

NIH Research on COVID-19

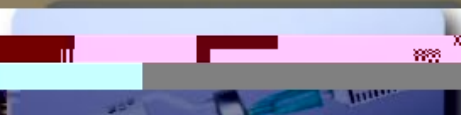


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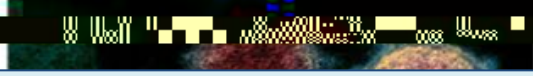
Therapeutics



Vaccines



Diagnosis



Research Programs

How to address an emerging problem:
recovery from SARS-CoV-2 infection?

Natural History



There are many ongoing NIH resources that can be leveraged to better understand COVID recovery

Electronic Health Records and Health Systems studies; 10 million+ collective participants. E.g.,

- National COVID Cohort Collaborative (N3C) (EHR-based COVID)
-

NINDS supported projects related to COVID + ME/CFS

NIH [NeuroCOVID](#) Project (at NYU Langone)

- Database will collect information from clinicians about COVID-19-related

Intramural studies addressing long term neurological symptoms associated with COVID-19

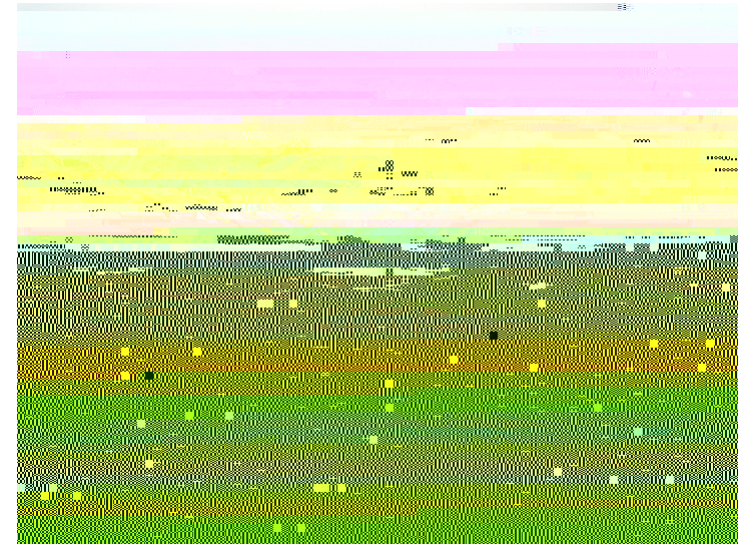
Natural History of Post-Coronavirus Disease 19 Convalescence

Avi Nath (NINDS), Brian Walitt (NINR)

To observe and describe the range of medical syndromes that occur following an acute COVID-19 infection

Study population: 1000 adults who are within six months of their convalescence from an acute COVID-19 infection

Starting with telephone interviews and internet-based questionnaires; following phases = in depth evaluation at CC; focus on identifying patients who overlap with ME/CFS; longitudinal follow up



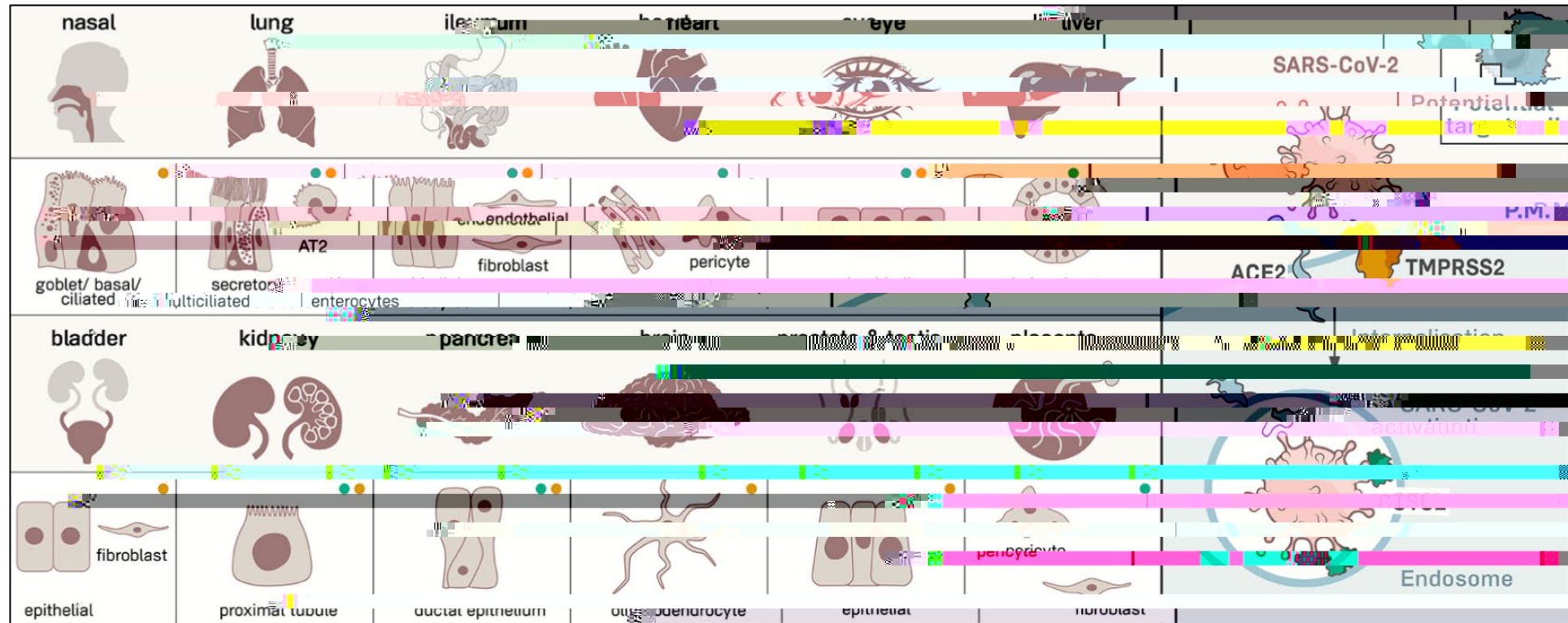
An Observational Study of Neurologic Function after COVID-19 Infection

Avi Nath (NINDS), Bryan Smith (NINDS)

To investigate structural abnormalities by brain MRI and other components of neurologic function in those with prior SARS-CoV-2 infection and persistent neurologic symptoms

Is SARS

COVID-19 Affects Multiple Organs



[The Scientist](#), April 2020

NIH Post Acute Sequelae of SARS-CoV-2 Infection (PASC) Initiative

NIH Post Acute Sequelae of SARS-CoV-2

NIH PASC Research

Goal

- ▶ Rapidly improve our **understanding** of and **ability to treat** and prevent PASC

Key Scientific Questions

- 1 What are the clinical spectrum of and biology underlying recovery from acute SARS-CoV-2 infection over time?
- 2 For those patients who do not fully recover, what is the incidence/prevalence, natural history, clinical spectrum, and underlying biology of this condition? Are there distinct phenotypes of patients who have prolonged symptoms or other sequelae?
- 3 Does SARS-CoV-2 infection initiate or promote the pathogenesis of conditions 0V0.005 Tc 0

Research Approach

1



Notes:

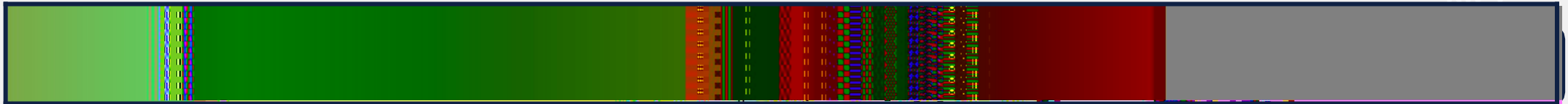
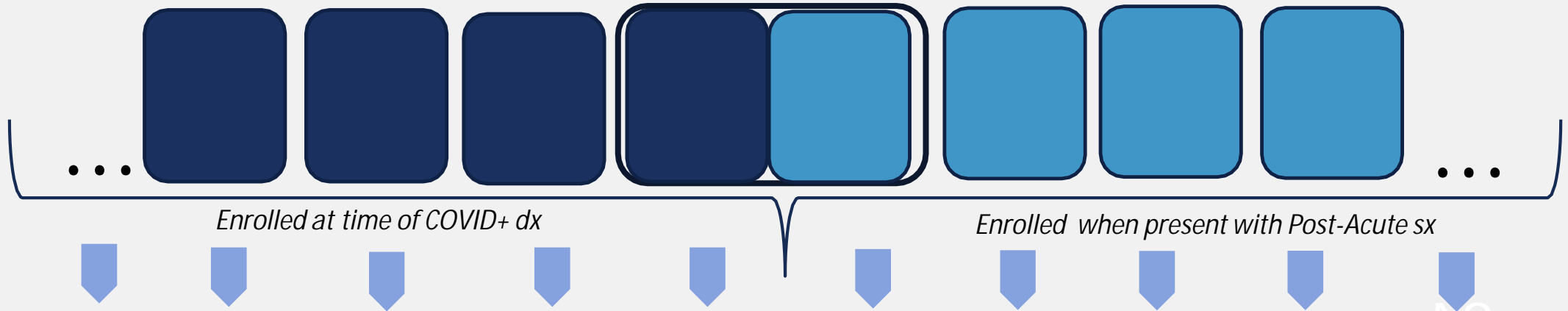
Includes
Peds Cohorts
Studies

Includes new
and leveraged
ongoing studies

Broad
Spectrum of
Recovery
Phenotypes

Individual
protocols
but
use of
core common
protocol
elements

SARS-CoV-2 Recovery Clinical Study



Clinical Characterization/Phenotyping

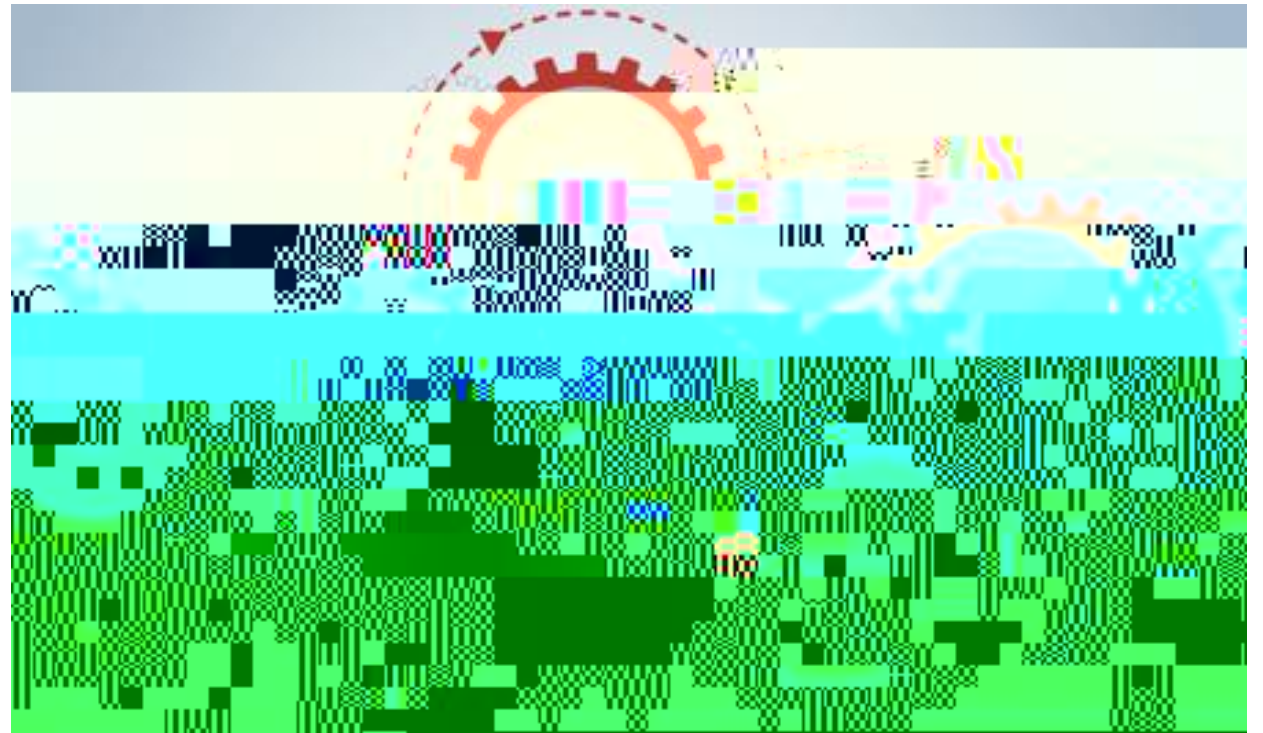
Streamlined core protocol elements (exam, labs, functional tests, imaging)
to capture spectrum of PASC

SARS-CoV-2 Recovery Cohort

PASC Initiative Components

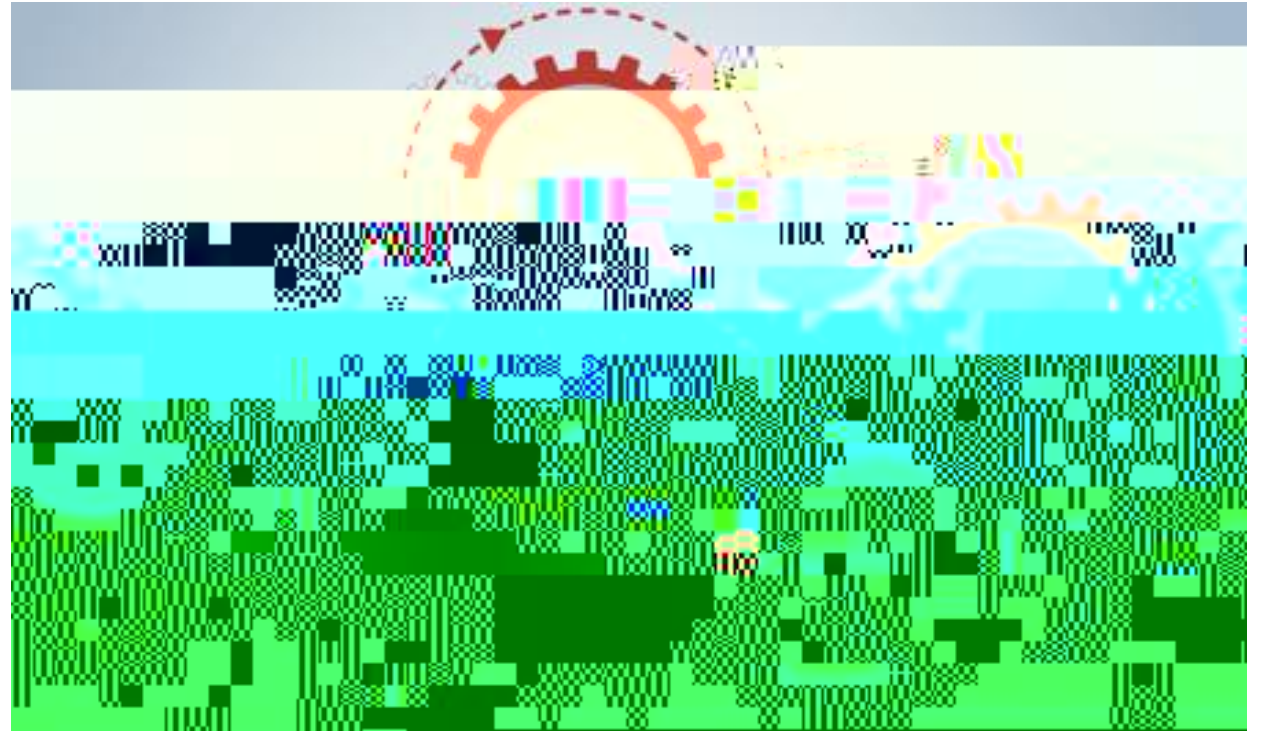
SARS -CoV -2 Recovery

Investigator Consortium



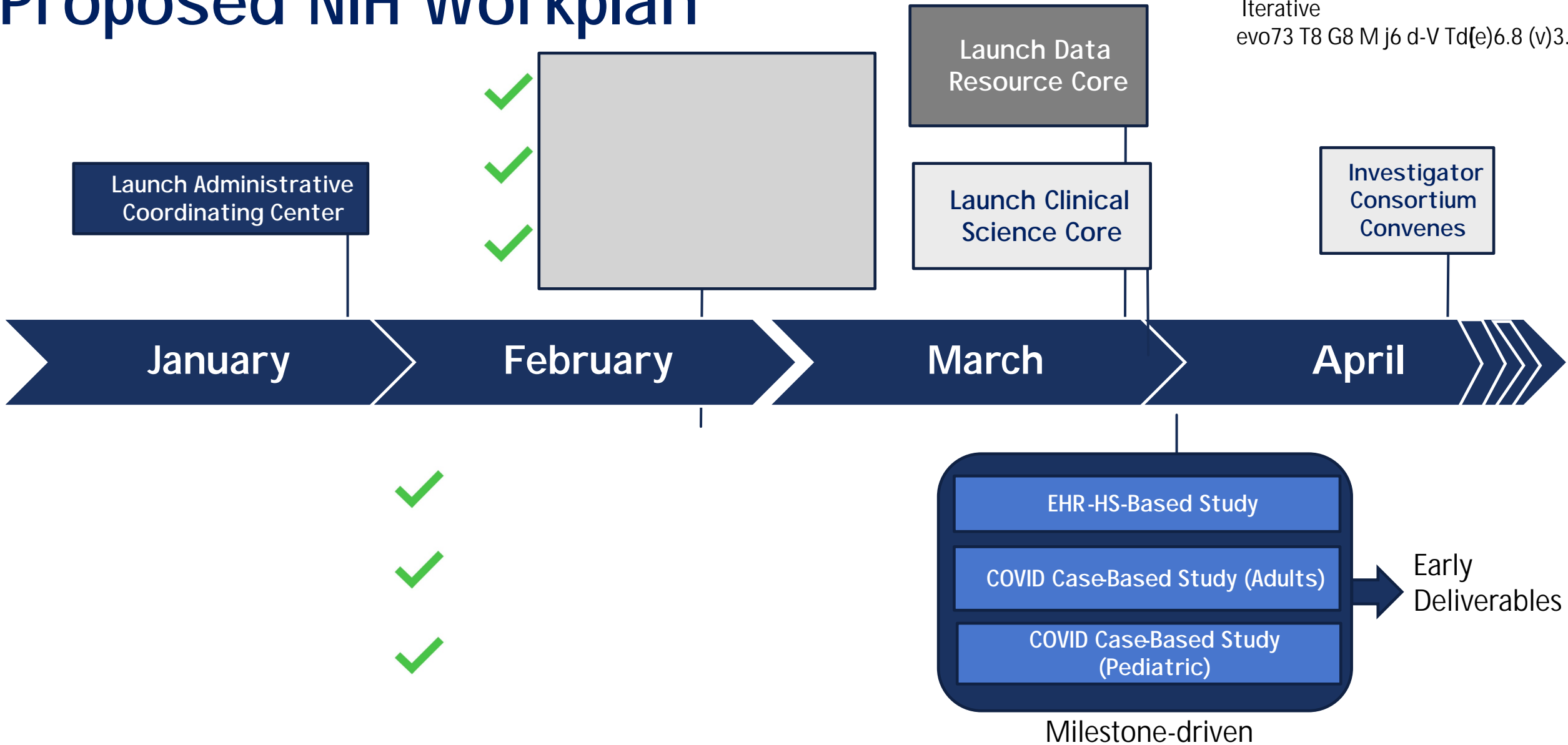
PASC Initiative Components

- The goals of the Recovery Cohort and Investigator Consortium will be supported by
2nd



Proposed NIH Workplan

Iterative
evo73 T8 G8 M j6 d-V Td(e)6.8 (v)3.



Discussion