



Texas Health Trace Implementation Plan

Problem Statement

Texas is experiencing an unprecedented burden on its public health infrastructure due to the response needs of COVID-19. Public health approaches to COVID-19 disease response are varied and have been influenced by the authority and resource capacity of public health partners across the state, including Local Public Health Entities and the DSHS Public Health Regions. This variance in approach, while meeting local needs in the short-term, is not a long-term solution to disease management and outbreak detection.

The COVID-19 disease response presents challenges related to the coordination of case management and contact tracing, maintaining clear delineations of workload assignments and case ownership across jurisdictions, and ensuring that capacity exists across the state to meet the response needs of all COVID-19 cases.

To address the state's disease management needs at all levels of public health, Texas needs a unified approach to the COVID-19 disease response.

Solution

Texas Health Trace is a data management system that will allow for a coordinated statewide approach to the COVID-19 disease response, while taking into consideration the varied needs of the public and all levels of public health entity disease intervention.

This system is intended to supplement current processes with as little disruption as possible. A synergistic approach to data reporting will aid in providing the most current data to inform decision makers about the health and readiness statuses of jurisdictions across the state.

This will allow for more responsiveness from government officials in guiding Texans to a healthier approach to preventing the spread of disease.

Proposed Implementation

Texas Health Trace implementation was initiated on April 27, 2020 with a public-facing interface for self-assessment and self-reporting. Texas residents are encouraged to use the platform to assess their current level of risk and determine if they are currently displaying the symptoms and co-factors which elevate their possibility of having COVID-19.

With this interface, persons determined as high-risk through their assessments or who have received a positive lab result, are prompted to sign up within the secure, password-protected Texas Health Trace website and enter additional case related information not captured in the assessment. The public platform also allows for individuals to enter persons/locations they have been in contact with within the past 14 days or prior to the onset of the suspected or confirmed disease.

Public users are asked if they need support or resources from a public health entity regarding their "case." Upon entry of the self-report and related contacts (exposures), a "case" is created and the exposure information is saved and placed in a workflow for follow-up assigned to contact tracers. Contact tracers will attempt to contact/locate the exposed individuals and document risk factors, symptoms, and identify the risk mitigation plan most appropriate for that individual, based on their risks and symptoms being displayed.

On May 1st, a soft launch of the contact tracing platform was instituted. Due to the infancy of the system, and low volume of exposures identified, senior central office contact tracers started contacting persons identified as potentially exposed to COVID-19 within the Texas Health Trace system. As the contact tracers worked through the system, issues with workflow and usability of the platform were identified and changes were made to address these concerns.

Additional functionality and system corrections will occur in sprints. Sprints, are by definition, 2 weeks in length. Items identified for additional functionality include: outbreak detection, symptom monitoring through user portal/application, and geo-locating notification (perhaps outside of system). Additional functionality will be added as is prioritized by executive leadership. **PLEASE NOTE: DATES AND PRIORITIES ARE SUBJECT TO CHANGE.** Sprints are intended to add functionality to the system in a timed and structured format. Users will see changes to the system in quick succession and increased depth and usability of the system.

Sprint One: Expansion to Regional and Local Health Jurisdictions

Sprint one of Texas Health Trace was initiated on May 5, 2020. This sprint will address items identified within the self-checker tool, updating the risk assessment matrix, and a few items within the contact tracing interface.

Increased functionality will include the addition of jurisdictions and jurisdictional workflows. This sprint will be completed on May 15, 2020. This functionality will allow non-central office DSHS users, to include regional and local health entity staff, access the system for a more robust contact tracing documentation and communications with other jurisdictions, including the ability to re-assign contacts (or cases needing interviews) to central office overflow staff. Depending on jurisdictional capacities, the program will be able to decide on whether they are able to follow-up with the contacts or if they need assistance with notifying.

Sprint Two: Electronic Lab Reporting (ELR) Capacity

The second sprint, scheduled for May 29th, is proposed to include ELR ingestion. Currently, there no labs electronically imported into the system. This means that contact tracing activities are solely dictated by the volume of self-reported information, to later include manual entry from the local and regional partners. Electronically imported labs will allow for positive lab reports to be directly assigned to jurisdictions for follow-up.

Once the labs are assigned, local and regional contact tracers can perform original case interviews and document interview outcomes within the Texas Health Trace system. From those original interviews, the local and regional staff would also be able to enter in all the person's contacts (exposures) and congregate locations for the purposes of notification, at which point, the local/regional user can assign to one of their users or to a central office DSHS contact tracer.

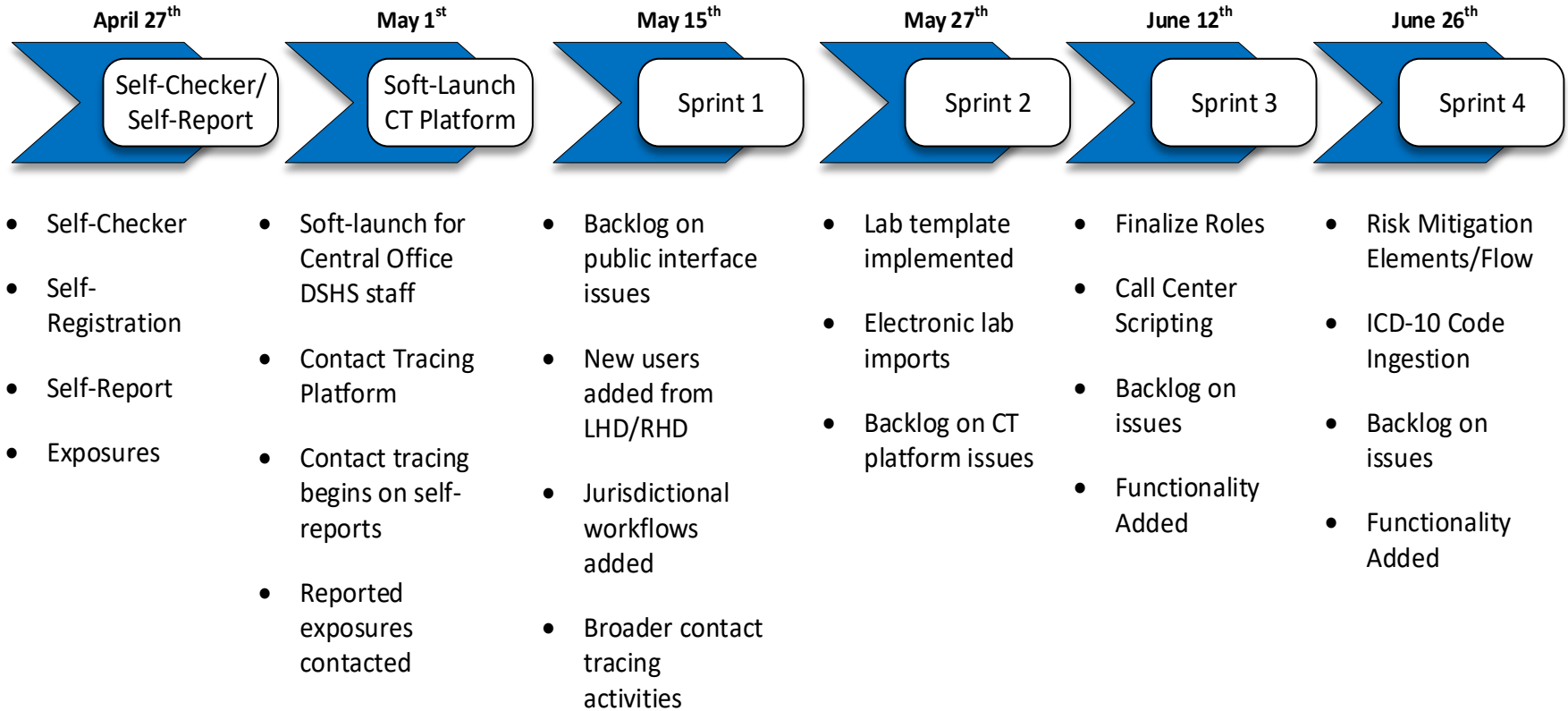
Sprint Three: Telephone Script for Workforce Development

In addition to addressing any issues identified within the contact tracing and lab portions of the platform, Sprint three will be defined by adding a phone script for contact tracers. This will help build a workforce with less experience to manage their conversations with persons at risk. This phone script will be an integrated algorithm to guide the contact tracer through the interviews.

Sprint Four: Risk Mitigation Planning, Workflows

Sprint four will include the development of risk mitigation planning and workflows. These plans will allow for the user to communicate with the local or regional jurisdiction when a person has been placed under self-isolation orders. It will be the responsibility of the jurisdiction to enforce the plan according to their local statutes or regulations.

Provisional Timeline*



*Dates and priorities are subject to change

Proposed Roadmap of Functionality

Item Name	Description	Phase*
User Platform		
Self-Checker	Web-based VCOVID Self-assessment for the public with Translation of Public Facing Self-Assessment/Self-Report Translation need: pick 2-3 common languages to allow for user selection which will require manual translation. Use another platform such as Google translate for less common language selections	Implemented
Self-Report	Web-based COVID self-report and LHD notification	Implemented
Phone Bank/Script Integration	Scripted interfaces for front line call center workers to help progress through complex calls	Sprint 3
Case Management	Contact tracing and mitigation/resource planning	Sprint 1
Risk Mitigation and Flow	Adding risk mitigation planning for persons who have confirmed/probable COVID-19 and their contacts. Local/Regional Health Departments will be notified of risk plans for persons in their area.	Sprint 4
Case Management Workload	Cases assignment and follow flows for case management. Prioritization and overflow capabilities based on workload caps set by the jurisdiction. Allow for automatic reassignment if workload cap is exceeded. Manual reassignment capabilities if local user needs to reassign	Sprint 1
Data Management		
Structured Data Export	Rational database translation adhoc and automated & ODBC preferred	TBD
In-System Analytics	Dashboard to report business metrics for monitoring, evaluation, and situational awareness	TBD
Outbreak Detection/Coordination	Time/Space incidence triggering and heat spot mapping corresponding to incidence of new disease	TBD
ELR Ingestion	Need ELR feed to trigger near-Realtime case, contact and outbreak detection activities	Sprint 2
Hospital Discharge Data Ingestion	Receives hospital discharge data	Sprint 4
ICD-10 Code Ingestion	Received ICD-10 codes indicative of new COVID-19 case	Sprint 4
Case Registry	If Case Management and ELR are integrated successfully, then creating a limited number of rules to calculate case def and report to CDC	TBD

Governor's Dashboard	Synergistic collection of data entered into the system for easy data extraction to support creation of the Governor's Dashboard (2x daily)	TBD
Registry Matching	Matching capabilities with existing systems such as eHARS, THISIS, NEDSS, Medicaid	TBD
Additional Functionality		
Geolocator Notification	Notifying persons who have been in close contact with someone diagnosed with COVID-19	TBD
GIS	Hot spot and location mapping for CI operational awareness	TBD
Symptoms Monitoring App	Monitored individuals continue to update symptoms autonomously through application without staff follow-up unless not entered. Triggers workflow if person does not log their symptoms	TBD
Testing Scheduler	Automate the scheduling of testing for probable and suspect cases	TBD
PSAP/911 Notification	Notification of emergency services of someone who is under monitoring measures	TBD

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