



NYCOVID-19

Reflections from the Epicenter

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*1st Virtual Joint Meeting of NCI Board of Scientific Advisors
& National Cancer Advisory Board*

April 9, 2020



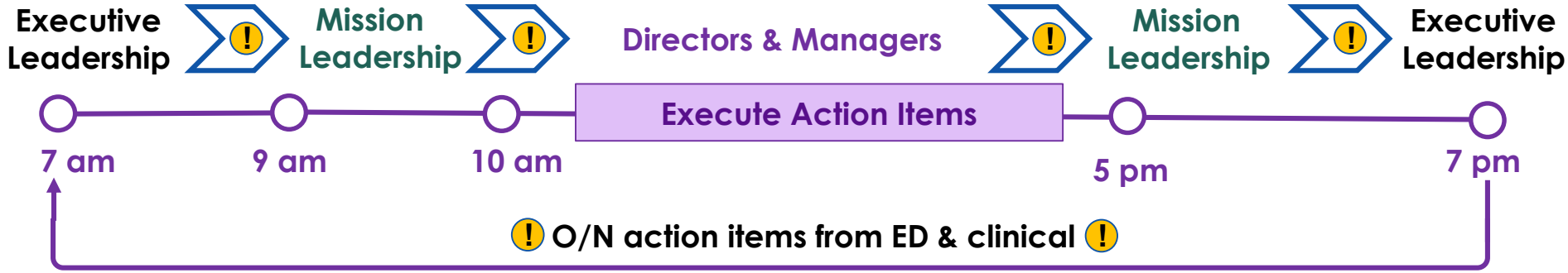
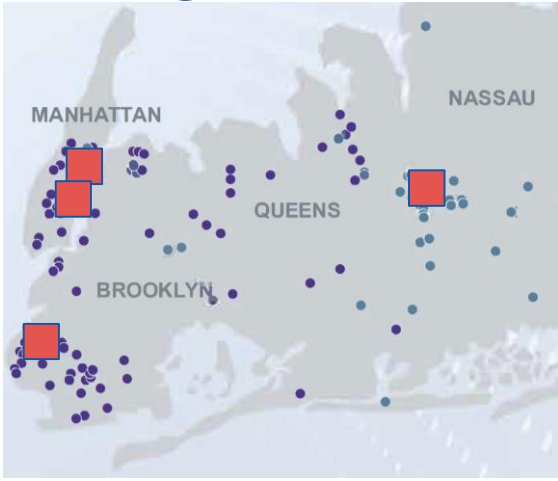
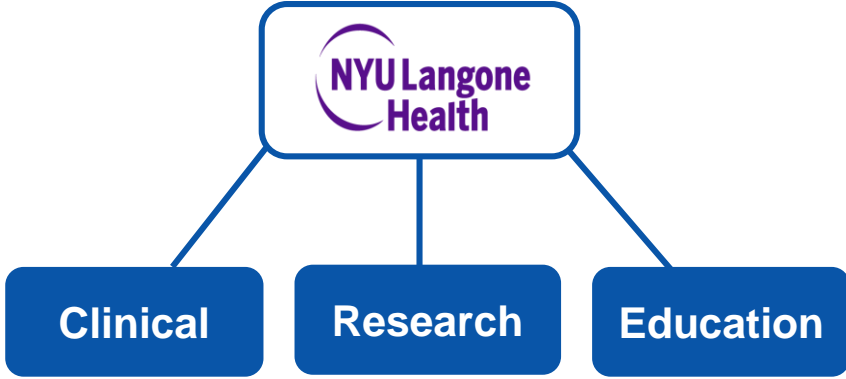
We thought we were prepared...



...but we were not

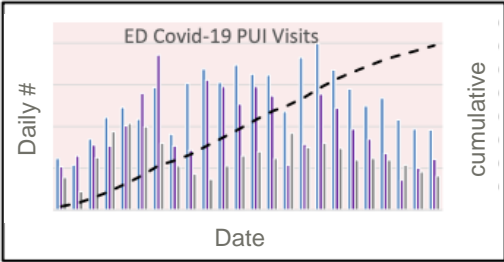


Coordination: Enterprise-wide Strategy

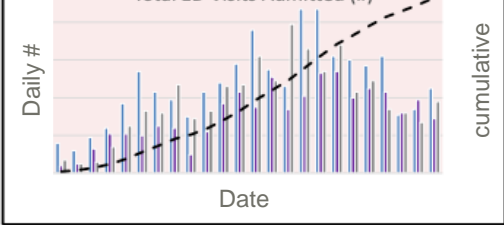


Data-driven Decision Making

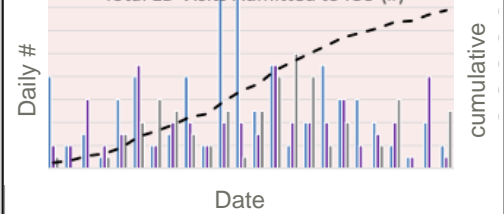
ED Patient Population



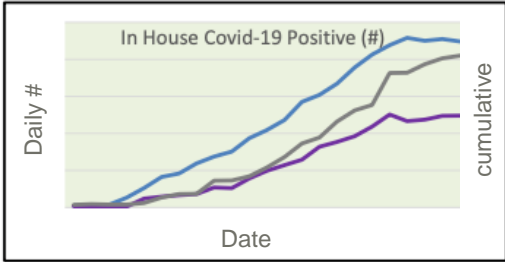
Total ED Visits Admitted (#)



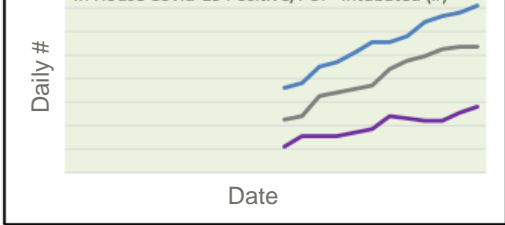
Total ED Visits Admitted to ICU (#)



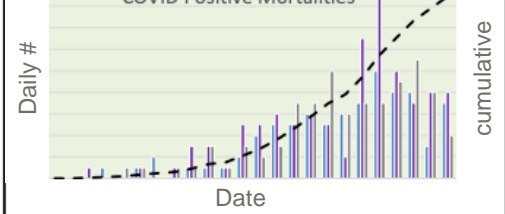
Onsite Population



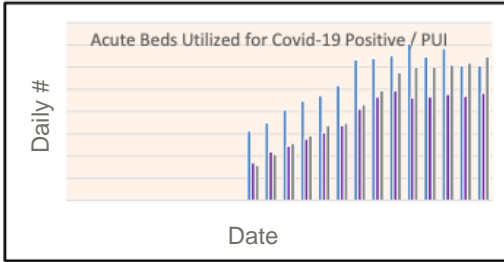
In House Covid-19 Positive/PUI - Intubated (#)



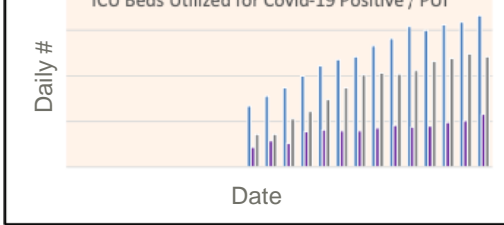
COVID Positive Mortalities



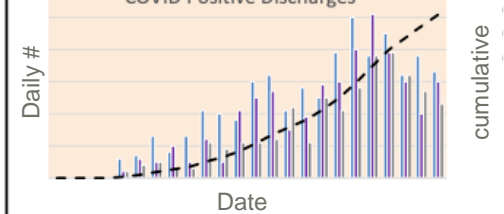
Capacity***



ICU Beds Utilized for Covid-19 Positive / PUI



COVID Positive Discharges



- █ Manhattan
- █ Brooklyn
- █ NYU Winthrop
- - - - Cumulative Total

Communication: Multiple Venues, All Constituents

E-MAIL NEWSLETTERS



VIRTUAL MEETINGS



30+ town halls,
info sessions,
office hours to
date

“HOTLINE”



24/7 rapid
response –
500+
Answers to-
date

RESEARCH INTRANET PORTAL

COVID-19 Resources on:

- General Policies & Guidelines
- Basic and Translational Research
- Clinical Research
- Funding & Grants
- Trainee Questions

~4,000+
unique visitors
to-date



Staff

Faculty



Trainees



Leaders



Genomic Epidemiology

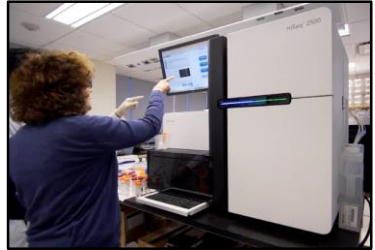
Swab
Remnant



Biospecimen
Repository



Genome
Technology Core

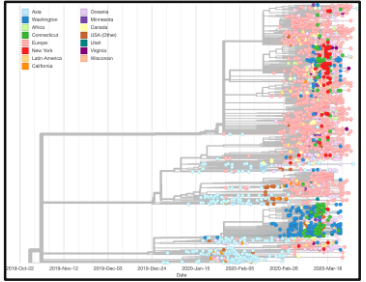


Automated pipeline to generate and analyze data

Nextstrain.org



Evolutionary
Tree



- Many chains of transmission – mostly Europe



The New York Times
Most New York Coronavirus Cases Came From Europe, Genomes Show

- Novel mutations with potential clinical implications

- Transmission in NYC started before 1st confirmed Covid-19 patient on Feb 29

Accelerated Launch of Clinical Trials

**>80
proposals
in ~3 weeks**

Prioritization & Approval
IRB and IND submissions
processed in days!

Research specimens collection in ED
(universal consent post-hoc)

32 Active Clinical Studies

Investigator-initiated Trials

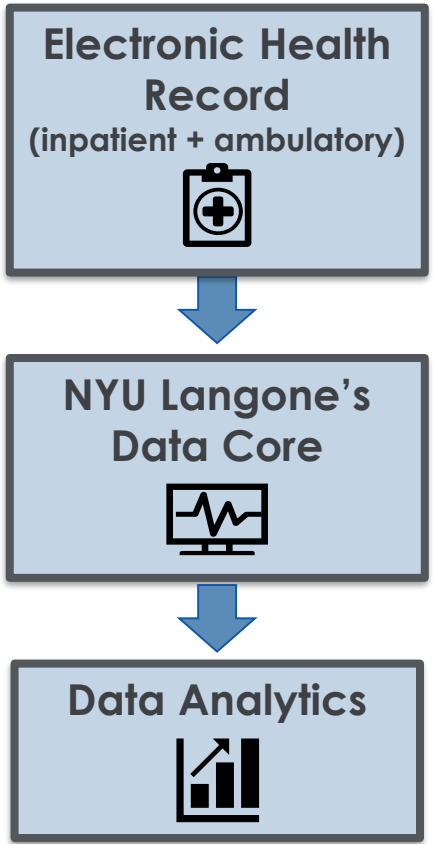
- 3 HCQ trials (RCT, PEP*, PrEP)
- Convalescent plasma*
- Anticoagulants (prophylactic vs full)
- Clazakizumab (anti IL6, complete)
- Colchicine*

Sponsored Trials

- Remdisivir (NIH/ NIAID)*
- Salirumab (Industry)*

*multi-site

Collaborative Data Science



Question:

Are hypertensive patients on ACE inhibitors (ACEI) or angiotensin receptor blockers (ARB) at increased risk for Covid-19?

Propensity matched analysis

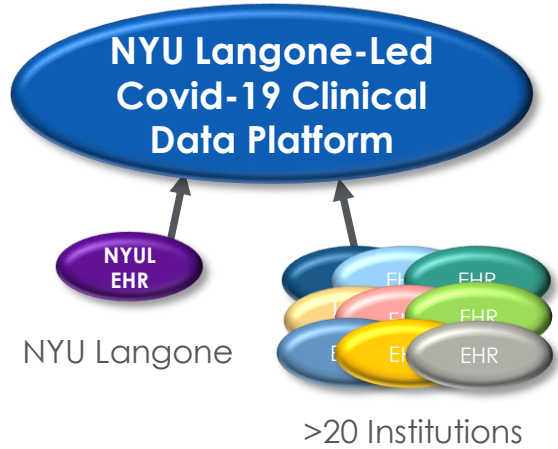
8,000 samples; 2,765 hypertensive patients; NYULH data

Outcomes

- Neither ACEI nor ARB increase risk of COVID-19+ test
- No relationship with severity of COVID-19 illness (ICU, mechanical ventilation, or death)

Next Steps:

- Extend to consortium of >20 institutions
- Address additional questions

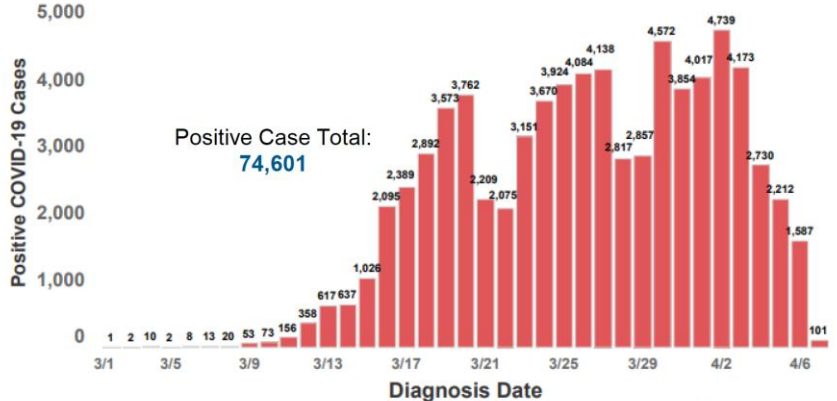


Light at the end of the tunnel?

Confirmed Cases in NYC 1800 HRS on 4/7/2020

New Positive Cases of COVID-19 in New York City

By Diagnosis Date (Due to delays in reporting, recent data are incomplete.)



Positive Case Total:
74,601

Source: NYC DOHMH

- NYS DOH began testing 2/28
- NYC DOHMH began testing 3/2
- NYC DOHMH began producing a Test Result Summary 3/9
- * Information about cases over the last week will be incomplete until the laboratories and hospitals report the results for people who were tested, which can take a few days to a week.

Restarting and avoiding setbacks

- Minimize risk of disease rebound
- Address lost research work/time
- Plan for financial challenges – institutionally and societally
- Leverage gains enabled by the crisis



Life after COVID-19

