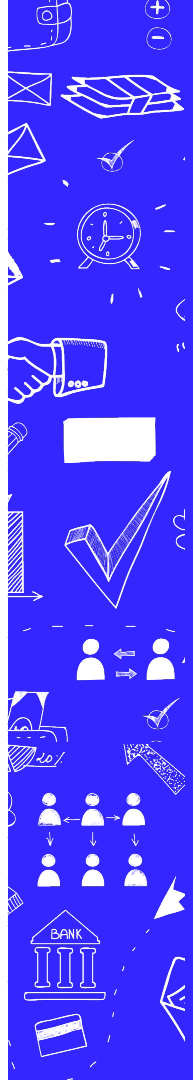




# Everwell

An **ISO 27001 Certified** company





**We empower organisations to deploy**  
**USER-CENTRIC DIGITAL PLATFORMS**  
**for healthcare programs**  
**across the world.**



The Everwell Hub is our integrated platform for adherence and case management, designed for high-burden healthcare programs.

Health care staff can log into a single portal to support the entire cascade of care from **registration, diagnostics, follow up, digital payments, virtual care and engagement, and digital adherence technologies.**



# Our growth journey

*Incubated in Microsoft Research in 2013*

## Journey till 2020



# Our Platform

## Digital Adherence Management (DATs)

Integrated adherence module to support multiple digital technologies

## Diagnostics

Module for adding tests and integration with diagnostic machines and services

## Dispensation

Prescriptions and refills to track drug delivery

## Reports & Data Analytics

Provider access to data dumps and visualisations

## Direct Benefit Transfers

Payment module for initiating, approving, and completing payments as per DBT schemes

## Virtual Care

Communication services like SMS, IVR, whatsapp and telemedicine for patients



# Platform Benefits

## Open Source Technology

Designed as an open source toolkit, available for use or adaptation by any government or health care organization

## Highly Secure Environment

Hosted on Microsoft Azure, an extremely secure cloud server guaranteeing data privacy and security

## User-Centric Design

UI / UX based on user-level research across countries, with customizations to suit local contexts

## Scalable Infrastructure

Built using microservices, the platform is designed to scale easily across countries

## Multiple Integrated functions

Digitizes the complete cascade of care for patients - notifications, diagnostics, adherence and outcomes.

## Interoperability

Easy to integrate and exchange data with existing digital health systems through custom APIs



# Digital Adherence Management

## SINGLE PLATFORM - MULTIPLE DATs

Custom 99DOTs envelope, Video Observed Tech and pillbox - all technologies supported.

## INTERNET NOT COMPULSORY

Can also work in low-resource patient settings without internet or smartphones.

## NO ENGLISH LITERACY REQUIRED

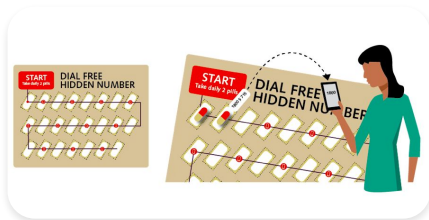
Adherence calendar is color coded and can also be translated across multiple languages.

## REAL-TIME FLAGGING OF NON-ADHERENCE

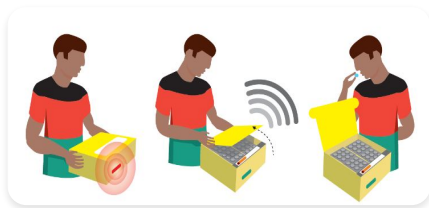
Facilitate digital observation of pill-taking

## DIFFERENTIATED CARE

Aggregate data allows for rapid triage of patients, helping providers to quickly determine those who need more support



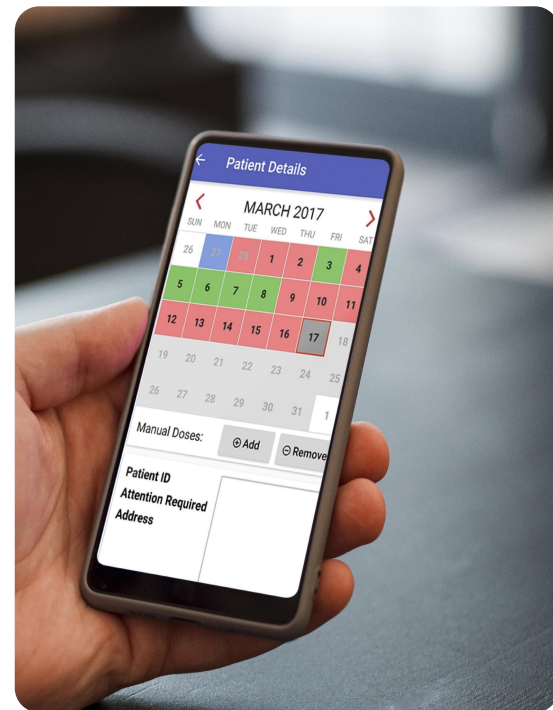
99DOTs ➤



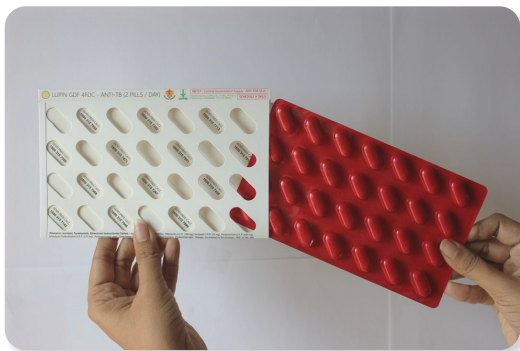
PILL BOX ➤



VOT ➤



# 99 DOTS



## 01

### Patients receive medication

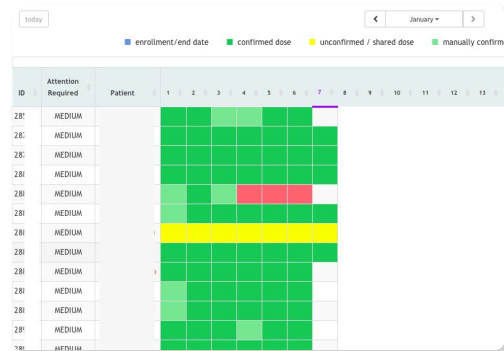
Blister packs are wrapped in customized envelopes, or stickers in the case of pill bottles with instructions and phone numbers printed on them



## 02

### Report adherence

Upon dispensing medication, patients reveal the hidden numbers. They place a call to it or text upon taking their medication, free of cost for them.



## 03

### Real-time access

The call/text by patients is reflected in real-time on a calendar style-dashboard that their healthcare workers can access, and follow-up with patients if necessary.



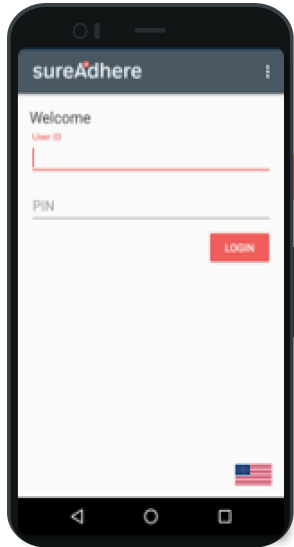
# Video-Observed Therapy (VOT)

sureAdhere

01

## Patients download app

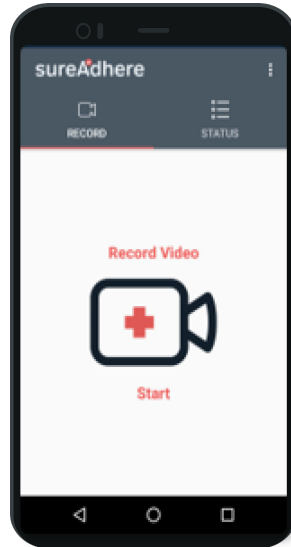
Available on iOS and Android, simple interface for patients with translations for local context



02

## Ingestion of pills is recorded

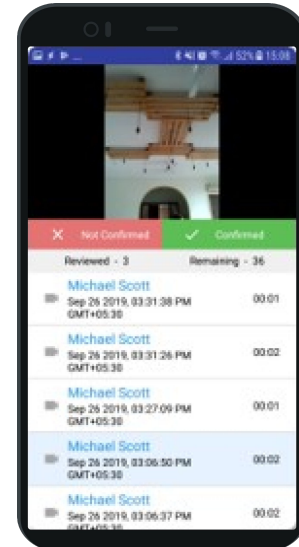
Recording done at convenient time and place, Videos uploaded in real-time to Everwell Hub



03

## Video is reviewed

Staff review video at their convenience, and adherence is recorded accordingly



# MERM/Evrimed

## Step 01

### Medication placed in smart pill box

No internet or phone required for patients, compartments available to segregate medication



## Step 02

### Box is opened to take medication

Alarms can be set on the box to remind patients everyday, as well as for refill visits



## Step 03

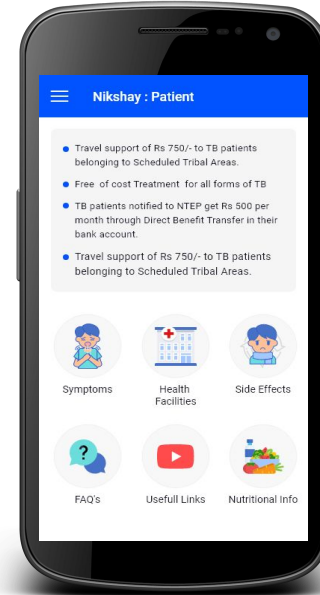
### Recording of adherence

Adherence signal is transmitted to the platform, reflected on the calendar-style dashboard for healthcare workers

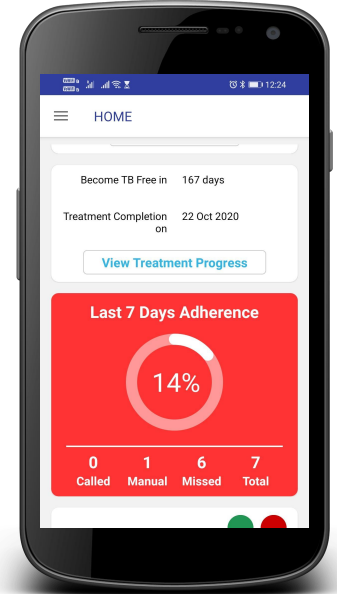
# Virtual care

A large percentage of people live far from clinics and would otherwise struggle to meet a healthcare provider on a regular basis. To support people where they are, the Everwell Hub promotes features and opportunities for virtual care.

- ❖ Text messages: SMS, Whatsapp for medication reminders, motivation
- ❖ IVR calls for clinic visit reminders, refill reminders, health check-ins
- ❖ Whatsapp integration for provider to call patient from the mobile application
- ❖ Smartphone application with video and text based channels integrated to communicate with healthcare providers remotely.



Disease information page  
– Phone application

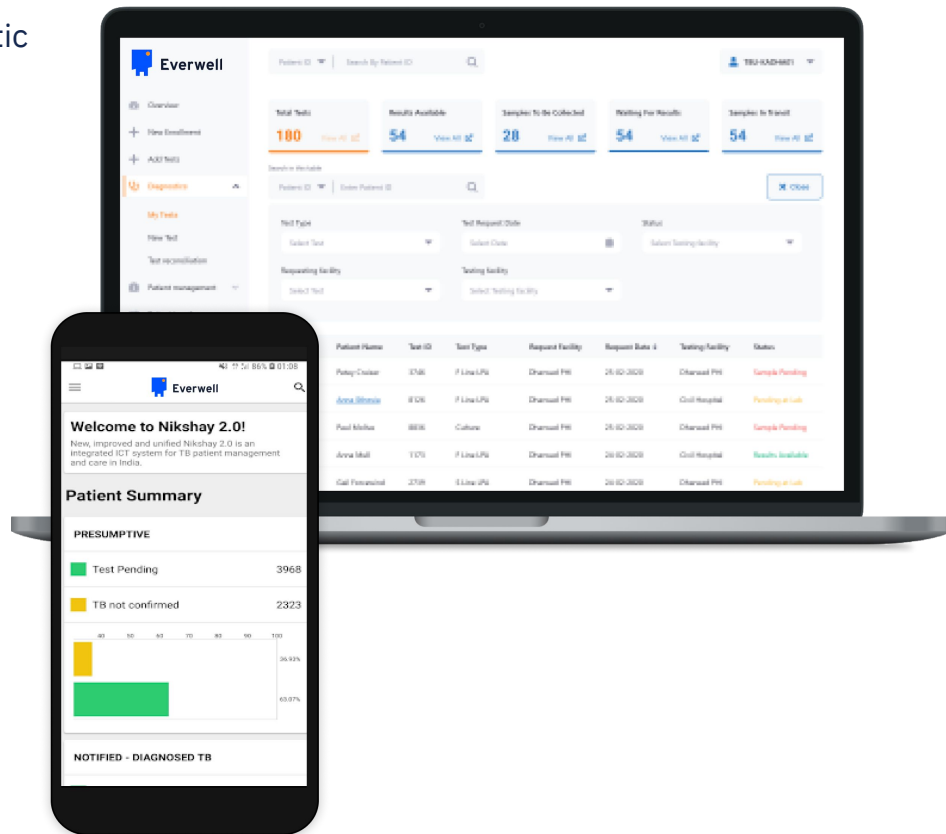


Home Page – Patient App

# Diagnostics

Healthcare providers and doctors rely on a variety of diagnostic tools for effective, early detection and diagnosis of diseases, which the Everwell Hub caters to.

- ❖ Unified Workflow for providers to request test results for a suspected case
- ❖ Ability to receive results from a host of compatible devices or tools
- ❖ Ability to view pending and received results by facility or geography
- ❖ Designed to drill down on results specifics per test per case.
- ❖ Defined APIs to connect devices including the leading diagnostics machines and AI-based x-ray analyses.

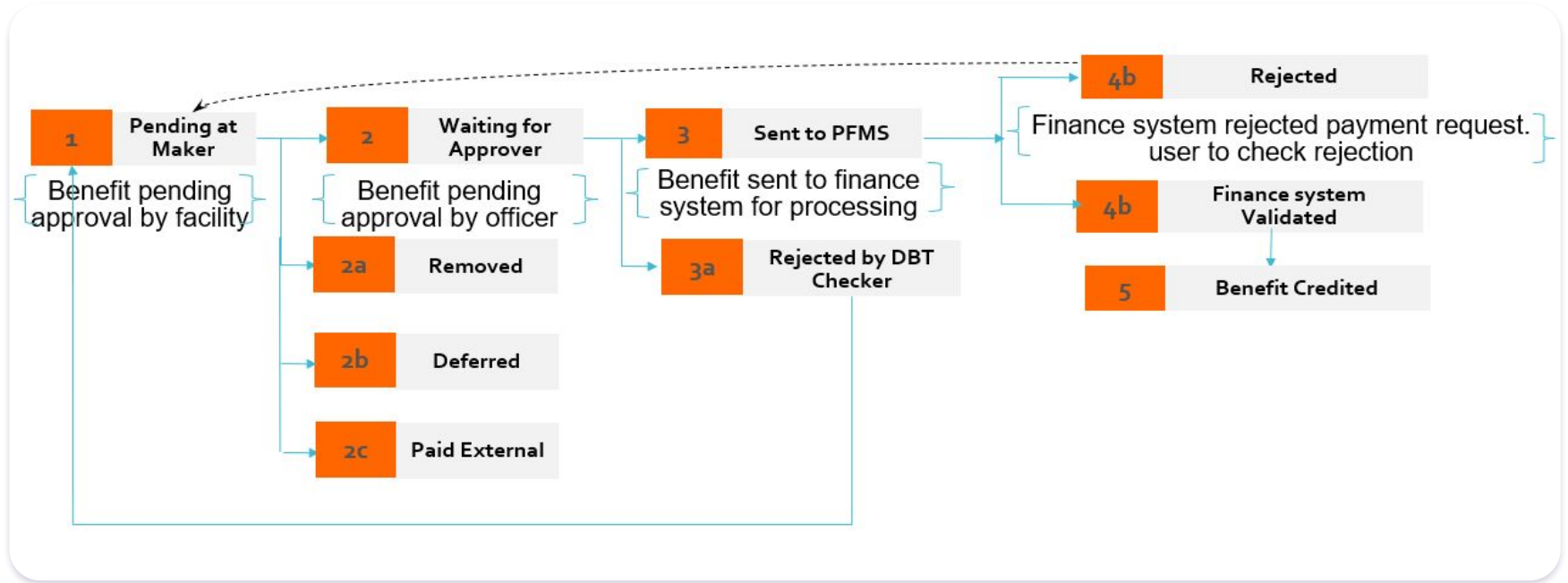


# Digital Payments through HUB

- ❖ As of **Feb 2020**, **INR 815 Cr** worth of benefits have reached patient and supporter accounts directly for the India TB program
- ❖ The Everwell Hub's Digital Payment Module exposes workflows for authorizing payments based on the Government welfare scheme logic for patients and providers
- ❖ Ability to integrate with payment systems to initiate payments directly to users.
- ❖ Ensure accurate targeting of the beneficiaries, de-duplication and reduction of fraud



# DBT Transaction Flow



# Dispensation

Dispensation and refills are a key to ensuring patients receive continuous treatment. Some of the major features of the *proposed* Dispensation module on the hub are:

- ❖ Automated dispensation day calculation based on treatment start date and number of adherent days (where applicable)
- ❖ Visual representation of dispensation day for each individual patient
- ❖ Auto-calculation of next refill visit
- ❖ Tasklist populating patients who are due for dispensation or refill
- ❖ Product details of drugs dispensed
- ❖ Prescription history of patients

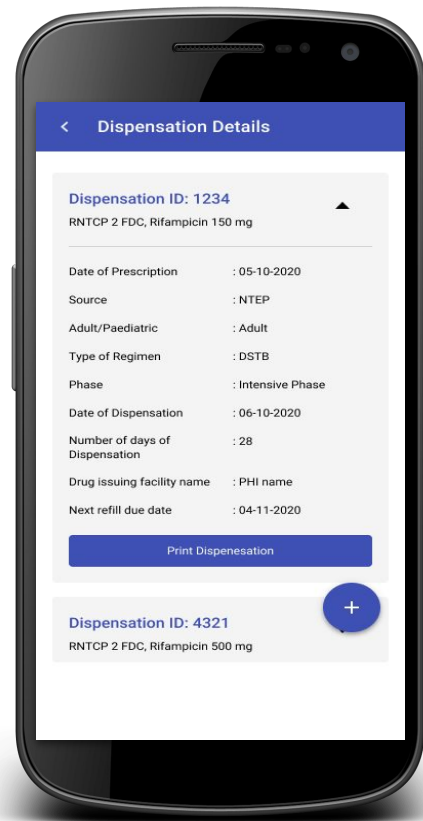
Adherence Dispensation Basic Details Treatment Centers Tags & Notes Medical Details Call Logs Support Actions Test Results

Close Case

### Dispensation

+ Add Dispensation

Dispensation ID	Date of prescription:	Source	Age	Type of Regimen:	Product Name	Issued On:	Doses Given:	Medication issued by:	Next Refill Due date:	Action
D123456	12/05/2020	Public	44	DSTB	2 FDC Rifampicin 150 mg	12/05/2020	28	Chemist	12/06/2020	<a href="#">Print</a> <a href="#">Delete</a>



# Reporting and Analytics

The Everwell Hub is designed around simplifying data and synthesizing reports based on the intended audience.



## Actionable insights

- ❖ Customizable Task lists
- ❖ Data summaries by geography
- ❖ Real-time Visualizations

**Select patient enrollment dates and status**

Select date range for patient enrollment

From: [calendar icon] To: [calendar icon]

Select patient status

All patients enrolled

Patients enrolled in a date range

Patients on treatment

Patients with outcome assigned

**Select geography**

State: [dropdown: Yangon]

District: [dropdown: Select all]

**Select report type**

Patient level report

Aggregate report

## Reports

- ❖ interactive Reports module
- ❖ Filter based data exports
- ❖ Detailed activity logs



# Implementation Support

One-stop shop for creating and deploying an intervention

## Scoping workshop

Everwell works with your team to understand the context, and propose appropriate solutions based on your metrics for success

## Project design and set up

We customize the platform and virtual patient engagements, and set up the infrastructure based on the local protocols and context

## Training and launch

Whether in person or remotely, we conduct master trainings for your team on the platform, along with materials for downstream training and reference

## Maintenance and scale

Through data analytics and our helpdesk, Everwell supports the project through scale up, modifying functionalities as the project evolves

## Publications and case studies

We are avid proponents of supporting the broader community by sharing findings, experiences, and data about tools supporting public health\*

\*Everwell does not own, modify, publish, or sell any data that we host without explicit consent from the partner.

# Everwell Hub Deployed as PaaS - India TB

1



**Screening**

**Once**

Walk-in to a HF or contact tracing or Active case finding

2



**Diagnosis  
(Test)**

**Once**

- ❖ Enrolment of patients in Nikshay
- ❖ TB diagnostic tests requested (X Ray, SM, CBNAAT) by Staff /Provider
- ❖ Test results updated in Nikshay
- ❖ SMS to patient on diagnosis

3



**Diagnosis  
Confirmation**

**Once**

- ❖ In-person consultation with provider and basis test results, confirms diagnosis and initiates Treatment
- ❖ Updates Prescription details in Nikshay

4



**Dispense  
Medicines**

**Multiple**

Patient collects drugs from Public or Private chemist

# Everwell Hub Deployed as PaaS - India TB

5



**Adherence Support  
& follow-up**

**Continuous**

Health Care staff or TS follow up with patient and monitors adherence via Adherence Calendar and refer for further follow-up tests

6



**Bank details entry  
& validation**

**Once**

Patient provides Banking details to Health staff who enters into Nikshay

7



**Two-way  
communication**

**Continuous**

- ❖ Patient is connected to health care staff /provider
- ❖ Patient can call CC for any information on treatment/ DBT
- ❖ 2-way communication channels via WhatsApp, Phone
- ❖ Use Follow Up Module for recording and scheduling communications

8



**Treatment  
completion, long  
term follow up**

**Once**

As patient completes treatment, Provider declares Treatment Outcome

**HF: Health Facility, TS: Treatment Supporter. SM: Sputum Microscopy**

# Platform Statistics

\*Cumulative since 2017

1



## Enrolment

149 Lakh persons enrolled, 1.64 lakh facilities on board

2



## Test

(Diagnosis/Follow Up)

206 Lakh Test results captured, 43 Lakh CBNAAT Tests added  
(Cumulative since 2017)

3



## Treatment

~79.5 lakh patients registered  
~75 Lakh initiated on Rx  
~15 Lakh presently on Rx

4



## Adherence

1.2 Lakh patients presently on Digital Adherence Tool (DAT)

Nikshay User base	Count
Total users (all time)	~ 4 Lakhs
Monthly Active unique users	60 thousand

1



## Deduplication

**1.82 Lakh** duplicate notifications identified

3



## Direct Benefit Transfer of Incentives

**INR 1,205.44 Crores** of Incentive paid out (across schemes)  
(Cumulative since April 2018)

5



## Task Lists

**11 Task Lists** across Modules are available

2



## Patient Transfer

**33 Lakh patients** Transferred since 2017. ~ 50 – 60 % of patients move from one facility to another for treatment

4



## Communications

(July 2020)

**40 Lakh SMS** sent to patients (per month)

6



## Reports & Dashboards

- ◆ **28** Registers (Line lists)
- ◆ **21** Reports
- ◆ **5** Dashboards

# Global Deployments



Scaled deployments globally I Focus on engagement I Open Source and Interoperable Platform



# A 360° Impact View

## Beneficiary Interface

A mobile application with patient-facing interface empowering ~4,500 patients to access details of their tests, treatment, Direct Benefit Transfer and contact details of Staff to make them aware of their treatment details, as a step towards increasing patient engagement and literacy (snapshot of TB Aarogya Sathi patient interface)



## Bureaucracy Interface

Access to Nikshay Dashboards and monthly Performance Reports to monitor performance of National TB Elimination Programme in their geographies. Integration with National and State level Dashboards like DISHA, eTaal, Gujarat MIS, UP MIS for comprehensive and seamless monitoring of NTEP along with other programmes (snapshot of TB Index Dashboard and Monthly Automated Reports)

## Staff Interface

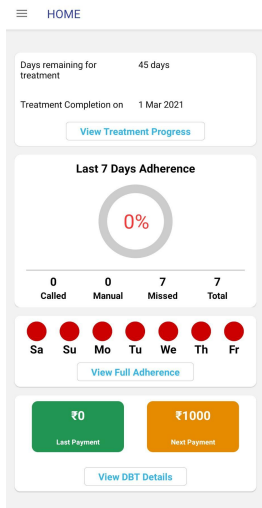
A dedicated application for programme staff and healthcare workers enabling ~55,000 users for notification of TB cases, monitoring of treatment progress, visit to the households and payment of benefits under social support schemes in addition to providing access to reports and dashboard for assessing overall progress (snapshot of Nikshay Staff app)

# A 360° Impact View

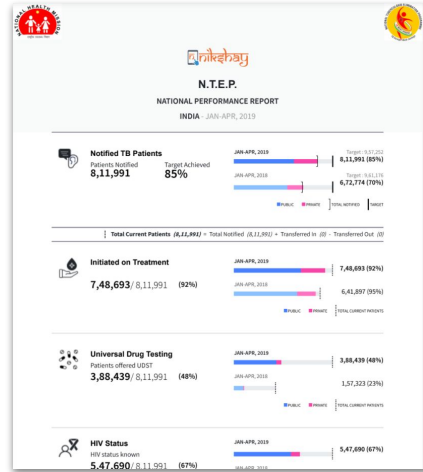
सम्पूर्ण स्वास्थ्य is designed to work effectively for the three key stakeholders



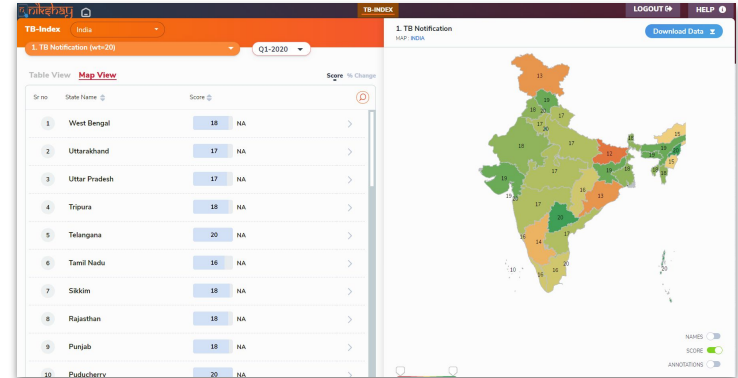
## Beneficiary Interface



## Staff Interface



## Bureaucracy Interface



# Testimonials



**Dr Harsh Vardhan** Health Minister, India

I'm also very happy to announce that a mobile application, '**TB Aarogya Saathi**', has been developed for patients, giving them access to critical information on TB services, such as treatment updates, nutrition and entitlements among others. To motivate states to become 'TB free' we've initiated a sub-national certification of states to recognise their efforts.



**Bill Gates** Co-chair, BMGF

The 99DOTs pilot project... is based on using mobile technology and worked very well in India.



**J. P. Nadda** Union Health Minister, India

Launching 99DOTS for TBHIV patients, World TB Day



**Satya Nadella** CEO, Microsoft

One of the things that was really pleasing for me to see was, we had worked for a long time on essentially a medical adherence technology at the lowest cost using essentially someone calling you and messaging you on a cell phone for TB. And we now see that... it was called the **99DOTS** program. But the thing that really warms my heart is to see that taken by a startup called **Everwell Health Solutions** and really scaling that out as a medical adherence technology for everyone.



# Research and Evidence

## 99DOTS Patient Acceptability

I will recommend 99DOTS to my family/friends for their TB treatment



The 99DOTS automated SMS reminders help me remember to take my pills



Using 99DOTS will help me adhere to and complete my treatment



I feel more connected to my healthcare provider using 99DOTS



99DOTS packaging makes it easy to use



Strongly Agree      Agree      Strongly Disagree

Report by KNCV - **DAT (99DOTS)** to support patients and health care workers in a rural setting - Evidence from Tanzania

96% providers reported reduced workload

99DOTS for tuberculosis treatment supervision in Uganda: Adherence rates and acceptability

“ The evidence also showed that when patients receiving treatment adherence interventions (e.g. different combinations of patient education, staff education, material support, psychological support, tracer and use of medication monitor) in conjunction with DOT or SAT, the treatment outcomes were significantly improved compared to DOT or SAT alone.”

**WHO DS-TB Guidelines, 2017**

“ As treatment supervision alone is not likely to be sufficient to ensure good TB treatment outcomes, additional treatment adherence interventions need to be provided.”

**WHO DS-TB Guidelines, 2017**

# Case study - 99Dots in Philippines for DS-TB

- ❖ The TB REACH project, which is funded by the Stop TB Partnership, supported drug-sensitive (DS) TB patients through 99DOTS. The project is the predecessor of the ASCENT project, funded and supported by Unitaid.
- ❖ 396 DS-TB patients were enrolled on 99DOTS between Dec 2018 and Jun 2020.
- ❖ The project implemented a SMS short-code based system instead of a call to a toll free no
- ❖ A successfully logged-in 3-digit code registered green on the Everwell Hub platform
- ❖ If a patient did not log their dose before 6pm, they would receive a reminder SMS
- ❖ HCWs monitored patient adherence via online dashboard and Android app, and also received daily SMS reports on nonadherent patients.
- ❖ Daily adherence rate for patients on 99DOTS was 93.41%.
- ❖ IsoScreen urinalysis tests confirmed the accuracy of 99DOTS in monitoring adherence in a sampling of patients



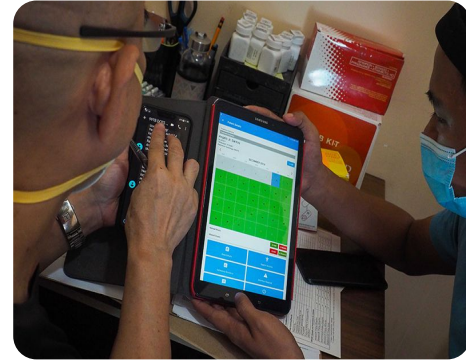
“

I felt relieved when nurse Anton mentioned that I didn't have to visit the clinic every day for him to see if I took my medicine. A visit every two weeks for drug refill was all that he asked of me. This meant I saved on transportation money. Unable to continue earning a living because of my illness, I had to budget the little amount I had saved.

**Juan (27)**

# Case study - Integrated DATs in Ukraine

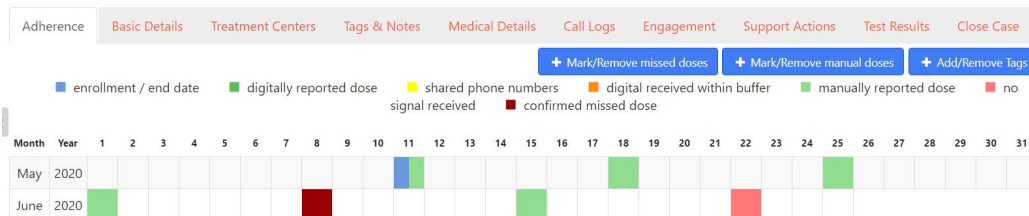
- ❖ To explore the practical aspects of using multiple Digital Adherence Technologies (DATs) in a local context in Ukraine, the W6 TB REACH project piloted the use of EvriMED boxes and Video-Observed Therapy (VOT) for TB patients
- ❖ PATH-Ukraine was the implementing partner, along with KNCV
- ❖ From November 2018 to December 2019, 902 MDR-TB patients, in high TB burden regions in southern Ukraine were enrolled in this program.
- ❖ The successful outcomes, and patient acceptance of these technologies has now led to it being scaled up as part of the ASCENT project, funded by UNITAID and planned to run over 3 years, starting 2020 and will enroll 15000 patients in Ukraine.



This is so advanced yet simple; I believe my patients love it. The application is amazingly helpful and supportive to ensure patient adherence especially in this COVID-19 crisis. Without this app, it would not be possible to remind and track adherence.. ”

# Case study - Latent TB : 3 HP Regimen

- ❖ The 3HP regimen (targeted at LTBI patients and PHLIV) entails individuals to consume their medication once every week for 12 weeks
- ❖ The Hub is now designed to allow flexibility in dosing schedule and is the only solution that caters to the 3HP regimen at the moment.
- ❖ To reduce the burden of patients coming into clinic each week, patients on this regimen receive IVR check-ins and dosing reminder each week empowering the front end worker to know how patients health conditions on a real-time basis
- ❖ These check-ins ensure that front-end workers follow up with those patients who have checked-in negatively on priority and take necessary immediate measures
- ❖ Like our other projects, this solution also ensures that patients are kept engaged with dosing reminders pre and post dosing day
- ❖ Our pioneering efforts cater to 1700 patients in Uganda who are maintaining an average adherence of XX%



“ I see the task lists as soon as I get to work and follow up with patients who need immediate attention. This helps me provide differentiated care to all my patients  
**Lidiya (Pharmacy Technician)**

# Case study - Anti-Retroviral Therapy

- ❖ The Hub is the first of its kind ICT solution catering to address adherence related issues for PLHIV, implemented on a large scale
- ❖ The solution aims at assisting early habit formation - newly initiated HIV patients are enrolled on the Self Verified Adherence (SVA) program for the first 6 critical months of treatment
- ❖ The scale up of our successful pilot (average adherence: 82%) is set to cater to over 6500 PLHIV in India across 40 ART centers and is in association with JHU and NACO
- ❖ To ensure PLHIVs are closely monitored, the Hub has integrated with the national AIDS helpline who are alerted for follow ups when doses are missed as per protocol



“

“No one at home knows my HIV status, so I feel cared for when I receive a call from the counsellor as soon as I miss taking a dose.” -

**PLHIV on 99DOTS - SVA**  
(anonymous)



# Founding Team



Andrew Cross

Andrew Cross is the CEO and co-founder of Everwell

Andrew leads the organizational vision and operations of the company and engages with global partners on deploying Everwell's solutions for both adherence and broader ICT support. Before founding Everwell, Andrew worked at Microsoft Research India for five years, focusing on developing technology in support of health, education, and other social sectors. Andrew earned a BS in Electrical Engineering from the University of Texas at Austin, and an MPhil in Engineering for Sustainable Development from the University of Cambridge.



Bill Thies

Bill Thies is the Chairman and co-founder of Everwell.

Bill is also a Senior Principal Researcher at Microsoft Research, where he works on using technology to positively impact low-income communities (a field known as ICTD). Bill's research has resulted in various awards (including a MacArthur Fellowship) and has led to over 80 peer-reviewed publications. Bill received his B.S., M.Eng., and Ph.D. degrees from the Massachusetts Institute of Technology, where he studied programming languages and computer architecture.



Nakull Gupta

Nakull Gupta is the COO of Everwell and responsible for supporting its work across the board. Starting with 99DOTS, he has been at the forefront for building Everwell's technology solutions. Nakull is responsible for driving the Nikshay vision and interfacing with the leadership of the consortium of partners that interact with Nikshay across India.

Before joining Everwell, Nakull worked at Microsoft Research India for a few years and was a part of the team which created the 99DOTS Adherence solution. Nakull has done his Computer Engineering from BITS Pilani

# Everwell Values



# Awards & Recognition



Everwell has been awarded  
Semi-Finalist

**SKOCH Award 2020**



# Thank You!



An **ISO 27001 Certified** company

[www.everwell.org](http://www.everwell.org)

contact@everwell.org

