

INTRODUCTION

Reducing the number child deaths in Kenya is a key priority for the Government and its development partners. Despite this, child mortality remains unacceptably high - of every 1,000 children born, 115 will die before their fifth birthday. Whilst the five main causes of death - diarrhoea, pneumonia, malaria, measles and malnutrition, can all be managed in primary health care facilities, quality of care for these conditions is frequently inadequate.

Since 1999 the Government has introduced the Integrated Management of Childhood Illness (IMCI) in an attempt to reduce child mortality. The IMCI strategy, developed by WHO and UNICEF, aims to improve the management of childhood illness at the primary health care level. The key features are described in Box 1.

By 2007, almost two-thirds of districts were implementing IMCI to some degree, mainly focusing on improving case management skills and health care delivery systems. With support from development partners, training has been provided for managers and front line health workers, reaching a high proportion of the poorest districts.

However, implementation of IMCI remains highly inadequate. The three major challenges are: low training coverage; trained health workers not following guidelines; and barriers to access for community members (See Figure 1).

This policy brief explores these three challenges and looks at why the IMCI strategy is failing to fulfil its potential to improve health care and reduce child mortality in Kenya. Recommendations are outlined for increasing IMCI coverage and implementation.



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Box 1: The Three Components of IMCI

1. Improving case management skills

Health workers attend an 11-day training course on case management guidelines for common childhood illnesses. They receive job aids, and follow-up supervision 6 to 8 weeks after training.

2. Improving health care delivery systems

Health systems are strengthened by ensuring that facilities have appropriate drugs and equipment, and that health workers receive good supervision.

3. Community IMCI

Family and community health practices are improved by increasing community involvement and awareness of measures to improve child health.



This policy brief was written by Kethi Mullei, Frank Wafula and Catherine Goodman.

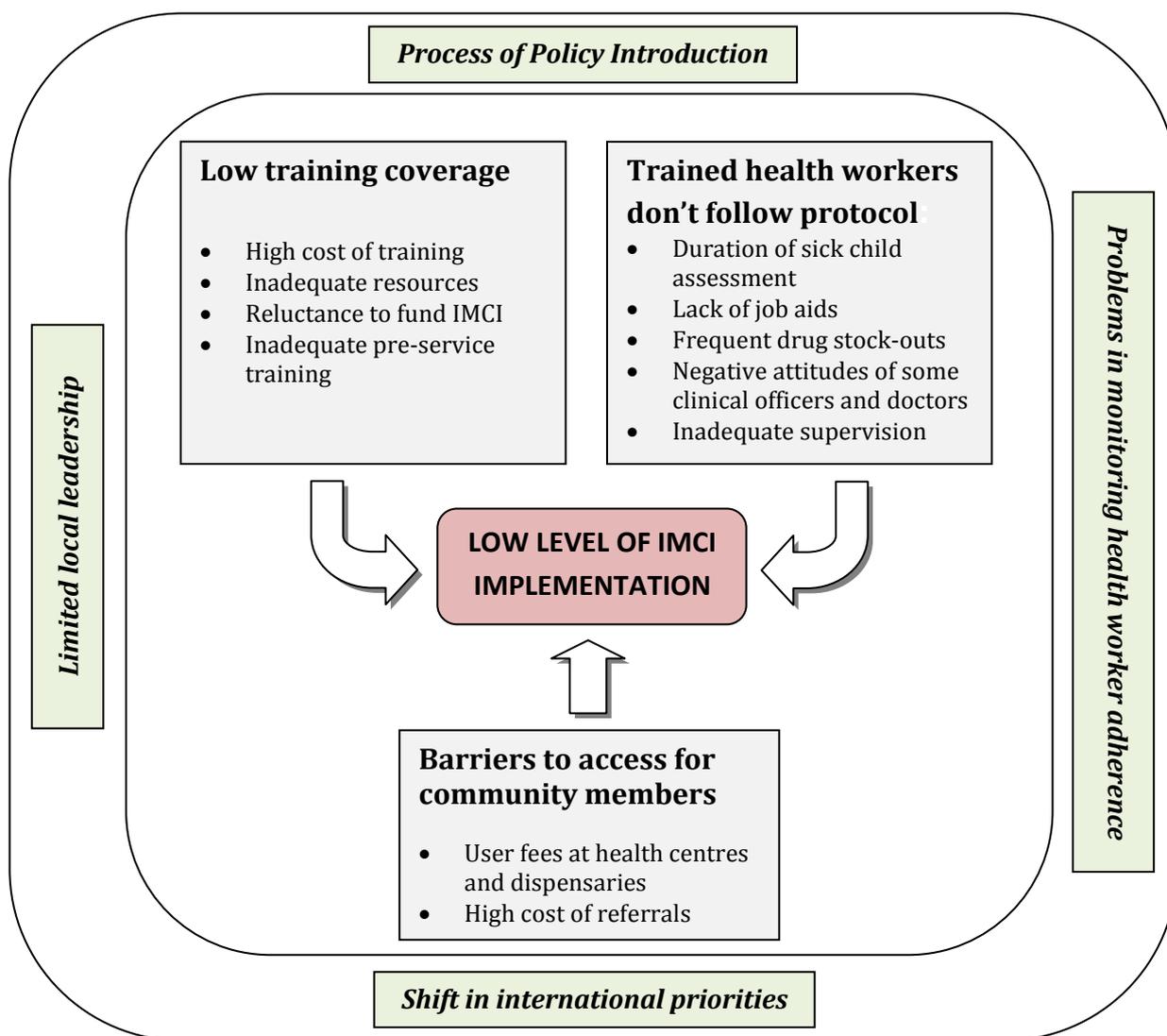
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A full copy of a report from the study is available on the CREHS website.

KEY POINTS

- Kenya has made some progress in rolling out the Integrated Management of Childhood Illness strategy, however implementation remains highly inadequate.
- There are 3 main challenges to implementation: training coverage is low, health workers don't follow guidelines, and community members face barriers to accessing IMCI services.
- These challenges reflect a range of IMCI-specific and broader health system constraints. Urgent action is needed to review pre-service training, scale up in-service training, address facility-level implementation challenges, improve IMCI supervision, and build support for the strategy.

Figure 1: The three main challenges to IMCI implementation, and their immediate and underlying causes



Why is IMCI training coverage low?

In mid 2007, national coverage of health workers trained in IMCI was 18%. This falls well short of WHO advice that at least 60% of health workers must be trained to achieve a significant impact on child health. The persistently low proportion of health workers trained reflects four inter-related issues:

i. **High cost of training.** IMCI training costs over US\$ 1000 per trainee. This stems from the long course length (11 days), and the cost of accommodation, facilitators, and training materials. Despite the high costs, the Division of Child Health (DOCH) is perceived to be reluctant to adopt cheaper training options, such as a shorter course, for fear of compromising quality.

ii. **Inadequate resources.** District budgets are inadequate to cover training costs, and at the central level, the DOCH relies on development partners for funds and as a consequence, its capacity to implement training is influenced by donor priorities.

iii. **Reluctance to fund IMCI.** Neither the Government nor development partners have ever committed to pay for large scale implementation of training. Their

reluctance is attributed to the high costs of training, and the lack of Kenyan evidence on its impact which reflects the difficulty of measuring appropriate health outcome indicators, and in separating the impact of IMCI from other health programmes.

iv. **Inadequate pre-service training.** In 2007 less than half of medical training colleges (MTCs) offered pre-service training. At MTCs which offered IMCI, the time allocated to it was limited (e.g. 1 to 2 weeks), and offered few opportunities for students to practice skills in a clinical setting. Learning materials such as job aids and training modules were frequently lacking.

Why do trained health workers fail to follow the IMCI protocol?

Evidence suggests that IMCI trained staff often fail to follow case management guidelines: for example, few children are checked for general danger signs of severe disease, less than half have their weights checked against the growth chart, and referral rates are low. Poor adherence stems from the following specific features of the IMCI strategy and broader health system issues:

i. **Duration of sick child assessment.** The 10 to 20 minutes required to assess each child fully was considered excessive by some health workers, who skipped sections they perceived as unnecessarily time-consuming or reverted to their original practices. This was argued to reflect a high work load, long patient queues and low staffing levels. Whilst the Government has hired more nurses, under-staffing remains a barrier to IMCI implementation and is exacerbated by high rates of attrition.

ii. **Lack of job aids.** Wall charts and chart booklets were frequently unavailable as they were only issued to trainees and were not replaced when lost, removed or damaged.

iii. **Frequent drug stock-outs.** Facilities continue to experience chronic shortages of drugs, including those for IMCI, with deliveries frequently delayed or failing to match facility orders.

iv. **Inappropriate facility lay-out.** Certain aspects of facility lay-out make it difficult for health workers to follow the protocol, especially in observing the first dose of treatment. Most drugs are dispensed from separate pharmacies so health workers rarely witness patients taking any doses.

v. **Negative attitudes of some clinical officers and doctors.** While nurses generally expressed positive views about IMCI, some clinical officers and doctors have not accepted the IMCI approach. They feel that the guidelines are simplistic and do not allow them to make full use of their clinical training.

vi. **Inadequate supervision.** IMCI supervision was universally seen as inadequate in both nature and frequency. District managers conducted “integrated supervision” covering several programmes at one time, but said frequency of supervision was constrained by heavy workloads, and limited transport. Moreover, IMCI was rarely addressed during integrated supervision visits, and case management observations were almost never undertaken. This reflected both time pressure and the lack of a checklist of areas to be covered during integrated supervision. In addition, national managers faced challenges in monitoring the intensity and quality of supervision at the district level.



What are the key barriers for community members trying to access IMCI services?

Households face significant barriers to accessing primary health care services, and as a result the benefits of IMCI training are not fully realised. Two key barriers to IMCI services both reflect the costs to households:

i. **User fees at health centres and dispensaries.** Whilst all public health services should be free for children under 5, fees of 10 or 20 KSH are frequently charged for outpatient care at health centres and dispensaries. Reasons given for this practice include the provision of additional services such as lab tests or more expensive drugs; the need to raise revenue to cover costs; and the view that small charges were unlikely to deter potential patients (though this conflicts with considerable evidence to the contrary in Kenya and many other countries).

ii. **High cost of referrals.** A key aspect of IMCI is the appropriate referral of children with specified danger signs. However, caregivers of severely ill children frequently fail to comply with referrals to the district hospital. This was mainly attributed to costs associated with seeking referral care, including transport fares and user fees.

Identifying the underlying causes

We have identified above the immediate causes of poor IMCI implementation. However, this leads to the question - why did these problems arise? In this section we identify four potential underlying causes for these problems:

- **The process of policy introduction.** IMCI was introduced to Kenya with minimal adaptation to the local context. Financial and health system constraints were not sufficiently anticipated, such as the high cost of training, or the compatibility of protocol length with staffing constraints. This reflected the largely ‘top-down’ process of policy introduction, driven by international stakeholders, with a strong emphasis on adherence to standards. Although development partners are increasingly advocating for flexibility in implementing IMCI, Government actors have been keen to stick to the original WHO recommendations, reflecting respect for international standards and fears about compromising quality.

- **Limited local leadership.** Where district-level leaders are dynamic and provide strong leadership in IMCI they have developed innovative approaches to increasing training coverage and encouraging staff to follow the protocol. Examples include non-residential training to reduce costs, and supervision to monitor health workers closely. However, these examples appear to be the exception: in most districts no local-level policy adaptations have been introduced and commitment to IMCI implementation is unclear.

RECOMMENDATIONS FOR IMPROVING IMCI IMPLEMENTATION IN KENYA

- **Problems in monitoring health worker adherence.** IMCI focuses on changing case management practices, meaning that implementation is difficult to monitor using routine records. There has been insufficient emphasis by national, provincial and district level managers on implementing case management observations and the importance of documenting IMCI process and impact has not been sufficiently recognized.

- **Shift in international priorities.** Changes in the interests and priorities of development partners have affected IMCI in two key ways. Firstly there has been a shift in focus towards the community component of IMCI and away from health worker training. More broadly, it is argued that there are low levels of interest in child health at a national and international level, and increased interest in vertical programmes (e.g. HIV/AIDS & malaria), at the expense of initiatives that are more integrated across health problems.

“IMCI must be included in routine integrated supervision visits, based on an integrated supervision checklist”

About the research

Data collection focused on two district case studies in Malindi in Coast Province and Homa Bay in Nyanza Province. The study used predominantly qualitative methods, including document reviews, and in-depth interviews with health workers, health facility committee members, district, provincial and national managers, development partners and other stakeholders.

Source:

Mullei K., Wafula F., Goodman C. **A Case Study of Integrated Management of Childhood Illness (IMCI) Implementation in Kenya.** CREHS working paper, 2008

Contact:

Catherine Goodman
cgoodman@nairobi.kemri-wellcome.org

Major review of pre-service training

To achieve and sustain high IMCI coverage, it is essential that IMCI is fully integrated into pre-service training. The government needs to lead a thorough review, covering the pre-service curriculum, coverage across training institutions, and training methods.

Scale up in-service training coverage

Alternative training options must be considered to reduce costs and facilitate rapid scale up. Options could include a shortened course (e.g. 6 days) or an innovative combination of on-job training and on-going supervision. The DOCH should develop costed 10 year plans for each option to assess their feasibility and predicted impact on coverage. These options should then be debated by all key stakeholders.

Address facility-level implementation challenges

In addition to training, health workers need guidance and support to facilitate implementation in their health centres and dispensaries. Greater focus is needed on staffing arrangements, setting up oral rehydration corners, ensuring direct observation of treatment doses, and adherence to free care for under fives. Such guidance could be provided by course directors during initial training, by district managers during supervision, or peer-to-peer during regular health worker meetings. In addition, the broader health systems constraints of under-staffing and unreliable drug supplies must be addressed.

Radically improve IMCI supervision

IMCI must be included in routine integrated supervision visits, based on an integrated supervision checklist. Such a checklist has been under development for some time. The Government must finalise this as a matter of priority. In addition, IMCI case management observations should be conducted by district managers at least once a year.

Build support for the strategy

In view of the shift in interest towards vertical programmes, a concerted effort is required to raise the profile of child health and advocate for the benefits of a more integrated, holistic approach. Two particular groups should be targeted: doctors, as key opinion leaders in the field; and local politicians, who have the potential to influence Kenya's policies and funding decisions.

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