Proposal of a Quality of Care Index

Summary of research[1]

Water trucking in a drought-affected area of Gonka Kebele, Ethiopia

GLOBAL

What we know: Efforts are needed to ensure provision of effective, high-quality care across health services.

What this article adds: While health management information systems continue to develop, periodic health facility surveys like the Service Provision Assessment (SPA) provide information to monitor progress and target interventions. However, these surveys are complex and consensus around key quality of care indicators or summary measures is lacking. This report proposes a short list of indicators that measure readiness for and provision of highly effective interventions and propose a quality of care index (QOCI) that spans reproductive, maternal, newborn and child health and nutrition (RMNCHN) as well as Water, sanitation and hygiene (WASH). An analysis using the QOCI is included for the seven countries that have completed a national SPA survey since 2013: Bangladesh, Democratic Republic of Congo, Haiti, Malawi, Nepal, Senegal and Tanzania. QOCI scores revealed differences within countries as well as differences in and among the services themselves. This study serves as a starting point for further discussion on how to create a concise and practical summary measure of quality of care so that decision makers and stakeholders can identify weakness within the health system and address gaps through targeted improvement efforts.

As the use of health facilities along the continuum of care for women and children increases globally, efforts are needed to focus on the provision of effective, high-quality care across services to end preventable maternal and child morbidity and death. It is no longer enough to measure the coverage of reproductive, maternal, newborn and child health and nutrition (RMNCHN) interventions without considering whether the services provided by facilities are adequate. Advancements in the measurement of the quality of care are however needed.

The Service Provision Assessment (SPA) is a health facility survey that provides a comprehensive overview of a country's health service delivery. It is one type of survey proposed by The Demographic and Health Surveys Program, one of the principal sources of international data on the provision of health services. Although critiqued for being complex or for their data being difficult to use, periodically conducted SPA surveys, or similar national health facility surveys that include observation of services, are critical sources of information on quality of care. Provision of care and selected services can be captured through health management information systems at lower administrative levels, even at the facility level, and at more frequent intervals. However, these systems are still under development and are often limited by lack of representativeness, incomplete reporting and not typically being publicly available.

This paper presents an initial attempt to select a short list of indicators that measure readiness for and provision of highly effective interventions and proposes to create a quality of care index (QOCI) – one singular measure of services built from data that are available in SPA. A set of RMNCHN and Water, sanitation and hygiene (WASH) indicators were determined based on scientific evidence, international guidelines and with input from technical experts. RMNCH indicators covered five services – family planning, antenatal care (ANC), delivery care, immunisation and child curative care. The final list of 17 indicators selected reflects structural readiness at the facility level (e.g., does the facility have first-line antibiotics?) as well as process components of quality service delivery which are measured at the client level (e.g., were children assessed for dehydration?).

An analysis using the QOCI is included for the seven countries that have completed a national SPA survey since 2013: Bangladesh, Democratic Republic of Congo, Haiti, Malawi, Nepal, Senegal and Tanzania. Quality could not be directly compared across countries given the differences in indicators and the timing of surveys and thus the findings are reported separately for each country.

Within many countries, the quality of care varied from region to region. Regional variation was most prominent in the DRC, with 48 points between the highest- and lowest-scoring regions. The three countries with the lowest variation among regions were those with the fewest regions, Bangladesh, Malawi and Nepal.

[1] Mallick, Lindsay, Rukundo K. Benedict, Courtney Allen, and Bradley Janocha. (2020). Proposal of a Quality of Care Index (QOCI). DHS Methodological Report No. 29. Rockville, Maryland, USA: ICF.

QOCI scores also revealed differences in and among the services themselves. In five of the seven countries included, WASH was the highest-scoring service (Bangladesh, Haiti, Malawi, Nepal and Senegal), ranging from 66% to 81% of facilities with basic WASH services. Conversely, the immunisation service was the lowest scoring area in three countries (Bangladesh, Malawi and Nepal) and the second lowest-scoring domain in the DRC. Although immunisation was the second highest-scoring service in Tanzania, the availability of immunisations at facilities ranged by 88 percentage points between its highest- and lowest-scoring regions. Within ANC, the blood pressure indicator scored high across most countries. In five out of the six countries in which it was measured, more than 70% of clients had their blood pressure measured. Across all countries, the percentage of facilities with oral rehydration salts (ORS) or zinc in stock for diarrhoea was also high. In five of this study's seven countries, more than 80% of facilities provided ORS or zinc for diarrhoea. In contrast, few clients had a full nutritional status assessment. Of the facilities in the DRC, Haiti, Malawi, Nepal and Tanzania, 2% or fewer included a nutritional status assessment during child curative care.

Scores for individual indicators ranged even more dramatically. In Senegal, for example, the ANC service area index score is 49 but this area also had the highest and lowest scoring indicators (blood pressure measurement and breastfeeding counselling, respectively).

Where comparable items were available across countries, the analysis found that nutritional status was rarely assessed during child curative care visits. Conversely, availability of ORS or zinc for diarrhoea, WASH resources, immunisations and blood pressure measurements during antenatal care were common.

This report does not provide external validation for the index or the indicators. Rather, both the index and indicators were chosen to serve as tracers for quality of care – a starting point for launching a conversation about which areas need to be more holistically explored to improve quality of care so that decision makers and stakeholders can identify weakness within the health system and address gaps through targeted improvement efforts. Ideally, the indicators could be assessed alongside health outcome data from population surveys or health management information systems to better understand gaps within the health system.

Conclusion of the R4ACT workshop and 'Nanterre Declaration'

Research summary[1]

A workshop was convened on 22nd November 2019 with a group of researchers, donor and health, nutrition and Water, sanitation and hygiene (WASH) advisers from multiple organisations to translate evidence on water quality into concrete, practical actions to reinforce WASH and nutrition integration. Discussions around the results of a recent review[2] focused on the systematic inclusion of interventions to improve household water quality in the package of activities accompanying the treatment of acute malnutrition. The results of the review were presented followed by the WASH'Nutrition strategy (developed in 2012 and consolidated by Action Against Hunger (ACF) and 17 organisations), generic protocols for community-based management of acute malnutrition (CMAM) and on WASH activities related to water quality. Participants were divided into two working groups and asked to prioritise three key integrated activities at health facility level and three at community/ household level (Box 1) indicating one relevant indicator for each activity as well as barriers, opportunities and potential mitigation solutions. Each organisation then selected the activities they committed to implement in their programmes. In the form of a 'Nantarre declaration', participants committed to seek funding for and implement integrated WASH and nutrition projects and programmes to achieve nutrition security and make nutrition treatment more effective, efficient and sustainable.

Box 1 Selected WASH and nutrition activities

Facility-level activities:

1. Improve the water system in health facilities
2. Systematically coordinate delivery of household water treatment adapted to context with severe acute malnutrition management
3. WASH experts train health staff to a) run the health centre water system and b) build caregivers capacity on the correct use of household water treatment products

Activities at community and household level:

4. Develop behaviour change approaches on water treatment in areas covered by SAM treatment services
5. Use of participatory methodology to select the most appropriate household water treatment method
6. Information, knowledge and data sharing

A child washing his hands in Bujumbura, Burundi

[1] Conclusion of the R4ACT workshop and "Nanterre Declaration" endorsed by participating organisations, organised by Action Against Hunger, 22/11/2019, Nanterre, France.

[2] See research snapshot in this issue of *Field Exchange* entitled "Impacts of WASH on acute malnutrition: from available scientific evidence to informed action"