STOP & SIG-COVID: Two Studies, One REDCap

Sarah Weber, Lizzy Ragan & Liz Duffy

Boston University School of Medicine

BOSTON UNIVERSITY

The STOP and SIG-COVID Studies

- Both studies look at the early COVID-19 surge (03-05/2020) in MA and SARS-CoV-2 infection among healthcare workers (HCW)
- STOP aims to look at risk factors associated with HCW infection and phylogenetics to identify intra-hospital clusters *(PI Karen Jacobson, Infectious Diseases)*
- SIG-COVID is a point seroprevalence study looking at SARS-CoV-2 antibody prevalence among HCW *(PI Yachana Kataria, Pathology)*
- Both studies performed SARS-CoV-2 serology as a study activity

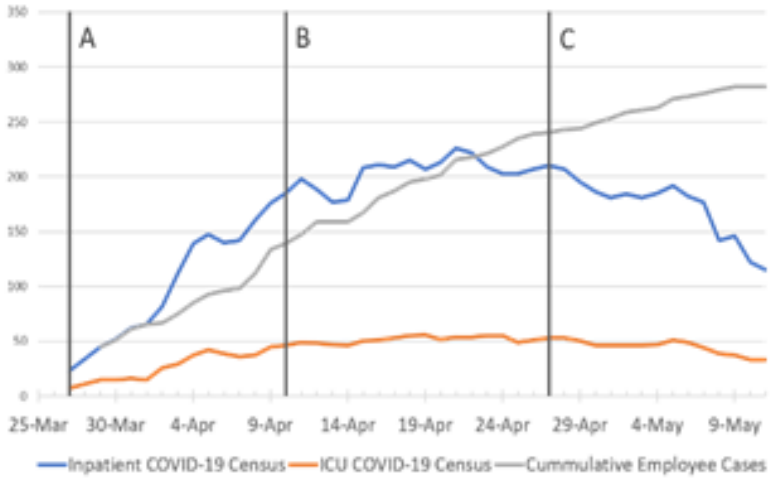
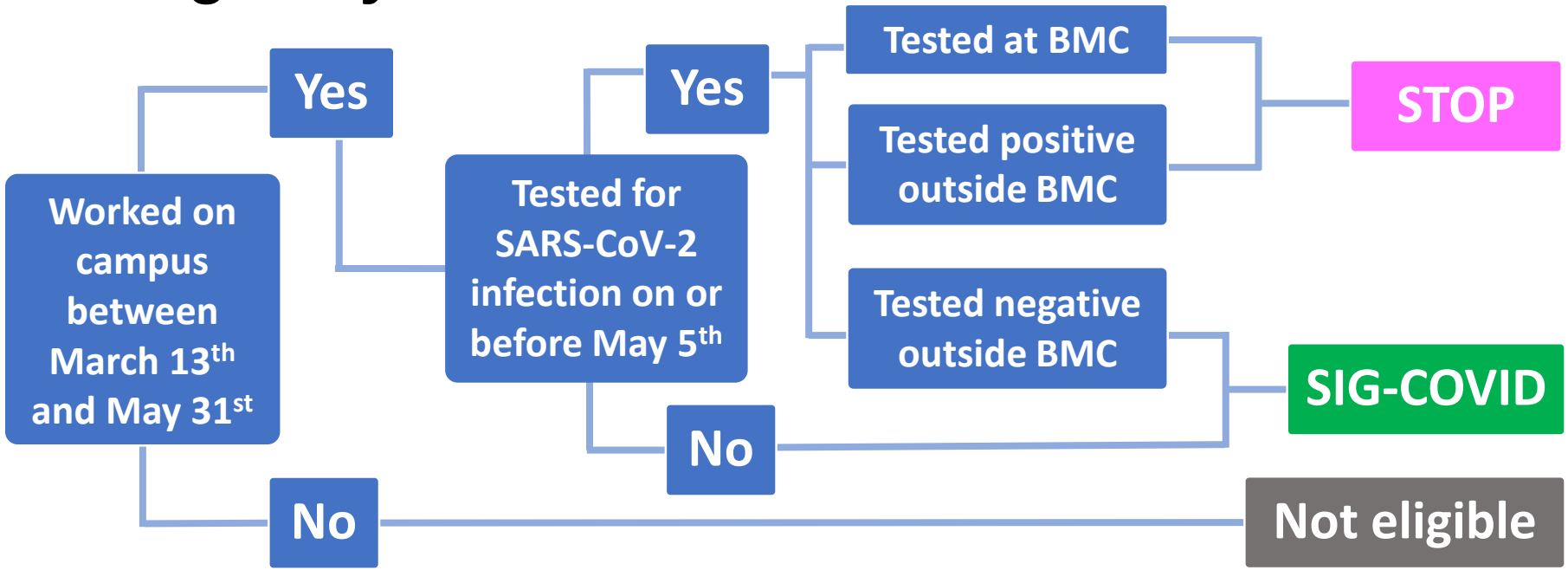


Figure 1. Boston Medical Center SARS-CoV-2 PCR positive COVID-19 Cases.

BOSTON UNIVERSITY

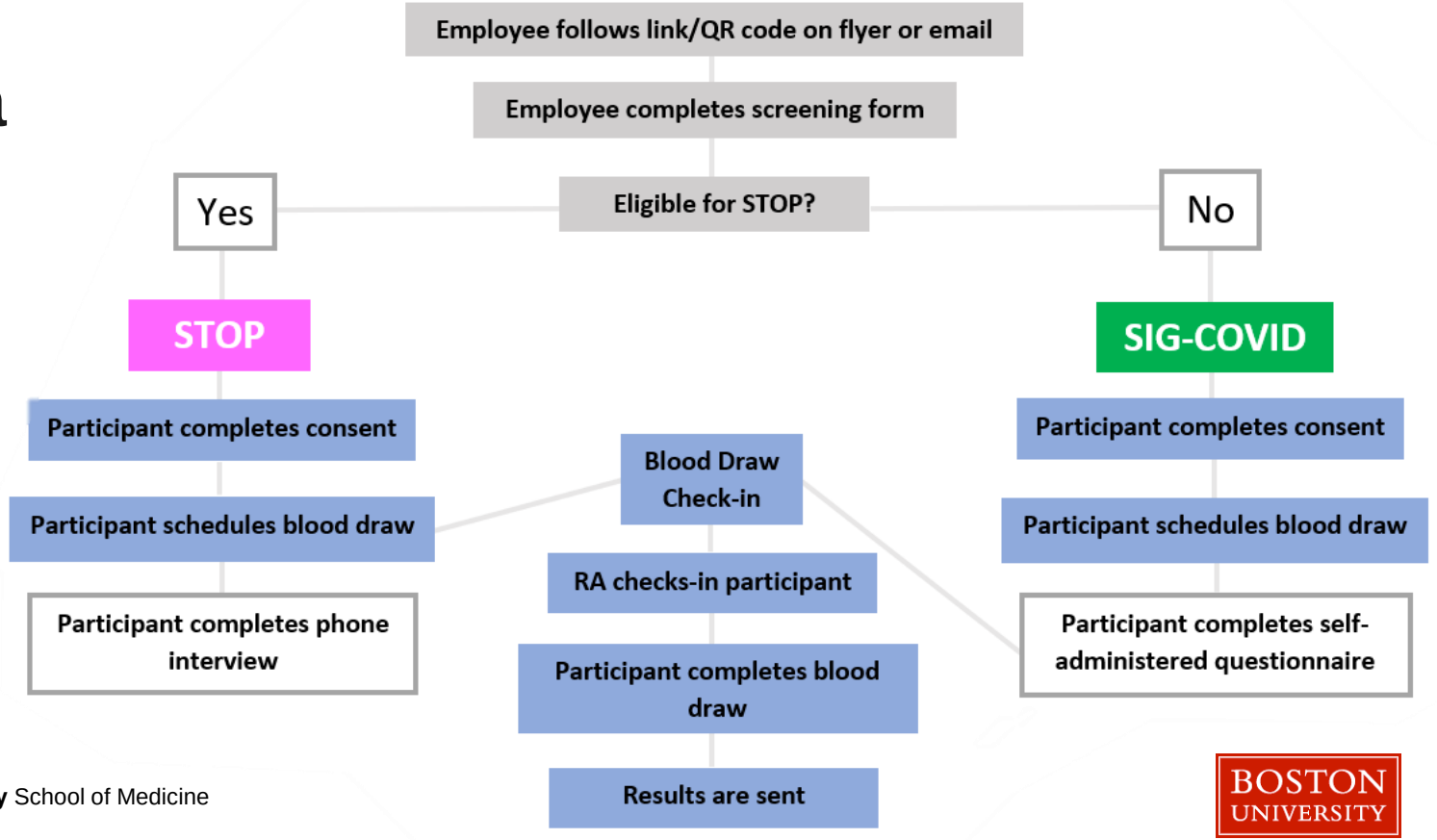
Eligibility Criteria



Why one REDCap project?

- Overlap in study population of interest
  - all STOP participants were eligible for SIG-COVID
- Reduced research burden on BMC employees
- Enabled co-recruitment (e.g., shared flyers, posters, etc.)
- Enabled co-screening (i.e., self-administered screening on REDCap)
- Enabled collaboration between two study teams and necessary data/results sharing
  - All STOP participants were also SIG-COVID participants, so SIG-COVID had access to STOP questionnaire data
- Shared phlebotomy station during two-week period

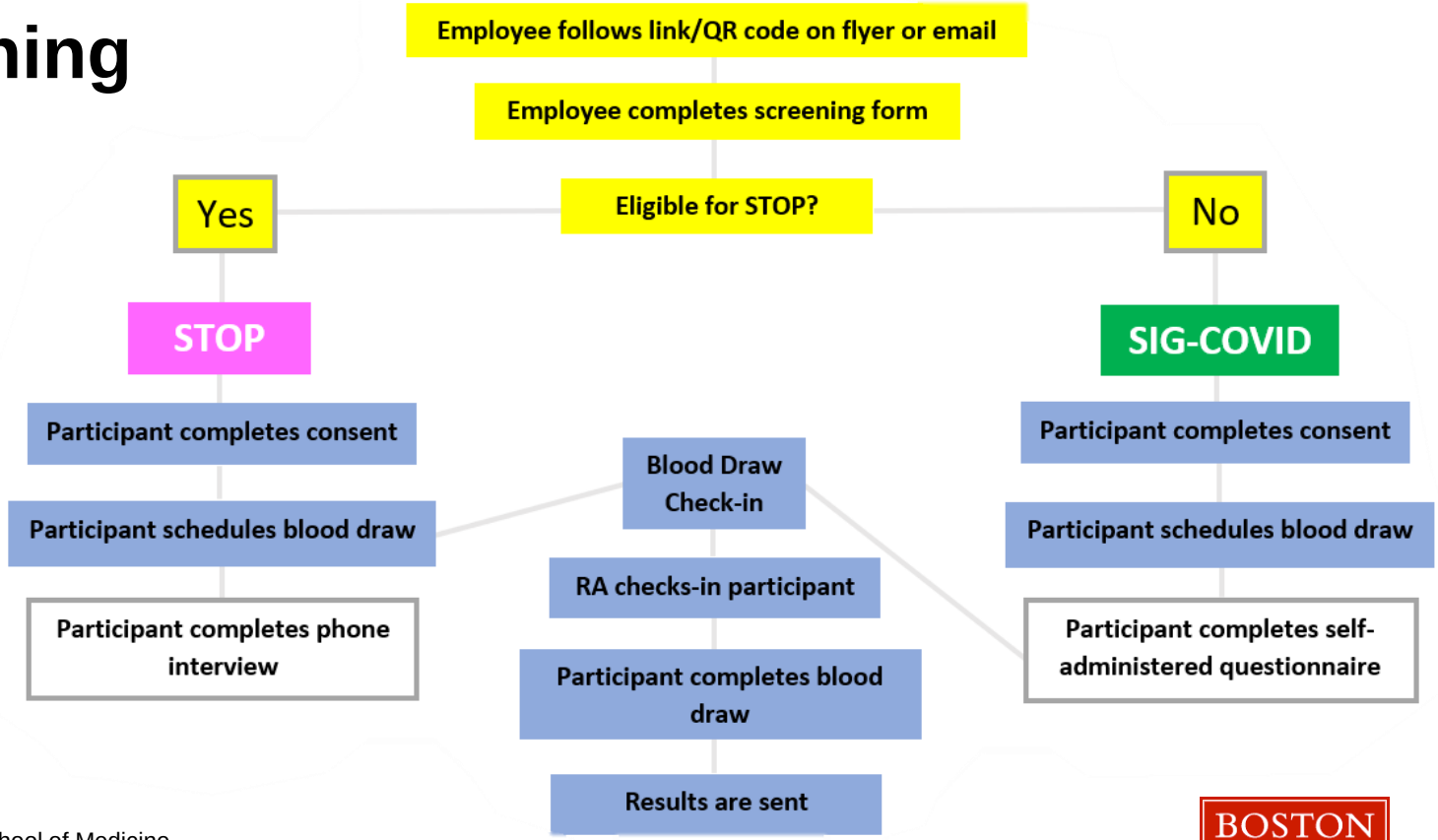
REDCap Flow


Employee follows link/QR code on flyer or email
Employee completes screening form
Eligible for STOP?
Yes
No
STOP
Participant completes consent
Participant schedules blood draw
Participant completes phone interview
SIG-COVID
Participant completes consent
Participant schedules blood draw
Participant completes self-administered questionnaire
Blood Draw Check-in
RA checks-in participant
Participant completes blood draw
Results are sent

REDCap Functions Overview

- Screening
  - Calculated field
- Consent
  - Branching logic; Confirmation email with attached PDF
- Scheduling
  - Response limit; Confirmation email
- Check-in
  - REDCap report; Branching logic
- Release of results
  - Data import tool; Alerts and notifications

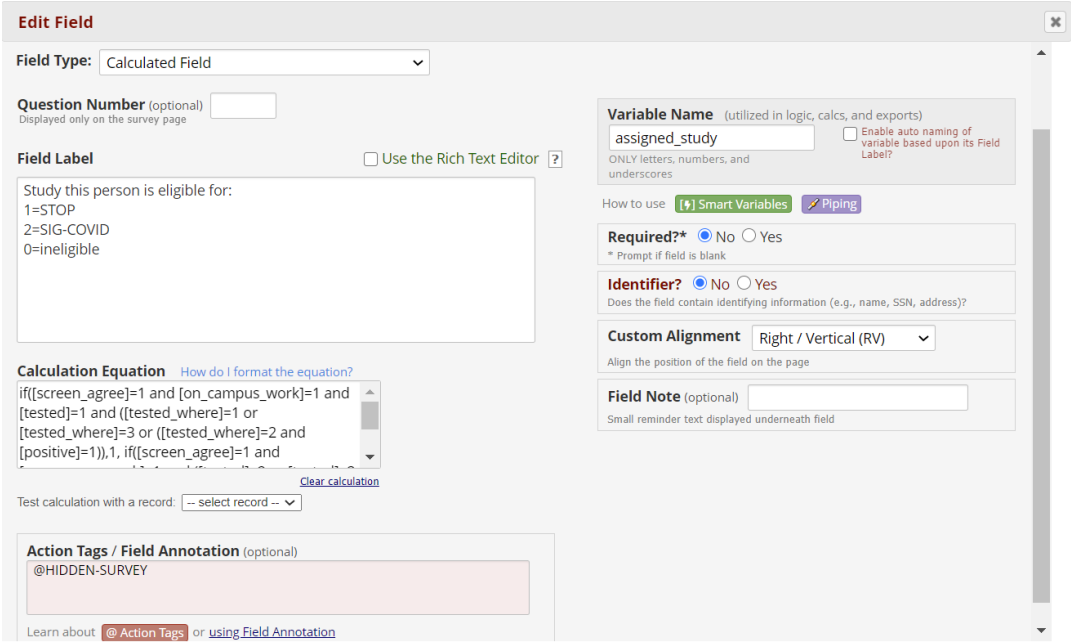
Screening



BOSTON UNIVERSITY

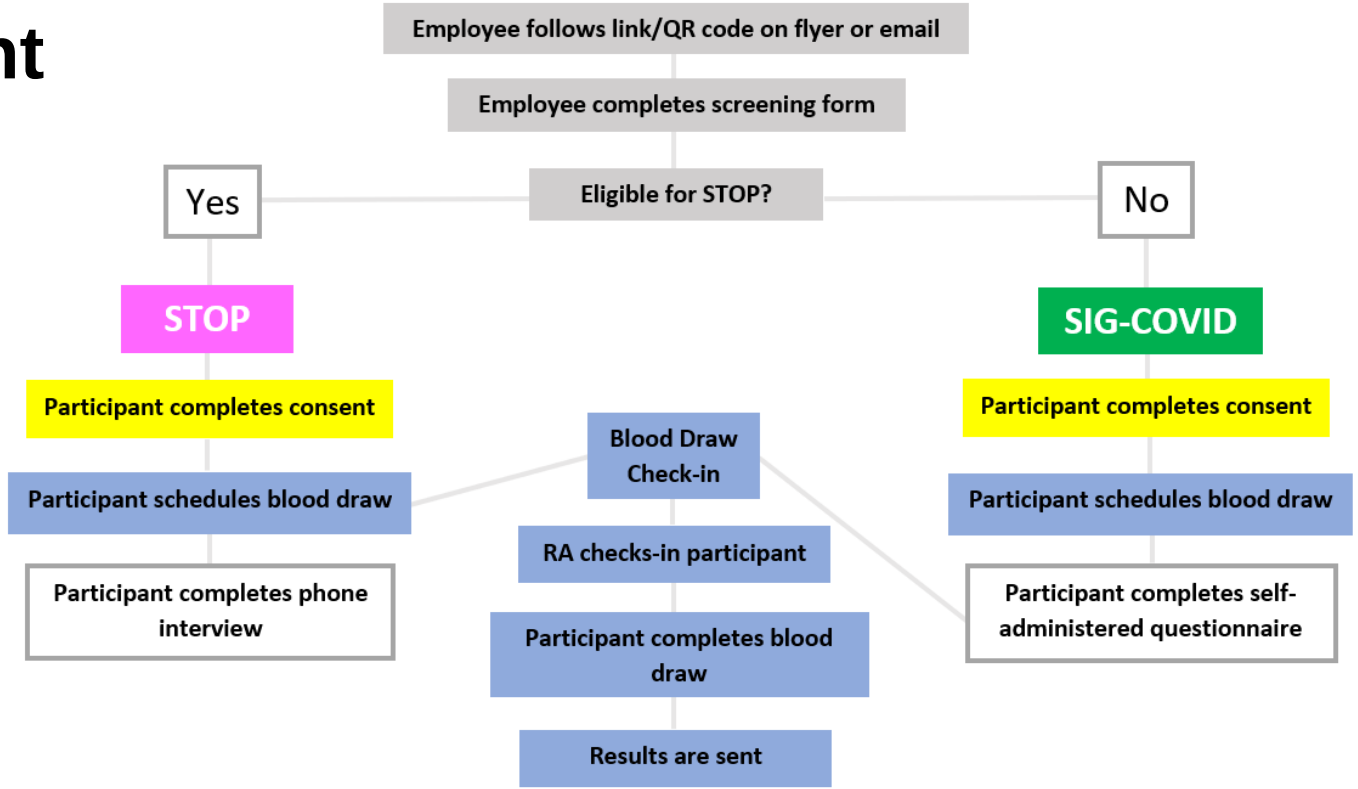
Screening

- Based on eligibility, participants were deemed eligible for either STOP, SIG-COVID, or neither study
- Calculated field was used to identify which study a participant was eligible for



BOSTON UNIVERSITY

Consent

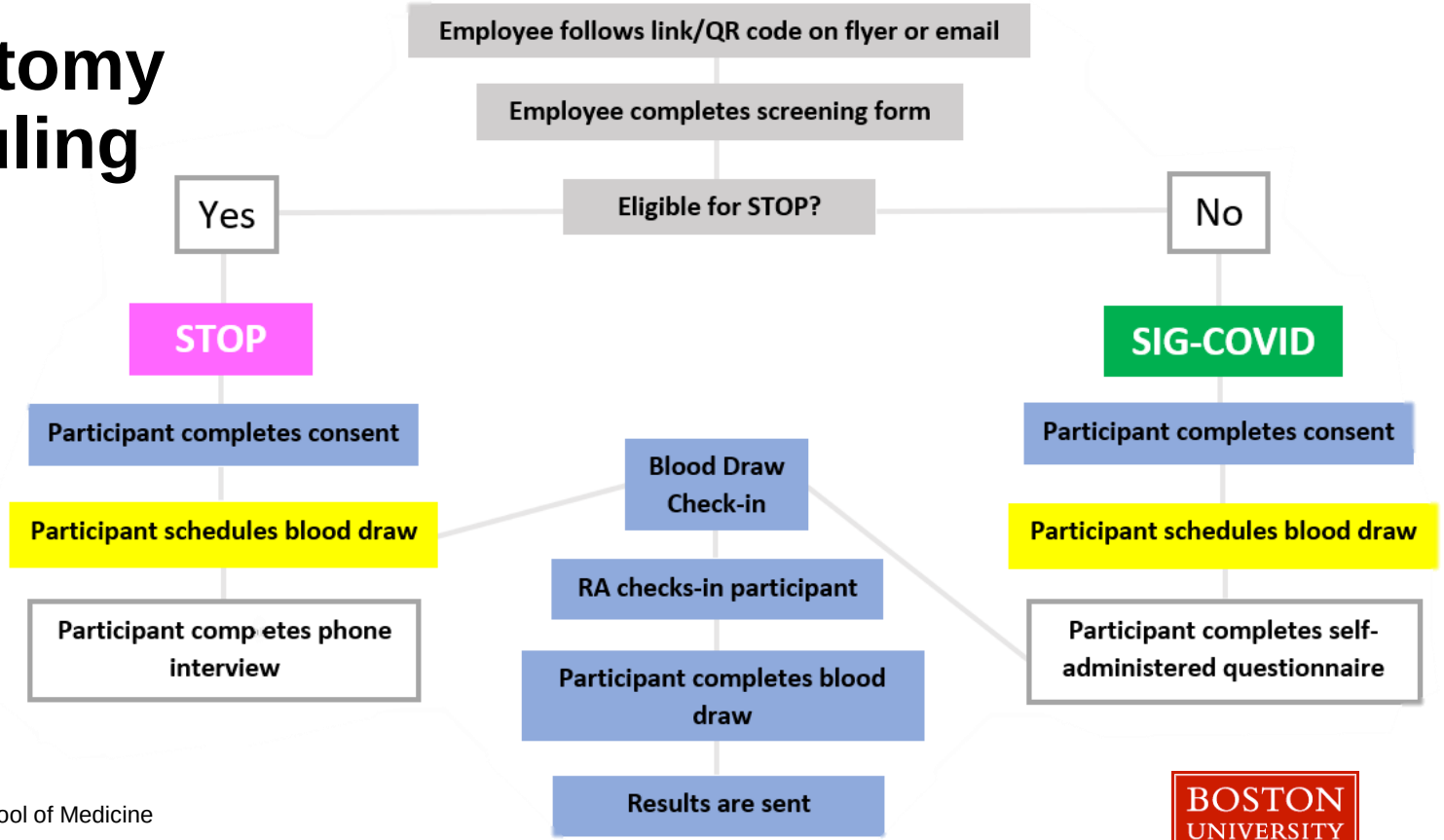

Employee follows link/QR code on flyer or email
Employee completes screening form
Eligible for STOP?
Yes
No
STOP
SIG-COVID
Participant completes consent
Participant completes consent
Participant schedules blood draw
Participant schedules blood draw
Participant completes phone interview
Blood Draw Check-in
RA checks-in participant
Participant completes blood draw
Results are sent
Participant completes self-administered questionnaire

Consent

- 6 different versions built into the same REDCap form based on study and preferred language from screening form
  - Languages: English, Spanish, Haitian-Creole
- Used branching logic to route participants to one of the 6 versions
- E-signature provided
- Confirmation email sent with attached PDF of completed form

BOSTON UNIVERSITY

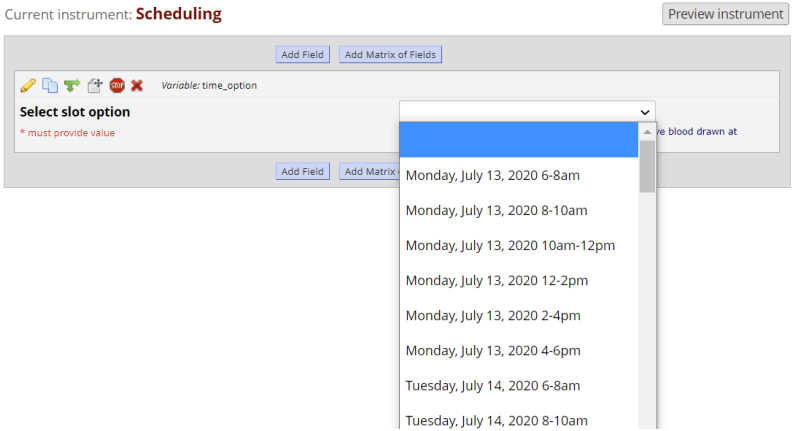
Phlebotomy Scheduling

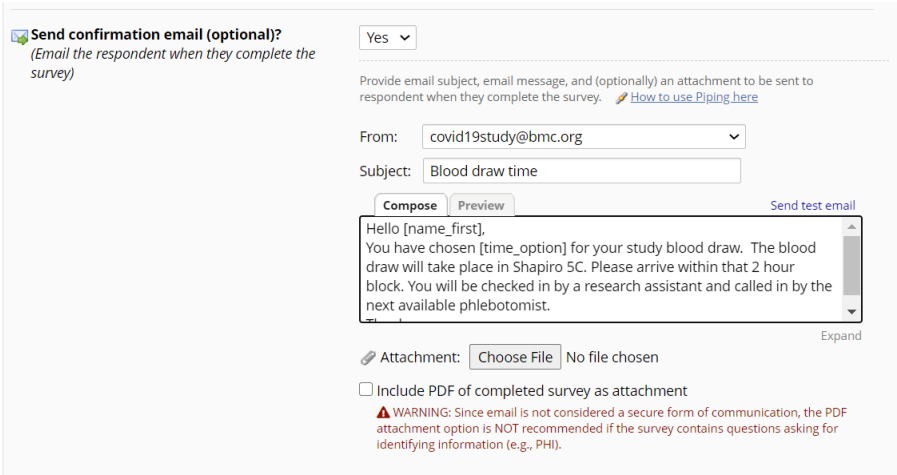


BOSTON UNIVERSITY

Phlebotomy Scheduling

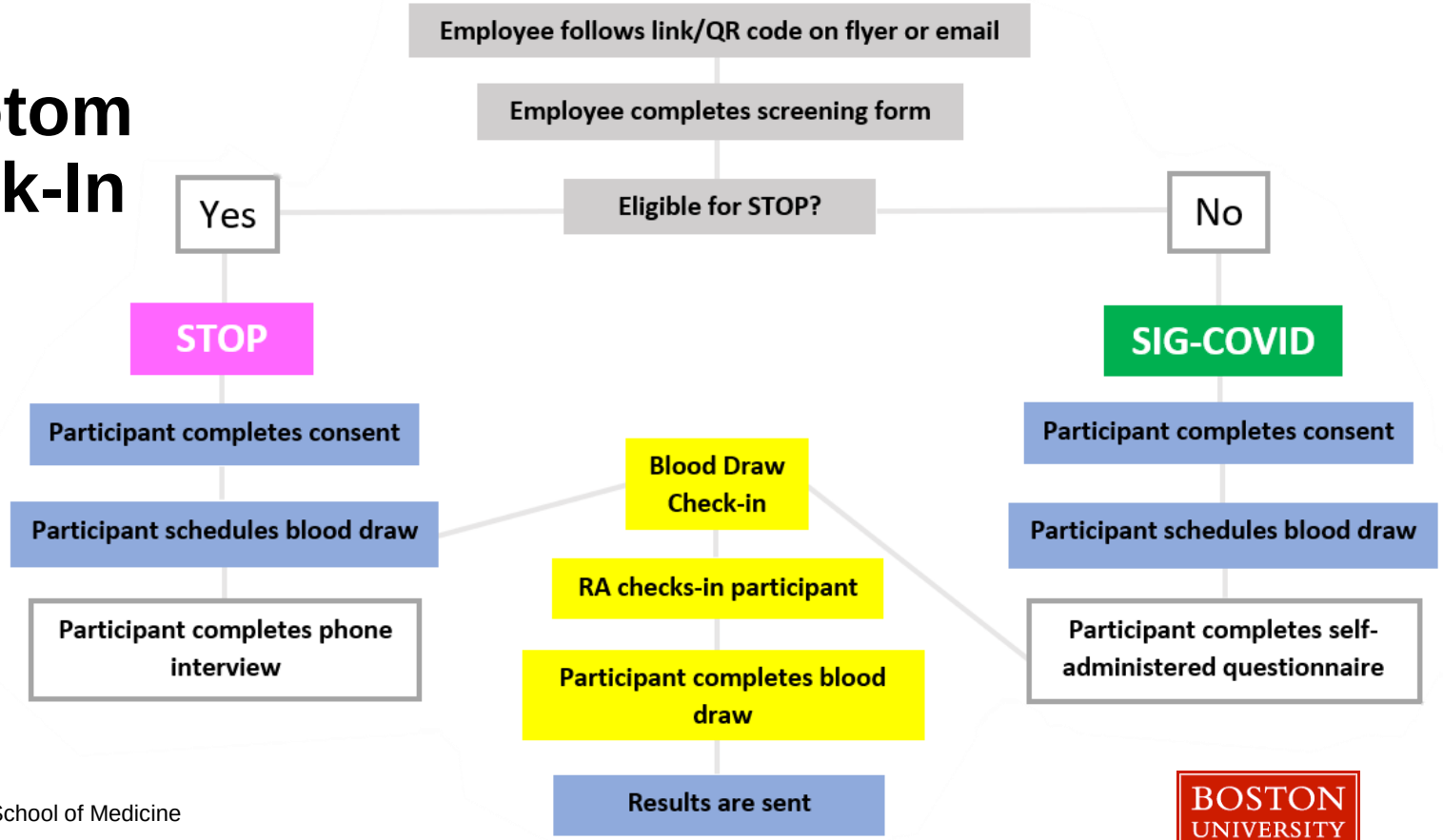
- Drop-down to select a two-hour time slot
- Used response limit to set maximum number of blood draws scheduled for each two-hour period
- Confirmation email sent from REDCap with selected time





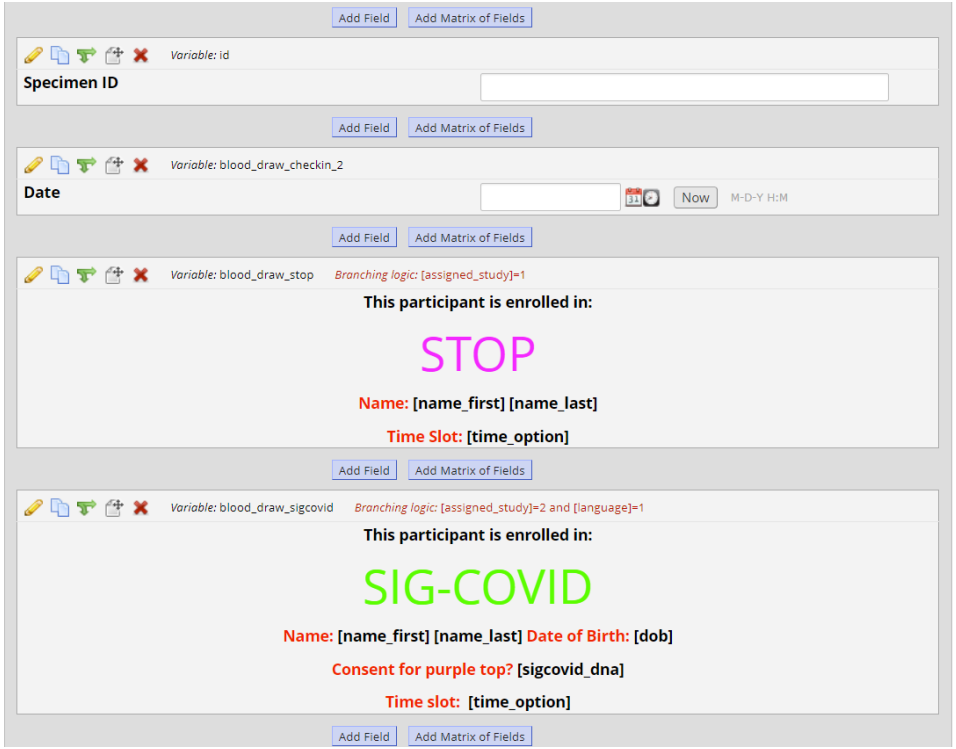
BOSTON UNIVERSITY

Phlebotomy Check-In



Phlebotomy Check-in

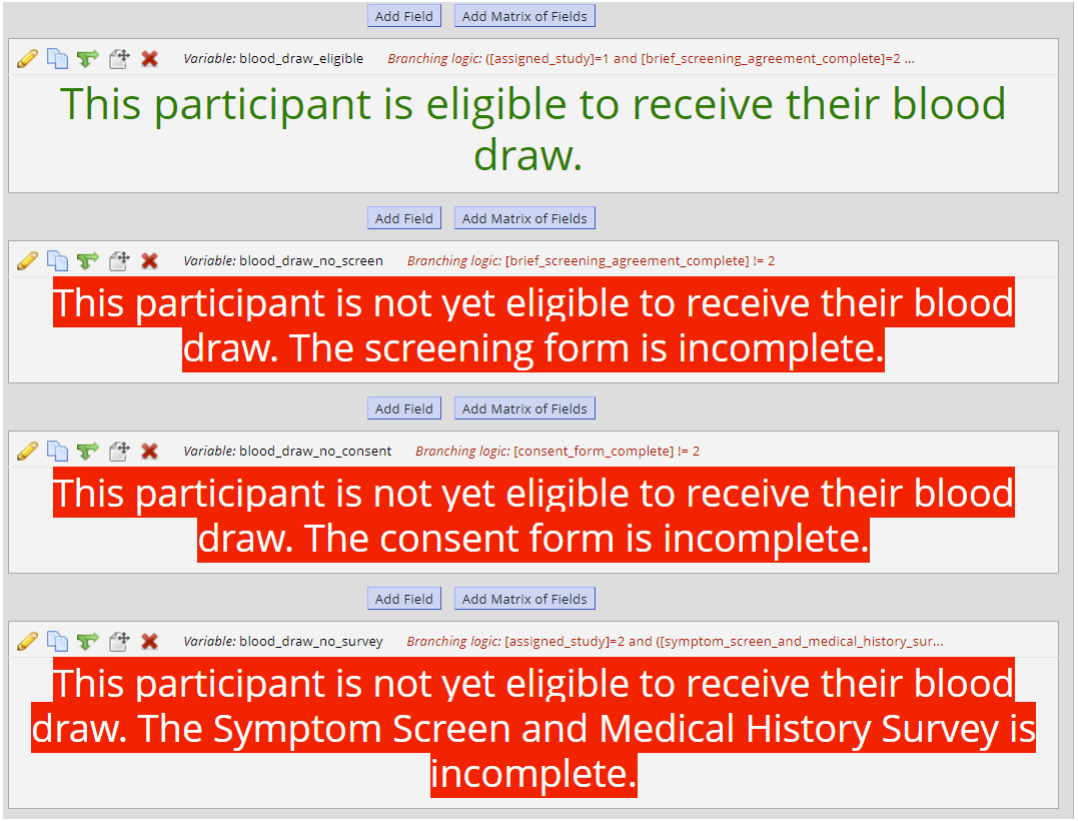
- RA searched for participant by last name using REDCap report
- Specimen ID used as secondary identifier to distinguish between the two studies (e.g. STOP-001 or SIGC-001)
- Name and chosen time slot piped into form
- Color of study name text matched color of requisition forms



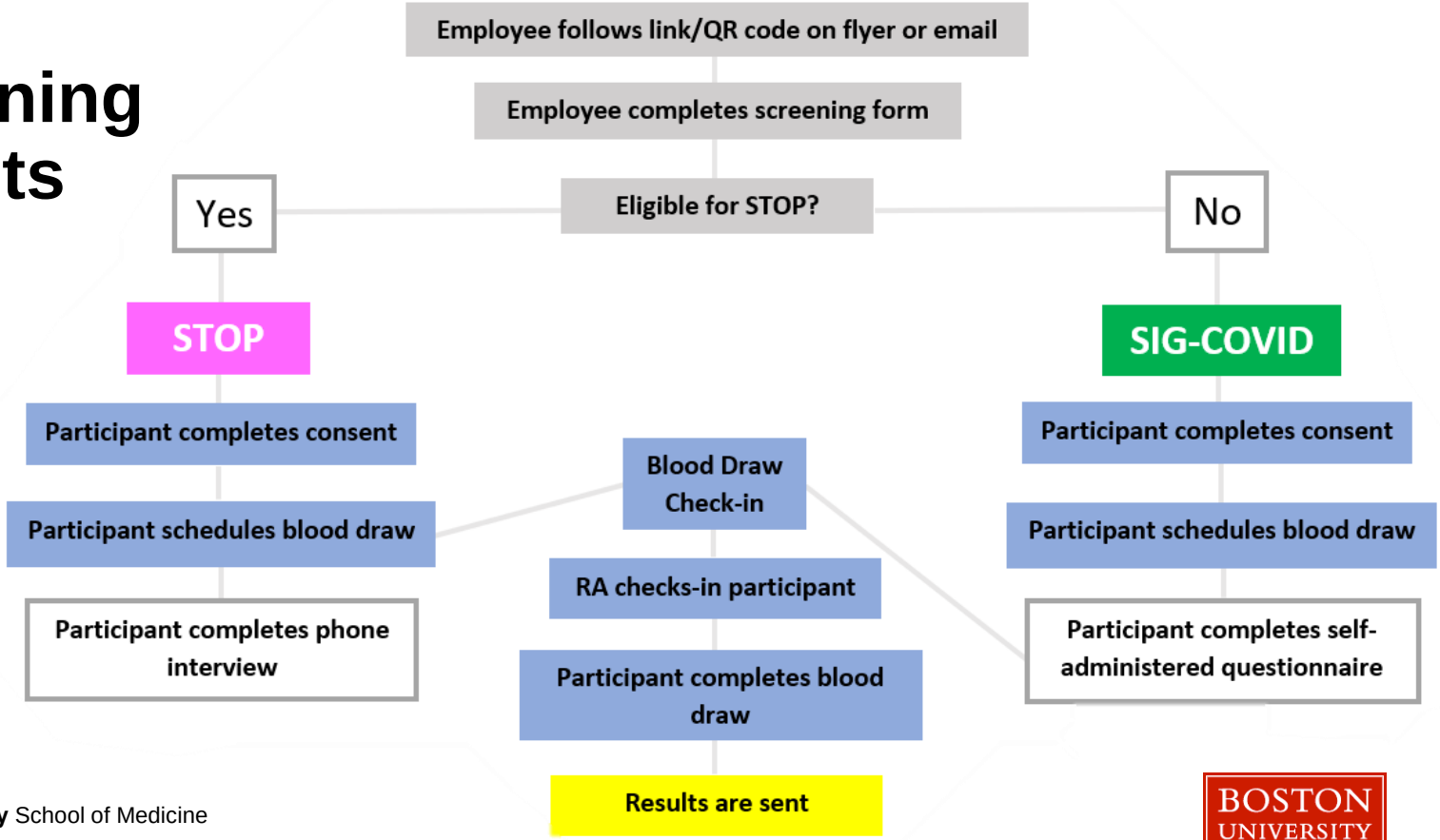
BOSTON UNIVERSITY

Phlebotomy Check-in

- Branching logic used to alert RA to any incomplete forms
- Participants were instructed to complete forms before returning for blood draw
- When all required forms were complete, the RA would see a message that participant is eligible for blood draw (top)

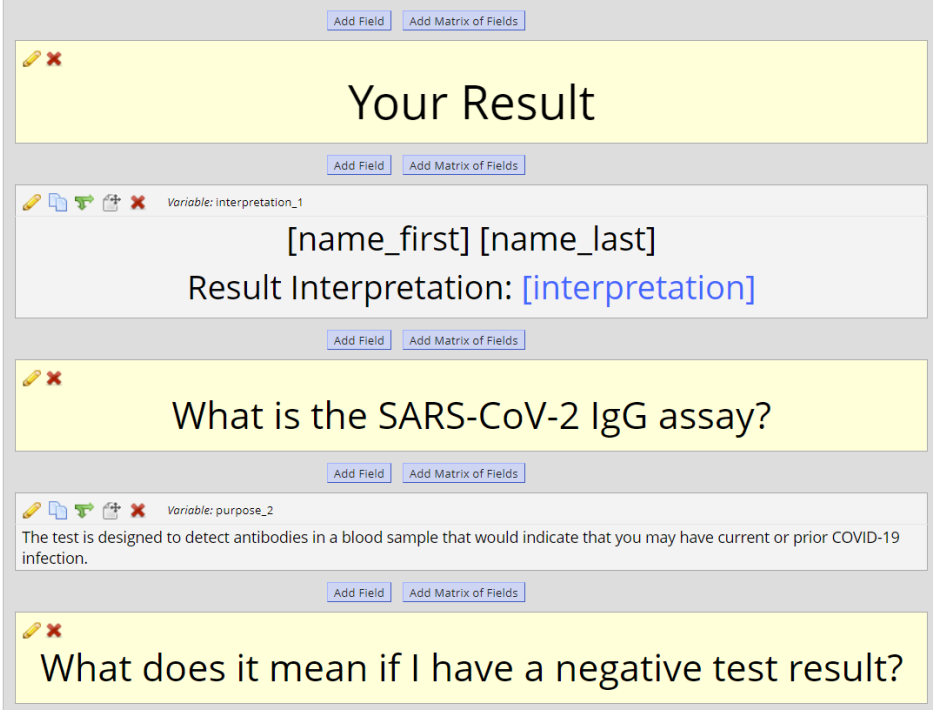


Returning Results



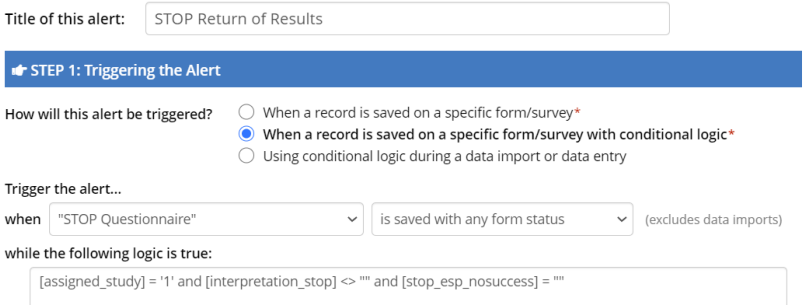
Returning Results

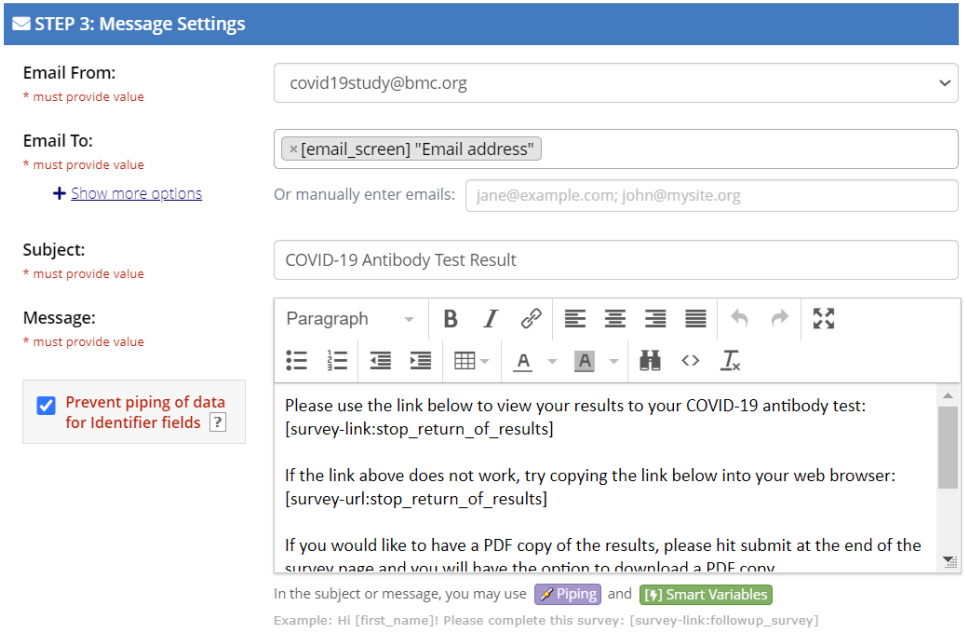
- Uploading Results
  - Results data imported using Data Import tool
  - Lab data was uploaded to a serology results form, then the interpretation field was piped into a survey which participants could access
  - Survey included information on the test and how to interpret results



Returning Results

- Dissemination of Results (STOP)
  - Alert created to automatically send results link if serology results were uploaded and questionnaire was complete





BOSTON UNIVERSITY

Thank you!

Sarah Weber: sarah.weber@bmc.org

Lizzy Ragan: elizabeth.ragan@bmc.org

Liz Duffy: elizabeth.duffy2@bmc.org