



POPULATION HEALTH DIVISION
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

**COMMUNITY HEALTH EQUITY
& PROMOTION**

Utilizing Epic for Improvements in Hepatitis Care and Surveillance

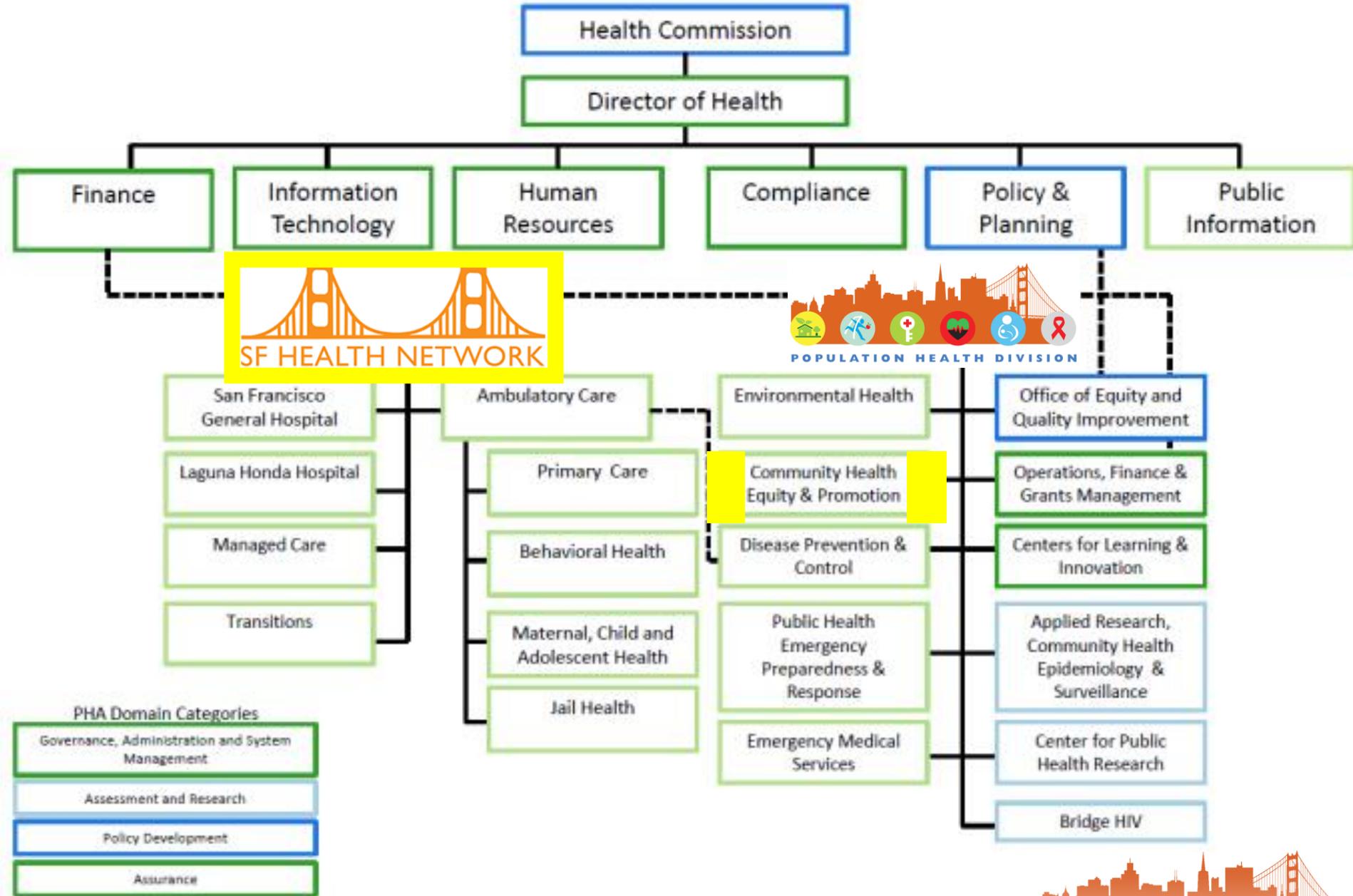
Viral Hepatitis Virtual Learning Collaborative
April 27th, 2022

Rachel Grinstein
HCV Data & Grants Coordinator
Community Health Equity & Promotion
San Francisco Department of Public Health

San Francisco Health Network (SFHN) is part of San Francisco Department of Public Health (SFDPH)

Allows us access to Epic, SFHN's electronic medical records database

Also provides us with in-house Epic IT team



Advances in Epic

Implemented

- HCV Patient Registry – Active Cases
- HCV Patient Registry – Active & Resolved
- HCV Screening Care Gap – Universal & Risk-Based

In Progress

- HBV Vaccination Care Gap
- Clinic-based Quarterly Report
- SFHN HCV Dashboard

Future Plans

- HCV My Panel Metric Dashboard
- HBV Universal Screening Care Gap



HCV Patient Registries

Active HCV Infections

Inclusion Rule = 1 and (2 or 3 or 4) and (5 or 6)

Where:

1. Patient is alive
2. Active HCV diagnosis in Problem List *or*
3. ≥ 2 HCV diagnoses in encounter diagnosis *or*
4. Reactive HCV Ab test *and*
5. Last HCV RNA test is Positive *or*
6. No HCV RNA test on record

Purpose – Provider support

Providers can pull a list of their
patients themselves

List shared with each clinic quarterly



HCV Patient Registries

Active & Resolved HCV Infections

Inclusion Rule = 1 and (2 or 3 or 4 or 5)

Where:

1. Patient is alive
2. Active HCV diagnosis in Problem List *or*
3. ≥ 2 HCV diagnoses in encounter diagnosis *or*
4. Reactive HCV Ab test *or*
5. Positive HCV RNA test in past 5 years

Purpose – Surveillance & QI

Data to be used for analysis of

treatment completions/cure rates

Reports to providers showing HCV

elimination efforts over time



Care Gaps

HBV Vaccination Care Gap

Notifies provider if patient aged 19-59
has no record of HBV vaccination

HBV Screening Care Gap

Will notify provider if patient has no HBsAg test
on file (may show if missing all 3 HBV tests)

Will notify provider if pregnant patient has not
completed HBV-panel tests during their
pregnancy

To be implemented upon update to CDC
guidelines

HCV Screening Care Gap

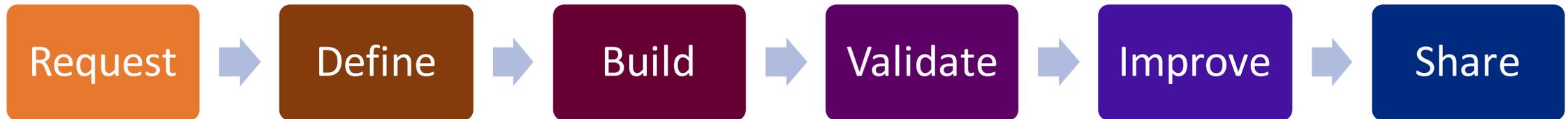
Notifies provider if patient has no HCV Ab
test on file

Notifies provider if pregnant patient has
not received HCV Ab test during their
pregnancy

Ability to toggle on Risk-Based screening
– notification for annual HCV Ab
testing



Development Process



Who Was Involved

Medical Advisor – Dr. David English & Dr. Joanna Eveland, HCV Champion Providers

Epic IT Support – François Habchi, Epic Technical Lead

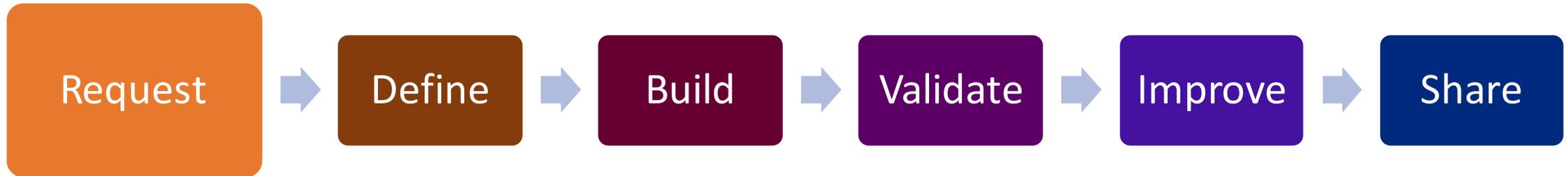
Epic QI Leadership – Henry Rafferty, Primary Care Reporting Lead

Epi/Surveillance Advisor – Elise Mara, Epidemiologist

Project Coordinator – Rachel Grinstein, Community Liaison



Questions & Challenges



What advancements should you request?

Knowing what's possible

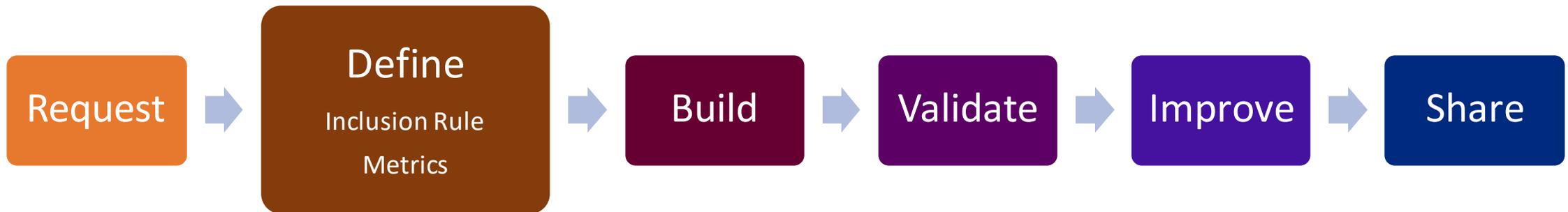
Knowing how improvements are made (system-wide vs. individual database improvements)

IT and QI staffing capacity

Prioritizing what you want



Questions & Challenges



What is it for? Care coordination? Surveillance?

Who to include: Resolved infections? Deceased patients? Inactive patients?

How much information is too much?

HAV/HBV vaccination, APRI score, genotype

System limitations

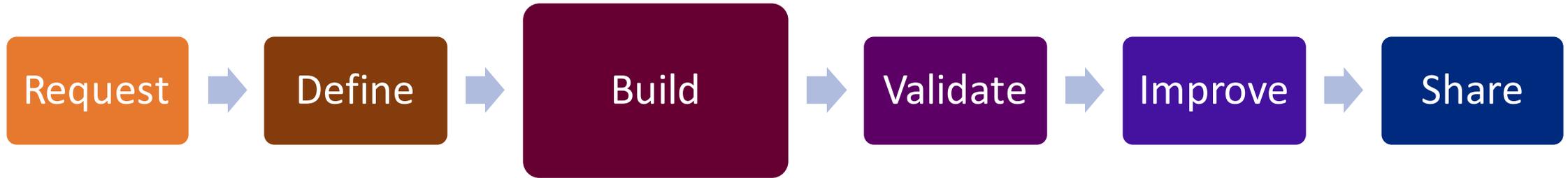
Lookback periods

Level of complexity allowed / system efficiency

Inconsistencies in how information is recorded: treatment dates, SVR, IDU



Questions & Challenges



Are multiple registries needed or can one registry serve multiple purposes?

Is it better to include parameters that return irrelevant patients, or to leave them out and exclude relevant patients?

Communication barriers / different vocabularies

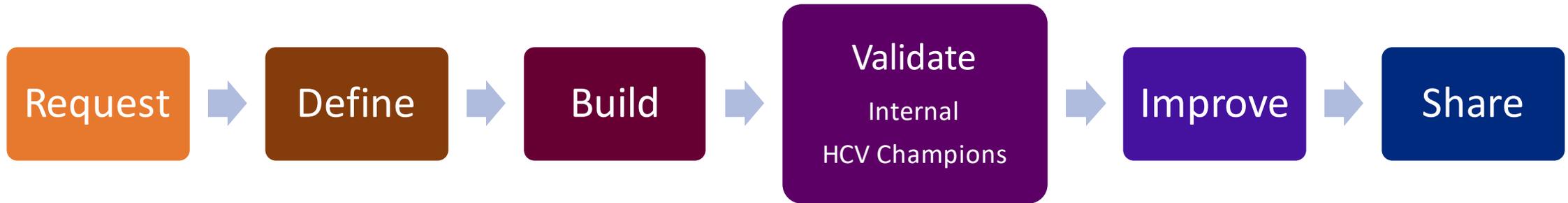
External lab data – must be mapped out individually for each lab

Determining appropriate definitions for demographic fields

Only able to include most recent test results



Questions & Challenges



How should outdated lab results be classified? (<615 IU/mL)

Should indeterminate lab results qualify?

“Presumptive reactive” or “Equivocal” HCV Ab test result

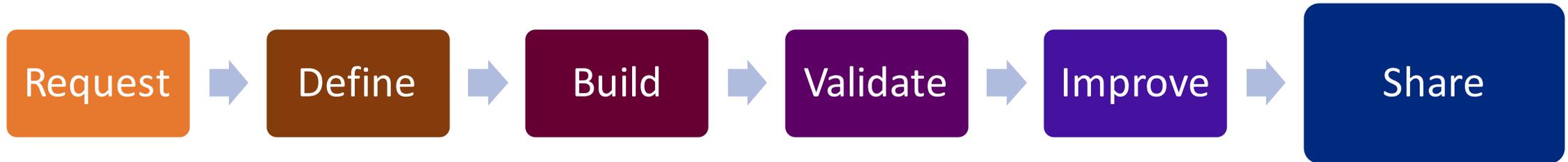
Indeterminate and inconclusive lab results override older lab tests

with positive result

Multiple records with incorrect diagnosis code entered (ICD 10 code for HCV used instead of HBV)



Questions & Challenges



When is it ready to be shared widely?

How will we publicize it?

Covid-19

Staffing capacity

Staff turnover, loss of connections to clinics

Unable to share registry template with external systems

My Panel Metrics reports development are deprioritized



Implementations

Provider Network

Clinic-specific registry assists in patient navigation and patient follow-up

Reports will support QI, performance evaluation and development of new strategies

Compiled demographic information will aid in the creation and implementation of micro-elimination efforts



Implementations

Surveillance

Streamlines data validation and data matching for other projects

Demographic and treatment data will be imported into surveillance registry

Provides additional measures for tracking HCV burden in SF

Ability to develop a care cascade for SFHN patients

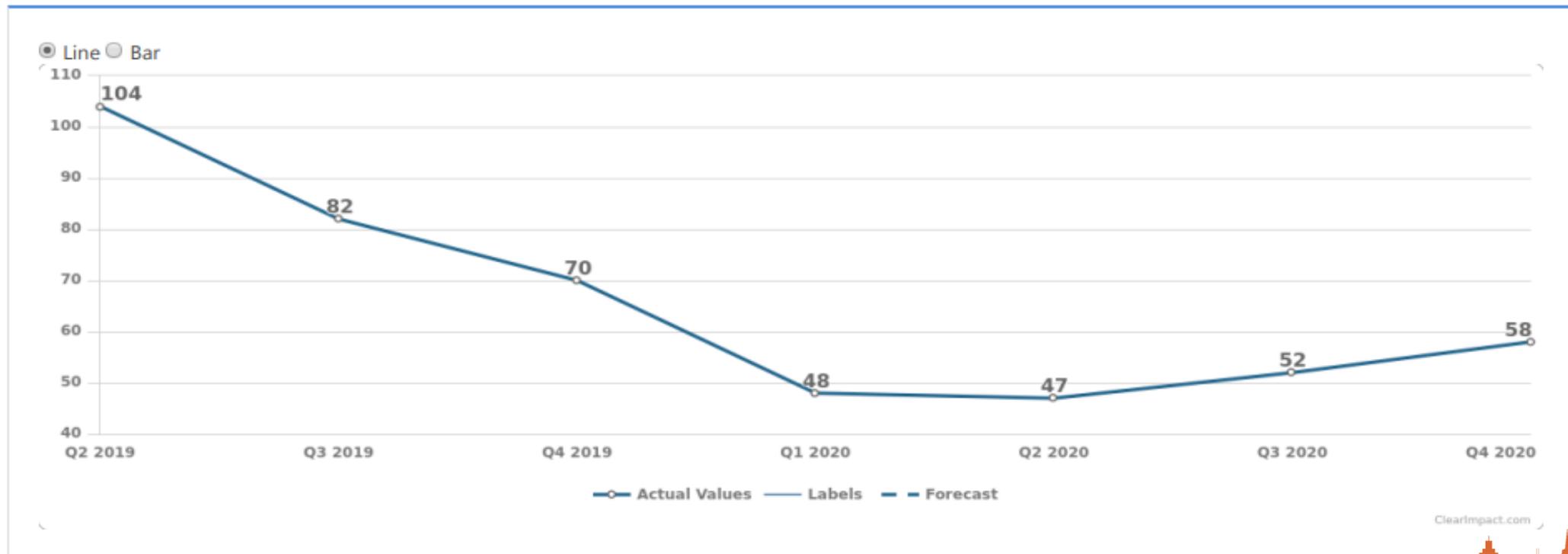


Implementations

End Hep C SF Dashboard

Number of people who start HCV treatment through SFHP

58 Q4 2020



ClearImpact.com



Future Goals

Additions to patient-accessible My Chart system

- **Health Maintenance Alert for HBV & HCV testing on My Chart account**
- **Text and email reminders for HBV vaccination, HBV & HCV screening**
- **Emails to patients in need of HCV treatment**



Future Goals

My Panel Metric HCV dashboard for providers that includes:

- **% of patients with no HCV Ab test**
- **% of patients with reactive HCV Ab test and no HCV RNA test**
- **% of patients with positive result on most recent HCV RNA test**
- **% of HCV+ patients that receive a prescription for a DAA**



Future Goals

My Panel Metric HBV dashboard for providers that includes:

- **% of patients in need of HBV vaccine**
- **% of patients who received 1st dose of HBV vaccine**
- **% of patients who completed full course of HBV vaccine**
- **% of pregnant patients in need of HBV screening**





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Thank you!



End Hep C SF website - <https://endhepcsf.org/>

End Hep C SF public dashboard -
<https://app.resultsscorecard.com/Scorecard/Details/75131>

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