

OH-CorHealth Cardiovascular Rehabilitation Stakeholder Forum #4

APRIL 27, 2023 | 3:00 – 4:00 PM



Ontario Health
CorHealth Ontario

Agenda

Time	Description	Purpose	Presenter
3:00 pm	Welcome <ul style="list-style-type: none">Land Acknowledgement and Meeting Objectives	Information	Dr. Karen Harkness
3:05 pm	Provincial CR Measurement & Reporting Initiative <ul style="list-style-type: none">Updated CR Measurement ResultsSurvey Findings	Information and Discussion	Dr. Karen Harkness Dr. Paul Oh
3:25 pm	Guest Presentation <ul style="list-style-type: none">Cardio-Pulmonary Rehabilitation Program at St. Mary's General Hospital	Information	Sarah Beingessner Ala Qahwash
3:45 pm	Open Forum Discussion <ul style="list-style-type: none">Pulse Check: What is the current experience of delivery CR in Ontario?	Discussion	Dr. Paul Oh
3:55 pm	Next Steps	Information	Dr. Karen Harkness



We are recording this Forum and will make the recording available on the CorHealth website



Ontario Health
CorHealth Ontario

Land Acknowledgement

Karen Harkness



Meeting Objectives

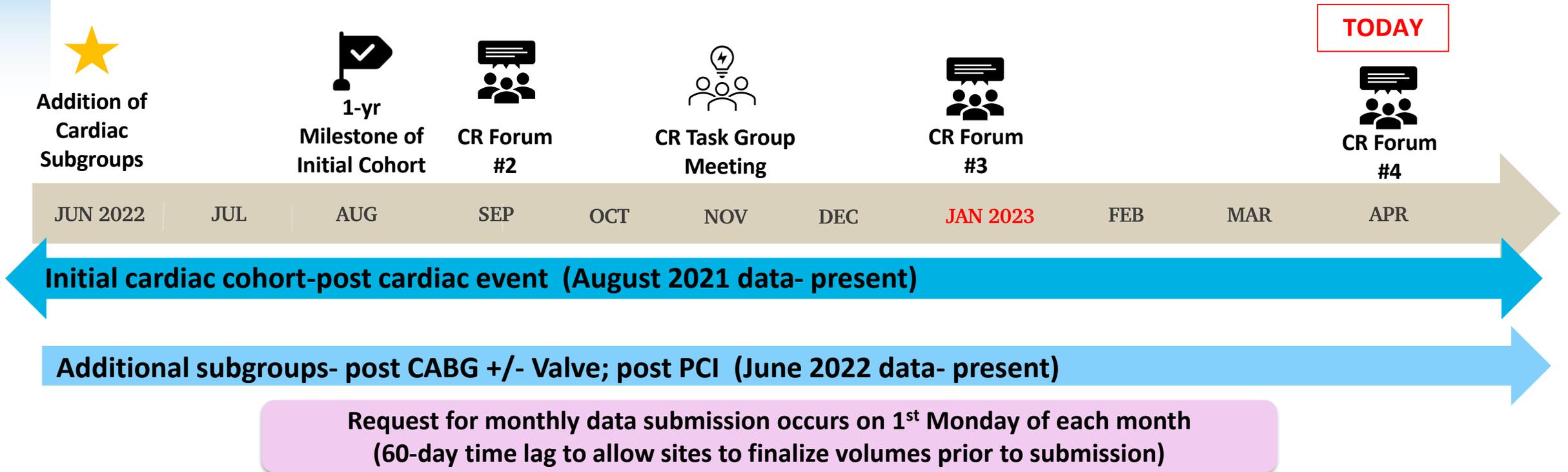
- To review updated CR data collection results to date
- To continue the dialogue and activity supporting a progressive approach to measure, monitor, and report on the status of outpatient Cardiovascular Rehabilitation in Ontario in the context of Survey findings
- To share experiences and facilitate dialogue on the current activities and models of delivery for cardiovascular rehabilitation (including virtual, in-person and hybrid)



Provincial Cardiovascular Rehabilitation Measurement and Reporting Initiative: Updated Results

Dr. Karen Harkness & Dr. Paul Oh

Update: Project Timeline

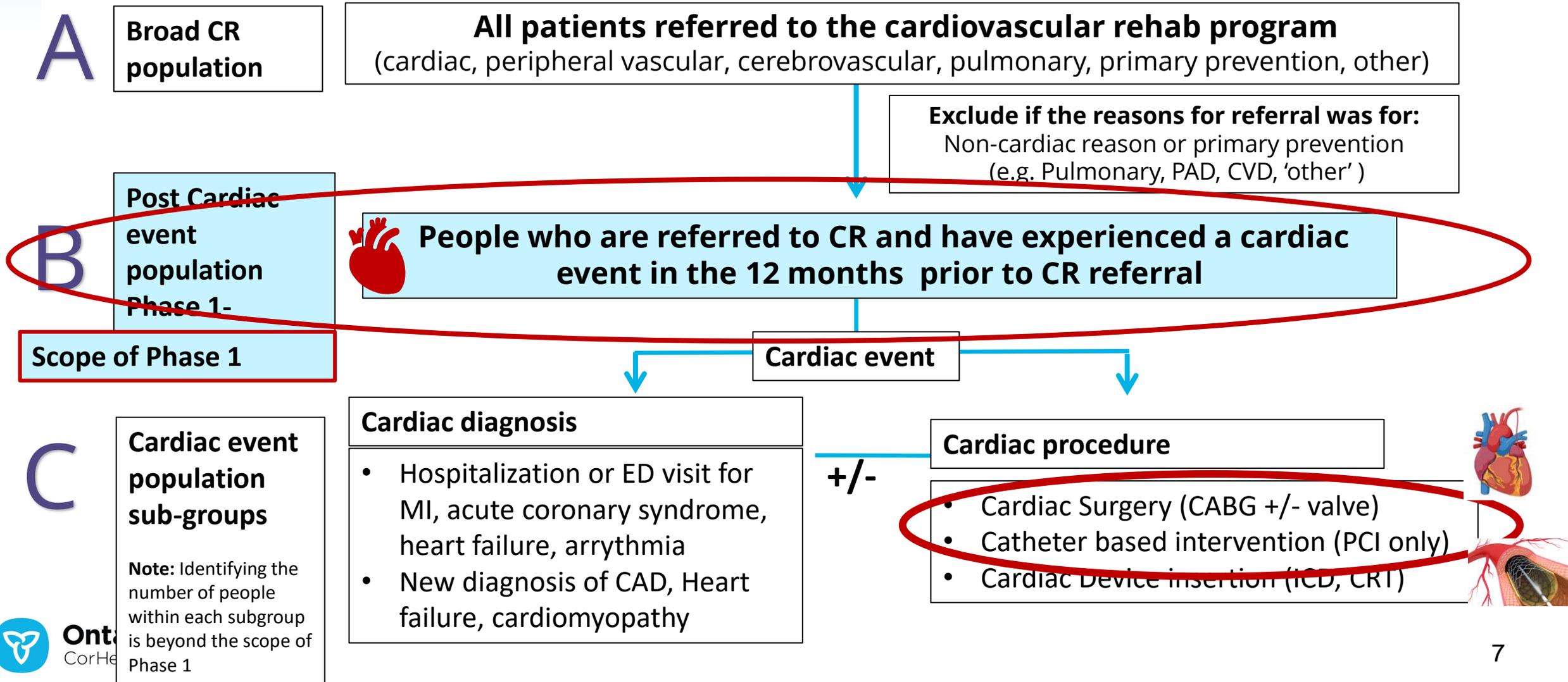


Key Achievements to Date:

- ✓ Start of CR data collection process (Aug 2021)
- ✓ Completed 1 year of data collection on the initial cardiac cohort (Aug 2022)
- ✓ Consistent response rate >80% for initial cohort from programs actively providing CR services
- ✓ Addition and start of cardiac subgroup data collection (Jun 2022)

Recall: "Initial Cohort": People referred to CR following a cardiac event

Subgroups within initial cohort: People referred to CR following CABG +/- valve surgery or following PCI procedure



Reporting Update

- Note- UOHI program collects and reports volumes on behalf of 12 programs in the area.
- We were reporting this submission as 1 program
- Modification: Reporting data submitted by the UOHI program as per the number of programs contributing to the data set (e.g., maximum 12 programs)

Progress update



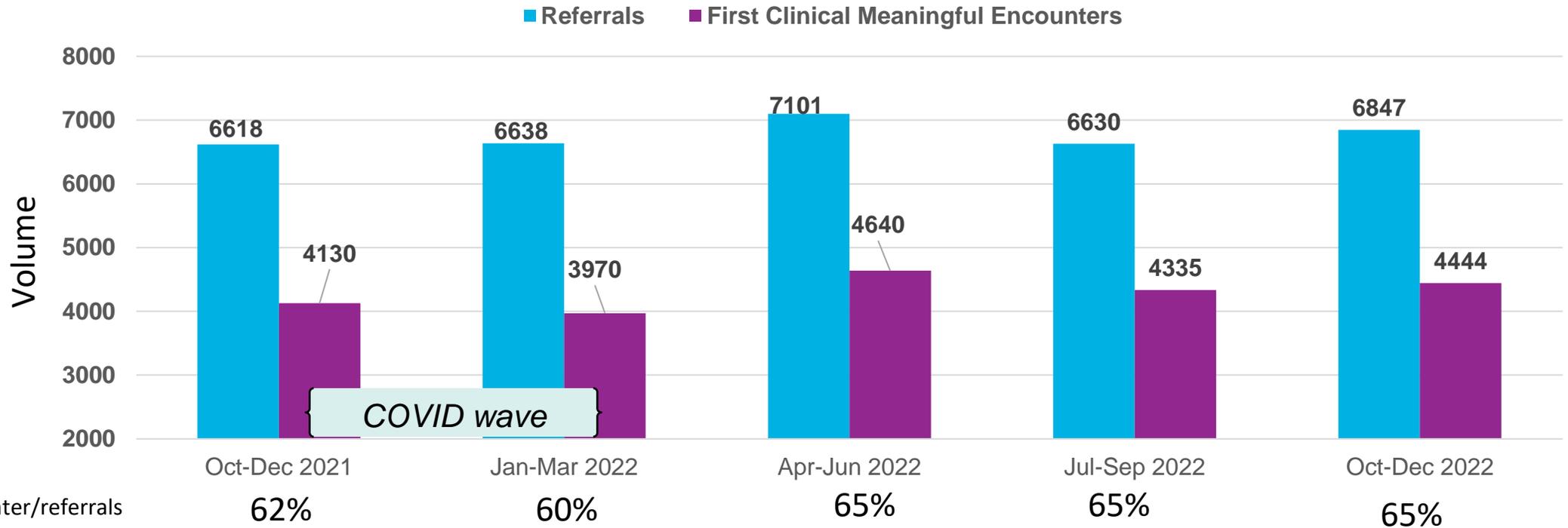
CR programs submitting the following data for Q1-Q3 FY 2022/23

	FY 2022/23		
	Q1 Apr-Jun	Q2 Jul-Sept	Q3 Oct-Dec
Any data	48	50	49
Complete data in the quarter for the initial cohort	41	43	44
Complete data in the quarter for the cardiac subgroups	29	33	37

Note- Participation rates for initial cardiac cohort appear to be stabilizing

Quarterly Provincial Volumes

Number of Referrals and Clinically Meaningful Encounters
 CR Programs Submitting Aggregate Data for Initial Cohort
 for the *entire period* between Oct 2021 - Dec 2022
 n=41 programs (75 sites)



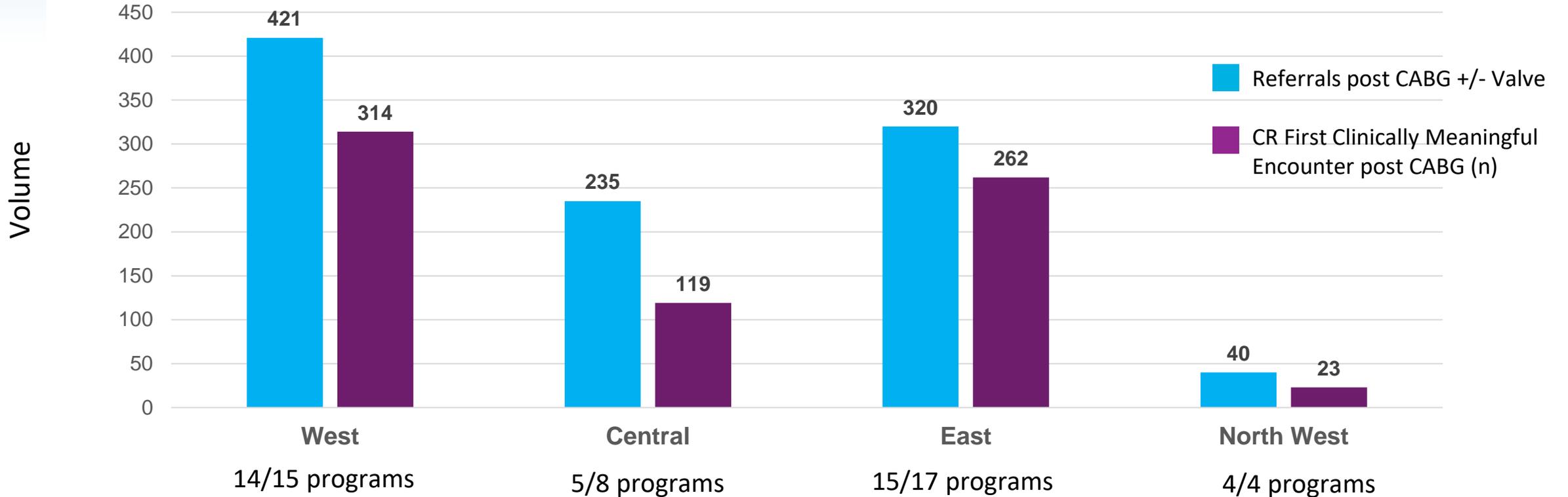
Total referrals: n= 33,834

Total first clinical meaningful encounter: n= 21,519

Ratio: total first encounter/total referrals = 64%

CABG +/- Valve Subgroup

Referrals and CR Program First Clinically Meaningful Encounters post CABG +/- Valve
October- December 2022



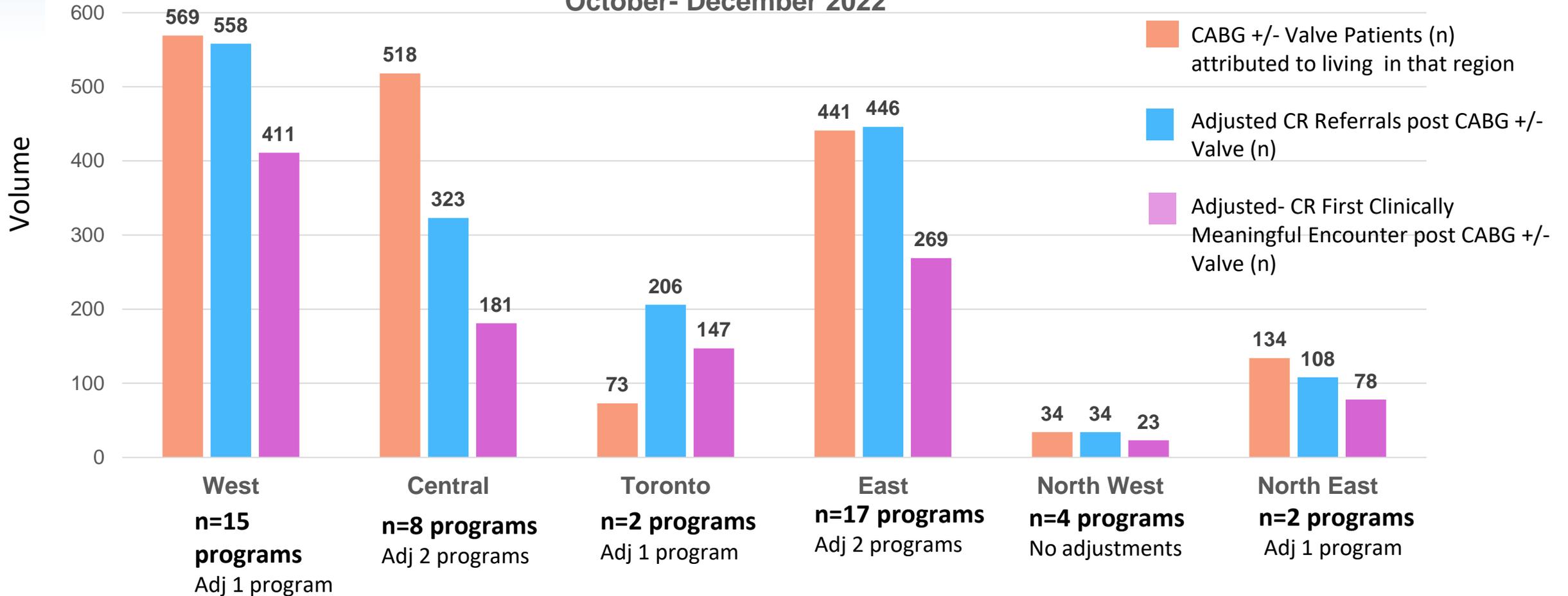
Total referrals/first clinically meaningful encounters: $718/1016 * 100 = 71\%$

Note- data are suppressed for Toronto Region (2 programs) and NE LHIN (3 programs) due to low cell counts of submitted CR volumes
Note- # patients with CABG +/- Valve surgery attributed to each region are based on data from the CorHealth Cardiac Registry according to hierarchy of CABG/PCI for this project



CABG +/- Valve Subgroup-Adjusted for missing data

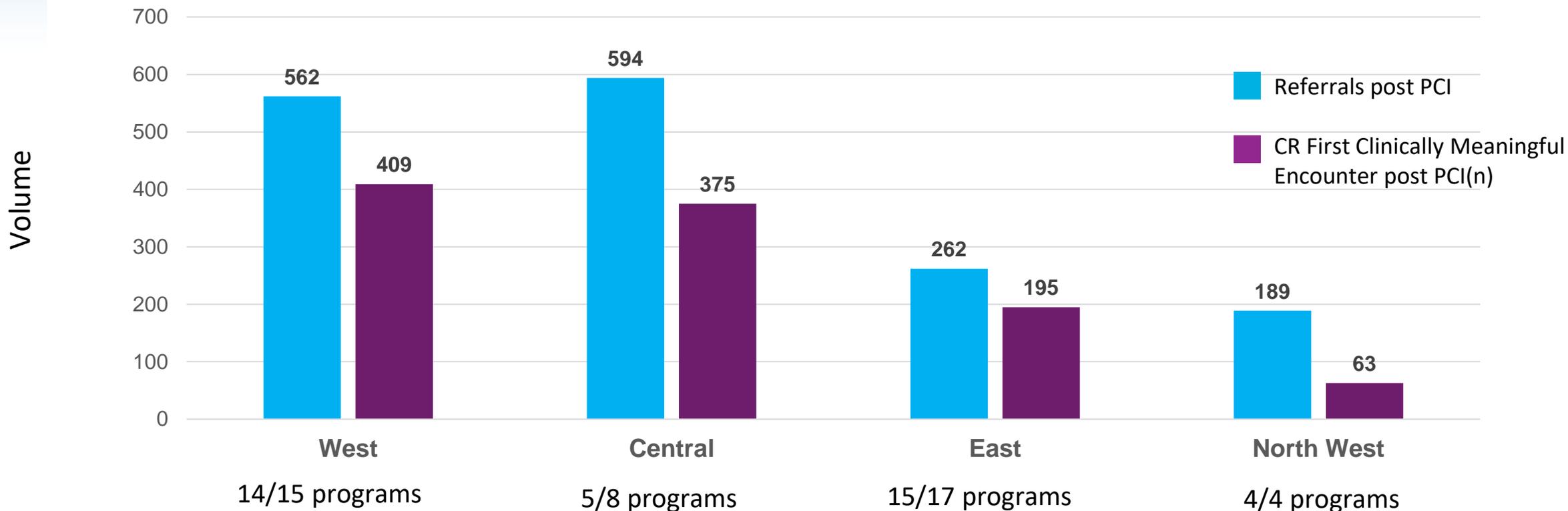
CABG +/- Valve Patients by Patient Region and
CR Program First Clinically Meaningful Encounters post CABG +/- Valve
October- December 2022



Note- # patients with CABG +/- Valve surgery attributed to each region are based on data from the CorHealth Cardiac Registry according to hierarchy of CABG/PCI for this project

PCI Subgroup

Referrals and CR Program First Clinically Meaningful Encounters post PCI
October- December 2022

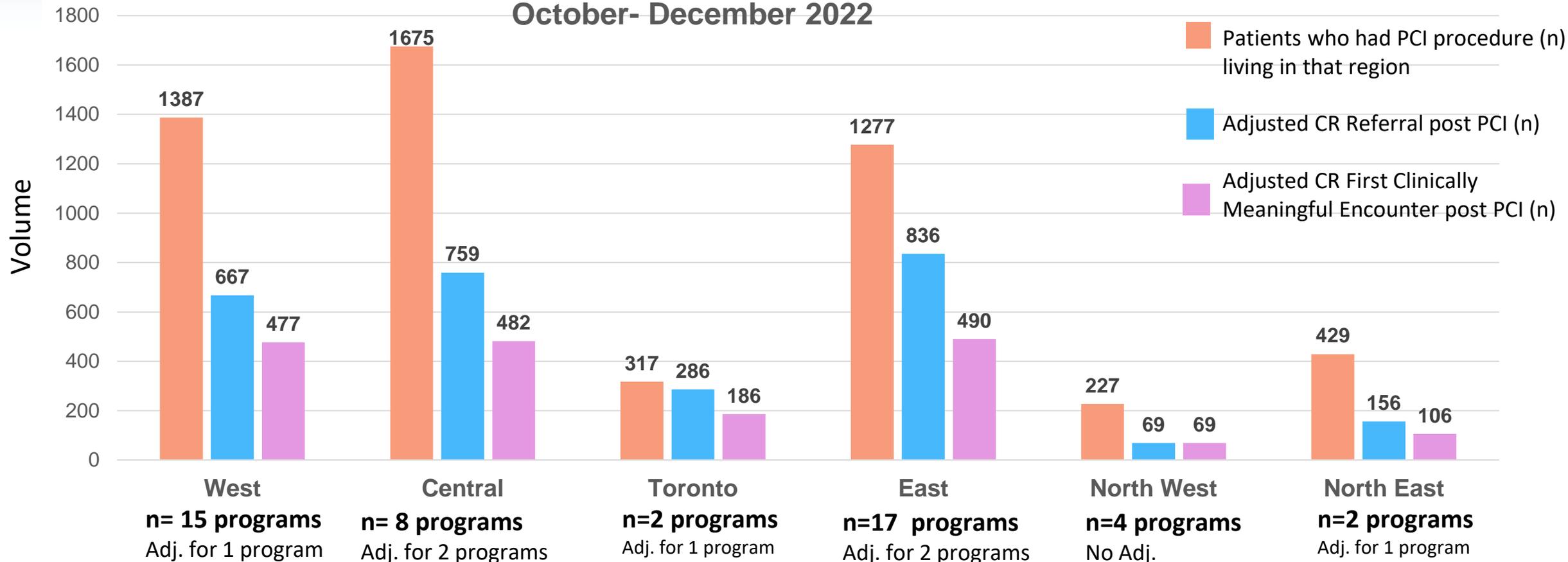


Total referrals/first clinically meaningful encounters: $1042 / 1607 * 100 = 65\%$

Note- data are suppressed for Toronto Region and NE LHIN due to low cell counts of submitted CR volumes
 Note- # patients with CABG +/- Valve surgery attributed to each region are based on data from the CorHealth Cardiac Registry according to hierarchy of CABG/PCI for this project

PCI Subgroup- Adjusted for missing data

PCI Subgroup Patients by Patient Region and CR Program First Clinically Meaningful Encounters Post PCI
October- December 2022



Note- # patients post PCI are attributed to each region are based on data from the CorHealth Cardiac Registry according to hierarchy of CABG/PCI for this project

Discussion

- What are some of the factors that contribute to the large gap in referral to cardiovascular rehabilitation in patients post PCI versus post CABG?
- Following referral to CR, what factors contribute to participating in a CR program?
- Do you have any examples of local strategies to increase referral or enrolment in your local CR program?



Survey Findings

Survey- background

- Purpose :
 - To understand the value and usefulness of the data being collected and how the information is shared
 - To assess the usefulness of current forum content and gather insights for the direction of future community of practice forums
- Survey sent out to CR Forum participants via Survey Monkey on April 3rd
- 32 responses received by the deadline of April 14th

Survey Respondents

- Majority of submissions coming from program managers, RN/NP's and exercise specialists
- Other represented:
 - PT
 - Research coordinator
 - MD
 - Clinical lead

ANSWER CHOICES	RESPONSES
Clerk/Administrative Assistant/Coordinator	3 (9.38%)
Program Manager	11 (34.38%)
Medical Director	1 (3.12%)
Nurse/Nurse Practitioner	7 (21.88%)
Exercise Specialist (Physiotherapist /Kinesiologist)	6 (18.75%)
Other	4 (12.50%)
TOTAL	32

Value of aggregate data for CR referrals and first clinically meaningful encounters

Answered: 28 Skipped: 4

How valuable is the aggregate data included in the CR Forum slide deck for your program?

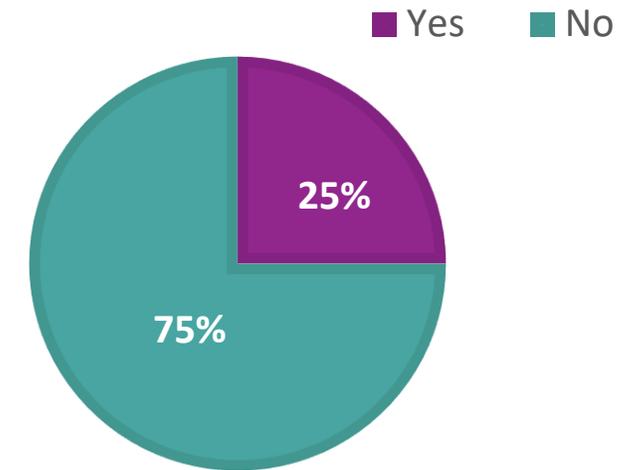
1 - NOT VALUABLE AT ALL	2	3	4	5 - VERY VALUABLE
0 0%	6 21.43%	9 32.14%	8 28.57%	5 17.86%

Role	# reporting	% that reported 4 or 5
Clerk	3	33%
Exercise physiologist	6	33%
Medical Director	2	100%
RN/NP	6	33%
Program Director	9	56%
Other	4	75%

- 46% of respondents found the aggregate data to be of medium or high value

Usefulness of aggregate data for CR referrals and first clinically meaningful encounters

- One quarter of survey respondents (n=7) use the summary data
- Most reported using the aggregate data for general interest, but not for program planning or evaluation (n=4)
- Two people reported using the data to advocate for program resources

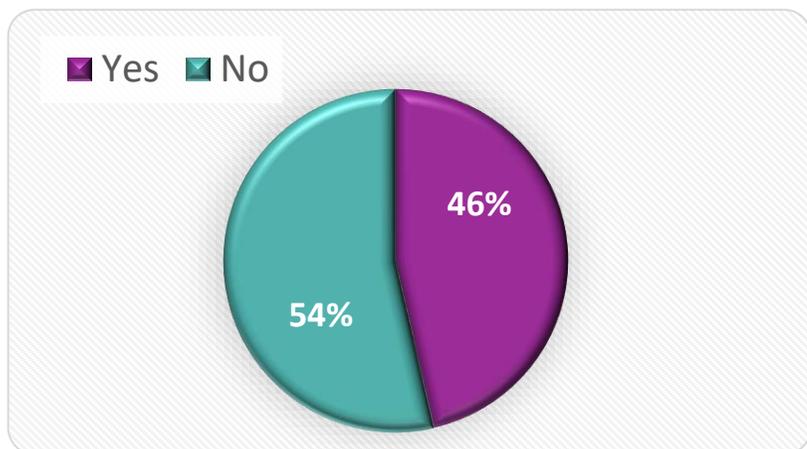


Do you use the provincial summary data from the CR Forum slides for your program?

Answered: 28 Skipped: 4

Sharing the aggregate data for referrals and first clinically meaningful encounters

Do you share the provincial summary data from the CR Forum slides with anyone in your program?



Answered: 28 Skipped: 4

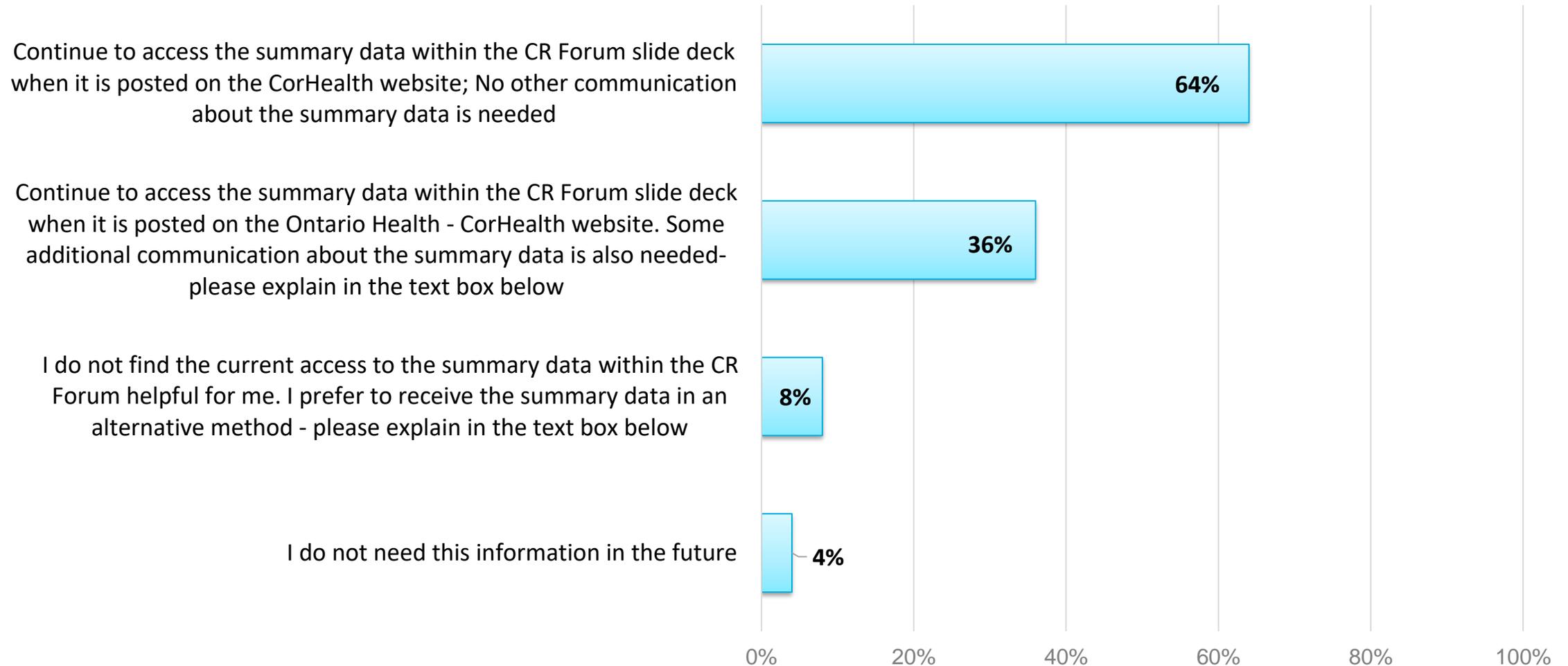
With whom do you share this information?

- CR Team Members
- Program director, members of the cardiac rehab team
- Program manager
- CR clinical team
- GBHS CR manager
- Quality
- CEO, program coordinator
- Leadership, Research
- Executive Director, potentially the Board
- Cardiovascular Rehab Team Regional Cardiac Program Quality and Operations Working Group
- Program management meetings
- PT
- All team members

Answered: 13 Skipped: 19

- Information is typically shared via email forward, but some also share at other meetings
- 22 out of 26 respondents agree with the current communication of these data through the Forum and additional communication channels are not necessary.

How would you prefer to receive the provincial summary data collected for CR in the future?



Preferred frequency if future data reporting to OH-CorHealth

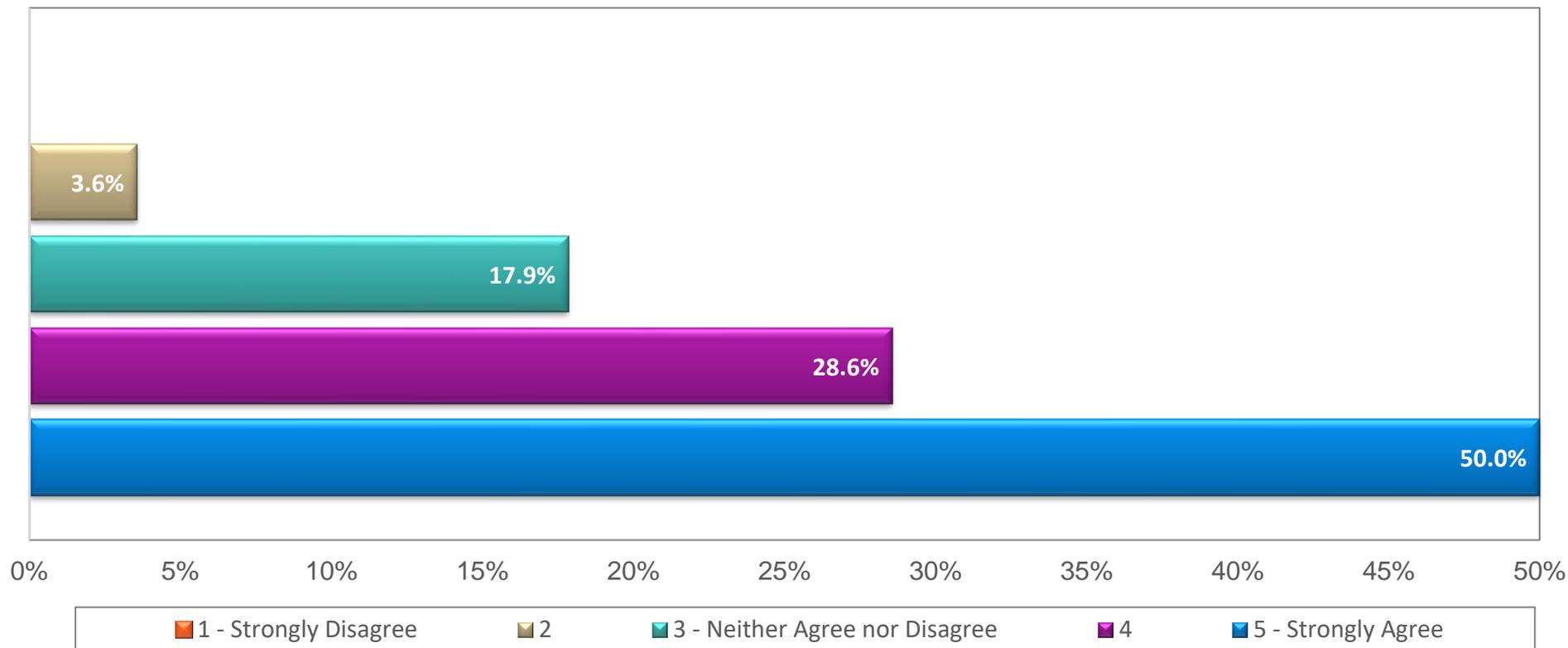
ANSWER CHOICES	RESPONSES
Monthly	10 (40%)
Every 2 months	0%
Quarterly	14 (56%)
Other (please specify)	1 (4%)
TOTAL	25

Answered: 25 Skipped: 7

- The majority of respondents prefer quarterly reporting of data

Please indicate your agreement with the following statement: The provincial collection of this data recognizes the value of cardiovascular rehabilitation in our health system.

Answered: 28 Skipped: 4



Discussion- The Opportunity

Opportunities for using the data in your local program or to inform conversations with your system partners may include asking the following questions when interpreting the data:

- How does our CR program referral rate or ratio of referral: first clinically meaningful encounters compare to the regional or provincial rate? What could be contributing to these similarities or differences? Are there any action items based on these findings?
- For example, what is our access and service gap in service compared to others for patients referred post CABG +/- Valve or post PCI?

For programs using the data, what are some examples on where you find the data helpful?

Please reach out to Karen Harkness if you would like to talk with the OH-CorHealth team as you interpret your local data .



Proposed next steps

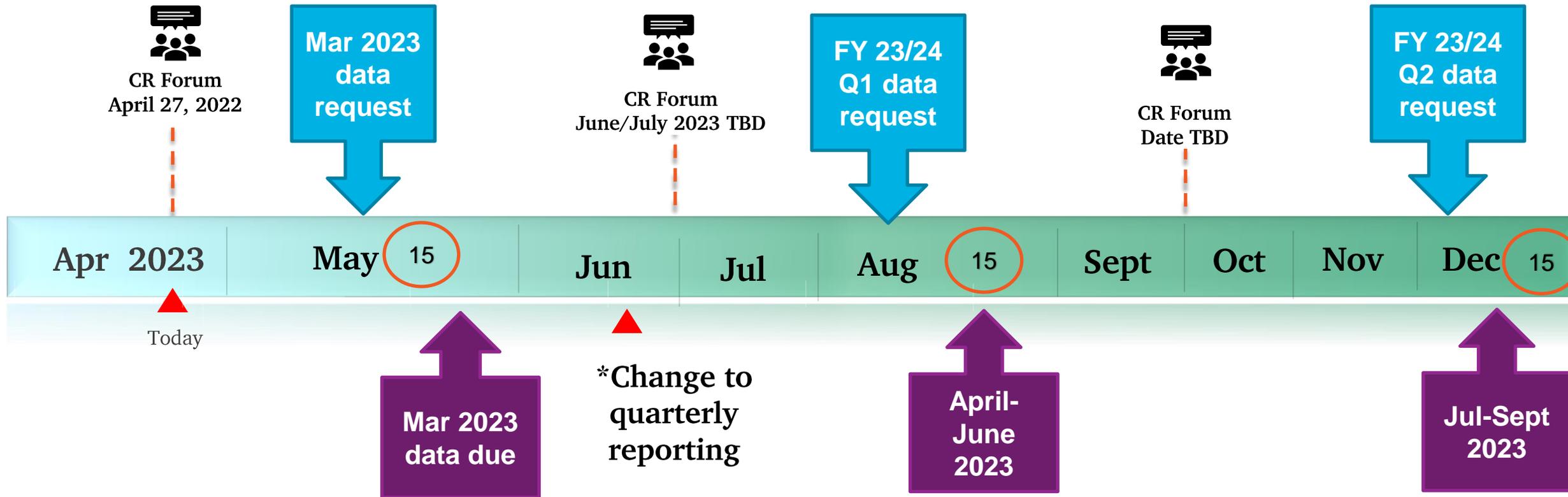
1. No change in data points
2. Data collection frequency to change based on survey findings:
 - May 2023- monthly data from March 2023 volumes to complete FY 2022/23
 - August 2023- first data request for total volumes from April-June 2023
3. OH-CorHealth to continue exploring how to best leverage these data to support system capacity planning.

Note: The value of subgroup data for the number of referrals and first clinically meaningful encounters is extremely helpful for this work as we have timely access to our registry data to quantify demand of eligible patients for CR.



Data Collection: Next Steps Timeline

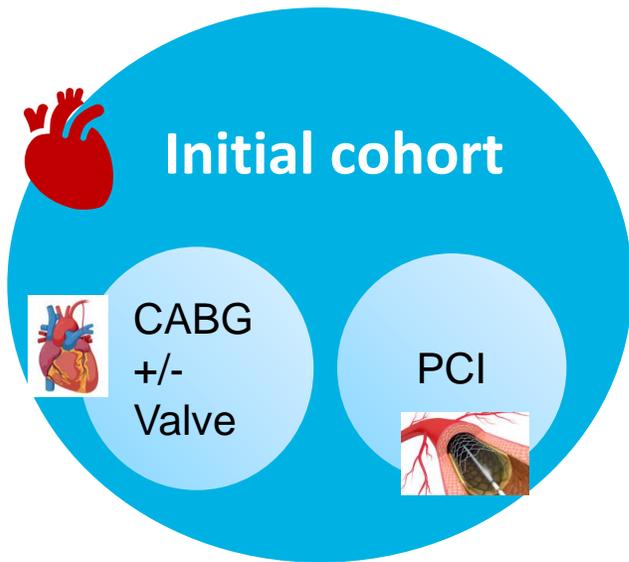
Data collection request via email from OH-CorHealth (Joy Tabieros) first Monday May, August, December 2023



Data submission to OH-CorHealth (Joy Tabieros) by email due 15th of May, August, December

Data collection flowsheet

The following data points for the initial cohort and 2 subgroups will be collected **quarterly starting August 2023** for CR Program volumes generated for FY 2023/24



Quarter – total for 3 months					
 Initial Cohort		 CABG +/- Valve subgroup		 PCI subgroup	
Referrals	First meaningful encounter	Referrals	First meaningful encounter	Referrals	First meaningful encounter



Guest Presentation

Cardio-Pulmonary Rehabilitation Program
at St. Mary's General Hospital



St. Mary's
**CARDIO • PULMONARY
REHABILITATION**

Cardiac Rehab

**Dr. Heather Warren – Cardiac Program
Medical Director, Interim Medical Director
Cardiac Rehab**

Dr. Al Qawash – Cardiac Program Director

Sarah Beingessner, Nurse Practitioner



St. Mary's
CARDIO • PULMONARY
REHABILITATION

Agenda

- History of program & statistics
- Program Overview – hybrid versus in-person
- Status throughout pandemic
- Intake process
- Future plans
- Q&A



St. Mary's Cardiac Rehab

CR initially operated out of the hospital, and in 2004, moved to a space in North Waterloo

Program grew, space limitations, no walking track, inaccessible to public transit

In the summer of 2021, moved into a new facility in Waterloo, at the Boardwalk

New facility offers walking track, lots of natural light, on bus route



COVID Pandemic

- All CR staff were redeployed at hospital x 6 months
- Re-opened with backlog of referrals
- Initially operated as a 'home-based' virtual/phone-based program
- Gradually returned to in-person with smaller group classes
- Over the past year, fully operational with class sizes of 16 participants

Referral Statistics for 2022-2023 fiscal year

- 2,472 total CR referrals
- 906 were sent to our spoke sites
- 58% conversion rate





Our Cardiac Rehab Team

- Program Manager & Director
- Medical Director and Consulting Cardiologists
- 0.4 FTE Cardiovascular Technicians
- 1.4 FTE Clerks
- 0.8 FTE Nurse Practitioner
- 1.0 FTE (job share) Nurse Intake Coordinators
- 1.2 FTE Registered Dietitians
- 3.0 FTE Registered Kinesiologists
- 1.0 FTE Exercise Assistants
- Respiratory Therapy support prn for smoking cessation



Cardiac Rehab Intake Process

- The majority of prospective participants undergo a supervised exercise stress test and consultation with one of six St. Mary's General cardiologists
- Intake screening bloodwork for most with lipid panel and HbA1C
- Multidisciplinary teamwork guides risk factor modifications, through consultations with our registered kinesiologists, dietitians and nurse practitioner



Cardiac Rehab Streaming

Regular Stream

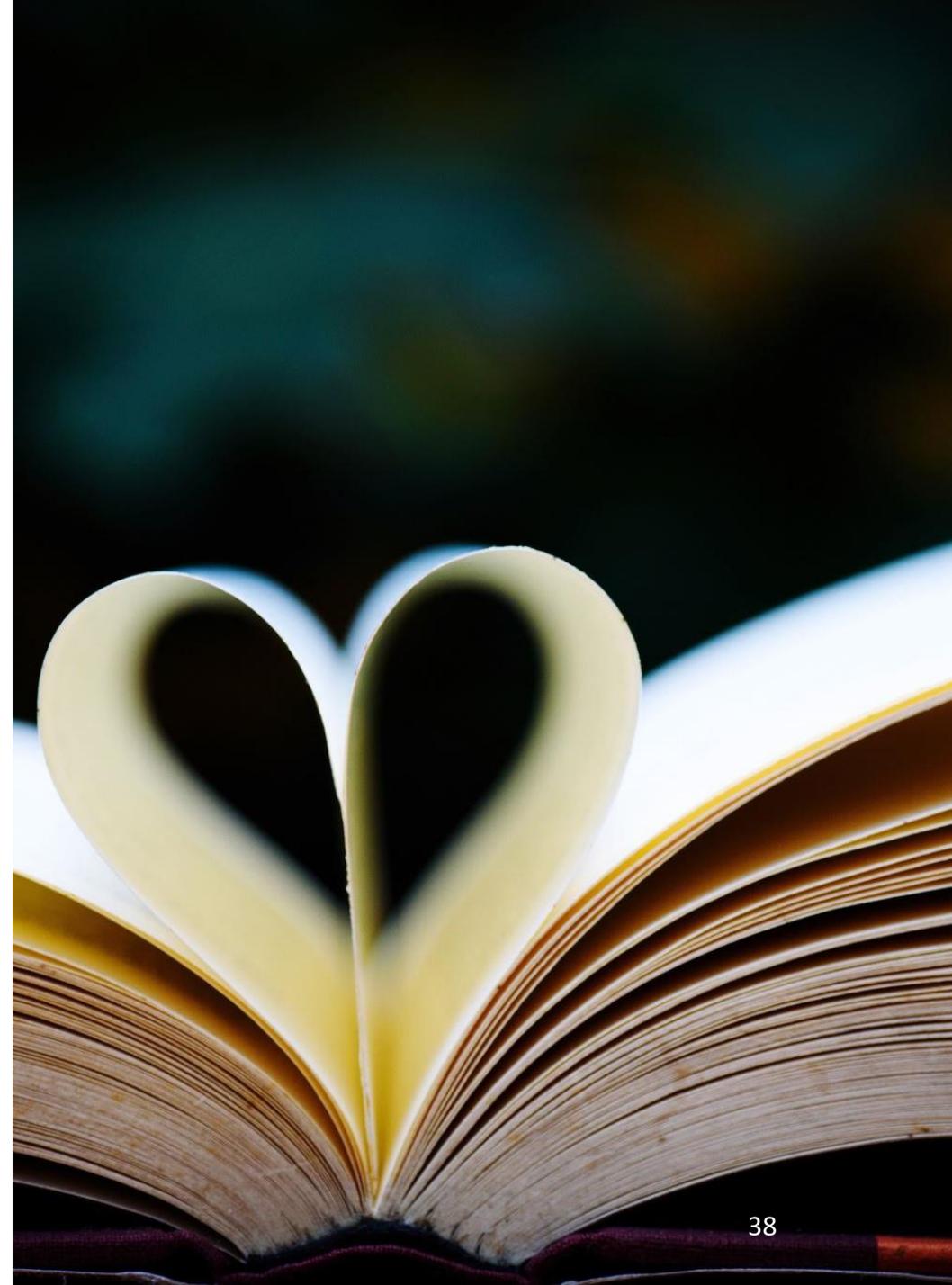
- 12- week duration
- Twice weekly 1-hour exercise classes
- 3–5-minute video/taped education at beginning of class (once/week) on: fats, sodium, exercise progression, stress, risk factors etc.

Heart failure stream

- 12-week duration
- Twice weekly 1-hour exercise classes
- 10 minutes of Ottawa Heart Failure education at beginning of class (once/week)
- Pre+post program exercise testing: 6MWT, 5 sit-stands, one arm curls in 30 seconds & chair sit & reach
- Discharge visit with CR NP to review HF 'action plan'
- 6-month, 1 year follow-up with 6MWT to assess longer-term adherence to exercise & medical stability

Heart Failure Stream Stats

- Implemented our HF stream in the Fall of 2022 in partnership with Ottawa Heart; will have first 6-month follow-up visit in May 2023
- 39.7m average increase in 6WMT
- Improvement in dyspnea scores and QoL measures on KCCQ
- In the process of developing our own HF video education, which would align with our HF education literature



Future State

- Process of implementing a pilot/feasibility study for a cardiac surgery 'Prehab' program
- Connecting with the TAVI/CR team at Hamilton Health Sciences re: rehab program for post TAVI patients
- Ongoing data collection for Health Failure Stream; assessing long-term adherence to exercise, stability for this patient population
- Securing additional CVT staff to be able to offer discharge exercise stress tests
- Rolling out Cardiologica/CR registry to begin more fulsome data collection for our program
- Diversifying our multidisciplinary team with the addition of pharmacy support (polypharmacy), social work and physiotherapy
- Securing a 'Fit for Life' transition plan by re-engaging community partnerships with YMCA

Thank you



Sarah Beingessner, Nurse Practitioner
Al Qawash, Program Director



sbeinges@smgh.ca
aqawash@smgh.ca



Open Forum Discussion

Pulse Check: What is the current experience of delivery CR in Ontario?

Dr. Paul Oh

Open Forum Discussion

1. What is the current experience of delivering CR in Ontario?
 - ❖ What is going well?
 - ❖ Where are your pain points?
 - ❖ Are there some key learnings and changes in response the pandemic that you feel have improved the delivery of CR in your program?
2. What can OH-CorHealth do to help support your program at this time?

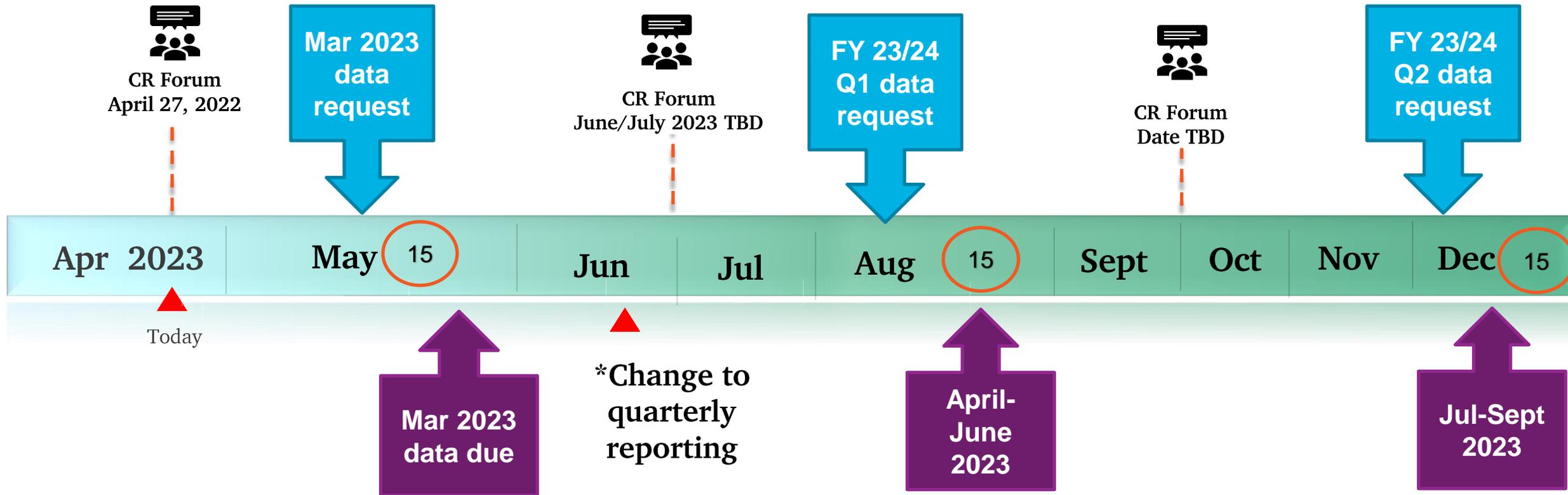


Next Steps

Dr. Karen Harkness

Data Collection: Timeline

Data collection request via email from OH-CorHealth (Joy Tabieros) first Monday May, August, December 2023



Data submission to OH-CorHealth (Joy Tabieros) by email due 15th of May, August, December

Next Steps

A copy of the Forum notes, slides and recording will be made available on the CorHealth website under ‘Resources for Healthcare Planners & Providers’

Resources for Healthcare Planners & Providers

Cardiac Catheterization & Percutaneous Coronary Intervention (PCI)

Referral Forms

Heart Rhythm

Offlisting Form

Referral Form

Quality Performance Measurement and Monitoring (QPMM)

Cardiac QPMM Resources

Stroke QPMM Resources

COVID-19 Resource Centre

COVID-19 Resources

CorHealth Memos & Documents

CorHealth Stakeholder Forum Meetings

General Cardiac Resources

General Stroke Resources

General Vascular Resources

Archive

Hypertension Management

Hypertension Management Program -

Getting Started Toolkit for Primary Care

Rehabilitation

Standards for the Provision of Cardiovascular

Rehabilitation in Ontario

Cardiovascular Rehabilitation Forum

Materials

Regional Economic Assessments

Community Stroke Rehabilitation



Next Forum- June/July 2023- Date TBD

Would your program like to share some of the work you are doing??

Please contact Karen, Joy or Erin



Appendix A: Supplemental information

Recall: Project Goals and Objectives

1. An initial goal of this work will be to gain a better understanding of the impact of COVID-19 on the delivery of Cardiovascular Rehabilitation (CR) services for Ontario patients with cardiac conditions (Phase 1)

Phase 1 Objectives:

- Consistently collect a small amount of aggregate data from a clearly defined group of CR providers across Ontario & regularly report data back to stakeholders
- Test the readiness of the CR System to provide consistent, reliable data / better understand the availability and accessibility of data at CR provider sites

2. A potential long-term goal of this work will be to have consistent/ reliable CR data collection in Ontario to support broader system planning, monitoring and performance measurement for cardiac and vascular patients (Phase 2)

- Ability to pursue / achieve this goal will be dependent on success of the initial objectives stated above

Purpose of Proposed Refinement of the CR Dataset

Continue to mature and refine the current data set to:

- Identify of regional variation and begin to explore drivers of variation in referral and uptake of CR, including barriers, enablers and opportunities to increase CR participation in Ontario
- Enable meaningful data-driven local and regional conversations about access and uptake of CR
- Support broader system planning, monitoring and performance measurement for cardiovascular rehabilitation

Refinement within Data Collection

Refinement: Explore cardiac subgroup(s) within initial cohort where a clear denominator can be captured from the Cardiac registry and programs can easily identify this subgroup for values that will represent the numerator

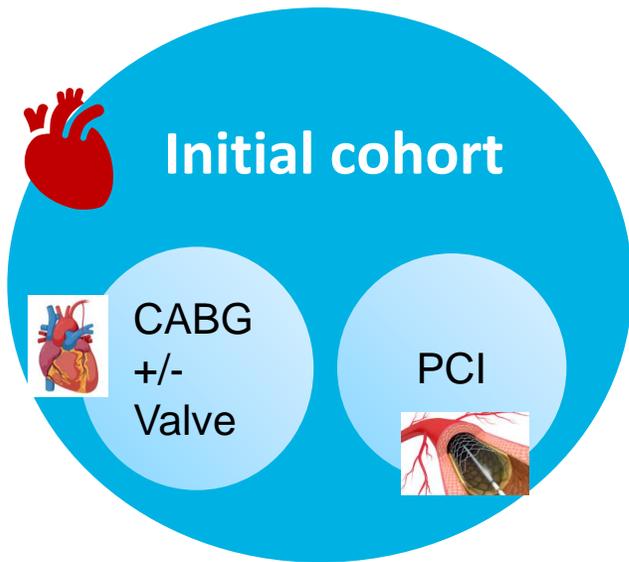
Rationale: Provides additional meaning to interpret findings by understanding local supply *and demand*

Outcome of discussion: Within the initial cohort of patients referred following a cardiac event, identify the following 2 cardiac subgroups:

- Post CABG +/- Valve surgery: easily identified
- Post PCI: represents a large proportion of patients referred to a CR program

Data collection flowsheet

The following data points for the initial cohort and 2 subgroups will be collected monthly for CR Program volumes generated for FY 2022/23



Month					
 Initial Cohort		 CABG +/- Valve subgroup		 PCI subgroup	
Referrals	First meaningful encounter	Referrals	First meaningful encounter	Referrals	First meaningful encounter

Additional Survey Findings

Q13: Please rate each segment of the CR forum based on its usefulness to you:

Answered: 25 Skipped: 7

	1 - NOT USEFUL	2	3 - NEUTRAL	4	5 - VERY USEFUL	TOTAL	WEIGHTED AVERAGE
Data reporting updates	8.00% 2	0% 0	40.00% 10	36.00% 9	16.00% 4	25	3.52
Guest presentation from a CR program on successes, challenges, and lessons learned	4.00% 1	0% 0	20.00% 5	48.00% 12	28.00% 7	25	3.96
Pulse Check: Open Forum discussion section	4.00% 1	8.00% 2	32.00% 8	36.00% 9	20.00% 5	25	3.6