National Association for Home Care & Hospice

HOME CARE & HOSPICE COVID-19 TOWN HALL

August 5, 2020

Visiting Nurse Service of New York:

David Rosales, Executive Vice President and Chief Strategy Officer | Andria Castellanos, Executive Vice President and Chief of Provider Services
Timothy Peng, Chief Data Analytics Officer | Susan Northover, Senior Vice President, Patient Care Services
Dan Lowenstein, Vice President, Government Affairs | Carlin Brickner, Director, Analytics | Naomi Shinoda, Manager, Data Science

COVID-19 Lessons Learned and Best Practices:
Safety Protocols, Staff Support, and Contact Tracing

August 5, 2020

Agenda

Topic	Presenters
Introductions **VNSNY Overview** **Status of VNSNY COVID-19 Response**	David Rosales, *EVP Chief Strategy Officer*
COVID care guidance and best practices: • VNSNY COVID Safety Protocols: 3 Pillars • Transition to virtual visits: lessons learned • Supporting our clinical workforce during COVID: the critical role of a Clinical Expertise Resource Team (CERT)	Andria Castellanos, *EVP Chief of Provider Services* Susan Northover, *SVP CHHA* Dan Lowenstein, *Vice President, Government Affairs*
Contact Tracing Tools and Tips: • Overview of VNSNY's Contact Tracing Tool, developed by our Analytics team using open-source code and available for use by any CHHA/Hospice	Tim Peng, *Chief Data Analytics Officer* Carlin Brickner, *Director, Analytics* Naomi Shinoda, *Manager, Data Science*
Q&A	

VNSNY at a Glance

We are the one of the nation's largest not-for-profit home and community-based health care organizations, serving New Yorkers for 127 years

Our Mission
To improve the health and well-being of people through high-quality, cost effective healthcare in the home and community

Our Vision
To be the leading payer and provider of integrated, cost effective home and community-based healthcare

Powerful Dualities of Capabilities

As a Provider
We bring 127 years of clinical expertise and experience

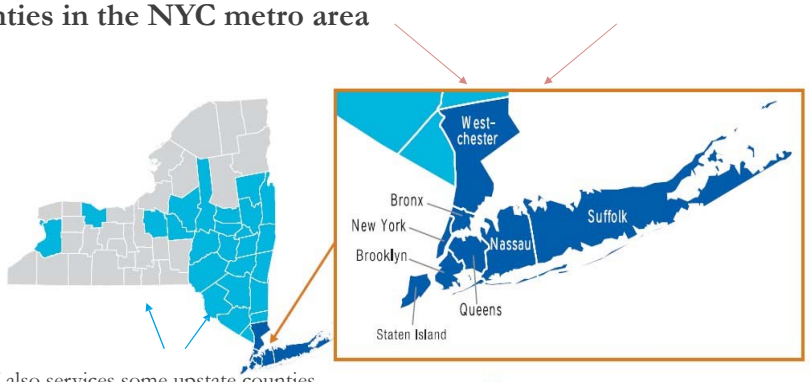
As a Health Plan
With deep understanding of managing and financing care for complex conditions

VNSNY by the Numbers

13,000	Employees, including: 1,500 nurses, 400 rehab therapists, 400 social workers, and 8,500 home health aids
44,000	Patient lives touched every day
50	Languages spoken by our staff members
$2+ BN	Annual revenues
$39M	Provided in 2019 in charitable care and community benefit programs to **under and un-insured individuals**

Where We Operate

VNSNY serves New York City, as well as the surrounding suburban counties in the NYC metro area



VNSNY also services some upstate counties through its Medicaid Managed Long Term Care ('nursing home without walls) program

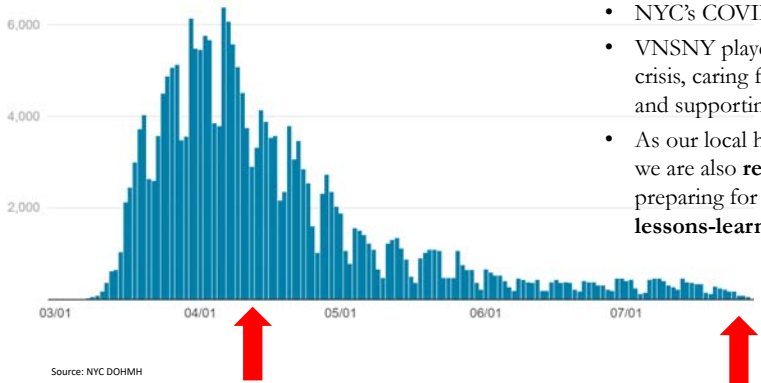
VNSNY Home Care and VNSNY CHOICE Health Plans

VNSNY CHOICE Health Plans Other Approved Counties

Availability of different VNSNY CHOICE Health Plans varies by county. Visit www.vnsnychoice.org for specific information on availability.

A lot has changed since our last NAHC COVID Town Hall

New York City: Number of Confirmed Cases Over Time



Source: NYC DOHMH

- NYC's COVID epidemic **peaked in early April**
- VNSNY played an important role at the front lines of the crisis, caring for over **2,500 COVID-positive patients** and supporting our local hospital partners
- As our local healthcare system begins to return to normal, we are also **returning to normal operations**, and preparing for a **possible second wave**, incorporating our **lessons-learned**

April 15th
VNSNY Presented at NAHC COVID Town Hall

August 5th
Today's Town Hall

Part 1:
COVID care guidance and best practices

- VNSNY COVID Safety Protocols: 3 Pillars
- Transition to virtual visits: lessons learned
- Supporting our clinical workforce during COVID: the critical role of a Clinical Expertise Resource Team (CERT)

VNSNY COVID Safety Protocols Today: 3 Pillars

1. PPE Protocols

Universal Protocols for *all* patients

- **PPE:**
  - **Surgical mask**
  - **Face shield or goggles**
  - **Gloves**
- **Face-coverings** for patients and caregivers
- In the home, **distance** (> 6 ft.) maintained from patient/caregiver, as possible, when not providing direct care

ENHANCED PPE Protocols

- If Patient or household member is **COVID-positive/symptomatic**
- And/or for wound care or other procedures involving sprays or splashes
- **PPE: Universal PPE (above) + N95 respirator and gown**

2. Staff/Patient Screening

- **All clinicians** required to perform a self-assessment of COVID status/symptoms prior to visiting patients
- CHHA and Hospice **patients** are screened:
  - Before the initiation of care to identify if a patient has positive testing or symptomology.
  - Prior to each in-person professional encounter, by phone prior to entering the home

3. Contact Tracing

- **If a VNSNY clinician tests positive** or is symptomatic, all clinicians and patients with whom that clinician had contact within the three-day period prior to the staff being tested or becoming symptomatic or are notified.
- **If a patient tests positive** or is symptomatic, all clinicians who had contact within the three-day period prior to the patient being tested or becoming symptomatic are notified.

Transition to Virtual Care: Lessons Learned

- At the peak of the, VNSNY put in place emergency protocols allowing for the **substitution of in-person visits with virtually encounters** where clinically appropriate.
- This experience enabled VNSNY to **gain valuable insight** into:
  1. **Benefits** of virtual home health care
  2. **Requirements** for virtual care to be successful
  3. **Specific HHA clinical interventions that are best-suited to be delivered virtually**
- **By collaborating with the patient and the ordering provider**, VNSNY was able to develop a plan that met the needs and requests of the patient for an optimal clinical and patient experience.
- In partnership with NAHC, we are using this experience to **advocate for adequate reimbursement for virtual encounters** under the Medicare Home Health benefit

Transition to Virtual Care: Lessons Learned

- We observed that clinicians continued to determine, in **a great majority of instances, that in-person visits were required**.
  - Even at the peak of the crisis, virtual encounters represented a **small minority of encounters provided**, reaching a peak of 12% of total visits in the month of April 2020
- **The pattern of delivery for virtual visits appear to be distributed in balance with risk and clinical appropriateness**.
  - The distribution of virtual encounters, as a proportion of all visits, varied widely across the diagnosis-driven clinical groupings.
  - Patients who received the greatest proportion of visits virtually were in the **respiratory and behavioral health** clinical groups, at 30% and 28% respectively in April.
  - **Wound patients** had amongst the lowest proportion of virtual encounters, peaking at 7% in April

Virtual Care: Our Requirements

In order to ensure effective delivery of virtual care, we established certain requirements on the part of the patient and the ordering physician

- **Patient (and caregiver, if applicable) requirements**:
  - Agree and formally consent to participation in clinically appropriate virtual encounters;
  - Have ready access to the technology to conduct the virtual encounter (typically a smart phone or camera-enabled laptop);
  - Be self-directing; and
  - Be capable of using the virtual-visit technology, with minimal guidance or instruction from the HHA clinician.
- **Ordering physician requirements**:
  - Agree to incorporation of virtual encounters into the patient's comprehensive Plan of Care, where clinically appropriate. Any Plan of Care also included traditional in-person visits, as we believe in-person care is central to any home care delivery episode.

Virtual Care: Services Performed

Services that are typically amenable to virtual delivery would typically:

1. Require similar time to deliver virtually vs. in a home setting;
2. Allow for documentation of the same clinical milestones in the HHA's electronic medical record; and
3. Achieve the same clinical goal as if the encounter had been delivered in an in-home setting.

CAN be delivered virtually (examples):

- Medication Management & Instruction
- Disease Management & Instruction
- Pain Management
- Home Exercise Program Follow-up
- Hospital Avoidance Tactics
- Speech-Language Pathology
- Review Diet Modification
- Safety Instructions
- Wound Evaluation and Caregiver/Patient competency
- Social Work intervention and Behavioral Health Strategies

Better delivered in-person (examples):

- Start-of-Care Admissions
- Most Wound Care or Surgical Site Care
- Vital Sign Monitoring requiring in-person assessment
- Administration of Insulin and other Injectable Medications
- Oral or Tracheal Suctioning
- Catheter Care
- Initiation of Rehabilitation Services

Supporting our Clinicians: Clinical Expertise Response Team (CERT)

One week into the COVID crisis, VNSNY established a **Clinical Expertise Response Team (CERT),** staffed by RNs who were redeployed from other parts of the operation (7 days/week, 8am-5pm)

The CERT team has been critical to VNSNY's ability to support its distributed workforce during the pandemic. Key functions have included:

1. **Answering calls from field clinicians** with questions about COVID exposure and symptoms (for both the clinicians and their patients)
2. Responding to general inquiries about **PPE and other patient management protocols**
3. **Providing telephonic outreach** to VNSNY's personal care workers on the appropriate use of PPE in caring for the Covid-19 patient in the community (6,000 + calls)
4. **Developing education material and education videos** to proactively educate personal care workers on safe care in conjunction with PPE shipped to their homes
5. **Tracking and trending test results** for our staff entering SNF/ALF's (state requirement)
6. Tracking and trending staff **test results for staff returning to the workplace**
7. Developing extensive **analytical tools** to track and trend data
8. **Investigating and validating** any quality of care issues related to exposure or potential exposure to Covid-19 by the VNSNY staff

Part 2:

Contact Tracing Tools and Tips:

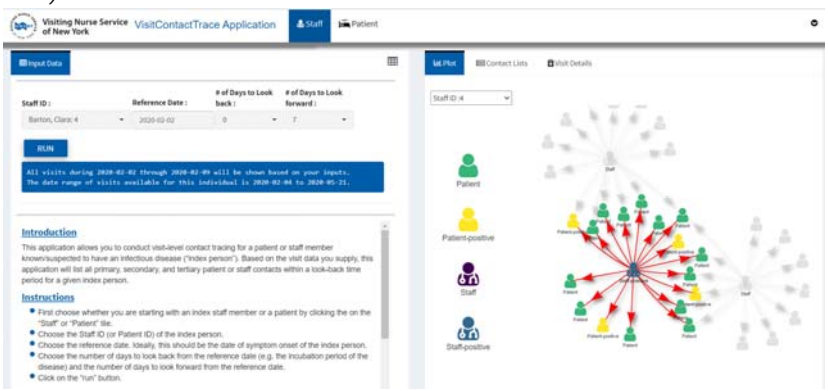
Overview of VNSNY's Contact Tracing Tool (and available to you!)

What is visit-based contact tracing?

- Traditional Contact Tracing
  - Identify all contacts of patients with confirmed infectious disease
    - notify contacts about potential exposure
    - monitor symptoms
    - control disease spread
  - In practice, much of the effort is spent constructing a dataset of contacts
- Visit-based Contact Tracing
  - Utilize visit (encounter) data to track visit-based contacts of visit staff and **home-bound** patients
  - Unique opportunity for community-based healthcare providers vs. facility-based healthcare settings

VisitContactTrace

- A contact tracing tool designed to consume visit or encounter data
  - Developed by VNSNY Data Science team using open-source code
  - Available for use by any Home Care or Hospice (any community-based healthcare)



Visit Data – who visited whom when?

patient_id	patient_name	staff_id	staff_name	visit_date
1	Adam A	18	Richards, Linda	3/11/2020
1	Adam A	11	Taylor, Susie King	5/11/2020
1	Adam A	18	Richards, Linda	5/13/2020
2	Bea B	6	Dix, Dorothea	4/1/2020
3	Chris C	7	Sanger, Margaret	2/7/2020
3	Chris C	7	Sanger, Margaret	2/21/2020
3	Chris C	7	Sanger, Margaret	2/23/2020
3	Chris C	7	Sanger, Margaret	2/28/2020
3	Chris C	12	Baumfree, Isabella	3/5/2020
4	David D	20	Maxwell, Anna Caroline	2/27/2020
4	David D	2	Wald, Lillian	2/29/2020
4	David D	2	Wald, Lillian	3/2/2020
4	David D	2	Wald, Lillian	3/8/2020
4	David D	2	Wald, Lillian	3/15/2020
4	David D	2	Wald, Lillian	3/22/2020
5	Elizabeth E	20	Maxwell, Anna Caroline	2/22/2020
5	Elizabeth E	20	Maxwell, Anna Caroline	3/1/2020

What can VisitContactTrace do?

Use visit data to:

- explore how infectious disease can spread within visit-based services if appropriate precautions are not in place
- discover the visit-based contacts of any patient or visit staff member whose disease status is known to the user

What VisitContactTrace can NOT do:

- suggest causality
- confirm disease transmission routes
- consider contacts from outside of the visit delivery model (e.g. contact with family members or friends)

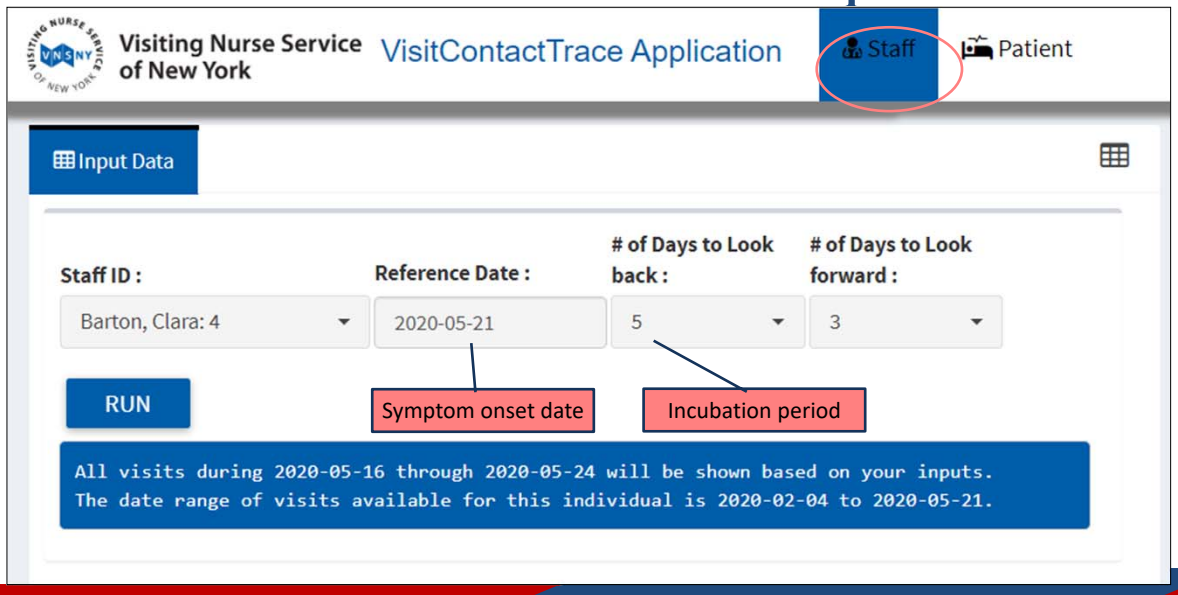
Getting Started with VisitContactTrace

VisitContactTrace was developed with the assumption that the end user of the application has already identified a patient or staff with suspected/confirmed infection

The end user must then identify whether they defining

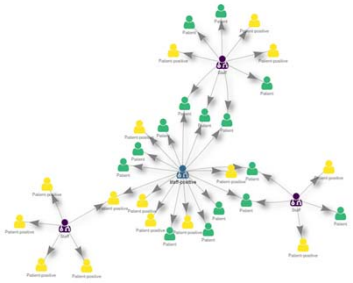
1. the **staff** as the index person, or
2. the **patient** as the index person

Scenario – visit staff tests positive



VisitContactTrace Outputs

1. Network plots



2. Contact Listings

(Primary, secondary, tertiary)

patient_id	visit_date	patient_name
1001	2020-05-18	Patient 1001
1001	2020-05-21	Patient 1001
1028	2020-05-18	Patient 1028
1028	2020-05-21	Patient 1028
1060	2020-05-16	Patient 1060
1063	2020-05-18	Patient 1063
1082	2020-05-17	Patient 1082
1094	2020-05-17	Patient 1094
1113	2020-05-19	Patient 1113
1117	2020-05-19	Patient 1117

3. Visit Details

staff_id	staff_name	staff_status	patient_id	patient_name	patient_status
4	Barton, Clara	positive	1060	Patient 1060	
4	Barton, Clara	positive	1128	Patient 1128	
4	Barton, Clara	positive	189	Patient 189	positive
4	Barton, Clara	positive	190	Patient 190	positive
4	Barton, Clara	positive	1082	Patient 1082	
4	Barton, Clara	positive	1094	Patient 1094	
4	Barton, Clara	positive	138	Patient 138	positive
4	Barton, Clara	positive	159	Patient 159	positive
4	Barton, Clara	positive	67	Patient 67	positive
4	Barton, Clara	positive	978	Patient 978	

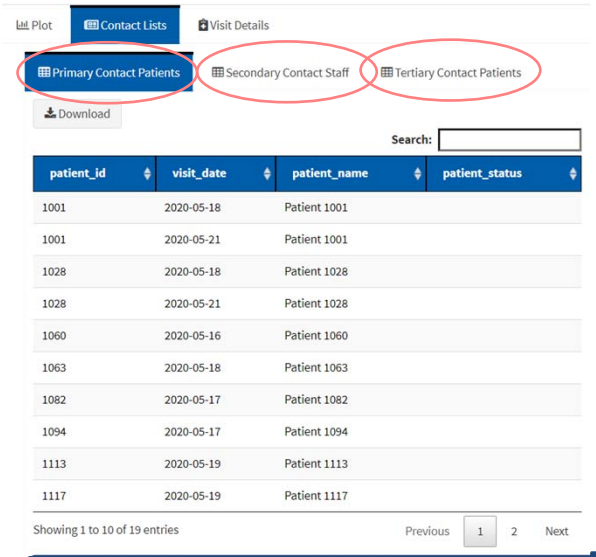
VisitContactTrace Output: Network plots

- Interactive plots
- Shows potential for disease spread
- Can search by patient or staff ID
- Hover over icons to see details such as patient/staff name

VisitContactTrace Output: Contact Listings

- Lists of people who may have been exposed to disease during the infectious period of the index person
- Can download as CSV file

Contact type	If staff member is index person…
Primary	The patients that the index staff member visited
Secondary	The staff members that visited the primary contact patients
Tertiary	The patients that were visited by the secondary contact staff members

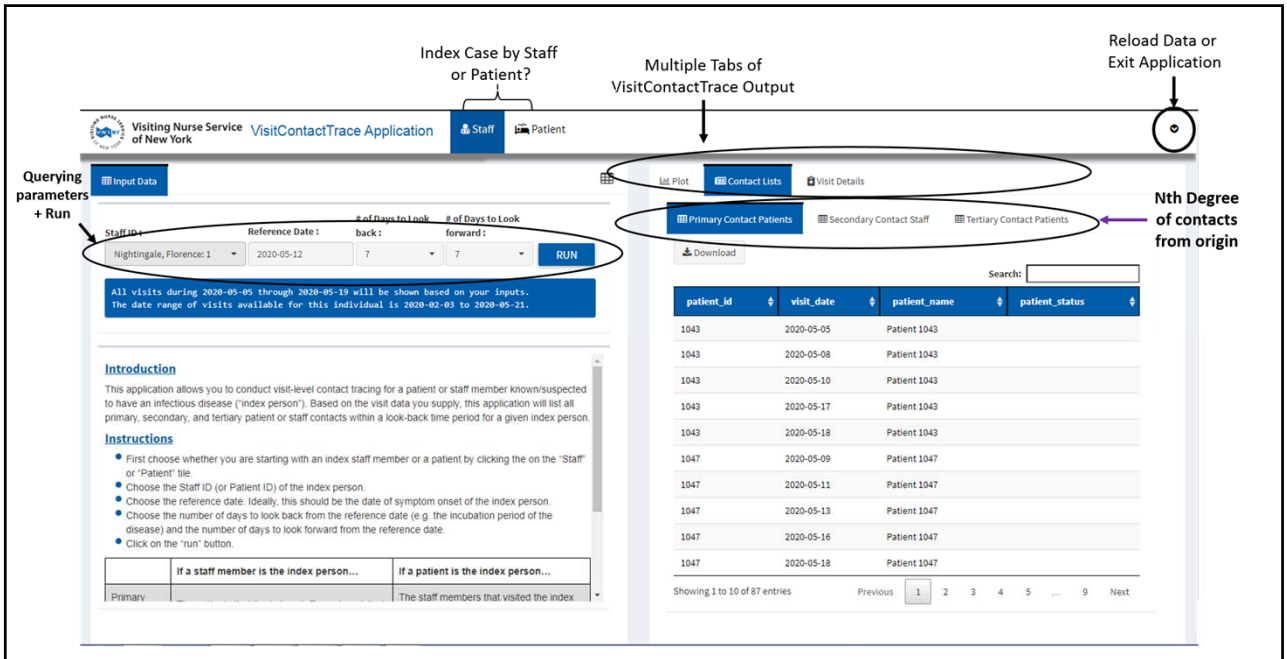


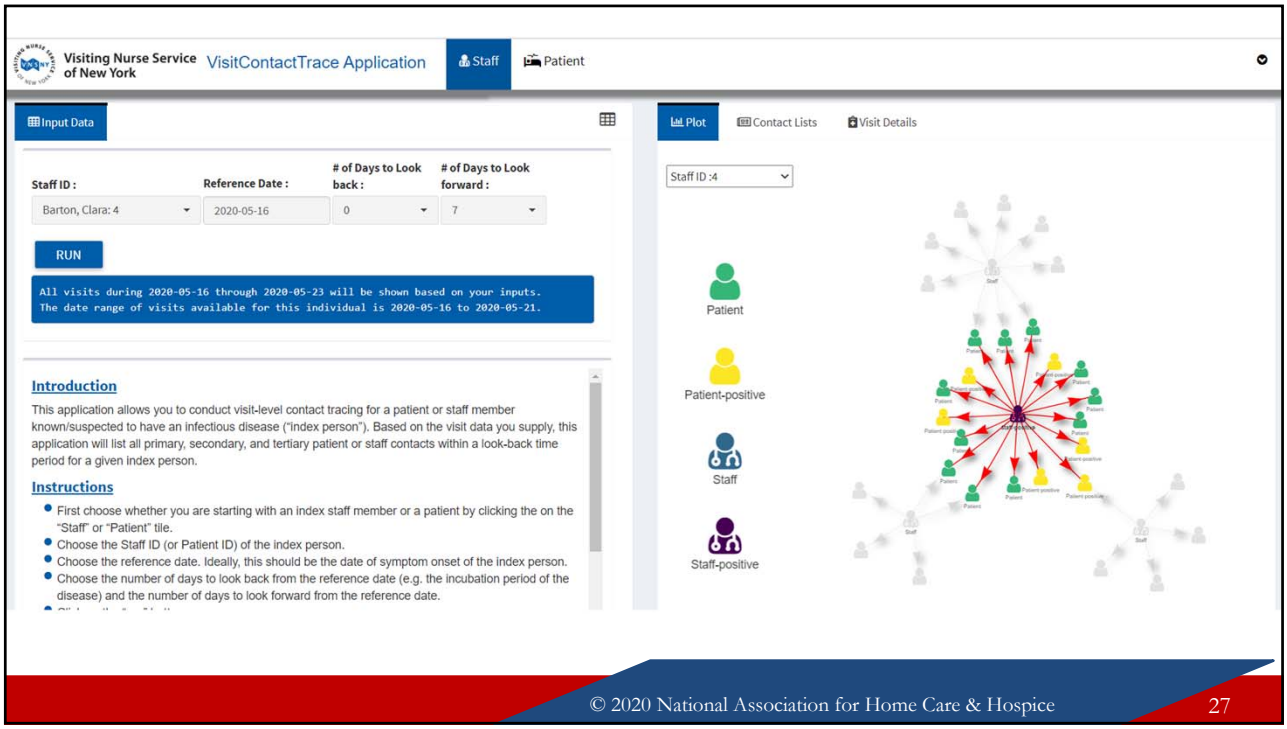
VisitContactTrace Output: Visit Details

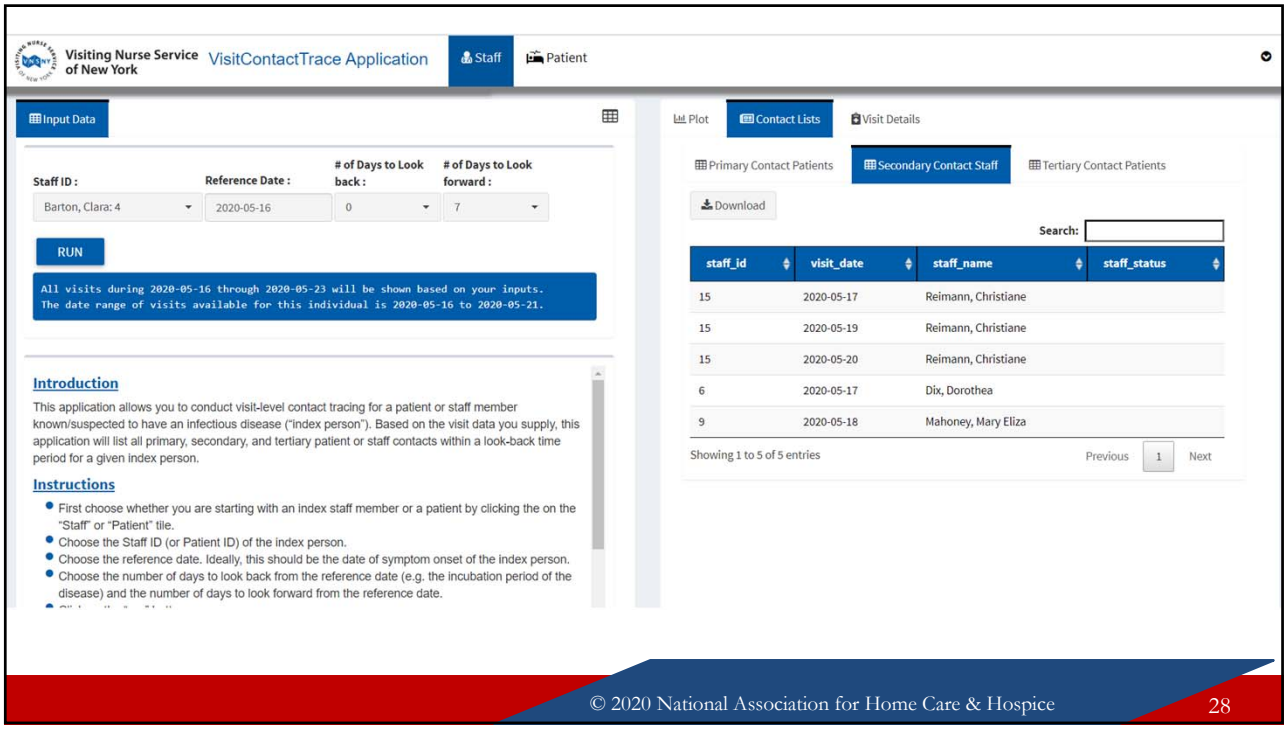
staff_id	staff_name	staff_status	patient_id	patient_name	patient_status	visit_date	contact_type
4	Barton, Clara	positive	1060	Patient 1060	NA	5/16/2020	Primary Contact
4	Barton, Clara	positive	1128	Patient 1128	NA	5/16/2020	Primary Contact
4	Barton, Clara	positive	189	Patient 189	positive	5/16/2020	Primary Contact
4	Barton, Clara	positive	190	Patient 190	positive	5/16/2020	Primary Contact
4	Barton, Clara	positive	1082	Patient 1082	NA	5/17/2020	Primary Contact
4	Barton, Clara	positive	1028	Patient 1028	NA	5/18/2020	Primary Contact
4	Barton, Clara	positive	1063	Patient 1063	NA	5/18/2020	Primary Contact
4	Barton, Clara	positive	1028	Patient 1028	NA	5/21/2020	Primary Contact
15	Reimann, Christiane	NA	1128	Patient 1128	NA	5/17/2020	Secondary Contact
6	Dix, Dorothea	NA	159	Patient 159	positive	5/17/2020	Secondary Contact
9	Mahoney, Mary Eliza	NA	1094	Patient 1094	NA	5/18/2020	Secondary Contact
15	Reimann, Christiane	NA	978	Patient 978	NA	5/19/2020	Secondary Contact
15	Reimann, Christiane	NA	1135	Patient 1135	NA	5/20/2020	Secondary Contact
15	Reimann, Christiane	NA	1014	Patient 1014	NA	5/17/2020	Tertiary Contact
6	Dix, Dorothea	NA	204	Patient 204	positive	5/17/2020	Tertiary Contact
15	Reimann, Christiane	NA	477	Patient 477	NA	5/17/2020	Tertiary Contact
15	Reimann, Christiane	NA	85	Patient 85	positive	5/17/2020	Tertiary Contact
9	Mahoney, Mary Eliza	NA	1012	Patient 1012	NA	5/18/2020	Tertiary Contact
9	Mahoney, Mary Eliza	NA	109	Patient 109	positive	5/18/2020	Tertiary Contact
9	Mahoney, Mary Eliza	NA	1117	Patient 1117	NA	5/18/2020	Tertiary Contact
6	Dix, Dorothea	NA	264	Patient 264	positive	5/18/2020	Tertiary Contact

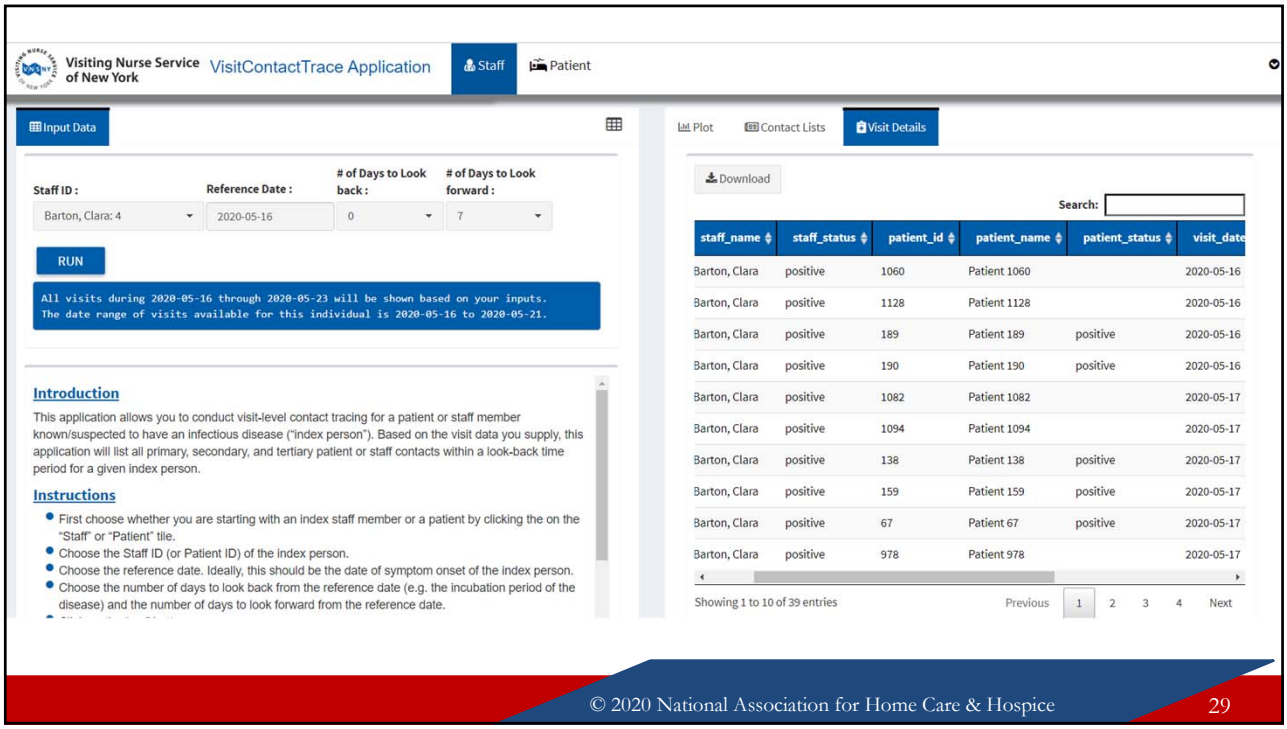
- All visit details associated with the data that you loaded
- Can download as CSV file

VisitContactTrace Screenshots







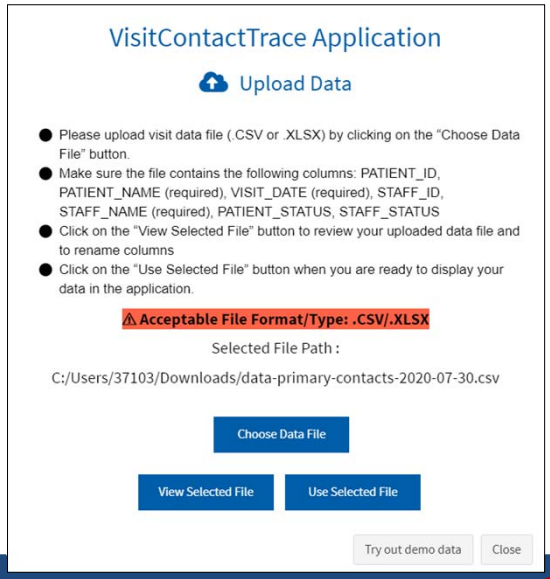


How to get started with VisitContactTrace

- Install R (open-source software) on computer
- Download/install VisitContactTrace R package
- Save your visit data in XLSX or CSV format
- Detailed instructions here:
  https://vnsny-bia.github.io/VisitContactTrace/

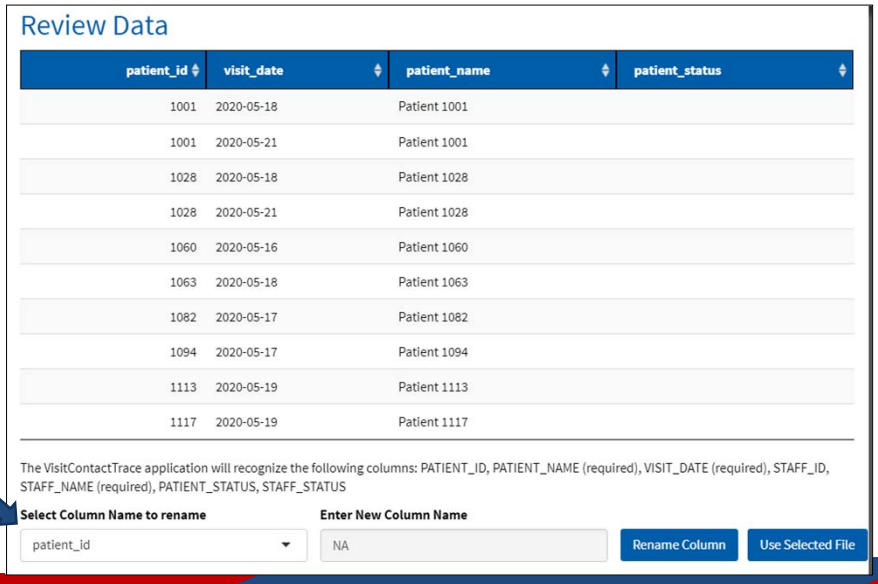
Using Your Own Data

- User-friendly data upload interface
  - Excel and csv formats supported
- "Try out demo data" feature to explore the application with a simulated contact dataset



Using Your Own Data

- Review your data
- Rename columns as needed directly in the interface



VisitContactTrace

- Please follow our GitHub repository for updates https://github.com/vnsny-bia/VisitContactTrace
- We would like to thank our BIA and many other VNSNY colleagues who participated in the testing and feature enhacnements of the application
- **VisitContactTrace development team**
  - Rushabh Patel (main developer)
  - Naomi Shinoda
  - Carlin Brickner

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Q & A

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NAHC COVID-19 Information and Resources

nahc.org/covid19
nahc.org/covid19faqs

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Join NAHC

NAHC is the leading trade association for home care and hospice professionals and we serve as the unified voice for the industry. Over the next ten years, the home care and hospice industry is expected to achieve unprecedented growth and NAHC will be there along the way to ensure your organization has the tools and resources needed to thrive.

Whether you're a home care provider, a hospice administrator, or a technology company that provides services for the industry, there's a place for you at NAHC.

Join your peers and fellow leaders as part of the NAHC community today! Learn more at http://nahc.org/join

Upcoming Events

2020 Home Care and Hospice Conference and Expo

October 18-20, 2020 | Tampa, FL

