



มูลนิธิวิจัยวัณโรคและโรคเอดส์ (ม.ว.ว.อ)
TB/HIV Research Foundation (THRF) Thailand



Grand Challenges Canada®
BOLD IDEAS WITH BIG IMPACT®

CARE-Box

An innovation to enhance patient adherence to treatment

Why CARE-Box?

- Non-adherence to treatment are common problems for chronic disease treatment
- Non-adherence causes treatment failure, increase death and complications. Non-adherence to an infectious diseases such as tuberculosis and HIV increase drug-resistance and consequently increased unnecessary health care cost and mortality.
- Common reasons of non-adherence are forgetfulness, side effects from medicine, discouraging and stigma including patients living alone without caregiver. CARE-Box was developed to solve these problems.

What is CARE-Box?

- A box set composes of electronic pill box connected with low cost mobile phone and providing daily alarm, triggered mobile signal based on daily medicine intake, absent of triggered signal will alert health staff and subsequent proactive actions.

How CARE-Box works?

- When patient hears an alarm, he is supposed to open CARE-Box and take the medicine. CARE-Box will send a missed-call signal to a receiving computer server. The signal is analyzed for adherence pattern
- Unless patient takes medicine, CARE-Box is not triggered and computer server not receive signal, then, the server will send a Short Message Service (SMS) to inform health staff. Finally, health staff will call the patient to determine the reason of absent of daily signal..
- Patient who experiencing side effect or having questions regarding his treatment can call health staff at no cost



CARE-Box

Connecting: Enhance connection between patients and health staff.

Affordable: The device is simple, cheap, low maintenance cost, low energy consumption and reusable

Reminder: Real-time medicine reminding and recording

Enabling: Enable patients to gain confident in the treatment regimens and health staff

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