Field Reports

“Ten Minimum Requirement”: A Management Tool to Improve Quality of Healthcare Services in Lao People Democratic Republic (Lao PDR)

Koji Wada*, Sommana Rattana2 and Chanphomma Vongsamphanh2

Received 22 August, 2015 Accepted 7 September, 2015 Published online 3 October, 2015

Abstract: In Lao People’s Democratic Republic (PDR), the mortality rate among children under 5 years of age is high (131 per 1000 live births in 2003), partly as a consequence of poor basic services provided by district hospitals. A simplified management tool, “Ten MR (Minimum Requirement)”, was developed in Lao PDR. The tool assured the quality of health services including the processes of planning, implementing, self-monitoring, supervision, reporting and evaluation. The tool focused on ten basic services, integrating stakeholders from district hospitals and governing agencies. Each district hospital develops feasible annual activities, assigning responsibility to people based on a consensus between hospital staff and local governing agencies. Hospitals can self-monitor their activities on a monthly basis. Supervisory visits to district hospitals by local governing agencies improved activities and communication between staff. Visualization of progress promoted the sharing of achievements between staff and highlighted activities in need of more work. In 2004, district hospitals in Vientiane and Oudomxay provinces initiated the application of the tool. These district hospitals included primary care hospitals for outpatients, emergency care and in-patients, with a capacity of 10–20 beds, providing care for a population of between 30,000 and 80,000 people. The Ministry of Health recognized the effectiveness of Ten MR and implemented the expansion of the tool to all district hospitals in Lao PDR from 2011. Ten MR benefits district hospitals and governing agencies. Ten MR focuses on the daily routine work, enhancing team work and communication among all stakeholders.

Keywords: Ten Minimum Requirement, primary care, management, quality

BACKGROUND

In 2003, Lao People’s Democratic Republic (Lao PDR) had one of the highest mortality rates among children under 5 years of age in Southeast Asia (131 per 1000 live births) [1]. The utilization of health facilities was low, especially for children under 5 years of age, for reasons such as the expensive out of pocket payments, geographical barriers to access facilities and dissatisfaction with health services within local communities [2].

In 2004, the KIDSMILE Project (Project for Strengthening Health Services for Children), funded by the Japan International Cooperation Agency (JICA), was launched in Vientiane and Oudomxay provinces in Lao PDR. The aim of the KIDSMILE Project was to reduce the mortality among children under 5 years old by improving healthcare delivery, especially at local settings. After discussion with district hospitals and local and central government, the KIDSMILE Project initiated the development of a user-friendly quality improvement tool known as “Ten MR” (Minimum Requirement). In 2011, this was expanded nationwide by the Ministry of Health in Lao PDR. The aim of this manuscript was to describe how Ten MR has been developed and to share the lessons learned from implementing Ten MR in Lao PDR.

LOCAL SETTING

The population of Lao PDR was 6.4 million, the majority of people involved in agriculture. There were 47 distinct ethnic groups in 17 provinces in Lao PDR [2]. The diversity of ethnicity is a challenge to ensure the quality of healthcare delivery. Lao PDR district hospitals provide primary care for a population of between 30,000 and 80,000,
with 10–20 beds in each hospital [2]. District hospitals provide services ranging from basic treatment for common diseases to emergency treatment. In 2004, all district hospitals in Vientiane and Oudomxay provinces introduced the Ten MR tool as a pilot. By 2015, 131 district hospitals nationally were using the system. Provincial health offices provide the budget for health services and supervise district hospitals, working with the district health office.

**APPROACH**

Ten MR is a management tool that includes the processes of planning, implementing, self-monitoring, supervision, reporting and evaluation for improving the quality of health services in district hospitals [3]. This tool integrates all staff stakeholders in hospitals and governing agencies, such as district and provincial health offices. District hospitals and district health offices, often within the same organization, report to provincial health offices and propose their hospitals’ feasible annual activities based on current problems identified in each MR. Then, provincial health officers approve the MR after discussions. The planning procedure for MR activities is as follows; 1) assign responsibility to people in charge of Ten MR and each MR in the district hospital, 2) prioritize problems in each MR through discussions with staff, 3) identify feasible activities to solve the identified problems and set up an indicator for each activity, 4) assign responsibility to people for each activity, 5) estimate the necessary budget, 6) build a consensus with local governing agencies such as provincial health offices.

The items of Ten MR were determined by the KIDS-MILE Project in collaboration with local and central government staff and JICA experts. The priority was to improve services for maternal and child care. The project prioritized nine basic services district hospitals were expected to provide and included the additional item of regular monitoring of activities. The project emphasized the value of integrated activities with the entire district hospital staff rather than a vertical program for maternal and child care staff, resulting in strong commitment from all hospital staff as well as staff from governing agencies. In 2011, Ten MR underwent minor revisions prior to nationwide expansion of the tool (Table 1).

Table 1. Ten items on the Minimum Requirement in district hospitals in Lao PDR

| Item |
|------|
| 1. The hospital is accessible to all patients 24 hours a day. |
| 2. The hospital welcomes all patients with warmth and hospitality. |
| 3. The hospital has all the essential drugs. |
| 4. The hospital diagnoses and treats diseases followed based on national treatment guidelines. |
| 5. The hospital uses standard tests to diagnose diseases. |
| 6. The hospital has a patient referral system. |
| 7. The hospital keeps daily records for all patients. |
| 8. The hospital gives routine vaccination and maintains a good quality cold chain. |
| 9. The hospital promotes safe delivery for all mothers and provides well-baby check-ups for all children. |
| 10. The hospital monitors and evaluates activities of each MR regularly. |

Fig. 1 provides an example of the activity plan and monitoring chart for MR 3; “The hospital has all the essential drugs”. One district hospital in Vientiane province addressed this problem because medicine storage and management was inadequate and expired medicine was not always disposed of. The hospital identified three activities to solve the problem; 1) Designate staff to check the availability of medicine and discard expired medicine each month, 2) Ensure that pharmacists organize and store medicine appropriately, 3) Designate staff to evaluate the use of medicine prescribed by doctors every 3 months. In Fig. 1, for each month, planned activity is identified using a planned activity mark (open circle). One clear activity is written in each row.

To monitor progress, district hospitals conduct a self-assessment of their activities and visualize their achievements monthly, quarterly, or annually, depending on their plans, using three simple levels; 1) complete implementation (done as planned), 2) partial implementation (partly done as planned), 3) not implemented (Fig. 1). District hospitals displayed the Ten MR chart in a communal area, accessible to all members of staff. This strategy promoted the sharing of achievements as well as the highlighting of activities that needed more work.

Supervision by governing agencies has the potential to accelerate implementation of activities by improving communication. When Ten MR was first initiated, meetings were scheduled two to four times each year, incurring
running costs for travel fees among stakeholders for supervisory visits as well as meetings.

At the end of each year, a joint meeting, known as an MR workshop, was held for the evaluation and sharing of good practices among people in charge of Ten MR in district hospitals. Hospitals with better outcomes had the opportunity to win an award for their achievements.

The Ministry of Health in Lao PDR recognized the effectiveness of Ten MR and initiated the national introduction of the tool to all 127 district hospitals in 2009 in order to improve the delivery of health services. The Ministry of Health assigned staff including medical officers to scale up Ten MR and developed handbooks for district hospitals implementing Ten MR [3]. Meetings with stakeholders and supervisor visits were conducted to build the system for each district hospital.

Despite various factors contributing to the health of children, such as socioeconomic improvement and free care for children under the age of 5 years, the under-five mortality rate was 72 in 2012, still the highest in Southeast Asia. However, rates are decreasing and are on-track to achieve United Nations Millennium Development Goals 4 in 2015 [1].

RELEVANT CHANGES

The Ministry of Health in Lao PDR recognized the effectiveness of Ten MR and initiated the national introduction of the tool to all 127 district hospitals in 2009 in order to improve the delivery of health services. The Ministry of Health assigned staff including medical officers to scale up Ten MR and developed handbooks for district hospitals implementing Ten MR [3]. Meetings with stakeholders and supervisor visits were conducted to build the system for each district hospital.

Despite various factors contributing to the health of children, such as socioeconomic improvement and free care for children under the age of 5 years, the under-five mortality rate was 72 in 2012, still the highest in Southeast Asia. However, rates are decreasing and are on-track to achieve United Nations Millennium Development Goals 4 in 2015 [1].

LESSONS LEARNT

Ten MR is a simple management tool designed to improve services in hospitals in Lao PDR. Both hospitals and governing agencies share the activities, and staff members are empowered through the visualization of their achievements and the issues they need to address. At the provincial and national levels, district hospitals can share their experiences with other hospitals in annual meetings and thereby motivate each other and share ideas for good practice.

Improving the quality of primary care in hospitals, often with limited resources, is a challenge for many countries especially in remote areas where activities cannot be monitored [4]. In local communities, trust and satisfaction with health facilities at the primary level is an essential factor for improving health outcomes [5] and achieving universal health coverage, a goal of Lao PDR by 2020 [2]. With this simple management tool, improvement can be expected, even in rural settings where there was less supervision and control.

A number of management tools have been developed to improve the quality of primary care services. The WHO Regional Office for Europe developed the Primary Care Quality Management Tool, piloted in Slovenia and Uzbekistan [6] which focused on structures and mechanisms to control and manage the quality of services. Introducing quality management system, the tool was
developed by the European Practice Assessment, focusing on the structure and process of primary care, and has also achieved the improvement of quality indicators [7].

The specific characteristics of Ten MR as a management tool are the integration of all stakeholders including hospital staff and governing agencies, the encouragement of voluntary daily routine work through commitment of all the stakeholders, and self-monitoring through sharing progress by displaying the chart in communal areas. Ten MR is not a tool exclusively for managers but can be used by everyone committed to primary care, strengthening teamwork and promoting the establishment of client-oriented facilities [8]. This is why district hospitals in Lao PDR have been using Ten MR for more than 10 years.

District hospitals need to expand their essential services, especially for non-communicable diseases such as ischemic heart disease and stroke, which were ranked as the 3rd and 4th highest burden of disease in Lao PDR in 2013 [9]. Increasing the budget to strengthen primary care services, including a prevention program, should be addressed to maintain the trend of improvement of health outcomes in ASEAN countries. The framework of Ten MR is applicable in other contexts, and increasing the budget to develop the service will maintain the quality of the tool.

In conclusion, Ten MR benefits district hospitals and governing agencies. Ten MR focuses on the daily routine work, enhancing teamwork and communication among all stakeholders. The management tool developed and extended in Lao PDR to improve the quality of services at primary care hospitals with limited resources may be applicable to other developing countries at a low cost.

ACKNOWLEDGMENTS

We thank all the staff involved with Ten MR in the Ministry of Health and district hospitals in Lao PDR and Ms. Kazue Sone for technical inputs in this manuscript.

FUNDING

This study was funded by a grant from the National Center for Global Health and Medicine, Japan (27-2).

REFERENCES

1. The government of the Lao PDR and the United Nations. 2013. The Millenium Development Goals Progress report for the Lao PDR 2013. Available: http://www.la.undp.org/content/dam/laopdr/docs/Reports%20and%20publications/2013/MDGR_2013.pdf. [accessed 26 June 2015].
2. Asia Pacific Observatory on Health Systems and Policies. 2014. Lao People's Democratic Republic Health System Review. Available: http://www.wpro.who.int/asia_pacific_observatory/hits/series/Lao_Health_System_Review.pdf. [accessed 6 September 2015].
3. Department of Health Care, Ministry of Health. Handbook of Minimum Requirements (MR) for Service Renovation in District Hospitals. 2008.
4. English M, Esamai F, Wasunna A, et al. Delivery of paediatric care at the first-referral level in Kenya. Lancet 2004; 364(9445): 1622–1629.
5. Srivastava A, Avan BI, Rajbangshi P, et al. Determinants of women’s satisfaction with maternal health care: a review of literature from developing countries. BMC Pregnancy Childbirth 2015; 15(1): 97.
6. World Health Organization Regional Office for Europe. 2010. Country work on primary care evaluation tool. Available: http://www.euro.who.int/en/health-topics/Health-systems/primary-health-care/country-work/primary-care-evaluation-tool [accessed 5 September 2015].
7. Goetz K, Hess S, Jossen M, et al. Does a quality management system improve quality in primary care practices in Switzerland? A longitudinal study. BMJ Open 2015; 5(4): e007443.
8. Berendes S, Heywood P, Oliver S, et al. Quality of Private and Public Ambulatory Health Care in Low and Middle Income Countries: Systematic Review of Comparative Studies. PLoS Med 2011; 8(4): e1000433.
9. Global Burden of Disease Study 2013 Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet 2015; pii: S0140-6736(15)60692-4.