



## Digital Adherence Technologies: Budget Line Items for Inclusion in Funding Applications

### Purpose

This document has been developed to provide guidance to National TB Programs and Global Fund Principal Recipients or implementers on budgeting accurately for the implementation of digital adherence technologies.

### Overview of costs

For the purpose of this document, detailed budgeting guidance has been provided for the smart pill box technology and for the video supported treatment (VST) technology .

The costs associated with an intervention are split into three elements – these being:

- **Technology costs**, which are the in-hand technology for both the patient and the healthcare provider.
- **Software costs**, which is the platform which collects all the patient adherence data, as well as the hosting costs associated with storing this data.
- **Human resource component** to ensure a sustainable and successful intervention.

Certain costs are easy to predict from a global level. However, there are other costs which are influenced by country factors, or service provider factors. These will require further investigation per country, however, where feasible, an average cost range for budgeting purposes has been provided.

### Potential modules for inclusion within Global Fund grants

- Treatment and care
- DR-TB treatment and care (particularly linked to the programmatic implementation of B-PaL(M) as an adherence support tool
- Key and vulnerable populations
- RSSH: Monitoring and evaluation systems

## Smart Pill Box

TECHNOLOGY COSTS			
Line Item	Activity	Budget	Costs vary per country
<i>Smart Pill Box Kit (plastic container; module; charger; 36 months of data)</i>	Procurement	USD 53.75 per kit	No
<i>Replacement plastic containers for smart pill box *</i>	Procurement	USD 2.50 per plastic container	No
<i>Laptop / tablet per healthcare facility **</i>	Procurement	~ USD 250 per device	Yes
<i>Mobile data / airtime for laptops/tablets at healthcare facilities **</i>	Procurement	Range: \$5.00 - \$16.00 per device, per month	Yes
<i>Printing of instruction booklets / labels for patients</i>	Printing	Range: \$0.30 - \$0.50 per booklet and label	Yes
SOFTWARE COSTS			
Line Item	Activity	Budget	Costs vary per provider
<i>Adherence platform (software) setup fees ***</i>	Software setup fees	~ USD 32 000 once-off	Yes
<i>Contractual costs:</i> <ul style="list-style-type: none"> <li><i>Software as a service</i></li> <li><i>Maintenance; updates; and technical support</i></li> <li><i>Hosting ****</i></li> </ul>	Contractual	~ USD 4000 per month (up to 2000 patients enrolled per year)	Yes

HUMAN RESOURCE COSTS			
Line Item	Activity	Budget	Costs vary per country
<i>Training &amp; refresher training:</i> <ul style="list-style-type: none"> <li>• <i>Daily subsistence allowance</i></li> <li>• <i>Conference venue</i></li> <li>• <i>Accommodation</i></li> <li>• <i>Transportation fees</i></li> </ul>	Training / capacity building	Country, time and location dependent	Yes
<i>Human resource support for digital adherence technology intervention **</i> <ul style="list-style-type: none"> <li>• <i>Coordinator at national level</i></li> <li>• <i>ICT support at national level</i></li> </ul>	Remuneration	Country dependent	Yes

**Notes:**

\* It is assumed that the **smart pill box module** can be **reused up to 5 times over a 3 year period** of implementation, however, the plastic container (which houses the module) can become damaged and may therefore require replacement over a 3 year period.

\*\* Laptop/tablet and mobile data/airtime costs and human resource support present the opportunity for **cost sharing** between different programmes (such as the HIV/AIDS programme) or different modules within the national TB programme (such and M&E) that may also require such tools and support.

\*\*\* The adherence platform setup and contractual costs are based on pricing received from Everwell Health Solutions, and may vary if a different software developer for the adherence platform is utilized.

\*\*\*\* Global cloud hosting vs in-country cloud hosting or in-country on premise **hosting can impact costs significantly**, and cost implications need to be investigated on a country-by-country basis

## Video Supported Treatment (VST)

TECHNOLOGY COSTS			
Line Item	Activity	Budget	Costs vary per country
<i>Smart phone for patients to record medication intake *</i>	Procurement	USD 100 per mobile phone	Yes
<i>Mobile data / airtime for patients to send daily video</i>	Procurement	Range: \$5.00 - \$16.00 per patient, per month	Yes
<i>Laptop / tablet per healthcare facility **</i>	Procurement	~ USD 250 per device	Yes
<i>Mobile data / airtime for laptops/tablets at healthcare facilities **</i>	Procurement	Range: \$5.00 - \$16.00 per device, per month	Yes
<i>Printing of instruction booklets for patients</i>	Printing	Range: \$0.30 - \$0.50 per booklet	Yes
SOFTWARE COSTS			
Line Item	Activity	Budget	Costs vary per provider
<i>Adherence platform (software) setup fees ***</i>	Software setup fees	~ USD 32 000 once-off	Yes
<i>Contractual costs:</i> <ul style="list-style-type: none"> <li><i>Software as a service</i></li> <li><i>Maintenance; updates; and technical support</i></li> <li><i>Hosting ****</i></li> </ul>	Contractual	~ USD 4000 per month <i>(up to 2000 patients enrolled per year)</i>	Yes
<i>Video storage costs on server</i>	Contractual	~ USD 2 per patient	Yes

HUMAN RESOURCE COSTS			
Line Item	Activity	Budget	Costs vary per country
<i>Training &amp; refresher training:</i> <ul style="list-style-type: none"> <li>• <i>Daily subsistence allowance</i></li> <li>• <i>Conference venue</i></li> <li>• <i>Accommodation</i></li> <li>• <i>Transportation fees</i></li> </ul>	Training / capacity building	Country, time and location dependent	Yes
<i>Human resource support for digital adherence technology intervention **</i> <ul style="list-style-type: none"> <li>• <i>Coordinator at national level</i></li> <li>• <i>ICT support at national level</i></li> </ul>	Remuneration	Country dependent	Yes

**Notes:**

\* When **mobile phones are reused** for multiple patients, the **costs per patient are reduced overtime**.

\*\* Laptop/tablet and mobile data/airtime costs and human resource support present the opportunity for **cost sharing** between different programmes (such as the HIV/AIDS programme) or different modules within the national TB programme (such and M&E) that may also require such tools and support.

\*\*\* The adherence platform setup and contractual costs are based on pricing received from Everwell Health Solutions, and may vary if a different software developer for the adherence platform is utilized.

\*\*\*\* Global cloud hosting vs in-country cloud hosting or in-country on premise **hosting can impact costs** significantly, and cost implications need to be investigated on a country-by-country basis

## **Technical Assistance for the planning for and implementation of Digital Adherence Technologies**

The Global DAT Task Force is fully funded to provide technical assistance to countries in their DAT planning, roll-out and scale up, including:

- Budget development
- Proposal development for the inclusion of DATs in Global Fund applications
- Identifying additional local and global funding streams
- Adherence platform comparison and selection
- DAT implementation assessment
- DAT procurement support

Contact the DAT Task Force via [secretariat@tbdigitaladherence.org](mailto:secretariat@tbdigitaladherence.org) if you require technical assistance for your country's DAT implementation.