Adapting a Cost Model for mPowering Frontline Healthworkers

Steve Ollis,
Senior Digital Health Advisor
Maternal and Child Survival Program / John Snow Inc
Steve.ollis@mcsprogram.org
@ollisste
Digital Health Focusing on $$

DIGITAL INVESTMENT PRINCIPLES

SDG DIGITAL INVESTMENT FRAMEWORK
A Whole-of-Government Approach to Investing in Digital Technologies to Achieve the SDGs

Global Call to Action
September 2016
Why did we need a cost model?

• To justify funding requests
• To demonstrate financial savings in addition to efficiency, quality, etc.
• Because many people still think digital is expensive
• Cost savings are persuasive

http://health-orb.org
Our starting point

Showed potential cost savings of 42% of training costs for 100,000 CHWs

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4292533/
Cost Model

• Nigeria model included:
  • Costs of training (trainers, lodging, per diems, classrooms)
  • HW salaries
  • Management salaries
  • Devices, solar and airtime
  • Inflation and HW attrition
• Updated the model to include:
  • costs of content adaptation
  • costs of technical support to platform
  • costs for full device replacement every 3 years
  • allow for cost sharing with other projects
• **Summary**: Using blended learning approach was cost neutral or less expensive under a variety of scenarios
## Scenarios & Results

<table>
<thead>
<tr>
<th># of HWs</th>
<th>Length of training</th>
<th>Device cost</th>
<th>Cost share</th>
<th>Savings on training and supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>14,000</td>
<td>3 months</td>
<td>$200</td>
<td>0</td>
<td>3%</td>
</tr>
<tr>
<td>14,000</td>
<td>6 months</td>
<td>$200</td>
<td>0</td>
<td>22%</td>
</tr>
<tr>
<td>14,000</td>
<td>6 months</td>
<td>$150</td>
<td>0</td>
<td>25%</td>
</tr>
<tr>
<td>100,000</td>
<td>6 months</td>
<td>$200</td>
<td>0</td>
<td>22%</td>
</tr>
<tr>
<td>100,000</td>
<td>6 months</td>
<td>$150</td>
<td>0</td>
<td>26%</td>
</tr>
<tr>
<td>100,000</td>
<td>6 months</td>
<td>$150</td>
<td>50%</td>
<td>33%</td>
</tr>
<tr>
<td>100,000</td>
<td>6 months</td>
<td>Airtime only</td>
<td>50%</td>
<td>38%</td>
</tr>
</tbody>
</table>
Additional considerations

- With a fully electronic enabled workforce:
  - Improved HW performance as access to information anytime, anywhere
  - Improved communication/coordination
  - Reduced costs of data collection
  - Improved metrics on learning material usage
  - Reduced costs of adding new projects, programs and platforms (captured in Scenarios 6 & 7)
  - Emergency Response - being able to quickly push out new content
Additional Considerations

- Model does not quantify benefits of:
  - Improved retention of training materials
  - Better availability of information on usage
  - Reduced time out of station for providers to attend training
- NB: Cost savings may be lower where per diems are not being paid