Timed and Targeted Counselling mHealth Application

The mTTC app is built in the common MOTECH Suite (CommCare), allowing easy adaptation and alignment to national data systems. The app collects real-time household-level data on practices, which can easily be assimilated and used in data-based feedback and supervision. The app ensures CHWs time home visits correctly by gestation/age of child, sending reminders on missed visits and follow-up, and improving workload management. It includes audio-visuals with multiple language settings, and press-play messages to give accurate information to caregivers. CHWs are prompted to conduct post-referral assessment of care including essential newborn care practices, stock-outs and case handling. In two countries it also includes accurate diagnostics of childhood illnesses. TTC App is used by CHWs conducting TTC home visits to communicate and track health practices for maternal newborn and child health at the household level.

Current mTTC Deployments

Current mTTC deployments in 7 countries total 3670 users, reaching 217,000 beneficiaries. Reported findings conclude that mTTC has improved efficiency of CHW home visits, community perception of CHW capacity, and timely referral of conditions. The app reduces burden of data collection during home visits and during supervision. District health authorities reported data are easier to analyse with automated features, have fewer data errors, and that patient records and medicine use are easily accessed. In Uganda, users also reported greater involvement and data use by public health staff.

Impact evaluation of health practices in India

The Starting Strong project in Narsinghpur, India utilizes a ttC-based mobile app that allows CHWs to track pregnant women and children under 2 and enhance personalized counselling with appropriate multimedia messages on caring and feeding practices, immunization and health-seeking behaviours. The mid-term survey conducted after 2 years of implementation showed significant positive results on health practices promoted using mTTC. The proportion of women completing postnatal care increased from 12% to 30%, as well as a 68% increase in iron folic acid during pregnancy (from 4% to 71%).

Understanding the needs of trainees in Sierra Leone

World Vision has been deploying the mTTC application amongst CHWs in Bonthe District, Sierra Leone for the past three years, supported by Irish Aid. User trainings conducted between 2012 and 2014 revealed key insights into the type of user that is able to master the mobile device and application by observing attainment of specific categories of skills following training with project-provided handsets. Having higher levels of education, more than one year of cell phone experience, and better access to a cell phone in the past, were all factors strongly related to more complete skills acquisition during the training.

mTTC strengthens data use in VHT supervision in Uganda

mobile-ttC in Uganda, funded by US sponsor funding and Irish Aid, has been deployed in close partnership with the Ministry of Health (MoH) to strengthen the national CHW strategy. World Vision supported village health team (VHT) supervisors to aggregate and analyse the data for their teams, by region and age groups. The project greatly increased the engagement of health management teams with data, and the need for technical support to manage data and technical issues was very low. The project is World Vision biggest mTTC deployment with 896 CHW users delivering the ttC service and using the application regularly. Results are still forthcoming, however the IAM health team are positive that CHWs and their supervisors are using the application with comfort and prefer it to paper based systems. There are ongoing discussions with the MOH, which aims to use the CommCare interface to which will enable projects such as this one, to share data with MoH data systems.
WV’s Global ttC Portfolio

World Vision’s Timed and Targeted Counselling model is being implemented in 28 countries, 7 of which are deploying the mHealth application for ttC and 6 of which include TTC as a national CHW approach. The scale of the Ugandan mHealth deployment is one of the largest in the World Vision portfolio, with 896 CHW users delivering the ttC service with the assistance of the MoTECH Suite and CommCare.

Table 1. User and beneficiary data for World Vision projects deploying the mHealth application for ttC

<table>
<thead>
<tr>
<th>Country</th>
<th>Project Name</th>
<th>Number of User Trainings Implemented</th>
<th>Current Number of Users</th>
<th>Current Estimated Number of Beneficiaries Reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>Starting Strong</td>
<td>17</td>
<td>72</td>
<td>2,490</td>
</tr>
<tr>
<td>Kenya</td>
<td>Jamii Smart</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Muecate MNCH – SMAP</td>
<td>3</td>
<td>300</td>
<td>27,700</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>Community mHealth</td>
<td>4</td>
<td>145</td>
<td>2,046</td>
</tr>
<tr>
<td>Tanzania</td>
<td>SUSTAIN MNCH</td>
<td>1</td>
<td>32</td>
<td>30,100</td>
</tr>
<tr>
<td>Uganda</td>
<td>mHealth for AIM</td>
<td>29</td>
<td>896</td>
<td>88,416</td>
</tr>
<tr>
<td>Zambia</td>
<td>mHealth for Malaria</td>
<td>NA</td>
<td>521</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Scaling up mTTC

WV projects are working closely with Ministries of Health to build national level support for mTTC scale-up and exploring sustainable cost-models in several countries, including Ghana and Sierra Leone. Currently, the majority of WV’s mHealth deployments are moderately scaled and represent proof-of-concept experiences. However, negotiations are under way in several countries to scale up to achieve wider population coverage based on positive results.

Try the App for Yourself

To install the demo application on your phone, follow these instructions:

1. Install “CommCare ODK” from the Google Play Store on your Android
2. If desired, install “Barcode Scanner” App to make installation easier
3. Run CommCare on your phone.
4. When prompted, choose Scan Barcode or Enter URL:
   - If entering URL, leave off the bit.ly portion as it is already loaded. Also it is CaseSensitive
5. There are two options:
   - With Multimedia: this will be a larger download and take some time (~10-15 minutes) but will include multimedia in your application. http://bit.ly/1iyTHzL or scan barcode
   - Without Multimedia: this will be a smaller download but will not have any multimedia. May also show errors where images should be. http://bit.ly/1iyTGf8 or scan barcode
6. Log in with the username: ttc and password: 123
7. Click Sync with Server before opening any forms:
   - Many forms will not work without first synchronizing one time after installation
8. Change your language
   - Click the Menu button on your phone (this is different on all phones)
   - Choose Settings from the menu
   - Choose Change Locale
9. To Demo on your computer see this page: http://bit.ly/214t0VH

To learn more about World Vision’s mHealth programmes visit www.wvi.org/mhealth or email: health@wvi.org