

# Turning the Tides

## Leveraging DRVS to Improve Colorectal Cancer Screening Rates

### PRESENTED BY:

#### **Leanne Peters**

Program Manager  
Center for HOPE at  
Huntsman Cancer Institute  
at the University of Utah

#### **Colin Buck**

Population Health Data  
Analyst  
Association for Utah  
Community Health (AUCH)

#### **Toni Wood**

Interim Director  
Montana Primary Care  
Association (MPCA)

#### **Courtney Buys**

Director of Quality  
Montana Primary Care  
Association (MPCA)



azara2024  
USER CONFERENCE APR 30-MAY 2 | BOSTON, MA

# Today's Presenters



**Leanne Peters**  
Program Manager  
Center for HOPE at  
Huntsman Cancer Institute  
at the University of Utah



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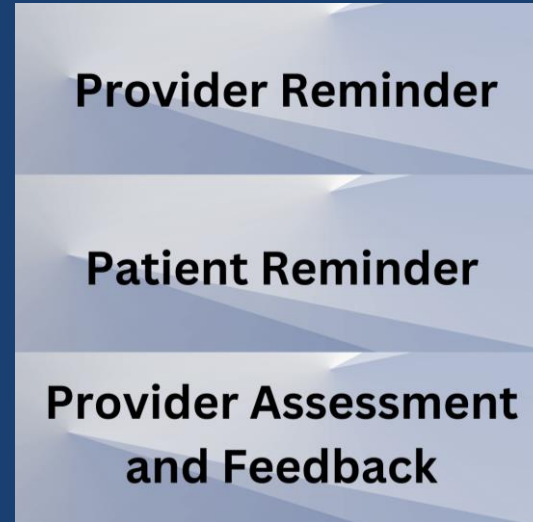
# AUCH/Huntsman Cancer Institute



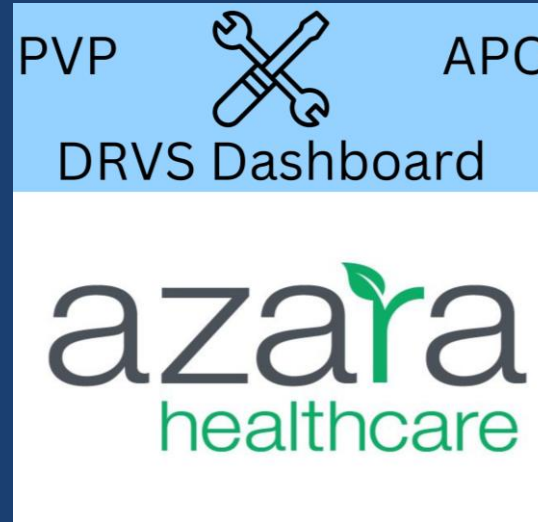
# Agenda



## PARTNERSHIPS



## EVIDENCE-BASED INTERVENTIONS



## AZARA TOOLS



## APO PERFORMANCE REPORT

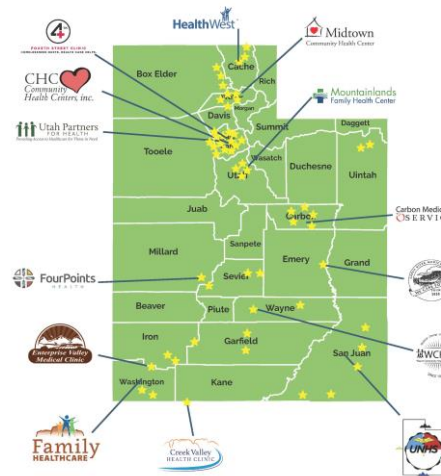
# Partnership



## Association for Utah Community Health (AUCH)



## Network Health Centers and Clinics



## Biomedical Informatics



**HEALTH**  
UNIVERSITY OF UTAH

**12 Centers/42 clinics**



# Evidence-Based Interventions

## Provider Reminder

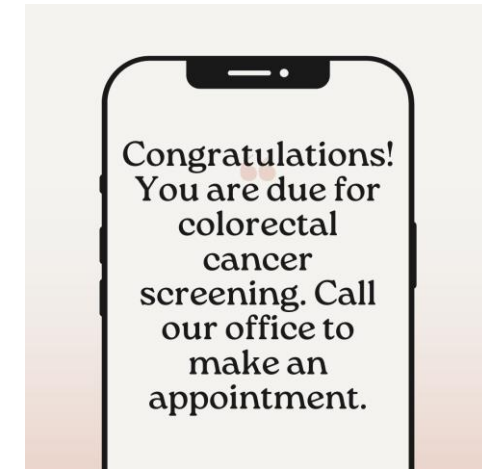


## Client/Patient Reminder

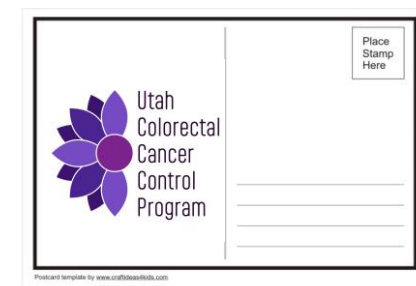
### Provider Assessment and Feedback



## Patient Navigation

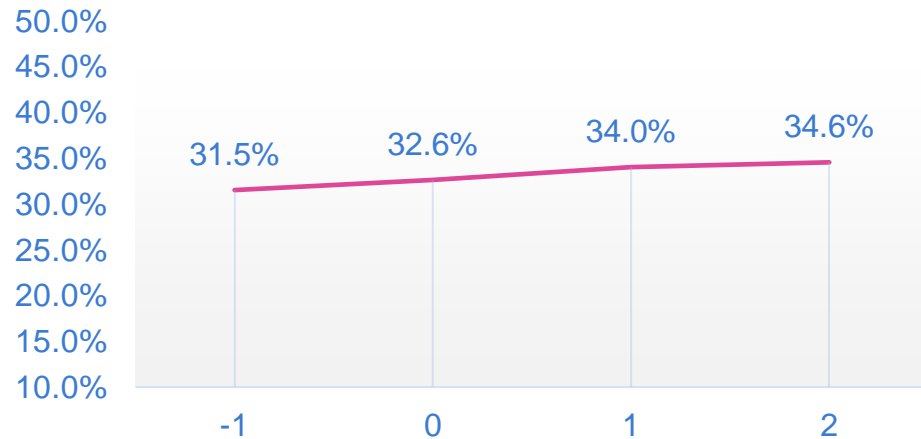


## Small Media

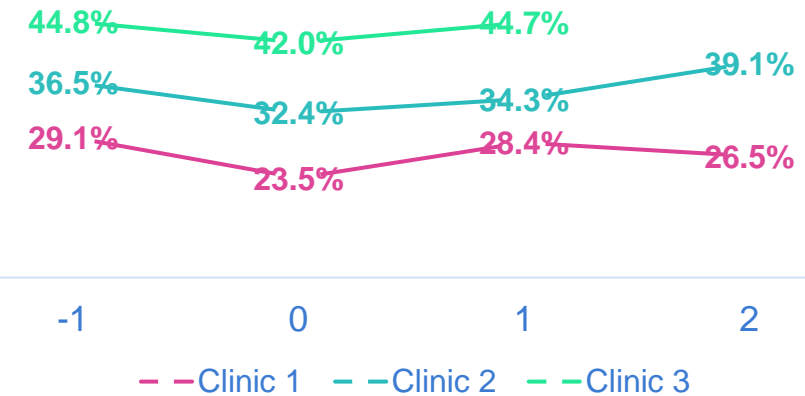


# Unpublished CRC Screening Rates

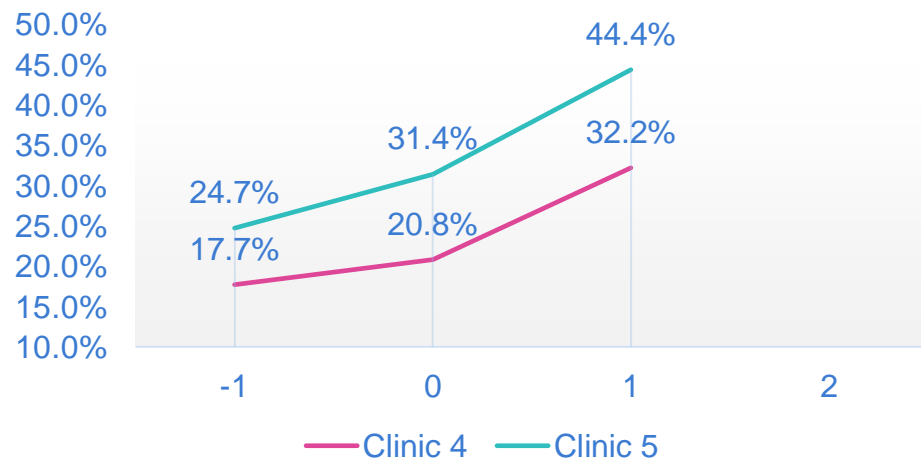
## Combined Eight Health Centers



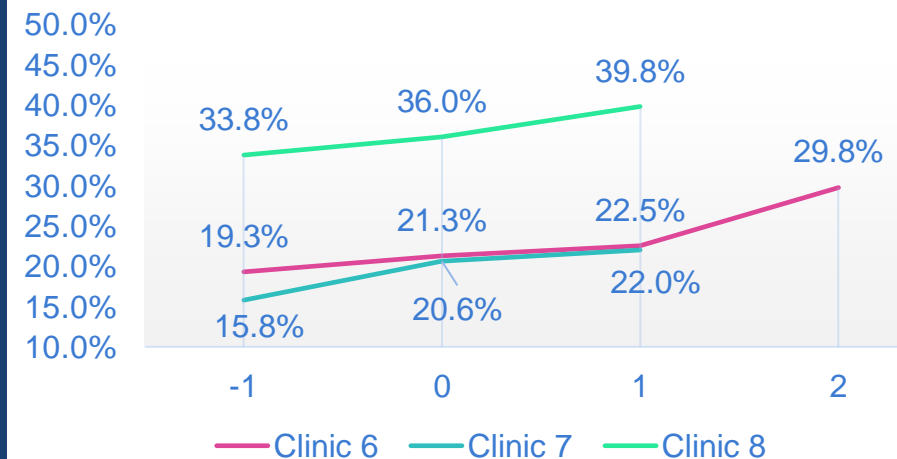
## YEAR 1 COHORT +1 YEAR 2



## Small Clinics (Year 2)



## Rest of Year 2 Cohort



# Screening for colorectal cancer


DRVS tools to support evidence-  
based interventions





# Provider Reminder: PVP Alerts

ALERT

Colorectal Cancer Sc... 

ALERT	MESSAGE	DATE	RESULT	OWNER
Colon CA 45+	Missing			MA/Clin
Mammo	Missing			Clinician
Pap HPV	Missing			MA
A1c	Out of Range			MA
Hep C	Missing			Clinician
HIV	Missing			Clinician
Alcohol Screening	Overdue			MA
PHQ-2 Annual	Overdue			MA
SDOH Needs Assessed	Missing			
Flu - Seasonal	Missing			MA
Shingrix Series Incomplete	Missing			MA/Clin
Tetanus	Due 1			MA
Foot Exam	Overdue			MA/Clin

# Provider Reminder: PVP Alerts

Search Alerts...



All

Enabled

Disabled

All

In POC Measure

Not in POC Measure

CATEGORY	NAME ▾	PVP NAME	ENABLED	DESCRIPTION	OWNER	CREATED	MODIFIED
Cancer Screening	Colorectal Cancer Screening 45+	Colon CA 45+	Y	Alert will trigger if patient has not had a colonoscopy in past 10 years, flexible sigmoidoscopy or colonography in past 5 years, FIT DNA in last 3 years or FOBT in past year, or is due in the next 3 months, for patients $\geq 45$ yrs old and $\leq 75$ years old. Excludes patients who have had colorectal cancer, total colectomy, hospice care or palliative care services, frailty with advanced illness, or are a long term care resident. This alert is not configurable		06/23/2021	12/21/2021
Screening	Colorectal Cancer Screening Results	Colorectal Cancer Screening Results	N	Alert will trigger for patients aged 45-75 to report the status of routine colorectal cancer screening activities. Includes the most recent result(s), if no screening is on record, or if screening is not indicated. This alert is not configurable		11/15/2023	11/15/2023

Columns

# Provider Reminder: PVP Alerts



## Colorectal Cancer Screening 45+

Alert will trigger if patient has not had a colonoscopy in past 10 years, flexible sigmoidoscopy or colonography in past 5 years, FIT DNA in last 3 years or FOBT in past year, or is due in the next 3 months, for patients  $\geq 45$  yrs old and  $\leq 75$  years old. Excludes patients who have had colorectal cancer, total colectomy, hospice care or palliative care services, frailty with advanced illness, or are a long-term care resident. This alert is not configurable.



**Use to promote CRC Screening**

## Colorectal Cancer Screening Results

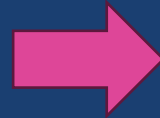
Alert will trigger for patients aged 45-75 to report the status of routine colorectal cancer screening activities. Includes the most recent result(s), if no screening is on record, or if screening is not indicated. This alert is not configurable.



**Use to see last CRC screen**

# Provider Assessment & Feedback: Measure Targets

Network  
target  
configuration  
screen



×

MEASURE

Colorectal Cancer Screening (CMS 130v11) ▾

NAME

AUCH focus measure goal

CENTER NAME

All Centers

PRIMARY TARGET(%)

45

SECONDARY TARGET(%)

32.6

The secondary target must be lower than or equal to the primary target

DESCRIPTION

Primary: the Apr 2023 screening rate for the second-ranked health center.  
Secondary: the Apr 2023 screening rate for the ninth-ranked health center.

☒ SET AS DEFAULT TARGET

This will override the current default target

Cancel

Confirm

# Provider Assessment & Feedback: Measure Targets



Comparison: center and network targets and performance TY Feb 2024

*key: P = primary, S = secondary, R = result, N = not met, N/A = not applicable*

Fake center ID	P	S	R	Comment	Center target progress	Network target progress	Center P compared to network P	Center S compared to network S
0 (network)	45.0%	32.6%	34.5%	Network targets and overall PHC performance	N/A	S	N/A	N/A
1	45.0%	32.6%	37.6%	No center target set	N/A	S	N/A	N/A
2	30.0%	24.0%	24.0%	Exactly at center S	S	N	Easier	Easier
3	43.0%	31.0%	36.3%		S	S	Easier	Easier
4	36.0%		37.0%	One point over center P	P	S	Easier	N/A
5	42.0%		41.4%	0.6 points away from center P	N	S	Easier	N/A
6	66.0%		38.2%	Ambitious target (value-based care goal)	N	S	Tougher	N/A
7	30.0%	20.0%	29.6%	0.4 points away from center P	S	N	Easier	Easier
8	32.0%	20.0%	28.0%		S	N	Easier	Easier
9	25.0%	20.0%	25.5%	0.5 points over center P	P	N	Easier	Easier

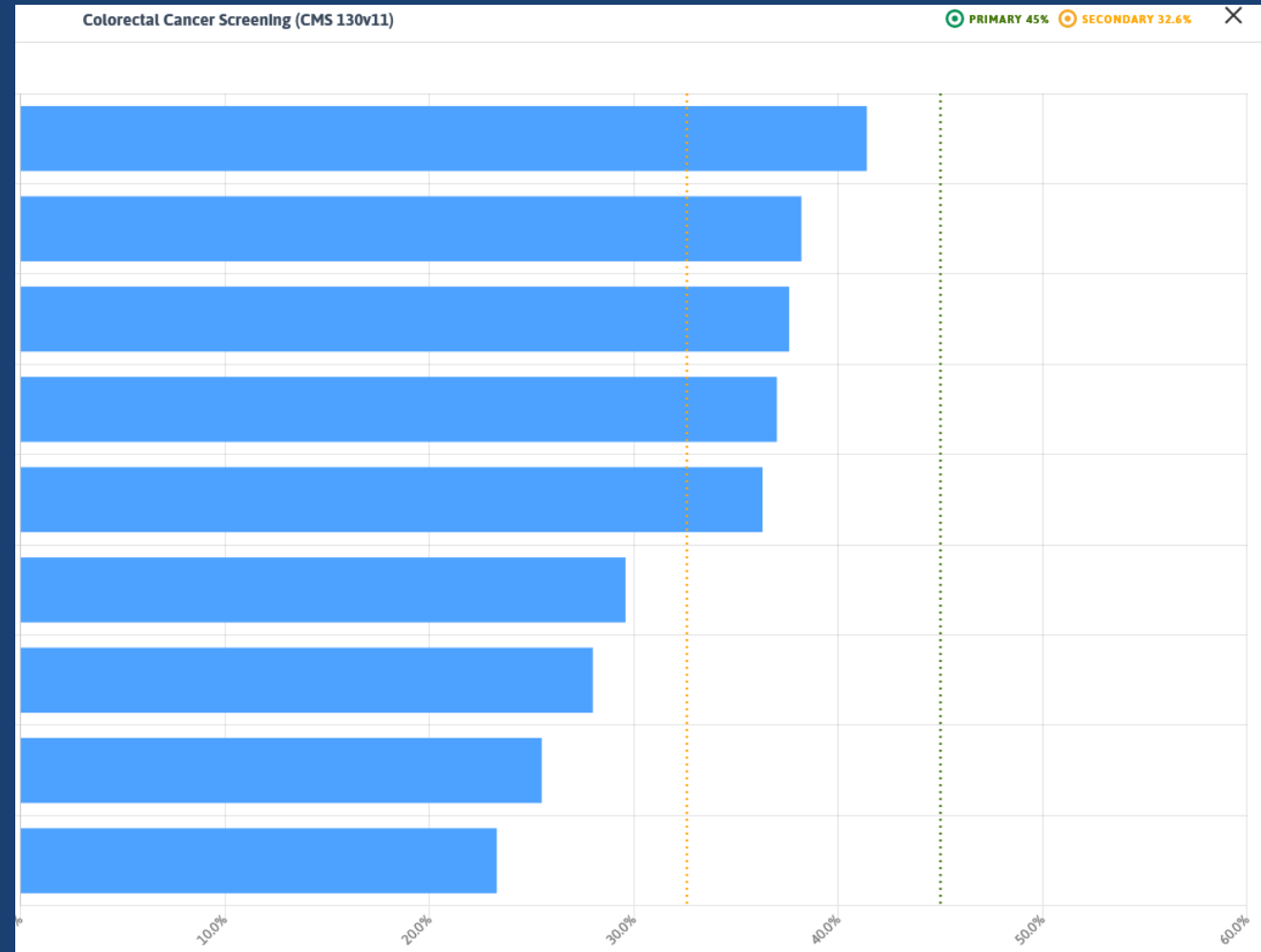
# Provider Assessment & Feedback: Measure Comparison

**UDS CRC screening  
measure performance**

**Each bar represents  
one of the nine  
participating health  
centers**

**TY Feb 2024**

**Network targets shown**





# Provider Assessment & Feedback: Measure Trends

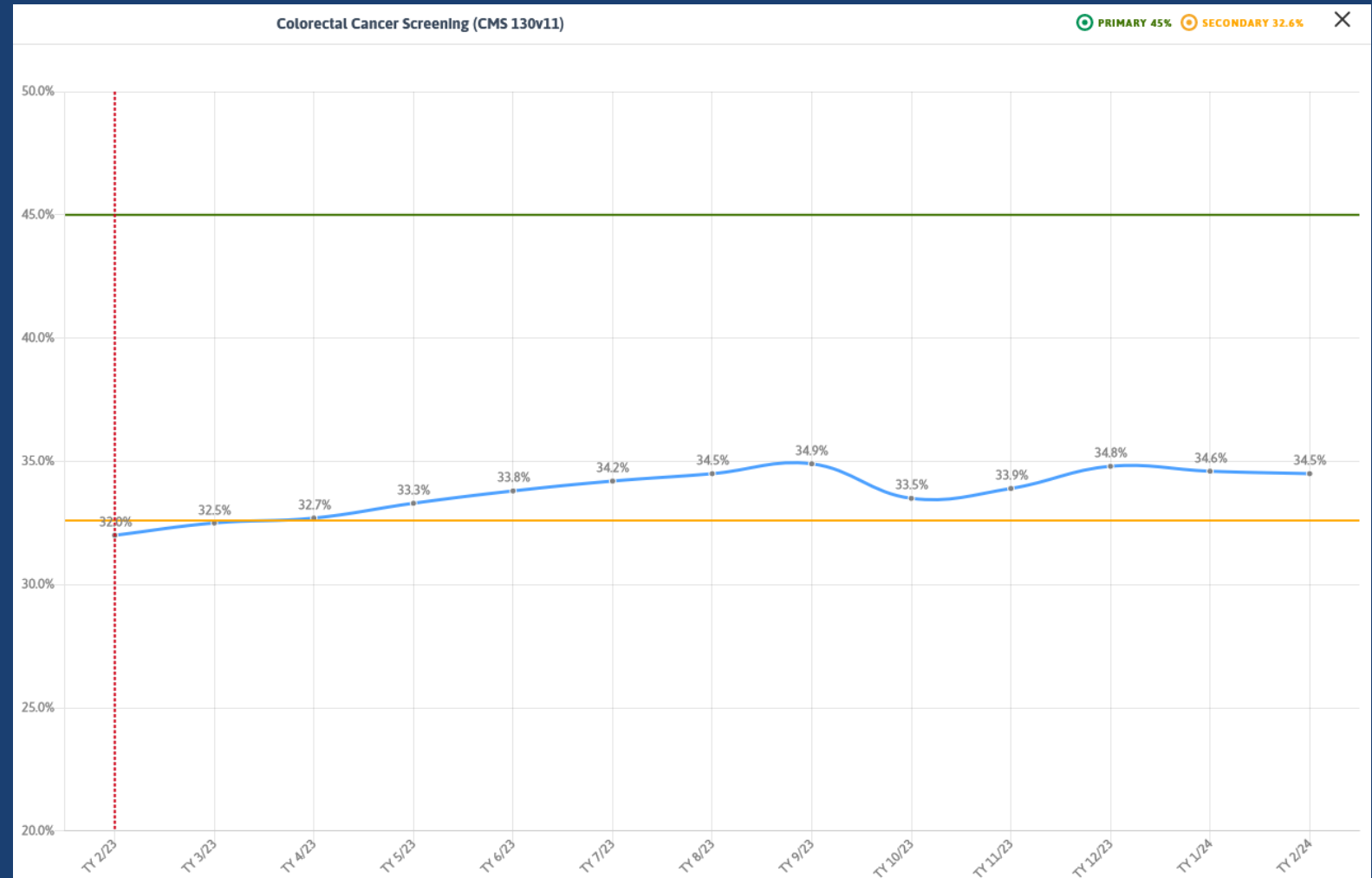


UDS CRC screening  
measure performance

Combined screening  
rate for nine  
participating health  
centers

TY Feb 2024

Network targets  
shown



# Provider Assessment & Feedback: Measure Trends

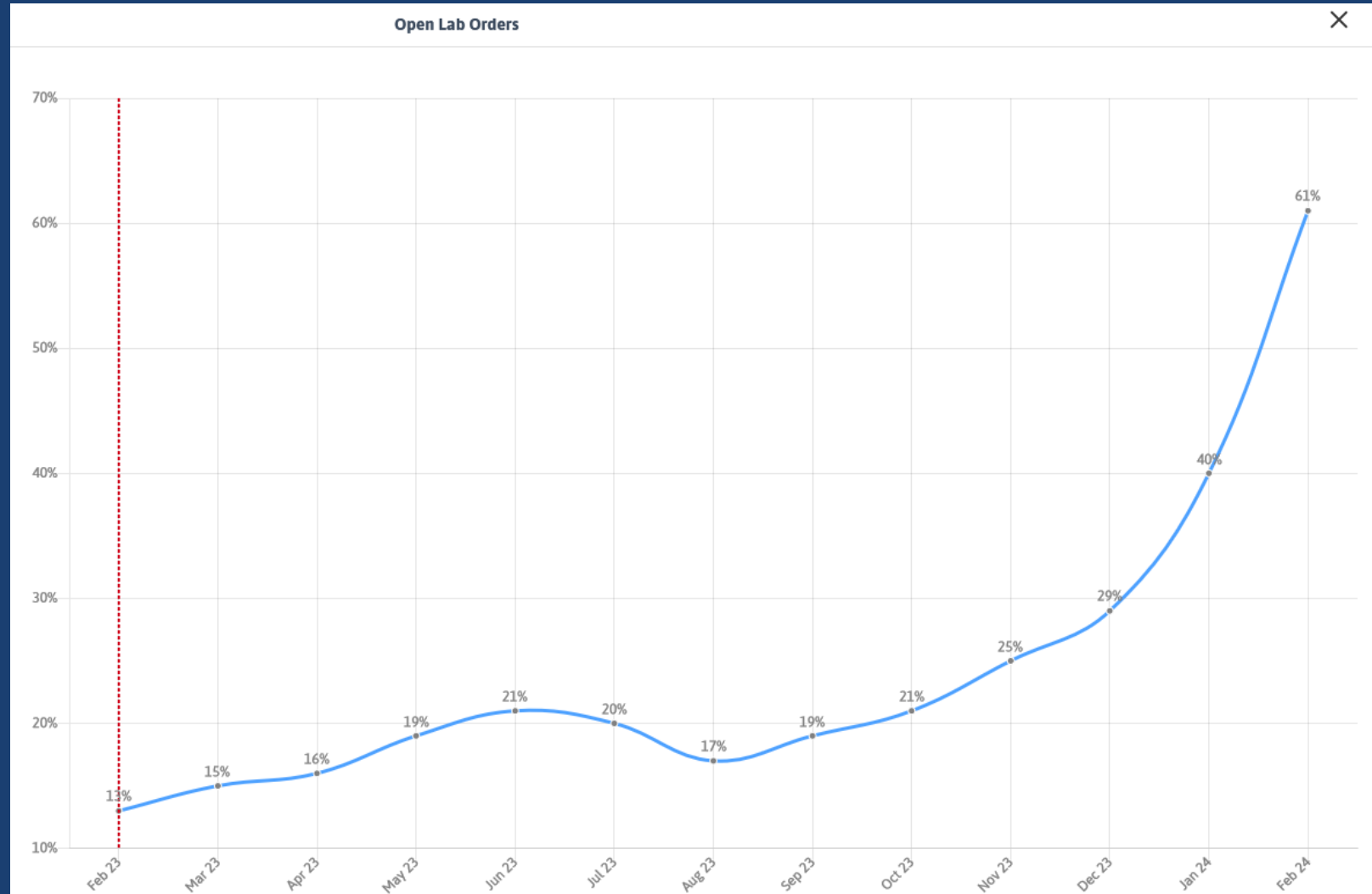


## Open lab orders

Combined open order rate for eight of the nine participating health centers (one center's lab orders are not linked to EHR CPT codes)

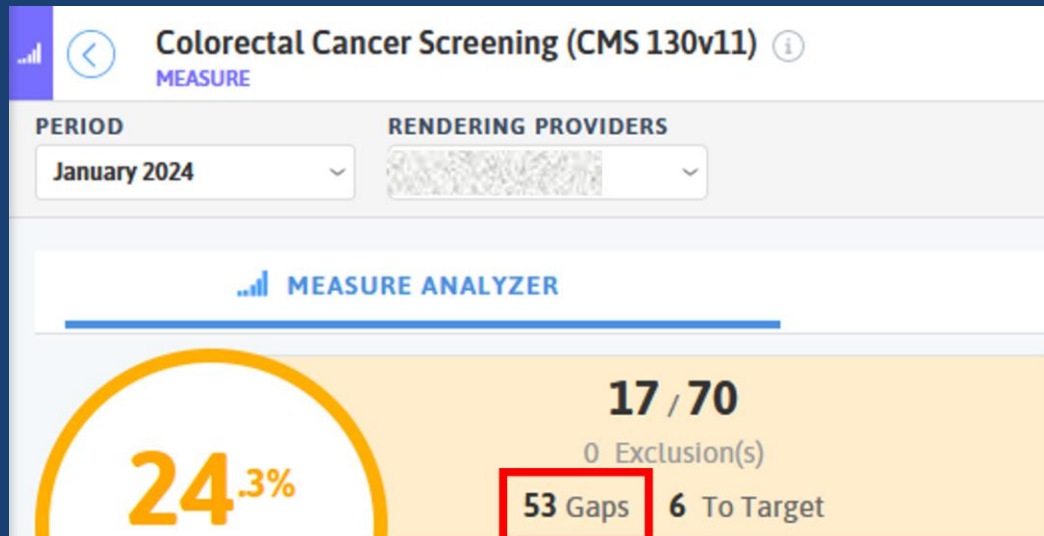
Month Feb 2024 (run on 2/22/24)

Measure filtered to FIT DNA and FOBT/FIT



# Provider Assessment & Feedback: Finding Missed Opportunities

Compare screening gaps to number of FIT/FIT-DNA tests ordered or colonoscopy referrals made.



Open Lab Orders MEASURE

PERIOD: January 2024  
RENDERING PROVIDERS: [selected]  
ORDER TYPE: 2 selected

Comparison	
DENOM	
2	

Open Referrals MEASURE

PERIOD: January 2024  
RENDERING PROVIDERS: [selected]  
REFERRAL TYPE: 3 selected

Comparison	
REFERRAL TYPE	DENOM
Colonoscopy, screening	3

# Client (Patient) Reminders: Azara Patient Outreach (APO) Campaigns

## Colonoscopy referral with appointment

### ENTRY CRITERIA

**This is how we detect if a patient should ENTER the campaign:**

Patients who had a visit within the last 12 month(s), who have an upcoming primary care appointment in the next 14 day(s), and have an open referral for a colonoscopy (both screening and Dx) within the last 12 month(s). The campaign uses the most recent colonoscopy referral.

### EXIT CRITERIA

**This is how we detect if a patient should EXIT the campaign:**

Patients in the campaign who no longer meet the entry criteria, including generic criteria, appointment criteria, and referral criteria

## Colonoscopy referral without appointment

### ENTRY CRITERIA

**This is how we detect if a patient should ENTER the campaign:**

Patients who had a visit within the last 12 month(s), who do not have an upcoming primary care appointment in the next 14 day(s), and have an open referral for a colonoscopy (both screening and Dx) within the last 12 month(s). The campaign uses the most recent colonoscopy referral.

### EXIT CRITERIA

**This is how we detect if a patient should EXIT the campaign:**

Patients in the campaign who no longer meet the entry criteria, including generic criteria, appointment criteria, and referral criteria

# Client (Patient) Reminders: Azara Patient Outreach (APO) Campaigns

## Colorectal Cancer Screening due reminder without appointment

### ENTRY CRITERIA

#### **This is how we detect if a patient should ENTER the campaign:**

Patients aged [50y, 75y), who have had a primary care visit in the past 12 month(s), and have not had a colonoscopy in the last 10 year(s), and have not had a flexible sigmoidoscopy or ct colonograph in the last 5 year(s), and have not had a FIT-DNA in the last 3 year(s) or FIT/FOBT in the last 1 year(s), and have no appointment in the next 30 day(s)

### EXIT CRITERIA

#### **This is how we detect if a patient should EXIT the campaign:**

Patients who no longer meet generic entry criteria, or have had a colonoscopy in the last 10 year(s), or have had a flexible sigmoidoscopy or ct colonograph in the last 5 year(s), or have had a FIT-DNA in the last 3 year(s) or FIT/FOBT in the last 1 year, or have an upcoming appointment in the next 30 day(s)

## Reminder to discuss colorectal cancer screening at upcoming appointment

### ENTRY CRITERIA

#### **This is how we detect if a patient should ENTER the campaign:**

Patients aged [50y, 75y), who have had a primary care visit in the past 12 month(s), and have not had a colonoscopy in the last 10 year(s), and have not had a flexible sigmoidoscopy or ct colonograph in the last 5 year(s), and have not had a FIT-DNA in the last 3 year(s) or FIT/FOBT in the last 1 year(s), and have an upcoming appointment in the next 30 day(s)

### EXIT CRITERIA

#### **This is how we detect if a patient should EXIT the campaign:**

Patients who no longer meet generic entry criteria, or have had a colonoscopy in the last 10 year(s), or have had a flexible sigmoidoscopy or ct colonograph in the last 5 year(s), or have had a FIT-DNA in the last 3 year(s) or FIT/FOBT in the last 1 year, or no longer have an appointment in the next 30 day(s)

# Client (Patient) Reminders: Azara Patient Outreach (APO) Campaigns



## Open FIT order

### ENTRY CRITERIA

**This is how we detect if a patient should ENTER the campaign:**

Patients aged [50y, 200y) and have had a primary care visit in the past 36 month(s) and have an open FIT order in the past 12 month(s)

### EXIT CRITERIA

**This is how we detect if a patient should EXIT the campaign:**

Patients who no longer meet generic entry criteria, or no longer have an open FIT order in the past 12 month(s)



# Client (Patient) Reminder

## APO Sample Texts

“Starter” text from Azara

Campaign: open FIT order

Three messages recommended. The third message allows patients to reply with one of four multiple-choice reasons

### Open FIT order

- Message #1: Hi, this is <Center Name> reminding you to put your FIT kit in your bathroom as a reminder to complete the test as soon as you can. Text STOP to opt out.
  - Spanish Translation of above message:
- Message #2: Hi, this is <Center Name> reminding you to complete the FIT kit you got at your last visit. If you've already sent it – thank you! If not, please call with any questions ###-###-####. Text STOP to opt out.
  - Spanish Translation of above message:
- Message #3: Hi, this is <Center Name> and we didn't get your FIT kit yet. Please tell us more: (A) No time, (B) I forgot, (C) Need a new kit, (D) Already returned. Thanks! Text STOP to opt out.
- Spanish Translation of above message:
  - A: It's quick to complete and it may help to leave in your bathroom as a reminder. Call if you need more directions 718-466-8244. Text STOP to opt out.
    - Spanish Translation of above message:
  - B: It's easy to forget, but screening is important. Putting the kit in your bathroom where you can see it may help, or you can use our restrooms instead. Text STOP to opt out.
    - Spanish Translation of above message:
  - C: Please come in and grab a new kit. Text STOP to opt out.
    - Spanish Translation of above message:
  - D: Great – Thank you!
    - Spanish Translation of above message:

# Client (Patient) Reminder APO Sample Texts

“Starter” texts from Azara

Campaigns: screening due reminder with and without appointment

One message for existing appointment. Three messages with patient reply option for no upcoming appointment

## Reminder to discuss colorectal cancer screening at upcoming appointment

- Message #1: Hi, this is <Center Name> reminding you to discuss your colorectal cancer screening at your upcoming visit. We look forward to seeing you soon. Text STOP to opt out.
  - Spanish Translation of above message:

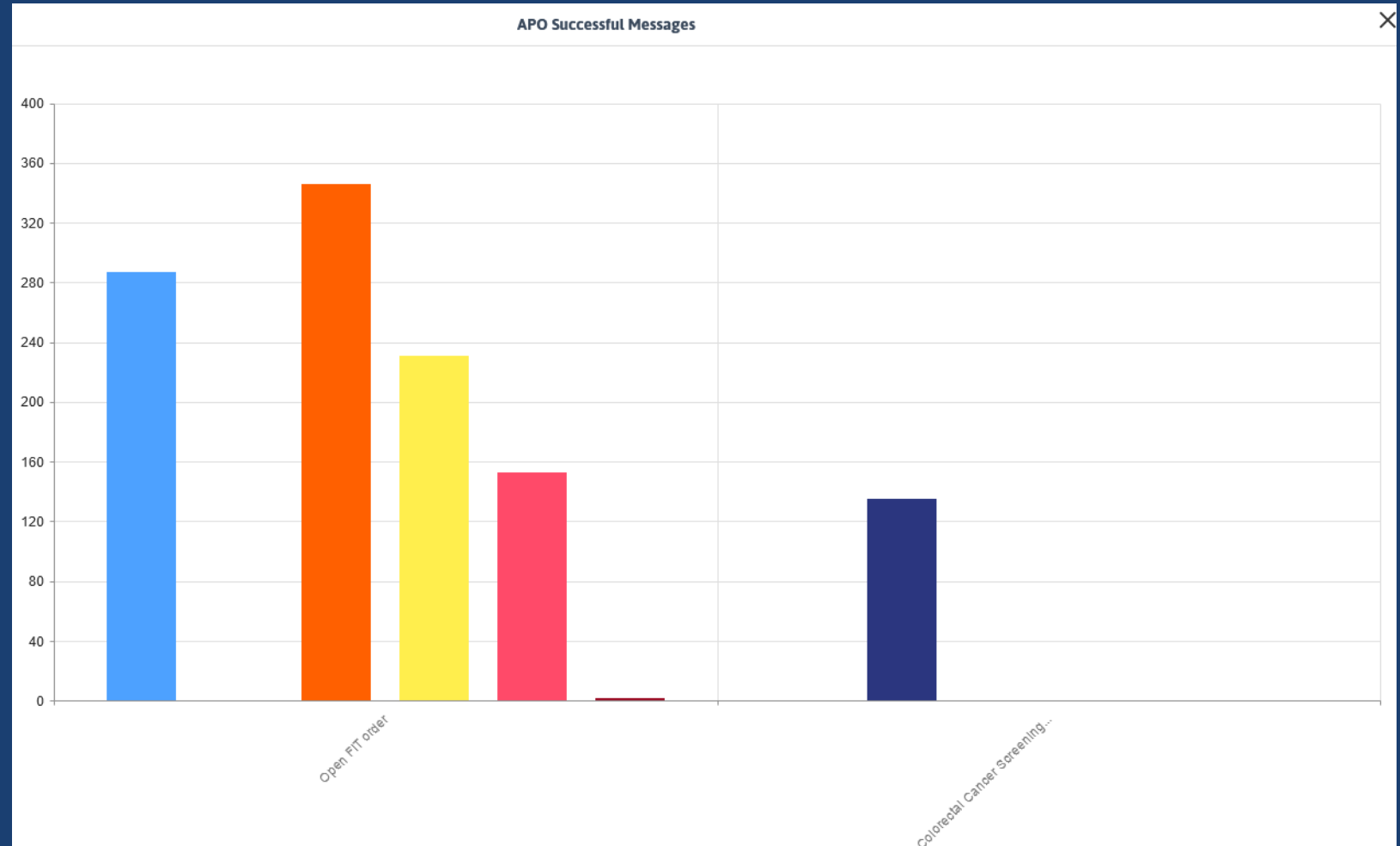
## Colorectal Cancer Screening due reminder without appointment

- Message #1: Hi, this is <Center Name>. You are due for your colorectal cancer screening. Please call us to schedule an appointment ###-###-####. Text STOP to opt out.
  - Spanish Translation of above message:
- Message #2: Hi, this is <Center Name>. You are due for your colorectal cancer screening. Please call us to schedule an appointment ###-###-####. Text STOP to opt out.
  - Spanish Translation of above message:
- Message #3: Hi, this is <Center Name>. We haven't heard from you regarding your colorectal cancer screening. Please tell us more (A) already called, (B) get my care elsewhere, (C) Can't come in. Text STOP to opt out.
  - Spanish Translation of above message:
    - A: Thank you for scheduling a visit with us. We look forward to seeing you soon. Text STOP to opt out.
      - Spanish Translation of above message:
    - B: We're happy to hear you are getting the appropriate care. If you let us know where, we can make a note in your record. Text STOP to opt out.
      - Spanish Translation of above message:
    - C: We understand and would like to help you address any challenges you're facing related to getting to the center. Please call us at ###-###-####. Text STOP to opt out.
      - Spanish Translation of above message:

# Client (Patient) Reminder: Number of APO Texts sent

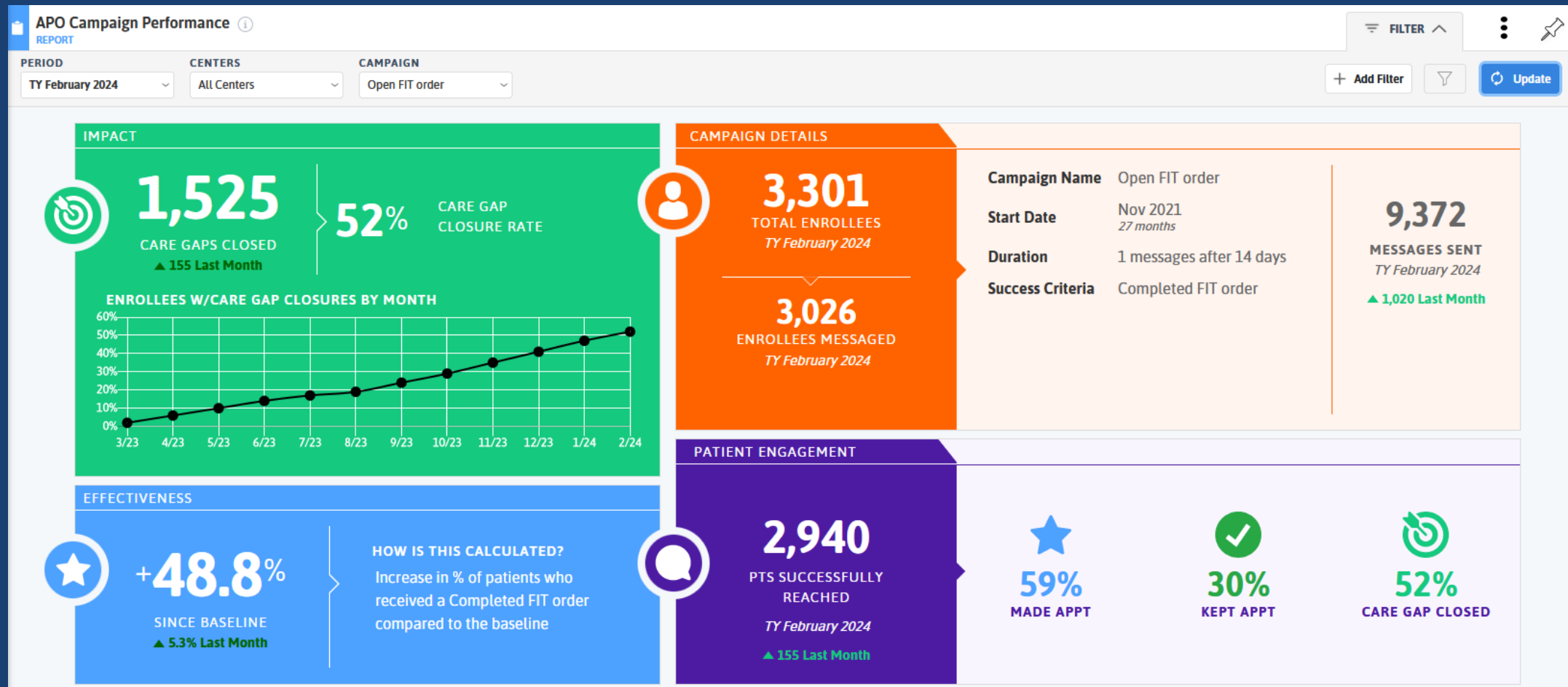
**Month Jan  
2024**

**Grouped by  
campaign by  
health center**



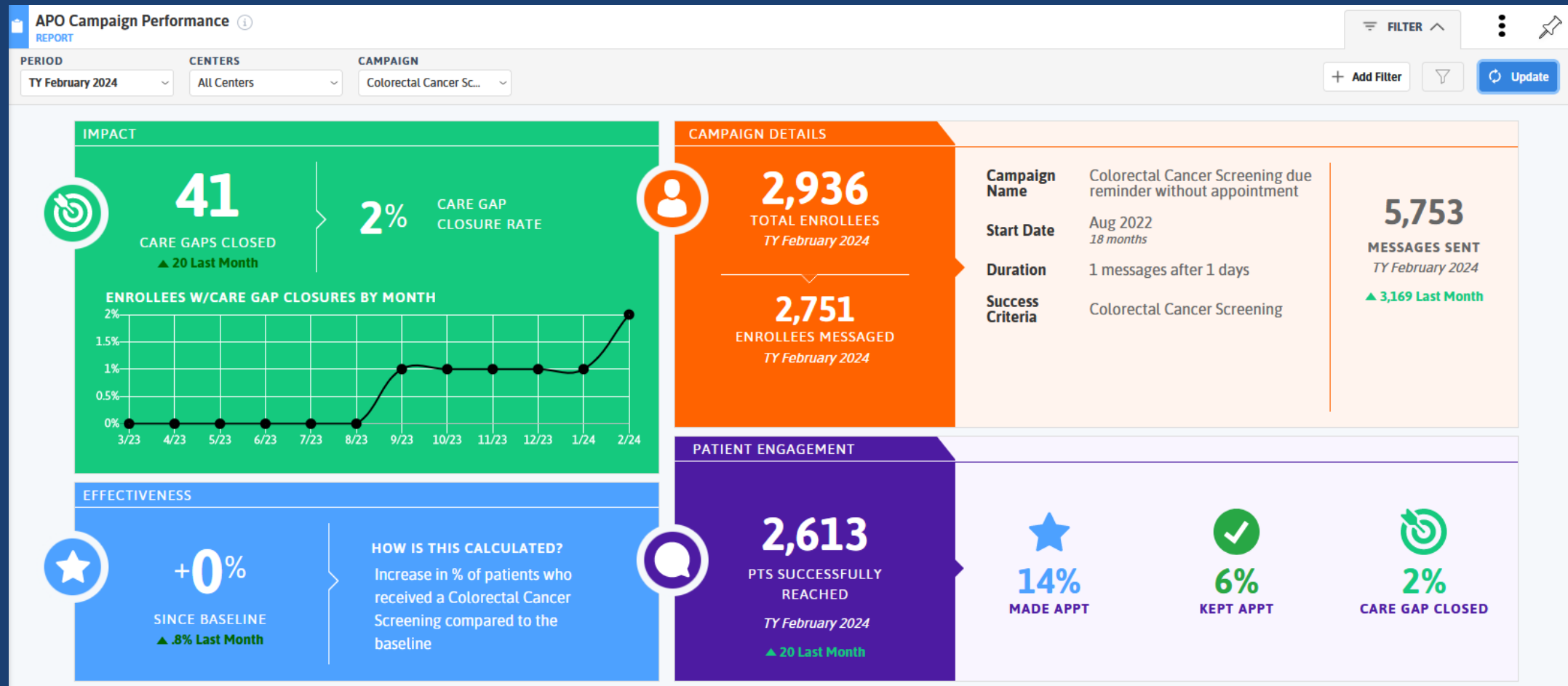
# Client (Patient) Reminder: APO Campaign Performance

## Campaign: open FIT order



# Client (Patient) Reminder: APO Campaign Performance

Campaign: CRC screening due without appointment



# Conclusions: Before & After

## Results Narrative

Overall Results: Colorectal cancer screening rates **increased by 30.8%** over an average project duration of 25 months.

### Key Considerations:



Baseline Measurement



Age Range 50-75



Final Measurement



Comparisons to non-participating centers



Lower baseline = greater improvement

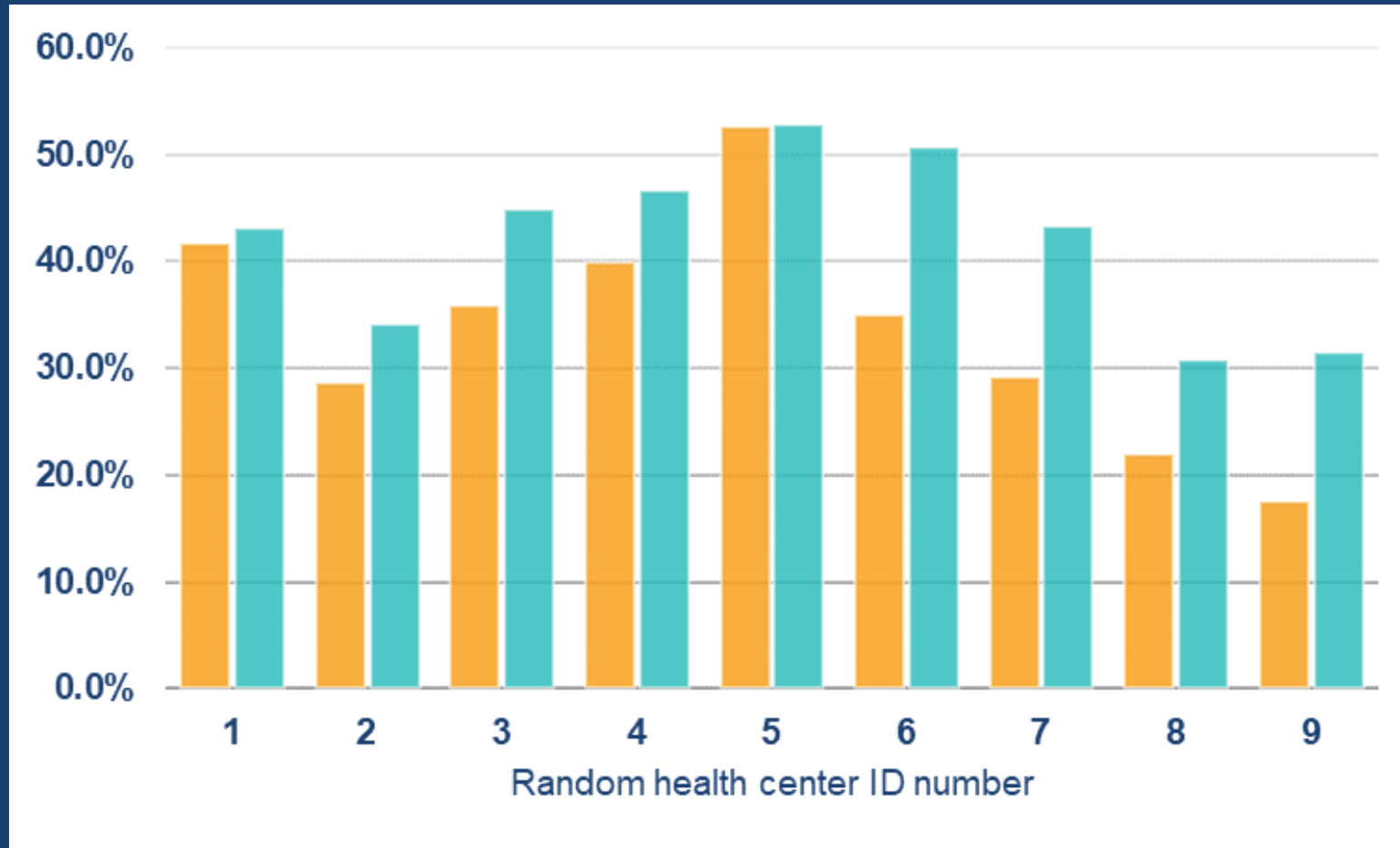


# Conclusion: Before & After Results Data Table

Percentage of patients age 50-75 appropriately screened for colorectal cancer  
before and after implementing the colorectal cancer control program

Random health center ID number	Baseline (before)	months counted	Final (after)	months counted	Points change	Percent change
0 (overall)	N/A	N/A	N/A	N/A	8.4%	30.8%
1	41.7%	31	43.1%	35	1.3%	3.2%
2	28.6%	14	34.1%	35	5.5%	19.4%
3	35.8%	59	44.9%	14	9.1%	25.3%
4	39.8%	50	46.5%	19	6.7%	16.9%
5	52.5%	50	52.8%	23	0.3%	0.6%
6	35.0%	3	50.7%	23	15.7%	44.7%
7	29.1%	38	43.3%	26	14.2%	48.8%
8	22.0%	44	30.7%	30	8.7%	39.7%
9	17.6%	50	31.5%	23	13.9%	79.1%

# Conclusion: Before & After Results Chart



**Percentage of patients age 50-75 appropriately screened for colorectal cancer before and after implementing the colorectal cancer control program**

**Orange/left = before (earliest screening rate data to program start)**

**Turquoise/right = after (program start to Jan 2024)**

# Questions?



# Montana PCA: Mailed FIT Project



# Montana Primary Care Association

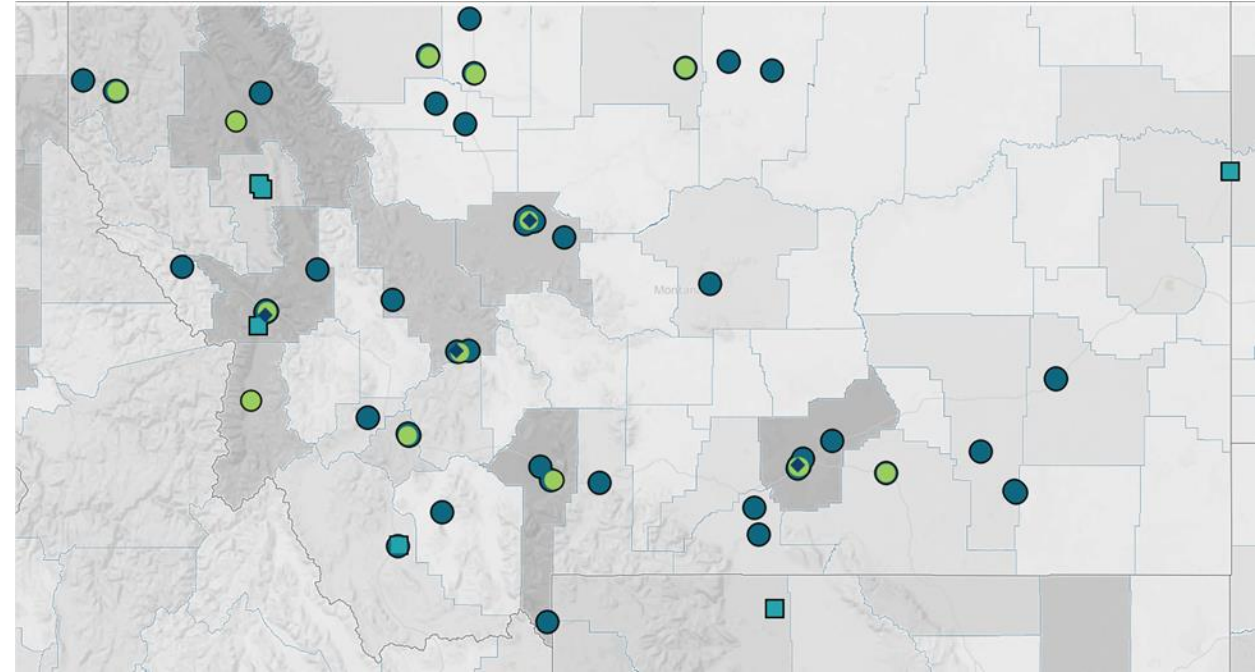


The Mission of the Montana Primary Care Association is to **promote integrated primary healthcare** to achieve health and well-being for Montana's most vulnerable populations.

The Vision of MPCA is **health equity for all Montanans**.

MPCA values **integrity, collaborations, and innovation**.

The Montana Primary Care Association is the support organization for Montana's **14 Community Health Centers and 5 Urban Indian Organizations**. MPCA centers serve over **123,791 patients** across Montana.



# Montana Health Center Patients



**123,791** unique patients

**13.78%** Uninsured | **32.06%**


















**24.89%** of patients under 100% of FPL | **40.76%** of patients under 200% of FPL

**38,108** patients aged 45-75 (eligible for Colorectal Cancer Screening)

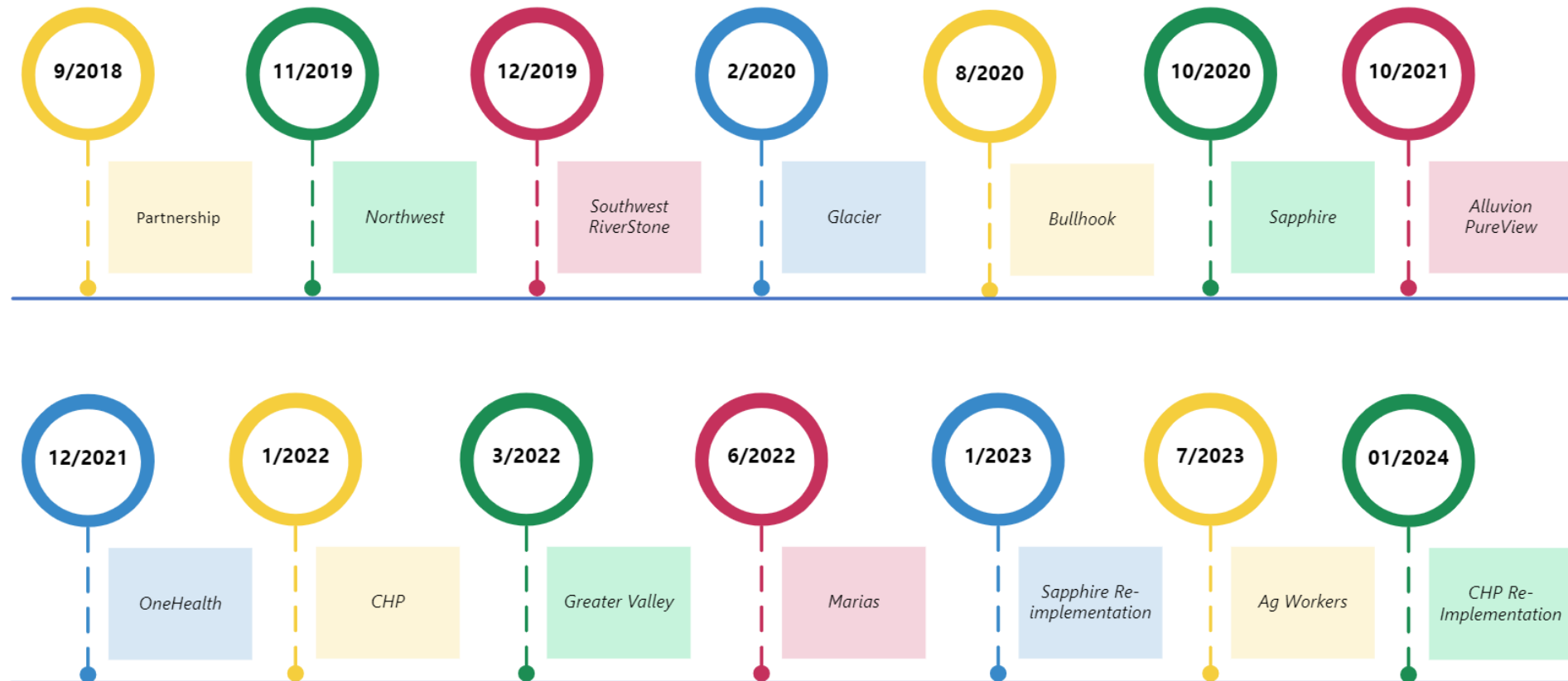
Colorectal Cancer Screening Rate: **42.1%**



# COVID 19 and Colorectal Cancer Screening

Clinical Quality Measure	2019	2020 (v 2019)	2021 (v 2020)	2022 (v 2021)
Cervical Cancer Screening	53.82	 50.41	 50.51	 48.34
Breast Cancer Screening		46.69	 44.38	 47.92
Colorectal Cancer Screening	46.06	 44.12	 45.8	 46.96
Screening for Depression	67.64	 62.36	 63.5	 63.88
Controlling High Blood Pressure	64.59	 57.39	 60.44	 62.53
Diabetes Management	25.94	 29.96	 27.09	 26.14

# Montana Azara DRVS Implementation

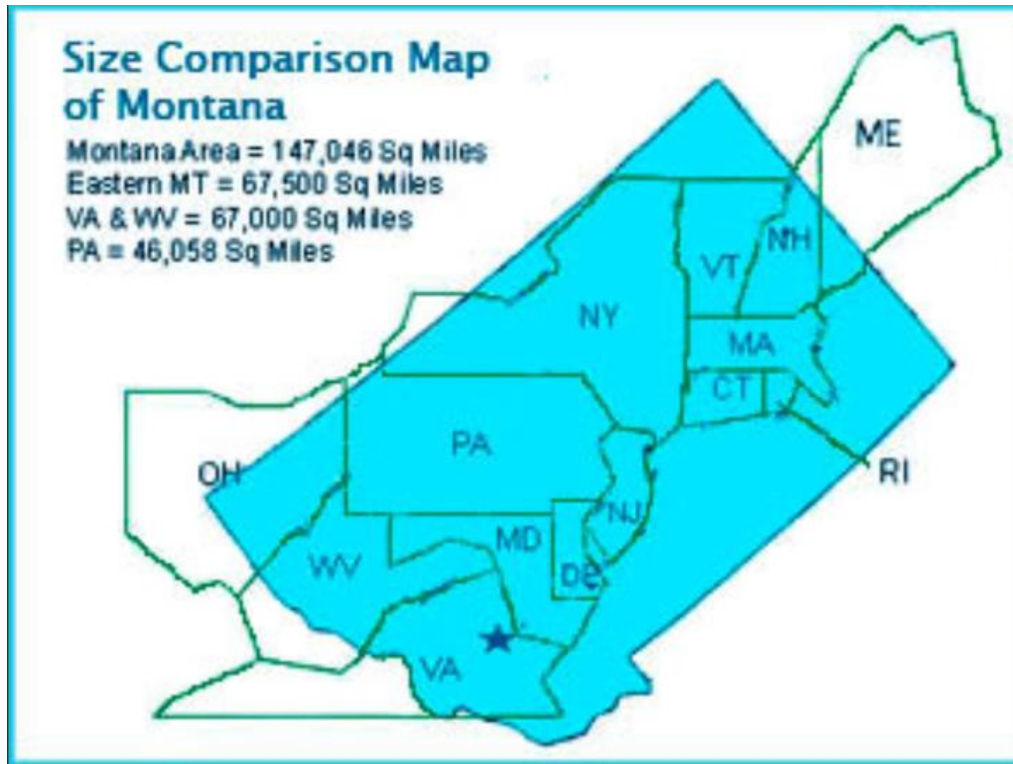


# MPCA DRVS Implementation Overview

Center	Core DRVS	SDOH	Controlled Substance	Risk	TOC	Payer Integration			APO	Dental
Alluvion	10/2021				X				X	
Bullhook	08/2020		X		X				X	
Community Health Partners	01/2022+01/2024				X					
Glacier	02/2020		X		X					
Greater Valley	03/2022		X		X				X	
Marias	06/2022		X						X	
Migrant	07/2023		X							
Northwest	11/2019		X		X					
One Health	12/2021		X		X					
Partnership	09/2018		X		X					
PureView	10/2021		X		X					
Riverstone	10/2019		X		X					X
Sapphire	10/2020+01/2023		X		X					
Southwest	12/2019		X		X					X

# Unique Geography, Unique Challenges

Montana's unique geography and population creates unique challenges, including access to healthcare services.



**4<sup>th</sup>** largest state in the nation

Population: **1,052,343** people  
**2,160,000** cattle (2023)

**45 of 56** Montana counties are designated frontier

By 2030, Montana will be one of ten states in the country to have **more people over the age of 65** than under

# The Solution: Mailed FIT Campaigns

Evidence based strategy to increase colorectal cancer screening

Overcomes limitations of opportunistic screening and can be conducted in coordination with in-clinic screening efforts

Reduces time and transportation barriers

Less invasive than other screening methods



# 2021 Mailed FIT Project (without APO)



## Successes

- Return rates varied between 11%-27%
- Positive reception from clinic staff and patients



## Opportunities

- Centers that performed outreach beyond mailed letters had better return rates.
- Postal Service Challenges
- FIT kit challenges

# Integrating Mailed FIT and APO



Desire for APO to increase return rates while reducing staff workload



Opportunity to align Montana DPHHS Cancer Contract with HCCN Grant Activities

## **Objective 1: Patient Engagement**

Using Digital Tools to Engage Patients and their Families  
AND Improve Staff Capacity

## **Objective 10: Improving Digital Health Tools**

Activity 2: Improve Cancer Screening in Montana's Most Vulnerable

# APO Set Up



Edit



DAY AFTER PREVIOUS

1

TYPE

No Response



MESSAGE (ENGLISH)

Hi %{patient\_first\_name}, this is Alluvion Health, you will receive a free FIT test in the mail to test for colorectal cancer. Please place in your bathroom and complete the test as soon as possible. You can call us at 406-454-6973 if you have any questions! Text STOP to stop msgs.



MESSAGE (SPANISH)

Hola, %{patient\_first\_name}, somos de Alluvion Health. Recibira en el correo un kit de prueba gratuito de detección de cancer colorrectal. Por favor haga la prueba en su baño lo mas pronto posible y llamenos si tiene preguntas al 406-454-6973. Text STOP to stop msgs.



Cancel

Confirm





# APO Set Up



⚙️ < Open FIT order

VARIABLES

MESSAGE SCHEDULE

MESSAGE SCHEDULE

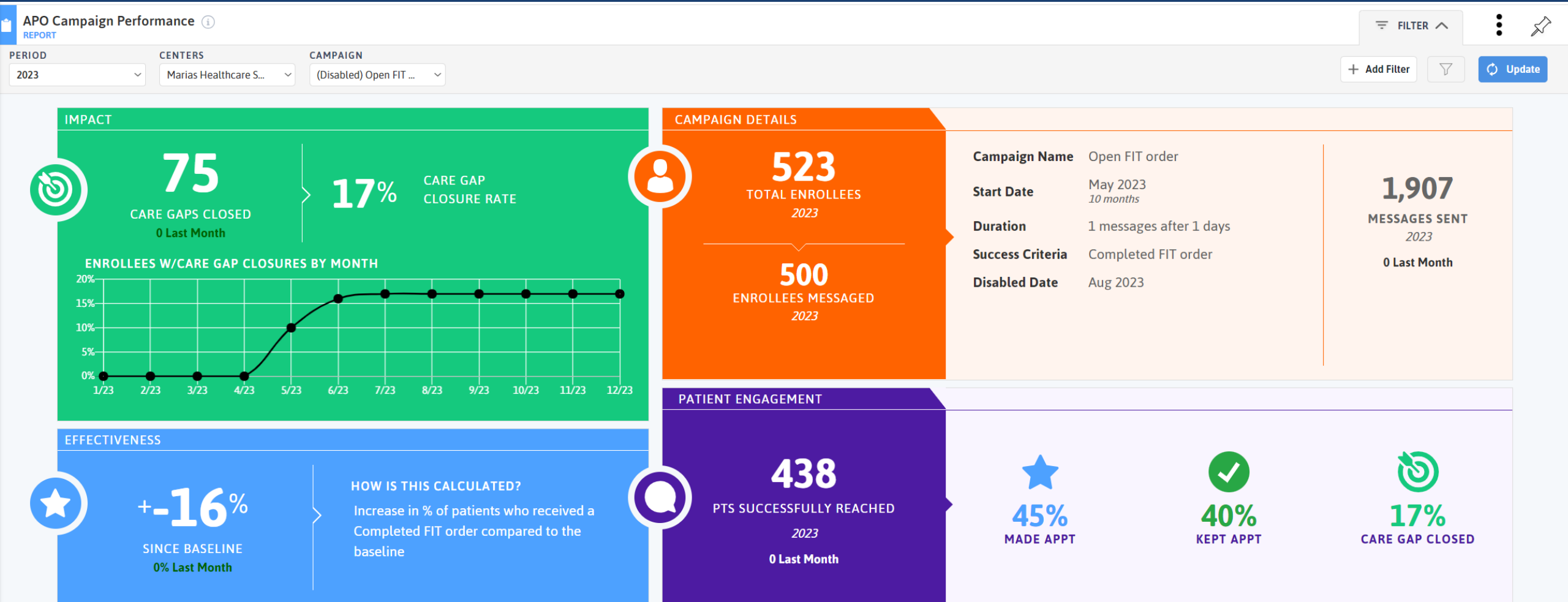
These are the messages that will go out to the patient, they will sort automatically based on day. Each campaign has a minimum of 1 message and maximum of 3 messages.

+ Message

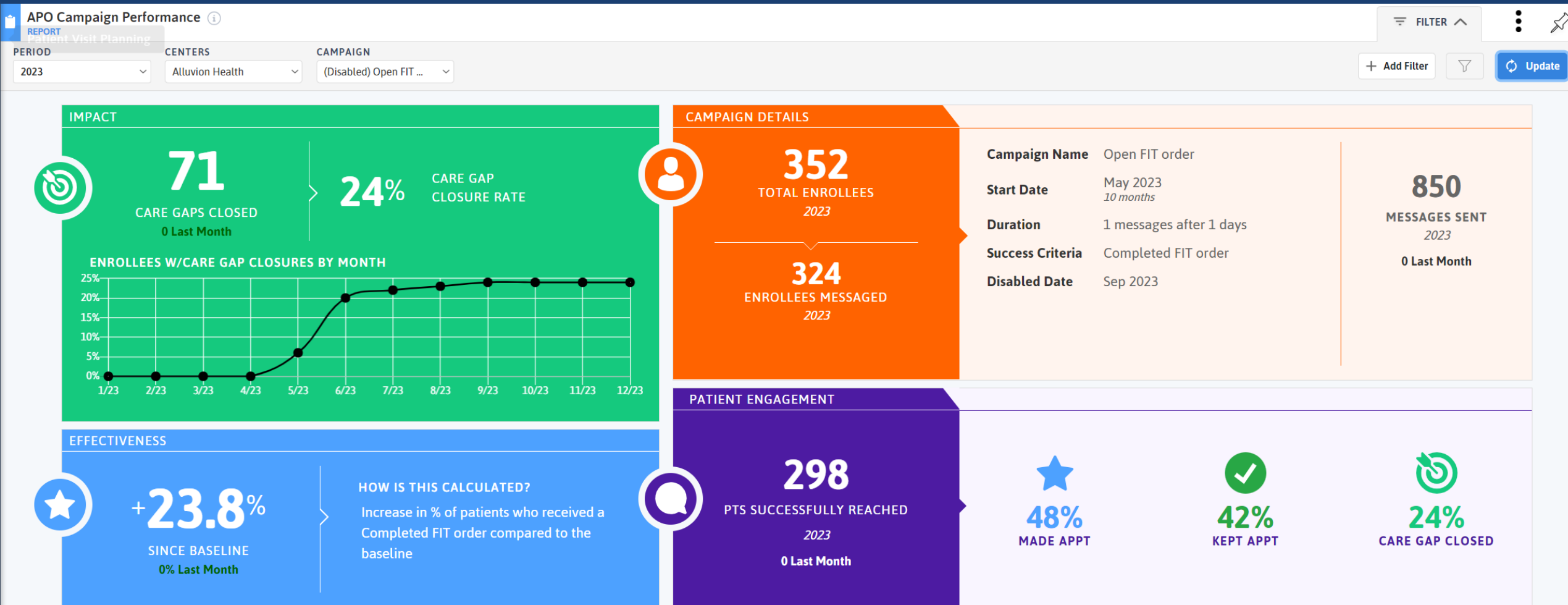
MESSAGE #	DAY	MESSAGE	
1	1	Hi %[patient_first_name], this is Bullhook Community Health Center, you will receive a FREE FIT test in the mail to test for colorectal cancer. Please place in your bathroom and complete the test as soon as possible. If you have any questions, please call 406-395-430 5. Text STOP to stop msgs.	⚙️
2	15	Hi %[patient_first_name], this is Bullhook Community Health Center reminding you to complete your free colon cancer screening kit. If you've already sent it-thank you! If not, please call with any questions 406-395-4305. Text STOP to stop msgs.	⚙️
3	22	Hi %[patient_first_name], this is Bullhook Community Health Center, we didn't get your colon cancer screening kit yet. Can you help us understand why? (A) No time, (B) I forgot, (C) Need a new kit, (D) Already returned. Thanks! Text STOP to stop msgs.	⚙️

Columns

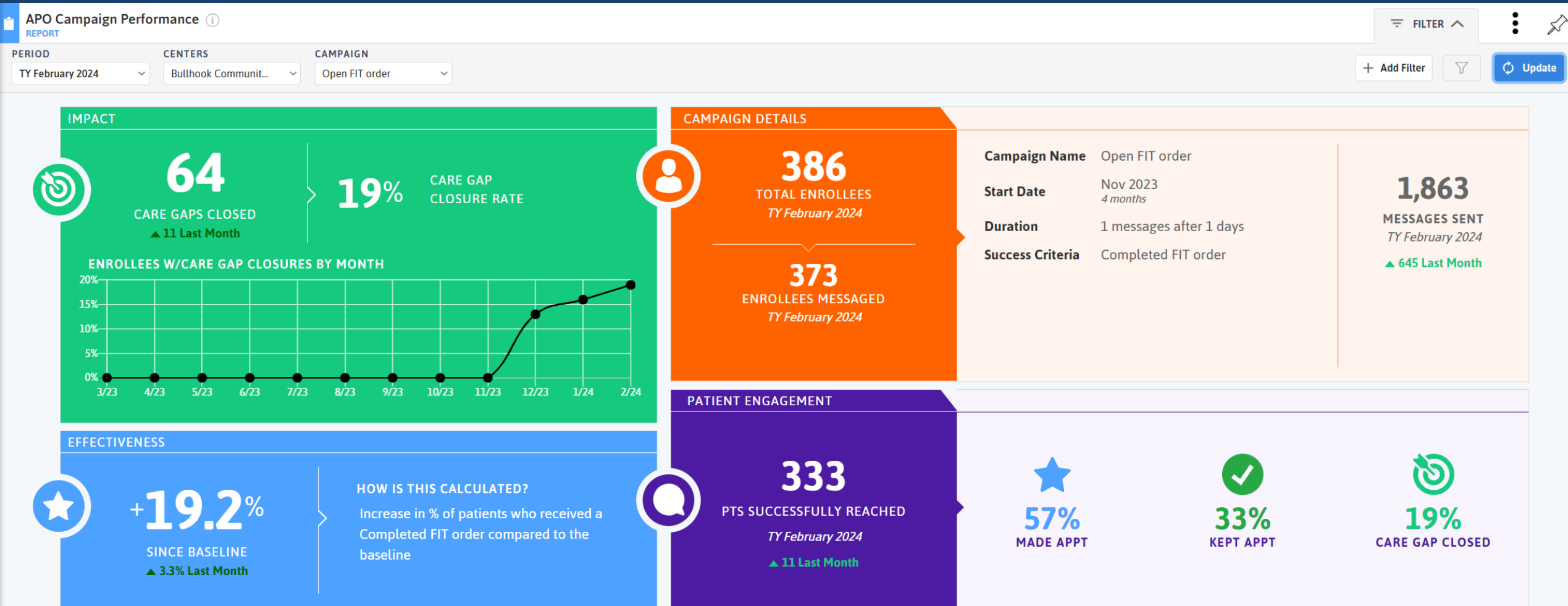
# Results | Marias



# Results | Alluvion



# Results | Bullhook



# Lessons Learned

- 1 US Postal Service Challenges
- 2 FIT Kit Shortage and Ordering
- 3 Data Cleanup might not increase return rates as much as expected
- 4 Emphasis to patients that tests are free and they/ their insurance will not be charged
- 5 Patients can and will opt out

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# Questions?



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## ACE'd it? Share your DRVS success story and become an Azara ACE!

Show your organization has used DRVS to **A**chieve measurable results, **C**elebrate improvement in patient health outcomes, and effectively **E**ngage care teams and/or patients. Stories should showcase how DRVS helped your organization overcome a challenge, the tools and solutions used to drive improvement and details of the successes that resulted from your initiatives. ACEs should be able to provide examples that quantify quality improvement, cost savings, operational efficiency or patient health improvement.

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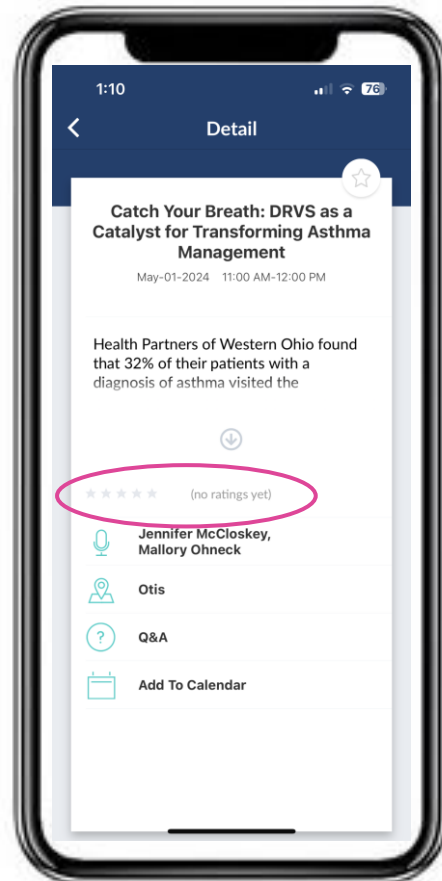
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