

Lessons Learned Document	
Thematic Area	Supply Chain Management
Description	This Lessons Learned document focuses on the structure and processes for maintaining reliable supply chains for iCCM products, ensuring reliable and continuous supply at the community level.
Organizations documenting Lessons Learned	John Snow Research and Training Institute, Inc. with input from the SCM Sub-Group of the iCCM Task Force and others, including Dimagi, International Rescue Committee (IRC), Johns Hopkins Bloomberg School of Public Health, Center for Communication Programs, MCHIP, Management Sciences for Health (MSH), PSI, Save the Children, UNICEF and Village Reach
<p>Background</p> <p>Public health supply chains in resource-limited settings are often characterized by frequent and persistent stock-outs of essential medicines. Stock-outs at the community level can pose a major bottleneck to iCCM. Without reliable availability of iCCM medicines and related products, iCCM programmes cannot be effective. Consistent availability of high-quality iCCM products to community health workers (CHWs) is key to CHW motivation, public demand for, and trust in CHW services.</p>	
<p>Process for documentation</p> <p>Information was primarily obtained from the experience of the Supply Chains for Community Case Management (SC4CCM) Project and the interventions the project tested to improve product availability with CHWs over the past four years in three countries. This information was supplemented with a literature review and interviews with members of the supply chain sub-group of the iCCM Task Force. Interviewees recommended additional iCCM field interviewees and shared published and grey literature.</p>	
<p>Strategies that worked well</p> <p>The following strategies were identified as those that promote reliable supply chains for iCCM products.</p> <ul style="list-style-type: none"> • Though implemented at the community level, iCCM crosses many programmatic and functional areas. Deliberate and consistent coordination at all levels promotes much-needed integration of supply chain and health services management, while fostering proactive prevention or mitigation of supply chain problems. Timely problem solving has proven particularly important given chronic shortages of essential medicines, inefficiencies in the supply chain and the long lead times necessary to rectify quantification and procurement problems. • Reporting rates are maximized when reporting is linked to resupply and CHWs see evidence that data is used for decision-making and has a direct impact on their ability to provide services. Merely setting up a reporting system does not improve data visibility. • Well-designed mHealth applications, created specifically for community supply chains and used in conjunction with problem-solving teams, have significantly improved efficiency and accuracy of CHW resupply and visibility of community-level data to managers at higher levels, and helped reduce stock-outs. Reliable mHealth system performance has also had a positive impact on CHW 	

motivation. Data from supply chain mHealth applications can be linked to, or applications made interoperable with, health information systems to generate data for improved management and strategic decision-making. Well-designed mHealth systems build on existing manual procedures and processes, are designed with end-users in mind, focus on core workflows, prompt users with action messages/alerts based on dashboards, reinforce feedback at all levels, have sufficient training and support mechanisms and allow for evolution in design, scope and scale.

- Designing **simple tools with minimum data elements** and ensuring translation into local languages enables CHWs to effectively and regularly execute supply chain tasks and standardizes processes to improve product availability. Adding illustrations to tools and job aids to enhance user-friendliness can also add significant value.
- Supply chain improvements happen when **supply chain tasks and challenges receive regular attention** and addressing them is perceived to be a priority. Deliberate efforts must be made by district managers and health centre supervisors to dedicate time during regular meetings or supervision for supply chain issues. Providing a structured approach and routine for supply chain problem-solving and action planning, including use of strategies such as peer supervision and on-site coaching, will promote regular attention to supply chains and improve motivation and productivity.

Strategies that need more attention

The following supply chain related-issues were identified as requiring more attention.

- **Improved availability of optimal products and packaging** in paediatric dosages and packaged for easy storage, transport and dispensing by CHWs with pictorial instructions for accurate explanation by minimally trained CHWs and use by low-literate caregivers.
- **Private sector involvement.** Although there are notable exceptions, few examples exist of effective private-sector efforts that regularly reach the community level with high-quality iCCM supplies. More information on private-sector partnerships for iCCM, including use of registered drug shops and rational drug use for the sick child, will be presented in the Symposium session on this topic.
- **Sustainability of mHealth programmes.** As these innovative programmes mature, more attention must be paid to country ability to plan for programming at scale, including adapting and managing mHealth systems independently. Of particular importance are non-traditional skill sets such as system administrators, computer programmers and programme managers, and ensuring MOH can retain skilled staff with these qualifications.
- **Improved facilitation of national coordination mechanisms** at all levels to address supply chain needs, with particular attention needed around linkages and integration between the community and higher levels of the supply chain as well as with other programmes and service delivery areas.
- **Improved, proactive use of community supply data** for decision-making, problem-solving and quality improvement at all levels. Supervision and coaching should be structured to improve regular recording, collection and flow of accurate logistics data.
- **Incentives for supply chain tasks can be effective** but require significant administrative management to score and administer. Integrating a supply chain indicator into an existing performance-based financing system will reinforce the importance of supply chain as a key component to improving service delivery at community level.

Lessons Learned

Too frequently supply chains at the community level are ad hoc or an add-on to an existing system or simply replicate more complex processes higher up in the system. Resupply systems for CHWs need to be designed deliberately and thoughtfully with CHWs and their context in mind. Effective, sustainable supply chains depend on adequate support for CHWs, including appropriate, standardized processes and routine and integrated linkages to higher levels of the system. A coordinated approach by iCCM

programme managers and supply chain stakeholders at all levels is needed for the design and maintenance of supply systems, considering the following lessons.

- **One-time training is not sufficient for CHWs to acquire competencies** in complex supply chain tasks such as recording and reporting. Using existing opportunities, such as monthly meetings, salary and/or supply collection days and supervision visits, to train CHWs and reinforce basic skills is an affordable, effective approach for CHWs to acquire supply chain knowledge and skills.
- **Regularly occurring meetings can be made more effective by establishing quality improvement concepts of team-based work and objectives.** They can be used to teach participants how to set an agenda, use the data they have, determine what kind of decisions to make and include regular problem-solving, action planning and progress tracking.
- **Products specifically designed for the community level can improve iCCM product availability.** iCCM programmes generally rely on supplies of essential medicines from various sources. Because essential medicines are never in full supply and CHWs are at the end of the supply chain, ensuring there is a mechanism for CHWs to access drugs regularly is crucial. This can be achieved by designing unique products or unique packaging for use exclusively at the community level.
- **Follow up and change management is critical during initial implementation and scale up of new supply chain practices.** Best practices from other areas of health care management, such as quality improvement approaches, can be successfully implemented at the community level. However, these innovations will require support, monitoring and possibly adaptation so that they are tailored to suit the community level and its unique supply chain challenges. Designing tools and processes for the community level is often an iterative process – especially when implementing a proven best practice from higher levels; it can work but may require adaptability and flexibility to make appropriate for the community level.
- **Integrating supply chain with other supervision tools and processes might be more difficult than creating a parallel process but is more sustainable.** This requires coordination and efforts to simplify tools and reduce required indicators to the minimum and is important because maintaining parallel processes is unlikely to be sustained.
- **iCCM supply chains require a high-level champion and leadership at all levels of the health system, but particularly at the district level.** Commitment to product availability and child health outcomes needs to be a common objective and performance goal for all people involved in managing products distributed to the community level.
- **The workload of each person in the supply chain needs to be designed with level of compensation in mind.** If CHWs are volunteers, supply chain tasks asked of them should not add additional burdens of transportation or communication costs. If they do, programmes should consider providing modest allowances to motivate them to undertake these additional activities. Facilitation allowances may provide additional motivation.
- **Supply chain processes should be set up to encourage and promote aligned objectives between people at different levels of the system.** As in any work environment, aligning the goals of facility-based staff and CHWs and providing opportunities for regular communication and joint problem-solving between them will improve overall system performance. In most settings CHWs are reliant on functionality of the whole supply chain, so strengthening is needed throughout the system to assure availability from the beginning to end points in the chain.
- **Technology alone cannot solve problems.** A functional and streamlined resupply system is the foundation of an effective supply chain. Technology can improve efficiency and data flow/visibility, but only if it is built on a strong, foundational system.