcomes
- Test the theory of change developed for DHPI globally in Malawi

The specific research questions that the evaluation asked are as follows by evaluation criteria:

**Relevance**
- What was the context in which DHPI was implemented (political, economic, social, major events that may have affected implementation) and did the assumptions required for successful implementation of DHPI hold?
- How is DHPI understood in the context of MoH district planning processes by key stakeholders at the district level and national levels and do stakeholders believe it adds value?

**Effectiveness**
- How were DHPI activities implemented in the evaluation districts?
- What changes did district manager(s) effect in Malawi following the implementation of DHPI (e.g. identification of priority strategies to improve service delivery and/or quality for the most underserved population groups, strategic shifts in allocation of resources, improved monitoring of implementation and/or bottlenecks...)?
- Is there evidence of improved planning and coordination of stakeholders as a result of the DHPI process?
Sustainability

- What were the barriers and enablers of DHPI implementation and what resources are needed to support continuation of the approach?
- How might the DHPI intervention be improved or designed differently?
3. Methodology

3.1. Evaluation Design

The study was a retrospective process evaluation of DHPI implementation in Malawi. Being a formative evaluation, it only focused on DHPI implementation districts and not non-DHPI districts. The evaluation, therefore, could not infer causal effects of DHPI implementation on short term outcomes; it rather aimed to show whether and how DHPI may have contributed to the short term outcomes. The study made qualitative judgements about certain elements of district planning and implementation before and after DHPI implementation.

Mixed methods were used to answer the research questions. Quantitative methods were used to substantiate qualitative findings. Primary and secondary data were used. Primary data were collected from key informant interviews at district level (District Health Office and local NGOs working in the health sector) and MoH and health partner officials at central level.

3.2. Data

3.2.1. Data collection tools

UNICEF HQ developed generic interview guides that were modified and used for collecting primary data. These tools were initially reviewed by the Consultant, Karen Grepin (UNICEF HQ) and Ellubey Maganga (UNICEF CO) in order to contextualise them. They were then presented at an inception workshop on 13\textsuperscript{th} January 2016 that was organised by the evaluation team for the study comprising Ellubey Maganga, Karen Grepin, Braeden Rogers (UNICEF HQ), Gabrielle Fontana (UNICEF HQ) and the Consultant. Besides seeking input into the data collection tools, the workshop aimed to launch the DHPI evaluation, explain the evaluation process to stakeholders and gauge stakeholder expectations of the evaluation.

The evaluation team revised data collection tools based on the feedback from the workshop and agreed to pre-test the tools in one Phase I district. The Consultant and Ellubey Maganga pre-tested the tools in Dedza from 27\textsuperscript{th} – 29\textsuperscript{th} January 2016. They then revised the data collection tools subsequently.
3.2.2. Sampling

The evaluation team had determined the following district selection criteria before the inception workshop:

- Districts belonging to Phase II of DHPI implementation. Phase I districts were not considered for selection because the evaluation team regarded them as learning ground, where the DHPI approach was being fully tailored to Malawi. They also utilised much more technical and financial support which was not replicated in other districts.
- Varied geographical representation.
- Districts with known high and low levels of staff turnover.
- Districts not directly affected by the recent floods or other known shocks in the 2014/15 fiscal year.

Based on these criteria, the districts in Table 3.1 were selected at the inception workshop:

**Table 3.1: Evaluation districts and their characteristics**

<table>
<thead>
<tr>
<th>District</th>
<th>Zone</th>
<th>Shocks (economic/Environmental/outbreaks) during 2014/15 FY</th>
<th>External support for DHPI after initial workshop, 2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karonga</td>
<td>Northern</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Balaka</td>
<td>South East</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Mwanza</td>
<td>South West</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Chiradzulu</td>
<td>South West</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Table 3.2 shows population and selected health care indicators for all Phase II districts. Mwanza had high coverage across all indicators most likely because of cross-border populations; many Mozambicans cross the border to access free health care. Chiradzulu also faces the issue of cross-boundary populations which may explain why measles vaccination coverage was over 100%.
Table 3.2: 2014/15 Population and health care indicators for Phase II districts

<table>
<thead>
<tr>
<th>District</th>
<th>Population§</th>
<th>OPD Utilisation per 1000 population</th>
<th>% Under 1 given Measles vaccination</th>
<th>% Deliveries conducted by trained health personnel</th>
<th>% Persons 15-49 years tested positive for HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiradzulu</td>
<td>314,059</td>
<td>1,241</td>
<td>105</td>
<td>69</td>
<td>2.4</td>
</tr>
<tr>
<td>Mwanza</td>
<td>102,571</td>
<td>1,822</td>
<td>98</td>
<td>116</td>
<td>3.5</td>
</tr>
<tr>
<td>Balaka</td>
<td>383,887</td>
<td>996</td>
<td>92</td>
<td>65</td>
<td>1.5</td>
</tr>
<tr>
<td>Karonga</td>
<td>327,084</td>
<td>1,363</td>
<td>81</td>
<td>57</td>
<td>1.7</td>
</tr>
<tr>
<td>Mzimba</td>
<td>1,119,290</td>
<td>1,087</td>
<td>58</td>
<td>45</td>
<td>0.8</td>
</tr>
<tr>
<td>Lilongwe</td>
<td>2,492,795</td>
<td>740</td>
<td>63.9</td>
<td>49</td>
<td>0.9</td>
</tr>
<tr>
<td>Phalombe</td>
<td>373,587</td>
<td>873</td>
<td>87.3</td>
<td>64</td>
<td>2.5</td>
</tr>
<tr>
<td>Nsanje</td>
<td>281,552</td>
<td>1,339</td>
<td>79.6</td>
<td>73</td>
<td>3.2</td>
</tr>
</tbody>
</table>

§Mid-year population projections for 2014
Source: DHIS2

The key informants by district are summarized in Table 3.3 while key informants at national level are presented in Table 3.4. At the District Health Office, the evaluator aimed to interview the District Health Officer and the DHPI Coordinator. If the DHPI Coordinator was transferred to a nearer District Health Office, the evaluator visited him/her in his/her new district. Due to the transfer of DHPI coordinators in two districts, the evaluator asked District Health Officers to recommend other individuals to be interviewed who were meaningfully involved in the DHPI process.

Secondary data included 2014/15 FY DIPs from the evaluation districts, 2014/15 DIP review reports, case studies of DHPI implementation in the evaluation districts, DHIS2 data and other relevant documents.
Table 3.3: Key Informants at district level

<table>
<thead>
<tr>
<th>District</th>
<th>DHO (Yes/No)</th>
<th>DHPI Coordinator (Yes/No)</th>
<th>Other DHO Staff</th>
<th>Local Partners</th>
<th>Total no. of interviewees</th>
<th>Period of visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karonga</td>
<td>Yes</td>
<td>Yes</td>
<td>District Environmental Health Officer, 2 Environmental Health Officers</td>
<td>Plan International (Support to Service Delivery Integration (SSDI) Project), Adventist Health Services, Lusubilo Community Project</td>
<td>8</td>
<td>15-17 February 2016</td>
</tr>
<tr>
<td>Balaka</td>
<td>Yes</td>
<td>No. Transferred to Nsanje district</td>
<td>EPI Coordinator, Nurse, Statistical Clerk</td>
<td>PCI Malawi, Save the Children (SSDI Project), Sue Ryder Foundation</td>
<td>8</td>
<td>24-26 February 2016</td>
</tr>
<tr>
<td>Chiradzulu</td>
<td>Yes</td>
<td>No. Transferred to Blantyre district</td>
<td>Environmental Health Officer (DIP Coordinator) Former DHPI Coordinator, Chiradzulu (now at Blantyre DHO)</td>
<td>Management Sciences for Health, Medicins Sans Frontieres</td>
<td>5</td>
<td>10-14 March 2016</td>
</tr>
<tr>
<td>Mwanza</td>
<td>Yes</td>
<td>No</td>
<td>Clinical Officer, Statistical Clerk, Data Clerk</td>
<td>Save the Children, Medicins Sans Frontieres</td>
<td>6</td>
<td>15-17 March 2016</td>
</tr>
</tbody>
</table>
Table 3.4: National level interviewees

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Designation</th>
<th>DHPI Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNICEF Country Office</td>
<td>Health Specialist</td>
<td>Focal Point</td>
</tr>
<tr>
<td>Ministry of Health Headquarters, Directorate of Planning and Policy Development</td>
<td>2 Economists</td>
<td>Focal Points</td>
</tr>
<tr>
<td>Ministry of Labour (Formerly of Central West Zonal Health Support Office)</td>
<td>Statistician</td>
<td>DHPI Champion</td>
</tr>
<tr>
<td>College of Medicine/MSH</td>
<td>Lecturer</td>
<td>Consultant</td>
</tr>
</tbody>
</table>

In Karonga and Balaka notes were taken by the evaluator and another individual while in Chiradzulu and Mwanza notes were taken by the evaluator only. The first three interviews in Karonga were recorded but the rest were not recorded because the recorder malfunctioned. All Chiradzulu interviews were recorded. In Balaka and Mwanza interviews were not recorded. For the former district, the recorder was not functional yet while for the latter district interviewees did not give consent. The recordings were transcribed and used to substantiate notes that were taken during the interviews.

3.2.3. Analysis

3.2.3.1. Coding and themes
Data analysis was conducted in Microsoft Excel. Separate tabs for each research question were created and codes assigned based on pre-defined sub-questions. Primary and secondary codes were assigned to the data as was necessary. The codes were identified by two individuals who compared and reviewed them accordingly. Additional codes were added to a tab if new themes emerged through analysis. The evaluator conducted inter-district and inter-stakeholder comparison of the data. Results from this analysis were triangulated with 2014/15 DIPs, DHPI case studies and quarterly review reports.

3.2.3.2. Review and assessment of district plans and budgets
One of the research questions was whether solutions identified through the DHPI process were included in the DIP and multiyear plans and whether those actions were implemented. This was verified by cross-checking the solutions identified during DHPI planning with DIPs. DIPs for three fiscal years, 2013/14, 2014/15 and 2015/16, the first fiscal year representing the pre-DHPI period and the latter two representing the post-
DHPI fiscal years for Phase II districts were requested in order to assess whether the content of DIPs had changed after DHPI was introduced. The evaluator also assessed if DHPI solutions fed into 2014/15 DIPs and what budgets were allocated to the solutions.

3.2.3.3. **Review and assessment of quarterly review meeting reports**
The evaluator also attempted to verify whether DHPI solutions were implemented by reviewing reports of 2014/15 DIP/HMIS quarterly review meetings which were requested from the evaluations districts. The purpose of this was to ascertain whether implementation of DHPI solutions was reviewed, whether the solutions were assessed as being effective or causal analysis of the bottleneck was reviewed to identify alternative solutions if they did not work. The analysis also meant to determine if bottleneck reduction was discussed. Only one evaluation district submitted one review report which limited the analysis.

3.3. **Validation workshop**
The draft report was circulated and commented upon. A validation workshop was then held on 27th June 2016 where stakeholders including DHMTs where the evaluation was conducted gave their comments on the results. The report was then finalized after integrating relevant comments.

3.4. **Ethical Clearance**
Ethical clearance was obtained from the National Health Sciences Research Committee and informed consent was obtained from all study participants before commencing the interviews. The letter granting ethical approval is attached in Annex D.

3.5. **Limitations**
This evaluation had the following limitations. First, being a retrospective evaluation there was a high chance of recall bias. Second, there was likelihood of social desirability bias by interviewees. The evaluator might also have introduced bias because of being involved in the district health planning process before DHPI was introduced. Third, the evaluation did not gather primary data from all relevant stakeholders such as communities and health workers especially at lower level facilities. There were also missing secondary data. Fourth, evaluation was not built into the design of the DHPI approach such that roll out did not consider maintaining comparison districts.
4. Findings

4.1. Relevance

4.1.1. DHPI implementation context and critical assumptions

The key assumptions for successful implementation of DHPI initiative, as outlined in the DHPI theory of change (Annex A) were i) MoH buy-in and support including no major staff turnover ii) DHMT motivation, support and resources to implement action plans iii) DHMT understanding and acceptance of DHPI after its introduction iv) Stakeholder and community engagement in the process and v) no major emergency, shocks or other major initiatives disrupt DHPI implementation. Some of these assumptions were satisfied while others were not. Assumption (i) was partially satisfied; there was MoH buy-in and support while there was high staff turnover. Assumption (ii) also partially held; there was DHMT motivation and support while there were insufficient resources to implement DHPI solutions. Assumptions (iii) and (iv) held and so did assumption (v) as was shown in Table 3.1.

4.1.1.1. MoH buy-in and support including no major staff turnover

Interviews with national level officials at both UNICEF CO and Ministry of Health indicated that the DHPI process had buy in. One central level interviewee said:

“... [UNICEF HQ] and UNICEF country office team met the Secretary for Health (SH). They were accompanied by the then Director of Planning and Policy Development and Deputy Director of the Central Monitoring and Evaluation Division (CMED). The SH requested [that] DHPI be rolled out to the whole country but UNICEF suggested that they start small [and] then roll out”.

One MoH interviewee said:

“We were selected as leaders to spearhead the process at the Ministry level. We were trained as trainers. We were involved in training these districts. Then we embarked on the process of implementing the DHPI approach. We were at the forefront of DHPI implementation”.

Another MoH key informant said

“We were invited to UNICEF for a presentation on DHPI. After that, we were asked how we felt regarding the tool. After looking at the tool in terms of the four
dimensions [diagnose, intervene, verify, adjust], we were impressed that it was a good tool. We said its focus on maternal and child health was rightly placed, because any changes you do regarding this part has big implications on health. Some elements of DIP could be beefed up by this process”.

Later, though, the Secretary for Health who championed the DHPI process was replaced while the Director of Planning and Policy Development was promoted away. In addition, some DPPD economists who were introduced to the approach were later unavailable and the one who remained was too busy to devote sufficient attention to DHPI. All evaluation districts were also affected by staff turnover. Karonga was least affected because the DHO and DHPI Coordinator were still there. Mwanza retained the DHO but had the DHPI Coordinator moved away while Balaka and Chiradzulu had both DHO and DHPI Coordinator transferred to other districts. A DHO staff in Balaka indicated that out of 20 members who were initially trained, only 8 remained. In Balaka and Chiradzulu DHO staff mentioned that the situation was aggravated by lack of proper handovers by staff who were moved away.

4.1.1.2. DHMTs have motivation, support and resources to implement action plans;

DHOs were motivated to implement DHPI. In Chiradzulu, one DHO staff said there was greater involvement of DHO staff: “Before DHPI, only the coordinators and DHMT did the plan. Now a larger team is involved”. In Karonga, commitment to the process was demonstrated by how all respondents consistently said DHPI did not complicate or make irrelevant the DIP process. “In fact, the DHPI simplifies the DIP process” said one DHO staff. In the same district, commitment was also evident from the knowledge of DHPI that the District Health Officer had; he replicated almost all information that the DHPI coordinator had given in an earlier interview. In Mwanza, DHO staff indicated that many health workers were engaged in the DHPI process and because they appreciated the challenges for themselves, they started working hard.

In terms of DHPI support, one DHO staff at Karonga DHO said there was not enough support from MoH Department of Planning and Policy Development, potentially leading to confusion since planning guidance was expected to come from that department.

Resources from Government to implement action plans were grossly inadequate. This was largely due to donor withdraw from budgetary support in 2012 due to widespread
fraud and corruption that was exposed in Government (“Cashgate” scandal). On limited budgets, one DHO staff in Chiradzulu said.

“You trim the plan to match resources and you end up not implementing some solutions ... Due to limited resources activities are either left out or scaled down”.

In Karonga, one DHO staff said:

“There has been real decline in ORT funding over the years, so currently DHMT prioritizes implementation of priorities of priorities such as paying utilities, procuring supplies, buying patient food, and running of ambulances; so even after identifying the bottlenecks, identified solutions are not being implemented using ORT resources. However, the DHMT has been able to implement some of the identified solutions using Partner resources”.

On the other hand, partner resources were in the majority of cases not going into priorities of the DHO. In Karonga, DHO staff mentioned of how they were surprised at the magnitude of health care resources that came to the district in the 2014/15 FY. Health sector resource mapping for 2014/15 FY conducted by MoH showed that Karonga health sector had a total of MWK2.2 billion worth of health resources while the Government budget for the DHO was MWK429 million. A DHO staff in Balaka said:

“It is a big challenge. Partners will agree to implement activities but when implementation time comes, they don‘t. They have their own interests”

As a result, in all districts assessed, bottleneck solutions identified through the DHPI process remained largely unfunded or were mostly funded by health partners, see section 4.2.2.1.

4.1.1.3. DHMTs understand & accept DHPI after its introduction;
District health offices in the evaluation districts understood DHPI as a process helping them to identify problems and their solutions. In Karonga a DHO staff said

“DHPI helps identify problems, identify solutions from the prioritised problems”.

In Chiradzulu a DHO staff said:
“When we are formulating our DIP we need to know the situation at that time...so the process that can lead us to prioritizing problems or knowing the situation and [at what] points to develop interventions is the DHPI process”.

In Balaka, a DHO staff said DHPI helped in finding root causes of health problems and setting priorities while in Mwanza a DHO staff said it was an in-depth analysis of health challenges.

4.1.1.4. Stakeholder and community engagement

From the DHO and national level interviews, health partners at the local level were engaged during bottleneck analysis and dissemination of DHPI results. In Balaka, a DHO staff said that most partners were present during the presentations of DHPI results, but mostly they did not participate in DHPI/DIP activities. In Chiradzulu, a DHO staff also reported that not all partners attended planning meetings. DHO staff across all evaluation districts said that a key strength of the DHPI approach was that community engagement went further than the previous DIP process by conducting the household survey, FGDs and involving communities in identifying solutions during planning. A DHO staff in Chiradzulu said:

“Household survey in DHPI helped engage communities more, never engaged communities to this scale before”.

A DHO staff in Karonga said:

“With the DHPI, communities are key in identifying solutions to problems that affect them, hence more likely to cooperate and work towards addressing the root causes of the problems... During DHPI we identified the problems, but solutions [had to] be identified by [the] community”.

In Karonga, in order to address the problem of high numbers of home deliveries, one of the solutions was the establishment of by-laws which was proposed by community leaders with the help of the district magistrate. In Mwanza, DHO staff pointed out that before DHPI was introduced in 2012, they conducted community engagement on a similar scale to DHPI. They went to communities and asked them their problems and their solutions. “When DHPI came, it built on the 2012 process” said one DHO interviewee.
4.1.2. How were DHPI activities implemented in districts?

The DHPI process was kick-started in all districts by an orientation of stakeholders to the concept. DHPI activities by phase were presented earlier in Figure 1.

Table 4.1 shows when the activities were done for the evaluation districts.

Table 4.1: Key DHPI activities and their timelines by district

<table>
<thead>
<tr>
<th>Activity</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHPI Orientation</td>
<td>Balaka Mar-13</td>
</tr>
<tr>
<td></td>
<td>Chiradzulu Mar-13</td>
</tr>
<tr>
<td></td>
<td>Karonga Feb-13</td>
</tr>
<tr>
<td></td>
<td>Mwanza Mar-13</td>
</tr>
<tr>
<td>LQAS Training</td>
<td>May-13</td>
</tr>
<tr>
<td>Household Survey data collection</td>
<td>May-13</td>
</tr>
<tr>
<td></td>
<td>May-13</td>
</tr>
<tr>
<td></td>
<td>Apr-13</td>
</tr>
<tr>
<td></td>
<td>Jun-13</td>
</tr>
<tr>
<td>Data tabulation</td>
<td>May-13</td>
</tr>
<tr>
<td>HF and HSA Survey</td>
<td>Aug-13</td>
</tr>
<tr>
<td>FGDs</td>
<td>Sep-13</td>
</tr>
<tr>
<td>Bottleneck Analysis Workshop</td>
<td>Feb-13</td>
</tr>
<tr>
<td>Dissemination of BA findings</td>
<td>Mar-14</td>
</tr>
<tr>
<td></td>
<td>Dec-13</td>
</tr>
<tr>
<td></td>
<td>Jan-14</td>
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<tr>
<td></td>
<td>Oct-13</td>
</tr>
</tbody>
</table>

Stakeholders in evaluation districts highly rated LQAS training and generally indicated that the right persons were trained. In Karonga, however, DHO staff indicated the training omitted the accounting and procurement officers who they deemed to be critical during implementation. A DHO respondent in Balaka reported that the DHO only presided over the opening ceremony of the training but did not attend the rest of the training. In Chiradzulu, DHO staff reported that all cadres were adequately represented in the trainings. In Mwanza, DHO staff pointed out that training time was not adequate. They started in the morning and finished in the evening and there was no time to clarify issues that participants did not understand. They were asked to go over the training manual in the night if certain things were unclear.

LQAS training was followed by data collection which involved conducting household surveys, HSA surveys and focus group discussions. The sample sizes by district are summarized in Table 4.2. Data collection was followed by bottleneck analysis.

Table 4.2: Sample sizes for data collection by district

<table>
<thead>
<tr>
<th>No. of supervision areas</th>
<th>No. of facilities surveyed</th>
<th>No. of HSAs surveyed</th>
<th>LQAS Household</th>
<th>No. of FGDs</th>
</tr>
</thead>
</table>

Stakeholders in evaluation districts highly rated LQAS training and generally indicated that the right persons were trained. In Karonga, however, DHO staff indicated the training omitted the accounting and procurement officers who they deemed to be critical during implementation. A DHO respondent in Balaka reported that the DHO only presided over the opening ceremony of the training but did not attend the rest of the training. In Chiradzulu, DHO staff reported that all cadres were adequately represented in the trainings. In Mwanza, DHO staff pointed out that training time was not adequate. They started in the morning and finished in the evening and there was no time to clarify issues that participants did not understand. They were asked to go over the training manual in the night if certain things were unclear.

LQAS training was followed by data collection which involved conducting household surveys, HSA surveys and focus group discussions. The sample sizes by district are summarized in Table 4.2. Data collection was followed by bottleneck analysis.
Three of the four evaluation districts reported being satisfied with bottleneck analysis. Mwanza DHO interviewees who reported that they were not very satisfied could not recall what the specific issues were. Even for the districts that reported that BA was fine, recall bias was also a problem. For example, a Chiradzulu DHO staff responded:

“I have to remember...what were we doing?...Let me recall... it was ok”. [Interviewer: Or were there areas that BA was not ok? Or some elements you would have liked omitted?] “I cannot recall some of the things because of the time it has taken, but it was fine”.

DHPI results were disseminated in all evaluation districts and the dissemination included health partners. In Balaka, one NGO informant indicated that the dissemination of DHPI results was their only involvement in the DHPI process. After dissemination, the next process was incorporating DHPI solutions in DIPs. From the start of the process to the dissemination of results, the process took about 8-12 months.

4.1.3. Planning process prior to DHPI introduction

Before the introduction of DHPI, evaluation districts followed DIP guidelines summarised in section 1.3 to formulate their plans. Balaka and Karonga DHO staff specifically mentioned the use of BPRS and PEARL in problem and solution prioritisation. In Karonga, DHO staff also indicated that other programmes e.g. EPI programme used additional methods for problem and solution identification and prioritization. They had also used Participatory Rural Appraisal (PRA) tools, mostly advocated by NGOs.

4.1.4. What inputs and activities were supported as part of DHPI?

The DHPI process was supported by consultants that UNICEF hired and DHPI champions. DHPI champions were Ministry of Health staff, mostly from districts, who
were trained in DHPI and participated in the DHPI planning process sufficiently to provide technical support to scale up districts. The consultants were involved in training DHOs, supervising data collection, data analysis and tabulation and troubleshooting the whole process assisted by the DHPI Champions. The financial cost of DHPI support activities was met by UNICEF. The following cost elements were required to conduct DHPI planning in a district.

- DHPI orientation. On average, about 30 people, lunch allowances, refreshments, fuel for verifying village listings
- LQAS Training. On average about 10 people for 3 days, subsistence allowances, fuel reimbursement
- Data collection - teams based on supervision areas each with a car. Vehicle hire by UNICEF
- FDGs, one per supervision area
- Data tabulation for 1 week
- HSA and HF survey, 1 week
- Data entry, about two people per district
- Data sent for analysis to New York and then India
- Bottleneck analysis, 1 week - included other stakeholders, LG, NGOs, Chiefs
- Dissemination of BA results by DHO
- Travel for central level technicians to districts
- Consultancy costs
- **Stationery and accessories**
  - Household questionnaire 77 pages long, 19 per supervision area.
  - Pens, rubbers, sharpeners
  - Boards for writing
  - Calculators for tabulation, eventually handed over to facilities
  - Flash disks for sharing files for districts
  - Rucksacks for carrying questionnaires
  - Umbrellas for data collectors
  - Welly boots

**4.1.5. Who was involved in the DHPI process at the outset and now?**

DHO interviewees (DHOs and DHPI Coordinators) reported that they were involved in the planning phase of DHPI. The exception was Chiradzulu where the DHO was neither trained nor involved. There was limited involvement of health partners. In Karonga only 1 out of 3 partners interviewed reported to have been involved initially while in
Mwanza 1 of 2 partners interviewed was initially involved. In Balaka and Chiradzulu none of the 5 partners interviewed reported being initially involved. District specific DHPI case studies for all the evaluation districts reported high involvement of health partners in BA and dissemination of results, however. The limited involvement reported by health partners could partly reflect staff turnover in health partner organisations. Two NGO staff in Balaka and Mwanza indicated that they were new in their posts.

In all the evaluation districts, DHO staff indicated they were not involved in any DHPI activities at the time of the interview. No partner across all evaluation districts reported being involved in DHPI activities at the time of the interview. Overall, DHO staff were more involved in the DHPI planning phase than health partners while at the time of the interview both DHOs and partners reported not to be involved in any DHPI activities.
4.1.6. How is DHPI understood in the context of MoH district planning processes and do stakeholders believe it adds value?

4.1.6.1. How is the DHPI concept understood in the context of district planning processes?

In all the four districts, there was consensus on the role of the DHPI in district planning. DHO staff indicated that the DHPI process was key to informing the situation analysis, identifying bottlenecks, finding root causes of bottlenecks and setting evidence based priorities in the DIP. A DHO interviewee in Chiradzulu said:

“When we are formulating our DIP we need to know the situation at that time...so the process that can lead us to prioritizing problems or knowing the situation and [at what] points to develop interventions] is the DHPI process. So it’s like [DHPI] process will determine that at this point [...] we need to plan for this”

Only 2 out of the 10 health partners interviewed across all evaluation districts were involved and hence understood the DHPI concept. One NGO in Karonga said “[The DHPI approach] ...helps identify issues and how to deal with bottlenecks. It feeds into [the] planning process by that if you implement the solutions in DIP [you] can address so many health challenges”. The other NGO in Mwanza shared the same understanding.

4.1.6.2. How does the MoH consider its role in supporting the DHPI process?

In the MoH, only the Department of Planning and Policy Development had been involved in DHPI, other Departments were not involved. Specifically, in the DPPD two Units were involved: Planning and Budgeting and the Central Monitoring and Evaluation. Informants from these MoH departments considered that their role was to provide guidance. One MoH interviewee said:

“We were selected as leaders to spearhead the process at the ministry level. We were trained as trainers.”

Another MoH interviewee said:
“We were the team that selected priority districts, provided guidance and worked with DHMTs in the selected districts.”

Eventually though, some DPPD members left and this diminished the capacity of the department to discharge the oversight function. One MoH interviewee said:

“...in the process of implementing the DHPI, due to pressure of work here at the office, I was the only one. So the director would not release me to do DHPI work.”

This was echoed by a DHO staff in Karonga when he responded to a question on how the MoH followed up districts when they were doing DHPI planning. He said:

“With the coming of the zones (ZHSOs), at least things are moving but not headquarters. Ngati amabwera mwina kwa a DHO (Maybe they come and only see the DHO)... A ku headquarters sindimawaonaona (I do not see MoH headquarters planners) but the zone they are on us, coaching us. We need them [MoH planners] that’s my feeling. Olo nthawi imene timaphunzira za DHPI or when we are formulating our DIP tisanayipange present ku Council ayenera kubwera a ku planning, munapanga bwanji? They should coach us. (when we were being oriented to DHPI or when we are formulating our DIP, before we present it to the District Council, the planners should come and ask “how did you do your plan?”, they should coach us”

4.1.6.3. Do stakeholders believe the DHPI process adds value to the existing planning process? Is there buy-in for the approach?

In all the evaluation districts, DHO staff and partners who demonstrated understanding of DHPI were in agreement that DHPI added value to the DIP process as follows: i) use of bottleneck and causality analysis helped identify real problems ii) it enhanced use of evidence in planning i.e. use of current data and community participation gave a clear picture of the situation on the ground iii) it strengthened community involvement in problem and solution identification iv) it led to greater involvement of DHO staff apart from the DHMT in planning v) it helped direct resources to removing bottlenecks - DIP process before DHPI focused on routine activities vi) it helped DHOs lobby for support based on DHPI results. In terms of improved use of evidence, a DHO staff in Chiradzulu said:
“[The DHPI] can inform the DIP objectively, evidence based. DIP on its own was lacking, there was no evidence based planning. Even though DIP process involved health facilities, they only said what they felt, no evidence basis. We were just collecting activities, what do you feel are problems at your health centre?”

In Mwanza, a DHO staff said:

“DHPI enlightened DHO on data use. We went to hard-to-reach areas during data collection. We had a superficial view of problems before but [we] appreciated real problems through DHPI”.

A health partner in Mwanza said:

“Using the DHPI process, the district is able to analyse its own challenges [and] devise district specific solutions. It goes to the sub-district areas and investigates specific issues causing the identified bottlenecks. Data [are] critical to the approach”.

In Karonga, a DHO staff said that, before the DHPI data for DIP situation analysis were only collected up to Area Development Committee (ADC) level. With DHPI, however, data were collected from the communities themselves, including at household level. In terms of improved motivation of health workers, in Mwanza a DHO staff said

“Health workers are now working hard. Deaths have declined. Health workers were involved in the DHPI process and appreciated the challenges for themselves. In the past the hospital could have more than 100 children in the paediatric ward but now there are only about 30”.

While they attributed this shift to DHPI, it was not possible to verify this quantitatively and it is possible that other factors may have influenced this perceived change in behaviour and case identification.

National-level MoH staff also highly valued the DHPI process and suggested that DIP guidelines be revised to incorporate the DHPI approach. One MoH staff said:

“Facilities [are] encouraged to do baseline[s], initially they could just do guesswork. It is more evidence based...DHPI [has] added value in that facilities [are] encouraged
to have baselines...It is not just saying high maternal mortality ratio because of \textit{abcd}, but you look at issues leading to the high maternal mortality, you use the statistics...I would suggest when we are making DIPs let us focus on the DHPI approach and then these [\textit{referring to BPRS and PEARL}] should add value to the DHPI".
4.2. Effectiveness

4.2.1. What changes did district managers effect due to DHPI implementation?

4.2.1.1. Was the use of bottleneck analysis sustained?
Among the four evaluation districts, none showed evidence of sustained use of bottleneck analysis at the time of the evaluation. DHO staff in the evaluation districts mentioned a capacity gap, stating that data had to be processed in India before they could do bottleneck analysis. This might have affected ownership and hence the sustainability of the approach. A DHO staff in Chiradzulu who was a DHPI champion said:

“BA was good and very informative. We had a problem with the BA tool. Now it is quite improved, it is adaptable, we are able to analyse data on our own, we can see the behaviour of the graph on our own, but that time it was just data that just came. The only thing that I experienced when we do data entry now is the labelling of determinants. We still have to send back the data for labelling. But then it was even harder. We should have that same capacity; that should have been our job”.

Because BA was done in 2014 and DHPI results included in the 2014/15 budget for Phase II districts, the evaluation sought to check if evaluation districts repeated bottleneck analysis for 2015/16 DIPs. However, this could not be verified because DHOs did not submit cover documents for 2015/16 FY DIPs which explain how the DIP was developed. One reason BA was not done for 2015/16 DIPs could be that, in the dispensation of multiyear plans, DIPs are supposed to be extracted from the multiyear plans with adjustments based on implementation of the preceding FY. This could have reduced the need for repeating BA. The evaluation also sought to assess if there was evidence of BA as part of quarterly reviews but only one of the four districts sent but one report out of the expected four. The report did not have any evidence of BA.

4.2.1.2. Were new solutions identified? Did they better identify and address underlying inequities in the district?
Evaluation districts indicated that they were finding better ways of delivering interventions as a result of DHPI. In Chiradzulu, a DHO staff said:
“We increased immunization outreach sites; instead of static ones we had to establish some additional sites. We used to have fixed immunization dates, after noticing problems, we decided that every day we will be providing services”

In Karonga, an interviewee from a health NGO said the following regarding improving first ANC visits in the first trimester,

“There has been a change in approach for pregnant women for whom pregnancy is not detected- they are offered the whole package”

He indicated that previously such women were returned without being provided any service.

In terms of addressing inequities, there was some evidence that inequalities were identified and were being addressed. In Chiradzulu, a DHO staff had this to say

“Actually, I remember like World Vision International Wonga [area] took [DHPI] results for Wonga area and that’s where they started implementing projects that were of real need to the area. For example, they changed to water and sanitation...They were in the phase of [securing] ... another [project]. They took advantage of that and aligned their programme [to] the results. And as of now, I know for sure the sanitation project is still there. By then they were not doing much of hygiene and sanitation but the results informed them about their area, what ...the priority needs [were]”.

4.2.1.3. Is there evidence of better or more frequent monitoring?
DHO staff in all evaluation districts reported using quarterly DIP/HMIS reviews for DIP monitoring, but there was no evidence of systematic bottleneck monitoring. In Karonga and Chiradzulu, DHO staff reported that ad hoc programme coordinator meetings were called based on need. A DHO staff in Karonga also mentioned that DHPI had improved the way the DHMT made sense of data. For example, after seeing low utilisation of HIV testing and counselling (HTC), the concerned coordinator opened an HTC clinic in the Outpatient Department (OPD) since this was the first entry to the district hospital. He also reported that they had a WhatsApp group for discussing and monitoring use of HTC, another initiative that improved utilisation of HTC services. Although a DHO staff in Karonga indicated that at quarterly DIP/HMIS reviews they discussed top ten bottlenecks, this was not evident from their 2015/16 FY biannual
review report. In Chiradzulu, although a DHO staff indicated that during review meetings they discussed data on implementation of DHPI solutions and bottleneck reduction, a partner said

“At quarterly review meetings, there are only presentations. [There is] no forum to be looking at data critically”

In Mwanza, DHO staff indicated that quarterly DIP reviews were done but bottlenecks were not discussed that much.

Evaluation districts reported general monitoring challenges that had bearing on monitoring of DHPI solutions. A DHO staff in Karonga said that there were different sets of monitoring indicators at different levels of the health care system and facilities had to report on numerous indicators that were not readily helpful for their routine decision making. There were changes to data collection tools without necessary trainings to the data collectors in the facilities and some data collection tools were not relevant. Data archiving was also a problem; it was difficult to get time series data for trend monitoring due to missing data. In Mwanza, DHO staff observed that DHIS2 did not have data for all DHPI solutions. For example, to improve sanitation one of the proposed solutions was the construction of toilets. This solution could not be monitored because DHIS2 did not have such data and no other efforts were made to track this information. In Balaka, one health partner said that not all partners reported to their relevant programme coordinators “Other partners do not even know they have to submit their data to the DHO but rather to their funders or headquarters” they said.

Some of the districts that reported better monitoring also reported data improvement initiatives that ran in parallel to DHPI. In Karonga, a DHO staff indicated that DHIS2 training had also led to more use of information than in the past. In addition, health workers in facilities and HSAs were using electronic data transfers to the DHIS2, which led to real time use of data in decision making. As part of DHIS2 improvements, facilities used cellphones bought by SSDI to enter and transmit data to the DHIS2 server. This increased data use through making data readily available when needed. In Balaka, SSDI were supporting supervision visits, data collection trips and orientation of data clerks on all registers. In Mwanza, Save the Children reported that they were orienting health workers on DHIS2. They were also facilitating discussions of data challenges at review meetings and they initiated data quality audits.
4.2.1.4. **Is there evidence of data quality improvement?**

Interviewees were asked about their perception of whether there was improvement in data quality. There were mixed views both within and across districts. In Karonga, a DHO staff indicated that data quality had improved with more SSDI supported mentoring of health facilities. This claim was difficult to verify because the evaluation did not assess data quality of indicators before and after the introduction of DHPI. Another partner, however, indicated that data were poor, arguing that using only district level data without going to communities, gave a false impression of the actual situation. Poor quality of data was a common concern across all evaluation districts. In Chiradzulu, a DHO staff said that this was due to late submission of data from health facilities to the DHO. They said that one of the reasons for late data reporting was that health workers handling data had more pressing core duties; data processing was not their primary responsibility. A partner in Balaka pointed out that the quality of data was a major challenge because some health workers were not conversant with how to fill HMIS registers. In another district, a DHO staff pointed out that the District Health Office was failing to send data reporting forms to facilities.

4.2.1.5. **To what extent has DHPI been sustained in the district?**

There was no evidence in any of the evaluation districts that DHPI was sustained beyond the planning phase. Evaluation districts associated DHPI with the planning phase of the DIP process. This is evident from section 4.1.6.3 on how they perceived DHPI added value; most of the areas they mentioned related to the planning phase and none on implementation and monitoring. A DHO respondent in Karonga said DHPI training fell short in monitoring and evaluation, which was deemed the main challenge that faced the DHMT. This could be one of the reasons for lack of sustainability. In Balaka, staff turnover was a challenge. A DHO staff indicated that the process did not continue beyond data analysis because most of DHMT members were transferred to other districts and the new DHMT did not have interest in taking DHPI forward.

4.2.1.6. **Resource allocation**

Evaluation districts gave mixed opinions on whether DHPI affected district resource allocation. A DHO staff in Balaka did not think that DHPI changed the way they allocated resources. He pointed out that they faced the challenge of centrally prescribed activities which distorted resource allocation. In Chiradzulu, a DHO staff indicated that there was more evidence based resource allocation. In Karonga, DHO
staff pointed out that the Government budget hardly sufficed for core service delivery; resource allocation was hence out of the question.
4.2.2. Effect of DHPI on improved planning and coordination of stakeholders

Improved planning can best be assessed by comparing how district plans address the district’s situation analysis pre and post an initiative aimed at improving district planning. If the situation analysis is based on the best data available and the plan addresses the situation, it can be deduced that there is better planning. An analysis similar to this is reported in section 4.2.2.1. This section reports on what interviewees in the evaluation districts perceived about the quality of district health planning.

All four districts reported that planning had improved since DHPI was introduced. In Chiradzulu, a DHO staff reported that DHPI enlightened DHO to use evidence in planning. They indicated that if they observed that an intervention was not affecting a targeted bottleneck, they used alternative interventions “otherwise we will not be using evidence practically” said a DHO staff. In Mwanza, DHO staff reported that there were new activities in the DIP due to DHPI and that there had been a change in the problem finding approach. Another DHO staff in Mwanza reported that bottleneck analysis helped them not over-order medicines. Previously they were overstocking medicines and some were expiring. In Karonga there was consensus among DHO staff that DHPI had substantially improved the way DIP formulation and reviews were undertaken. In Balaka, a DHO staff reported that DHPI had changed district planning by looking at root causes and identifying solutions to address them.

4.2.2.1. Did the content of district plans substantively change following the DHPI process?

The evaluation analysed DIPs to answer this question. Karonga DHO submitted 2014/15 DIP only, Balaka and Mwanza DHOs submitted DIPs for 2014/15 and 2015/16 FYs and Chiradzulu DHO submitted DIPs for all three fiscal years. So there was only one district that submitted pre-DHPI plans. The evaluation, therefore, could not perform pre and post analysis of DIP content but rather focussed on assessing whether DHPI activities were included in 2014/15 DIPs.

Some DHPI solutions were included in 2014/15 DIPs for all evaluation districts. Table 4.3 presents an analysis of the solutions that were included in the 2014/15 DIP for all the evaluation districts. It is shown in the Table that Balaka came up with the highest number of solutions, 67, while Mwanza had the least, 39. The high number of solutions is more a reflection of a poor planning process than a district health care system facing many bottlenecks judging by the quality of the solutions. The poor quality of solutions expressed in DIPs cut across all the evaluation districts; there were many solutions that
were either not feasible at the district level or vague altogether. Karonga had the highest percentage of DHPI solutions developed and prioritized in DHPI planning workshops included in the DIP, 39%, while Balaka had the least, 19%. All evaluation districts allocated a relatively small percentage of their budgets to DHPI solutions) in 2014/15 DIPs (Columns E and H). Balaka had the highest percentage allocation, both in absolute and relative terms while Mwanza had the least in both terms. Source of funding for the DHPI solutions as indicated in the DIPs was mostly non-Governmental (column I). Mwanza had almost the whole allocation to DHPI solutions coming from non-Government funding sources while Chiradzulu had the least at 71%. 
<table>
<thead>
<tr>
<th>District</th>
<th>Total no. of solutions identified during DHPI planning</th>
<th>No. of solutions in 2014/15 DIP</th>
<th>% solutions in DIP (C/B)</th>
<th>Total allocation to DHPI solutions in 2014/15 DIP (MWK)</th>
<th>Total allocation to DHPI solutions with non-Govt. funding source (MWK)</th>
<th>% of total DIP budget allocated to DHPI solutions (E/G)</th>
<th>% of total DHPI solutions with non Govt. funding source (F/E)</th>
<th>Non Govt. sources of funding for DHPI solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karonga</td>
<td>61</td>
<td>24</td>
<td>39%</td>
<td>140,425,000</td>
<td>129,925,000</td>
<td>964,250,000</td>
<td>15%</td>
<td>93%</td>
</tr>
<tr>
<td>Balaka</td>
<td>67</td>
<td>13</td>
<td>19%</td>
<td>166,365,814</td>
<td>158,365,814</td>
<td>1,082,089,617</td>
<td>15%</td>
<td>95%</td>
</tr>
<tr>
<td>Chiradzulu</td>
<td>59</td>
<td>19</td>
<td>32%</td>
<td>25,219,570</td>
<td>17,987,630</td>
<td>482,772,411</td>
<td>5%</td>
<td>71%</td>
</tr>
<tr>
<td>Mwanza</td>
<td>39</td>
<td>8</td>
<td>21%</td>
<td>13,950,000</td>
<td>13,830,000</td>
<td>544,816,148</td>
<td>3%</td>
<td>99%</td>
</tr>
</tbody>
</table>
4.2.2.2. Were solutions included and executed, including those addressing equity issues?

Most of the solutions that were included inherently addressed equity issues because the bottlenecks related to expanding coverage to unreach areas. For example, outreach clinics dealt with scaling up antenatal care or immunisation and other services to populations in hard-to-reach areas. NGOs also took on board activities that were addressing inequalities. An example was given in Section 4.2.1.2 about World Vision International Wonga area in Chiradzulu. However, there was no documentation to show that they were executed. Three evaluation districts did not submit 2014/15 DIP review reports while the one quarterly DIP/HIMS report that was submitted by Karonga DHO did not mention implementation progress with respect to DHPI solutions.

4.2.2.3. Evidence of better alignment of resources to plans.

There are two types of resources that need to be considered: Government and health partners’. There is no evidence proving Government resources were better aligned due to DHPI. A way of assessing this would be to check whether activities in the DIP addressed the situation analysis in the district and whether this changed over time. The evaluation did not do such an analysis. For health partner resources, alignment to plans is discussed in the next section.

4.2.2.4. Is there evidence of better participation of stakeholders in the planning process and better coherence of stakeholder activities in line with the district plan?

This question was assessed by looking at two dimensions – coherence and coordination. Coherence was defined as whether plans of local health partners were consistent with priorities of the DHO and coordination was defined as whether there was joint planning, implementation and monitoring of DIPs. The performance of all four evaluation districts is examined in relation to coherence and coordination.

4.2.2.4.1. Coherence

Coherence was variable across districts and it was not clear whether DHPI affected it. There were parallel initiatives such as the health stakeholder forum, an SSDI initiative in Karonga and Balaka, and strong District Health Officer leadership and enforcement in Mwanza which had the objective of promoting better coherence. Coherence also depended on the nature of the NGO projects. Projects with flexible designs implemented DHO priorities while projects with rigid focus implemented only DHPI
solutions that fell within their thematic area of focus and pre-determined priorities. There was no evidence DHPI affected either type of project design.

Based on the interviews, Mwanza district stood out in terms of coherence followed by Karonga while Balaka and Chiradzulu were similar. In Mwanza, a DHO staff said NGO priorities were consistent with the DIP. An NGO staff in the same district mentioned that the District Health Officer had a strong say when a partner wanted to operate in the district. They perceived that partners coordinated better in Mwanza than in other districts. Another NGO staff in Mwanza said:

“As a partner you cannot just come up with your own idea and DHO will take it, you have to discuss with him first. Partners are encouraged to work with programme coordinators. If activities are outside their priorities, DHO says no”.

In Chiradzulu, a statement by a DHO staff indicated DHPI had no effect on coherence in the district. They said, referring to health partners

“Most of them have their activities they implement. There are very few partners who have interest in checking what we have so that they can implement [that]. Most of them [...] come with [...] activities that we do not understand how they developed them. When usually you want to change one or two things they tell you that’s not their focus area. Most of them come with pre-planned activities which is something we have had hard time to understand. My thinking would be partners should look at our situation analysis, get our problems and make interventions from there”.

In terms of flexibility of an NGO and coherence, SSDI project whose staff were interviewed in both Karonga and Balaka was the most flexible; the design of the project was such that they did not have their own activities but supported priorities of the DHO. On the other hand, a staff for another NGO in Karonga said that their project priorities were based on a project management framework which was difficult to alter at the district level. He cited an example where during a DIP review, stakeholders identified low immunization coverage as a challenge in the district and agreed there was urgent need to address the problem. However, since the NGO’s activities were fixed, it was not possible to reprogramme to take into account the new priority. An NGO staff in Balaka said that there was a difference in alignment between international NGOs and local ones. He said most international NGOs headquartered in Lilongwe developed project proposals from there without reference to the local situation in the
district. Local NGOs on the other hand, used local data and consulted widely to develop priorities and worked with the DHO from project design to implementation.

4.2.2.4.2. Coordination

There was no evidence DHPI had an effect on coordination. Where improved coordination was reported, it could have been due to other initiatives like the health stakeholders’ forum, for example, in Karonga. DHO staff and partners in Mwanza reported satisfactory coordination most likely because of the strong influence of the District Health Officer. In Balaka and Chiradzulu, DHO staff and partners reported limited coordination. Attesting to improved coordination in Karonga, an NGO staff cited an example where when he was on a supervision visit at a health centre he met a representative of another NGO that was working in the same programme area and also came to visit the same health centre. He did not know that the other organization was also working in the district let alone at that facility. When they had a discussion and discovered the duplication, they went together to the DHO to ask him to reallocate one of them to another health centre. Another NGO also mentioned that there was better partner coordination. This NGO was providing HIV/AIDS care across the whole district but when another NGO implementing HIV/AIDS activities came to the district, they scaled down their HIV/AIDS support handing over the responsibility to the new NGO.

In Balaka, a DHO staff did not perceive that DHPI changed the level of stakeholder engagement saying “there has been no change, it may even be worse”. In Chiradzulu, an NGO staff had this to say:

“Partners do not share amongst themselves, don’t communicate with other partners, [they] want to go direct to DHO... For example, there is a partner we know and we discussed with them what we are going to do for the coming 2 years. They did not share what they would do. In the end, we realized the partner had started activities [we] were going to do. If we had discussed, we could have rationalized the activities, ...one would have done one phase and the other one the other.

An NGO staff in Balaka cited the following causes of poor coordination i) bureaucracy by international NGOs - they had to seek consent from their head offices just to participate in meetings ii) some partners did not value the DIP process iii) “Founder syndrome” where locally founded NGOs personalised activities and could not
collaborate with other partners iv) preference of where to geographically place projects because of, for example, connections with local leaders who create a favourable environment for project success. So the focus is in on the success of the project rather than on where need is. He cited an example of a conflict between two organisations in the district because of implementing a similar project in the same area v) lack of guidance on volunteer support. Some organisations gave volunteers per diem while others did not and this created a problem for good projects with limited funding. Communities were more loyal to organisations that rewarded them monetarily vi) lack of commitment by DHMT members. He said, for example, a DIP review could start and finish without DHMT members, but only health centre representatives. vii) not sharing the DIP, sometimes because it is never finalised. The NGO staff indicated that the DIP had not been shared in the 5 years that he had been with his NGO.

4.2.3. Is there evidence of increased attraction of resources to the district plan as a result of DHPI?

Since the Government health budget to DHOs is guaranteed, any increase in resources would be expected to come from health partners either as direct support to the DIP or through making their priorities more coherent with DHO priorities. Based on the analysis in Table 4.3 there was some evidence of increased attraction of resources to DIPs since most of the DHPI solutions were funded by health partner resources. It is nevertheless not clear cut to attribute that alignment to DHPI because partners would also have supported DHOs prior to DHPI. Measuring DHPI effect on increased resource attraction would require determining the change in total partner resources committed to DHO priorities pre and post DHPI less increase in resources due to the health partners’ own impetus. Apart from the objective evidence in Table 4.3, in Chiradzulu a DHO staff reported that they wrote a proposal to UNICEF CO based on DHPI results which was funded to about MWK14 million. In Karonga, DHO staff said that the DHPI initiative had substantially improved the district’s ability to mobilize resources from partners but this was not substantiated. In Balaka, one NGO reported using DHPI results to develop a funding proposal which was not successful.
4.3.  **Sustainability**

4.3.1. Enablers, barriers, and resource requirements for DHPI implementation

4.3.1.1. **Enabling factors**
The enabling factors for the DHPI process in Malawi were:

- High level MoH buy-in: Secretary for Health at the time of introduction of the approach was the Champion, Department of Planning and Policy Development was engaged.
- The decentralization process that has placed greater value in strengthening the planning capacities of District Councils.
- An established DIP process and structures such as the district health stakeholders’ forum which the DHPI approach could build on.
- The availability of DIP coordinators in each district, especially where there had been consistency in the post-holder, as well as combining the positions of DHPI and DIP coordinators.
- Designation of DHPI champions at the national and district levels.
- Commitment and financial support from UNICEF CO.

4.3.1.2. **Challenges**
The DHPI process had the following challenges:

- In all the evaluation districts all respondents who participated in the DHPI process identified UNICEF as the lead institution and the approach was hence viewed as a UNICEF initiative. This viewpoint was strengthened by reliance on consultants who operated outside of the Ministry of Health.
- Weak collaboration between the consultants on one hand and the MoH and the National Local Government Finance Committee (NLGFC) on the other hand. NLGFC is the legally mandated institution in district planning, budgeting, implementation and monitoring of district level activities.
- Lack of follow-up to districts during and after DHPI planning process by MoH and UNICEF.
- DHPI planning was an expensive process. Districts relied on UNICEF CO for financial support.
- High staff turnover especially for DHOs. In Karonga and Mwanza, the DHOs were there when DHPI was introduced. In Balaka and Chiradzulu, DHOs who were there when DHPI was introduced were moved away and new DHOs who were not trained
in DHPI replaced them. This presented a challenge for implementation and sustainability.

- There were no guidelines on the DHPI process specifically designed for the district. There was hence no reference document for those who were not involved in the training.
- Lack of or poor handover from staff who were moved. This compromised sustainability of the approach.
- The process took so long to complete because data processing was done outside the country. This also compromised ownership of the results. One interviewee said “… as health workers we want to understand the packages.”
- Inadequate resources especially from Government limited the extent to which solutions could be implemented.
- “The DHPI process has been left to HMIS personnel and that is a challenge” said one national level interviewee. Champions have greatly contributed to the DHPI process but the lack of involvement of Planning and Budgeting Unit at MoH meant that there was no strategic oversight of the process.

4.3.1.3. What resources are needed to sustain DHPI implementation?
All evaluation districts mentioned the need to be retrained in DHPI due to high staff turnover. They also mentioned the need for increased Government budgetary resources in order to implement identified bottleneck solutions. More fiscal space could, however, be realised from improved coherence and coordination.

4.3.2. How might the DHPI intervention be improved or designed differently?
In Karonga, DHO staff mentioned the need to reconcile DIP and DHPI prioritization approaches. In the other evaluation districts, there were no suggestions on how to improve the DHPI process. At MoH, the respondents also did not suggest any clear cut ideas on how to improve the DHPI process. They, however, mentioned the need for institutionalising DHPI in the Department of Planning and Policy Development in MoH.
5. Implications for DHPI theory of change in the Malawi context

From the results, the DHPI theory of changes requires modifications in order to be applicable in the Malawi context. It is clear from section 4.1.1 that some critical assumptions of the DHPI theory did not hold such as availability of resources to implement DHPI solutions and there being no major staff turnover. It is also clear that DHPI understanding was not adequate; it was understood as a process meant to enhance the planning stage of the DIP but it was not well understood that the process should continue to support the monitoring and adjustment of plans based on implementation experience. The evaluation recommends modifying the resource availability assumption so that it rather focuses on coherence and coordination of resources because, in totality, resources are available at the district level but that there is either duplication or health partners focus on non-priorities of the DHO which limits the impact that can be made.

The DHPI theory of change should also be more specific in the linkage between DHPI activities and short term outcomes. Examples of short term outcomes that are not logically linked to activities are as follows:

- More frequent data use for monitoring
- Sustained stakeholder & community participation
- Increased accountability for results to the national-level, district and community stakeholders.

For the first outcome, “more frequent data use for monitoring”, an activity that is linked to it is “monitor bottleneck reduction, adjust, refresh diagnosis after 1 year”. It is not clear how the activity leads to the short term outcome and the activity does not offer any addition to status quo which is quarterly DIP/HMIS reviews. This could probably be why a DHO staff in Karonga mentioned that DHPI was weak in terms of monitoring and evaluation. For the latter two short term outcomes above, it is not clear in the DHPI theory of change which activities or outputs lead to their realisation. Specific activities should be added that lead to these outcomes.

The multiplicity of similar interventions across districts and pre-existence of planning structures implies which DHPI duplicated in some cases mean that the theory is difficult to test. The results showed that health partners were involved in many initiatives aimed at strengthening evidence use and monitoring. In terms of inputs, for example, there were already DIP Coordinators who doubled as DHPI Coordinators when DHPI was
introduced, there were community participation structures as part of decentralisation reforms and there were also stakeholder consultative mechanisms. Outputs like national level monitoring of DIPs were also already in place.

It is important to consider balancing the extensive scope of the diagnosis component of DHPI and its frequency in light of multiyear planning since the idea behind multiyear planning is to reduce the burden of annual planning after a comprehensive situation analysis is done. MoH planners at the inception workshop asked a question about the validity period of the comprehensive diagnosis done during DHPI planning in light of multi-year planning.
6. Conclusions and lessons learned

6.1. Relevance
The evidence shows that the DHPI approach was relevant. Interviews with national level officials at both Ministry of Health and UNICEF CO indicated that the DHPI process had buy in and DHOs were motivated to implement it. In all the evaluation districts, DHO staff and partners who demonstrated understanding of DHPI were in agreement that DHPI added value to the DIP process. DHPI knowledge was better for staff at the DHO than for health partners in the districts and at the national level, it was higher amongst UNICEF staff/consultants than amongst Government officers and other partners. At the MoH level, senior Government officials indicated that DHPI strengthened the use of the logical framework approach in tracing health problems to root causes and formulating and prioritising interventions. At the district level, DHPI was valued in terms of improved use of real time evidence, community engagement, and bottleneck and causality analysis. Areas where the DHPI approach added value to the DIP process are summarised in Table 6.1.

Table 6.1: Value added by DHPI

<table>
<thead>
<tr>
<th>No.</th>
<th>DIP process</th>
<th>DHPI Process</th>
<th>DHPI added value? (Y/N) Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establishing planning team</td>
<td>Data collection (HH survey, HSA survey, FGDs) and consolidation</td>
<td>Y. Current evidence. Qualitative evidence provided community insight into health problems which helped DHOs develop acceptable solutions to the communities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bottlenecks and causality analysis</td>
<td>Y. Critical addition, helped identify actual problems</td>
</tr>
<tr>
<td>2</td>
<td>Situation analysis, Problem Identification, prioritization and analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Definition of priorities (BPRS &amp;PEARL)</td>
<td>Identification and prioritization of solutions</td>
<td>Y. Community engagement was the key, helped DHOs come up with acceptable solutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prioritisation criteria similar to PEARL</td>
<td>N</td>
</tr>
<tr>
<td>No.</td>
<td>DIP process</td>
<td>DHPI Process</td>
<td>DHPI added value?</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>4</td>
<td>Designing monitoring &amp; evaluation framework</td>
<td>Definition of an implementation and monitoring plan</td>
<td>N</td>
</tr>
<tr>
<td>5</td>
<td>Official Submission of DIP/Multi Year Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>DIP Monitoring</td>
<td>Monitoring of implementation and bottlenecks reduction</td>
<td>N</td>
</tr>
<tr>
<td>7</td>
<td>Revision of DIP based on reviews</td>
<td>Prompt adjustment of activities according to the monitoring</td>
<td>N</td>
</tr>
</tbody>
</table>

Although DHPI was deemed relevant, there was no prior assessment of the DIP process to inform any specific areas that DHPI had to strengthen. There were hence DHPI elements which duplicated the pre-existing DIP process. In addition, some of the critical assumptions of the DHPI theory of change did not hold.

### 6.2. Effectiveness

The effectiveness of DHPI was partial. The positive side was that DHPI assisted districts identify solutions that would increase coverage of interventions and address inequities in health and health care use. There was also evidence in the evaluation districts that health partners made higher allocations to bottleneck solutions than DHOs. Nevertheless, both DHOs and health partners reported poor coordination and incoherence of health partner resources; there were more health partners that did not align to DHO priorities. Evaluation districts gave mixed opinions on whether DHPI affected district resource allocation. While some key informants said yes, others argued that there had been a real decline in the Government health budget and DHMTs prioritized delivery of basic health services so that identified bottleneck solutions were not implemented. There were also mixed views both within and across districts in terms of whether there was improvement in data quality. Where evaluation districts reported better quality data, there were data improvement initiatives that ran in parallel to DHPI so the changes could not wholly be attributed to DHPI. There was also no evidence of bottleneck reduction monitoring despite quarterly DIP/HMIS reviews being held. And
none of the four evaluation districts showed evidence of sustained use of bottleneck analysis at the time of the evaluation.

6.3. Sustainability
Enabling factors for the sustainability of DHPI included the buy-in and value that national level Government officials and partners attached to the process, the decentralization process that placed greater value in strengthening the planning capacities of district councils and the designation of DHPI champions at national and district levels. Sustainability was, however, threatened by high staff turnover especially for DHOs, the perception that the DHPI process was a UNICEF initiative as opposed to MoH’s, lack of involvement of the Planning and Budgeting Unit at MoH and district council planners and lack of follow-up to districts during and after DHPI planning by both MoH and UNICEF.
7. Summary Recommendations

7.1. For the MoH Department of Planning and Policy Development

- The Department of Planning and Policy Development should fully integrate in Multi-year and DIP guidelines DHPI principles which added value to the DIP process to ensure that there is only one source of district planning guidance. The Multiyear and DIP guidelines of 2013 have incorporated DHPI elements which add value to the DIP process as in Table 6.1 i.e. bottleneck and root cause analysis, use of evidence and community participation. There might be need, however, to review the guidelines again in light of the evolution of the DHPI approach.

- The MoH should work with the Ministry of Local Government and Rural Development to strengthen the oversight roles of relevant community health structures. The DHPI process strengthened community participation in planning but with the ongoing decentralization reform, strengthening the oversight capacity of community structures is seen as a pre-condition for improving the performance and accountability of the district health care system.

- The Department of Planning and Policy Development should reinforce a health systems approach in planning e.g. apply bottleneck analysis to a particular area such as maternal new-born and child health (MNCH) only for purposes of identifying cross-cutting bottlenecks and their solutions.

- The planning Department should establish a national DIP forum where they meet DHOs, DIP coordinators and the Chairpersons of the District Partners Forum to discuss implementation successes and challenges, and to also act as a peer review mechanism for districts;

- The Department of Planning and Policy Development should collaborate with the Department of Health Policy and Systems at the University of Malawi College of Medicine to ensure local capacity at the University in district health planning which has DHPI elements and produce mass capacity locally to take the district planning process forward. Medical students who eventually become DHOs should be targeted.

- The Department of Planning and Policy Development should setup up regular specific training programmes for DIP Coordinators or district health planners in general and that such programmes should also be extended to planners at the District Council to minimize the effects of staff turnover.

- The MoH should formalize the district stakeholders’ forum and put in place a mechanism for ensuring that partners sign binding Memoranda of Understanding with the District Councils to implement priorities of the district.
• The Department of Planning and Policy Development should harmonise national and district planning and M&E frameworks.
• Add data in DHIS2 for coverage indicators of interventions that are not currently captured in the system.

7.2. For UNICEF
• Since the DIP and multi-year planning guidelines have incorporated DHPI, the focus should be on the DIP not DHPI, also to eliminate perception that it is a project or a UNICEF initiative and reduce confusion about the process. For example, there is no need for a DHPI manual when there are multiyear and DIP guidelines; all relevant aspects of DHPI should be included in these guidelines.
• Re-orient DHMTs with high staff turnover in Multi-year and DIP guidelines.
• UNICEF and MoH should explore opportunities for supporting the revision of the Health Policy and Management Modules within the University of Malawi, College of Medicine, to capture key planning competencies including the DIP that potential managers at the district and national levels need;
• UNICEF should ensure that the bottleneck analysis tool is fully localised and DHO capacity is built in using it.
• UNICEF should ensure that Consultants working on district health planning are linked and report to Director of Planning and Policy Development.
• For institutionalization and national ownership of the process, it is important to build greater awareness both amongst government staff and partner institutions at both district and national levels.

7.3. For DHOs
• Strengthen the application of Multi-year and DIP guidelines throughout the planning cycle
• Institutionalize the district health stakeholder forum to maximise coherence and coordination of health partners;
• Assume the role of provision of oversight over health related activities in the district to strengthen coherence of partner activities with DHO plans.
• Enforce signing of Memoranda of the Understanding with local health partners together with the District Commissioner that binds health partners to adhering to and implementing priorities of the DHO and obligates them to align their resources to DHO priorities
• Share the DIP with all health partners to ensure coherence and coordination
• Include bottleneck reduction monitoring as part of DIP/HMIS quarterly reviews
• Show commitment to DIP/HMIS reviews by being available throughout the whole process

7.4. For the future evaluation of the DHPI programme
• It is important to clarify what specific areas of the existing DIP process DHPI was meant to strengthen so that future evaluation of the programme can focus on those areas. The areas of value addition according to the evaluation were presented in Table 6.1. Additionally, for those areas of DHPI value which existed in the current DIP process, for example community participation or evidence based decision making, it is important to clearly define the specific DHPI elements the evaluation will focus on.
• It will be important to consider parallel initiatives aimed at strengthening district health performance such as results based financing and other managerial processes that DHOs and health partners introduce.
• Define the outcomes of interest more specifically. For example, short term outcomes like better planning, improved use of evidence and better alignment of resources to district plans should be more specific.
References

Annex A  District Health Performance Improvement Theory of Change and Logical Framework

CRITICAL ASSUMPTIONS: 1) MOH buy-in and support (and no major staff turnover); 2) DHMTs have motivation, support and resources to implement action plans; 3) DHMTs understand & accept DHSS after its introduction; 4) Stakeholders and communities engage in the process; 5) no major emergency, shocks or other major initiatives disrupt DHSS implementation.

**BASELINE CONTEXT**
- Limited district coverage of key MNCH interventions.
- Prevalence and death among women and children.

**INTervention**
- More effective, systematic, & frequent use of data.

**More effective DHSS accountability for results**

**Improved district health management for results**

**Reduction in supply, demand & quality bottlenecks**

**Improved effective coverage of MNCH interventions with equity**

**Reduced maternal & child morbidity & mortality**

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**INPUTS**
- Connect appropriate DHSS methodology, guidance, tools & technical assistance.
- National level: MOH on DHSS, tailor tools, select districts & interventions, plan for DHSS.
- District level: Develop action plans & adjust budget.
- Implement action plan.

**ACTIVITIES**
- Determine local solutions, develop action plans & adjust budget.
- Implement action plan.
- Monitor bottlenecks; adjust & refresh diagnosis after 1 year.
- **Ensure process informed by national, district & community stakeholders input.**

**OUTPUTS**
- National level: National ownership & capacity on DHSS.
- Country-specific tools for DHSS.
- Implement monitoring of DHSS implementation.
- District level: DHSS & local stakeholders' ownership & capacity on DHSS.
- Action plans addressing bottlenecks implemented and monitored with stakeholders.

**SHORT TERM OUTCOMES**
- Sustained use of bottleneck analysis.
- More frequent use for monitoring.
- Sustained stakeholder & community participation.
- Improved data quality.
- Ability to adapt to shocks & innovate.

**MEDIUM TERM OUTCOMES**
- Better planning.
- Better monitoring.
- More relevant implementation strategies.
- Better alignment of resources to plan priorities.
- Better coordination of stakeholders.
- Improved data quality.

**IMPACT**
- Target bottlenecks reduced, including in sub-districts/population groups as the worst off at baseline.
- Improved population coverage & quality of targeted MNCH interventions.
- Reduced disparities in coverage and quality across sub-districts/population groups.

* Reduced maternal and child mortality expected, but will not be measured.
Annex B  Basic Priority Rating System (BPRS) and PEARL (Propriety, Economics, Acceptability, Resources, Legality) analysis

In order to prioritise problems pre-2012 guidelines prescribed using what is referred to as the basic priority rating system (BPRS). BPRS finally involves using the following formula to rate health problems

\[
\text{BPRS} = (A + 2B) \times C
\]

Component A = Size of problem
Component B = Seriousness of problem
Component C = Estimated intervention effectiveness

Each component is given a score from 0-10 based on predetermined categories as shown in Error! Reference source not found. .

Table B.1: Basic Priority Rating System

<table>
<thead>
<tr>
<th>Size of the Problem (0-10)</th>
<th>Serious of the Problem (0-10)</th>
<th>Effectiveness of Interventions</th>
<th>BPRS Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% or more</td>
<td>9-10</td>
<td>9-10</td>
<td>9-10</td>
</tr>
<tr>
<td>10% to 24.9%</td>
<td>7-8</td>
<td>6, 7, or 8</td>
<td>7-8</td>
</tr>
<tr>
<td>1% to 9.9%</td>
<td>5-6</td>
<td>3, 4, or 5</td>
<td>5-6</td>
</tr>
<tr>
<td>0.1% to 0.9%</td>
<td>3-4</td>
<td>0, 1, or 2</td>
<td>3-4</td>
</tr>
<tr>
<td>0.01% to 0.09%</td>
<td>1-2</td>
<td>Relatively Ineffective</td>
<td>1-2</td>
</tr>
<tr>
<td>Less than 0.01%</td>
<td>0</td>
<td>Almost entirely ineffective</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Ministry of Health (2013)

PEARL analysis complements BPRS by assessing whether the problems that have been selected are feasible to address. PEARL is an acronym defined as follows

- **P** – Propriety: Is it the responsibility of the DHO?
- **E** – Economics: Does it make economic sense to address the problem?
- A – Acceptability: Will the community accept interventions to address the problem?
- R – Resources: Is funding available?
- L – Legality: Is the program legal?

PEARL score is obtained by multiplying the binary scores for each category so it is either 0 or 1. This is illustrated in Error! Reference source not found..

Table B.2: PEARL analysis

<table>
<thead>
<tr>
<th>PEARL analysis</th>
<th>Propriety</th>
<th>Economics</th>
<th>Acceptability</th>
<th>Resources</th>
<th>Legality</th>
<th>PEARL Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do each of these categories affect the ability to address the problem</td>
<td>Yes=1 No=0</td>
<td>Yes=1 No=0</td>
<td>Yes=1 No=0</td>
<td>Yes=1 No=0</td>
<td>Yes=1 No=0</td>
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<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Ministry of Health (2013)
## Annex C List of interviewees

### Table C.1: List of Interviewees

<table>
<thead>
<tr>
<th>District</th>
<th>Name</th>
<th>Organisation</th>
<th>Designation</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karonga</td>
<td>Mr Elias Phiri</td>
<td>District Health Office</td>
<td>Environmental Health Officer</td>
<td><a href="mailto:ebcphiri@gmail.com">ebcphiri@gmail.com</a></td>
<td>0888545465/0999545465</td>
</tr>
<tr>
<td>Karonga</td>
<td>Lewis Tukula</td>
<td>District Health Office</td>
<td>District Environmental Health Officer</td>
<td><a href="mailto:lewistukula@yahoo.com">lewistukula@yahoo.com</a></td>
<td>0999206298</td>
</tr>
<tr>
<td>Karonga</td>
<td>Dr Charles Sungani</td>
<td>District Health Office</td>
<td>District Health Officer</td>
<td><a href="mailto:csungani@hotmail.com">csungani@hotmail.com</a></td>
<td>0888784745</td>
</tr>
<tr>
<td>Karonga</td>
<td>Mr Soko</td>
<td>District Health Office</td>
<td>Environmental Health Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karonga</td>
<td>Mr Alfred Nyasulu</td>
<td>District Health Office</td>
<td>DIP Coordinator</td>
<td></td>
<td>0881438002</td>
</tr>
<tr>
<td>Karonga</td>
<td>Mr Hastings Mithi</td>
<td>Plan International (Support to Service Delivery Integration (SSDI))</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karonga</td>
<td>Mr Lanjesi</td>
<td>Adventist Health Services</td>
<td>Health System Coordinator</td>
<td></td>
<td>0995602026</td>
</tr>
<tr>
<td>Karonga</td>
<td>Mr Kondwani Nyasulu</td>
<td>Lusubilo Community Project</td>
<td>Nutrition Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>District</td>
<td>Name</td>
<td>Organisation</td>
<td>Designation</td>
<td>Email</td>
<td>Phone</td>
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<tr>
<td>----------------</td>
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<td>------------------------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Balaka</td>
<td>Mr Mike Nkhoma</td>
<td>District Health Office</td>
<td>EPI Coordinator</td>
<td></td>
<td>0999430658</td>
</tr>
<tr>
<td>Balaka</td>
<td>Mrs Zamasiya</td>
<td>District Health Office</td>
<td>Nurse</td>
<td></td>
<td>0888605829</td>
</tr>
<tr>
<td>Balaka</td>
<td>Dr Mwawi Yiwombe</td>
<td>District Health Office</td>
<td>District Health Officer</td>
<td><a href="mailto:yiwombe.md@gmail.com">yiwombe.md@gmail.com</a></td>
<td>0992559602/ 0999175700</td>
</tr>
<tr>
<td>Balaka</td>
<td>Mr. Francis Chimombo</td>
<td>District Health Office</td>
<td>Statistical Clerk</td>
<td></td>
<td>0884156518</td>
</tr>
<tr>
<td>Balaka</td>
<td>Ms. Josephine Kalepa</td>
<td>PCI Malawi</td>
<td></td>
<td></td>
<td>0997917807</td>
</tr>
<tr>
<td>Balaka</td>
<td>Ms. Blessings Genti</td>
<td>Save the Children (SSDI)</td>
<td>District Clinical Coordinator</td>
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<td>Balaka</td>
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<td>Executive Director</td>
<td><a href="mailto:anthonychilembwe@sueryderwm.org">anthonychilembwe@sueryderwm.org</a></td>
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<td>District Health Officer</td>
<td><a href="mailto:stengift@gmail.com">stengift@gmail.com</a></td>
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<td>Mr Penjani Chunda</td>
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<td>Mwanza</td>
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<td>Mrs E Maganga</td>
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<td>Health Specialist</td>
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<td>Lilongwe</td>
<td>Mr Thokozani Sambakunsii</td>
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<td>Statistician</td>
<td><a href="mailto:sambakunsit@gmail.com">sambakunsit@gmail.com</a></td>
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<tr>
<td>Lilongwe</td>
<td>Dr Isabel Kazanga</td>
<td>College of Medicine</td>
<td>Lecturer</td>
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</table>
Annex D Ethical clearance letter

Kyaw Aung
United Nations Children Fund
Box 30375
Lilongwe 3

Dear Sir/Madam,

Re: REQUEST TO CONDUCT A DISTRICT HEALTH PERFORMANCE IMPROVEMENT EVALUATION STUDY

Thank you for the above titled study that you submitted to the National Health Sciences Research Committee for review.

The committee reviewed the study and exempted it from scientific and ethical review because it is an ongoing program existing with the Ministry of Health.

Kind regards from the Secretariat.

FOR: CHAIRMAN, NATIONAL HEALTH SCIENCES RESEARCH COMMITTEE

21st January 2016
Annex E  Evaluator Terms of Reference

TERMS OF REFERENCE
FOR CONSULTANCIES

Project title: Malawi District Health Performance Improvement Evaluation
Section: Health
Key partner: Ministry Of Health
Location: Lilongwe plus visits to the implementation districts
Duration: Ten weeks
Start date: December 14th, 2015
Reporting to: Chief of Health

BACKGROUND AND JUSTIFICATION

UNICEF has been supporting the scale-up of the DHPI approach in Malawi since 2012. Three districts began to implement the DHPI approach in the second half of 2012, nine more districts followed in 2013, two in 2014, two in early 2015 and there are plans to implement in five more districts by the end of 2015 in total 21 districts. By early 2016, 21 of 29 districts in Malawi will be implementing the DHPI approach. UNICEF plans to support the repeated DHPI analysis and planning exercise in seven already implementing districts in early 2016.

The DHPI approach is based on a theory of change that suggests that district health system performance can be improved through the use of better data on bottlenecks in the provision of priority health services and of tools to support decision makers make more informed managerial decisions to address such bottlenecks in an ongoing manner. District Health System Strengthening (DHSS) activities involve the collection of data on key health interventions, an analysis and planning exercise comprising a bottlenecks analysis, consultations to develop locally tailored solutions to address bottlenecks, the development of an operational plan, frequent monitoring of bottlenecks reduction during implementation (typically taking advantage of ongoing supervision activities and quarterly reviews), and the implementation of corrective actions when necessary. The approach encourages more accountability by government to community stakeholders. These activities aim to be built into the planning and budgeting cycle and repeated every year.

In all implementing districts in Malawi to date, as part of the implementation of the DHPI approach, UNICEF has conducted district-level Lot Quality assessment Sampling (LQAS) household surveys, health facility surveys and community health workers surveys. In addition, focus groups with care givers of children less than five years old and adolescent to better understand constraints to health service utilization. Since these data collection activities are relatively labor intensive, starting with the five districts that will begin implementation in 2015, the plan is to transition to date collection process that relies primarily on routine data from the DHIS2 system. Those districts will use routinely collected data, and will be entered using a bottleneck tool to identify bottlenecks and plan to reduce the problems. It is hoped that based on the current experience and the ongoing work that UNICEF is supporting on DHIS2, all data necessary for the bottlenecks analysis will be captured in the DHIS2, which will become the solely source of information needed from 2016 onwards.

Implementation of DHPI activities in Malawi is also complemented by the use of DHSS champions, who are employees from the Ministry of Health (MOH) at central, zonal and district level, supported by UNICEF and MSH, who are able to advocate for the program, are able to help with scale-up and training activities, and that are able to travel to the districts when necessary.
Health management teams in Malawi undertake a 3 year strategic planning exercise as well as a one-year operational plan. Budgets are also set annually at the district level. The aim of the approach is to ensure that a bottleneck analysis would be carried out in every district in Malawi to inform annual planning processes. To date there has been no formal assessment of the extent to which the results of the bottleneck analysis and planning exercise facilitated in districts have informed annual plans and budgets and if such activities have been repeated yearly after the first exercise facilitated with UNICEF support.

PURPOSE

The purpose of this study is to conduct a retrospective implementation (process) evaluation of the introduction and implementation of DHPI activities in Malawi. The specific goals are to describe how the approach was actually implemented, the fidelity of the model implemented in Malawi to the general DIVA approach, describe any discrepancies between expected vs. actual outcomes of the approach, identify key barriers and facilitators to the implementation process, and to understand how DHPI may have affected managerial practices. The implementation will leverage program documents (e.g. report of DHPI exercise, annual district plans and budgets), administrative data and documentation (e.g. minutes of quarterly reviews on implementation progress), as well as interviews with program managers and key stakeholders at both the district and national levels. These lessons will be useful both for the future scale-up and ongoing implementation of the program in Malawi and also for other countries planning future DHSS activities.

GOAL

To conduct a retrospective implementation evaluation of the DHPI activities in 3–5 districts that began implementing the approach starting in 2012/13. The goal of the evaluation is to document the actual implementation of the approach in Malawi, describe changes that followed from the program, document the barriers and facilitators of implementation, and to describe what resources will be needed to sustain implementation in districts.

SPECIFIC OBJECTIVES

The specific objectives of this evaluation are to answer the following questions:

1. How were the DHPI activities implemented in districts, including a good overview of the implementation process in each district?

2. What changes did district manager(s) effect in Malawi following the implementation of DHPI (e.g. identification of priority strategies to improve service delivery and/or quality for the most underserved population groups, strategic shifts in allocation of resources, improved monitoring of implementation and/or bottlenecks...)?

3. Is there evidence of the priorities identified through the DHPI analysis and planning exercise being incorporated in district level plans, budgets and/or quarterly reviews?

4. What were the barriers and enabling factors of the implementation of DHPI?

5. Which activities are still ongoing in districts and what resources are needed to sustain implementation activities?
SCOPE OF WORK

The Consultant will be hired to oversee the local implementation of all aspects of the process evaluation. The Consultant will be responsible for providing input to the research protocol, finalizing in collaboration with the research team the research plan, conduct initial document review and data collection, develop a data collection plan, conduct interviews in target districts, collect and review relevant documents, and to provide initial analysis of the data collected.

METHODOLOGY

The consultant is expected to present, in detail, their approach, methodology and tools, with an action plan and time frame that addresses the expected outputs, with reference to the overall and specific objectives as well as budget. The following key steps are the minimum expected:

- Review of relevant documentation, including country programme documents and sector policies and strategies:
  i) Overview of the DHSS approach and the DHPI
  ii) Existing DHSS evaluation guides
  iii) Country level documents

- Final protocol development
  i) Development of structured interview guides
  ii) Initial assessment of secondary data sources to determine whether they will be useful to the evaluation

- District-level data collection
  i) Key informant interviews using structured interview guides
  ii) Key document collection at district level

- National-level data collection
  iii) Key informant interviews using structured interview guides
  iv) Key document collection at national level

SKILLS AND QUALIFICATIONS

Key skills, technical background and experience required of the Consultant:

- Advanced degree in health systems, health policy, health financing or health economics;
- At least 5-10 years work experience in health policy or systems research;
- Experience working with Ministry level officials in Malawi;
- Evidence of leading previous evaluation projects;
- Conversant in Chichewa;
- Knowledge of the Malawian health sector;
- Ability and flexibility to work to short deadlines and prioritise work, with minimal supervision;
- Demonstrated ability to work in a multicultural environment and establish harmonious and effective working relationship both within and outside the organisation;
- Excellent communication, analytical and writing skills, including writing reports, strategies and proposals in English;
- Knowledge of UNICEF internal procedures and programming an asset;
DISSEMINATION PLANS

The final report will be shared widely with Government partners through the Ministry of Health and UNICEF-Malawi.

TIME FRAME

Evaluation is expected to be carried for a period of 45 work days.

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<th>Expected Result</th>
<th>Deliverable</th>
<th>Timeframe</th>
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<tr>
<td>Design</td>
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<td>Detailed research protocol, final data collection tools, IRB submission documents, and detailed work plan</td>
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Total: 50 days

KEY RESULTS

- Final evaluation report to inform the ongoing implementation of DHPI approach in Malawi, including in districts beyond those currently implementing the DHSS activities.
- Lessons learnt and key recommendations to inform the implementation of similar activities in other countries.

DELIVERABLES

Intermediary deliverables
1. Finalized research protocol (soft copy): includes detailed list of districts, finalized data collection tools (including structured interview guides), initial analysis of administrative data sources, list of key stakeholders to be interviewed, and detailed work plan
2. Field report after data collection and presentation (soft copy): summary of data collection activities including initial overview of data
3. Draft evaluation report and presentation (soft copy): summary of initial findings from the evaluation, to be shared at least one month before the end of the project

Final deliverables
As final outputs two sets of documents will be required (electronic copies in Word & PDF) - (1) Final evaluation report; (2) Micro data in soft copy
Final evaluation report: the Evaluation Report which shall be compliant with the UNICEF-adapted UNEG standards should include - but is not limited to - the following components:

- Table of Contents
- Executive Summary*
- Background
- Terms of Reference
- Methodology including source of data, data collection, people and places visited
- Quality and reliability of data
- Findings
- Conclusions
- Recommendations**
- Appendices at the discretion of the report writer
  - A tightly-drafted, to-the-point and free-standing Executive Summary is an essential component. It should be short and not more than five pages. It should focus mainly on the key purpose or issues of the evaluation, outline the main analytical points, and clearly indicate the main conclusions, lessons learned and specific recommendations. The Executive Summary shall include the Performance Rating of the main 5 evaluation criteria. Cross-references should be made to the corresponding page or paragraph numbers in the main text that follows.

** The Recommendations should be the subject of a separate final chapter. Wherever possible, for each key conclusion there should be a corresponding recommendation. The key points of the conclusions will vary in nature but will often cover aspects of the key evaluation criteria (including performance ratings).

BUDGET

The consultant should provide a proposed overall budget for the evaluation.

Payment will be best on deliverables as follows

- Inception report and presentation - 30%
- Field report and presentation - 10%
- Draft evaluation report and presentation - 10%
- Final report incorporating comments - 50%

Standard UNICEF procedures will apply for invoicing and all other financial management requirements set out in the contract. Standard penalty clauses will also apply for late and poor quality deliverables.

MANAGEMENT OF THE EVALUATION

The consultant will report to the Chief of PME. A Reference group will be responsible for quality assurance of the evaluation at each stage. The Reference Group will provide the consultant with the criteria for the evaluation of the quality of each deliverable and will include the following colleagues: Kyaw Aung (UNICEF Chief of Health), Mekonnen Woldegorgis (UNICEF Research and Evaluation specialist), Ellubey Maganga (UNICEF health specialist), Anupa Deashbande (MSH Senior M&E Adviser); Gabriele Fontana (UNICEF Health Specialist); Karen Grépin (UNICEF consultant NY); David Higgrave (UNICEF Senior Health Specialist); Beth Ann Plowman (UNICEF Senior Evaluation Specialist); Braeden Rogers (UNICEF Health Specialist (Health/HIV) and Sara Wilhelmsen (MSH Senior Program Officer).
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<td>Atnafu Getachew</td>
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<td>Sarah Ahmad Mirza</td>
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Annex F  Evaluation team

Gerald Manthalu, PhD, Evaluator
Karen Grepin, PhD, UNICEF Consultant
Braeden Rodgers, UNICEF CO
Ellubey Rachel Maganga, UNICEF CO