



Ensuring an uninterrupted supply of quality-assured, affordable anti-TB drugs and diagnostics to the world.



Stop TB Partnership | Global Drug Facility Global Health Campus – Chemin du Pommier 40 1218 Le Grand-Saconnex | Geneva, Switzerland Email: gdf@stoptb.org

November 2020



TECHNICAL INFORMATION NOTE **Smart Medication Container KIT**

Digital Adherence Technologies (DATs) such as the smart medication container kit can help to support people affected by TB with their treatment in a modern and ef-fective way. These technologies are able to deliver reminders and may help em-power TB affected individuals and their families to take their daily medication at a time and place that suits them best. They also generate a digital record of medication intake. When this information is linked to an online digital adherence platform, it can help healthcare providers and social support services to focus efforts on individuals requiring extra support to complete their treatment. DATs have been deployed at both small and large scale in different contexts with a growing body of evidence around them to support peoplecentered care in TB and have been endorsed by the World Health Organization (WHO).

Smart Medication Container Kit

→ Available in the GDF medicines catalog Manufacturer: Wisepill Technologies, Somerset West, South Africa



The **smart medication container kit** combines the functionality of a plastic medication box with a small-scale, battery-powered sensor and mobile data connection. Individuals store and organize their medications in the box and get reminders when they should take their next dose. When they open the box for daily medication intake, the sensor is activated and sends a digital record of medication intake in real-time to an online adherence platform using the built-in mobile data connection.



One **smart medication container kit** consists of the evriMED1000C module (including battery and USB charging cable), a plastic medication box and a bundled 36-months mobile network plan for global use. The evriMED1000C module can be re-used for multiple patients; the plastic medication box can be single use or reused if properly cleaned.



PRODUCT NAME	Smart medication container kit	
GDF PRODUCT CODE	SMC kit-1 (Available in the <u>GDF medicines catalog</u>)	
MANUFACTURER	Wisepill Technologies, Somerset West, South Africa	
COST	US\$ 53.75 per kit	
LEAD TIME	24 weeks from order confirmation	

GDF PRODUCT CODE	GDF ITEM DESCRIPTION	NUMBER OF UNITS PER PACK	PRICE (USD)
SMC kit-1	Smart medication container kit	1	53.75
	Kit includes:		
	evriMED1000C (includes chip SIM card)	1	19.00
	Extended Life Battery (1800 mAh)	1	4.50
	Prepaid Data Services for 3 years	1	26.00
	USB Charging Cable	1	1.75
	Plastic container	1	2.50

Note: The kit does not include hosting and access to an online digital adherence platform.

BUDGET

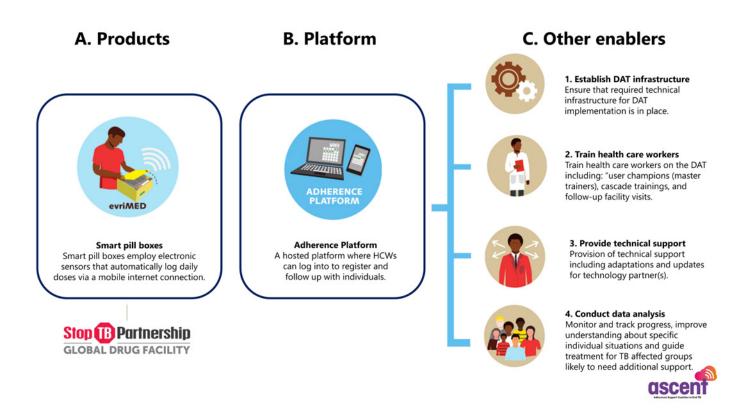
To effectively budget and plan for the implementation of DATs in any country context, it is important to consider the total cost of ownership including capital expenditures (CAPEX) and operating expenditures (OPEX).

- → CAPEX: DATs require up-front expenditures for both the product itself, as well as onetime costs associated adoption. CAPEX includes the price of the product, shipping and distributor fees, installation, training, and configuration costs.
- → OPEX: Any DAT require an interactive and dynamic ecosystem to function effectively. Operating expenditures (OPEX), which are ongoing costs associated with using DATs, include costs to facilitate messaging between people affected by TB and providers, recurring adherence platform hosting costs, labor and technical assistance costs, and any spare or replacement parts.

The Unitaid-supported ASCENT project has developed an Excel-based Total Cost of Ownership Tool, which streamlines the planning and budgeting process. This tool helps to plan and budget for the adoption and scale-up of DATs according to specified numbers of facilities/ patients, average treatment duration, and type of DAT products used.

OTHER REQUIRED COMPONENTS TO IMPLEMENT DATS

An overview of the components that support a successful DAT implementation (products, platform and other enablers) is shown below:



The online digital adherence platform serves as a critical interface, compiling adherence data (in a secure online environment) to enable automated support and health care workers to identify persons who would benefit from further support to complete their treatment. As with any novel digital health intervention, establishing the requisite infrastructure and technical support are necessary for any DAT to be used effectively. This includes building the capacity of health care workers to use the DAT and platform.

RESOURCES

POLICY RECOMMENDATIONS

Drug-Sensitive TB: The WHO's updated <u>Guidelines for the treatment of drug-susceptible</u> tuberculosis and patient care (2017) recommends that providers "offer one or more treatment adherence interventions to patients such as tracers and/or digital adherence medication monitors (conditional recommendation, very low certainty in the evidence)."

Drug-Resistant TB: In the 2020 WHO Consolidated guidelines on drug-resistant tuberculosis treatment, WHO recommends the use of Digital Adherence Technologies, including smart pill

TB Preventive Treatment: In the <u>2020 WHO Consolidated guidelines on tuberculosis preventive</u> treatment, WHO calls for further research on DATs to generate evidence on the effectiveness of context specific interventions for enhancing adherence and treatment completion

PRACTICAL AND NORMATIVE GUIDANCE

2018 WHO Handbook for the use of digital technologies to support tuberculosis medication adherence: Provides guidance for the inclusion and scale-up of three types of DATs, including smart pill boxes

2020 Digital Adherence Technologies Implementation Toolkit: Presents a step-wise approach to help decision-makers think systematically for successful selection and implementation of any digital adherence technology.

2020 Digital Adherence Technologies: technical guidance & budget for Global Fund funding request: Provides an overview of the necessary steps for planning and budgeting for a DAT deployment.

<u>DigitalAdherence.org:</u> The official website of the Unitaid funded ASCENT project, which seeks to generate evidence for DAT use, establish a global market for DAT products, and engage TB stakeholders at all levels



Stop TB Partnership | Global Drug Facility Global Health Campus - Chemin du Pommier 40 1218 Le Grand-Saconnex | Geneva, Switzerland E-mail: gdf@stoptb.org