Background

Despite significant progress over the past two decades in reducing child mortality worldwide, a large proportion of children in sub-Saharan Africa continue to die of preventable and treatable causes before their fifth birthday. In 2015, malaria, diarrhea, and pneumonia alone accounted for an estimated 1.1 million child deaths—37% of all under-five deaths—in sub-Saharan Africa.1

Integrated community case management (iCCM) is an equity-based strategy aimed at improving access to treatment services for children outside the reach of health care facilities, where most deaths occur. The strategy aims to train, equip, and supervise community health workers (CHWs) so they can treat children for malaria, pneumonia, and diarrhea using artemisinin-based combination therapy, oral rehydration salts, zinc pills, and antibiotics. Bringing these services into the community has the potential to lead to estimated 70%, 60%, and 70-90% reductions in under-five mortality due to pneumonia, malaria, and diarrhea, respectively.2

Although the strategy has been adopted by several low- and middle-income countries, iCCM services appear to be underutilized in many areas. To enhance understanding of demand-side factors that influence the use or non-use of iCCM services and identify strategies to address them, USAID’s Bureau for Africa commissioned the African Strategies for Health (ASH) project to conduct a study in Senegal and the Democratic Republic of Congo (DRC), where rates of child mortality are high and iCCM is heavily relied upon to improve child health outcomes. This technical brief presents a summary of key findings from DRC.

Country Context

Child mortality presents a significant challenge in DRC. Although the under-five mortality rate decreased from 148 to 104 deaths per 1,000 live births between 2007 and 2014,3 an estimated 304,600 children in the country died in 2015.4 About 80% of under-five deaths in DRC occur in communities where primary health care facilities are largely out-of-reach.5

In 2005, the DRC Ministry of Health (MOH) introduced a national iCCM strategy which is now implemented in an estimated 3,630 community sites across 461 health zones (HZ) and reaches approximately 7,727,556 inhabitants.6 The program relies on volunteer, unpaid CHWs—called site relays—who are formally trained to detect, treat, and manage pneumonia, malaria, and diarrhea cases at the community level. They operate out of community sites, which refer to defined geographical areas of a given number of communities that benefit from their health services. Site relays are connected to primary public health services through supply and supervisory systems.

The iCCM program in DRC is financed and sustained primarily through support from faith-based and non-governmental organizations. The community sites sampled for this study are supported by a single implementer, the USAID Integrated Health Project (USAID-IHP). USAID-IHP is responsible for the orientation and training of cadres at the provincial and HZ levels; identification of community sites; selection of relays; training of trainers, relay supervisors, and community site relays; provision of medicines and supplies to community sites; and supervision by the head nurse, HZ team, and/or partners.
Objectives and Methodology

The objective of this study was to examine the demand-side determinants of use or non-use of iCCM services in Senegal and the DRC and to provide recommendations—based on identified best practices, innovations, and lessons learned—to inform the introduction and/or scale-up of other iCCM programs.

This study was conducted in DRC in the Kasaï Central and Lualaba provinces and at four HZs and eight community sites therein. It used qualitative methods, including a document review, key informant interviews, and focus group discussions (FGD). In total, 137 interviews were conducted with caregivers of children under five, site relays, head nurses, alternative care providers, health zone head doctors, community leaders, and technical and financial partners. Additionally, 29 FGDs were carried out with caregivers (mothers and fathers separately), site relays, village health committee members, and head nurses. ASH collaborated closely with a team from the Kinshasa School of Public Health (KSPH) based in Kinshasa, DRC, which led the in-country data collection and analysis.

Select Findings and Recommendations

Utilization, quality, access and availability, and demand were identified as key research themes for the analytical framework. Select key findings—including facilitators and barriers to iCCM utilization—are presented in the following subsections. Findings were analyzed to develop practical programmatic recommendations for increasing demand for and uptake of iCCM services in DRC and other countries in the region. A more detailed analysis can be found in the longer country report which is available on the ASH website.

### Utilization

This section outlines the basic determinants of use and non-use of iCCM services as reported across the four HZs. It covers findings related to the decision-making process for seeking care outside of the household, including the timing of doing so, who is involved in making decisions, and why families may prefer to seek care for a sick child from providers other than their local site relay.

#### Facilitators
- Understanding of danger signs of disease
- Care-seeking behavior outside of the home after the onset of disease, usually within 24 hours

#### Barriers
- Delayed care-seeking behavior outside of the home only after the disease persists, usually 48 hours or more after the onset
- Preference toward self-medication
- Religious convictions and faith in traditional medicine
- Interpersonal conflicts involving site relays

#### Recommendations
- Improve community understanding of disease and options for care: Health workers, community mobilizers, and community leaders should enhance education efforts in communities where caregivers delay seeking care for their sick children. Messaging should be streamlined for all household decision-makers on the importance of early care-seeking for key child illnesses at the community site.

### Quality

Perceptions of the quality of services are known to impact use or non-use. Monitoring and supervision were found to be important factors in ensuring quality of service provision.

#### Facilitators
- Motivation of relays through regular supervision and small monthly payments for performance
- Incentives, such as bicycles, which enable timely transport for referrals and more frequent medicine re-stock

#### Barriers
- Perceived lack of qualification of relays in medical sciences and limited capabilities (relays are only equipped to treat select illnesses)
- Perceived lack of motivation among relays
- Perception that injections (not provided by relays) are more effective than tablets

#### Recommendations
- Strengthen monitoring of quality of care: Record-keeping should be strengthened at the community level to better monitor the quality of services provided as well as the quality and timeliness of patient referrals to health centers. Community sites should be consistently supplied with appropriate recording and reporting tools. Site relays should be better integrated into the national public health system by strengthening ties with HZ staff, particularly through closer supervision. The government should reinforce its endorsement of standardized training and formally recognize site relays to boost their perceived credibility and competence. Opportunities to institutionalize established mechanisms to motivate site relays to provide consistent, reliable, and quality care should be explored.
Access and Availability

Financial accessibility, geographic accessibility, and communities’ perceptions of relays and the services they offer were found to influence caretakers’ decisions to seek and utilize services from relays as the first point of care. Supply-side issues, such as medicine supply and health worker motivation and supervision, were also noted as factors affecting the utilization of iCCM services.

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<tr>
<th>Facilitators</th>
<th>Barriers</th>
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<tr>
<td>Establishment of community site to serve just one village</td>
<td>Remoteness of sites that serve several villages</td>
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<td>Difficulty accessing health centers outside of the community</td>
<td>High cost of iCCM services at community site</td>
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<td>Work hours and phone number of relay made available to community</td>
<td>Presence and proximity of alternative care providers</td>
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<tr>
<td>Perceived status of relays as educated community leaders</td>
<td>Repeated absence of relay from community site</td>
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<tr>
<td>Respect for relays and their service to the community</td>
<td>Supply-side issues (stock-outs of medicines and materials)</td>
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**Recommendations**

- **Reduce perceived supply-side issues:**
  - **Availability of supplies** – Ensuring the consistent availability of medicines and supplies at community sites can be achieved by strengthening the capacity of relays and HZ staff to monitor the utilization of community sites and correctly estimate medicines needs. Medicine orders and deliveries for community sites should be distinguished from those for health centers.
  - **Availability/capacity of relays** – Provincial focal points are needed to support community site management, including generating supervision topics and overseeing stock management. Site relays must receive more regular, formative supervision. In addition to providing financial and material support to facilitate supervision visits, the government could assess the feasibility of implementing alternative, complementary supervisory methods where the burden on health center nurses is high.

- **Improve financial accessibility of iCCM services:** Innovative financing mechanisms (e.g., elimination of fees or creation of village funds) should be implemented to consistently provide iCCM services free of charge at the point of care. The MOH should consider systematically regulating any fees/gratuities paid by patients to site relays.

- **Ensure appropriate placement of community sites:** The MOH and program managers should collaborate with private health care facilities to integrate activities and avoid establishing community sites close to these facilities.

Demand

Communities’ knowledge of iCCM services impacts demand. Findings in this section relate to health promotion activities that communities find most useful as well as caretakers’ understanding of site relays and their roles in their communities.

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<tr>
<th>Facilitators</th>
<th>Barriers</th>
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<td>Strong understanding of relays’ role and the package of iCCM services they offer</td>
<td>Lack of awareness-raising and education sessions for the community prior to establishing a community site</td>
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<tr>
<td>Village chief informs residents when the site has been resupplied after stock-out</td>
<td>Community members not involved in selection of relays</td>
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<td>Caregivers’ desire for relays to expand scope of services</td>
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**Recommendations**

- **Enhance information, education, and communication (IEC) activities to increase demand for iCCM services:** Prior to establishing a new site, HZ staff and partners should enhance promotional activities in the community, actively engaging community members in the full process. Partners should supply community sites with materials to enhance IEC efforts. Household decision-makers should receive targeted communication on the value of iCCM services.

- **Involve community stakeholders:** Community leaders must be actively involved in carrying out IEC activities, promoting the use of iCCM services, and informing the community of any changes to the program (e.g., availability of services offered and status of medicine stocks at community site).
Discussions

Demand-side elements often receive less attention than supply-side elements in program design and implementation. However, in order to provide more equitable coverage of iCCM and other proven child survival interventions, careful attention must be paid to the demand-side barriers and facilitators encountered by caregivers when seeking health care for their children. Many caregivers included in this study indicated that, despite the establishment of CHWs and iCCM services in their communities, a range of factors influence their decision whether, when, and where to seek care for their sick children. Findings revealed that barriers to or enablers of appropriate care-seeking are often complex and affected by a range of issues related to knowledge of causes, symptoms, and danger signs of illness as well as options for care; geographic and financial accessibility of iCCM services and proximity of health huts to other facilities and providers; perceived supply-side issues; and perception of CHWs, the quality of services they provide, and their role and relationship with the community. It is evident that caregiver behavior is not driven by one factor in isolation; rather, the relationship between the identified determinants can be multifaceted.

Of particular note, findings suggest that nuanced gaps in caregivers’ knowledge of danger signs of disease may lead to delays in care-seeking. The presence of alternative health care providers can negatively impact the community’s use of iCCM services. This is especially true when alternative services are perceived to be of high quality, are provided at a low or no cost, and encompass a greater range of services. Caregivers’ recourse to alternative providers is also motivated by perceived frequent and prolonged stock-outs of medicines at the community sites. The unavailability of relays, interpersonal conflicts involving relays, lack of motivation for relays, and the relays’ lack of professional qualifications were mentioned as barriers to the use of iCCM services. Several gaps were also cited in the frequency of community site supervisions and the use of data for appropriate guidance in both the HZ management teams and the provincial teams.

Conclusion

The aim of this study was to identify demand-side drivers of the use or non-use of iCCM services across four districts and eight community sites in DRC. The findings and recommendations may be relevant for countries that are considering introducing, modifying, or scaling up an iCCM program at the community level. As governments and implementing partners do so, efforts to address demand-side drivers of care-seeking must be incorporated into the iCCM strategy alongside an appropriate supply of child health services in order to promote equitable access to health care for children.

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ABOUT ASH

African Strategies for Health (ASH) is a five-year project funded by the U.S. Agency for International Development’s (USAID) Bureau for Africa and implemented by Management Sciences for Health. ASH works to improve the health status of populations across Africa through identifying and advocating for best practices, enhancing technical capacity, and engaging African regional institutions to address health issues in a sustainable manner. ASH provides information on trends and developments on the continent to USAID and other development partners to enhance decision-making regarding investments in health.

ENDNOTES

4. UN Interagency Group for Child Mortality Estimation (IGME) in 2015. Available at: http://www.childmortality.org
5. Ministry of Public Health, National Program to Combat Diarrheal Disease (PNLMD), Situation Regarding the Development of Community Sites in DRC (Situation de l’évolution des Sites des soins Communautes en RDC), Report, August 2015
6. Ibid.