

Electronic Medical Record Flags Have a Limited Impact on Hepatitis C Virus Birth Cohort Screening in the Primary Care Setting: results of a multifaceted intervention to improve screening

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Disclosures

- No financial disclosures

Background

- Burden of hepatitis C (HCV)-related morbidity & mortality in the U.S. is rising
- More than 50% of patients with HCV are not diagnosed
- Prevalence of HCV is highest among people born 1945-1965, i.e. “baby boomers”

Background

- Major advances in HCV treatment & rising cure rates
- CDC/USPSTF updated HCV screening guidelines in 2012
- New York State passed legislation mandating HCV screening in baby boomers effective 2014

Aims

1. Establish a successful model for birth cohort screening in the primary care setting
2. Link positive persons to care

Methods – Study Design

- Study period: November 2013 – March 2015
- Study sites: The Mount Sinai Hospital
 - Internal Medicine Associates (IMA)
 - Faculty Practice Associates (FPA)
- Monthly reports with HCV Ab results for all baby boomers with primary care encounters

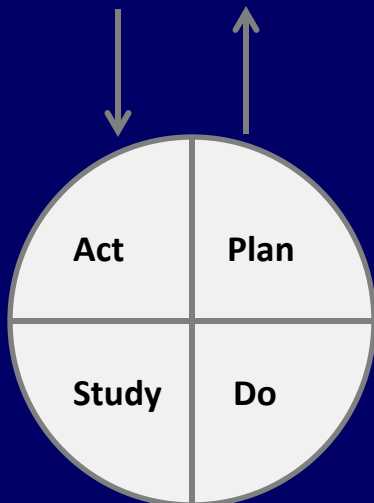
Methods – Study Design

What are we trying to accomplish?

Improving primary care HCV birth cohort screening rates to 80% by June 2015

How will we know that a change is an improvement?

What changes can we make that will result in improvement?



Methods – Study Design

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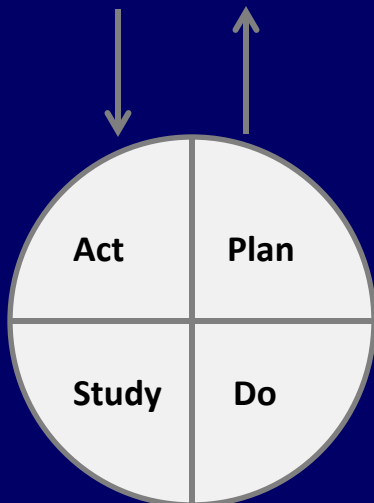
Improving primary care HCV birth cohort screening rates to 80% by June 2015

How will we know that a change is an improvement?

Outcomes:

What changes can we make that will result in improvement?

- Overall screening rate
- Eligible screening rate
- Link to care



Methods – Study Design

Overall screening rate = $\frac{\text{\# patients with HCV Ab test at any point in time}}{\text{Total \# of patients}}$

Eligible screening rate = $\frac{\text{\# patients newly screened for HCV}}{\text{Total \# of patients without prior HCV Ab test}}$

Link to care = referral to hepatologist at Mount Sinai

Methods – Study Design

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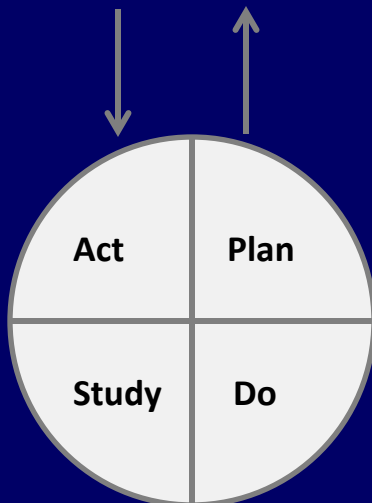
Outcomes:

- Overall screening rate
- Eligible screening rate
- Link to care

What changes can we make that will result in improvement?

Changes:

- Electronic prompt in EMR
- Staff & patient education
- Data feedback



Methods – Electronic Prompt

POMANavigator | Images | Admin | References | Open Orders | Care Teams | Media Manager | Print AVS/Follow Up

Try the Widescreen View | Not Right Now | Do Not Show This Again

There is a new, faster way for you to finish your visit documentation with fewer clicks and less scrolling. [Learn More](#) [Try It](#)

BestPractice | BestPractice Advisories

⚠ Patient due for Hepatitis C Screening:
 NYS Requires Hepatitis C Screening for patients born between 1945-1965.

To satisfy this alert, open override and complete the override section. Alternatively go to HM and complete the override in HM. Once done the alert will be satisfied.

Last HCVAB=NON-REACTIVE on 5/24/2011
 (HEPATITIS C SCREEN HOSP last satisfied: Not on file)

Open SmartSet: HEP C SCREEN [preview](#)
 [Override](#): HEPATITIS C SCREEN HOSP
 [Postpone](#): HEPATITIS C SCREEN HOSP

[Refresh](#) | Last refreshed on 8/19/2014 at 2:59 PM | [Accept](#)

Health Maintenance
 Health Maintenance

Vaccine Report
Immunization History as of 8/19/2014 Never Reviewed
 No immunizations on file.

Health Maintenance Summary

HEPATITIS C SCREEN HOSP	Overdue	4/30/2012
HEPATITIS C SCREEN FPA	Overdue	4/30/2012
MAMMOGRAPHY	Overdue	4/11/2013
COLONOSCOPY	Overdue	4/30/2013
FLU VACCINE	Next Due	9/1/2014
CERVICAL SCREENING 3 YRS	Next Due	3/14/2015

Immunization Assessment
 No data found.

Vaccine Assessment click to open
 No data available.

Reason for Visit click to open
Initial Consult

Vitals click to open
 New Reading Go to Doc Flowsheets

08/19/14
 1402

Methods – Education

- Housestaff
 - Monthly noon conferences x 4
 - Electronic educational modules (medicine)
- Patients
 - CDC pamphlet in admission packets

Methods – Data Feedback

HCV Screening Data

Goel, Aparna



To:

Cc:

Sent Items

Tuesday, December 02, 2014 11:03 AM

Dear

Hope you are doing well and happy holidays! Here are your updated HCV screening results as part of our STOMP-C initiative (Screening & Treating baby boOMers with hePatitis C). **Currently, 31% of your eligible patient encounters (18/59) are getting screened for HCV.** Overall, 72% of your patients have been tested for HCV at some point. Our goal is a screening rate of 80% by June 2015 - you are almost there!

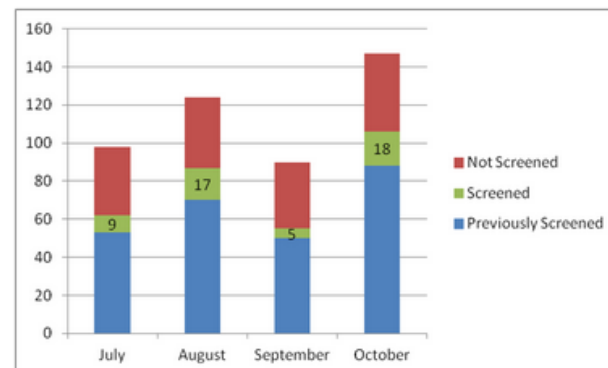
Remember, this applies to both inpatients and outpatients!

Please email with any questions or issues!

Sincerely,

Aparna Goel

The STOMP-C team



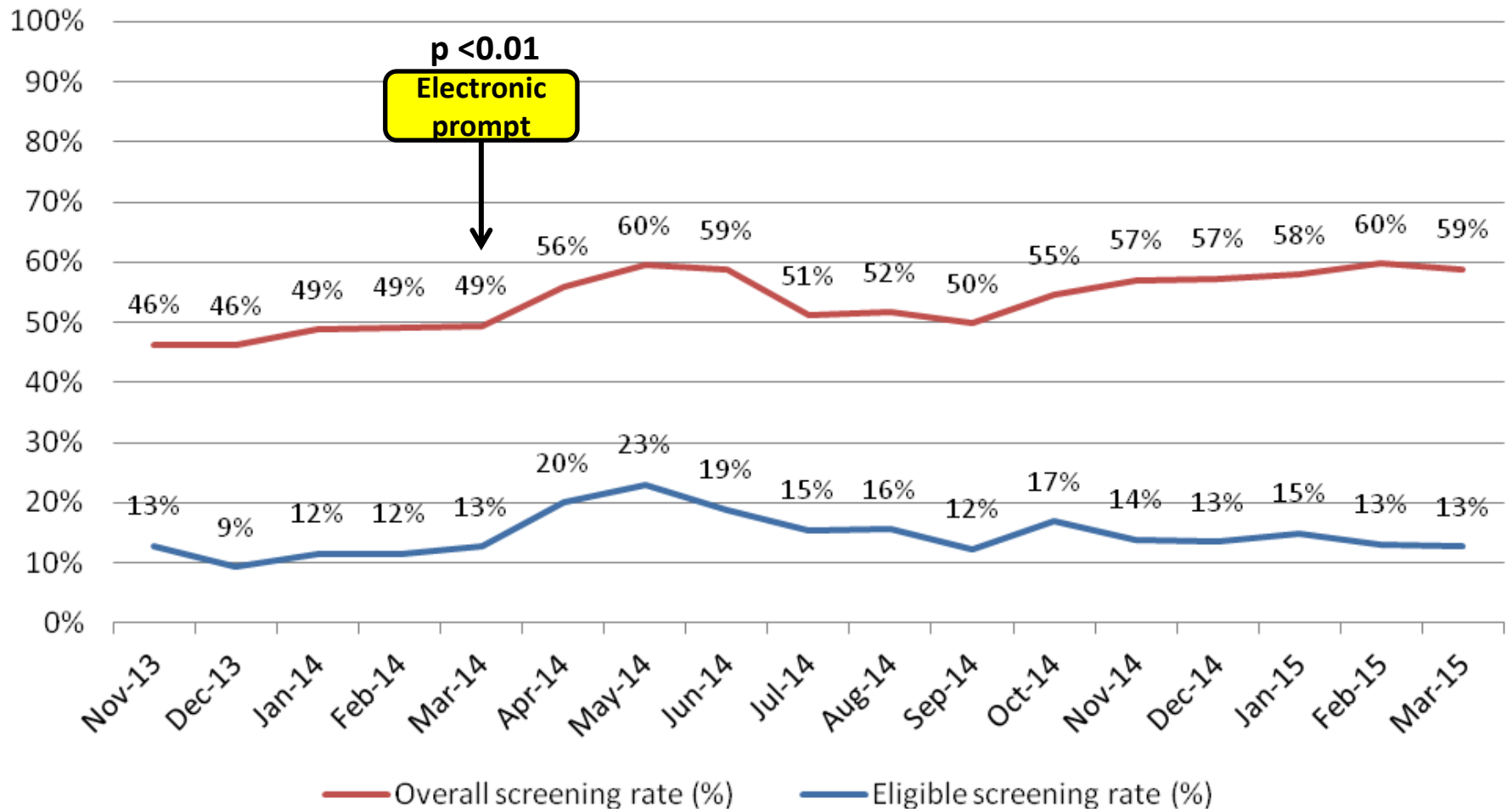
Results

Demographic information of baby boomers with primary care encounters from Nov 2013 – March 2015

Patients born 1945-1965	
Total # encounters	48,437
Encounters/ month	3,027
Age, median (IQR)	59 (54-64)
Male	34%
Non-Hispanic	42%
IMA	64%

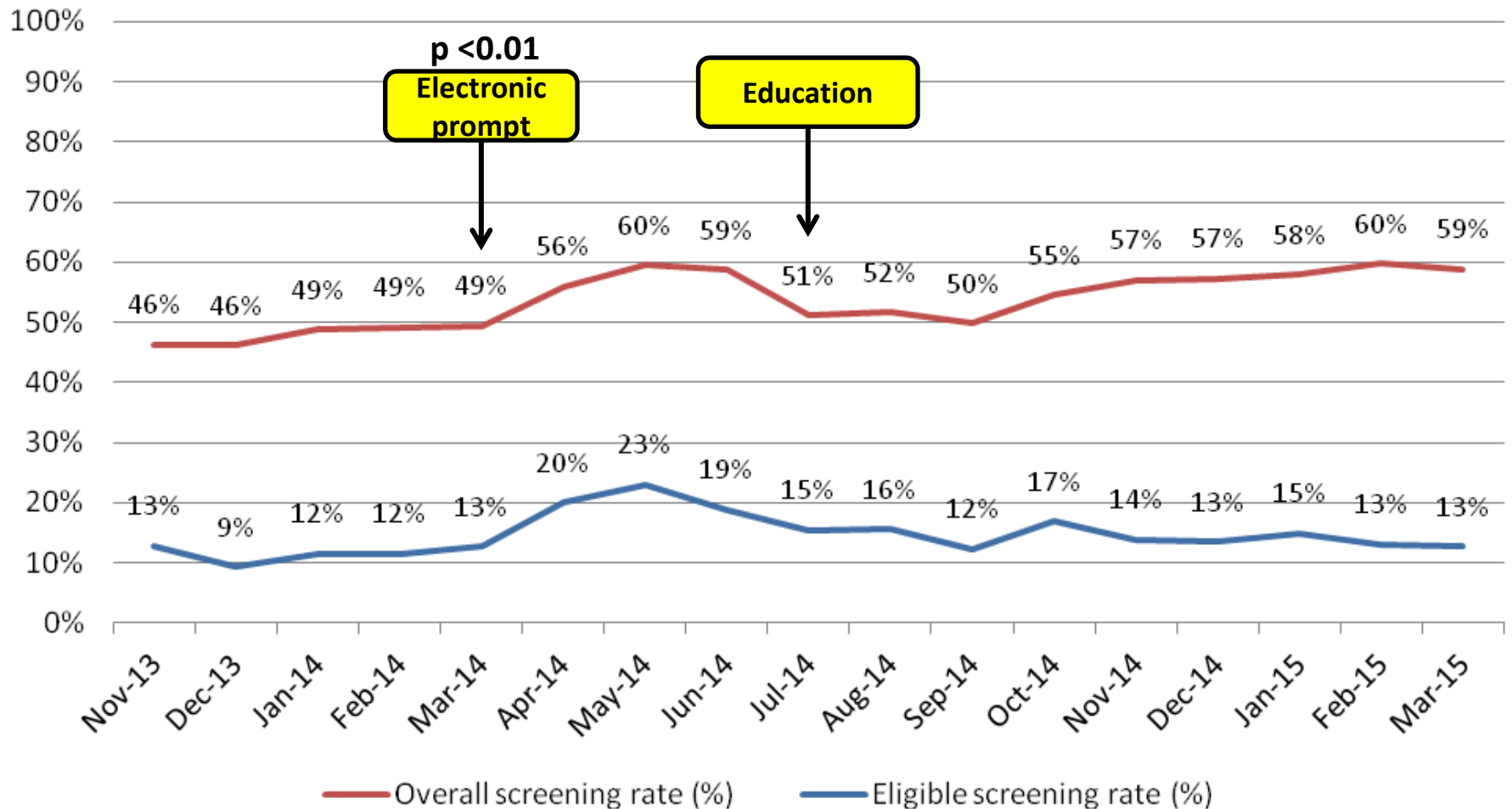
Results

Outpatient HCV Screening Rates



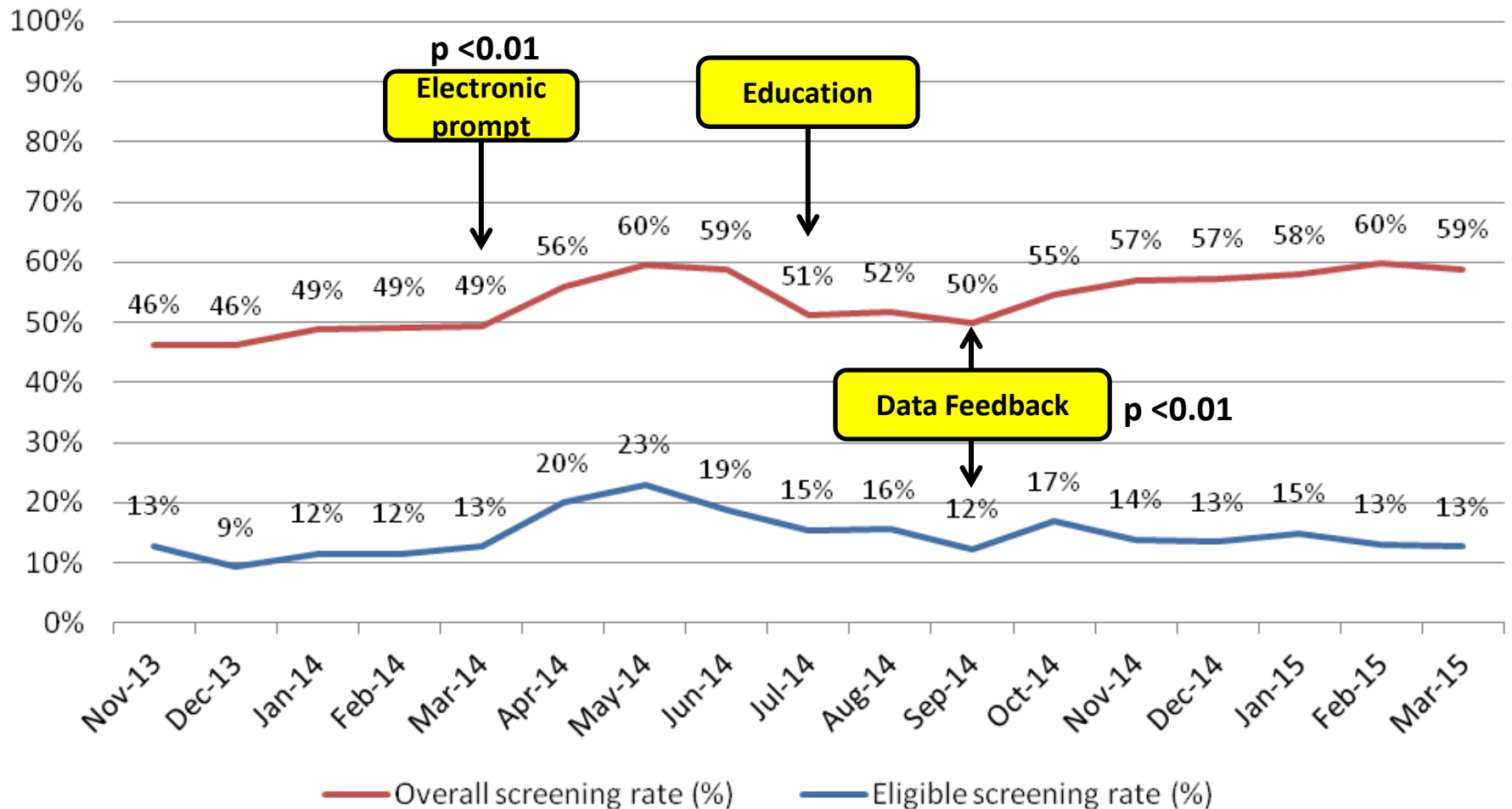
Results

Outpatient HCV Screening Rates



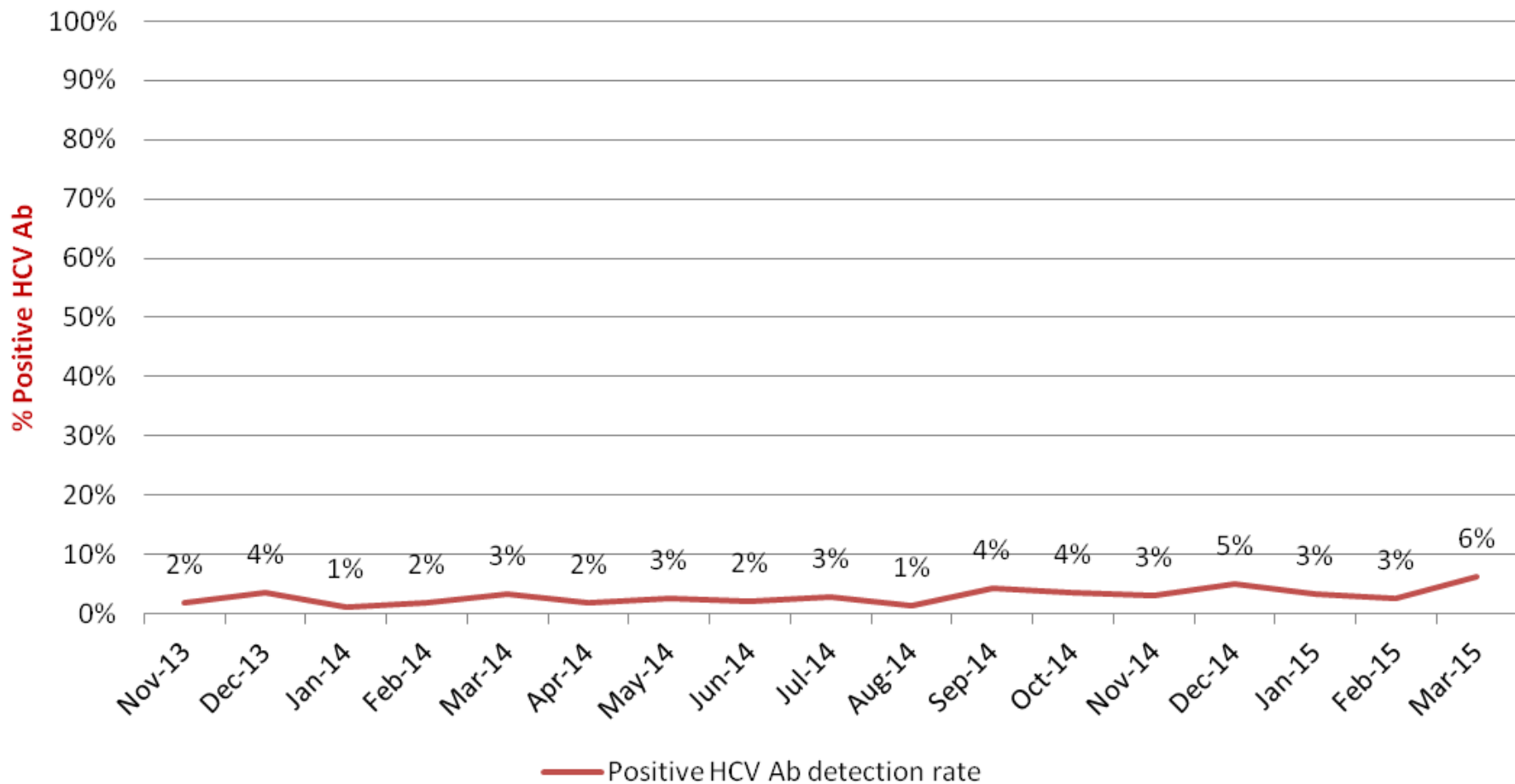
Results

Outpatient HCV Screening Rates



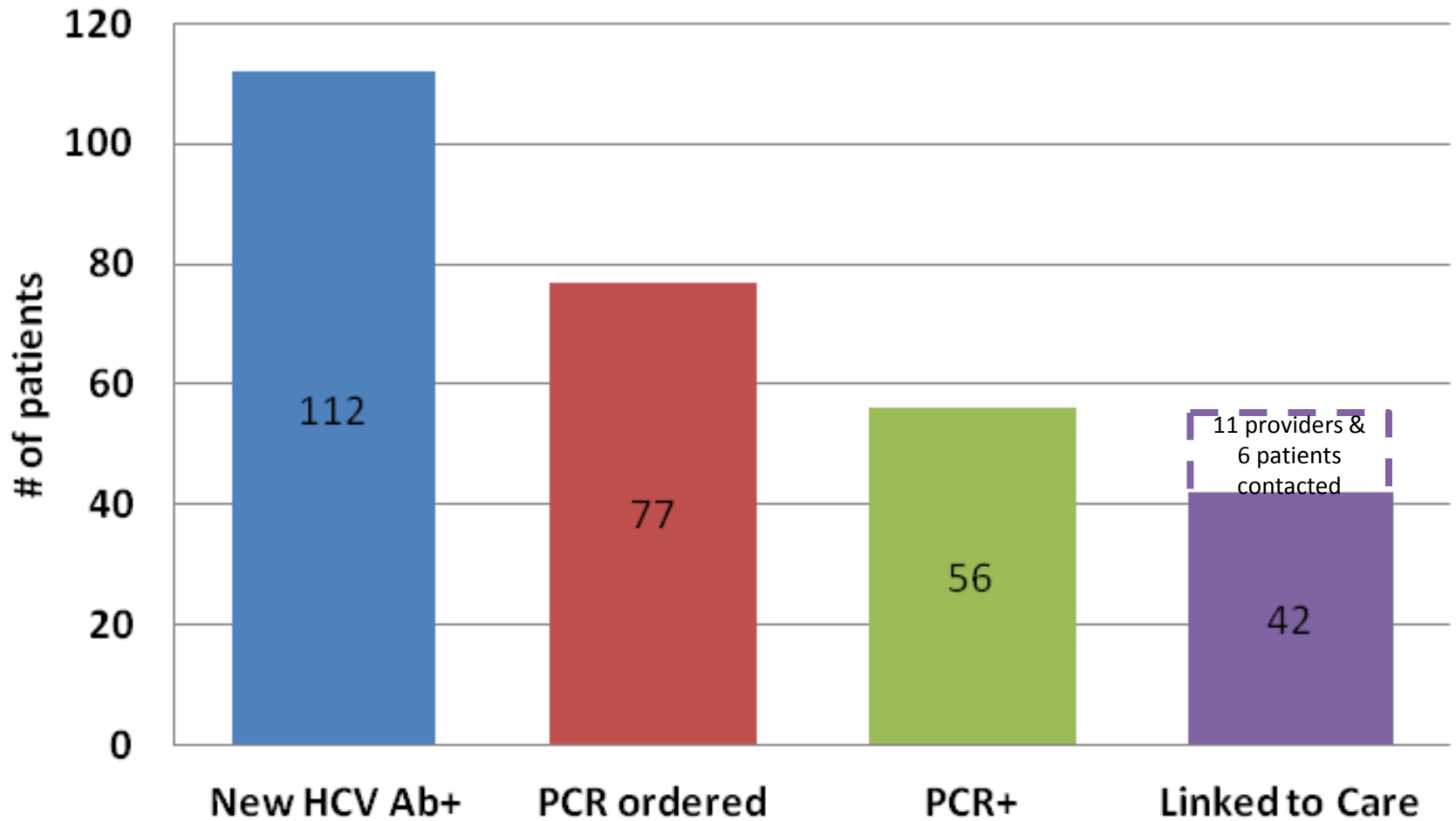
Results

Positive HCV Ab Detection Rates



Results

Follow-up Care for Newly Diagnosed HCV Ab+ Patients



Summary

- Electronic prompts have a limited, non-sustained increase in HCV screening rates
- With a series of interventions, overall screening rates have significantly improved
- Drop-off in follow-up testing and linkage to care among newly identified HCV Ab-positive patients

Limitations

- Data from a single tertiary care center may make generalizability of data difficult
- Prior tests, referrals and follow-up testing outside of our hospital system were not captured
- Electronic prompt is voluntary and not a 'hard stop'

Future Directions

- Add reflex HCV RNA testing to eliminate drop-off between HCV Ab and PCR orders
- Involve bilingual (Spanish-English) patient navigator to identify eligible patients and follow-up on all positive test results
- Expand to other primary care sites

Thank you