

<https://vaww.insider.va.gov/nst-new-tools-tell-the-covid-patient-story-and-provide-insights-to-care/>

NST: New tools tell the COVID Patient Story and provide Insights to care

National Surveillance Tool: COVID-19 Facility Detail
DEPARTMENT OF VETERANS AFFAIRS

NAME, PATIENT XXXX
Full Name L4

XX MALE
Age Sex

00/00/0000 00/00/0000
Admit Date Discharge Date

VA HOSPITAL
Facility

RACE OF PATIENT
Race & Ethnicity

Disposition (Mv)

- CLC
- ICU
- Inpatient; Not acute care
- Med/Surg

Diagnosis (Dx)

- Pneumonia
- Respiratory Failure
- Sepsis/Septic Shock

Medications (Rx)

- Antibiotic
- Anticoagulation
- Antivirals Dedicated
- Dexamethasone
- Paralytics
- Pressors
- Remdesivir
- Respiratory Anniect

Therapies (Tx)

- Acute Dialysis
- Chronic Dialysis
- Mech Vent
- Monoclonal Ab
- O2 Supplementation

Comorbidity

- Asthma
- CAN>95
- Cerebrovascular Accident
- Chronic Obstructive Pulm. Dz
- End Stage Renal Dz
- Ischemic Heart Dz

Timeline Chart | Timeline Grid | Movement Details | Labs

COVID-19 Labs

- 9 Completed
- 2 Pending
- 0 Canceled
- 0.58 Avg Collection to Result (day)

All COVID-Related Labs

- 11 Lab Count
- 5 COVID-19 Positive Labs

Patient Story is a timeline of a patient’s care experience – movements in a hospital, symptoms, diagnoses, lab data, medications, and therapies – showing a patient’s individual care history.

[VA’s National Surveillance Tool \(NST\)](#) was implemented in the early days of the pandemic and has become an invaluable tool for frontline staff and VHA leadership. The multi-use tool combines information from dozens of VA and outside agency data sources to inform decision-making in VA’s fight against COVID-19.

Since implementation, several updates were made to the NST to help VA frontline staff better understand their facility readiness from a strategic, operational and tactical perspective. Two recently added tools – Patient Story and Patient Insights – are powerful resources to battle the pandemic.

Patient Story is a timeline of a patient’s care experience – movements in a hospital, symptoms, diagnoses, lab data, medications, and therapies – showing a patient’s individual care history. “Patient Story answers the question ‘What’s

happening with our patients with COVID-19?’ and ‘What does a patient’s trajectory look like over time?’. It is shown in a beautiful timeline representation for a complete, detailed view of those answers,” explained Dr. Tami Box, Deputy Executive Director of Analytics and Performance Integration (API), VHA Office of Quality and Patient Safety. In addition to a COVID-19 patient’s basic information, such as age and sex, VA staff can see a patient’s diagnosed conditions, such as pneumonia and respiratory failure, time spent in the ICU and medications they were prescribed.

Patient Insights takes a higher-level view serving as an investigative tool to examine the characteristics of groups of patients and their COVID-19 care over time. Within this view, VA staff can build their own patient cohort report to study patterns and trends in the care of patients with COVID-19. “Here, I can see all the ICU patients in a specific facility and what has happened to them as a group. It really shows the impact over time of certain restrictions, medications and therapies in mitigating the disease,” Dr. Box said. VA staff can view how often specific medications were administered, the frequency and type of symptoms experienced, and even comorbidities of a selected group of patients during a specific period.



Patient Insights takes a higher-level view serving as an investigative tool to examine the characteristics of groups of patients and their COVID-19 care over time. Within this view, VA staff can build their own patient cohort report to study patterns and trends in the care of patients with COVID-19.

Dr. Makoto Jones, Director of [Biosurveillance, Antimicrobial Stewardship and Infection Control](#) (BASIC), was instrumental in developing the NST. He said the goal is for these dynamic tool views to encourage investigation and learning from

patient-specific data. Access to these tools is restricted because of the level of patient specific information, however employees can request permission for access on an as-needed basis.

“We have learned some answers to common questions, such as what therapies patients need and what happens to them. But most of these questions came initially from leadership. Our hope is that by having broader access to chart-level data, more VA staff can begin to recognize patterns that help them make better decisions over time,” Dr. Jones explained.

Dr. Jones said Patient Story and Patient Insights can help VA care providers identify trends in treatments and patient movement, including implementation and de-implementation of medications and the impact on the length of hospital stays.

“We were worried in the beginning of the pandemic about bed availability. Our capacity has improved over time and we began taking care of people faster,” Jones said. “During surges knowing when and where resources are needed helps our staff and facilities to triage and determine treatment.”

Jones and others involved with the development of the NST tool acknowledge that providing health care during a pandemic makes it difficult to see the forest for the trees and develop systematic approaches and best practices in care and treatment. COVID “hot spots” created unanticipated escalations of care and shortages of resources and supplies. “These tools give staff a chance to cross-check the data that was captured with what actually happened in a particular facility and course correct if needed,” said Jones.

“Predicting the future is difficult, especially when staff are stressed, and resources limited. These tools take a step back in time, making it easier to see what happened. This view helps us develop protocols and policies that better anticipate our pain points and follow the science moving forward,” Jones explained.

The National Surveillance Tool is the result of a collaboration between VA, VHA, and the Office of Information Technology. It is led by the [Office of Quality and Patient Safety, Analytics and Performance Integration](#) division and VHA’s Healthcare Operations Center.

A public view of this powerful tool is available on the [VA COVID-19 National Summary webpage](#).

May 24, 2021|Categories: [Choose VA](#), [From Our Programs](#), [HR and the Employee Experience](#), [Modernization](#), [Transformation](#), [VA Health Care](#), [VA News](#), [Veterans Experience](#), [vha top story](#)|Tags: [BASIC](#), [biosurveillance](#), [covid-19](#), [covid-19 national summary](#), [decision-making](#), [infection control](#), [National Surveillance Tool](#), [NST](#), [Office of Quality and Patient Safety](#), [pandemic](#), [patient insights](#), [patient story](#), [stewardship](#)