

THE CLOVER PROJECT



Improving health systems: working together, with malaria as an entry point

INTRODUCTION

Funded by Irish Aid and implemented by Malaria Consortium, the Clover programme has been running for seven years and focuses on Health System Strengthening (HSS) using malaria as an entry point. This work has generated important experiences and results by using a pragmatic, flexible and context-sensitive approach.

A main thrust of Clover has been to identify and implement solutions to the constraints that impede delivery of health services at a universally acceptable level of quality. In the settings we operate in, where there are numerous bottlenecks, it has been essential to focus on specific aspects of the health system by prioritising intervention areas and to view changes in terms of incremental improvements rather than dramatic effects. Whenever possible, existing tools have been employed and where gaps exist new tools have been developed. Through sharing of lessons between countries, some innovations have crossed borders and been adopted with minimal red tape.

In the early stages of Clover, the focus was to appreciate the contextual constraints that existed at national level in five selected sub-Saharan countries: Ethiopia, Mozambique, Tanzania/Zanzibar,

Uganda and Zambia. The next stage was to work in partnership with Ministries of Health and others to identify priority gaps that, if addressed, could contribute improvements to health service delivery. Malaria Consortium subsequently worked at national and sub-national levels in Ethiopia, Mozambique, Uganda and Zambia to implement innovative solutions in response to priority gaps.

During this period the programme has been directly responsible for training over 6,000 health workers and about 800 community health workers, developed over 40 manuals and tools and influenced the introduction of changes to seven national policies. This work has had beneficial effects on the stability of essential drug supplies, quality of malaria diagnosis, health worker treatment practices, health information management, planning and budgeting.

Photo: The unacceptably high burden of malaria is partly due to inadequate utilisation of known effective interventions



Context

Malaria morbidity and mortality remain unacceptably high – an estimated 243 million cases of malaria and about 863,000 deaths worldwide in 2008 with the majority of cases (85%) and deaths (89%) occurring in the African Region¹. This unacceptable burden is partly due to poor access and inadequate utilisation of known effective interventions. Sub-optimal coverage and functionality of the health system - the building blocks of which are health services, health workforce, health information, medicinal products, vaccines and technologies, health financing, and leadership and governance² - contributes to the burden of malaria, as well as other diseases, and slows the progress that can be made³. Serious concerns have been raised that the huge increase in resources for malaria control cannot be absorbed effectively and is not therefore benefiting those suffering most from malaria. Despite these critical realities, insufficient attention continues to be given to the health system that is essential to the delivery of quality services and sustainability of effective interventions.

Arriving at the big idea

Over the past decade, the establishment of several global health institutions and initiatives, such as Roll Back Malaria (RBM), Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria (GFATM), Global Alliance for Vaccines Initiative (GAVI), Abuja Declaration and the Millennium Development Goals (MDGs), has resulted in increased commitment and resource allocation for the prevention and control of HIV/AIDS, malaria and tuberculosis (TB).

While some development partners at the time were looking to invest resources in country-specific projects to achieve maximum impact in the short term, Irish Aid took a different approach. In addition to country-specific projects, it decided



Photo: Newly trained health workers in Mozambique stand ready to start work in their communities

to support a regional programme of health system strengthening for the prevention and control of malaria and other communicable diseases. This led to consultative visits to five countries to identify malaria control and health system development needs in 2003. The results of these joint assessments, carried out by Malaria Consortium and the Roll Back Malaria Partnership, helped shape Clover's strategic objectives and purpose over the next seven years.

It was against this background that Malaria Consortium set out to design, test, implement and then refine a model for health systems strengthening, using better malaria prevention and control as an entry point, that could contribute to improvements in health outcomes with beneficial effects on control of other communicable diseases such as tuberculosis. The regional nature of the programme added more value to the work because it presented opportunities for inter-country sharing of information, experience exchange and learning.

¹ WHO World Malaria Report 2009. World Health Organisation: Geneva.

² WHO, Everybody's business: strengthening health systems to improve health outcomes: WHO's framework for action. 2007, World Health Organisation: Geneva.

³ Meek, S. and J. Lines, Special Summit of African Union on HIV/AIDS, Tuberculosis and Malaria (ATM): Universal Access to HIV/AIDS, Tuberculosis and Malaria Services by a United Africa by 2010, Update on Malaria Control in Africa. 2006, African Union: Abuja.

CLOVER'S UNIQUE APPROACH



Photo: A community health worker in Uganda explains the process of diagnosis to a patient

Focuses on malaria as an entry point

The focus on malaria, if done properly, is not distorting. Malaria is a major disease burden in these settings and is an important component of the MDGs. Its prevention and control calls for attention to inter-related systems important for many other health priorities such as medicine supplies, laboratory services, information management, proper diagnosis and case management, quality assurance, support and supervision, skills development and problem solving. In addition, Clover's approach, where possible and helpful, involves linking to and integrating with initiatives and programmes to ensure a more comprehensive and balanced strategy. This boosts the impact for both the Clover work and its partners.

Works in a way that fits but doesn't displace

Clover's work responds to systems strengthening needs identified by health staff and their managers. For the most part, it corresponds with the ambitions and intentions of management staff at different levels and is in tune with each country's local priorities – though different in each country. The effects of strengthening systems has been achieved without taking over, displacing, or running ahead of the main actors responsible for delivering service and managing the sector. Health workers will have continued access to manuals, guidelines, data sheets and a number of other tools developed for use independently of the programme.

Uses solutions that tackle context-specific priorities

Health systems strengthening is a practical business that comes with many unexpected challenges that are often very context-specific. An outstanding feature of the Clover approach is attention to practical issues and the development of solutions and innovations, while being unafraid of upper-end technology. A process of identifying system bottlenecks and prioritising them, so as to use the limited resources to develop and implement solutions, is a key feature.

Utilises quality management at the heart of its design

Confidence in health services is an important determinant of their acceptance and use. Quality assurance systems for microscopy diagnosis and treatment practices have been introduced and implemented to contribute to improvements in standards of care and systems maintenance.

Uses smart and flexible programming

This approach has allowed for a varied pace of progress, with obstacles dealt with in a way that did not hinder the progress of the overall strategy. The overall effect has been an incremental improvement towards a stronger and better functioning system, managed more competently and confidently.

Understands that improvements are incremental in nature

Whereas there is need for interventions to have quick impact on health outcomes, health system strengthening requires a patient and persistent approach that contributes to incremental gains. Measuring improvements is important in order to know rates of progress towards the ultimate goal of reduction in morbidity and mortality. It also helps to keep stakeholders committed to a path of progress that might be slow but needs to be maintained over a long period of time.

Appreciates that maintaining the gains is critical to impact on health outcomes

Solutions to health systems constraints need to be implemented with sustainability in mind. Sustainability in this case is the responsibility of all partners rather than the sole responsibility of national governments that might not have the resources at present to tackle the numerous constraints that currently exist in the health system.

Recognises that ownership and partnerships are key

By using the right mix of strategies - visiting and supervision, 'buddying,' prompting, advising, training and teaching, influencing and advocating, and convening and brokering partnerships

- Clover has helped in ensuring responsibility rests with sector staff preserving ownership. At national and sub-national levels, whenever possible the roles of partners have been mapped, recognised and their comparative advantages harmonised through better coordination mechanisms and/or consolidated work plans.

Concentrates on weakest locations, serves the poor

The programme has purposely elected to work in more remote and difficult areas and has demonstrated a success in these settings that particularly serves poorer communities.

Uses opportunities to learn across sub-national units and international borders and build solidarity

Inter-district and inter-country exchange, sharing and support is helpful and valuable. However, this needs third-party facilitation and good structure in order to be achieved effectively.

Photo: Rural communities are often neglected by a centralised health system



SOLUTIONS, INNOVATIONS AND ACHIEVEMENTS

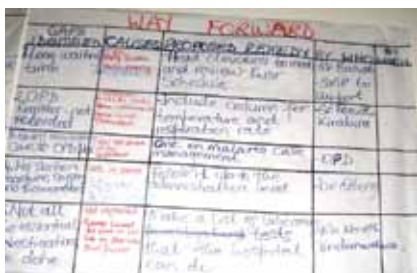


Photo: Display of recommendations agreed by facility-based personnel following a clinical audit session

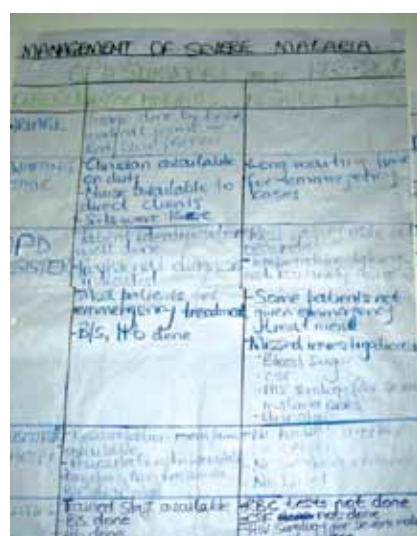


Photo: Display of findings from a clinical audit at a health facility in Uganda

Photo: Dispensing window at a health facility in Uganda: records of medicines issued are used to track medicine consumption



Working together with Ministries of Health and partners, a number of impressive gains have been realised. Some examples are highlighted below.

Strengthened leadership, better planning and budgeting of health services

Within a resource-constrained setting it is crucial to make the best use of what is available and, more so, when the opportunities to increase the resources at hand are limited. There is sufficient awareness that better leadership and governance benefit a health system, but making this work at national and sub-national levels can be time consuming and monotonous. Working together with our partners we have emphasised the role of stewardship by ministry officials at all levels of the health system. At sub-national level we have supported health authorities in developing annual plans in line with the national planning cycle. Importantly, we provided the training and guidelines for these plans to be evidenced-based and costed. In Ethiopia for example, the regional bureau developed plans and allocates responsibilities for aspects of the plans to partners. In Uganda, Kiboga District Health Service used its district information to highlight critical gaps in HIV/AIDS prevention and control and secured in 2008, a US\$10 million project from CDC/PEPFAR⁴ covering 27 health facilities.

Enhanced capacity and use of scarce human resources

Scarce human resources are a recurring feature of weak health systems. Many countries are not able to address this critical constraint in the short-term, although some progress is taking place. An interim solution is to use what exists more effectively. With this realisation, we have supported training activities targeting a variety of knowledge areas and skillsets. We have developed training manuals and job aids that are user-friendly. We have also used coaching

and mentoring through supervision to empower supervisees to take responsibility, problem-solve and work better together. In Mozambique, for example, peer supervision is employed to overcome the challenge of scarce numbers of workers at central level with sufficient expertise to supervise others. A core team of personnel (doctors, nurses, pharmacy technicians, laboratory personnel) from district level have been trained to supervise personnel in neighbouring districts. It also aimed at overcoming the instructive approach (rather than supportive) often exhibited by supervisors from higher levels. Our teams make the effort to work alongside their colleagues from the ministries in a manner that is complementary. With these 'extra pairs of hands' the burden of work is lightened and trusting relationships are developed.

Better coordination and more effective partnerships

In Zambia, Malaria Consortium has initiated the formation of district Malaria Task Forces (MATFs). Different organisations, including line ministries, community-based organisations, private companies and training institutions, are brought together at district level to form the MATF. Before the creation of MATFs, malaria control interventions were solely conducted by the Ministry of Health without help from other government ministries. There was lack of coordination of malaria interventions such as insecticide treated nets (ITN) distribution carried out by different community-based organisations (CBOs) often leading to duplication of efforts. The MATF has proved to be a good vehicle for promotion and advocacy for malaria control interventions at the district level and has improved planning and delivery of malaria interventions and coordination of efforts.

Improved malaria case management practices

A multi-pronged approach of training, supervision and operational research is employed to identify critical gaps that need attention, build capacity and maintain improved practices. The process is one of quality improvement and is carried out in a supportive and

empowering manner. Parasitological-based diagnosis of malaria is a best practice that is promoted among health workers, including at community level. Rapid diagnostic tests have been deployed at community level to improve diagnostic capacity of community health workers and the quality of microscopy has been improved with external quality assurance (EQA). In Ethiopia, on average the agreement between routine microscope slide results and expert slide results improved from 90% to 96% within 12 months; in Uganda the change was from 69% to 82% in just nine months. In both countries, the EQA system will be scaled up. Clinical audits have been pioneered as a quality improvement tool among facility-based health workers. They have been used to improve management of severe malaria, which seems to be a neglected area of competence.

Improved skills and systems for supply of essential medicines and health commodities

One objective of the Clover programme has been to improve the delivery of malaria drugs, supplies and commodities. In order to determine the solutions required, a rapid assessment was carried out to ascertain the main obstacles. Lack of knowledge and skills in management of medicines and inadequate supply of medicines were key bottlenecks. Working together with store keepers, dispensers, nursing assistants and pharmacists, we have deployed a training and supervision package to improve capacity in medicines management. Recording tools have been developed when necessary - for example the dispensary record of medicine issue, which is an innovation that is used to record consumption of essential medicines at facility-based service delivery points. Supply of medicines in adequate quantities was the responsibility of the Ministries of Health, which in Uganda, for instance, limited drastically the beneficial outcome of the improved capacity amongst health workers.

⁴ CDC – Centre for Disease Control <http://www.cdc.gov> and PEPFAR – President’s Emergency Plan for AIDS Relief <http://www.pepfar.gov/>
⁵ <http://ehmis.net>

Better access and use of routine health information

Record forms for routine health information tend to be of various types and need to be sent from the health facility up the information chain to national level. It is not surprising that data are sometimes incomplete and late to reach national level. Even on arrival, data are not in a format that can be easily used for basic summaries and decision making. Information technology (IT) presents an opportunity to address these difficulties. However, the deployment of electronic or web-based health management information systems (e.g. eHMIS⁵) is fraught with systemic challenges that have to be dealt with. For example, internet-enabled computers that are pre-loaded with antivirus software need to be available and arrangements made for equipment maintenance. This requires collaboration between ministries - for example in Uganda, the Ministry of Information Technology and the District Health Service. This system has cut out the need for physical transportation of completed forms and has reduced the burden of entering the data into electronic format for descriptive analyses. An additional advantage of an electronic system is that computer skills are improved among personnel along the information chain, who have been trained to carry out basic descriptive analyses and to interpret the information.

“ Previously, very sick patients were not triaged. Health workers had little understanding of this concept and many very sick patients spent a long time in the waiting lines. However with the comprehensive training that clinical audits provided to health workers with regards to severe malaria management, our staff now have the capacity to identify very sick patients and triage them for quick emergency care. ”

Dr Musinguzi Patrick, Malaria Zonal Coordinator and Physician, Hoima Regional Referral Hospital, Uganda Promotion Officer, Alaba District Health Office

Photo: Ms Harriet Mirembe HMIS Focal Person for Bukomero Health Sub-district, Kiboga District, Uganda, demonstrates how she tracks key indicators on graphs displayed at her station



SOME LESSONS LEARNED

Clover has been a rich opportunity for lesson-learning. A number of important issues have emerged from Malaria Consortium's experience in this programme:

Rethink training

The model of training employed in the sector – and other service sectors - needs re-thinking and practical redesign.

There needs to be a retreat from the conventional off-site release course and workshop training and a move towards a more effective quality assurance type system that has the following features:

- provides on site real-time mentoring
- encourages problem solving
- is regular and cyclical
- involves follow up
- provides information that can be fed up the system

This type of training requires a special set of skills beyond standard training skills. This approach to skills development has been a key factor in the success of this programme.

Evidence inspires and stimulates

Among health professionals, the presentation of live and current data in a meaningful and attractive way stimulates thinking and motivates action and change. Similarly, understandable and simple graphic presentation of data for stakeholders not working in the sector – members of Malaria Task Teams for example – has a profound effect on their interest in health and their will to act. However, ironically, this requires relatively sophisticated analysis and presentation so that it is simply presented and understandable.

Photo: A key objective of the Clover programme has been to improve the delivery of malaria drugs, supplies and commodities



“How” is important

Health system strengthening is as much about how one operates as it is about what one does. A sense of ownership, trust, dependability, mutual respect and partnership are key guiding principles. Malaria Consortium staff very rarely, if ever, undertake field visits without health staff joining them. In Zambia, activities were significantly delayed in 2009 when key officials at the Ministry of Health were suspended, causing disruption of operations. The team had to wait for clearance to continue the work.

Malaria focus work

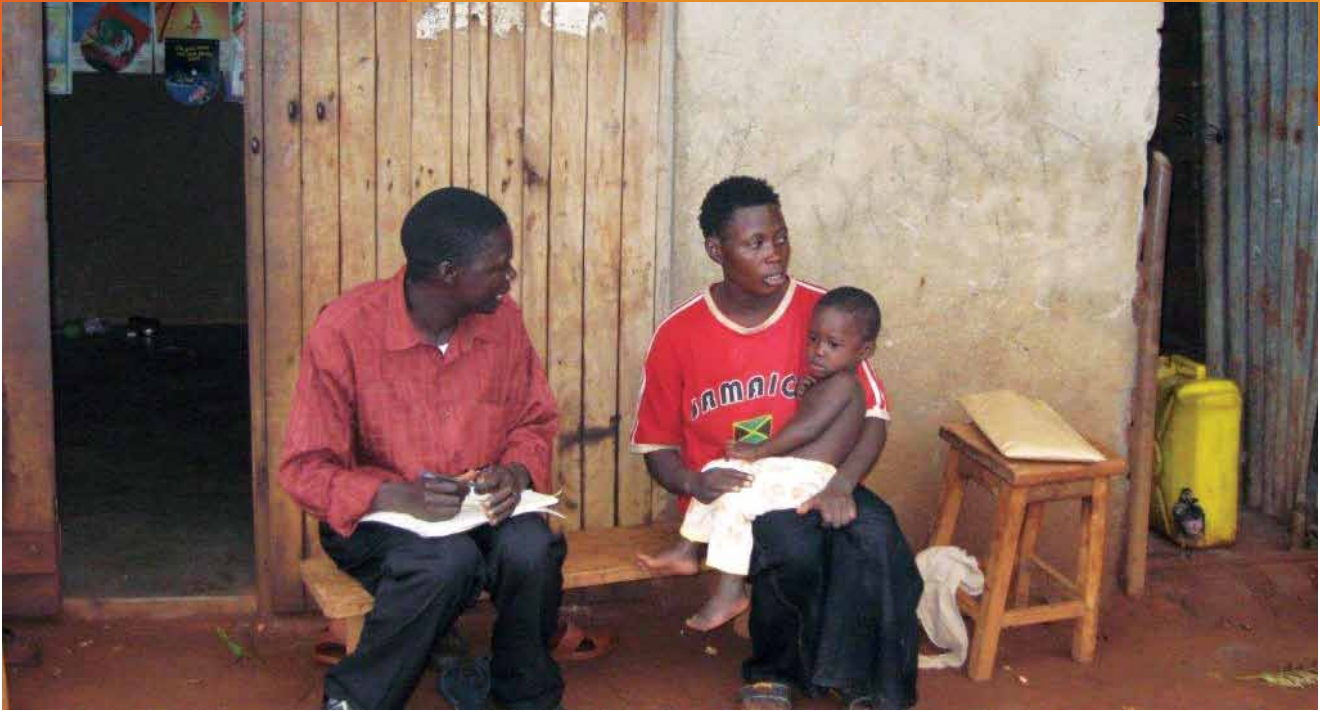
The single or restricted disease focus as an entry point for system strengthening can and has worked well. However, it does require a particular approach and set of talents not often brought together. The focus on malaria swiftly brings attention to service delivery and the associated systems needed for this to work well. This is precisely the focus that is needed in recent analysis of the impact of sector budget support – attention to service delivery and the ‘missing middle’ (systems and internal capacity) enhance coverage and quality. The wider impact of the malaria focus is significantly boosted when integrated with, and adding value to, other initiatives such as Integrated Management of Childhood Illnesses (IMCI) and Integrated Community Case Management (ICCM). From the malaria focus, the programme can, without much difficulty, broaden to other conditions such as TB and HIV, which share the need for certain systems to be strengthened.

Flexible activity portfolio is needed

Health system strengthening requires coordinated attention on a mix of sub-systems. Rather than a single disease focus being of concern, focusing on a single aspect of the system at the expense of others presents more of a problem. So, for example, concentrating on health management information systems alone would, to a large extent, be ineffective and insufficient.

Essential Medicines and Health Supplies are critical

Essential medicines and health supplies are relatively expensive and yet are a recurrent cost. It is a fact that their uninterrupted availability and appropriate use are a pre-requisite for better health



outcomes. There should be commitment by national governments and their development partners to ensure their availability and this should be tracked as an indicator of health system performance.

Incremental strengthening and feeding the system

Systems can only be properly established and strengthened by being put to use and then improved incrementally. Systems are also processes that require inputs to operate. In system strengthening work, it may be necessary to guarantee the inputs to ensure profit from the development work. For example in the Clover programme, it was necessary to provide a variety of inputs, from laboratory reagents and test kits to vehicles.

Gradation of the performance of a health system is needed

Despite the existence of numerous performance indicators of the various components of the health system, it is not clear how the data can be used to grade or classify a health system as weak or strong. The core indicators are not commonly monitored, which makes it difficult to demonstrate incremental changes in the health systems.

Systems development and strengthening, once started, should be maintained

The complex inter-relationships between the six building blocks of the health

system require that the ultimate goal should be for all six to be optimised. It is an enormous task to tackle all system gaps or weaknesses concurrently; rather, a systematic approach can be used to tackle a few at a time ensuring that as improvements are made in one area, the changes are maintained and other gaps taken on. Governments and their development partners have roles to play in making this possible⁶ and should have a long term vision in this regard.

Better streamlining of implementation is required

There seems to be a lack of an overall national perspective of the status of a health system, making it relatively more difficult for disease programmes to contribute constructively to health systems development. There should be clarity on where responsibility for this lies within Ministries of Health.

Building solidarity by learning across districts and borders

Clover embarked on a regional programming model with dedicated country level staff for exchange, inter-country links and support to build a community of practitioners. At district level, and in-country, it led to a number of individuals establishing email contact, resulting in fruitful exchanges of experiences and rapid replication of interventions already tried out in other countries, such as MATF and clinical audits.

Photo: Clover has succeeded in treating a range of diseases with malaria as the entry point

“ I am in a much stronger position to accurately predict consumption of various drugs and to agree on priorities with prescribers. ”

Sister Clare Nyanzi, Nursing Officer in charge of Medicines management, Bukomero Health Sub-District, Uganda

⁶Paris Declaration on Aid Effectiveness (2005)

DEALING WITH CHALLENGES

When Clover was being conceived, the concept of health system strengthening among our key stakeholders and implementing partners was nearly non-existent.

With little evidence to demonstrate its efficacy, it was a major challenge to overcome. This was compounded by reforms in financing and policy shifts, a shortage of critical drugs, inadequate financial and human resources, and competing priorities of stakeholders. Managing partner aspirations and needs without compromising overall project objectives was also an obstacle to be overcome. However, dogged perseverance and firm convictions helped Clover to overcome these challenges.

Clover succeeded in part because of its focus on malaria as the entry point. It showed that, done properly, the focus need not be distorting. With malaria continuing as a major disease burden in most of Africa, and an important component in the achievement of the MDGs, its call for attention to inter-related systems has become very important for recognisable interventions across many other health priorities. Clover owes its success to highly skilled, committed, experienced and innovative professionals in each of the four countries who worked with health sector staff in a flexible and responsive way. They enabled effective work in difficult settings and grappled efficiently with systems development.

Where next? Scaling Up

The Clover programme has worked in contexts where health systems are most fragile and MDGs are lagging. Health staff in the sub-national units presently covered by the programme are able and willing to act as foci for expansion to new districts. Clover has achieved this by facilitating, accompanying, mentoring, convening, advising, and using malaria as an entry point around which health systems can be strengthened to the benefit of priorities other than malaria. By working alongside and behind governments and other service providers, the programme has demonstrated to the world it is a workable model that can be significantly scaled-up or replicated to reach much more ambitious targets than its present coverage.

Malaria Consortium has engaged in health system strengthening on a moderate scale. We have learned lessons and we now have the experience and expertise to provide it on a much larger scale.

Photo: Clover purposely selected to work in more remote and difficult areas in order to benefit poorer communities





Photo: From a malaria focus, Clover can broaden to other conditions such as TB and HIV, which share the need for certain systems to be strengthened



Malaria Consortium

Development House
56-64 Leonard Street
London, EC2A 4LT
+44 20 7549 0210

Malaria Consortium
disease control, better health

www.malariaconsortium.org

Irish Aid

Department of Foreign Affairs
Riverstone House
23-27 Henry Street
Limerick
+353 1 408 2000

www.irishaid.gov.ie

