WORKING PAPER ON THE USE OF ESSENTIAL PACKAGES OF HEALTH SERVICES IN PROTRACTED EMERGENCIES

Global Health Cluster and WHO
EPHS Task Team
February 2018
1. INTRODUCTION

The concept of an essential package of health services (EPHS), that defines priority health services in fragile settings, where needs often exceed available resources, has featured recurrently in policy discourses over the past three decades, both for humanitarian as well as development planning. Restoring and/or maintaining access to essential lifesaving services is central in all humanitarian health response strategies. Progress toward Universal Health Coverage (UHC) is based on expanding the coverage and scope of an EPHS, with sustainable financing, including specific attention for the most vulnerable, and ‘leaving no-one behind’. As such, ensuring access to an EPHS can be used as policy entry point for putting the Humanitarian Development Nexus into practice; looking at how humanitarian and development programming can work together to support service delivery through the concept of an EPHS for the most vulnerable populations, including those affected by crisis and displacement, toward the collective outcome of UHC, so that all people receive the quality health services they need without financial hardship.

For the purpose of this paper, an EPHS is defined as detailed lists of interventions/services (preventive, promotive, curative, rehabilitative and palliative) across different levels of care, endorsed by the government at the national level, or agreed to by a substantial group of actors when services are to be provided in areas outside of government control. These interventions should be available to all, safe, people centred, and of assured quality to be effective. They should be funded by the government, with or without donor support, and to the extent possible be provided without user fees at the service delivery point during the emergency.¹

EPHS’s have been developed in many protracted emergency contexts, and mostly used to seek policy and planning alignment in support of service delivery between partners to reduce fragmentation, and to estimate overall budget estimates for resource mobilisation. However, most EPHS’s in their current application do not go beyond this purpose, and due to limited considerations of feasibility, are more aspirational than implementable, and don’t indicate a set of guaranteed services for those in most need. Few evaluations of EPHS’s have been conducted in humanitarian settings and the evidence base of their implementation and effectiveness to improve quality and coverage of services, resource allocation and coordination for alignment of partners to response strategies, is limited.

While standards can be set when designing the content of an EPHS, it needs to be understood that the concept of the package is not a static one. Its content,

implementation modalities and costing need to be adapted to the different contexts that often co-exist in the same country, such as areas not under control of the government, hard to reach areas, urban versus rural contexts, population movements, differences in implementation capacity, etc. Taking into account that key features of crises and available resources often change over time, any guidance for EPHS`s should be flexible and revisited to adapt to the changes. To this end, informed by a desk review on the use of EPHS`s in protracted emergencies\(^2\), we propose a six step process to develop, implement, and monitor an EPHS in such settings.

\(^2\) The Essential Package of Health Services in Humanitarian Crises: A review. X. Môdol and S. Colombo, March 2017
**STEP 1. AGREEING ON THE USE OF AN EPHS**

Clarity on the intended uses of EPHS’s and agreement among stakeholders is important when starting the development of an EPHS. The main types of rationale for the development of an EPHS are: priority setting on the grounds of effectiveness and relative cost; poverty reduction; equity; and political empowerment and accountability.

One of the most common reasons for designing an EPHS in fragile setting seems to be providing a policy statement by the Ministry of Health for the health strategy in a country. A second reason is defining a set of services to be delivered, as standard, by facility level, which are intended to be used for planning, accreditation, etc. A third, more operational purpose, would be as guidance to health care facility managers on the role, responsibilities and standards of their institutions. A fourth purpose, and the one that fits best the generally accepted EPHS concept, is to serve as a basis for resource allocation and for reducing fragmentation, gaps and inequities in access to healthcare.

If the aim is to deliver a policy statement with no immediate practical consequences, the content of an EPHS can be rather general, without the details typical of a fully-fledged package. For the definition of a set of standard services and for operational guidance to health facility managers, details should be more exhaustive and precise, but may not necessarily involve budget estimations. If used for resource allocation or contracting, the package should include a policy component (at least in terms of equity), be comprehensive and detailed (including cost estimates), and establish a clear relationship with the current capacity and performance of the existing health system.

As the concept of the EPHS for the purpose of an aspirational policy statement is of limited use, we should move toward a package of guaranteed services that can be implemented within the available resources, and is feasible within the current capacity of the health system. It should then be understood that the design of the content of a package is not a stand-alone exercise, but that this needs to be part of an interdependent process of its costing and a feasibility analysis that determines the current capacity for service delivery and the bottlenecks that need to be addressed for planning any further improvement in the scope, quality and/or coverage of services.

In countries that have both humanitarian and development programming, it needs to be clarified what the differences and connections are between the humanitarian EPHS and the national package. As the boundaries between the two may shift over time, or sometimes even overlap, this requires a dynamic and flexible interface between humanitarian and development programming and funding.

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**Action in country:** Agreement on the use of the EPHS. This may shift over time and it may be different for its use in the conflict affected areas in a country and the areas that are still stable. Initially it can be sufficient to use it as a general concept in a policy statement for coordination to align partners and to mobilise resources. When the acute phase of an emergency is over, the purpose should change to a guaranteed package requiring additional steps with regards to the details of the package, its costing, a feasibility analysis, an implementation plan, and the monitoring of its coverage and performance.
STEP 2. DEFINING THE CONTENTS OF A PACKAGE

The review of EPHS`s in eight countries with protracted emergencies shows similarity in the structure of documents and in their components, which reflect the standard set of PHC services in low and middle-income countries. Unfortunately there were no examples available for the review to compare these national packages with packages applied within the humanitarian programming in the same countries. Expected differences are for example in terms of priorities in its content, such as mental and physical trauma care or treatment of sexual and gender based violence, a more limited scope of services when for example implementation capacity has been reduced due to staff having left insecure areas, contextual adaptation of the delivery platforms due to limited access in insecure areas, its financing without co-payments that may be applied for the national package, simpler quality assurance and monitoring systems, etc.

Maternal and Newborn care (including Reproductive Health), Child Health and Immunization, Communicable Diseases, and Nutrition (occasionally integrated in other components such as child health rather than as a stand-alone package element) consistently compose the core of the reviewed EPHS`s. Furthermore, with the exception of Afghanistan, all other EPHS`s include Non-Communicable Diseases (NCD), although with different approaches: South Sudan includes only Eye Care under the NCD sub-package, while Liberia proposes a survey to establish priorities. In most other countries, NCD management is restricted to the upper levels of EPHS delivery. Mental health has also become a feature in most packages.

Palliative care is missing from the packages, and currently there is no good guidance available on what priority palliative interventions should be in emergency contexts. Managerial services to assure supervision and performance and quality management are generally not included, nor are services for public health emergency preparedness.
Table 1. EPHS service components in selected crisis-affected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>RH/MNH</th>
<th>CH/EPI</th>
<th>CD</th>
<th>NCD</th>
<th>Nutrition</th>
<th>Mental</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghan.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>Disability, Supply ED</td>
</tr>
<tr>
<td>S.Sudan</td>
<td>✔</td>
<td>✔</td>
<td>Eye</td>
<td></td>
<td>Integrate</td>
<td></td>
<td>NTD, Eye, Emrg, Prison</td>
</tr>
<tr>
<td>Liberia</td>
<td>✔</td>
<td>✔</td>
<td>Survey</td>
<td></td>
<td>Integrate</td>
<td>✔</td>
<td>S/AH, Emrg, Eye, ENT, OH</td>
</tr>
<tr>
<td>S.Leone</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>Emrg, S/AH, Envirn, Food</td>
</tr>
<tr>
<td>Iraq</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>NTD, Eye, Emrg, Prison</td>
</tr>
<tr>
<td>N.Syria</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>S/AH, Emrg, Eye, ENT, OH</td>
</tr>
<tr>
<td>Somalia</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>Integrate</td>
<td>✔</td>
<td>Emrg, Common, OH, Eye</td>
</tr>
<tr>
<td>Haiti</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>Emrg &amp; IC, Surg, OH, Eye</td>
</tr>
</tbody>
</table>


When developing these EPHS’s, the countries studied did not apply the most standard tools or considerations in the process of defining EPHS’s: burden of disease (BOD), cost-effectiveness analyses (CEA), budget impact, fairness, cultural acceptability and/or equity with priority to the worst off. This may be due to the complex and time-consuming nature of these methods, or the fact that these packages were not developed for standard setting or resource allocation.

| Burden of Disease (BOD) for premature mortality and morbidity estimated for diseases and risk factors⁵ | Quantitatively describe which conditions are responsible for losses of years of good health using the Disability-Adjusted Life Years (DALY). Regular reports are made for 195 countries, covering 333 diseases |
| Cost effectiveness analyses (CEA) | CEA gives evidence on the value for money the intervention represents, and is calculated as the cost per unit of health gain. A list of interventions/services ranked according to the relative cost of obtaining a health improvement can then be built. The findings are often expressed as incremental cost-effectiveness ratios, for a direct comparison between alternative interventions |
| WHO Choosing Interventions that are Cost-Effective (CHOICE)⁶ project | Provides global knowledge bases of cost-effectiveness ratios for 500+ interventions and implementation scenarios for normative guidance. For country application a tool kit is available to allow full contextualization of the models to the local setting |

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In addition to using globally available evidence such as WHO-CHOICE or DCP3 as a reference for selecting the content of a package, there are several other documents that help define priority interventions, such as the Essential Interventions, Commodities and Guidelines for Reproductive, Maternal, Newborn and Child Health, the Minimum Initial Service Package (MISP) for Sexual and Reproductive Health, the Package of Essential Non-Communicable Disease Interventions and ‘best buys’ for NCDs, the Mental Health toolkit, etc. Also, the Sphere handbook provides an overview of minimum standards with priority interventions for service delivery in humanitarian response. The HeRAMS checklist list of services can also be used a starting point to define an EPHS.

Most of this guidance however, is aspirational, and does not indicate what, for example, an absolute minimum package of services should be in contexts with very low implementation capacity, or how to sequence expansion when capacity and resources increase.

The design of an EPHS should specify the services by delivery platform or level, including population level, community level, primary care (sometimes split as PHC unit and PHC health centre) and hospital care. In addition, there can be a module for mobile services. Recognizing important differences in the structures of national health systems and the emergency settings, service delivery platform categories will be country-specific. The content of the package should be accompanied by infrastructure standards, lists of essential medicines, diagnostic tests and equipment linked to the

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7 See www.dcp-3.org and for the full list of services: http://dcp-3.org/sites/default/files/chapters/Annex%201A.%20All%20Essential%20Packages.pdf
9 http://iawg.net/areas-of-focus/misp/
12 http://www.who.int/health-cluster/resources/publications/PHIS-toolkit.pdf?ua=1
13 With a need for flexibility in humanitarian settings where these may be very basic at the onset of a response with services that could be provided under a tree behind a curtain
services, and required staffing (competencies and numbers) required for each of the services as well as for each level of health care. For humanitarian programming, a range of kits have been developed for medicines, diagnostics and equipment, some directly linked to a set of minimum services, such as the Reproductive Health kits linked to the MISP.

**Action in country:** In every protracted emergency, humanitarian stakeholders should agree on an EPHS with its priorities adapted to the morbidity and mortality patterns, taking into account the health system’s capacity, with its delivery platforms adapted to the different contexts that often co-exist, and when available, aligned to the national EPHS. A useful starting point is provided by globally available lists of cost effective interventions such as those provided by WHO CHOICE or the DCP3. The categories of services should be aligned to the HeRAMS list of services, thus describing services at population, community, primary and hospital care levels, possibly including mobile clinics. The level of details for such a package will be determined by its intended use, which may change over time.

**Available examples of EPHS`s:** Examples of EPHS`s are made available on the Global Health Cluster EPHS Task Teams website, with different levels of details linked to what they were used for. The example of the EPHS made for Yemen in 2017 is based on the approach mentioned above.

**Follow up:** Additional examples of EPHS`s made by humanitarian partners and/or those agreed between stakeholders to be shared and made available. To review the DCP3 HPP and see which services may need to be added that are specific to emergency contexts, and which services are less of a priority in these contexts. To develop example packages for different categories of resources.

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14 See [www.who.int/health-cluster/about/work/task-teams/essential-package-health-services/en/](http://www.who.int/health-cluster/about/work/task-teams/essential-package-health-services/en/).
STEP 3. HEALTH SYSTEM REVIEW AND FEASIBILITY ANALYSIS

Without prior assessment of the health system, packages cannot be more than aspirational. Health system assessments should be relevant, trustworthy, and coherent. However, no standardised tools exist yet on how to conduct rapid health system reviews in fragile countries.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Information</th>
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<tbody>
<tr>
<td>Health Sector Profile (HSP)(^{16})</td>
<td>Analysing disrupted health systems, module 13</td>
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<tr>
<td></td>
<td>- Offers a systemic, updated, as reliable as possible view of a health sector, including its structure, resources, outputs, performance and dynamics</td>
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<td></td>
<td>- Includes guidance on a so-called ‘barebones approach’ when time is limited</td>
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<tr>
<td>Rapid Health Sector Review (RHSR)</td>
<td>No pre-existing tool, adhoc questionnaire or checklist. Examples include:</td>
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<td></td>
<td>- Somalia (2015): conducted desk review of policies, plans and programme-specific documents. A checklist was agreed for use during field visits to health facilities; it used an EPHS framework and looked at the 6 health system building blocks;(^{17})</td>
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<tr>
<td></td>
<td>- For Yemen health sector review and feasibility analysis for the EPHS, a simple 2 page questionnaire was used (^{18})</td>
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<tr>
<td>Bottle-neck analysis (Tanahashi framework)(^{19})</td>
<td>In 1978, Tanahashi described a way of both measuring health service coverage and identifying bottlenecks in implementation. This approach has been used and modified by UNICEF (conceptual model and approach to conducting analyses of health system bottlenecks) and the World Bank. Limitations: the assessments require high-quality data from health management information systems, which are rarely available in low-income settings, and whose data are likely unreliable in fragile settings. Bottlenecks in implementation can be due to limited access, for geographical, financial or sociocultural reasons. Poor readiness of health-care facilities due to, for example, a lack of human resources, drugs or equipment and suboptimal clinical practice, such as failure to adhere to evidence-based clinical guidelines can also cause bottlenecks.</td>
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\(^{17}\) [http://www.emro.who.int/som/somalia-news/somali-health-sector-review-concluded.html](http://www.emro.who.int/som/somalia-news/somali-health-sector-review-concluded.html) The report will be added to the GHC website

\(^{18}\) The questionnaire will be available on the GHC EPHS TT website

\(^{19}\) Reaching Universal health Coverage through District Health System Strengthening: Using a modified Tanahashi model sub-nationally to attain equitable and effective coverage. [https://www.unicef.org/health/files/DHSS_to_reach_UHC_121013.pdf](https://www.unicef.org/health/files/DHSS_to_reach_UHC_121013.pdf)

As part of the EPHS development, based on a rapid health system review, a feasibility analysis should be performed to assess whether the health system is able to provide the complete package to an identifiable (and sizeable) percentage of the target population. It should also provide the analysis needed for adaptation of the service delivery platforms for the EPHS to the different contexts within a country. The review should identify bottlenecks and gaps, such as quality of care processes, facility-WASH infrastructure, supply chains, human resources capacity, and/or access barriers that need to be addressed to assure its quality and performance, and expand its coverage and possibly the range of services.

**Action in country:** When developing a realistic EPHS, its content needs to be adapted to the current capacities of the health system for its delivery. Such feasibility analysis is to be based on a rapid health sector review that provides options for different implementation modalities with the service delivery platforms adapted to the different contexts that may exist in a country, and it should identify bottlenecks and barriers for access that need to be addressed to expand the EPHS, its quality and performance, and/or its coverage.

**Follow up:** There is need to review existing tools and methods for health system review and bottleneck analysis, and adapt these as indicated for use in fragile and emergency contexts.

**Tools:** In the meantime, guidance can be found in Module 13 of the ADHS manual. The ad-hoc health sector review questionnaire and the result of this analysis as applied in Yemen in 2017 are made available to the GHC EPHS TT website.
STEP 4. COSTING

Costing should be a part of the EPHS development to assess affordability, resource allocation and review the initial draft of the EPHS according to available resources. Yet from the EPHS desk review, it was identified that costing of the EPHS’s was conducted 2 to 7 years after an EPHS was produced in the surveyed countries, sometimes using ad hoc adaptations of costing methodologies with varying levels of detail. Standard costing tools are available and these could inform future EPHS resource needs estimations in country. Examples include CORE Plus and OneHealth Tool. Advantages of these standardized tools include comprehensiveness and flexibility.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
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<tbody>
<tr>
<td>CORE Plus(^{21})</td>
<td>Tool based on an excel spreadsheet. Uses a step-down methodology, using actual and normative costs. Allows the user to estimate a standard cost for each intervention, broken down by drugs, tests, medical supplies and staff. The standard costs are multiplied by the number of each type of interventions to build the total direct costs for a facility or group of facilities, to which are added indirect costs.</td>
</tr>
<tr>
<td>OneHealth Tool(^{22})</td>
<td>Software tool released in 2012; developed by IAWG-costing group; updated regularly. Uses a bottom up, inputs-based costing methodology whereby the user specifies the activities to be undertaken, the associated inputs and their prices. Estimates health impact of expanding intervention coverage, through the incorporation of models such as Lives Saved Tool (LiST), (^{23}) NCD impact model, HIV, TB and malaria impact models. Includes modules to plan for health system investments (infrastructure, health workforce, information systems, logistics, financing and governance), and associated costs. Includes major diseases and SDG outcome indicators, including overarching outputs such as modelled increase in life expectancy. Uses a systemic modular approach. Users can set up and define national disease control programmes to match the country context, and then estimate the cost including an analysis of the broader health system implications. Available in English, French and Spanish and partially in Chinese and Russian. Includes data from the WHO CHOICE global database, providing baseline data for a variety of prices, intervention coverage levels and country epidemiological profile.</td>
</tr>
<tr>
<td>The Systematic Cost Analysis (SCAN) tool (IRC)(^{24})</td>
<td>Software that automates data collection and standardizes the analytical structure, enabling field staff to quickly and easily conduct cost analysis to help humanitarian actors develop and implement programs that efficiently target and apply funds for greater effectiveness, while still meeting methodological standards. It allows staff to answer program- and budget-related questions, such as: How much does it cost to treat a child for severe acute malnutrition? Which type of</td>
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\(^{22}\) Download software here: [http://www.avenirhealth.org/software-onehealth](http://www.avenirhealth.org/software-onehealth); Overall information on the OneHealth Tool and the IAWG-Costing can be found on the IHP+ website: [https://www.internationalhealthpartnership.net/en/tools/one-health-tool/](https://www.internationalhealthpartnership.net/en/tools/one-health-tool/)

\(^{23}\) [http://www.livesavedtool.org/how-list-works](http://www.livesavedtool.org/how-list-works)

How does the process of such an analytical exercise require – data and technical capacity – as well as time and effort. All of these requirements may make the application of standard costing tools challenging, particularly in a humanitarian emergency context. Many humanitarian costing experts have developed their own tools (in reality simple spreadsheets), with which they can do a costing within several weeks. Expertise for doing such a costing exercise is usually not readily available in country.

For every EPHS, there is a need to agree on the most appropriate method of costing, with an emphasis on ensuring that costing is part of, and not separate from, the EPHS development process. The EPHS desk review suggests that it might be best to start with a simplified, quick, ad-hoc approach, that can calculate a “ballpark estimate” of costs, based on data reflecting an “average” district setting and a quick review of current resources for the existing package, to allow for the review of the first realistic draft of the EPHS. It can then be followed by a more in-depth costing (such as with the OHT or Core Plus) if better data and time allow. In some cases, it may be enough to do a costing of the service delivery platforms for initial planning and budget estimates (e.g. the average cost of a primary care facility for 10,000 people per month), whereas for other purposes, more detailed bottom-up costing of the entire health system would be required based on the services and linked with the Burden of Disease. The results of the costing exercise can be used to inform the budgeting process for the health sector strategy in the Humanitarian Response Plan (HRP), as this is moving toward the use of activity based costing.

Rather than starting by choosing a tool, we need to define which questions a costing expert needs to address, linked to its intended use, ensuring transparency of the method, and an off-site peer review:25

- The scope for the costing: facility level, district level or national level.
- The costs of implementing the current range of services, with the current levels of quality and coverage
- The projected cost for introducing minimum quality standards (national or humanitarian) with increasing levels of coverage over the next 3 years.
- The projected cost for implementing an increasing range of priority service and introducing minimum quality standards with increasing levels of coverage over the next 3 years

25 See general guidance on costing: Estimating cost implications of a national health policy, strategy or plan [http://apps.who.int/iris/bitstream/10665/250221/1/9789241549745-chapter7-eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/250221/1/9789241549745-chapter7-eng.pdf?ua=1)
- Indication how costs will differ when implementing the EPHS in different contexts that may co-exist in a country: high priority package in lower capacity areas versus a more an extended list of services in stable and higher capacity areas, different balance of implementation modalities in urban vs rural areas, different delivery costs in hard to reach areas, stable vs conflict affected areas, etc.
- Average cost per service delivery platform (e.g. primary care facility, or mobile clinic)

**Action in country:** To conduct a costing of the EPHS.

**Tools:** At this moment, there is no official costing method or tool that has proven to be the most suitable for fragile contexts. Note that the approach will depend on the objective and scope of the costing. WHO Regional Offices and headquarters can assist in finding consultants to carry out costing exercises.

**Follow up:** Develop key questions for the development of ToRs for costing consultants. Establish a system for external peer review of draft costing analysis including methods, results and documentation. When there is more experience, develop guidance on the use of appropriate tools, and process to deploy health costing experts. Guidance to health cluster coordinators and partners how costing can be used for activity based costing for the HRP and project proposals.
STEP 5. IMPLEMENTATION PLAN

The next step in the process is to develop an implementation plan. Implementation plans are not usually coordinated between humanitarian and development programming, and therefore there is usually no mutual understanding how the implementation of the humanitarian EPHS connects with or complements the implementation of a package under the national health policy and plan. Such an implementation plan should be informed by a reference package, and then adapted to various contexts as they may exist within a country: Implementation modalities and therefore costs will vary in rural vs urban contexts, in areas not under government control or in hard to reach areas, or areas only accessible for short periods, possible inequities between refugee, IDP, returnee and affected host populations, etc. It is critical to adapt the modalities of service delivery, and the cost of providing different packages, to the differing contexts.

Furthermore, flexibility in implementation is needed to anticipate changes in the context, when conflict re-escalates, or when areas become more accessible. This also requires flexibility in, and between, humanitarian and development funding.

Furthermore, the implementation plan should address constraints and bottlenecks identified by the health system assessment and feasibility analysis. This often requires addressing supply management, constraints related to the health workforce, financing options to reduce user fees, or managing minimum quality standards. It also needs to look at the role of district health offices in the implementation and monitoring of the EPHS, and seeking engagement with communities.

**Action in country:** To develop an implementation plan for the EPHS, coordinated between humanitarian and development stakeholders. It should define the different service delivery platforms adapted to different contexts that co-exist in a country; select providers, identify a baseline and set targets for service provision. It should give guidance on how to start addressing the underlying bottlenecks in the health system required for a possible increase in the range of services and/or scaling up coverage and quality of the package, and address barriers for access.

**Examples:** An example of such implementation plan for the EPHS in Yemen is available on the GHC EPHS TT website.
STEP 6. MONITORING EPHS IMPLEMENTATION

Facility and population-based tools exist that may help assess different dimensions of EPHS implementation, such as the service uptake, the increase in population coverage, quality of services, provider/organizational performance. Some of these tools are already part of the routine monitoring system within humanitarian programs and others may need to be adapted for this purpose. Most of the tools can be used at the beginning of EPHS implementation, but also in the design phase to define a baseline. The information can also be used as an input for the health system review, the feasibility analysis and the initial EPHS costing and implementation plan, as well as to assess progress of implementation and plan for future interventions to improve access, utilization and/or quality of the services within the EPHS.

One of the challenges remains measuring quality of services and how to apply quality improvement methods in humanitarian settings. For instance, in contexts where the regulatory capacity of the MoH is limited, or for areas where MoH has no access, it is not clear which standards to use, what methods to use or who would be responsible for overseeing adherence to quality standards.

Local health authorities play a role in coordinating stakeholders that support the implementation of an EPHS, and they should be responsible for managing the various proposed quality and performance monitoring tools, including through integrated health facility supervision and regular review meetings. Furthermore, there should be an active engagement with communities, to give them a voice in the design and implementation of the services in the areas where they live, but also for accountability purposes, such as complaints mechanisms. However, tools for building the capacity of district health management and community engagement fall outside the scope of this paper.

1. Health facility based tools:

1.1. Routine health information systems collect part of the information to assess EPHS implementation. Key indicators that measure access, utilisation and/or coverage include:  26 27

- The number of outpatient department visits per person per year
- Proportion of births attended by skilled health personnel
- Immunization coverage levels by vaccine
- Number of health facilities offering specific services per 10.000 population, and meeting minimum service standards on the basis of tracer criteria for specific services

27 See also https://phcperformanceinitiative.org/about-us/measuring-phc
- Percentage of the population living within a 5km radius (or 1 hour travelling distance\textsuperscript{28}) of a health facility (total number of health facilities per 10,000 population)
- Total number of beds per 10,000 population

1.2. **Health Resources Availability Monitoring System (HeRAMS)\textsuperscript{29}:** designed specifically for emergency contexts; focuses on functionality of health services and resource availability; usually data is provided through partners supporting health facilities and services, and therefore it does not require field visits; useful to monitor functionality of health facilities and presence of services as reflected in an EPHS. However, it only has a few aspects that look at quality.

1.3. **Service Availability and Readiness Assessment\textsuperscript{30}:** designed for stable contexts; very detailed so well suited to measure EPHS and several quality aspects but can take 3-6 months, has high costs, and therefore generally not suited for monitoring purposes in fragile contexts.

1.4. **Balanced Score Cards (BSC)\textsuperscript{31}:** one of the most widely used approaches of the new generation of performance measurement systems. It has a risk of becoming a dashboard of measurements rather than an integrated performance management system that should be used to develop improvement plans. The main limitations of this tool are its costs, associated with lengthy and labour-intensive surveys, its focus on health facilities, as well as the limited use health managers make of the summary reports.

1.5. **Accreditation tools:** Tool meant to assess and certify providers against selected quality standards, as condition related to different types of contracting, or licensing within national regulation processes \textsuperscript{32}(e.g. for private providers before they can open a clinic or pharmacy)

1.6. **Specialised tools:** In addition to the general tools mentioned above, some detailed and more specialised tools exist. However, these are not specific or adapted to fragile settings:
- Mental health quality rights tool (as basis for QI tool)\textsuperscript{33}
- Standards for improving quality of maternal and newborn care in health facilities\textsuperscript{34}
- Safe child birth checklist\textsuperscript{35}

\textsuperscript{28} See [https://www.accessmod.org/](https://www.accessmod.org/)
\textsuperscript{29} PHIS toolkit and HeRAMS: [http://www.who.int/health-cluster/resources/publications/PHIS-Toolkit/en/](http://www.who.int/health-cluster/resources/publications/PHIS-Toolkit/en/)
\textsuperscript{31} Balanced Score Card, UNHCR 2013, [http://twine.unhcr.org/app/](http://twine.unhcr.org/app/)
\textsuperscript{33} [http://apps.who.int/iris/bitstream/10665/70927/3/9789241548410_eng.pdf](http://apps.who.int/iris/bitstream/10665/70927/3/9789241548410_eng.pdf)
- Minimum requirements for surgical care\textsuperscript{36}
- Effectiveness of treatment, including rational drug use and patient compliance\textsuperscript{37}
- Patient and staff safety\textsuperscript{38}
- Standards for hand hygiene\textsuperscript{39} and Infection Prevention and Control (IPC)\textsuperscript{40}
- Medical incident reporting and clinical audits
- Different patient experience and satisfaction tools

2. Population based tools:

2.1. Demographic and Health Surveys (DHS) or Multiple-Indicator Cluster Surveys (MICS)\textsuperscript{41}: record useful information on access to and utilization of selected health services. Furthermore, household surveys provide understanding of the health seeking behaviour and potential barriers to access the services from the EPHS. However, often no recent data is available in fragile contexts, or insecure and conflict affected areas were not covered by the survey, or data no longer reflects the reality on the ground after an emergency occurred.

2.2 Health needs, health seeking and utilisation surveys: These population and/or community based surveys provide essential information on how households and/or communities prioritise their needs\textsuperscript{42}, including for health services, or on self-reported episodes of illness, whether people took action to seek a service and if so where, and what their barriers\textsuperscript{43} may have been in attempting to access services. Depending on the purpose, that can also include more detailed questions on health related expenditures, looking at both direct costs as indirect costs.

Action in country: Establish a monitoring system around the EPHS, to measure accessibility, utilisation, coverage and performance. It should at minimum include selected key indicators on availability of services through HeRAMS and output data

\textsuperscript{35} http://www.who.int/patientsafety/topics/safe-childbirth/childbirth-checklist/en/
\textsuperscript{36} http://www.who.int/patientsafety/topics/safe-surgery/checklist/en/
\textsuperscript{38} Technical Series on Safer Primary Care. http://www.who.int/patientsafety/topics/primary-care/technical_series/en/ or http://applications.emro.who.int/dsaf/emropub_2011_1243.pdf?ua=1
\textsuperscript{39} http://www.who.int/gpsc/country_work/hhsa_framework_October_2010.pdf?ua=1
\textsuperscript{40} http://www.who.int/infection-prevention/tools/core-components/en/
\textsuperscript{41} See country profiles under the Health Equity Analysis Tools (HEAT) http://www.who.int/gho/health_equity/countries/en/ and DHS and MICS reports on https://www.unicef.org/equity/
from health facility based HIS reporting. When the situation stabilises, additional tools should be used such as a balanced score card to add elements of performance, effectiveness and quality, and household surveys to understand health seeking behaviour and identify barriers for access. In case the approach shifts toward purchasing essential services from existing providers based on a benefit package (e.g. through vouchers, contracting or subsidising overage under an insurance scheme), accreditation type tools need to be applied.

**Examples:** Examples of the BSC and household surveys tools for health seeking behaviour and barriers will be added the GHC EPHS TT website

**Follow up:** To define a core set of health facility, household and community assessment tools to cover the different EPHS monitoring needs (from general to detailed), adapted to different settings (access, urgency and resource availability). Such a set will complement the PHIS, with selected tools to be developed or adapted of the above, modular health facility assessment tools, BSCs or accreditation tools for fragile settings.