Abstract

Kenya has made significant progress in reducing child and infant mortality in the past decade, but significant challenges remain. The Government of Kenya has adopted a reproductive, maternal, newborn, child, and adolescent health (RMNCAH) scorecard as an accountability and management tool to drive improvements in child and maternal health. Through the Eastern and Southern Africa Region (ESAR) Programme Monitoring and Response (PMR) Initiative, the United Nations Children’s Fund (UNICEF) Kenya is providing technical assistance for further development and customization of the scorecard. UNICEF is supporting the roll-out of the RMNCAH scorecard at decentralized levels (county, sub-county, and ward), with near real-time monitoring (NRTM) of health services across all tiers of the health system. This includes support to decision-making based on NRTM data, and an action tracker dashboard to facilitate feedback to communities and health service delivery managers on resulting improvements to service provision. Key lessons learned are the need to rework training modules to accommodate a lower than anticipated level of monitoring and evaluation (M&E) knowledge among government staff, and the need to conduct causal analysis in order to create effective actions which lead to an improvement in health indicators.

Issue

Between 2003 and 2015 Kenya almost halved its infant mortality rate (to 39 deaths per 1,000 live births) and under-five mortality rate (52 deaths per 1,000 live births). However, the rate of reduction in neonatal mortality is not satisfactory and the maternal mortality ratio remains unacceptably high. There is a need to sustain the gains made, while committing more resources to high impact interventions with measurable outcomes in support of the Sustainable Development Goals. As part of efforts to improve accountability and monitoring of the delivery of RMNCAH services, the Government of Kenya developed and introduced an RMNCAH scorecard (Figure 1). Data based on a core set of health sector indicators, from attendance of antenatal care appointments by pregnant women to the immunization rates of children, are visualized on the dashboard and act as a decision-making and accountability tool to drive health service delivery improvements and increase accountability to women, children and adolescents.

The quarterly preparation of the RMNCAH scorecard is a manual process whereby scorecard indicators and data elements are exported from District Health Information Software (DHIS2) to the RMNCAH Scorecard Platform, a second portal which generates the scorecard report. This process is prone to introducing errors, resulting in tensions between management and health workers. In 2013, Kenya introduced a devolved system of government and wards became a legally recognized county administrative level for targeting health responsiveness in rural and hard to reach areas. However, DHIS2 did not recognize ward-level data. Furthermore, subnational programme managers needed more synchronized and dynamic DHIS2 reports to enable them to self-monitor their performance and push for local interventions in support of maternal and child health.
**Strategy and implementation**

With funding from the US Fund for UNICEF and the Bill and Melinda Gates Foundation, UNICEF is improving the responsiveness of DHIS2 and the RMNCAH scorecard (Figure 1) to facilitate health data generation and use, which includes reporting at ward, sub-county, county and national levels. The scorecards are being implemented in two counties, Homa Bay and Siaya, in western Kenya, which are among 18 high priority counties that account for 90% of Kenya’s maternal deaths.

Specific activities include: orientation of the county and sub-county management teams on use of the scorecards as a management and accountability tool; inclusion of the wards as a hierarchy in DHIS2 to facilitate generation of ward-level RMNCAH scorecards; institutionalization of the RMNCAH Scorecard in integrated health programme and data reviews and updating of the action trackers; and use of the scorecards for advocacy on health budgeting and priorities with local government and related stakeholders.

**Figure 1: Extract from Siaya County, Kenya, RMNCAH scorecard Q4 2016**

<table>
<thead>
<tr>
<th>Region</th>
<th>Deliveries by skilled health attendants</th>
<th>% pregnant women attending 1st ANC visit / % pregnant women attending 4 ANC</th>
<th>Female infants &lt;6 mos on exclusive breastfeeding / Male infants &lt;6 mos on exclusive breastfeeding</th>
<th>PMTCT ARV Prophylaxis Rate (Infant) / PMTCT ARV Prophylaxis Rate (Mother)</th>
<th>Targeted pregnant women provided with LLITNs / PNC attendance</th>
<th>Vitamin A coverage (12-59 mos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siaya</td>
<td>59%</td>
<td>37%</td>
<td>72%</td>
<td>0%</td>
<td>99%</td>
<td>92%</td>
</tr>
<tr>
<td>Alleo Usonga</td>
<td>12%</td>
<td>42%</td>
<td>56%</td>
<td>99%</td>
<td>100%</td>
<td>84%</td>
</tr>
<tr>
<td>Central Alleo Ward</td>
<td>135%</td>
<td>21%</td>
<td>71%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>North Alleo Ward</td>
<td>22%</td>
<td>100%</td>
<td>66%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>South East Alleo</td>
<td>100%</td>
<td>93%</td>
<td>82%</td>
<td>99%</td>
<td>100%</td>
<td>72%</td>
</tr>
</tbody>
</table>

**Source:** Kenya Near Real-Time Monitoring System
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Lessons learned

Lesson 1: Underestimating the level of M&E knowledge

A key area of work has been to build the capacity of managers at the county level to interrogate and interpret routine health information data from DHIS2 and the RMNCAH scorecard in order to properly identify and address gaps in service delivery. Previously, only one or two people in the county would have been able to access DHIS2 but now all service delivery managers have developed full familiarity with routine data capture and reporting processes, including decision support tools in the form of a customized suite of dashboards for strengthening performance reviews, management and accountability in health.

Many managers should already have received some prior training on DHIS2 and the national RMNCAH scorecard and so initially only refresher training was planned. However, awareness proved to be much lower than anticipated so the training modules had to be reworked to cover M&E basics. This delayed the capacity-building component of the initiative.

Lesson 2: Design of actions for the action tracker

The items identified in the action tracker (Figure 2) were critical in improving the quality of data in DHIS2, and in strengthening service delivery systems. These include data quality audits (DQAs), facilitative support supervisions, and support for needs-based targeted technical orientations such as remedial trainings, better integrated performance reviews, increased evidence informed advocacy, which are linked to holistic health systems strengthening for improved health outcomes.

For example, county health teams updated the population denominators to facilitate computation of all the core service delivery indicators, as part of DHIS2 data set cleaning. The teams also worked with national Ministry of Health structures to include wards as a hierarchy within DHIS2 to facilitate generation of more decentralized RMNCAH scorecards and other DHIS2 dynamic dashboards.

Source: Kenya Near Real-Time Monitoring System
A significant lesson is that for health management teams to clearly outline actions that directly improve health indicators, a thorough understanding is needed of the causal analysis that links problems to solutions within health programmes. The RMNCAH scorecard can therefore lead to strengthening programming as the question “so what” is continually asked during the process of formulating actions in the action tracker.

A standing example of how the RMNCAH scorecard action tracker is used in both counties is a structured approach to identifying candidate facilities for DQAs by looking at indicators that are red (i.e. under performing) across all sub-counties. The DQA improvement plan, a product of the DQA, has not only helped counties identify capacity gaps to improve health metrics, but has also helped county health management teams work with partners to support remedial capacity building sessions. These allow health service providers to understand data elements and data disaggregation in the revised standard HMIS tools.

**Figure 2: Extract from Siaya County, Kenya, action tracker report, Q1 2017**

![Action Items for RMNCAH Scorecard](image)

Source: Kenya Near Real-Time Monitoring System
I present the dashboard data which gives the scorecard information in a visual and easily digested format which stakeholders can relate to. We can then have a profitable, evidence-based discussion about how the health sector is performing and the resources needed to meet the health needs of, particularly, women and children.”

- Dr Okomo

Progress and results

The impact of the data is already influencing county integrated performance and data reviews (IPDRs) as managers now own the data that are coming from their system and ask how these data relate directly to their own programme area. For example, in Sidindi ward, Siaya County, a decision was made to map pregnant women and attach them to community health volunteers for referral to health facilities for deliveries.

Dr Okomo, County Director of Health, Homa Bay County, comments: “I now know exactly what to present in different forums as I interact with policymakers and stakeholders in health. When I meet with the County Committee for Health, for example, I present the dashboard data which gives the scorecard information in a visual and easily digested format which stakeholders can relate to. We can then have a profitable, evidence-based discussion about how the health sector is performing and the resources needed to meet the health needs of, particularly, women and children.”

Next steps

This initiative has revamped the implementation of the RMNCAH scorecard as an accountability and management tool in Kenya. As a result of work with the two counties, the quarterly integrated performance and data reviews using the RMNCAH scorecard and other complexity aware M&E toolkits will continue to be strengthened and expanded to target all 18 high priority maternal mortality burdened counties under the auspices of the Government of Kenya’s Division of M&E, Health Research and Development and Health Informatics (Div. MEHRDHI) in close collaboration with the Division of Family Health in the Department of Promotive and Preventive Health Services.

Continued capacity-building of staff is vital. Victor Ouma Achieng, M&E Specialist, Knowledge Management and Social Accountability, UNICEF Kenya, comments: “We cannot stop at the availability of data, we have to ensure the data support subnational teams through their analysis of those data. Capacity-building is so important, particularly on communicating data for impact, so health stakeholders know how to come up with a story to pitch to the governor’s office in order to get the resources they need.”

The next step is for Kenya to develop the scorecard function within the latest version of DHIS2. This will enable automatic population of the scorecard within the routine DHIS2 platform, rather than having to export data to the RMNCAH platform.
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The impact of the data is already influencing county integrated performance and results. The quarterly preparation of the RMNCAH scorecard is a management tool to drive improvements in child and maternal health. Through the Eastern and Southern Africa Region (ESAR) Programme Monitoring and Evaluation (M&E) knowledge among government programme managers needed more synchronized and targeted strategies. The revised scorecard was presented at the County Health Management Board meetings. They were surprised to find their area’s data out-of-date with lots of errors in the base data. A second portal which generates the scorecard report and throws up alerts which show up at the City, County, Sub-county, and ward level.

This process is prone to introducing errors, resulting in tensions between management and health workers. In the past, data were sent upwards and stakeholders, unable to self-monitor and evaluate their performance, acted in silos. The development of an RMNCAH scorecard at decentralized levels (county, sub-county, and ward), with near real-time monitoring (NRTM) of health services across all tiers of the health system. This initiative has revamped the implementation of the RMNCAH scorecard as an accountability and management tool in Kenya. As a result of work with the software (DHIS2) to the RMNCAH Scorecard Platform, elements are exported from District Health Information and Referral System (DHIS2) to the RMNCAH Scorecard Platform, then have a profitable, evidence-based discussion about how the health sector is performing and the resources needed to meet the health needs of, particularly, women and children.

Further information
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