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Taking stock of monitoring and evaluation systems in the health sector: findings from Rwanda and Uganda

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In the context of sector-wide approaches and the considerable funding being put into the health sectors of low-income countries, the need to invest in well-functioning national health sector monitoring and evaluation (M&E) systems is widely acknowledged. Regardless of the approach adopted, an important first step in any strategy for capacity development is to diagnose the quality of existing systems or arrangements, taking into account both the supply and demand sides of M&E. As no standardized M&E diagnostic instrument currently exists, we first invested in the development of an assessment tool for sector M&E systems. To counter the criticism that M&E is often narrowed down to a focus on technicalities, our diagnostic tool assesses the quality of M&E systems according to six dimensions: (i) policy; (ii) quality of indicators and data (collection) and methodology; (iii) organization (further divided into iiia: structure and iiib: linkages); (iv) capacity; (v) participation of non-government actors and (vi) M&E outputs: quality and use. We subsequently applied the assessment tool to the health sector M&E systems of Rwanda and Uganda, and this article provides a comparative overview of the main research findings. Our research may have important implications for policy, as both countries receive health sector (budget) support in relation to which M&E system diagnosis and improvement are expected to be high on the agenda. The findings of our assessments indicate that, thus far, the health sector M&E systems in Rwanda and Uganda can at best be diagnosed as 'fragmentary', with some stronger and weaker elements.

Keywords Monitoring and evaluation systems, health sector, sector-wide approaches, Rwanda, Uganda

KEY MESSAGES

- An important first step in any M&E capacity improvement effort is to take stock of what already exists from each of the M&E supply and demand perspectives.
- The health sector M&E systems in Rwanda and Uganda are diagnosed as 'fragmentary', with some stronger and weaker elements.

Introduction

Sector-wide approaches (SWAps) were introduced in the health sectors of low-income countries during the 1990s, in response to a growing acknowledgement of the limitations of project support. Health SWAps are characterized by policy frameworks that focus on priorities in the health sector, by expenditure frameworks that define budgets for these priorities, by the use and improvement of national management systems and by partnerships between governments and donors (Peters and Chao 1998). SWAps are expected to contribute to better co-ordination, harmonization and alignment, and to enhance national ownership and domestic accountability. These principles were also adopted more generally in the 2005 Paris Declaration (Walford 2007), which sets out a reform agenda for both donors and recipients with the aim of increasing aid effectiveness.

In practice, however, the impact of health SWAps has been relatively limited, due to the fact that many participating donors fail to adhere to the SWAp principles and continue to use their own planning, budgeting and monitoring and evaluation (M&E) systems (Walford 2007; Chansa *et al.* 2008). The reluctance of donors to rely on recipient M&E systems relates to the fact that many SWAp countries' M&E systems and statistical institutions remain weak (Boesen and Dietvorst 2007). This reluctance, however, actually blocks the further development and maturation of recipient M&E systems.

As the financial means and activities intended to attain the health-related millennium development goals (MDGs) are scaled up, the need to invest in well-functioning health sector M&E systems becomes increasingly apparent (see IHP+ 2008; Chan *et al.* 2010). According to the International Health Partnership and related initiatives (IPH+), a sound M&E system within the health sector provides information on inputs (e.g. funding, planning), processes (e.g. capacity building), outputs (e.g. service delivery, health systems), outcomes (e.g. service utilization, equity) and impact (e.g. child mortality, maternal mortality, morbidity) (IHP+ 2008). In 2010, eight agencies working in the global health field committed themselves to reserving funding for M&E system improvement, and to supporting countries in the development of a coherent M&E plan (Chan *et al.* 2010).

Improvement of sector M&E systems generally leads to improvement in accountability and learning, which may ultimately lead to better performance and results on the ground. Moreover, it is also essential for improving the quality of joint sector reviews. A joint sector review is an M&E mechanism used in the SWAp context that is supposed to replace the evaluation of individual projects (Peters and Chao 1998). While no standardized definition has emerged to date, a joint sector review could be described as 'a type of joint periodic assessment of performance in a specific sector with the aim to satisfy donor and recipient's accountability and learning needs' (Holvoet and Inberg 2009, p. 205). 'Performance' is to be interpreted broadly, and may include a focus on substance at various levels (i.e. input, activity, output, outcome and impact) and on underlying systemic and institutional issues. The main input into the joint sector review is often the sector performance report, which is one of the main outputs of a sector M&E system.

Prior to the improvement of any M&E system, it is important to diagnose the quality of existing systems or arrangements, taking into account both the supply and demand sides of M&E. Thus far, no harmonized M&E diagnostic tool exists, though there are certain instruments and checklists that could be useful in this respect, such as the diagnostic guide for evaluation capacity building (Mackay 1999), the similar M&E readiness assessment (Kusek and Rist 2002), the diagnostic tool for the institutional dimensions of M&E systems (Bedi *et al.*2006) and the checklist used by Holvoet and Renard (2007) in their diagnosis of M&E systems in 11 Sub-Saharan African countries. While these tools are mainly used for the assessment of central M&E systems, they could also guide assessment exercises on sector M&E systems. While the scope of sector diagnosis is obviously more limited, the key components and guiding principles of a sector M&E system largely overlap with those of a central M&E system. An important specific issue within sector diagnosis is the contribution of sector M&E activities to the central M&E system (Mackay 2007). Specific tools for the assessment of (components of) the M&E system in the health sector have been developed as well, including the Framework and Standards for Country Health Information Systems developed by the Health Metrics Network (HMN 2008), the Performance of Routine Information System Management (PRISM) framework developed by Aqil *et al.* (2009) and the Monitoring, Evaluation and Review Platform for National Health Strategies developed by IHP+ and the World Health Organisation (WHO) (2011). These tools are further discussed in the 'Methods' section below where we also present the assessment tool that was used in our diagnostic exercises of the health sector M&E systems of Rwanda and Uganda.[1] The main findings of these diagnostic reviews are compared and discussed in this article.

General background: Rwanda and Uganda

Rwanda and Uganda are both low-income countries in central Africa with low human development: they rank 166th (human development index value of 0.429) and 161st (value 0.446), respectively, of a total of 187 countries (UNDP 2011). Uganda was the first country in the world to develop a Poverty Reduction Strategy Paper (PRSP) in 1997 and it recently began to implement its National Development Plan 2010/11–2014/15. Rwanda's first PRSP was developed in 2002 and implementation of its second PRSP began in 2008 (i.e. the Economic Development and Poverty Reduction Strategy 2008–12).

While Uganda outperformed Rwanda on many of the Paris Declaration indicators[2] in 2005, the selective overview of indicators shown in Table 1 demonstrates the remarkable progress made by Rwanda in the period 2005–10. Only on the indicator that measures progress in results orientation was no change in status recorded. Using a five-point scoring system, Rwanda's national performance assessment framework is rated modest (C score: action taken towards achieving good practice). Uganda, being one of only two countries to have a largely developed results-oriented framework (B score) in 2005, received a lower score (C) in 2010. Several of our interviewees in Uganda, however, do not agree with this relegation and stress that the quality of the performance assessment framework has actually improved over the past few years because of stronger sector performance indicators.

Table 1 Progress on selected Paris Declaration and governance indicators

	Rwanda		Uganda	
	2005	2010	2005	2010
Paris Declaration indicators				
Alignment				
Use of country's public financial management systems	39%	50%	60%	66%
Use of country's procurement systems	46%	64%	54%	43%
Harmonization				
Joint missions	9%	44%	17%	24%
Joint analytical work	36%	82%	40%	56%
Managing for results				
Results-oriented framework	C	C	B	C
Governance indicators				
Voice and accountability	10th–25th	10th–25th	25th–50th	25th–50th
Political stability	10th–25th	25th–50th	10th–25th	10th–25th
Governance effectiveness	10th–25th	50th–75th	25th–50th	25th–50th
Regulatory quality	10th–25th	25th–50th	25th–50th	25th–50th
Rule of law	10th–25th	25th–50th	25th–50th	25th–50th
Control of corruption	25th–50th	50th–75th	10th–25th	10th–25th

Sources: Kaufmann *et al.* (2010) and OECD (2011).

Table 2 Progress on selected health indicators

Health indicators	Rwanda		Uganda	
	2004	2009	2004	2009
Under-five mortality rate (per 1000 live births)	203	111	138	128
Maternal mortality rate (per 100 000 live births)	1300 (2005)	540 (2008)	550 (2005)	430 (2008)
Prevalence of HIV among adults aged 15–49 years (%)	5.1 (2003)	2.9	4.1 (2003)	6.5
Malaria mortality rate (per 100 000 population)	59 (2006)	15 (2008)	145 (2006)	103 (2008)

Sources: World Health Organisation (2006, 2008, 2009, 2011).

Table 1 also highlights 2005–10 progress on the six Kaufmann *et al.* governance indicators. While Rwanda had previously scored well on the more technocratic governance indicators ('governance effectiveness', 'regulatory quality' and 'control of corruption') and less well on the more political ones ('voice and accountability', 'political stability' and 'rule of law') (see Holvoet and Rombouts 2008), in 2010, it scored above the regional- (Sub-Saharan Africa) and income-group averages (low income) on all indicators except 'voice and accountability', which persistently lags behind in the 10th–25th percentile[3] (Kaufmann *et al.* 2010). In contrast, Uganda scored slightly better on 'voice and accountability' than the regional- and income-group averages, whereas its weakest scores lay in the areas of 'political stability' and 'control of corruption' (both in the 10th–25th percentile). No significant improvement was made by Uganda in the governance indicators between 2005 and 2010.

As far as the health sector is concerned, both countries have developed health strategies over the last decade: Rwanda has developed the Health Sector Strategic Plan II (July 2009–July 2012), and Uganda has developed the Health Sector Strategic and Investment Plan (2010/11–2014/15). Donors provide their support through a health SWAp, which has been in place since 2007 in Rwanda and since 1999 in Uganda. Table 2 shows the progress made by Rwanda and Uganda on some of the indicators related to the health MDGs. The progress made by Rwanda, in particular, is remarkable.

Methods

Rwanda and Uganda have been selected for this sector M&E stocktaking exercise since the health sectors in both countries receive (budget) support through an SWAp, where improvement and diagnosis of existing M&E systems are expected to be high on the agenda. This is especially the case for budget support donors which are largely dependent on recipient sector M&E systems to satisfy the accountability needs of their own constituencies. Case selection was also influenced by the fact that our research aims to feed into the policy and practice of the Belgium aid agency that provides health sector budget support to both countries. The assessments have been endorsed by the ministries of health, and terms of references and results of the assessment exercises have been discussed in the Joint Health Sector Working Group in Rwanda and the Health Policy Advisory Committee in Uganda. The embeddedness of our diagnostic exercises in these fora which regroup the majority of

the stakeholders involved in the health sector was deliberate and in line with the basic Paris Declaration principles of 'harmonization' and 'alignment'.

For the assessment of elements of health sector M&E systems several interesting tools already exist, including the above-mentioned Framework and Standards for Country Health Information Systems (also known as the HMN framework). Health information systems are essential suppliers of data for M&E activities, particularly with regard to coverage and utilization (Alliance for Health Policy and System Research 2007) and, therefore, the improvement of sector M&E systems will logically require health information system strengthening. The HMN framework is supposed to function as a kind of benchmark for the collection, reporting and use of health information (Health Metrics Network 2008) and describes six components of a health information system, subdivided into inputs, processes and outputs. 'Inputs' more specifically refer to health information system resources, 'processes' to indicators, data sources and data management, whereas 'outputs' focus on information products, dissemination and use. Based on the argument that health management information systems, through which facility-based data are collected, are generally weaker than other data sources including household and facility surveys, Aqil *et al.* (2009) developed a specific tool for the design, strengthening and evaluation of health management information systems, that is the PRISM framework. This framework takes into account technical, organizational and behavioural factors (Aqil *et al.* 2009). In addition to these tools that zoom in on specific components of health sector M&E systems, other tools have been developed that focus on disease-specific M&E systems, including among others the '12 Components Monitoring and Evaluation System Strengthening Tool' of UNAIDS and the Monitoring and Evaluation Reference Group (UNAIDS and MERG 2009) and the 'Monitoring and Evaluation Strengthening Tool' of the Global Fund to Fight AIDS, Tuberculosis and Malaria *et al.* (2006) which is recommended to be used by Malaria and Tuberculosis programmes in the assessment of their M&E systems.

More recently, the IHP+ and the WHO developed a tool that provides guidance to countries that intend to strengthen their entire M&E and review of national health plans and strategies through the establishment of a common platform. The IHP+ and the WHO identify four areas that are considered key to a sound M&E and review platform, including the national health strategy as the basis for information and accountability, institutional capacity, technical elements of M&E and country mechanism for review and action (IHP+ and World Health Organisation 2011). Our own assessment tool is most similar to this tool, as we do not focus on specific diseases while we also provide a more comprehensive overview than the HMN and PRISM frameworks, which focus on the health (management) information system. More specifically, our checklist aims at assessing the quality of M&E systems according to six dimensions, including (i) policy; (ii) quality of indicators and data (collection) and methodology; (iii) organization (further divided into iiia: structure and iiib: linkages); (iv) capacity; (v) participation of non-government actors and (vi) M&E outputs: quality and use. These criteria are further subdivided into 34 topics (see Table 3).

While there is a considerable degree of overlap among the IHP+ and WHO platform and our checklist, we also include issues such as the degree of vertical integration, the linkage between M&E at the level of the ministry of health (MoH) and the statistical office as well as the linkages with donor project M&E. This focus on linkages with donor project M&E as well as the involvement of non-governmental actors (domestic accountability) is indicative of the fact that we adopt a broader view than government health sector M&E. In addition, our checklist is applicable to other sectors as well and could thus be used for comparison between M&E systems of different sectors. As low-income countries are stimulated to strengthen their national M&E systems in the context of the Paris Declaration, streamlining between the M&E systems of different line ministries becomes increasingly important. From this vantage point, a checklist that is applicable across sectors is particularly welcome and could be complemented with tools that specifically focus on (specific components) of health sector M&E systems. Such combinations of tools might be particularly useful in cases where the assessment on the basis of our tool points at specific weaknesses in the system, for instance, at the level of the health (management) information system.

Another point of divergence between our tool and the IHP+ and the WHO platform is the combination of a more indepth qualitative discussion with a quantitative assessment that assigns each topic a score using a five-point scoring system, that is weak (1), partially satisfactory (2), satisfactory (3), good (4) or excellent (5). As the aim of the scoring system is to identify the comparative strengths and weaknesses of one M&E system, rather than to compare or rank systems across countries, the 'Discussion' section below focuses on a comparative qualitative assessment without providing explicit scores.

Our assessment is based upon a combination of primary and secondary data. Secondary data include official documents provided by the Rwandan and Ugandan governments, as well as academic and grey literature on Rwanda, Uganda, M&E and health (management) information systems. We also conducted semi-structured interviews in both countries with various stakeholders directly involved in and responsible for M&E in the health sector at district level (e.g. health district officers and district data managers) and central levels (e.g. MOH staff involved in M&E overview and coordination, MOH staff responsible for data collection, including the Health Management Information System and the Institute of Statistics). In addition, we also interviewed users of the M&E output including health planners and policy makers [e.g. MoH commissioner and MoH policy analysts, civil society organizations, parliament and donors (staff responsible for SWAp/budget support)]. Interviews in Rwanda and Uganda took place during May/June 2011 and October 2011, respectively. We also benefited greatly from participant observation during the 2008 Joint Health Sector Review in Rwanda and the pre-Joint Review Meeting field mission to Jinja, the National Health Assembly and the Joint Review Meeting in Uganda (October 2011). Moreover, valuable feedback on preliminary research findings was provided during debriefing workshops.

The findings of our diagnostic exercises are useful for the various audiences of the M&E supply and demand side that we have targeted during our interviews and particularly aim to feed

Table 3 The dimensions and topics of the sector M&E system assessment tool

Topics	Question
1. Policy	
1 M&E plan	Is there a comprehensive M&E plan, indicating what to evaluate, why, how and for whom?
2 M vs E	Is the difference and relationship between M and E clearly spelled out?
3 Autonomy and impartiality (accountability)	Is the need for autonomy and impartiality explicitly mentioned? Does the M&E plan allow for tough issues to be analysed? Is there an independent budget?
4 Feedback	Is there an explicit and consistent approach to reporting, dissemination and integration?
5 Alignment planning and budgeting	Are M&E results integrated in planning and budgeting?
2. Quality of indicators and data (collection) and methodology	
6 Selection of indicators	Is it clear what to monitor and evaluate? Is there a list of indicators? Are sector indicators harmonized with the PRSP indicators?
7 Quality of indicators	Are indicators SMART (specific, measurable, achievable, relevant, time-bound)? Are baselines and targets attached?
8 Disaggregation	Are indicators disaggregated by sex, region or socio-economic status?
9 Selection criteria	Are the criteria for the selection of indicators clear? Is it clear who is involved in the selection?
10 Priority setting	Is the need to set priorities and limit the number of indicators to be monitored acknowledged?
11 Causality chain	Are different levels of indicators (input–output–outcome–impact) explicitly linked (programme theory)? (vertical logic)
12 Methodologies used	Is it clear how to monitor and evaluate? Are methodologies well identified and mutually integrated?
13 Data (collection)	What is the quality of the data collected (reliability)? Are sources of data collection clearly identified? Are indicators linked to sources of data collection? (horizontal logic)
3a. Organization: structure	
14 Co-ordination and overview	Is there an appropriate institutional structure for co-ordination, support, overview, analyses of data and feedback at sector level? With different stakeholders? What is its location?
15 Joint sector review	Does the JSR cover accountability and learning needs for both substance and systemic issues? What is the place/linkage of the JSR within the sector M&E system? Does the JSR promote the reform agenda of the Paris Declaration?
16 Sector working groups	Are sector working groups active in monitoring? Is their composition stable? Are various stakeholders represented?
17 Ownership	Does the demand for (improvement of the) M&E system come from the sector ministry, a central ministry (e.g. ministry of planning or finance) or from external actors (e.g. donors)? Is there a highly placed 'champion' within the sector ministry who advocates the (strengthening of the) M&E system?
18 Incentives	Are incentives (at central and local level) used to stimulate data collection and data use?
3b. Organization: linkages	
19 Linkage with statistical office	Is there a link between sector M&E and the statistical office? Is the role of the statistical office in sector M&E clear?
20 'Horizontal' integration	Are there M&E units in different sub-sectors and semi-governmental institutions? Are these properly linked to the sector's central unit?
21 'Vertical' upward integration	Is the sector M&E unit properly linked to the central M&E unit (PRS monitoring system)?
22 'Vertical' downward integration	Are there M&E units at decentralized levels and are these properly linked to the sector M&E unit?
23 Link with projects	Is any effort being made to co-ordinate with donor M&E mechanism for projects and vertical funds in the sector?
4. Capacity	
24 Present capacity	What is the present capacity of the M&E unit at central sector level, sub-sector level and decentralized level (e.g. FTE, skills, financial resources)?
25 Problem acknowledgement	Have current weaknesses in the system been identified?
26 Capacity-building plan	Are there any plans/activities for remediation? Do these include training, appropriate salaries, etc.?

(continued)

Table 3 Continued

Topics	Question
5. Participation of non-government actors	
27 Parliament	Is the role of parliament properly recognized, and is there alignment with parliamentary control and overview procedures? Does parliament participate in joint sector reviews and/or sector working groups?
28 Civil society	Is the role of civil society recognized? Are there clear procedures for the participation of civil society? Is the participation institutionally arranged or ad hoc? Does civil society participate in joint sector reviews and/or sector working groups?
29 Donors	Is the role of donors recognized? Are there clear procedures for the participation of donors? Do donors participate in joint sector reviews and/or sector working groups?
6. M&E outputs: quality and use	
30 Quality of M&E outputs	Are relevant M&E results presented? Are results compared to targets? Are discrepancies analysed? Is the M&E output adapted for different audiences?
31 Effective use of M&E by donors	Are donors using the outputs of the sector M&E system for their information needs? Is the demand for M&E data from donors co-ordinated?
32 Effective use of M&E at central level	Are the results of M&E activities used for internal purposes? Is it an instrument of policy-making and/or policy influence and advocacy at central level?
33 Effective use of M&E at local level	Are the results of M&E activities used for internal purposes? Is it an instrument of policy-making and/or policy influence and advocacy at local level?
34 Effective use of M&E by non-government actors	Are the results of M&E used as an instrument for holding the government accountable?

PRS = Poverty Reduction Strategy.

into capacity strengthening efforts. To trigger the use of our findings and comply with Paris Declaration principles of harmonization and alignment, we have embedded our exercise from the start within the framework of the existing Joint Health Sector Working Groups and Committees.

Results

In this section, a selection of findings from the stocktaking exercise on the Rwandan and Ugandan health sectors' M&E systems are presented alongside the assessment tool's dimensions.

Policy

An M&E plan tends to indicate what to monitor and evaluate, why, how and for whom. In their study on the quality of central M&E systems in 20 Sub-Saharan African countries, Holvoet *et al.* (2012) demonstrate that the quality of an M&E plan is a relatively good proxy for the overall quality of M&E: countries with well-established evaluation plans tend to perform better on M&E activities and outputs than countries without such a 'grand design'.

In Uganda, a MoH task force recently (2011) developed an M&E plan for the Health Sector Strategic and Investment Plan, with the support of, for example, the WHO and the Global Fund to Fight AIDS, Tuberculosis and Malaria and in the context of the IHP+ and WHO initiative to support country-led M&E platforms (World Health Organisation 2010). While it is somewhat surprising that this is the first M&E plan developed for the health sector since the introduction of SWAps in the 1990s, the situation is comparable with other countries with health SWAps which also lack fully developed M&E strategies and plans (see Vaillancourt 2009). In Rwanda's MoH, on the other hand, several documents are circulating which describe components of the M&E policy and strategy, but no clear, validated overview document that might be considered the sector M&E plan yet exists. In fact, the recent IHP+ assessment of Rwanda's third Health Sector Strategic Plan also includes in its key recommendations the development of a detailed operational M&E plan (IHP+ 2012).

While the M&E policies and plans in both countries stress the importance of the twin key M&E objectives of 'accountability' and 'learning', in practice the emphasis seems to lie more on accountability than on learning, and more on upward than on downward accountability. In Uganda, however, accountability is undermined by a lack of data control at the various levels of the health management information system, resulting in unreliable data. This is in sharp contrast with the situation in Rwanda, where local health data are controlled in a context of performance-based financing (Ireland *et al.* 2011), and where very strong intra-governmental accountability generally exists from local to central level and from sector ministries to the Ministry of Finance and Economic Development.

Quality of indicators and data (collection) and methodology

In both Rwanda and Uganda, it is the 'monitoring' components of the M&E system that have been most thoroughly developed, and the identification of indicators, baselines, targets and the set up of various data collection sources have been particularly well-established. While there is a continuous tendency of donors and especially vertical health programmes to push for additional indicators, efforts are being made to prioritize and harmonize better among various indicator sets and data collection sources. Important data sources include census and population-based surveys and health management information systems. In both countries, the health information systems have been assessed on the basis of the HMN framework. The HMN

assessments, which include assessments of various data sources, conclude among others that the quality of data collected through census and population-based surveys is generally higher than that of facility-based data collected through the health management information systems (Health Metrics Network 2007; Republic of Rwanda 2009). Interestingly, various interviewees in both countries emphasized that little cross-reading has so far been carried out among survey and facility-based data. The lack of cross-reading among data sources, insufficient disaggregation according to relevant categories, a lack of qualitative facility-based data and deficient integration of indicators into causal chains all contribute to a lack of evaluative analysis. Deficient analytical quality is also obvious in the M&E outputs (e.g. health sector performance reports), which are mainly limited to an overview of progress made in health indicators with no provision of insights into the underlying reasons behind progress or lack of progress. Obviously, this also hampers the usefulness of the M&E output for learning purposes.

Organization and capacity

As many actors are involved in data collection, analyses and feedback, an appropriate institutional structure for co-ordination, support, overview and feedback is crucial. Both in Rwanda and Uganda, the creation and positioning of this health sector M&E overview structure is proving to be highly problematic. In Rwanda, an M&E taskforce established in 2008 was no longer operational at the time of our 2011 field mission, while a new M&E overview unit was still being set up. Interviewees drew attention to the continuous reforms and changes taking place in the health ministry's organizational set-up, the ongoing discussions among the health and finance ministries with respect to health sector M&E overview, as well as the lengthy procedures related to the appointment of the head of this unit.

In Uganda, the Quality Assurance Department, under the Directorate of Planning and Development, is responsible for the co-ordination and overview of M&E activities in the health sector. Various interviewees hinted at the fact that the power of the Quality Assurance Department is curtailed by the limited number of staff members and its positioning under the Directorate of Planning and Development. An M&E overview function logically necessitates a position that is hierarchically higher, and that has some degree of independence, since evaluation might in some instances be a sensitive matter. At local levels, M&E capacity also appears to be fairly limited, and hampered by high staff turnover and defection to donor agencies.

While M&E capacity in Rwanda is limited at central level, M&E capacity at local level has been strengthened in recent years by the appointment and training of M&E co-ordinators and data managers in hospitals, and data managers in health centres. Nevertheless, the relation between these M&E staff and the MoH is not clearly specified. M&E staff in the health facilities that were visited during our field missions indicated that information flows are mainly upwards, with the ministry providing minimal feedback with regard to data analysis. In Uganda, supervision is provided during quarterly area team visits, but several interviewees remarked that these visits are very expensive, time consuming and of limited use.

While none of the policies or plans developed by the Rwandan MoH refers explicitly to linkages between health sector M&E and the central M&E unit, serious efforts are being made in practice by the Ministry of Finance and Economic Planning to establish a unified M&E framework that links sector M&E units with the central M&E co-ordination unit. In doing so, M&E focal points have been installed in sector ministries, including the MoH, with the aim of assisting sectors in the establishment and improvement of a unified M&E system. In Uganda, on the other hand, it is the responsibility of the health sector's Quality Assurance Department to align with the National Policy on Sector M&E. Until recently, there was less of a strong coercive mandate on the part of one central actor, and more of a complex interaction and competition among various players at central level to take the lead in central M&E co-ordination.[4] However, over the last year, the Office of the Prime Minister has clearly become the most powerful actor in central M&E oversight and co-ordination among different line ministries.

Joint health sector reviews are organized in both countries, twice a year in Rwanda (one retrospective and one forward looking), and once a year in Uganda. While joint health sector reviews in Rwanda have been criticized for their poor preparation, for example, performance reports not being made available prior to the review, recent reviews hint at a number of improvements in this respect (BTC 2010). If anything, joint health sector reviews in both countries are more focused on progress in substance (health sector inputs, activities, outputs, outcomes and impact) than on underlying systemic issues, such as, for instance, the quality of the M&E system. In Rwanda, field visits in the context of the joint sector review have only recently been introduced. While some of the interviewees were rather sceptical and referred to a lack of independence, in principle field visits offer opportunities to confront the aggregated data provided by the ministry with reality checks on the ground. Field visits spread over different regions and across different layers of inequality might be particularly valuable in the Rwandan context, where concerns have been voiced over increasing levels of inequality and potentially exclusionary poverty reduction policy and outcomes (see Evans *et al.* 2006).

In Uganda, field visits are systematically organized by the Quality Assurance Department prior to the Annual Review Meeting. They include reality checks and structured interviews at the levels of health districts, hospitals and health centres on the basis of a pre-determined and standardized checklist. Somewhat surprisingly, this checklist does not include topics related to data collection, use of data or feedback on data quality, despite the fact that the MoH itself identified poor data collection as a major weakness (Republic of Uganda 2009). Field visits clearly focus on monitoring and local level reality checks, and do not investigate the underlying reasons for local non-performance. As a result, potential weaknesses or obstacles at other levels of the health system, which may nevertheless have a strong influence on local-level performance, are not disclosed. On the positive side, immediate feedback is given and there is room for negotiation and discussion with regard to the main findings and recommendations, which are two of the ways in which effective use of M&E findings may be stimulated (see Patton 1998).

Participation of non-government actors

Donors and civil society organizations in Rwanda and Uganda participate in the technical dialogue through technical working groups, and in the policy dialogue through joint sector reviews and sector working groups.[5] However, several interviewees in both countries highlighted the limited efficacy of civil society organizations, particularly with regard to policy dialogue, while also hinting at deficient connections between central and local-level civil society organizations, which puts their representativeness into perspective somewhat. Moreover, Rwanda's low scores on the 'voice and accountability' governance indicator (see Table 1) and the fact that civil society organizations generally have limited room for manoeuvre (see e.g. Holvoet and Rombouts 2008) might also explain why participating civil society organizations do not adopt a critical stance. In Uganda, interviewees referred to the poor quality of input from civil society organizations in the technical and political dialogues, which is often considered 'anecdotal'. Several Ugandan civil society organizations, however, are active in community-based monitoring. The Uganda Debt Network, for example, has been involved in community-based monitoring since 2002. Together with 15 community-based organizations, they have trained more than 6000 community monitors in 22 districts to monitor service delivery at village level not only in relation to health but also to education, rural roads, agriculture and water and sanitation (Uganda Debt Network 2009). On the basis of information provided by the community monitors, the Uganda Debt Network facilitates dialogue meetings which focus both on accountability and learning. To date, however, the information they provide is scarcely used by the MoH, donors or parliament.

In Rwanda, parliament is hardly involved in health sector M&E, which is in line with the more generally observed limited parliamentary overview capacity (Government of Rwanda and Development Partners 2008). This is in contrast to the Ugandan Parliament, which adopts a more active stance. Here, for instance, the parliamentary Social Service Committee has visited 16 districts to document health performance, on the basis of which the committee underlined, for example, the need for increased community involvement in decision-making (Wild and Domingo 2010). However, various interviewees also point out that parliamentarians are particularly active only when it comes to issues that directly affect their own districts, and fail to show sustained interest in issues that affect the country or the system as a whole.

M&E outputs: quality and use

In Rwanda and Uganda, an important output of the M&E systems is the annual health sector performance report. While these reports produce a lot of data and information, their analytical quality remains weak, notwithstanding considerable improvement over time. In particular, the lack of data analysis regarding underlying causal pathways, which could subsequently be influenced to produce better performance on health outcome indicators, hampers systematic use of M&E outputs at both central and local levels. In the Rwandan case, however, ad hoc instances of learning, and rapid changes in programmes made on the basis of evidence, are not unknown. An example of this can be seen in the field of maternal and under-five mortality, where Rwanda had previously failed to reach Sub-Saharan African averages, and where several measures were subsequently taken to successfully redress the situation (Basinga *et al.* 2010; Sekabaraga *et al.* 2011). The effective use of evidence and speed of remediation was particularly aided by strong linkage between planning and M&E, by the government's strong leadership and by the effective functioning of the government's institutional apparatus. However, when it comes to the more sensitive issues (including, among others, issues of inequality in the health sector), analysis and learning appears to be less straightforward.

In Uganda, ad hoc instances have also arisen in which data have been used for planning, but the level of usage remains relatively low due to poor data quality, among other things. However, interest in data quality and use is on the increase in the context of the recent adoption of a system of half-yearly high-level retreats with the president, ministers and permanent secretaries, during which sector performance is discussed. According to several interviewees, this 'naming and shaming' ceremony, for example, has fed into a revision of the health management information system, the appointment of a staff member from the Ugandan Bureau of Statistics in the health ministry's information resource centre, and the set up of an e-health management information system project.

Use of data at local level has increased in Rwanda since the introduction of performance-based financing in the health sector, and district hospitals and health centres have also begun to use their data analyses for their own planning. However, analytical depth is still lacking, and the analyses are mainly limited to tabular overviews and the use of graphs. In Uganda, health facilities do not currently use data systematically, and this limited usage of data does not motivate staff to control and improve data quality, which in turn affects data usage.

As far as donors are concerned, as expected, budget support donors in particular use information from joint sector reviews and M&E outputs from the MoH, whereas non-sector budget support donors rely to a much larger extent on their own additional data collection (OECD 2011).

Discussion

Our stocktaking exercise demonstrates that health sector M&E systems in Rwanda and Uganda can thus far be diagnosed as 'fragmentary' at best, with certain stronger and weaker elements. The M&E systems both score relatively well on indicators and data collection. With regard to the broader policy issues, the strong linkages between the local and central levels, and between the health sector and finance ministry, are particularly striking in Rwanda. They are also indicative of the generally strong intra-governmental accountability. Uganda has an overarching health sector M&E plan which outlines the various components of the M&E system. The extent to which this plan will actually be put into practice, however, remains unclear. In addition to a lack of earmarked funds is Uganda's reputation for being good at drafting laws and policies that ultimately fail to be implemented (Republic of Uganda 2010). Uganda's weak track record of implementation contrasts sharply with the situation in Rwanda, which is also obvious from the latter's relatively high score on the 'government effectiveness'

governance indicator (see Table 1) and the impressive improvements made in relation to several health and Paris Declaration indicators (see Tables 1 and 2). Rwanda has also been widely applauded for its successful implementation of performance-based financing in the health sector (see e.g. Basinga *et al.* 2010; Meessen *et al.* 2011), which has contributed to improved data collection and use at local level. In Uganda, the introduction of performance-based financing has recently been proposed in the context of the October 2011 joint sector review (Quality Assurance Department 2011). However, as discussed in Ireland *et al.* (2011), it is not possible to generalize Rwanda's 'success story',[6] which is heavily indebted to generally strong intra-governmental accountability, to other contexts, such as Uganda, where such strong 'control' does not yet exist and where many of the documented side effects of performance-based financing (e.g. 'crowding-out' effect and 'gaming') are a real possibility.

The fact that health sector M&E systems in Uganda and Rwanda focus on monitoring does not come as a surprise when we consider that rigorous evaluation is not possible without a proper monitoring system. However, a focus on monitoring at the expense of evaluation leads to ignorance of the underlying reasons for (non)-performance, which also hampers the M&E feedback loop in terms of systematic learning and improving outcomes over time. While Rwanda, in particular, has made remarkable progress on several health indicators in recent years, it is highly probable that the need for (qualitative) in-depth analysis and disaggregation will become more pronounced in the future as achievements in the health sector slow down, and as measures need to be taken to reach the less accessible segments of the population.

A lack of evaluative analysis also affects the quality of the joint sector reviews. The minimal attention paid to the quality of the underlying health sector M&E system during these joint sector reviews is somewhat contrary to what we might expect. This is especially the case for budget support donors, as these rely in principle upon the health sector M&E system to satisfy accountability to their own constituencies. Refraining from investing in 'systemic' issues risks triggering parallel M&E processes, which in turn undermines the M&E reform agenda. On the other hand, improvements in sector M&E systems are expected to contribute to improvements in the quality of joint sector reviews in the short term, and may change its outlook over time. In fact, joint sector reviews could evolve towards a kind of meta-evaluation instrument for monitoring and evaluating the existing sector M&E system (including a number of reality checks on the ground) instead of functioning as an M&E instrument for activities and outputs (see Holvoet and Inberg 2009).

In line with the scores on the 'voice and accountability' governance indicator, domestic accountability actors are notably stronger in Uganda than in Rwanda. Whereas civil society organizations participating in Uganda's health SWAp are considered weak, the organizations active in community-based monitoring contribute to the supply of a continuous flow of information on local-level realities. Williamson and Dom (2010) consider both the Rwandan and Ugandan parliaments weak. In particular, they point out the lack of effective pluralism, which is also evident in the fact that the political opposition, while formally permitted, is weak in comparison with the ruling party. However, several interviewees reported that the recently installed Ugandan Parliament (May 2011) has taken up a more critical stance and a more active role in (health) M&E. Hedger *et al.* (2010) also mention that the role of the Ugandan Parliament as watchdog is increasing, and that parliamentary committees such as the Social Service Committee and the Public Accounts Committee have become better informed. In both countries, connections between non-government actors tend to be largely underdeveloped in spite of the fact that they have different comparative advantages when it comes to (steering) M&E: while civil society organizations tend to have easier access to local-level data, universities are often better equipped for analysis, and parliament and donors may have more leverage at policy level. So far, however, parliament and donors have made little use of findings from community-based monitoring. It may be interesting for donors to consider supporting domestic accountability actors within the framework of a portfolio approach, where capacity improvement of domestic accountability actors is combined with increasing these actors' room for manoeuvre, as well as with using information from local-level monitoring exercises in donors' sector dialogue with the government.

Conclusion

While the importance of M&E system improvement is increasingly being acknowledged, little strategic engagement has been shown in this area to date, even among donors that mention it in their mandates. We have aimed to contribute to this challenging and policy-relevant research agenda through the development of a diagnostic tool and its application to sector M&E systems. In this article, we have compared the health sector M&E systems of Rwanda and Uganda according to six broad dimensions of M&E: policy; quality of indicators and data (collection) and methodology; organization (structure and linkages); capacity; participation of non-government actors; M&E output: quality and use. The focus on diagnosis is built on the assertion that, regardless of the approach adopted, an important first step in any M&E capacity improvement effort is to take stock of what already exists from both the supply and demand sides of M&E. This is consistent with the idea that small incremental changes to existing systems might be more feasible and workable than radical and abrupt changes that seek to impose blueprints from the outside.

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Endnotes

[1] For a more elaborate overview of the findings of the diagnostic reviews, please see Holvoet and Inberg (2011, 2012).

[2] Progress on the five Paris Declaration principles of 'country ownership', 'harmonization', 'alignment', 'results orientation' and 'mutual accountability' is assessed on the basis of 12 indicators.

[3] The percentile rank specifies the percentage of countries that score below the country. The regional- and income-group averages for 'voice and accountability' are in the 25th–50th percentile.

[4] The Ministry of Finance, Planning and Economic Development is responsible for budget monitoring, and both the Office of the Prime Minister and the National Planning Authority are responsible for the M&E of outputs and outcomes.

[5] The Joint Health Sector Working Group in Rwanda and the Health Policy Advisory Committee in Uganda.

[6] Kalk *et al.* (2010) highlight how the 'crowding-out' effect (the diminishing or erasing of intrinsic motivation due to external rewards) and 'gaming' (the focus on indicators that are in the system, thereby neglecting unrewarded indicators, or the falsification of results for maximization of reward) also remain a reality in Rwanda's health sector.

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