

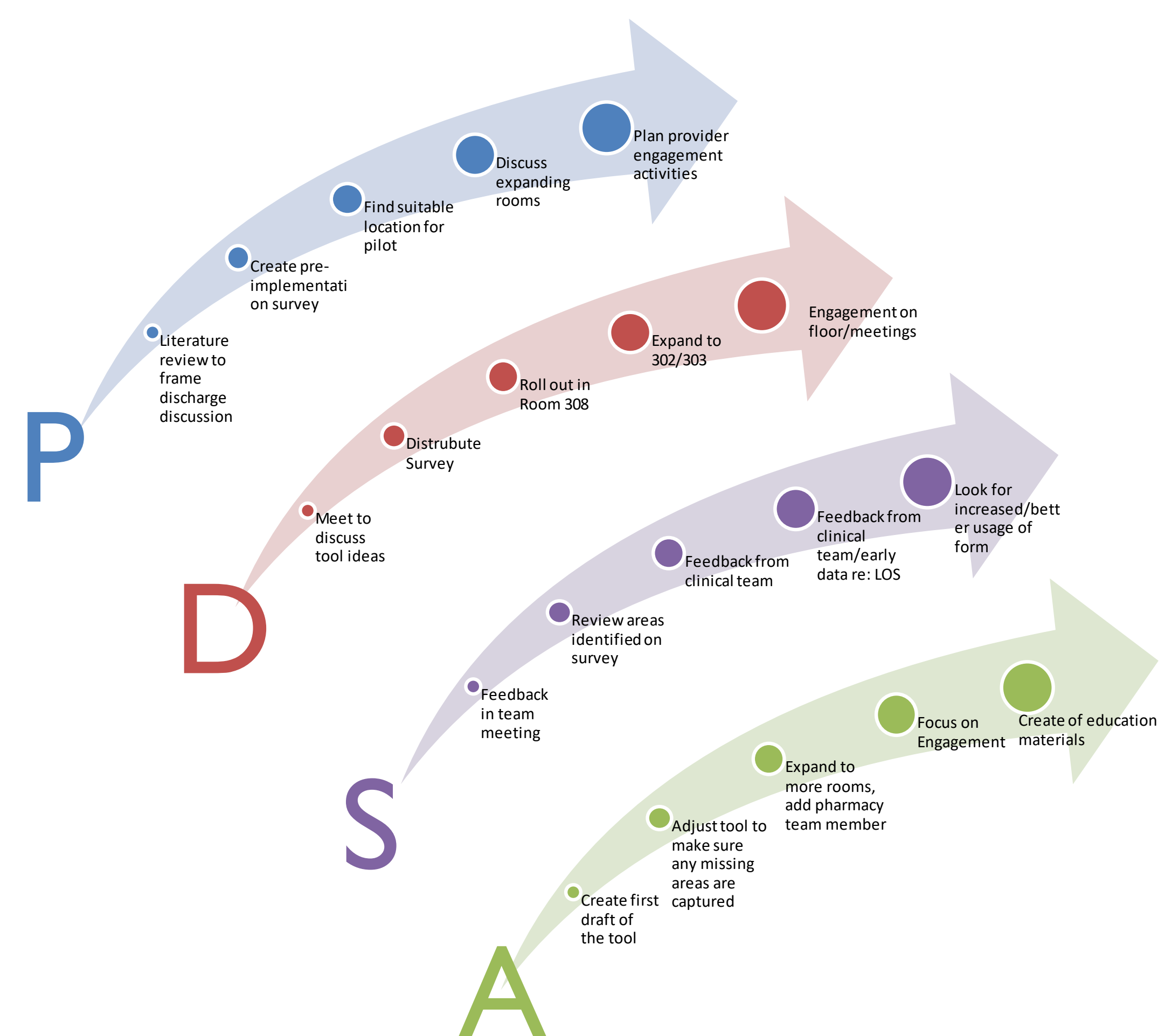
PROJECT TEAM

Physician Leads: Ryan Gallagher, MD & Philip Baker, MD
Clinical Team: Vanessa Bramhill, SW; Celine Edwards, MSI3; Michelle Handley, PT; Angela Henry, RN; Cassandra Jordan, RN; Jennifer Kealy, OT; Jaqueline Kendall, RN; Meredith McAdam, RN; & Lauren Ostaff, Pharm
PQI Support Team: Rosie Holmes; James Saunders; Jason Wale, MD; & Bastian Weitzel
Project Sponsors: Brenda Aguiar, RN; Graham Blackburn, MD; Maki Ikemura, MD; & Afshin Shamshiri, MD

AIM STATEMENT

To reduce the average length of stay starting in a 4-bed hospital room on 3 West at Cowichan District Hospital by 0.5 days by June 2021 through improved team communication.

PDSA CYCLES



DATA ANALYSIS

- Our project began in single 4 bed room and later expanded to three 4 bed rooms
- We had 3 main data sources: 1) Length of Stay (LOS) Data 2) Anonymous surveys from team members 3) Individual review of completed Discharge Communication Tools
- For LOS data we used data through Island Health which we reviewed with James our PQI Data Analyst
- For Surveys and Discharge Communication Tools we collated results and reviewed themes for helping drive change ideas and discussion in our team meetings
- Primary endpoint was LOS which we compared to mean LOS. In an ideal setting, we would have liked to compare Estimated Length of Stay (ELOS) to LOS but the delay in this data being available made it impractical for informing change in our project

- Challenges:**
- The characteristics and composition of patients in any particular room varies more by patient factors than by discharge likelihood/condition. As we studied a small number of rooms the effect on our data may have been more pronounced than if we had been able to study a larger group
 - Turnover – our local leadership teams, leadership structures, and many staff changed during our project. This added many factors beyond the change we were making in the system which may have obscured our results
 - COVID – Placed a time pressure on all team members, impacted the hospital, and resulted in a lack of static system to study

FINDINGS

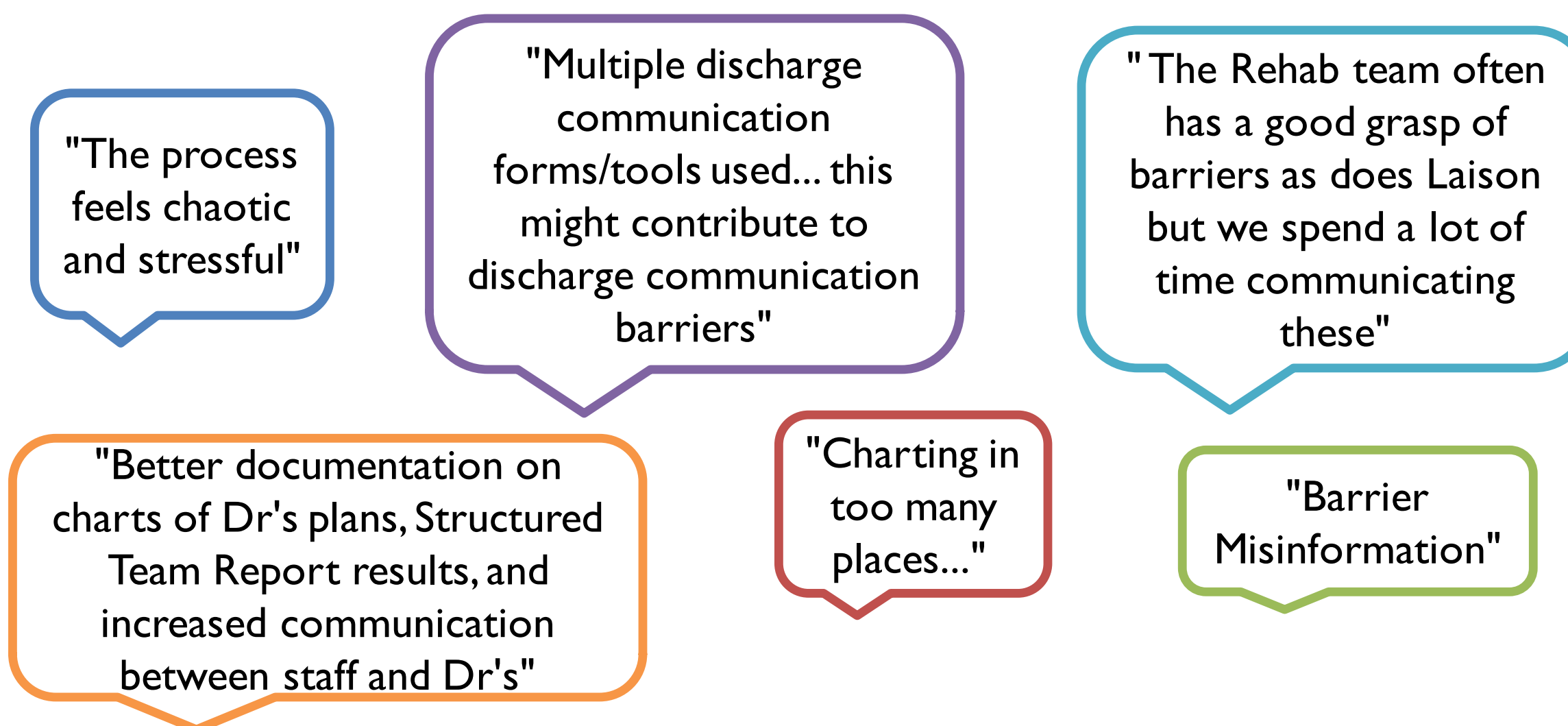
- We were not yet able to demonstrate a clear impact of implementing our Discharge Communication Tool
- Streamlining documentation into common channels would significantly benefit all parties. We found that each team member is documenting similar information multiple times in different locations in the medical record and other clinical documentation. This was one of the primary barriers to having people use the Discharge Communication Tool
- Not all patients benefited from having a Discharge Tool in place. It is often unnecessary for those with minimal barriers and for those who are needing long term placement there are many processes currently established. In our analysis we were unable to separate out these subgroups
- Having regularly estimated discharge date would potentially make it easier to analyse those patients who stay longer than expected as ELOS was not available in a timely enough fashion to inform our quality improvement changes

BACKGROUND

In our hospital we noted that missed communication opportunities appeared to lead to delays in discharge. Our multidisciplinary team identified that the following were primary barriers to this occurring:

- Timing of providers being available to discuss discharge
- Multiple locations for documentation
- Differences in professional languages and priorities

COMMENTS FROM OUR FRONTLINE TEAM MEMBERS PRE-IMPLEMENTATION



OUR TOOL

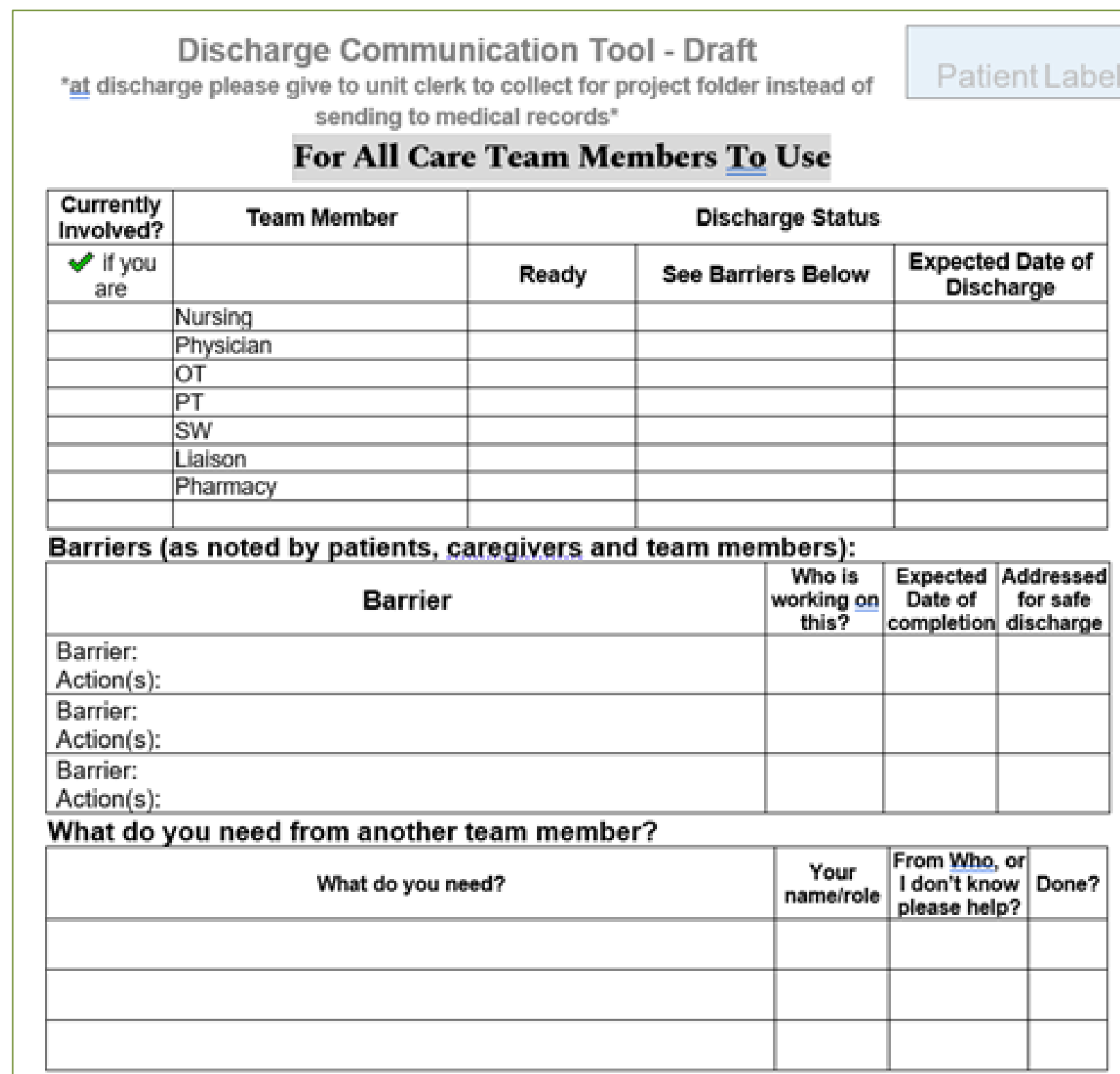


Figure 1: Mean Length of Stay in Rooms Over Time

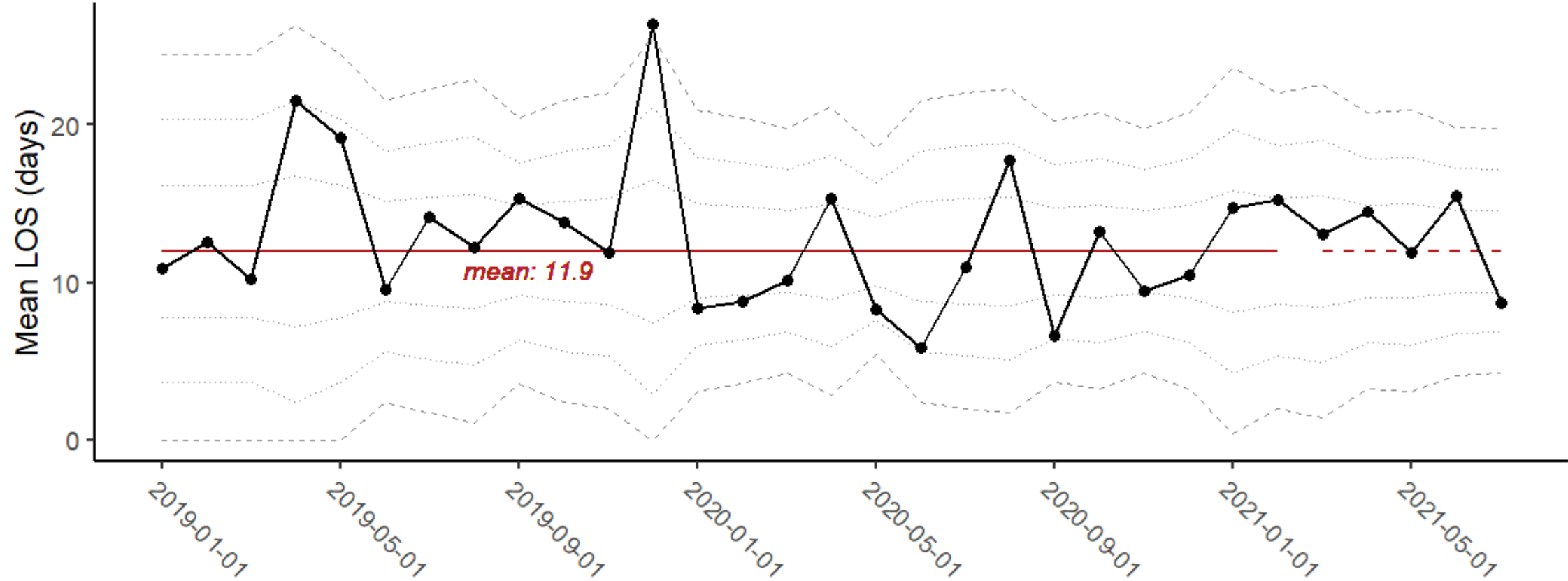


Figure 1: Mean Length of Stay in Rooms Over Time

PROBLEM

When we are not able to communicate effectively as a team about discharge throughout a patient's stay, there are unnecessary delays in discharge. This hinders a patient's return to health and wellness (BC Health Quality Matrix); keeping them from their home, posing them potential risks (e.g. deconditioning¹/nosocomial infections²), and negatively impacting our health resources (e.g. costs³ and availability of services for other patients⁴).

¹ Hospital stay > 10 days leads to 10 years of muscle aging for people who are most at risk. Kortebein P, Ferrando A, Lombardi J, Wolfe R, Evans W (2007). Effect of 10 days of bedrest on skeletal muscle in healthy older adults. *JAMA* 297: 1769-74.
² 2% Infection risk increase with each additional night in hospital. The Discharge Strategy Handbook: Creating Capacity by Eliminating End-of-Stay Delays - The Advisory Board (2013)
³ Average Daily Cost at CDH: \$800.42/day (\$5683 average cost per stay/7.1 average days per stay) as per CIHI Website for 2018/2019
⁴ Reduction of Average LOS by 1 day effectively gains 17-33 beds in a (100-200 bed hospital such as ours), The Discharge Strategy Handbook: Creating Capacity by Eliminating End-of-Stay Delays - The Advisory Board (2013)

CHANGE IDEA

To create a single point of documentation that all providers could use and reference to communicate barriers and progress to discharge.

- We felt the largest impact would be in medium stay patients: those who don't just have purely medical illness but also have barriers which if addressed would will allow them to leave hospital
- We engaged a multidisciplinary clinical team to discuss barriers/solutions/evolve the Discharge Communication Tool
- We used a combination of length of stay (LOS) surveys of team members, and in-person feedback to help us improve our tool

PROJECT SPREAD

- Early in the project we identified stakeholders that would both directly be impacted by the project but also those who might benefit from the learnings we had in our project.
- We had clinical team members in leadership positions to help communicate changes to each of their own professional groups
- We tried to communicate value on the basis of the problem we wanted to fix as it applied to each team member
- Looking towards the evolution of paper records to IHealth we began discussions early in order to understand what would be possible in a fully electronic environment so that learnings could be applied when we transition to a PowerChart based records system
- Ongoing discussions regarding barriers of discharge during our project helped initiate conversations about how existing tools might be used more effectively (e.g. structured team report boards/televisions)

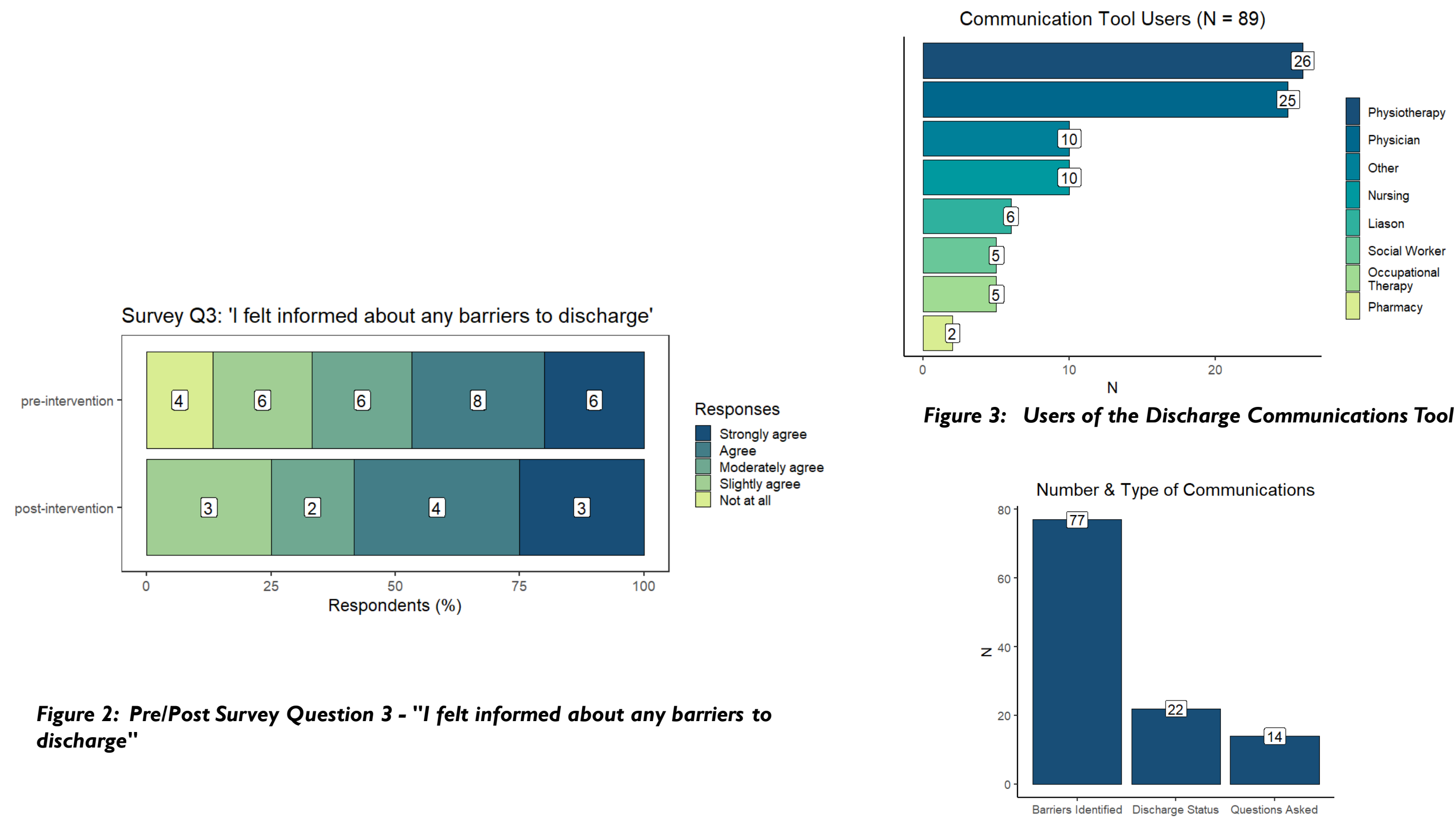


Figure 3: Users of the Discharge Communications Tool

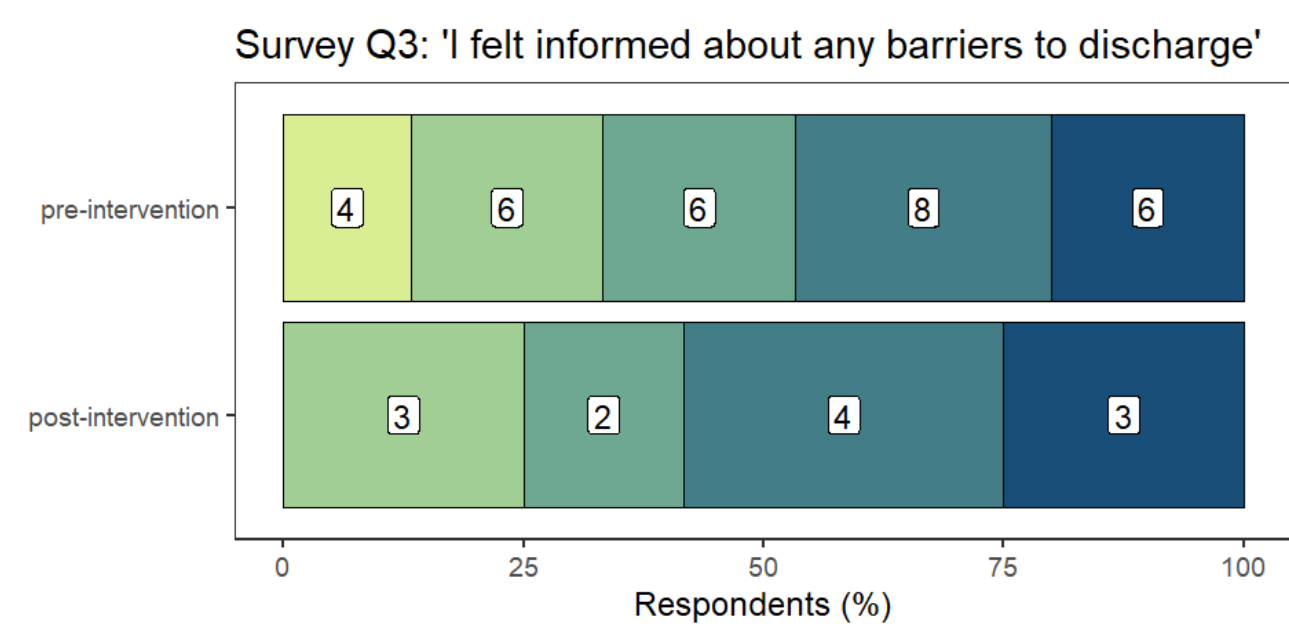


Figure 2: Pre/Post Survey Question 3 - "I felt informed about any barriers to discharge"

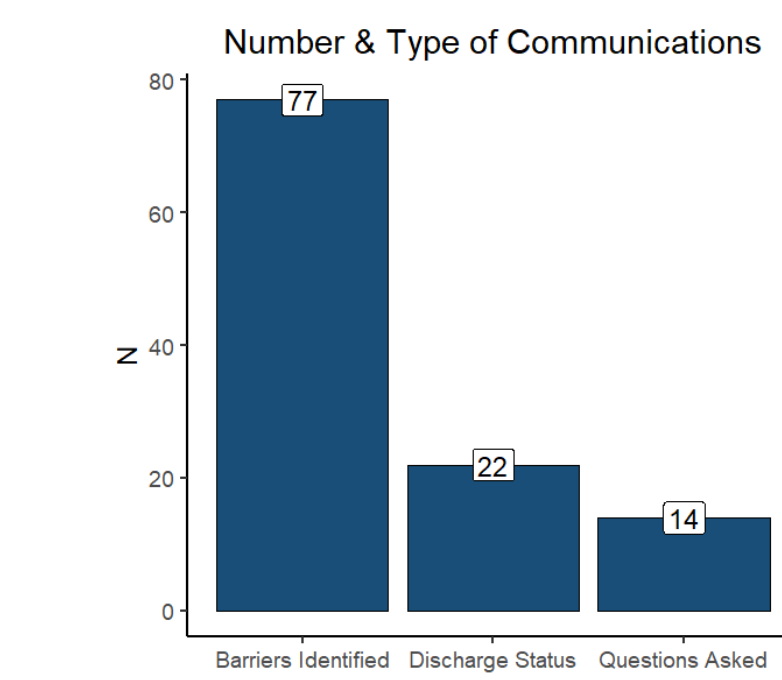


Figure 4: Number and type of communications on Discharge Communications Tool

CONCLUSION

We were not able to demonstrate the value of implementing a Discharge Communication Tool to improve asynchronous communication. We had strong agreement amongst our interdisciplinary team about the importance of improving communication. We encountered several challenges studying quality in a system whose stability was affected by changes with COVID, leadership, leadership structure, and staff turnover. We also noted that members of the care team are frequently being asked to document progress/barriers to discharge in many different locations. While there was potential value in having a single location to communicate discharge barriers, the increased the workload on team members already working above capacity, likely affected the value of the tool. We hope that new technology like electronic documentation will be able to leverage the ability to collate team members discharge efforts into a common location where team members can asynchronously collaborate to achieve efficient, effective, patient-centered and professionally satisfying discharges.

From The Ground Up...

A Grass Roots Approach to Improving Acute Stroke Care at Nanaimo Regional General Hospital

PROJECT TEAM

Dr John Boldon (NRGH ER)

Project Participants:

- Kasia Gwiazda (UBC Flex Medical Student)
- Dr Martin SuttonBrown (Neurology Nanaimo)
- Sara Grant (NRGH stroke RN)
- Joanie Litchfield (NRGH ER RN educator)
- Kim Enslow (NRGH ER NUA)
- Carrie Baldwin (NRGH ER RN)
- Dr Janka Hegedus (VGH Neurology)
- Dr Jason Wale (Vic ER)

AIM STATEMENT

We aim to meet the to Heart and Stroke Foundation best practice guidelines for door to needle time (median 30 mins) and door in door out time (median 60mins) for patients presenting to Nanaimo Regional General Hospital (NRGH) Emergency Room (ER) with acute ischemic stroke with large vessel occlusion by September 2021.

PDSA CYCLES



1. Acute stroke flow sheet for ER physicians and nursing staff
2. Education program for ER nursing staff and physicians for the recognition and treatment of acute stroke. Establishing RN stroke leaders in ER
3. Publishing and tracking of acute stroke quality data at NRGH ER

DATA ANALYSIS

Data was obtained from variety of sources including chart review, Cerner, PACs, and EDW. Analysis and collection with help of decision support, and PQI team. Collection occurred from Jan to May 2021

- Process measure of time to STAT CT EVT. N = 161 studies over 6 months.
- A total of 14 patients received TPA over 6 months. Data incomplete for 6 (Incomplete hybrid paper-EHR record)
- 14 patient transports for EVT. Data incomplete.

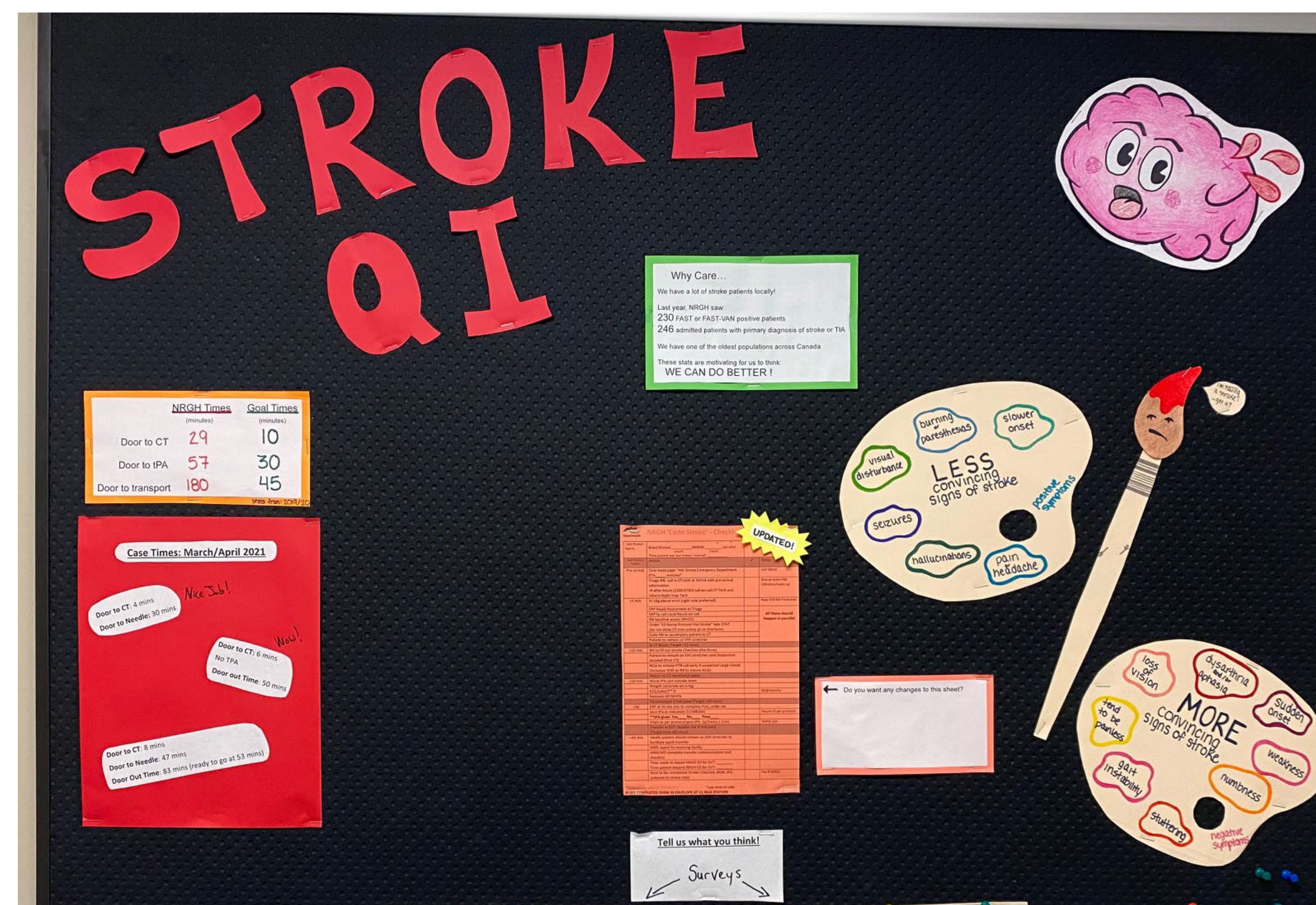
FINDINGS

- Possible modest improvement in median door to needle time 54 -> 50 mins (N 14 - incomplete data). Time reduced with In hospital neurology median door to needle 41 mins (N = 4)
- No improvement in door in door out time
- Median door to CT EVT for all patient 24 mins, For patient receiving TPA/EVT median 12 mins. No statistical significance, but possible trend to improvement (See chart)

BACKGROUND

Endovascular therapy (EVT) is a relatively new and highly effective therapy available to a subset of patients with acute stroke. This treatment is a dramatic shift in stroke care with expanded treatment window up to 24-hours from stroke onset. Timely identification of candidate patients, treatment with thrombolysis, and time to EVT are all key to good patient outcomes. Achieving successful EVT for patients remains a challenge in peripheral centres including NRGH.

Hallway Stroke QI Board



PROBLEM

NRGH ER treats a sizeable percentage of VIHA stroke presentations. However, patients from NRGH are not seeing the same benefit from EVT as patients in Victoria with only 30% having functional outcome compared to 52% of Victoria origin patients (MRAS 0-2). Amongst many contributing factors are NRGH prolonged median time to CT imaging, thrombolysis (54 mins) and transport (118mins) for acute stroke patients. In addition, there is often limited understanding of the benefits and indications of EVT amongst frontline providers.

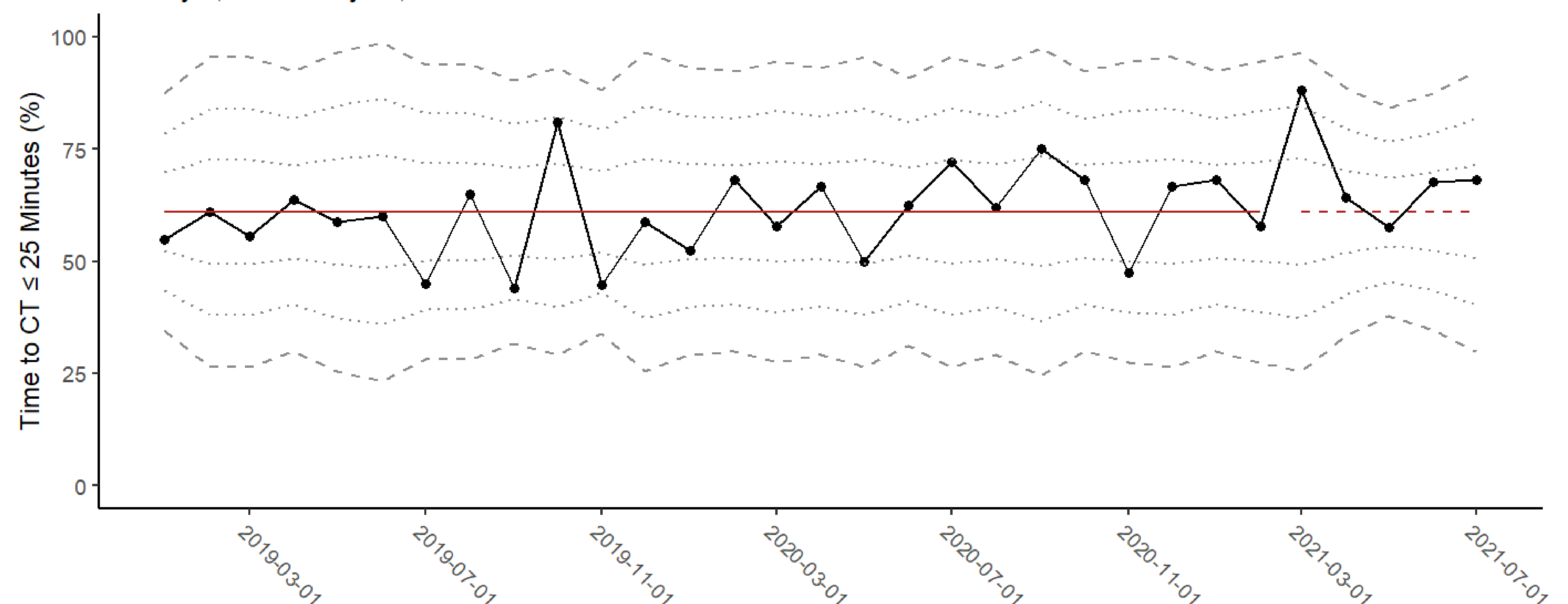
CHANGE IDEA



1. New bedside stroke flow sheet for RN and ER physicians
2. Interactive 3 hours of case based stroke education delivered to RNs and Physicians at NRGH. Plan to recur yearly in June (Canada Stroke Month). Brain pins given to identify RNs who completed training
3. Stroke QI board placed in ER hallway to publish stroke QI data

P Chart: Percent of Encounters with a Time to CT ≤ 25 Minutes for a Stat CTA EVT Stroke Protocol MI Order at NRGH by 1-Month Intervals

January 1, 2019 - July 31, 2021



CONCLUSIONS

There continues to be a need to improve the care of acute stroke patients at NRGH. Quality improvement initiatives were hampered by strains on the acute care system during the pandemic, incomplete data and high emergency department staff turnover and burnout. Despite this, modest improvements in time to thrombolysis was achieved. Subjective feedback on this QI project from frontline staff was overwhelmingly positive. In the future, continued staff engagement and comprehensive quality monitoring will form the foundation for a highly functional acute stroke care system.

Improving Patient Access Through Team Based Care

BACKGROUND

- The Victoria Youth Clinic (VYC) provides integrated and comprehensive primary health care services, with an emphasis on mental health and addiction care, for youth aged 12 to 24 years. VYC's vision and mission are to improve the physical and mental well-being of youth and provide services and care in a youth friendly, non-judgmental and safe environment
- Stats from 2019-2020 showed from July-December 2020 the number of youth already attached to the clinic that were unable to access appointments had almost doubled some months

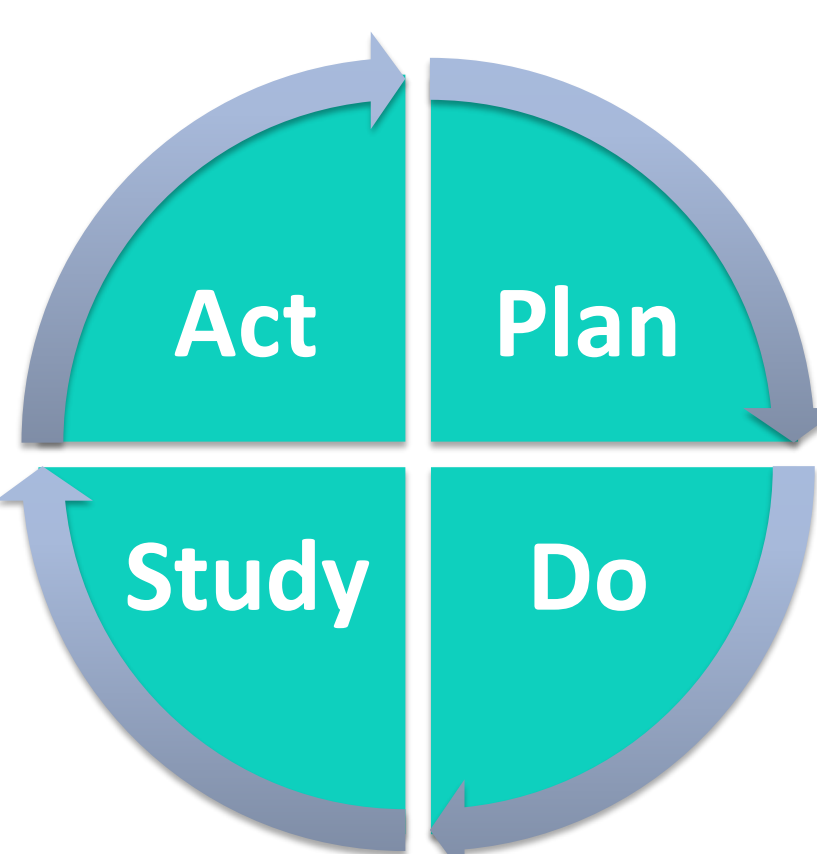
PROBLEM

- Staff and physicians at the VYC were concerned that high-risk youth were being lost to follow-up due to difficulty accessing appointments. As a result, appointments were being pre-booked into the same day access spots, resulting in less available spots for youth to book appointments or for new patient intakes
- We are seeing escalating mental health and substance use (MHSU) concerns in our community
- High-risk refers to youth with significant mental health or substance use concerns, recent emergency room visits or hospitalization, marginalized, homeless or street involved youth, or those with involvement with the legal system

CHANGE IDEAS

- MOA collecting and testing urine samples
- Creating, testing and adapting patient flow sheets for physicians, nurses, and counsellors, including visit flow sheets for intake and follow up of new Mental Health Patients, and Opiate Agonist Therapy initiation and maintenance visits.
- Increasing physician availability by redirecting youth to other clinical team member when appropriate for initial assessment.
- Booking follow up appointments with a RN or counsellor instead of physician when fits criteria identified on patient flow sheet.

PDSA CYCLES



- Created, tested and adapted intake flow sheets
- Booking follow-up appointments for Dr. Ehasoo's patients with other team members when appropriate
- Next PDSA – spread to all physicians at clinic
- Future PDSA –expand to include Gender Affirming Care

AIM STATEMENT

We will improve access to care at the Victoria Youth Clinic for high-risk youth aged 12 –24 by identifying follow-up visits routinely booked with a physician that could instead be seen by a clinical team member (nurse, counsellor or outreach worker) and use a team-based shared care approach to increase the availability of physician appointments spots by 10% by August 2021

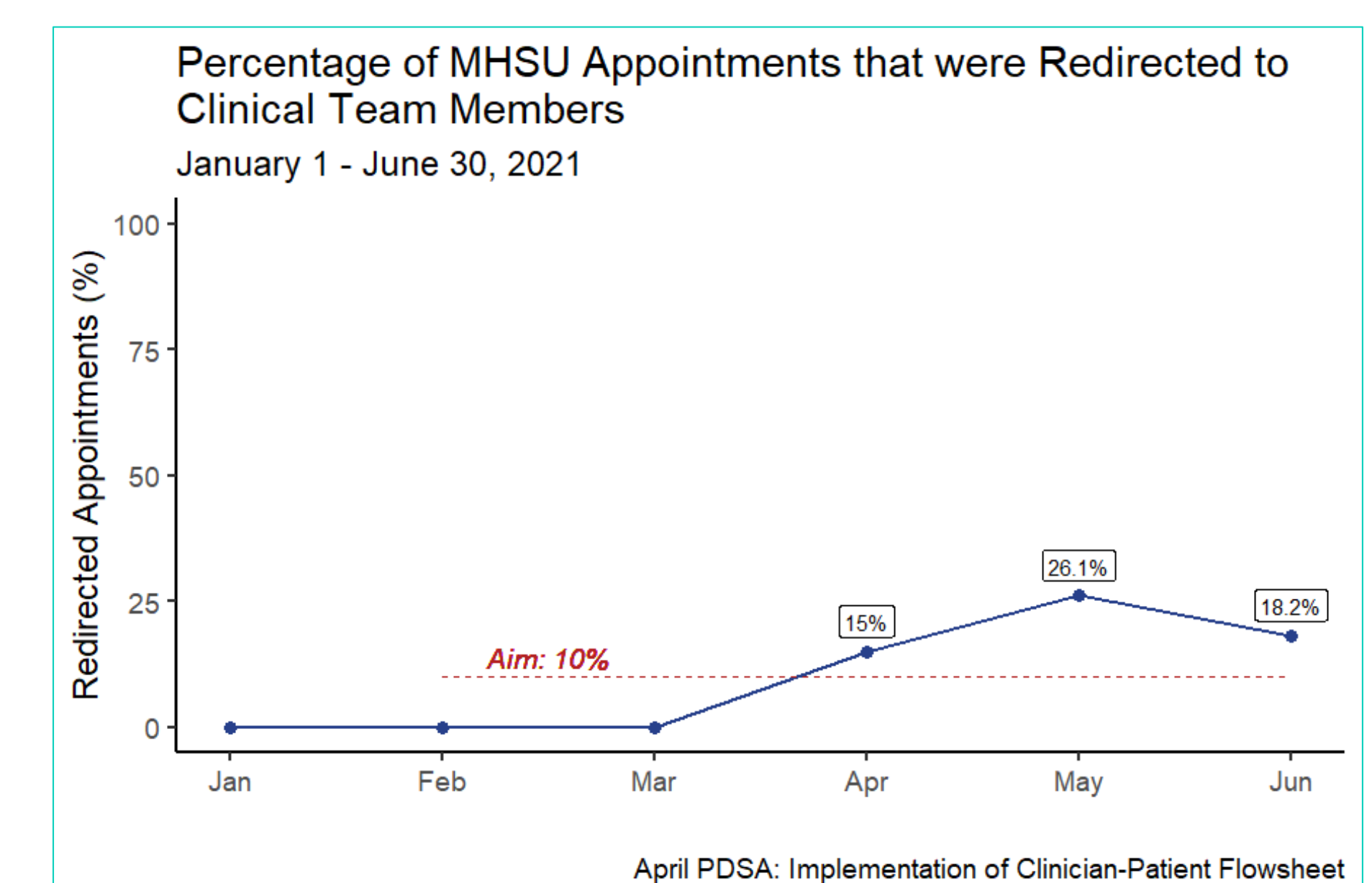
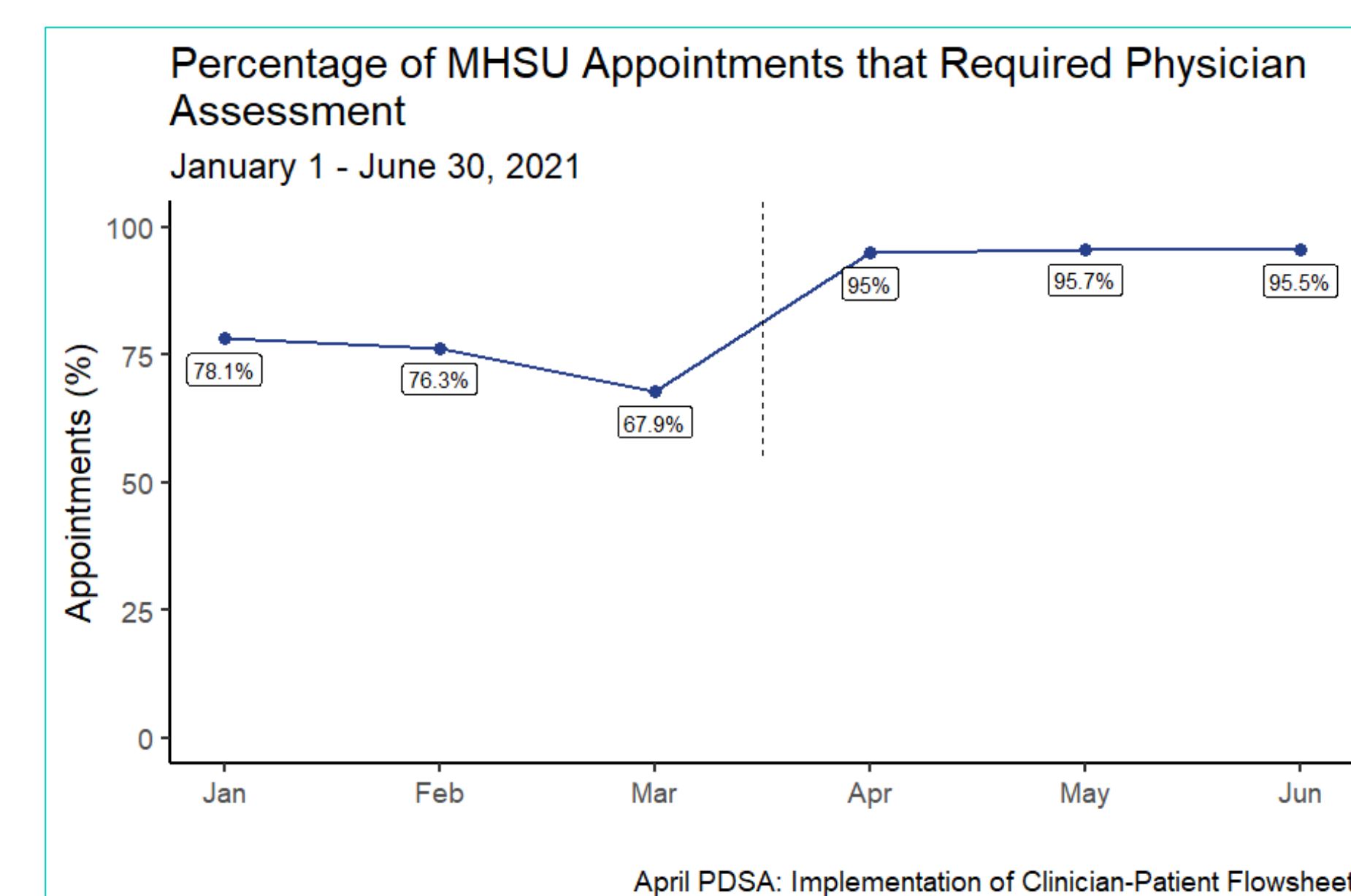
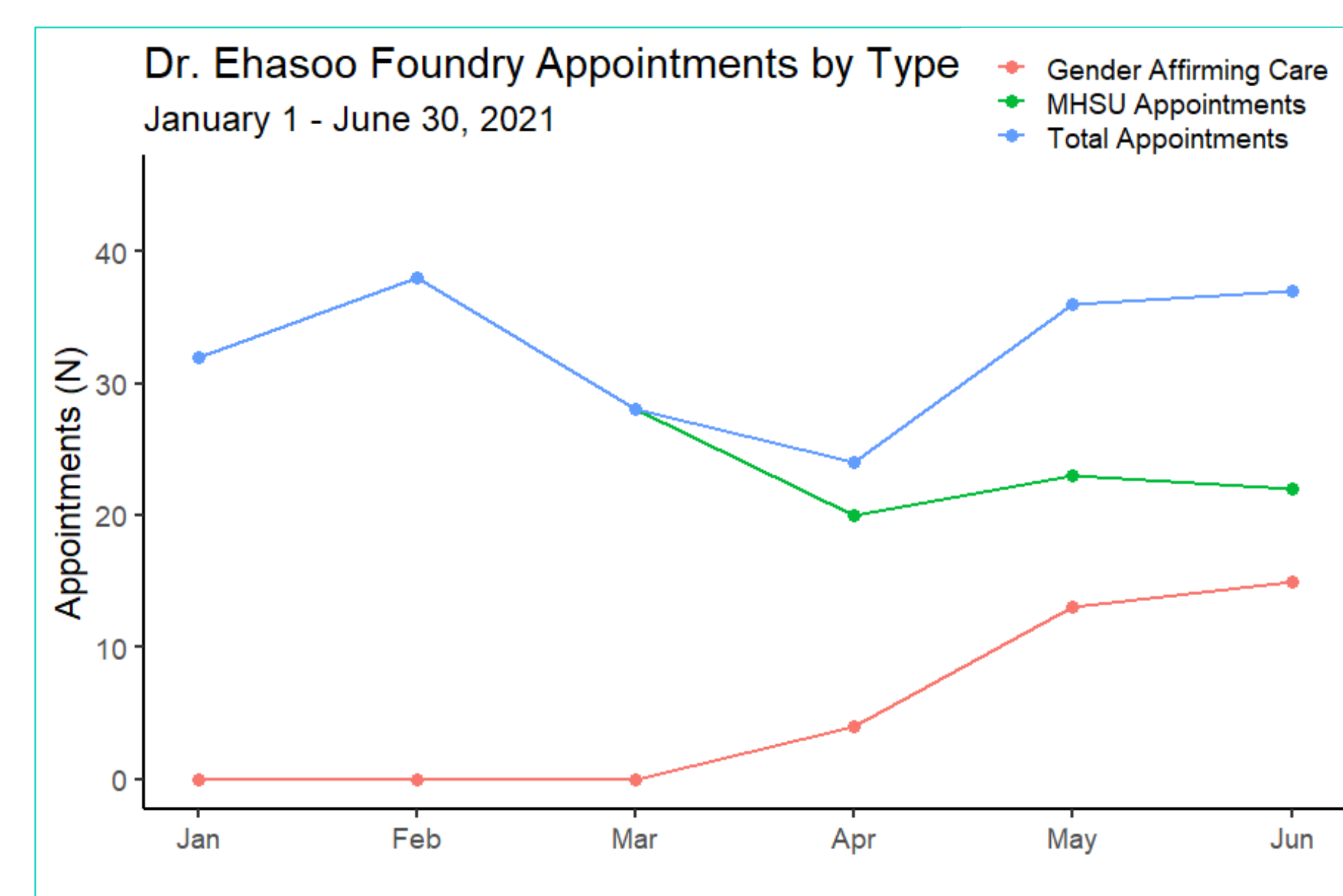
PATIENT VOICE

"Need more consistency with making appointments"

"They're all really easy to access. Like in one building... like it's all connected... all these services to help you!"

"Everyone is on the same page.. have that sort of connection... it seems to work out here. "

*[Have you ever come to the Clinic and not been able to be seen?]
"Multiple times... I ended up going to the hospital because I was suicidal and I was about to act on it, so I didn't have a choice. But I felt like if came here and had someone to talk to, and like safety plan, and had something to help me sleep or whatever, then I probably wouldn't have (A) acted on what I did, and (B) not ended up in the hospital."*



FINDINGS

- Approx. 352 physician appointments per month (2 physicians/day, 7 hours Monday-Thursday, 6 hours Friday = 1.7 FTE)
- In 2019, there were 26-52 new patient intakes per month & 47-94 attached patients turned away per month as no same day visits available
- In 2020, there were 3-22 new patient intakes per month & 60-140 attached patients turned away per month as no same day visits available
- Between January and April, 7-9 MHSU patients per month could potentially have been seen by a nurse or counsellor instead of a doctor
- Between April and June, 3-6 MHSU patients per month were able to be booked in follow-up with alternate team members. This is less than what would have been predicted based on January-March numbers, however my practice expanded to include Gender Affirming Care during this period of time
- Some patients met flow sheet criteria for redirection to another team member however, were booked in follow-up with physician due to perceived acuity of risk or patient preference
- Balancing measures included checking with team members prior to booking these patient appointments. To date, clinical team have had capacity to meet this demand. Physicians appear to be the more limited resource

CONCLUSION

In the months of April, May and June, we were able to successfully book appropriate patients for follow-up with other clinical team members and open up more than 10% of patient appointments each month to allow for better access for our currently attached patient panel, as well as increase our potential to accept new patient intakes. We were able to exceed our aim by making 15 – 26.1% more physician spots available per month from April to June 2021. Some patient visits were not redirected due to patient preference as well as concerns regarding high level of patient acuity/risk. Our goal is to spread this model to all physician members of the team, as well as to continue to expand this model to our other patient groups. We will need to continue to monitor the capacity of other team members. The next target group will be Gender Affirming Care patients.

PROJECT TEAM

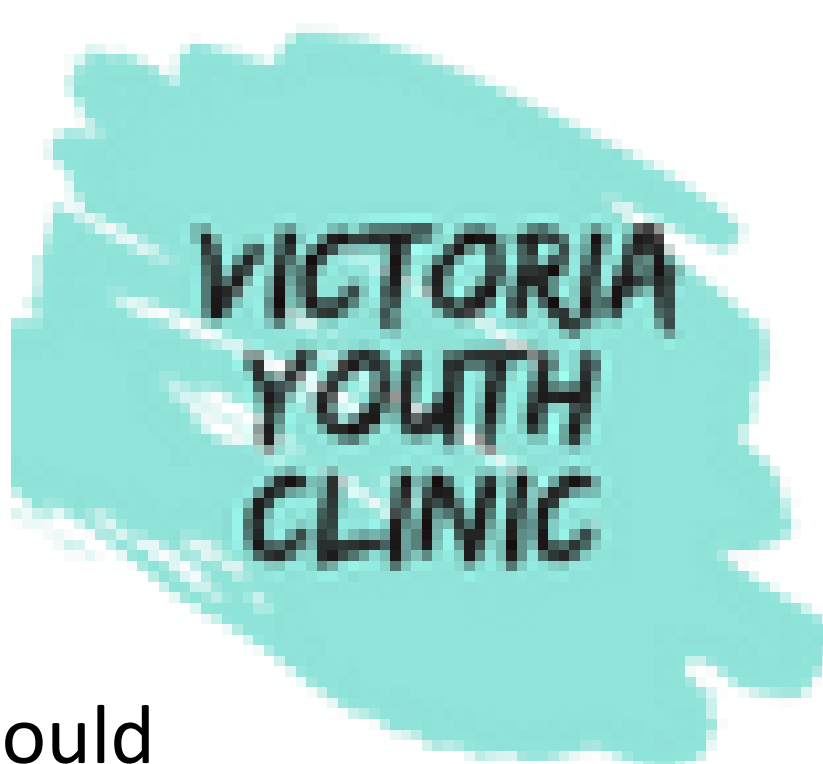
Lead: Dr. Valerie Ehasoo

Project Participants:

- Dr. Jenn Lee – Medical Director
- Amy Schactman – Clinical Coordinator
- Neeraj Grewal – MOA
- Foundry Staff
- Youth Advisory Council
- Victoria Youth Clinic Physicians
- PQI Mentor – Dr. Alan Buckley
- PQI Staff – Julia Porter & James Saunders

DATA ANALYSIS

- January – March 2021 patient visits were reviewed to see how many MHSU youth could potentially have been redirected to clinical team member
- April – June 2021 MHSU patient visits were tracked to determine how many follow-ups were booked with clinical team members, and charts reviewed to determine how many visits could have been booked with team member but weren't
- January to March 2021, 67.9 – 78.1% of patients required physician intervention
- April – June 2021, 95 – 95.9% of patient visits met criteria for a physician intervention
- Overall 15 – 26.1% of appointment spaces were made available for same day access or new patient intakes using team based model of care**



Patient Reported Outcome Measurements (PROMs) at the RJH Chronic Pain Clinic



PROJECT TEAM

Project Participants:

- Dr. Kyle Fisher – Project Lead
- Cheryl Armstrong – QI Coordinator
- Lindsay Wheelock – Project Management
- Patient Partners of the RJH Chronic Pain Clinic
- Pain Clinic Clerks, Nurses, Physiotherapist, Psychologist and other Support Staff
- Island Health Pain Physicians (Nanaimo and Victoria)
- Island Health REDCap development team

AIM STATEMENT

- Electronic health history form and PROMs will be created for all new outpatient referrals and follow-ups to the Royal Jubilee Hospital (RJH) Chronic Pain Clinic and Nanaimo Regional Hospital (NRGH) Chronic Pain Clinic by April 1, 2021
- Patient and physician satisfaction, ease of completion, and percentage of completion will be assessed to determine the success of both history form and metrics in capturing a patient's wellbeing

BACKGROUND

- No validated PROMs exist in our current paper intake form to quantify factors such as depression, anxiety, sleep, function, and overall quality of life
- Paper-based health history forms are not complete or partially finished at initial assessment in the RJH Pain Clinic (35-40% completion rate) as most are mailed a few days before appointment or are time consuming to complete in the waiting room minutes before an appointment
- No PROMs are completed at follow-ups to quantify patients current health
- Electronic documentation could assist in triaging patients or explore alternate pathways for patients to be seen in clinic

PROBLEM

- The current health history form is on paper, and does not contain quantitative metrics, and outcomes are not tracked by providers who offer interventions
- Without quality intake metrics, patient progress is difficult to determine
- Triage is completed by a single referral form and contains limited patient information, and more urgent patients are waiting longer than expected

CHANGE IDEA

- Creation of an electronic health history in REDCap, with online access for patients to complete prior to first visit
- Update questions to be more inclusive
- Project team and patient partners decided on the PROMIS-3A, PROMIS-29, and McGill Pain Questionnaire short form as PROMs
- These PROMs will detect baseline levels of depression, sleep, anxiety, and function and importantly pain
- PROMs to be completed at 3 months, 6 months, or after intervention (by MD or other pain provider)

PATIENT VOICE

“How many trees are cut down to make this form?”

“How will you know if I feel better?”

-Anonymous-

PROJECT SPREAD

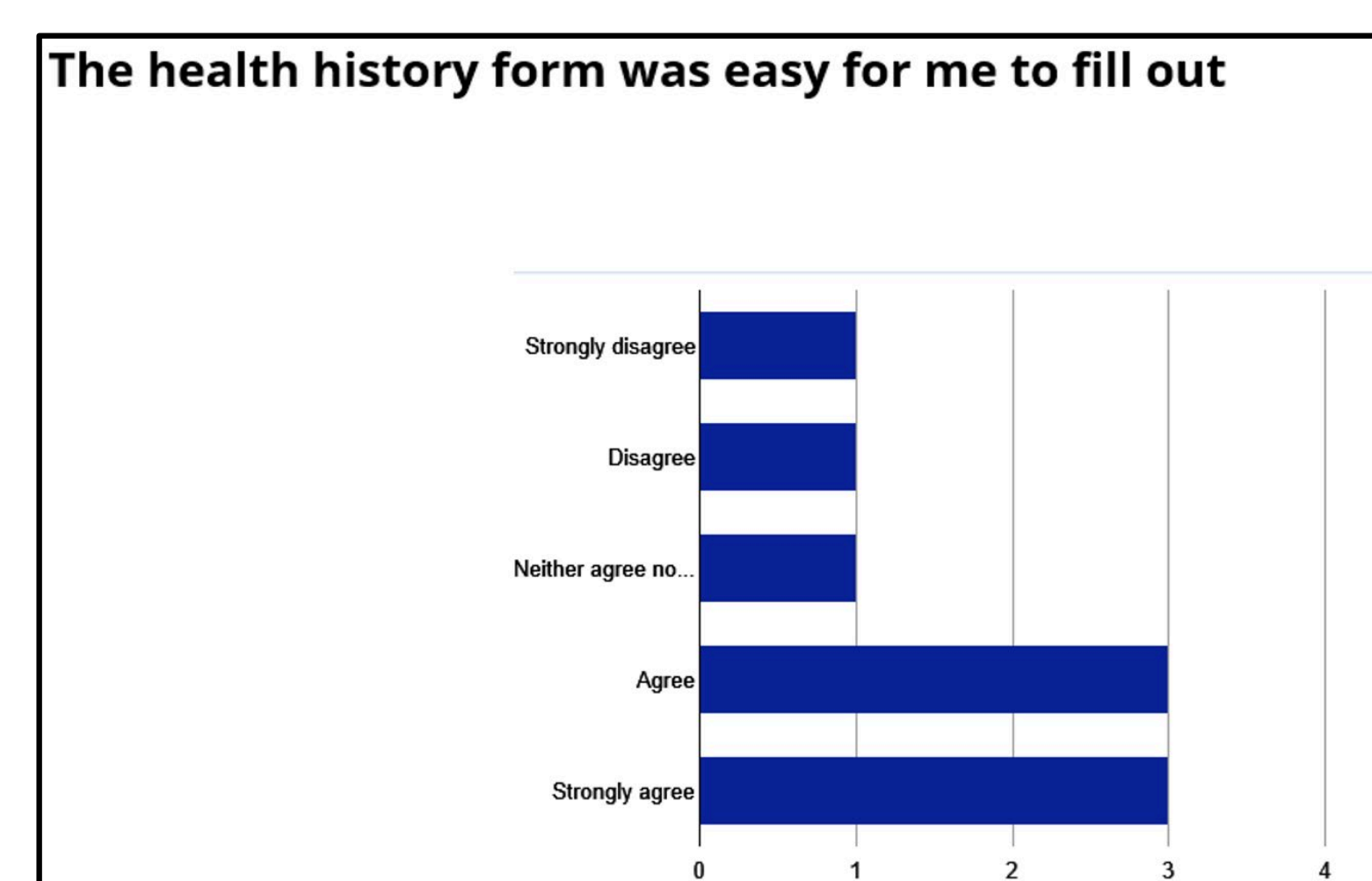
- Sequential spread of ideas: Project team members working closely with patient partners and pain clinic team to create a form inclusive to all members
- Sphere of influence: RJH Pain Clinic and Dr. Fisher implementing PROMs to our waitlist and soon implementing at NRGH Pain Clinic
- Sustainability: completed with support from Island Health, project management and Island Health pain physicians
- Health history form and PROMs involved in future SSC project to streamline triage and implement new patient pathways in the RJH Pain Clinic

PDSA CYCLE

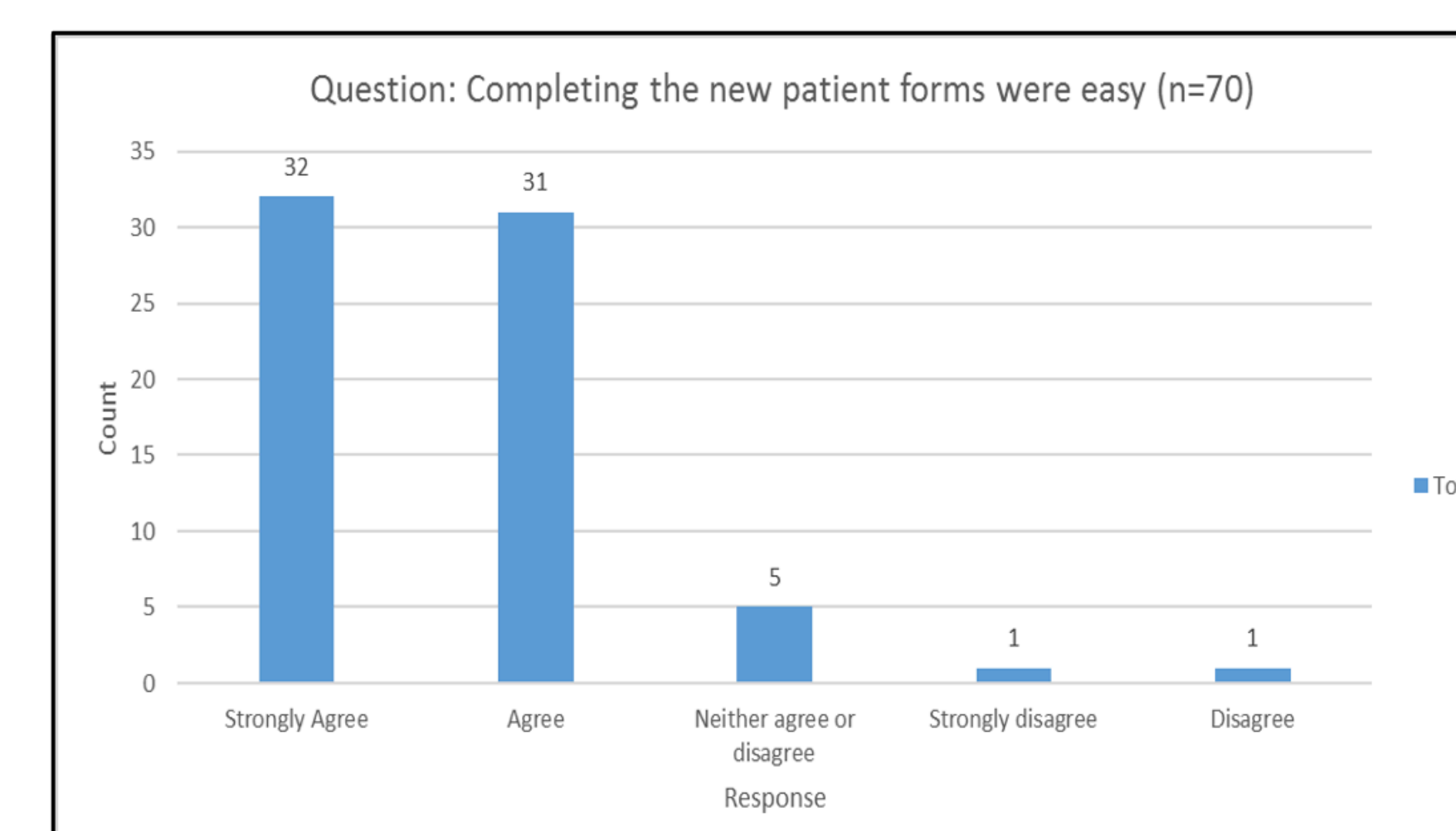
Small Test of Change

- 20 semi-urgent patients on waitlist assigned new PROMs and health history form
- Further PDSA with 120 patients on routine waitlist assigned PROMs and history form
- Satisfaction survey at end of intake form, 70 patients completed

Current Intake

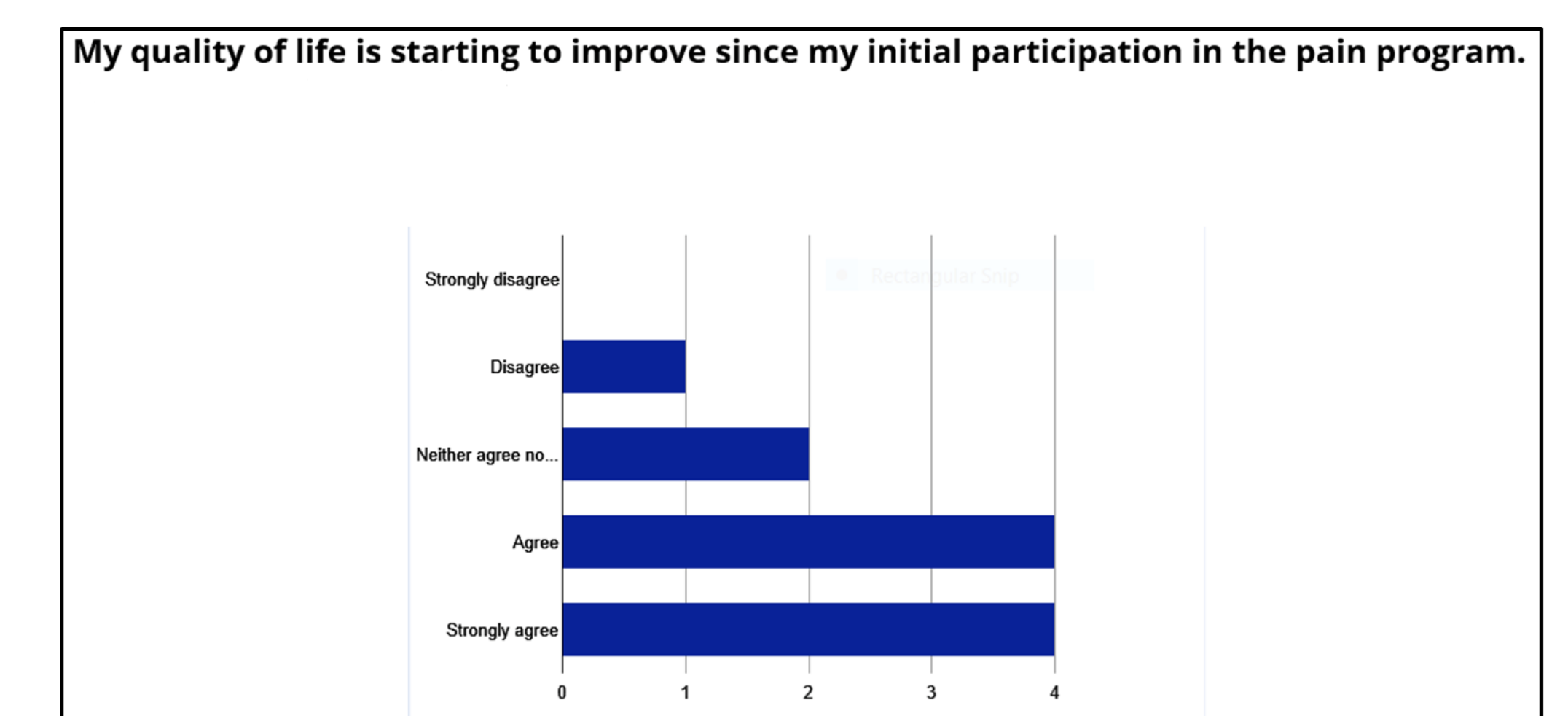
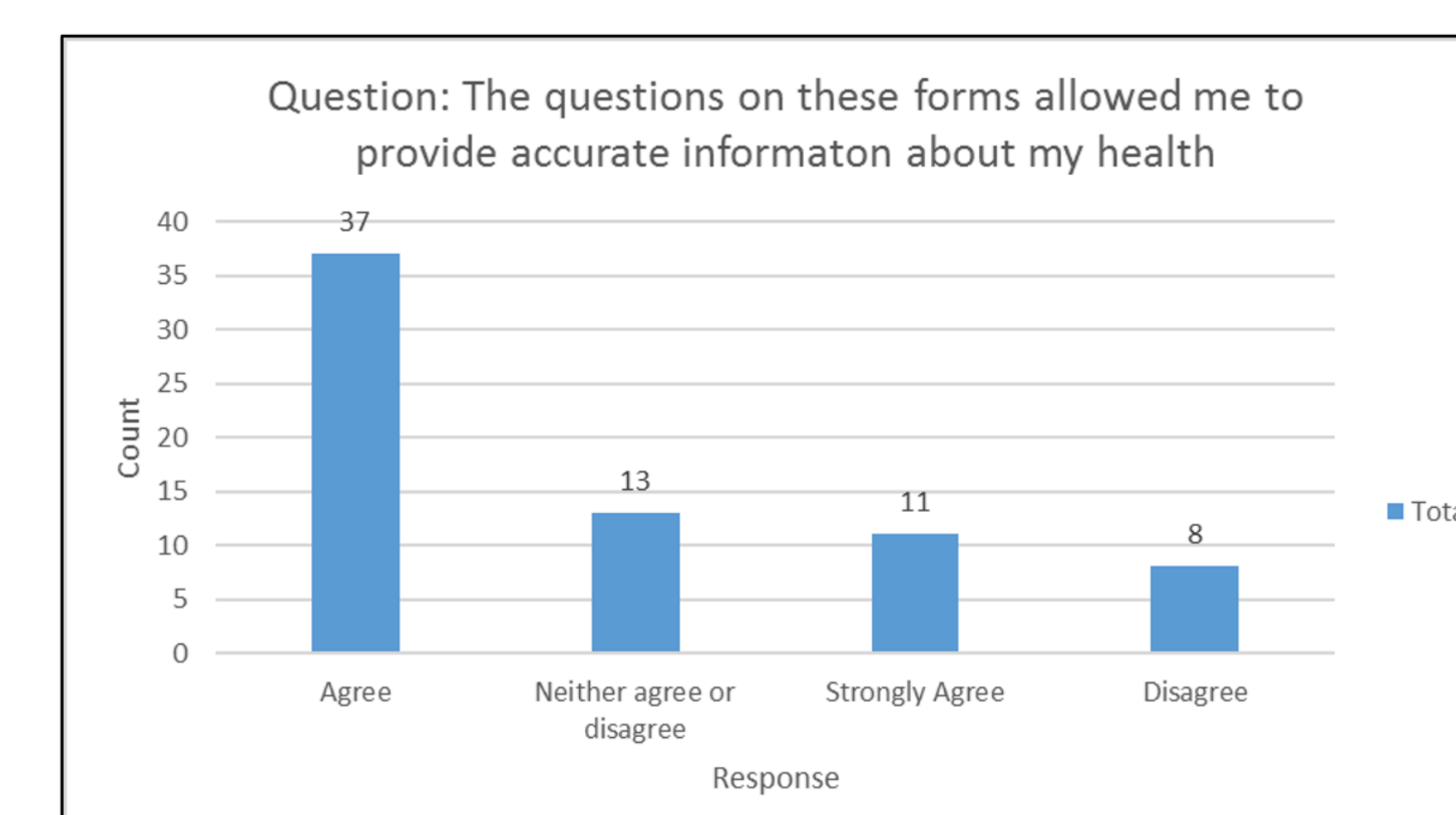
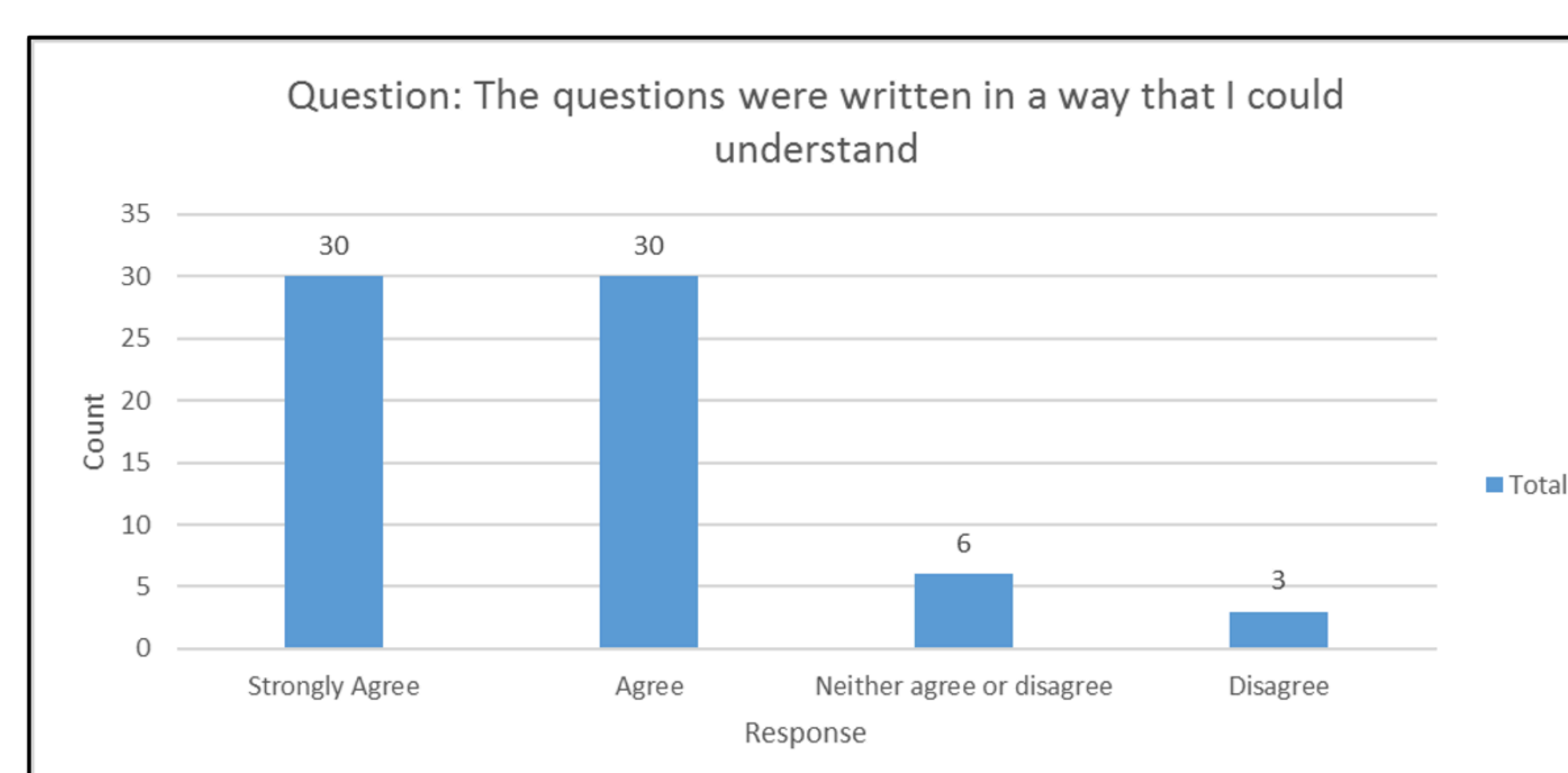


New Intake with PROMs



DATA ANALYSIS

- Data collected on 570 patients (and counting!)
- Baseline PROMs for chronic pain collected and future reassessment not yet fully integrated into clinical practice
- Data collected on ease of completion of PROMs and new health history form, completeness of patient assessment, and satisfaction since participation at pain clinic



FINDINGS

New health history form and PROMs:

- Easy to complete
- Easy to comprehend
- Provided a comprehensive platform about a patient's health

CONCLUSION

- Our electronic health history form and validated PROMs are easy to complete, and fully capture a patient's health history
- PROMs have the ability to quantify outcomes in the Chronic Pain Clinic
- Scalability: The project can easily be implemented to other pain clinics across the province, and is more cost effective than other alternatives currently used
- PROMs can be used in other health care settings to help quantitatively determine efficacy of treatment and patient wellbeing



Care without borders: Improving patient-centered rural access to care through virtual collaboration

PROJECT TEAM

Dr. Deni Hawley, *Family Physician, Project Lead*
Dr. Daisy Dulay, *Specialist Consultant*
Dr. Sarah Olson, *Primary Care Consultant*
Cacia Rechlo, *Administrative Assistant*
PQI team: Kamla Gage, *Coordinator*;
Dr. Dana Hubler, *Mentor*;
James Saunders, *Data Specialist*

AIM STATEMENT

Using a patient survey and automated invitation process, I will increase the number of Westward Medical patients offered virtual Collaborative Care Visits (CCVs) with a team of healthcare providers by 50% by July 1, 2021.

PATIENT VOICE

“Having my [family] doctor join me for my appointment with my specialist helped me to make sure that I didn’t forget to bring anything up that was important to me.”

“I appreciated my doctors talking with me all at the same time to make a plan for my healthcare.”

PDSA CYCLE



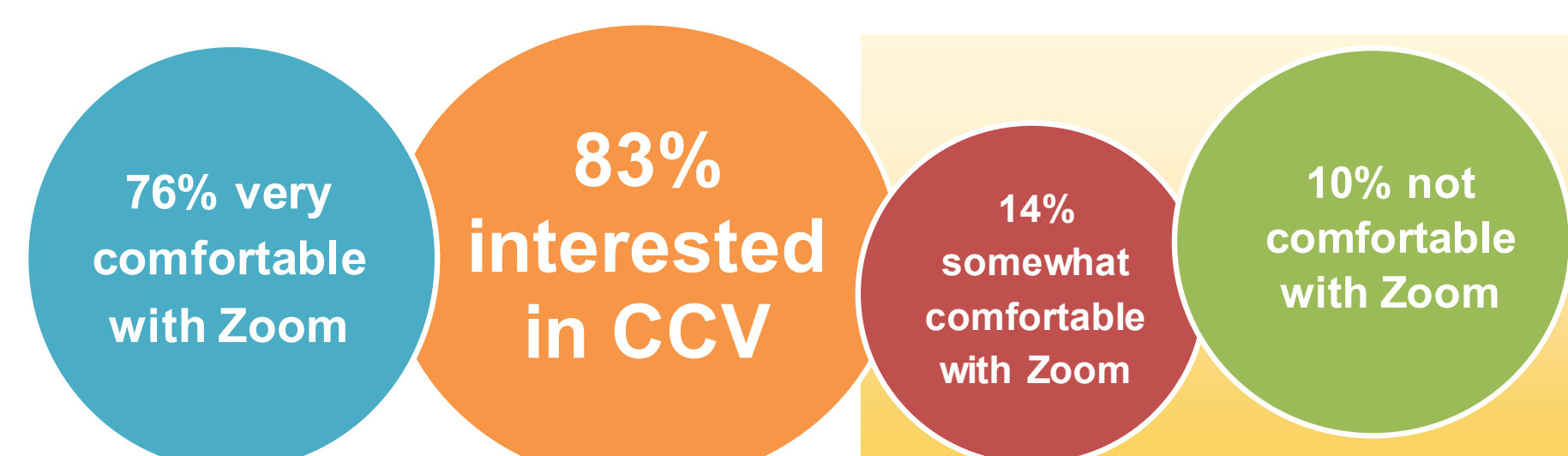
- Aim statement scope
- Email vs phone pitch to specialists
- Identifying patient population
- Engaging patients and specialists with surveys

DATA ANALYSIS

- Anonymized patient survey quantifying interest in participating in a CCV as well as familiarity using Zoom
- Survey results communicated as count data
- Number of CCVs completed and patient/physician satisfaction quantified in post-survey

FINDINGS

- Using a survey to engage patients **increased CCV frequency by >400%** (0.7/month to 4/month)
- **79% of patients responded** to the engagement survey
- Of patients who responded, **82% were interested** in participating in a CCV and **85% were comfortable with Zoom**
- 24% of survey respondents who expressed interest went on to have a CCV with their specialist:
 - **100% of patients were satisfied** with their CCV as well as using Zoom
 - 75% of specialists who responded were satisfied with CCVs and using Zoom



BACKGROUND

Westward Medical patients prefer to see specialists in the Comox Valley instead of travelling to larger centers in Nanaimo, Victoria or Vancouver, particularly for routine follow-up appointments.

Patients feel less central to the decisions that are made about their healthcare plan as their care becomes more complex. As care team complexity increases, there can also be more redundancies and communication errors or delays between care providers on the patient care team.

In the past 2 years, innovations in virtual care make it possible to address many logistical problems regarding rural healthcare access.

As more physicians and AHCPs are onboarding with virtual care enablement, it becomes possible to achieve team-based care collaboration as if we were co-located. Having the patient at the center of this collaboration, conducted in a virtual setting, allows for healthcare team members and patients to work together in real time, no matter their geographic location.

PROBLEM

- Patients experience fragmented care when having to attend multiple visits between PCPs and specialists & AHCPs, and they often feel that they are not engaged in healthcare decision making within their team
- Patient care can suffer delays and even errors when team communication is not collaborative or timely.
- Patients and health care providers can improve efficiency, satisfaction and resource allocation through virtual healthcare delivery with the patient in their home and home community

CHANGE IDEA

- Starting with interested patients, then pitching to specialists
- Pre and post-CCV surveys to examine patient and specialist satisfaction
- Specialists and Primary Care Practitioners (PCPs) are remunerated for CCVs
- Next step: calculation of time and \$ saved with CCVs

PROJECT SPREAD

- Parallel approach - funded RCCBC initiatives for virtual care coordination in rural communities
- Sphere of Influence - supporting colleagues in rural community practice similar to Comox Valley to try this change idea
- Identifying specialist and PCP champions to continue improving CCVs
- Inspire patients to ask for a CCV from their healthcare team and improve patient engagement in virtual care collaboration

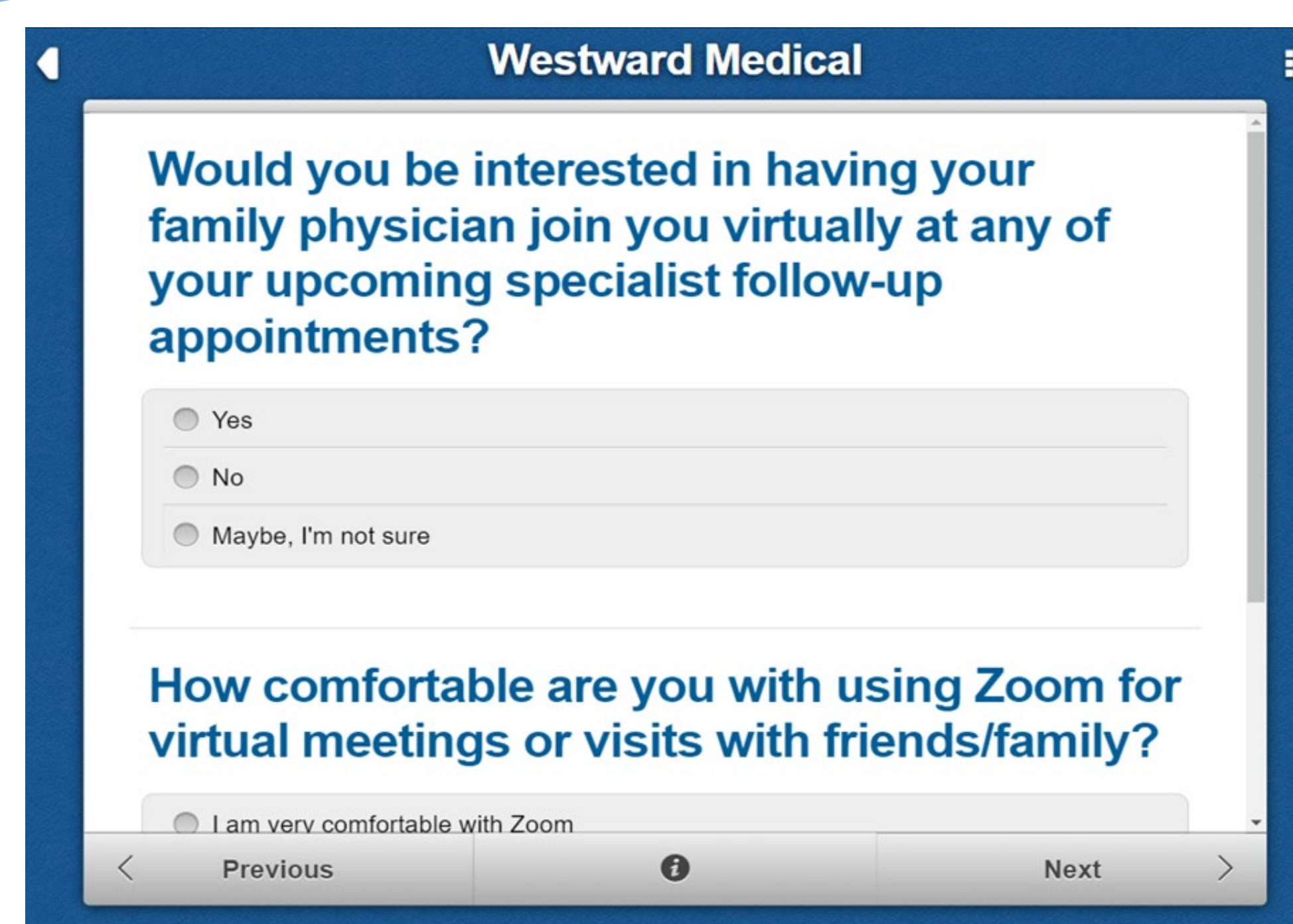


Figure 1: Patient engagement survey screenshot

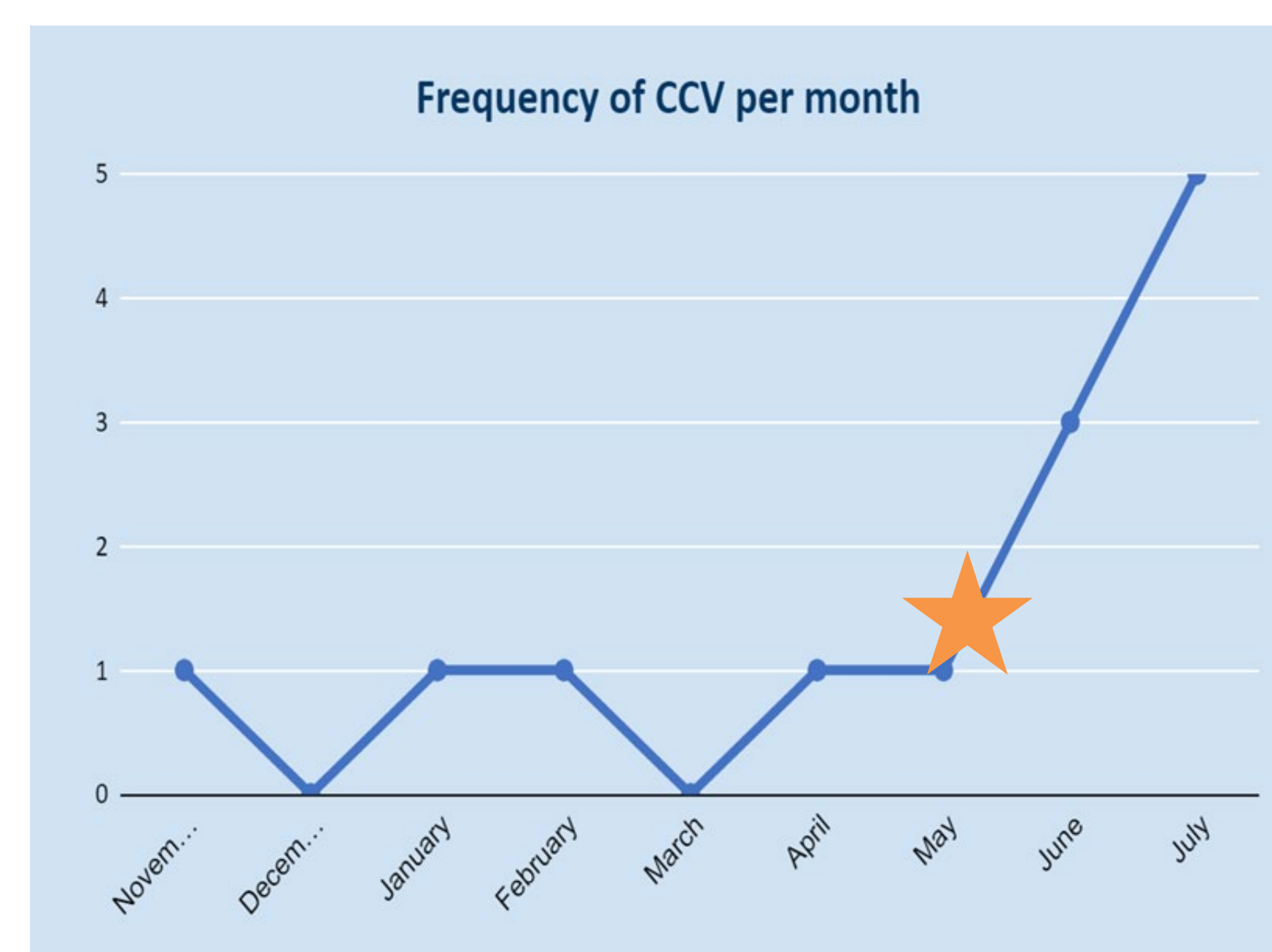


Figure 2: Frequency of CCV per month before and after using survey to engage patients



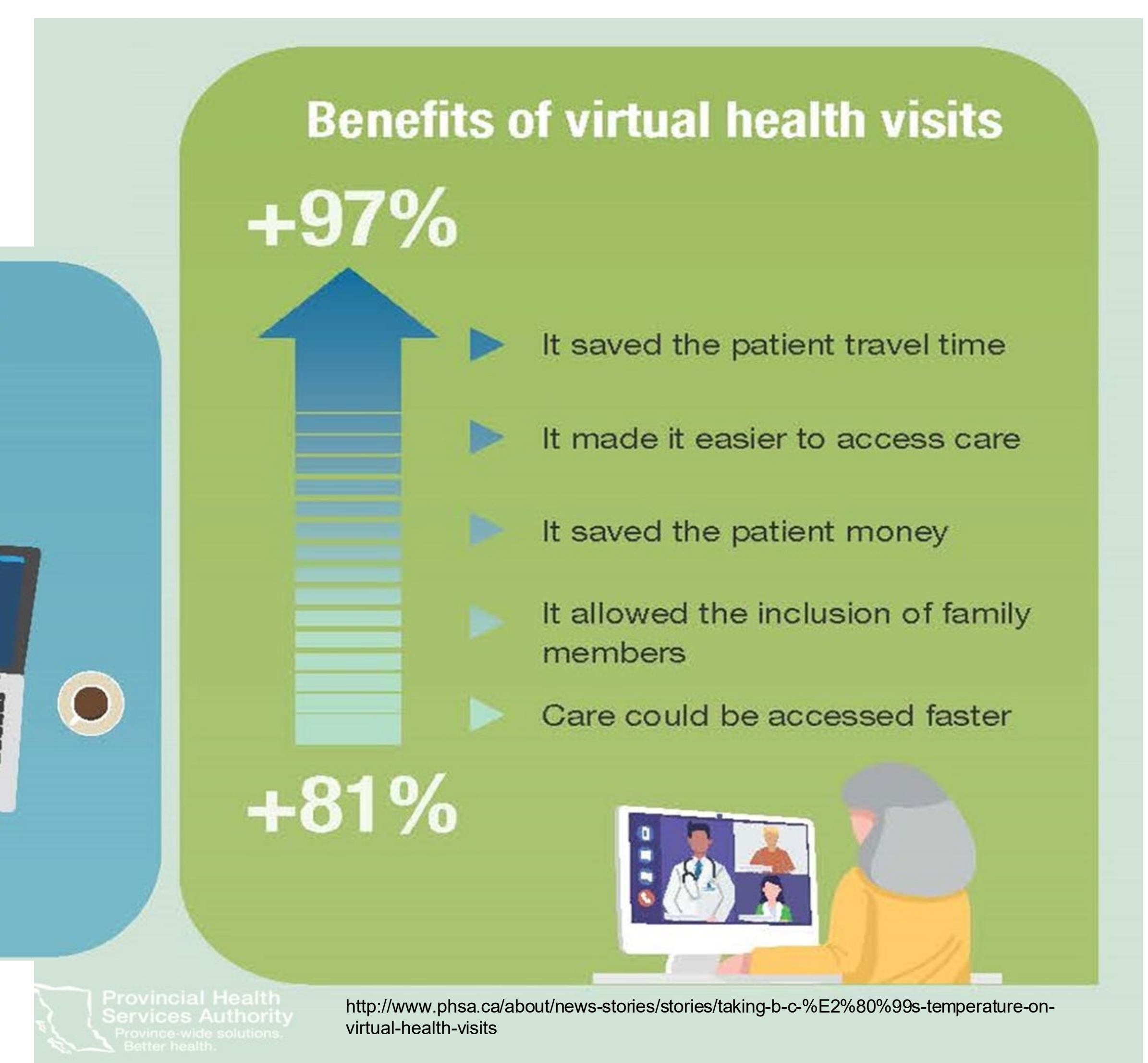
<http://www.phsa.ca/about/news-stories/stories/taking-b-c-%E2%80%99s-temperature-on-virtual-health-visits>

CONCLUSION

For our patients, virtual collaborative care visits bring better care to their home.

For providers, CCVs remove borders and geographic limitations to co-location by providing a real-time collaborative care environment to bring the care focus back to the patient.

This project will serve as a foundation to exploring new innovations in virtual care for rural communities, particularly new RCCBC initiatives to improve rural access to healthcare through virtual care coordination which will improve on some of the limitations identified during the course of this learning journey.



<http://www.phsa.ca/about/news-stories/stories/taking-b-c-%E2%80%99s-temperature-on-virtual-health-visits>

<http://www.phsa.ca/about/news-stories/stories/taking-b-c-%E2%80%99s-temperature-on-virtual-health-visits>

RACING AS ONE FOR FASTER STROKE CARE

Improving Door to CT Times at VGH as a Team

PROJECT TEAM

Dr Janka Hegedus MD, PhD, FRCPC (Neurology)

Project Participants:

- Dr Kristen Attwell-Pope
- John LeRoy, Neurosciences Manager
- Madison Koniuk, Stroke Nurse

AIM STATEMENT

The stroke team at Victoria General Hospital (VGH) aims to have completed a CT head scan in at least 75% eligible stroke patients within the first 10 minutes of arrival between the hours of 8 am and 8 pm.

PDSA CYCLE



Small Test of Change

- Discuss goals of door to scan time with diagnostic imaging managers
- Post educational poster in CT scan control room
- Distribute educational podcast to CT technicians

DATA ANALYSIS

We analyzed the door to CT times to get an idea of how fast people were getting their scans

- Everyone flagged a potential “hot stroke” who presented to the VGH ER between 8 am and 8 pm
- Time to CT scan

FINDINGS

- PDSA cycle 1: not even the management of the radiology department was aware of our targets
- PDSA cycle 2: everyone wanted to make things quicker, and the poster helped brainstorm

BACKGROUND

- National standard for door to CT scan times is less than 10 minutes(Boulanger et al)
- With this we can treat strokes within 30 minutes
- Every 15 minute delay in stroke treatment reduces the chance that patients will be independent (Saver 2006)

Boulanger et al. Canadian Stroke Best Practice Recommendations for Acute Stroke Management: Prehospital, Emergency Department, and Acute Inpatient Stroke Care, 6th Edition, Update 2018. International Journal of Stroke 2018;Vol. 13(9) 949-984
Saver, J.L. Time is Brain. Quantified. Stroke. 2006;37:263-266.)

OUR POSTER

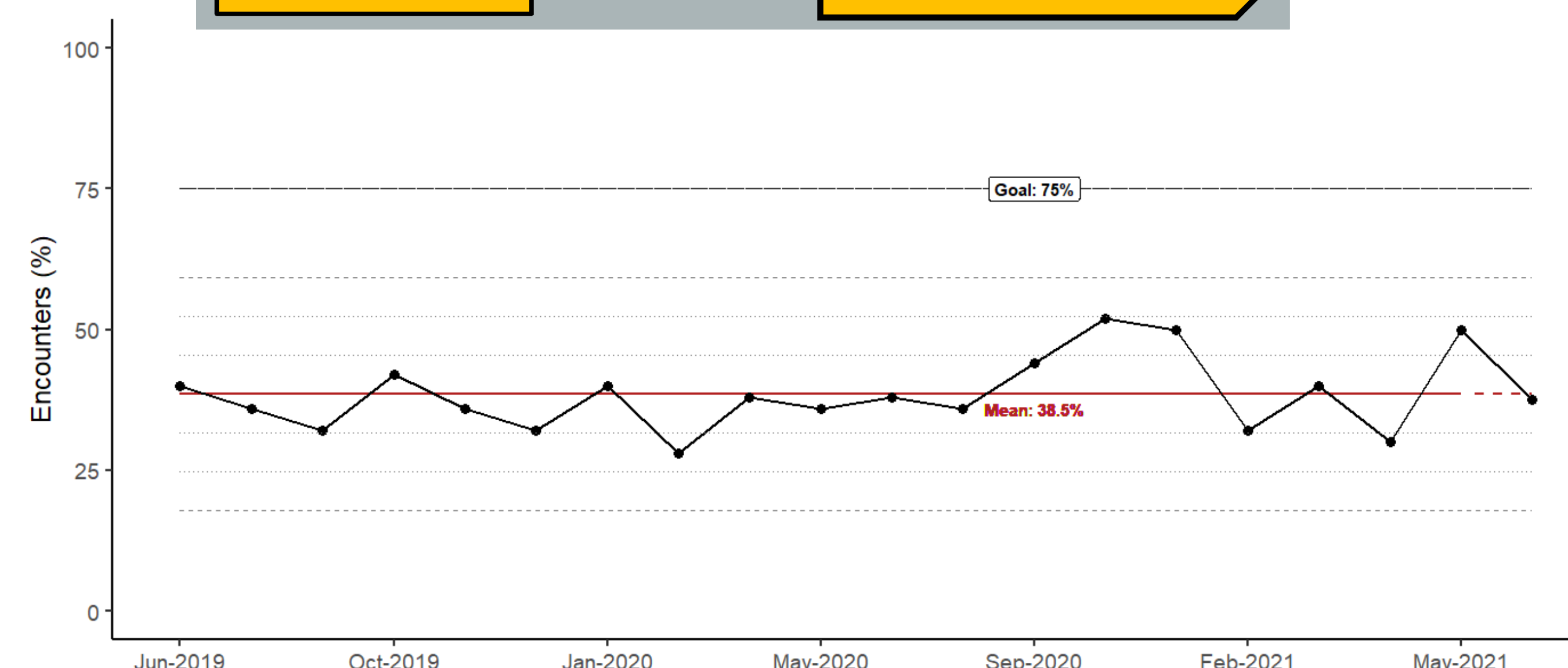
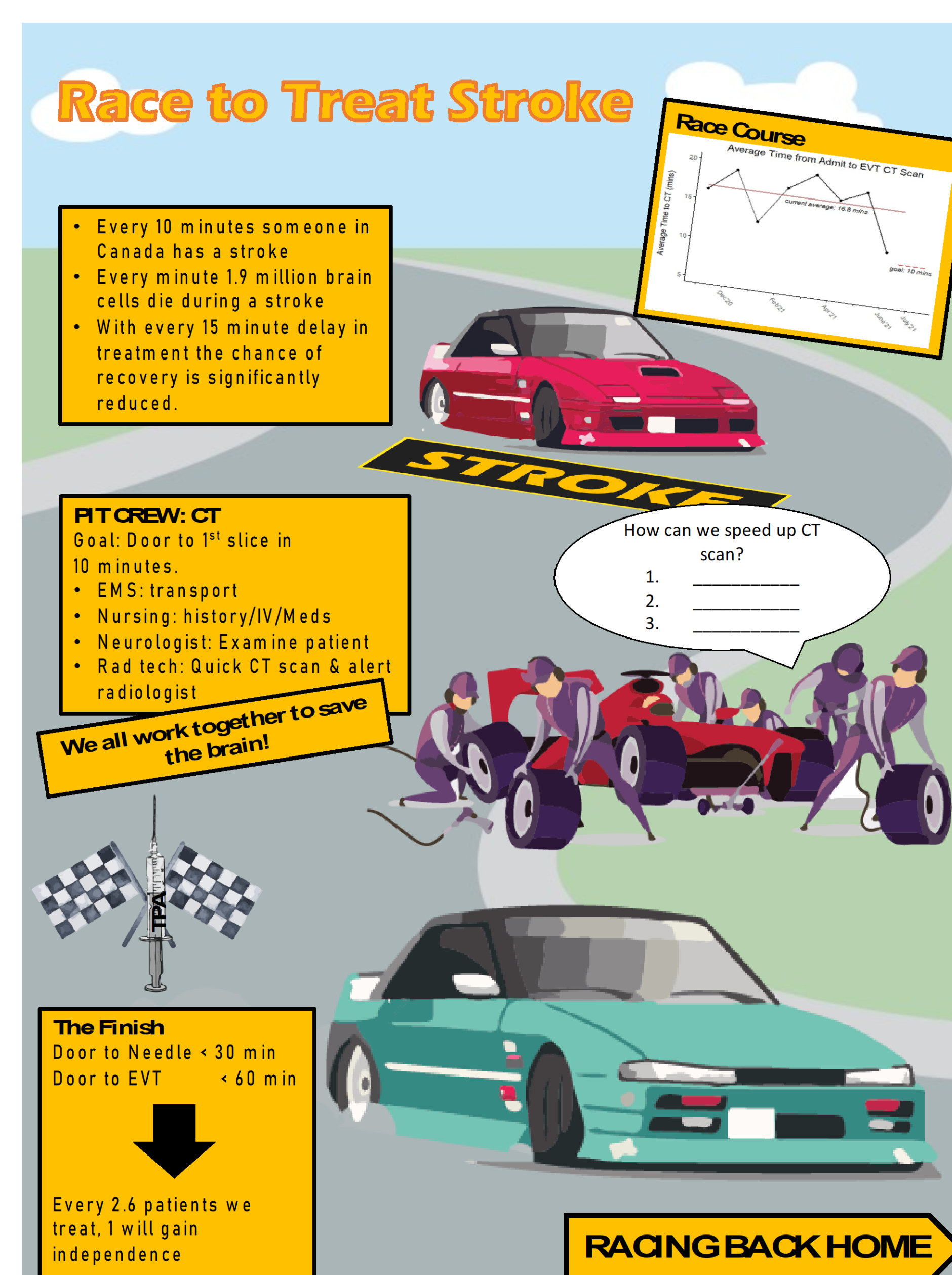


Figure 1: Run chart of the percent of encounters who had a CT within 10 minutes of EDS presentation at VGH

PROBLEM

- The VGH stroke team encompasses members from at least three different departments,
- We must improve the cohesiveness of the team to treat strokes quicker

CHANGE IDEA

- Improve team relations thru education
- To improve CT times, we started an education process to involve the CT technicians more in the stroke process
- We assessed how quickly we could get CT scans

PROJECT SPREAD

- Project was spread through a top down approach first through managers.
- For our second PDSA cycle we tried to engage the team as a whole

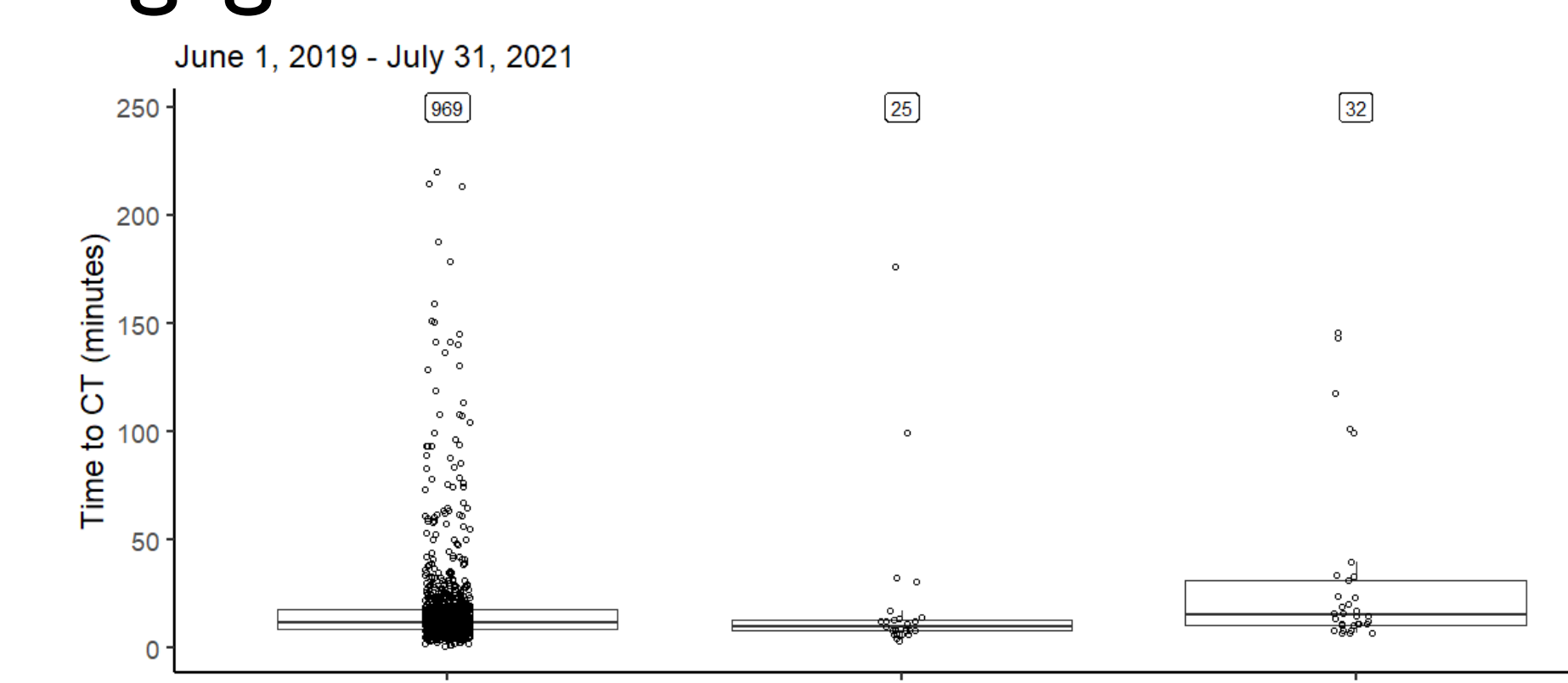


Figure 2: Scatterplot showing registration time to CT scans

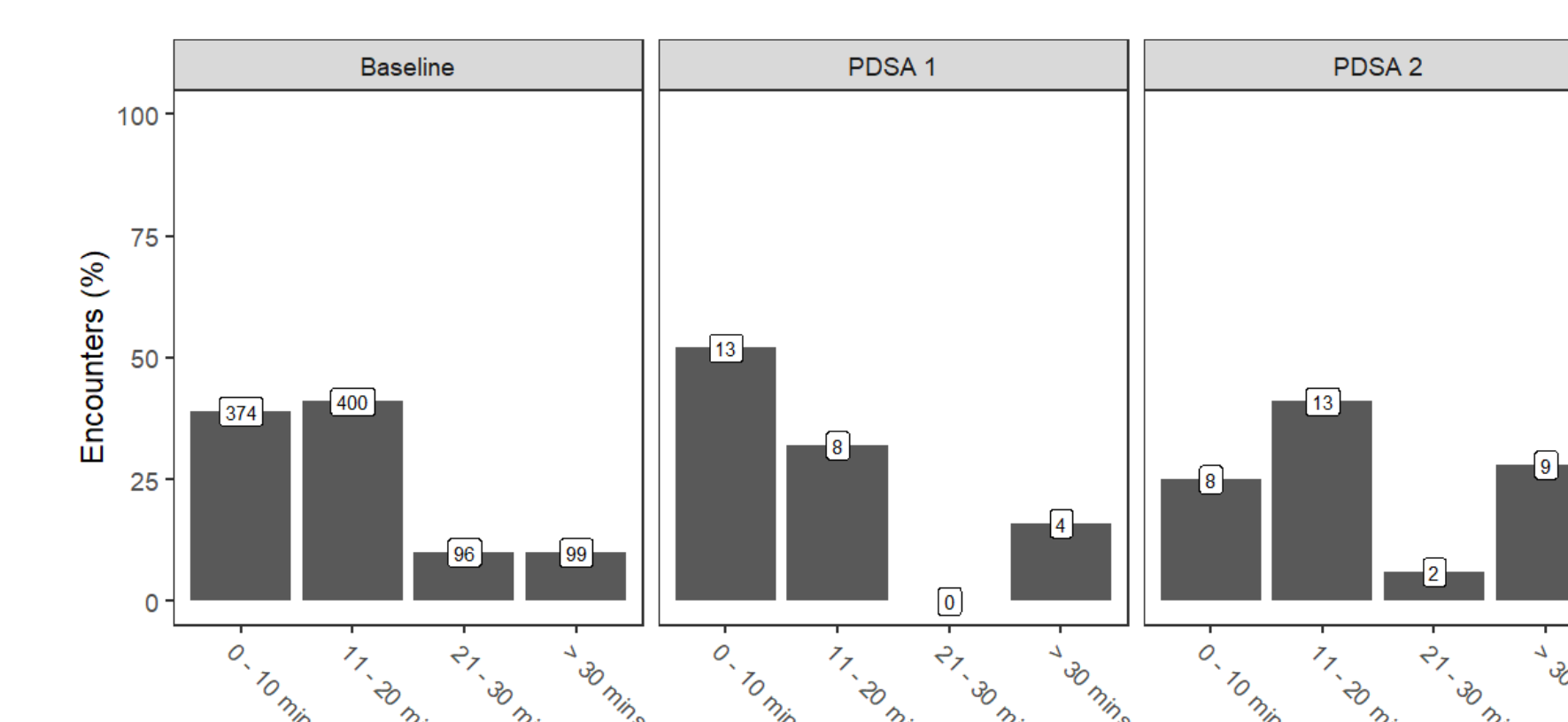


Figure 3: Breakdown of proportion of CT Scans that were done within 10 minutes, 20 minutes, 30 minutes and greater.

CONCLUSION

We are not there yet! There is a lot of time we could still save by working together.

It was eye opening to find out that the manager and the CT techs working at the VGH were not aware of the goal time for CT scan acquisition that were working together. By working through this project our team realized that we are working in silos, and that we must educate our counterparts in different departments as to why certain goals had been set. Our next goal is to work with Patient Voices to see how we could improve from a different perspective. We suspect that we did not reach our goal for two reasons: 1) we did not run the PDSA cycles for long enough and 2) the summer was unusually busy time in the emergency room and this slowed down all processes.

Peer Facilitated Group Support for Postpartum Depression and Anxiety

PROJECT TEAM

Dr. Shana Johnston – Project Lead

Sheila Duffy - Head of Pacific Post Partum Support Society (PPSS)

Heather Barnes - local “Peer”

Clare Zeschky - Peer Mentor from PPSS

Kathy Easton & Hilary Plandon – Public Health

Julia Porter - PQI Coordinator

Dr. Sarah Lea & Dr. Alicia Power - Physician Peer Mentors

The 10 amazing women of the group who reached out for support and have been very involved giving regular feedback, comments and suggestions along the journey

SPECIAL THANKS

- **South Island Facilities Engagement Initiative (SIFEI)** for a grant that made this project possible
- **Pacific Post Partum Support Society (PPSS)** for their extensive collaboration and support



PACIFIC POST PARTUM SUPPORT SOCIETY

Model of Care: Mothers Supporting Mothers

- Providing support for **50 years** (est. 1971)
- Support from “peers” - women with lived experience of PP distress
- Trained and mentored to provide phone/group support
- Paid \$20-25/hour
- Based in Vancouver but now providing virtual support province wide (Supports now up to approx. 6000 parents and families each year)
- Contracted by Vancouver Coastal Health and Fraser Health Authority to provide group support

FINDINGS

Increased Support and Decreased Isolation

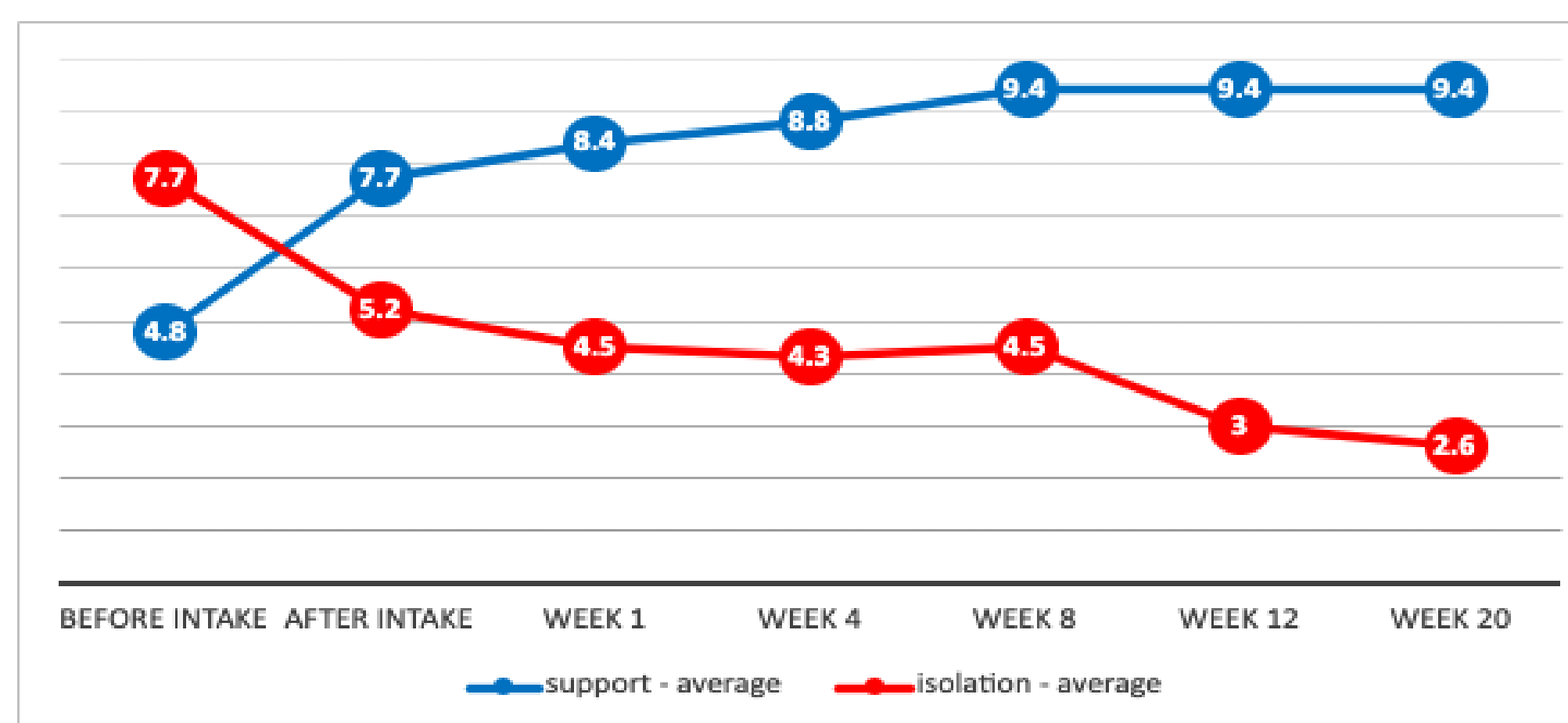


Image 1: Average rating for support (blue) and Isolation (red) before any intervention, after phone call, and at regular intervals in group process

Improved Mood

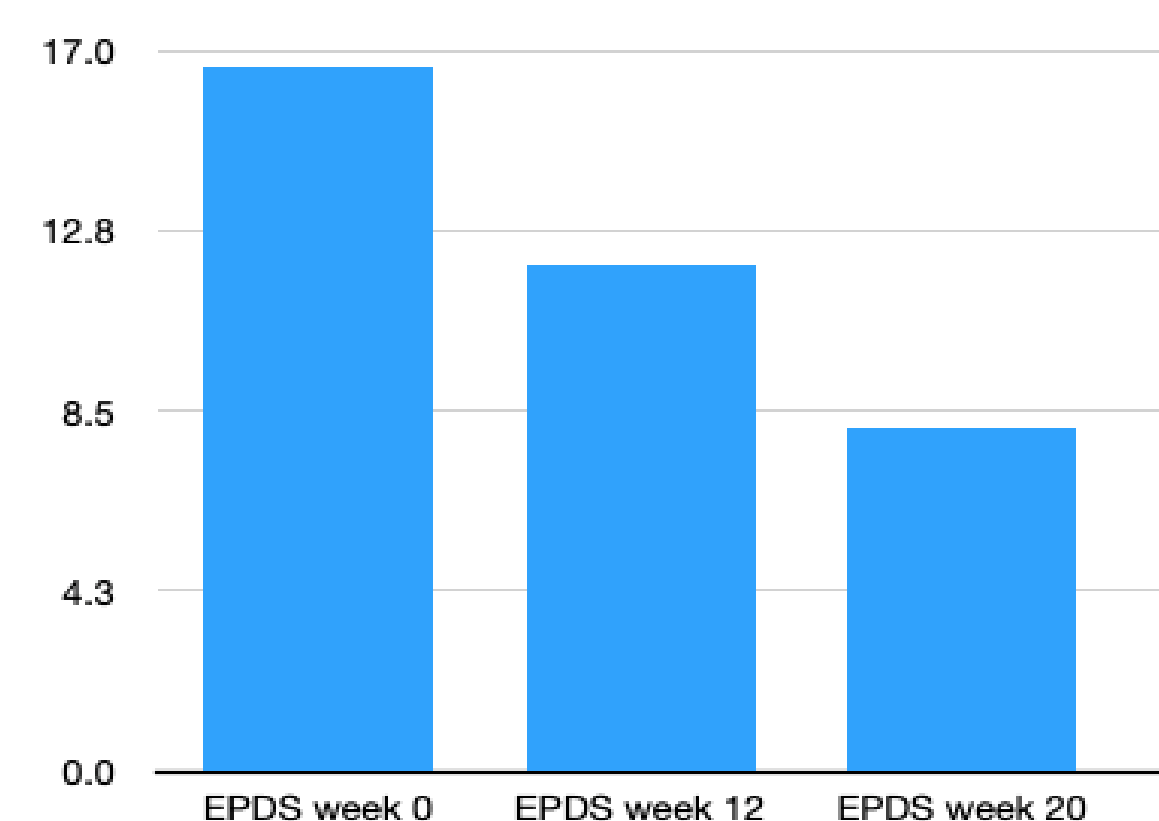


Image 2: Average score on Edinburg Postpartum Depression Scale (EPDS) at intake, at the end of the 12 week group and 8 week extension

Score of 9+: Possible Postpartum Depression/Anxiety (PPD/A)
Score of 12+: Likely Postpartum Depression/ Anxiety (PPD/A)

Average EPDS before group: 16.6

Average EPDS at 12 weeks: 11.9

Average EPDS at 20 weeks: 8.1

Average EPDS decrease: 8.5

PROBLEM

In 2019, Public Health had 2807 postpartum clients:

- 9.8% of those screened, had an EPDS score of 12+ (likely PPD/A)
- 22.4% of those screened, had an EPDS score of 9+ (possible PPD/A)

Gap in Care:

- 3-6 months waitlist to access group support through Public Health
- All groups stopped at beginning of the COVID pandemic
- No virtual options for those with transportation/child care challenges

DATA ANALYSIS

- Surveys done at intake, week 1, week 4, week 8, week 12 and week 20 for support and isolation on 10 point scale
- EPDS at intake, 12 weeks and 20 weeks
- Longer survey at intake, 12 weeks and 20 weeks
- Regular opportunities for open text feedback
- Patient engagement session at week 9

PATIENT VOICE

"I enjoyed meeting and talking with others in similar situations and who had similar thoughts. It made me very much feel like I wasn't alone in my thinking."

"This is one of the best groups I've been in. Everyone is very supportive. Heather and Clare are great facilitators."

"Keep this going! I know so many other moms who would benefit from this program and need it now!"

"THANK YOU for giving me and my babe a chance."

**Participants
overall
rating of group:**

9.9/10

Participants rated how much their mental health improved:

Average improvement in mental health: 89%

Average attributed to program: 87%

Average improved mood from program: **77%**

Participants rating of:

- Virtual platform - 9/10
- Facilitators:
 - Our local Peer Facilitator - 9.4/10
 - PPSS Peer Mentor - 10/10

NEXT STEPS

- Program filled up in less 2 weeks, demonstrating community need
- Women in program asking for this support to be offered to more women and to look at rolling out for partners as well
- Will be engaging with Operational Leadership at Island Health to explore funding options for both virtual and in person programs
- Will also be exploring community partnerships for location and funding options

AIM STATEMENT

To improve the mental health of 10 postpartum people on the South Island, demonstrated by showing a decrease of least 3 points in the Edinburgh Postpartum Depression Scale (EPDS) scores by the end of August 2021.

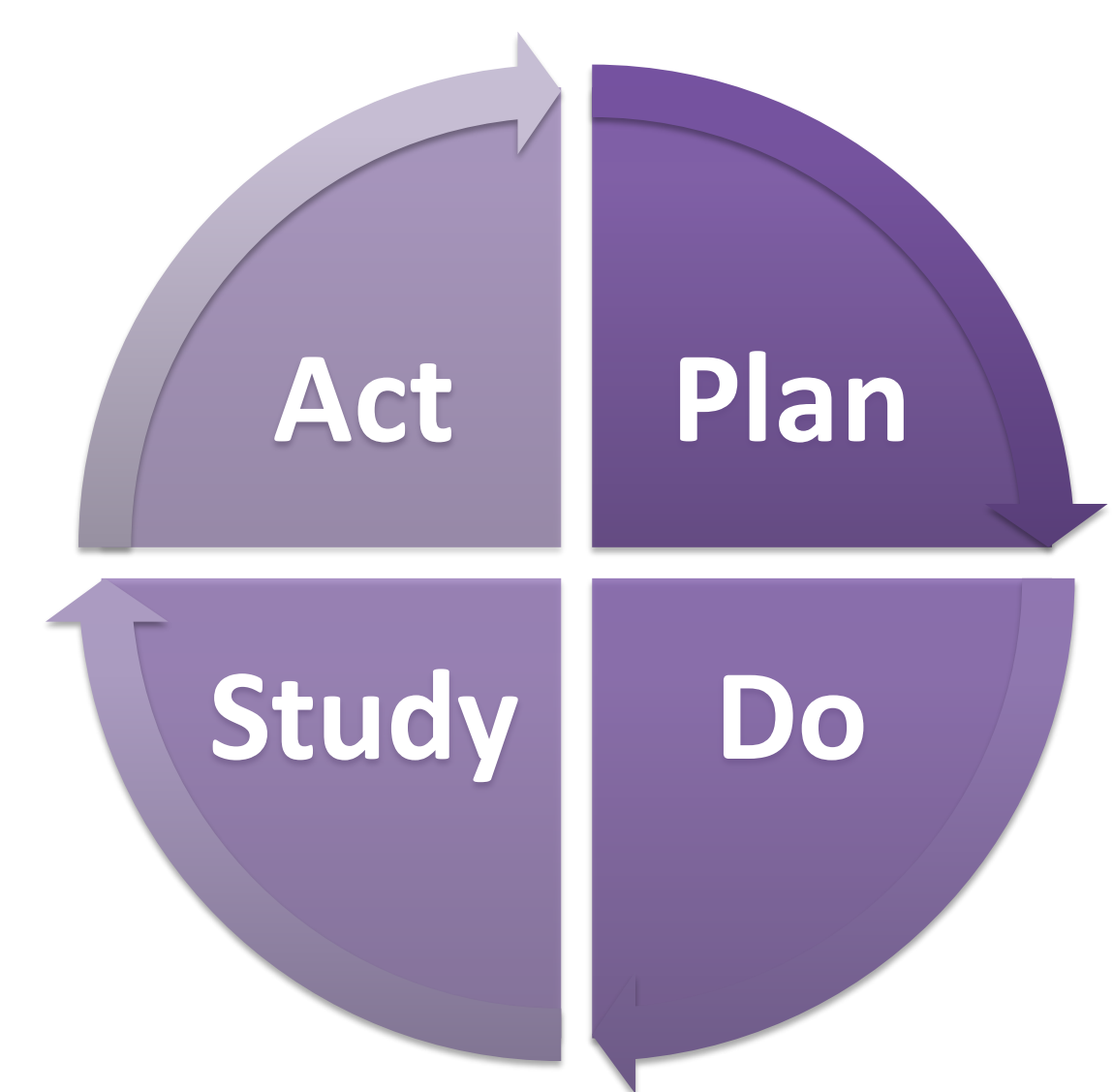
CHANGE IDEA

Partner with Pacific Post Partum Support Society to offer a virtual postpartum support group in our area

Study impact of providing support on:

- Women's feelings of support and isolation
- EPDS scores
- Perceived improvement in mental health

PDSA CYCLE



Provide support

- Phone support from peer at PPSS
- Support email/video
- Weekly group support
 - 12 week program
 - 8 week extension

CONCLUSION

- 1) Peer facilitated group support led to substantial improvement in measures of support and isolation and continued to improve over time
- 2) The mental health of the women in the group improved as a result of being involved in the program with an average improvement in EPDS scores of 8.5 and average improvement in mood attributable to the program of 77%
- 3) Facilitators and program both rated highly by participants
- 4) Virtual platform well received
- 5) The program was well received with pages of positive feedback from participants

PROJECT TEAM

Physician: Colin D. Landells MD, FRCSC

Project Participants:

- Amy McCoy - Administrative Assistant, RebalanceMD
- Stefan Fletcher - CEO, RebalanceMD
- Rosie Holmes - PQI Coordinator
- James Saunders - PQI Data Analyst
- Dr. Alan Buckley - Physician Mentor

AIM STATEMENT

To improve staff and clinician awareness of quality projects by 80% at RebalanceMD by September 2021.

PDSA CYCLE

Small Test of Change

- Review all ongoing QI work at RebalanceMD
- Interview Physicians, Staff, and administrators about their knowledge and understanding of QI work
- Develop several iterations of a survey for all physicians and staff at RebalanceMD



DATA ANALYSIS

A survey to evaluate the level of understanding of quality improvement initiatives and engagement in quality projects was administered to all staff and physicians (115) at RebalanceMD:

- Overall response rate was 61.7%
- 62% reported that they had never been involved with, were unaware of ongoing QI projects, and were unfamiliar with QI methodology
- 73% expressed interest in learning more about QI methodology
- 72% agreed that QI projects can improve teamwork and enhance patient experience and outcomes.
- The most important barriers to QI work are physician / staff workload and communication gaps.

FINDINGS

There is an appetite to enhance basic QI methodology knowledge and engagement among many staff and physicians..

There is strong interest to develop processes to align, coordinate, and spread QI work at RebalanceMD

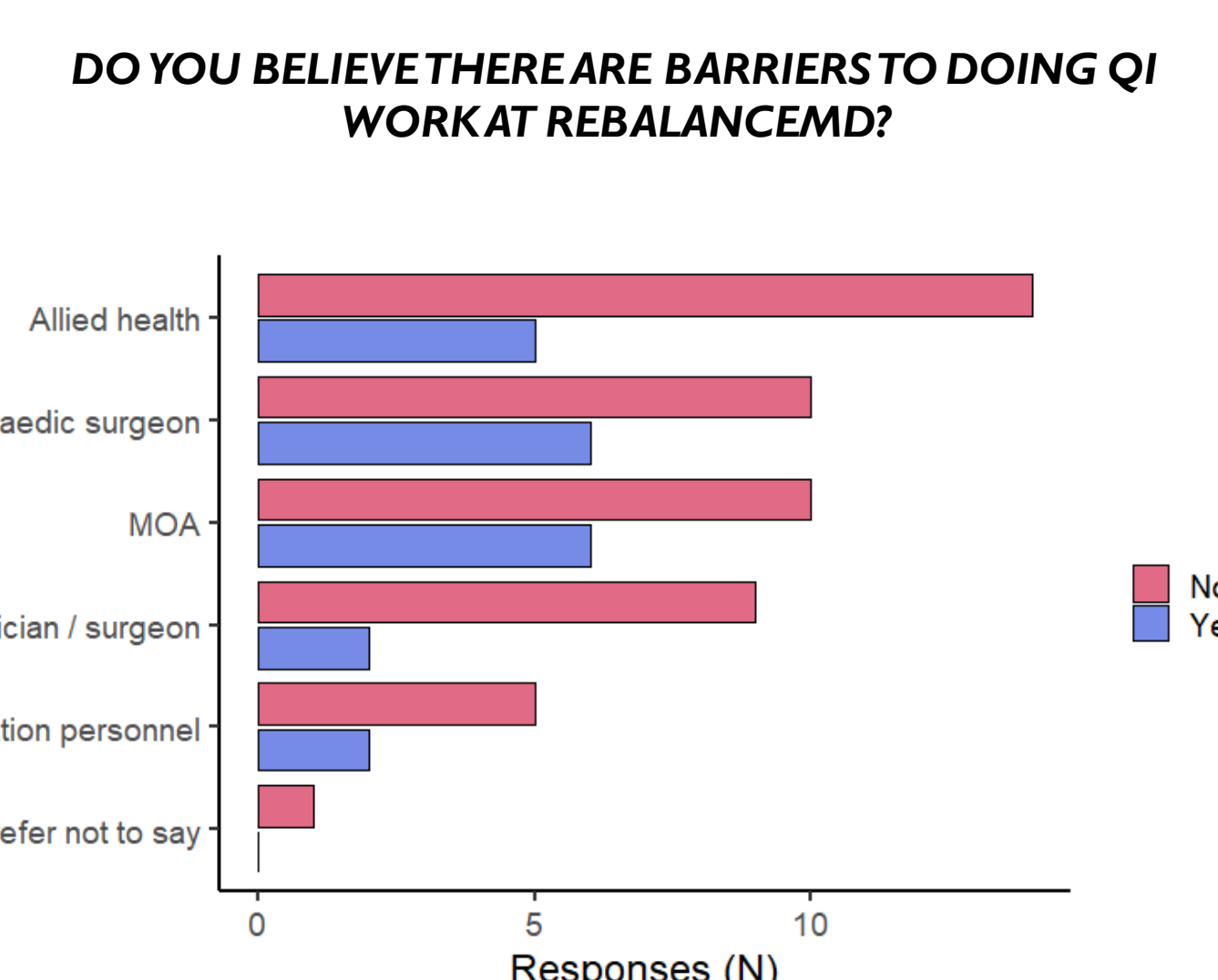
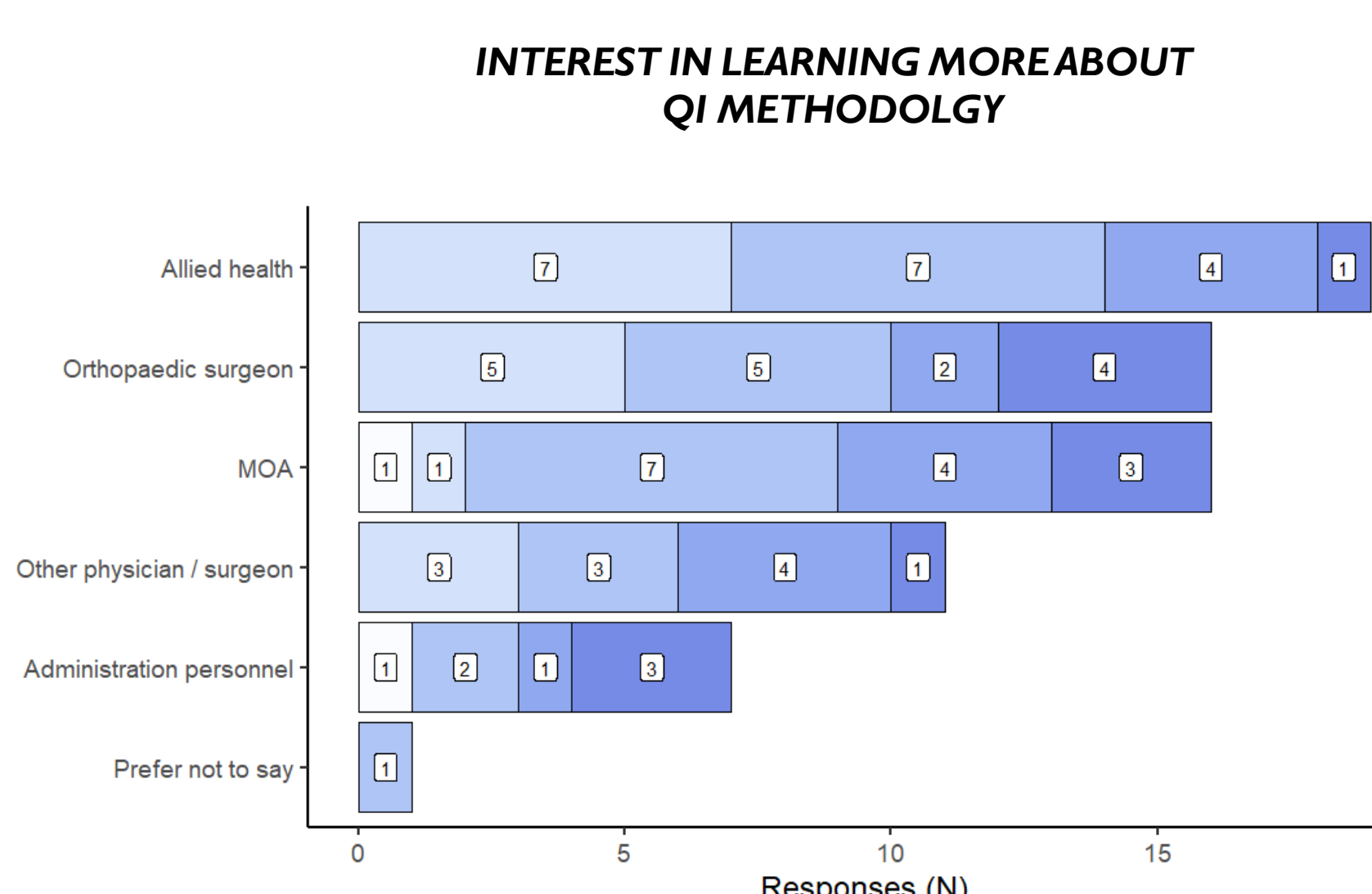
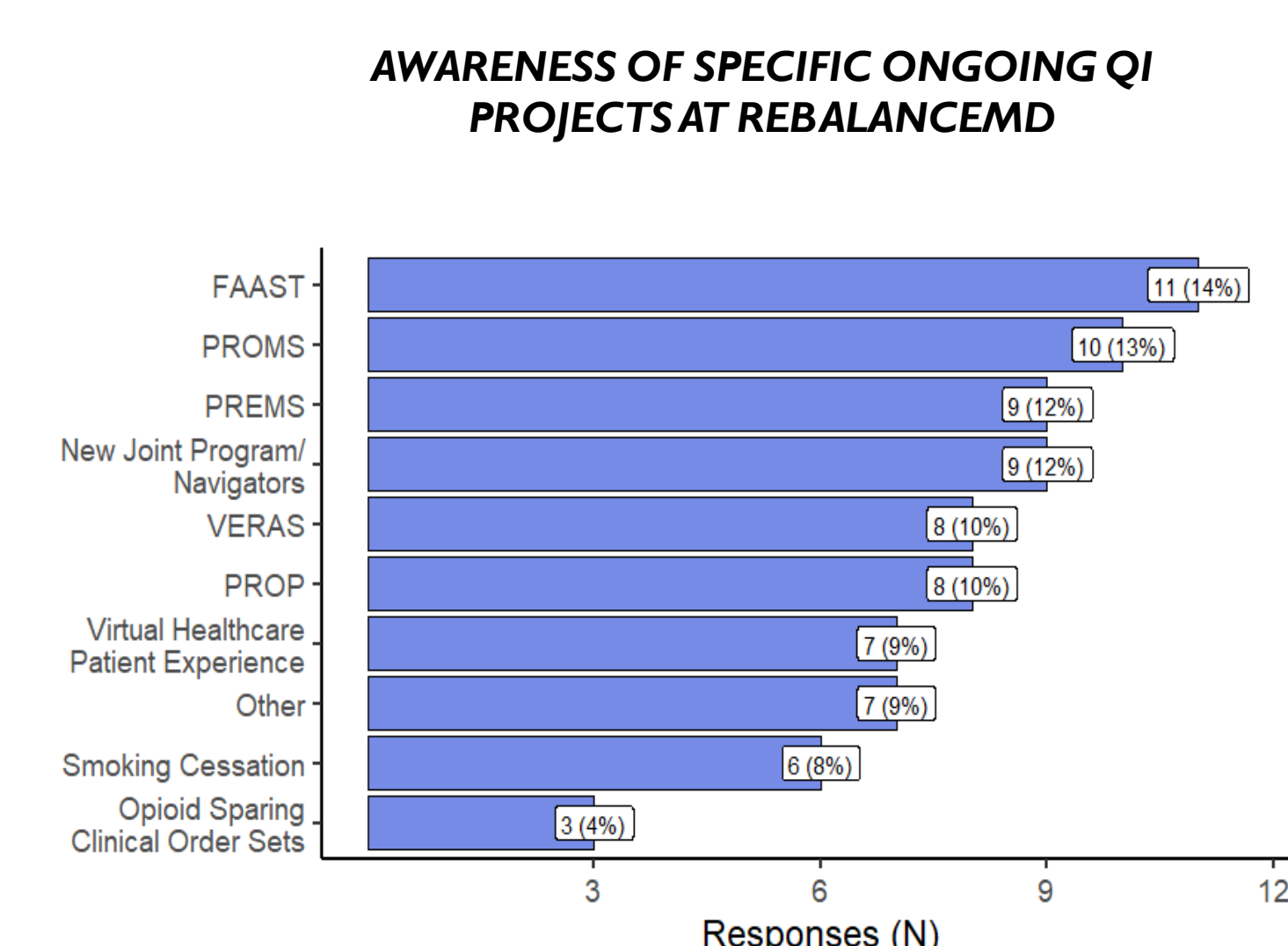
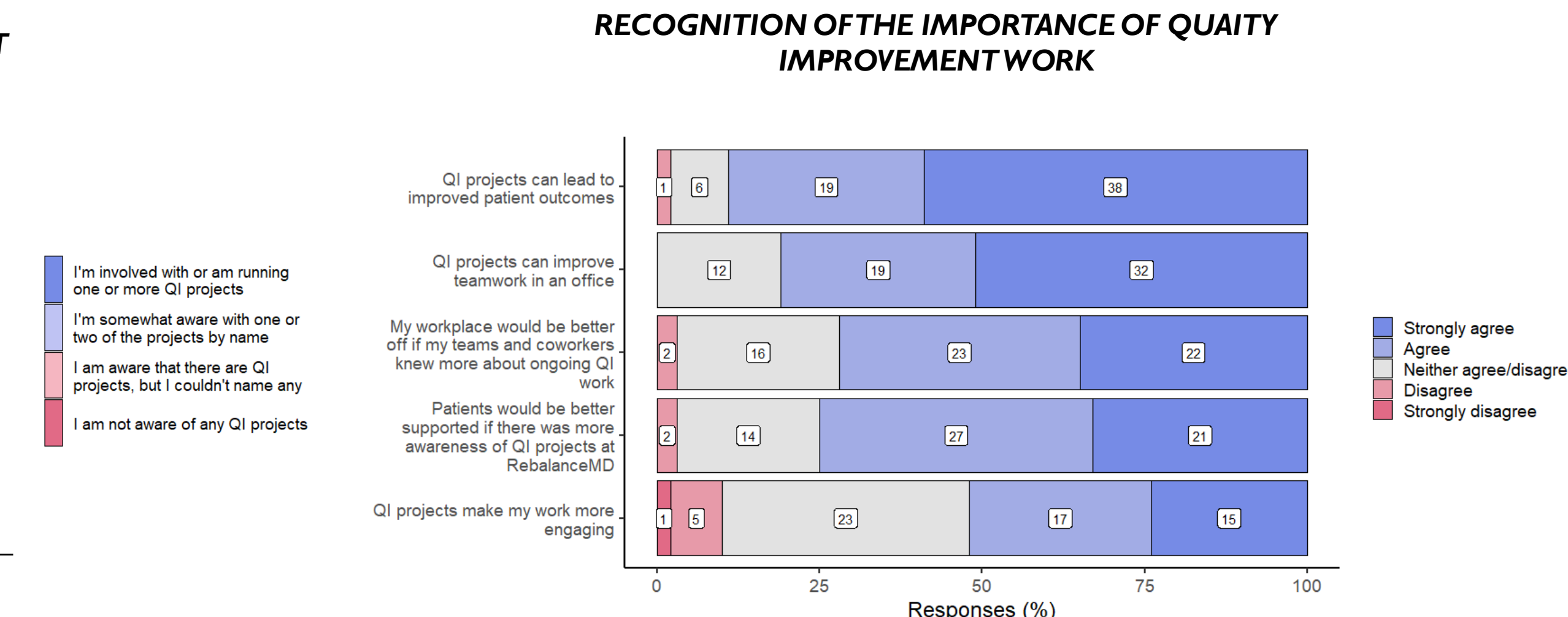
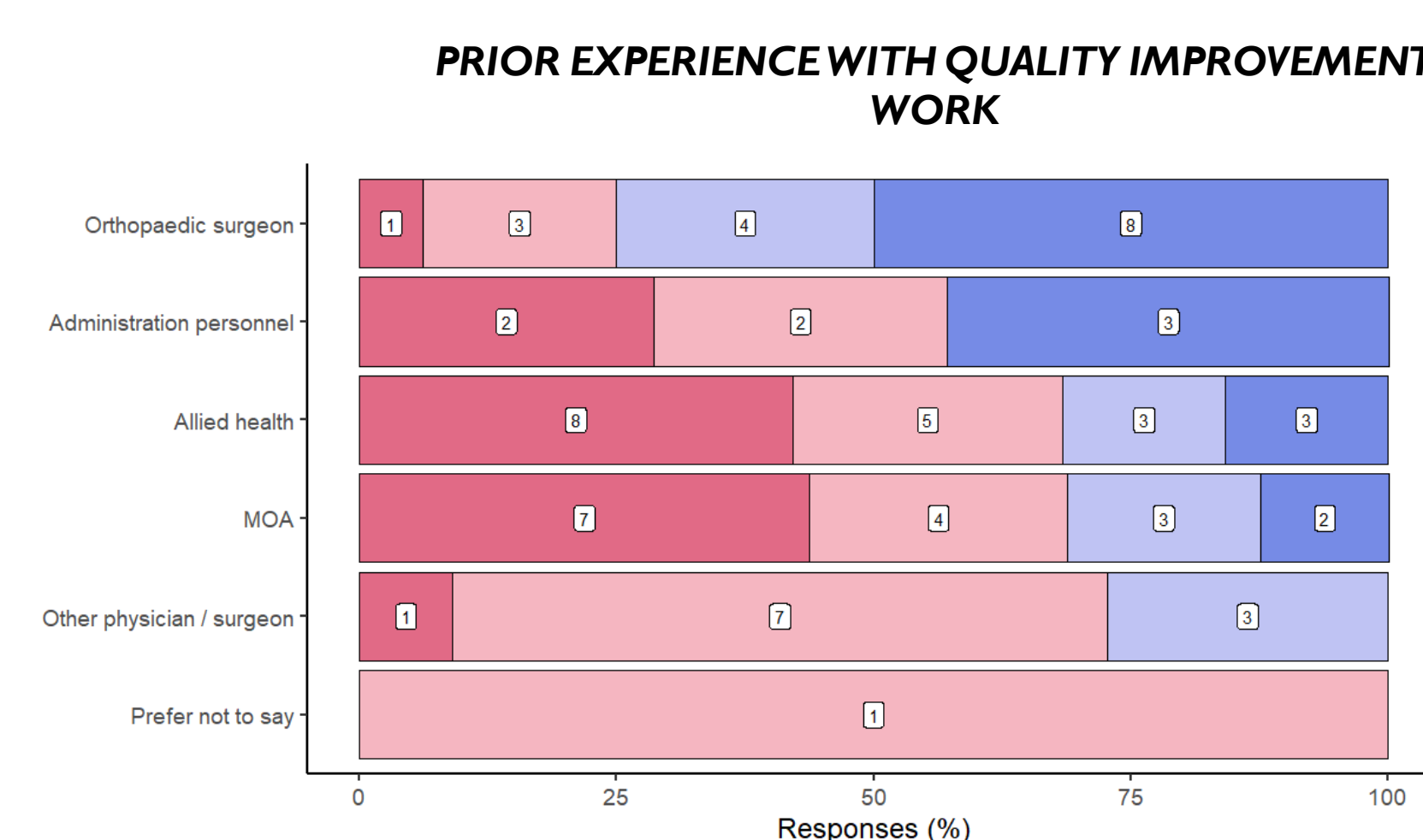
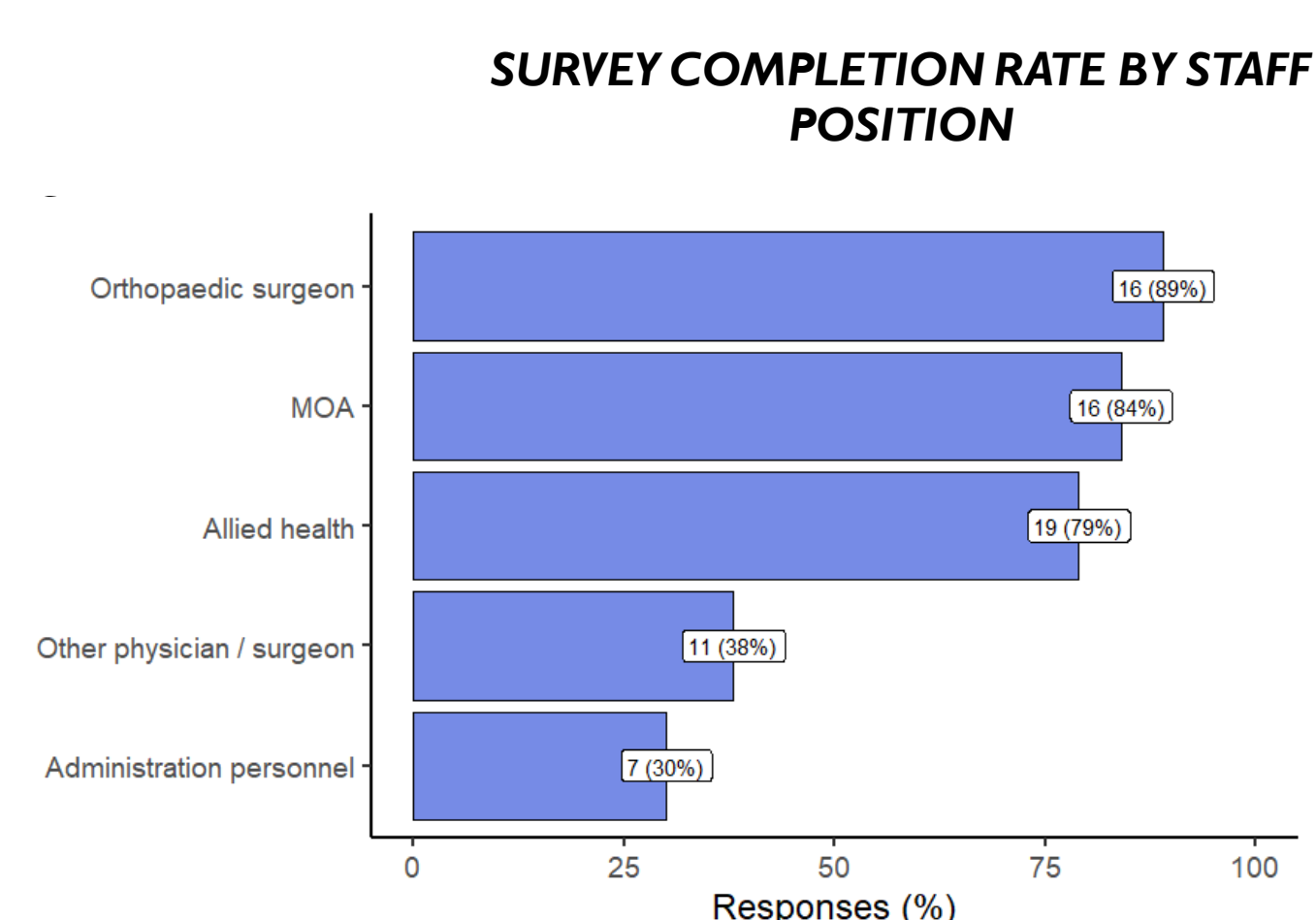
BACKGROUND

RebalanceMD is a multidisciplinary, patient-centred musculoskeletal (MSK) care clinic committed to comprehensive, quality MSK care for Vancouver Island.



PATIENT VOICE

Engagement of a patient voice is the critical next step in the evolution of quality improvement coordination at RebalanceMD



CONCLUSION

Despite active involvement with multiple QI projects by a few stakeholders at RebalanceMD, there remain opportunities to further improve engagement and understanding of QI methodology with many staff and physicians. Most staff understand the benefits of quality improvement work to achieve the quadruple aims of healthcare to improve patient experiences and outcomes, as well as to enhance efficiencies of care, and to make their work more engaging.

Barriers identified to carrying out QI work at RebalanceMD include existing workloads leaving no extra time to take on new projects, and communication gaps about ongoing QI initiatives.

Recruitment of a patient voice is a critical next step.

PROJECT TEAM

Dr. Laura MacKinnon, CCFP

Project team:

- AMCS Team: Dr. Elizabeth Plant, Mental Health Clinicians - Erica Stuart, Nicole McEwan & Brandi Keddell, & MHSU Short Term Services Manager - Kathryn Dale
- Local Leads: Medical Director of Cowichan Valley Region - Dr. Maki Ikemura, FP Lead CDH - Dr. Graham Blackburn, ERP Lead CDH - Dr. Isabel Rimmer, Medical Director CDH - Dr. Robert Anderson, Quality Manager - Brenda Aguiar

PDSA CYCLE

AMCS and Clinical Information Dissemination:

- 04/21: Emergency Room Physicians (ERPs) (including referral form) & Cowichan Valley Division of Family Practice presentation
- 07/21: Emergency & Family Physicians at CDH

BACKGROUND

- Inpatient Addiction Medicine Consult Services (AMCS) reduce healthcare costs, increases uptake of treatment for people with Substance Use Disorders (SUDs), and may decrease the frequency of ED presentations and readmissions
- Patient-centered treatment for SUDs leads to positive outcomes
- No literature on optimal time of consult during inpatient admission, but anecdotal evidence indicates more engagement time leads to improved outcomes



PROBLEM

- Many CDH inpatients are referred to AMCS near the end of their admission
- Not enough time to build rapport, reach therapeutic pharmacological doses, and connect with psychosocial supports
- This leads to suboptimal SUD management with potential avoidable downstream harms

DATA ANALYSIS

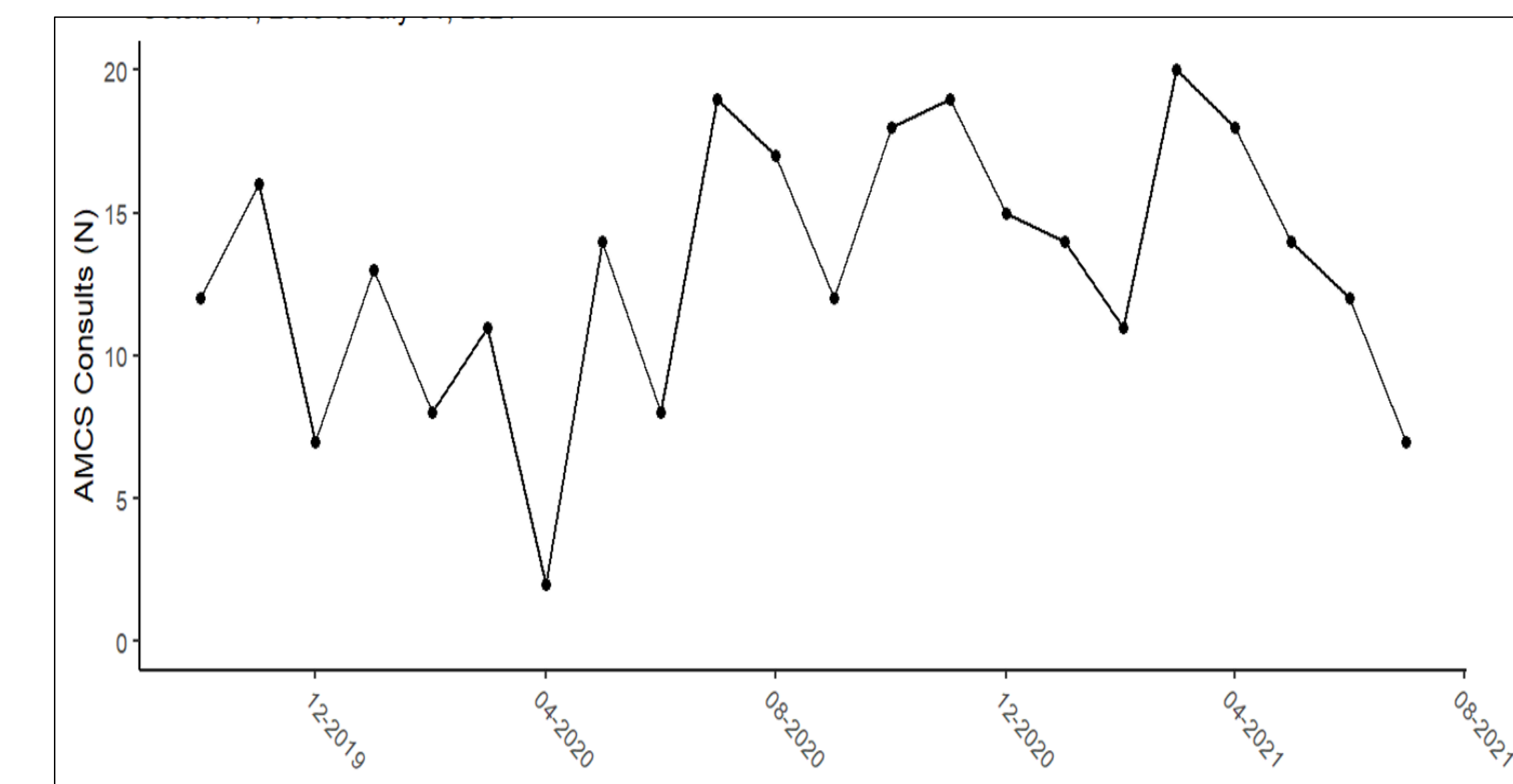
Data for these analyses were collected by the teams' mental health clinicians since AMCS launch at CDH in Oct 2019.

Baseline data (solid line vs post-PDSA cycles dashed) is potentially unstable due to COVID-19 and should be interpreted with caution.

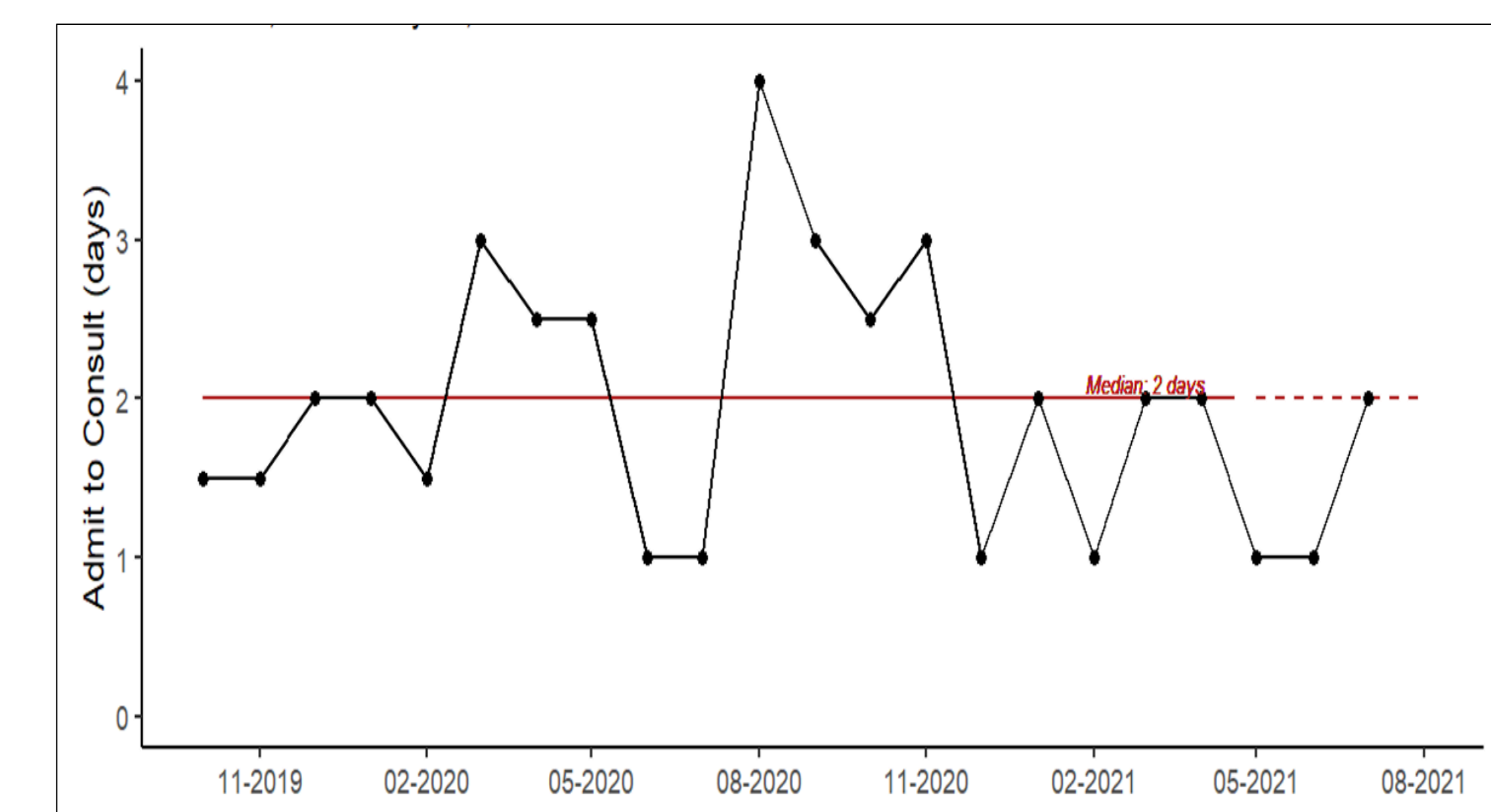
AIM STATEMENT

Reduce the amount of time between a patients' date of admission to the Cowichan District Hospital and the date of the consult by the Addiction Medicine Consult Service by 30%, by August 31, 2021

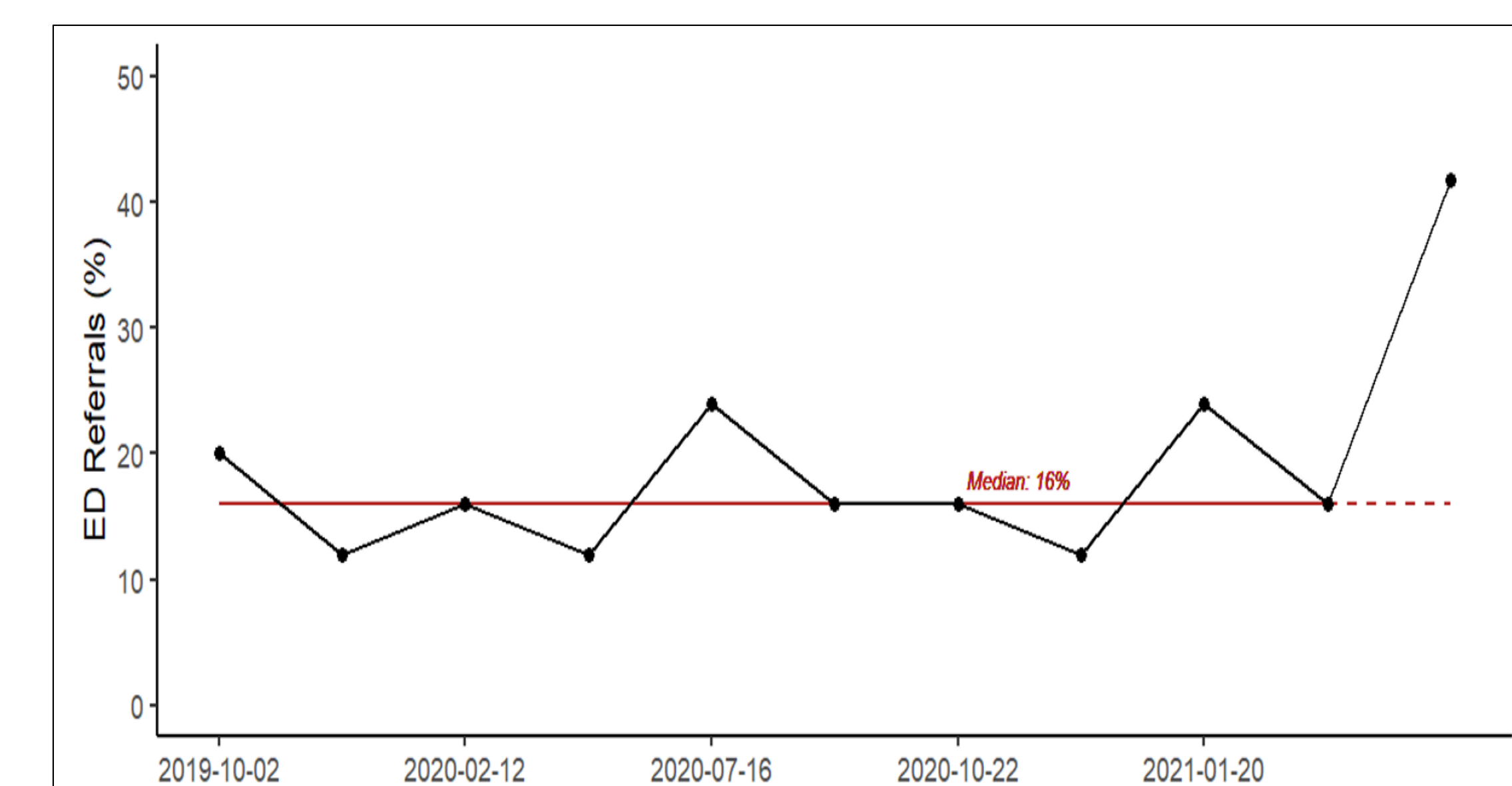
1. Number of AMCS consults at CDH over time



2. Median time from admission to AMCS consult over time, pre- and post- start of PDSA cycles



3. Percent of AMCS referrals from the ED for CDH inpatients pre- and post- targeted information disseminations for ERPs



CHANGE IDEA

- Initially, we focused on creating an referral form for physicians and allied health to see whether this would facilitate early referrals, however, there was no uptake
- We learned that physicians benefited from basic AMCS knowledge (scope, staffing model, contact information, after-hours resources) coupled with clinical education

PROJECT SPREAD

- Initial sequential approach with one hospital unit at a time using a new referral form
- Pivoted to a parallel approach by spreading AMCS information to various physician groups after a PDSA cycle highlighted that the new referral form was not useful
- Spheres of influence utilized to disseminate information to various physician groups

FINDINGS

- No referrals were made using the new referral form
- No significant impact on length of time from admission to AMCS consult post interventions, more data required
- Limited, non-significant evidence suggesting targeted information distribution to ERPs increased the % of referrals from the ED
- Limitations acquiring CDH physician feedback

CONCLUSION

Despite challenges, preliminary data suggests that CDH physician engagement regarding AMCS may improve early inpatient linkage to substance use care. Specifically, there is limited evidence demonstrating that targeted distribution of information to ERPs may have led to an increase in percentage of referrals to AMCS from the ED (however, more data is needed.) The pandemic impacted our ability to initiate and sustain change, as well as elicit feedback from clinicians, given the healthcare systems' maxed out capacity during these unprecedented times and the associated change fatigue experienced by healthcare workers. Finally, the foundation has been laid for ongoing work to ensure quick and quality substance use care continues to meet the evolving needs of admitted patients at CDH.

Finding Breaks in the Chain

Reducing Avoidable Transfers from Long Term Care to Cowichan District Hospital ER

PROJECT TEAM

- Lead:** Dr. Stacey McDonald, Family Physician
- Project Participants:**
- Sunridge LTC Directors: Jain Mariyil & Jason Zoratti
 - Sunridge Nursing Staff
 - Cerwydden Director of Care: Robb Armson
 - Cerwydden Nursing Staff
 - CDH ER Department: Drs. Kalen Leech-Porter & Isobel Rimmer
- Patient Voices:** Sherri Williams, Albert Donald, Darlene Franks
- Feedback:** Drs. Maki Ikemura & Valorie Masuda
- PQI team:** Julia Porter (Coordinator)
Dr. Jason Wale (Mentor)
James Saunders (Data Analyst)

CHANGE IDEAS

- Develop a flowchart to identify where “breaks in the chain” of acute resident incident care occur
- Use the flowchart to work on small steps of change to address these gaps
- Establish accurate on-call physician schedules for LTC sites
- Identify who circulates on-call MRP lists and establish a backup process
- Develop an up to date and accurate phone list, including clinic private lines for timely access to MRPs for acute resident incidents
- Work with MOAs/office managers to develop clinic systems for relaying urgency of calls/faxes from LTC to MRPs
- Create phone decision tool (who to phone when, how to escalate) for staff
- Improve SBAR tool use for communication between nurses and MRPs
- Recruit new Medical Coordinators and support via Zoom meetings
- Familiarize CDH ER physicians to “Pink Band Protocol” and create a feedback form for identifying avoidable transfers
- Identify clinical patient scenarios most likely involved in LTC to ER transfers
- Work to establish a LTCI working group to encourage GPSC best practices and support physicians providing care to LTC residents in Cowichan
- Identify MRP manpower issues that may affect LTC response times and transfers
- Survey patient/family voices and nursing staff on why avoidable transfers to hospital ER may be occurring at their site(s)

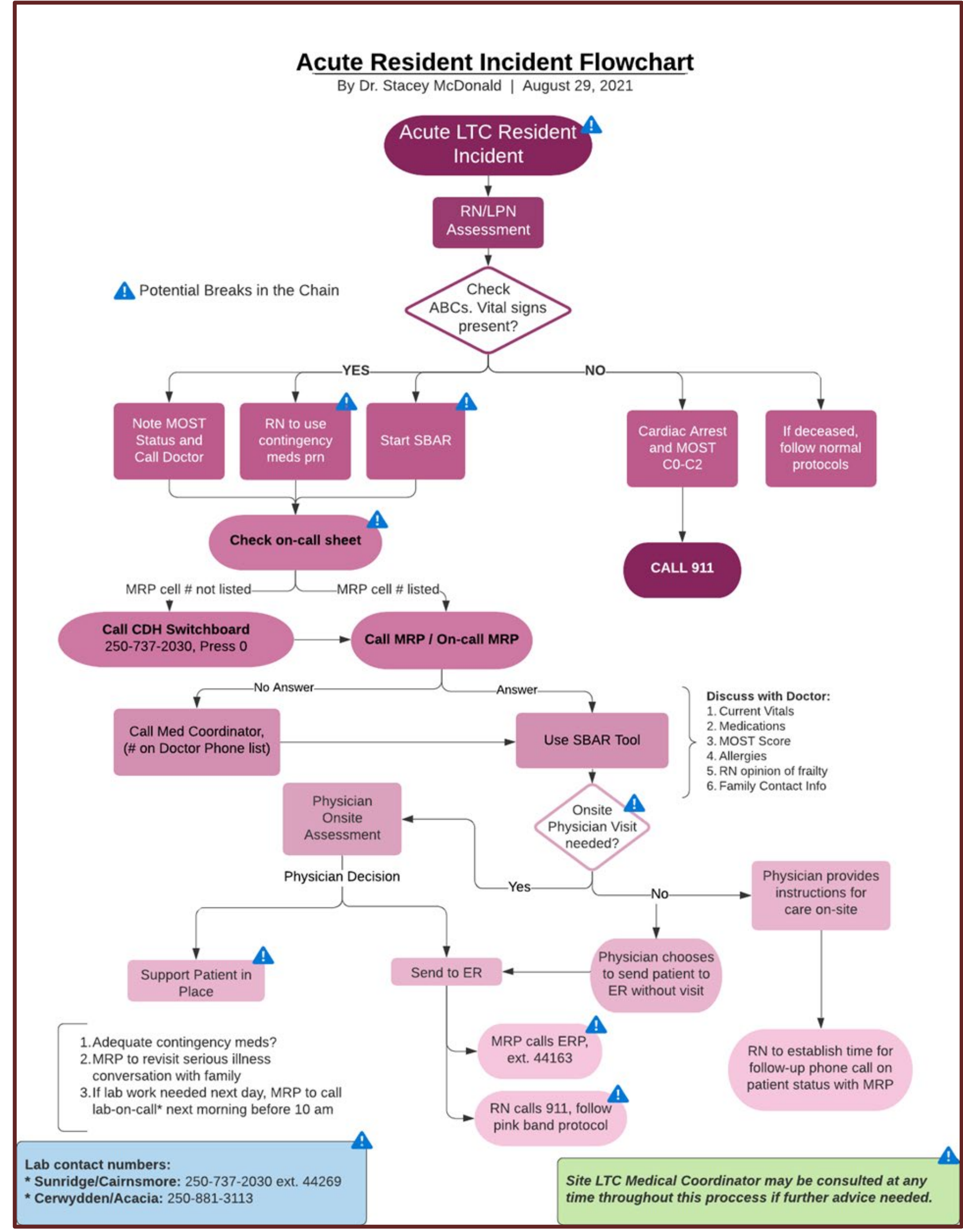
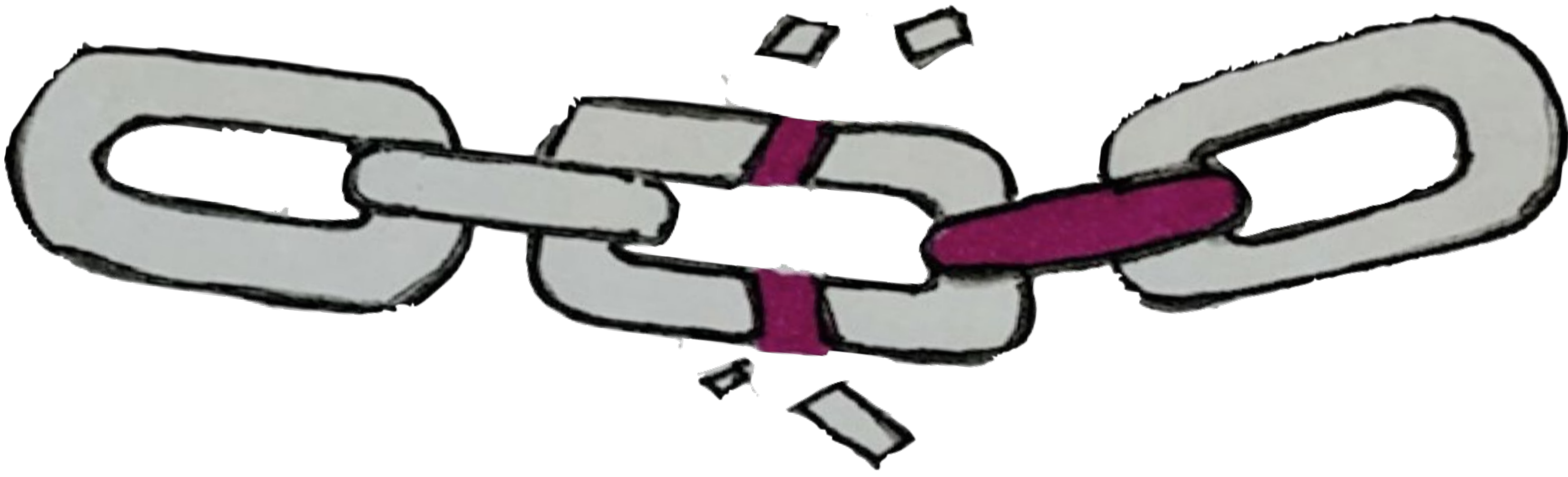


Image 1: Acute Resident Incident Flowchart

AIM STATEMENT

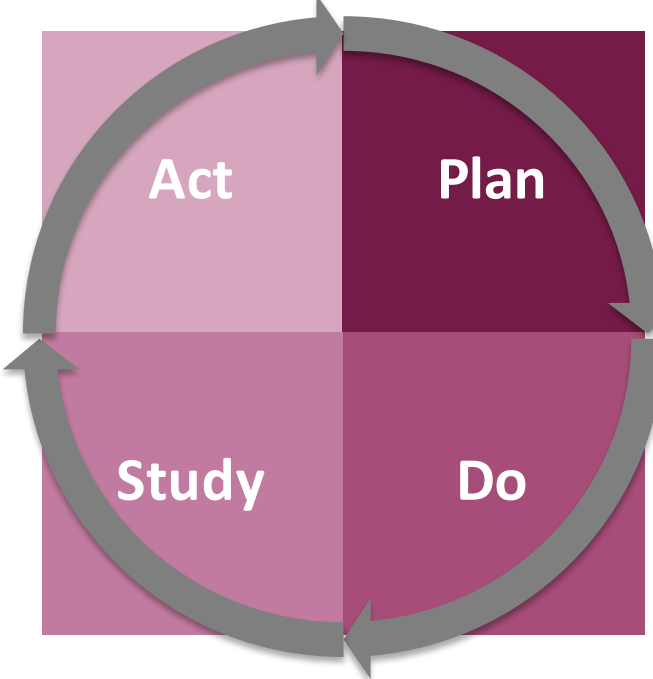
Reduce avoidable/unnecessary transfers from Sunridge and Cerwydden Long Term Care (LTC) sites to Cowichan District Hospital (CDH) Emergency Department by 25% by June 30, 2021



Voices from Family and Nursing Staff

“I assumed [the] physician was going in to see Dad but he wasn’t. That is why I wanted him to go to hospital - to get some answers”

“We get frustrated when we call a doctor and get told to fax them, usually we have already faxed or need the MRP quickly then don’t get called back for a couple of hours or the next day”



PDSA CYCLES

FINDINGS

- Work with Site Leaders to document when physicians are called and their response e.g. COVID screen check in binder, RN EMR note
 - Encourage use of LTC site EMR vs paper chart by MRPs
 - Chart audits to assess in-person resident visits, particularly in acute situations, to identify ways to support MRP to consider on site management where appropriate
 - Post physician on-call schedules at sites; educate permanent and temporary staff how to use these lists
 - Update and share phone contact lists with LTC admin
 - Survey nurses as to efficacy of lists; make improvements
 - Work on LTC contingency medication lists to support on site care
 - Familiarize CDH ER staff with “Pink Band Protocol” and reinforce feedback form to learn from avoidable transfers
 - Recruit and onboard two new Medical Coordinators
 - Create Acute Resident Incident Flowchart
 - Embed flowchart and SBAR tool into staff orientation
- LTC sites were using inaccurate phone lists
 - Clinics had differing responses to LTC calls
 - Nursing uniformly experienced challenges with reaching a physician for help in acute resident situations
 - Contingency medication lists vary between LTC sites
 - Sites not prepared for some end of life scenarios prompting transfers to ER for palliative care
 - Scope of experience/comfort in managing acute end of life incidences varies amongst MRPs and nursing staff
 - MRPs vary in level of response times and in-person resident visits and thus can be unfamiliar with frailty status of resident at time of acute incident phone call
 - LTCI working group/project manager needed
 - ER docs not aware of established “Pink Band Protocol” or difference between LTC and Assisted Living
 - Form for ERP feedback on transfers was useful
 - There is motivation for change but manpower issues and burnout make it difficult

CONCLUSION and NEXT STEPS

This project improved nursing staff engagement at Sunridge and Cerwydden LTC sites. It helped identify and fix a few gaps in the chain of acute incident care management at those sites. The staff now feel more supported but there is still more work to be done. The improved phones lists have been shared throughout the Duncan LTC facilities. There is now a LTCI working group and interim project manager, Medical Coordinators at all 4 sites, and increased awareness of the challenges for nursing staff when trying to reach at least 25 busy MRPs who work out of each site. Contingency lists have been discussed and improved upon for on-site management. CDH ER docs are now informed of some LTC protocols and their help in this project is much appreciated. Presentations to CDH Quality and Operations, and the LTC Clinical Practice Council occurred in June 2021. The goal is to continue to use the new flowchart with the LTCI working group to work on small tests of change where problems are identified by nursing staff, Directors of Care, Medical Coordinators and MRPs.

BACKGROUND

Choosing Wisely Canada has identified with the Long Term Care Medical Directors Association of Canada (August 2019) that transfers to hospital for assessment and treatment of a change in condition have become customary.

Transfers can result in long periods in unfamiliar and stressful environments leading to delirium, hospital-acquired infections, and polypharmacy. Harms often outweigh benefits, and this is often not communicated to families. For these reasons, BC GPSC best practice expectations are also tied to achieving reduced unnecessary or inappropriate hospital transfers.

Nationally, COVID-19 has shed a light on this situation for LTC residents. Transferring residents to CDH for investigations/procedures/admissions of questionable benefit puts all other residents at risk on their return.

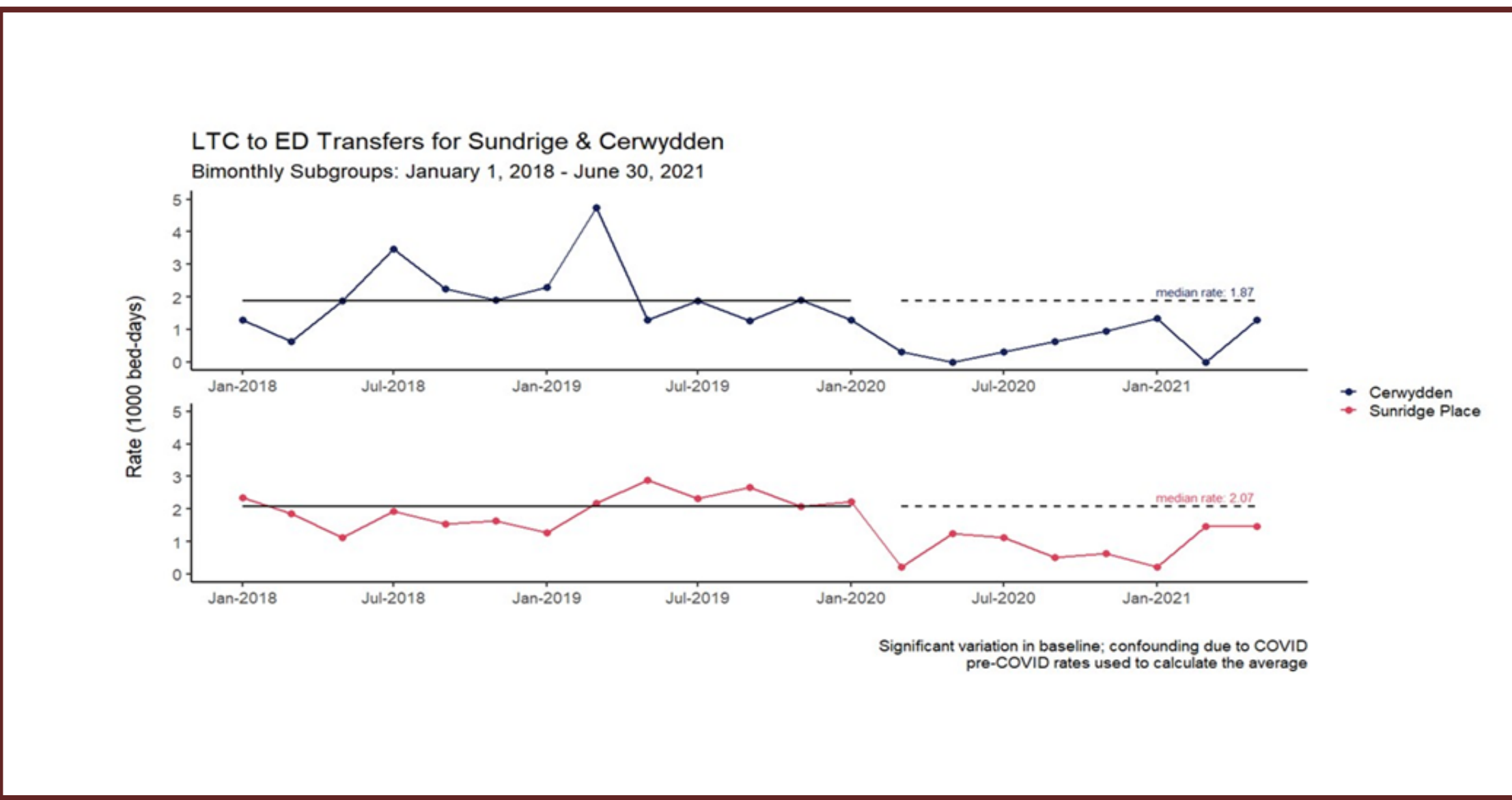
PROBLEM

Patients at Cerwydden and Sunridge LTC sites can be transferred to CDH ER for assessment and treatment for changes in condition, even when it is against their MOST care goals. This can lead to negative outcomes for patients, as well as increasing the risk of acquiring COVID-19 and spreading it to other LTC residents when they return.

There are inconsistencies in practice at LTC sites contributing to confusion around what to do and who to call for help in acute clinical situations.

DATA ANALYSIS

Although the data shows a decrease in transfers and an increase in the days between transfers, it is confounded by COVID-19 and we cannot attribute it to the project.



Cerwydden (56 beds)		Sunridge (160 beds)	
Year	Transfers	Year	Transfers
2017	17	2017	100
2018	36	2018	101
2019	42	2019	130
2020	11	2020	57
2021	8	2021	30

Images 2 & 3: Number of transfers to CDH from Cerwydden & Sunridge LTC sites

Assessment of Health Equity in Care Delivery to Indigenous People Presenting for Care within the Western Communities Primary Care Network Region

PROJECT TEAM

Dr. D. Randal Mason, Family Physician/Addiction Specialist

Project Participants:

- Westshore Primary Care Circle
- Dr. Jason Wale
- Dr. Elizabeth Wiley- Executive Director West Shore Urgent Primary Care Centre
- Rosanne Holmes PQI
- James Saunders PQI
- Annie Walters UBC Medical Student
- Larissa Eyres - Social Worker, AVI Health and Community Services
- Stephanie Day - Social Worker, Pacific Centre Family Services Association
- Michael Aeberhardt - Primary Care Network Change Manager

AIM STATEMENT

To improve the process by which we collect health equity data for Indigenous patients presenting for care within the WCPCN region by measuring engagement efforts which is reflected by 50 Indigenous people providing feedback on the assessment tool by July 1, 2021.

PDSA CYCLE

Small Test of Change



- Introduce the idea of the Equity survey tool to the Primary Care Network
- Present the concept of quality improvement to the social workers working on Indigenous engagement efforts to assist in design of services at the West Shore Community Centre
- Introduce the concept to a variety of Indigenous stakeholders and ensure that the assessment is developed collaboratively.
- Align with similar work being conducted by other groups in BC.
- Present EQUIP Health Assessment and collaborative development with Senior Evaluation Analyst at First Nations Health Authority.

BACKGROUND

The Western Communities Primary Care Network (WCPCN) is a clinical network of local primary care service providers located in the western communities of the greater Victoria area (Esquimalt to Port Renfrew). The WCPCN is enabled by a partnership between Island Health, the South Island Division of Family Practice, along with local First Nations of Esquimalt, Songhees, Scia'new, T'Sou-Ke and Pacheedaht.

While there is an acknowledgement of the importance of health equity in primary care, and that Indigenous people experience significant inequities in care, there are no standard measures in place to assess health equity for Indigenous people seeking care within the WCPCN region.



FINDINGS

- Broad support for equity assessment tool from Indigenous stakeholders in the western communities
- Challenges with engagement during the period of the PQI program
- Essential to focus on data stewardship and how findings will be used to improve health equity for Indigenous people in the western communities
- EHoCS survey from EQUIP Health Care group is an appropriate baseline document that can be refined to reflect the challenges and barriers faced by Indigenous people in the western communities

PROBLEM

- Health equity measures focus on disparities on health outcomes between populations, not equity of care delivery
- Indigenous people experience significant disparities in health outcomes compared to non-Indigenous people. In Plain Sight report highlights inequities in care delivery for Indigenous patients in BC
- No standard tools or systems in place within primary care to assess health equity
- Addressing equity is resource intensive. Return on investment tends to focus on intangibles and requires long term evaluation. Equity, as a forth aim in the quadruple aim can be in conflict with reducing cost (short-term). *Why measure what you can't/won't fix?*

CHANGE IDEA

Engagement & relationship building with the current Western Communities Primary Care Network (PCN) as we continue to strengthen relationships with Indigenous people and stakeholders, including First Nations communities by engaging them authentically surrounding the assessment tool.

PROJECT SPREAD

Next steps:

- Primary care needs assessment of First Nations communities of the western communities region underway as part of the Western Communities PCN
 - Potential to incorporate health equity assessment tool development
- Indigenous health equity and cultural safety set as key priorities for South Island Collaborative Services Committee for 2021

CONCLUSION

There is broad support from Indigenous leadership in First Nations communities and urban Indigenous voices to assess health equity. Many ideas came forward in how best to develop the assessment tool. Moving forward, talking circles/focus groups with local First Nations of the western communities and urban Indigenous groups could be an effective method to gather feedback on assessment tool development. It is important that this work is adequately resourced, with participants well informed, empowered and compensated for their contributions. Continuing the development and implementation of an Indigenous health equity assessment tool aligns with recommendations from the In Plain Sight Report (recommendation 9) and Truth and Reconciliation Commission's Calls to Action (call 19).

PROJECT TEAM

Lead: Dr. Maria Kang

Project Participants:

- Dr. Alicia Power, Physician Quality Improvement Advisor/Mentor
- Grow Health Allied Health staff
- Rosie Holmes, Physician Quality Improvement Coordinator
- James Saunders, Physician Quality Improvement Data Analyst
- Dr. Vanessa Percy
- Dr. Amy Plessis
- Dr. Sarah Williams
- Patient partner: Dr. D. Singal

AIM STATEMENT

100% of patients referred to pediatrician at Grow Health for a developmental or behavioural assessment ages 0-5 years will have received a pre-survey link; the Roadmap; a post survey link after the assessment and within 6 months.

PDSA CYCLE

Small Test of Change

Survey was created and sent out to test group including Project Team members and Patients Partners. Multiple iterations to survey were created. Final draft along with Roadmap was sent out to patients electronically.



DATA ANALYSIS

100% of patients meeting criteria were sent electronic pre-survey link. Of the 12 patients identified, 3 filled out pre-survey within 3 month period (June-August, 2021). The primary question: “I feel confident about where to go or who to contact about my child's behavioural or developmental problem” showed 66% strongly disagreed and 33% neither agreed or disagreed. Following pre-survey distribution, Roadmap was electronically distributed. Post-survey link distributed 1 week after Roadmap distribution. No respondents as of yet.

FINDINGS

Very low percentage of respondents to pre-survey link as well as no respondents of post-survey. Of the respondents, majority did not feel comfortable with knowing supports for their child with developmental/behavioural challenges.

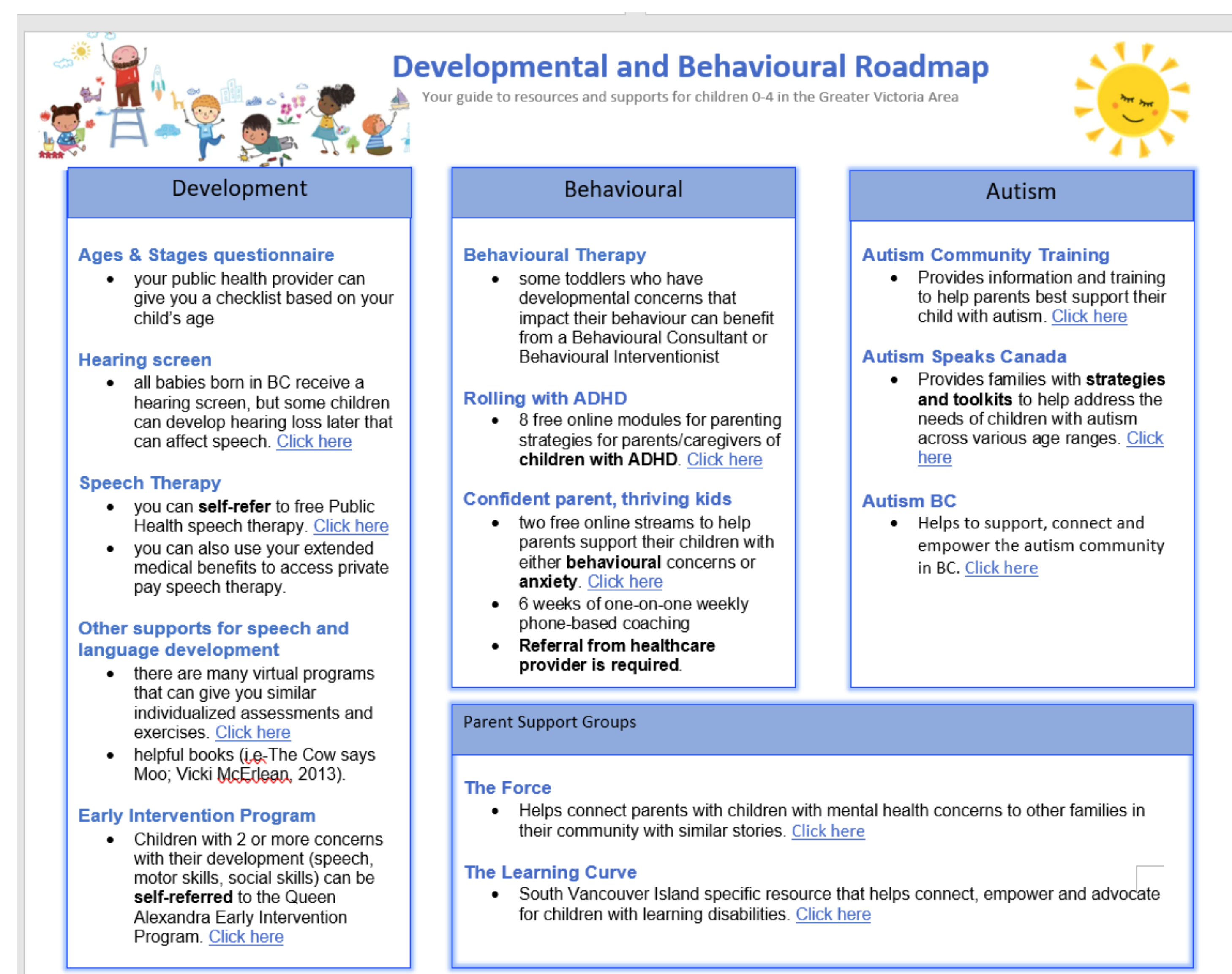
BACKGROUND

Early intervention has an established wealth of data that supports a broad reaching numbers of areas of benefit from individual academic achievement, mental health to healthcare cost-savings. From reducing the number of appointments that a parent needs to attend, thus taking time away from work, to streamlining the pathway into early intervention supports and beyond, will reduce replicated work

PATIENT VOICE

“It is so hard to know what I could be doing while I wait for an assessment. It’s hard to know what I could be doing.” C.J.

“Even having gone through this with my other child, I still wasn’t sure which programs I could just reach out to and what has changed over time...”



PROBLEM

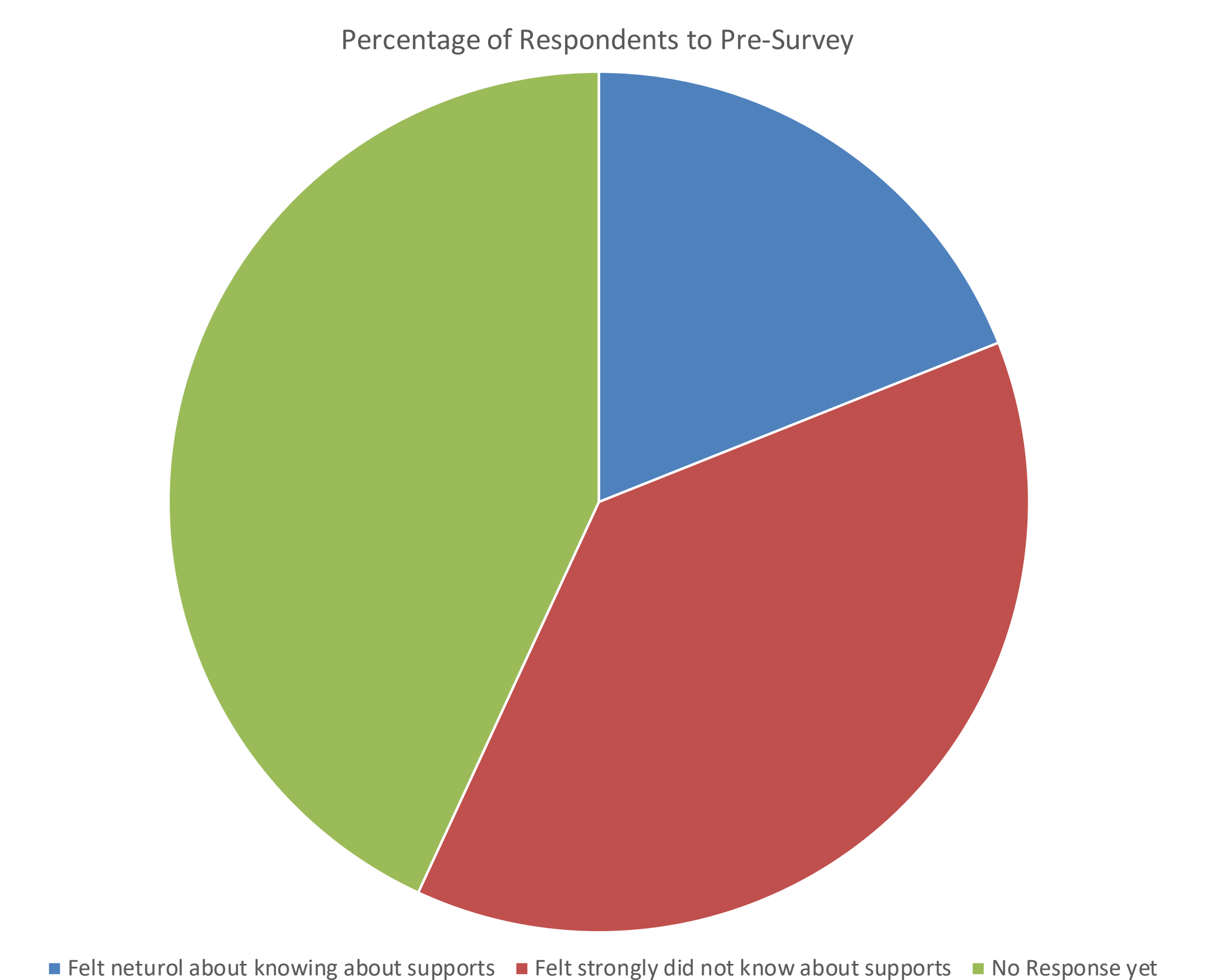
Pre-school aged children in Victoria wait 6-18 months to be assessed by a pediatrician for developmental and/or behavioural concerns. During this wait, access to both private and public supports are inhibited by lack of knowledge of the services, waitlists for services, financial barriers and other barriers that prevent parents and families from receiving appropriate support. Following this wait for a developmental or behavioural assessment, there a variable wait to receive supports and services. Within the critical stage of 0-4 years, early intervention for both a child and their caregivers can effect significant change prior to entering into the school system

CHANGE IDEA

Initially, a virtual group visit was contemplated as a method of providing more personalized information. Feedback from project team and patient partners determined that initial “One Pager” would be sufficient and more efficient in providing information to patient and families. Initial interactive website was created but found to be challenging to navigate and also creates a private website outside of health authority. Preliminary information was consolidated and put into QR code embedded within Roadmap for easier access of online information.

PROJECT SPREAD

Secondary goal to be completed: 100% of referring MDs at Grow Health distribute & communicate the Roadmap with the family at the time of being referred for developmental or behavioural consults to any community pediatrician.



CONCLUSION

This project requires more time for participants to complete post-survey. It is assumed that the One Pager Roadmap would provide preliminary information to increase patient and family’s confidence in community supports available. The initial aim of this project was to provide a feedback loop for patients and families to reach out to available resources in the community.

PROJECT TEAM

Physician Name: Dr Jennifer Barley

Project Participants:

- Leanne Komm, Manager, MHSU
- Brent Clayton, Coordinator, MHSU
- Susan Finch, Psychiatrist, CRH
- Jennifer Matthew, Coordinator, Admin MHSU
- Lucas Delabough, Resident based in Victoria

BACKGROUND

The Collaborative Care Outpatient Psychiatry Program is not well defined, but is essential to improving mental health services & support to General Practitioners (GPs) and patients in the Comox Valley. The intent of the program was to provide 1-3 sessions with a psychiatrist for diagnostic assessment and to initiate treatment, but without a clear referral and intake process we are seeing very lengthy wait times for patients requiring timely psychiatric care through this program

PROBLEM

The wait time to access the Collaborative Care program via the Comox Valley Outpatient Psychiatry is approximately 12 months, while others such as the Chronic Care with Case Management is much shorter. With a single referral process for all mental health services in the Comox Valley, it is difficult to accurately triage patients to the appropriate service and level of mental health outpatient care which could be contributing to inappropriate referrals going to the Collaborative Care Program resulting in longer wait times.

AIM STATEMENT

By June 2021, improve the triage process of outpatient psychiatry referrals to Comox Valley Outpatient Psychiatry so that 75% of referrals to the Collaborative Care Program are appropriate

CHANGE IDEA

- Education campaign for GPs regarding the Collaborative Care Program
- Improve Referral Form
- Triage Checklist
- Build GP capacity

FINDINGS

Time Constraints:

- Leading a project is time consuming which, coupled with balancing clinical and family demands, can seem overwhelming when learning and implementing quality improvement skills

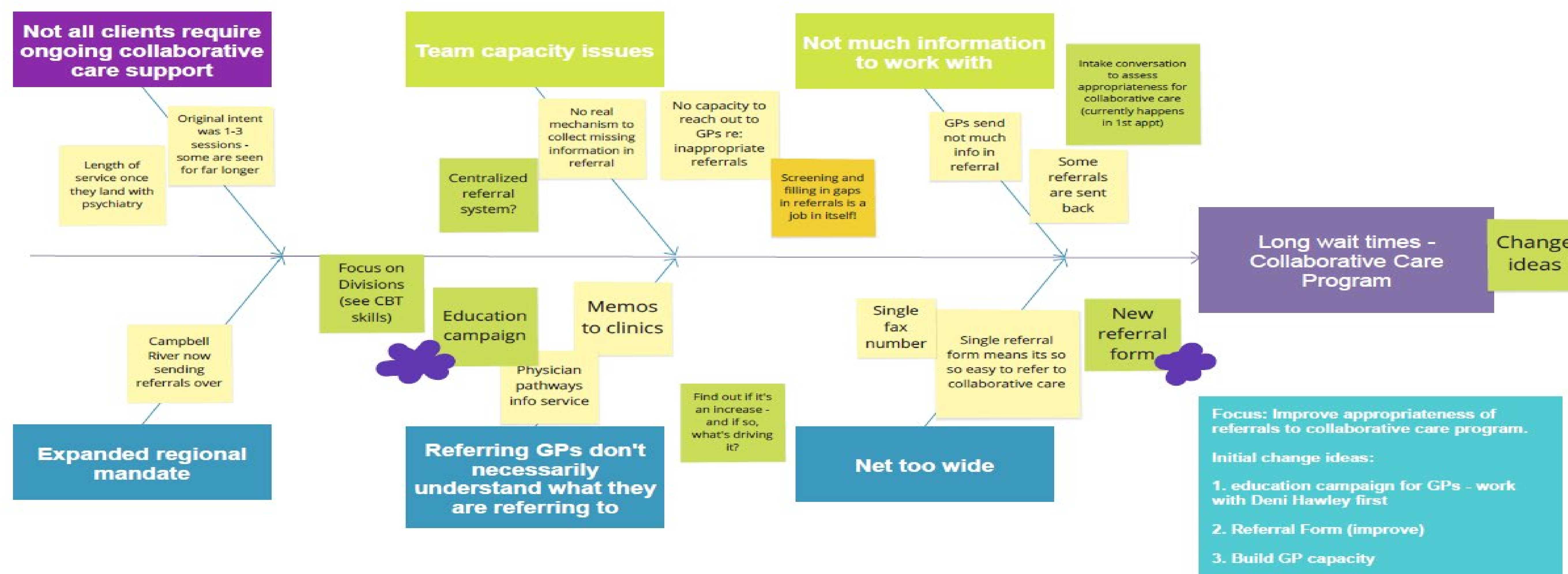
System Navigation:

- Difficult to navigate system without wayfinding and direction
- Takes time to understand the system

Developing Relationships:

- Team Enthusiasm alone will not move project forward
- Importance of team engagement (the human side of change) leads to a high performing team
- It takes time to develop relationships
- Geographical barriers can lead to limited face-to-face interactions and hinders the opportunity for informal relationships via “hallway conversations” with team members and management
- COVID environment impacted relationship building

ROOT CAUSE ANALYSIS



CONCLUSION

Many physicians want to be involved in finding solutions to wait times and mental health access. There is still a desire to understand the root cause of the problem so that any change ideas are not just fixing symptoms of a bigger problem. My work with multiple facilities on Vancouver Island has shown the issue of wait times is a common issue for psychiatry across different psychiatric departments at Island Health.

Quality Improvement looks to test small changes and it was difficult to scope the project to something that could be done with the limited time and resources offered by the program. I believe with more time and without the barriers created by having to work within the COVID environment, my team and I would have been able to test some of our change ideas.

Follow-up for Oceanside Urgent Care Patients Minimizing Re-Admission for Unattached Patients

PROJECT TEAM

Dr J. Basia Siedlecki

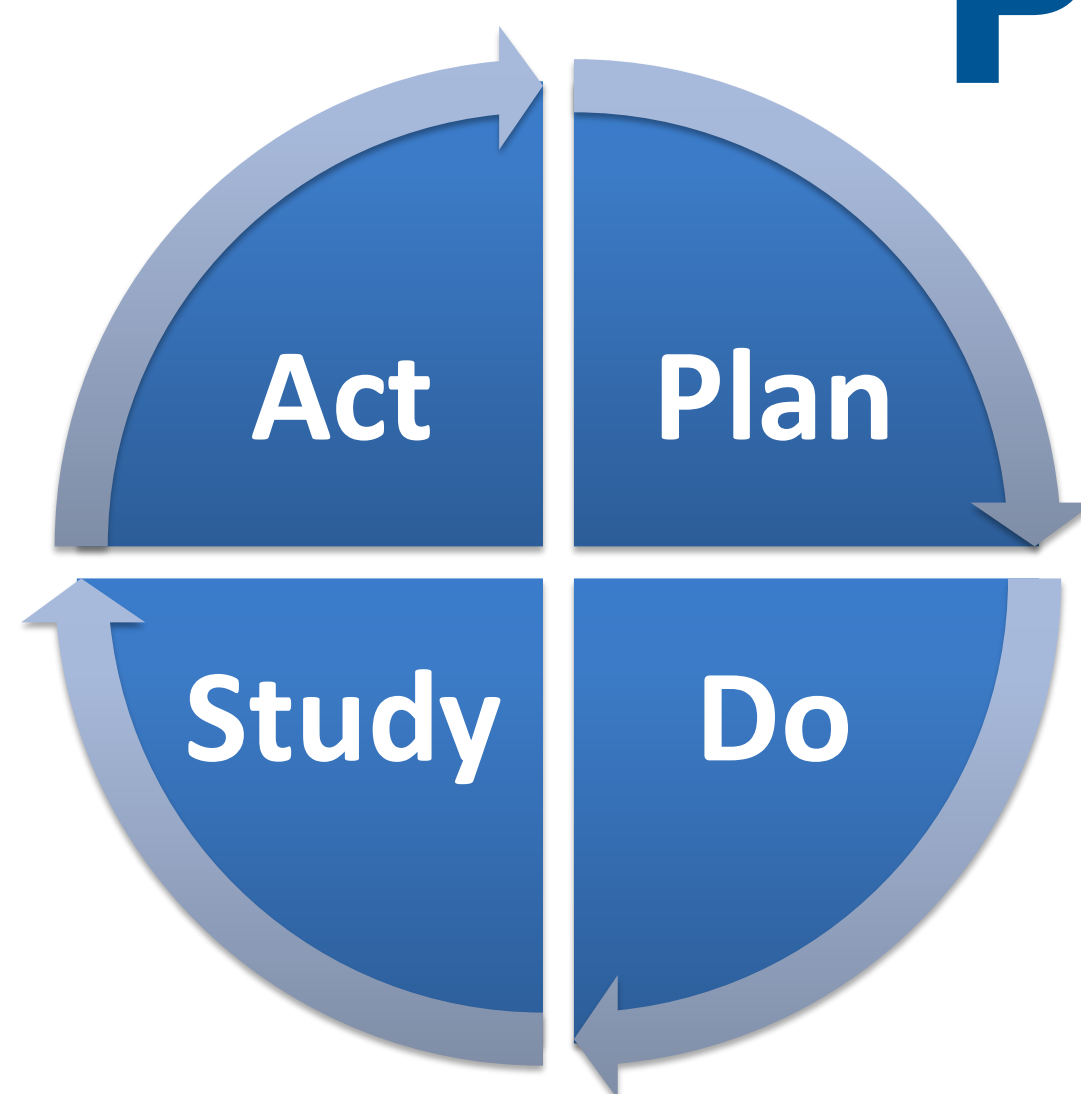
Project Participants:

- Christina Dawes, Manager, Urgent Care OHC
- Julia O'Keefe, Director Oceanside Health Centre
- Dr Drew Digney, Medical Director Urgent Care
- Dr Tom Dorran, Urgent Care physician
- Loreen Sidorchuk, RN, Priority Response Team at Oceanside
- Rosemary Graham, Nurse Practitioner Oceanside

CHANGE IDEA

- Dr Siedlecki will follow up with her patients via telephone
- Expand testing to other urgent care physicians and their patients
- Connect Oceanside Priority Response Team with patient
- Connect unattached patients with local Nurse Practitioner

PDSA CYCLE



Small Test of Change

- Contact patients via Telephone
- Increase attempts made to contact patients

BACKGROUND

- Many local vulnerable (elderly, disabled) patients are without primary care
- 5000+ on the Patient Attachment Mechanism
- Due to COVID-19, many primary care providers are not seeing patients in person. Many elderly endorse not being able to manage the technological requirements of virtual visits.



PROBLEM

- Patients return to Oceanside Urgent Care (OHC) for follow-up
- While these visits are convenient, it leaves them at risk to infectious exposures
- Unnecessary travel and wait times

AIM STATEMENT

By June 2021, reduce by 30%, the number of readmissions within 96 hours for unattached patients over 65, who present with cardiac, respiratory or orthopaedic complaints to Oceanside Urgent Care and were discharged to the Community.

DATA ANALYSIS

- Population restricted to Dr Siedlecki's patients
- For initial investigations & baseline data, aggregate data of all unattached patients over 65 re-presenting within 24, 48 or 96 hours at OHC will be used.

BUILDING CONNECTIONS

- Developed working relationship with other programs within Oceanside community, who provided services to this population.
- Explored improvement to referral forms
- Connection to Oceanside Priority Response Team while at Urgent Care
- Engagement with local nurse practitioners

FINDINGS

Describe what was found from the project:

- Positive responsive from patients
- Patients felt supported
- There are programs available to connect vulnerable patients for Home Support Services
- Fundamental problems of lack of primary care and lack of follow-up were only exacerbated by the COVID crisis necessitating a rethinking of the role of Urgent Care in the Community.

CONCLUSION

Why this project failed, and yet....

The project was faced with a number of obstacles. It was essentially a failure because it did not essentially change the underlying problems and fell victim to a number of issues that profoundly affect the delivery and orientation of care over the past year.

1. The COVID-19 pandemic resulted in nursing and support staff shortages, wild fluctuations from all time lows to record high patient attendance at Oceanside Urgent Care and consequent physician and nursing burnout.
2. Further decompensation to a critical level of local primary care with retirements, illness and death causing closure of local family physician offices.
3. Influx of retirees into the area with many comorbidities and no plans for primary care.
4. Goal of reducing readmissions in itself became banal as the crisis and pandemic deepened. The idea of phone calls as an intervention was revealed as woefully inadequate as the primary care system struggled with staff shortages, loss of providers and influx of vulnerable patients into the area.

Right Care, Right Place, Right Time for Ladysmith Urgent Care Centre

PROJECT TEAM

Dr Emily Steeves and Dr Pramod Swamy

Project Participants:

- Carol Goguen – Nurse Lead
- Emily Bullen and Carol Smith - Clerks
- Laura Work - NP

AIM STATEMENTS

- Reduction of patients presenting to urgent care for prescription renewals by 50% at Ladysmith Urgent Care by June 2021
- Generate a waitlist of at least 100 unattached patients for new Ladysmith Primary Care Providers (PCP) with capacity
- Facilitate patient attachment to Nurse Practitioner (NP) starting at Hillside Medical Center

PDSA CYCLE

Plan - Early data collection observed minimal medication refills over many months post COVID.

Do – Waited many months to manually collect enough data through patient interviews to characterize problem.

Study - When med refills started to rise found the majority were unattached patients with no PCP.

Act - Pivoted project to attach unattached patients to new PCN NP starting May 2021 at Hillside Clinic in Ladysmith.

BACKGROUND

Ladysmith Urgent Care is the only facility for unscheduled and after hours care in the community. In addition, it is the only access point to care for unattached patients in the area.

PATIENT VOICE

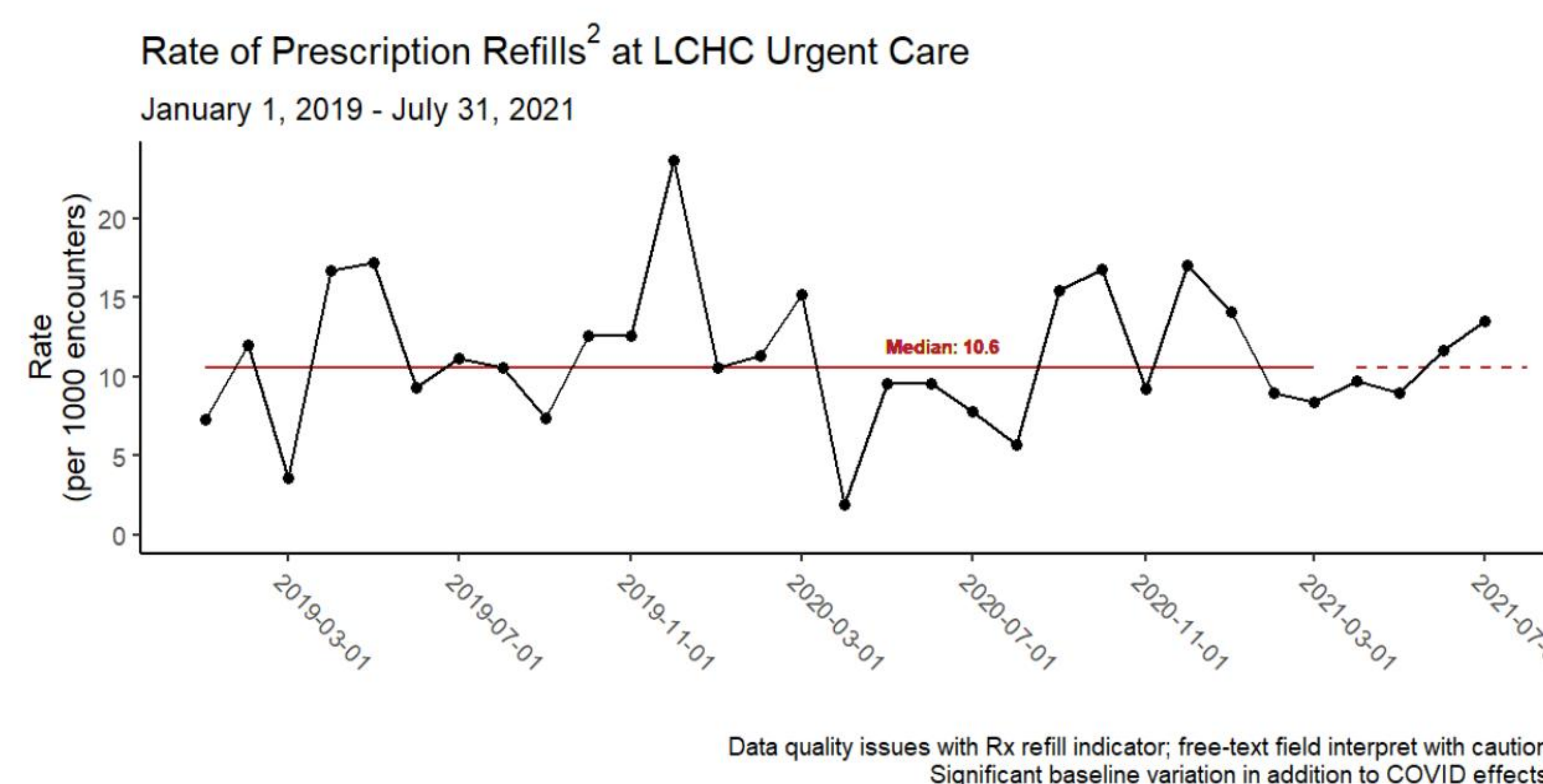
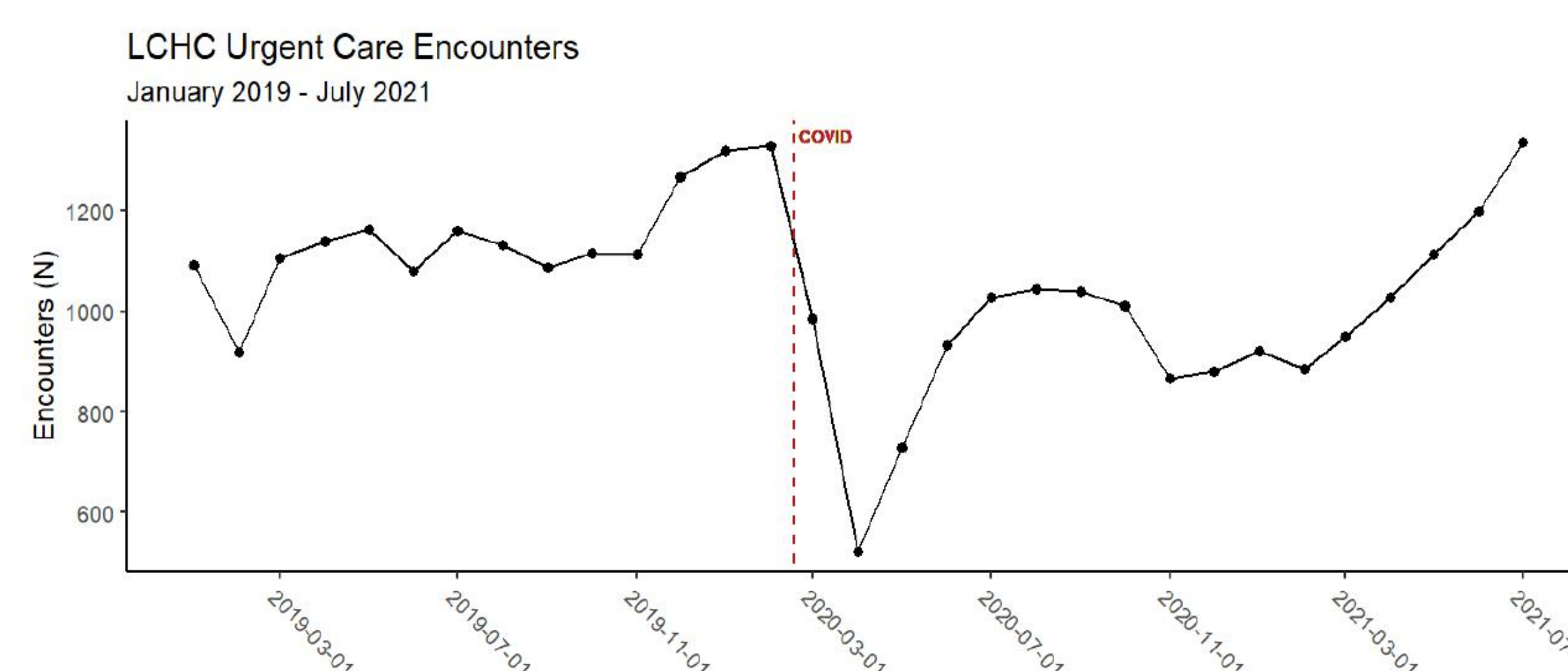
"My doctor is cutting back so he fired half his patients!"

It takes 3 weeks to see my doctor!"

"My doctor is retiring."

"The Walk In Clinic was all booked up at 9am"

"I have a bladder infection and called my doctor's office for an appointment and they can get me in for a phone call in 6 weeks."



CONCLUSION

Due to a world-wide pandemic, 2020 was a year of rapid unpredictable changes in urgent and primary care. There have been many novel ways of seeking care, particularly for attached patients. Unattached patients remain an increasing burden to the urgent care system. Almost all communities have increasing rates of unattached patients as populations increase and primary care recruitment is insufficient to replace attrition. New primary care providers and increasing rates of attachment will improve appropriate utilization in the urgent care setting. Current unattached patient numbers exceed the capacity of available new providers. Overall Ladysmith has not seen any new provider capacity in the past 20 years but the community has more than doubled in size.

Medication refills for attached patients decreased during our project. We hypothesize that 3 things were primarily responsible:

- Pharmacists were allowed to do medication refills.
- GPs started being compensated for fax refills.
- GPs were compensated for virtual visits for medication refills.

PROBLEM

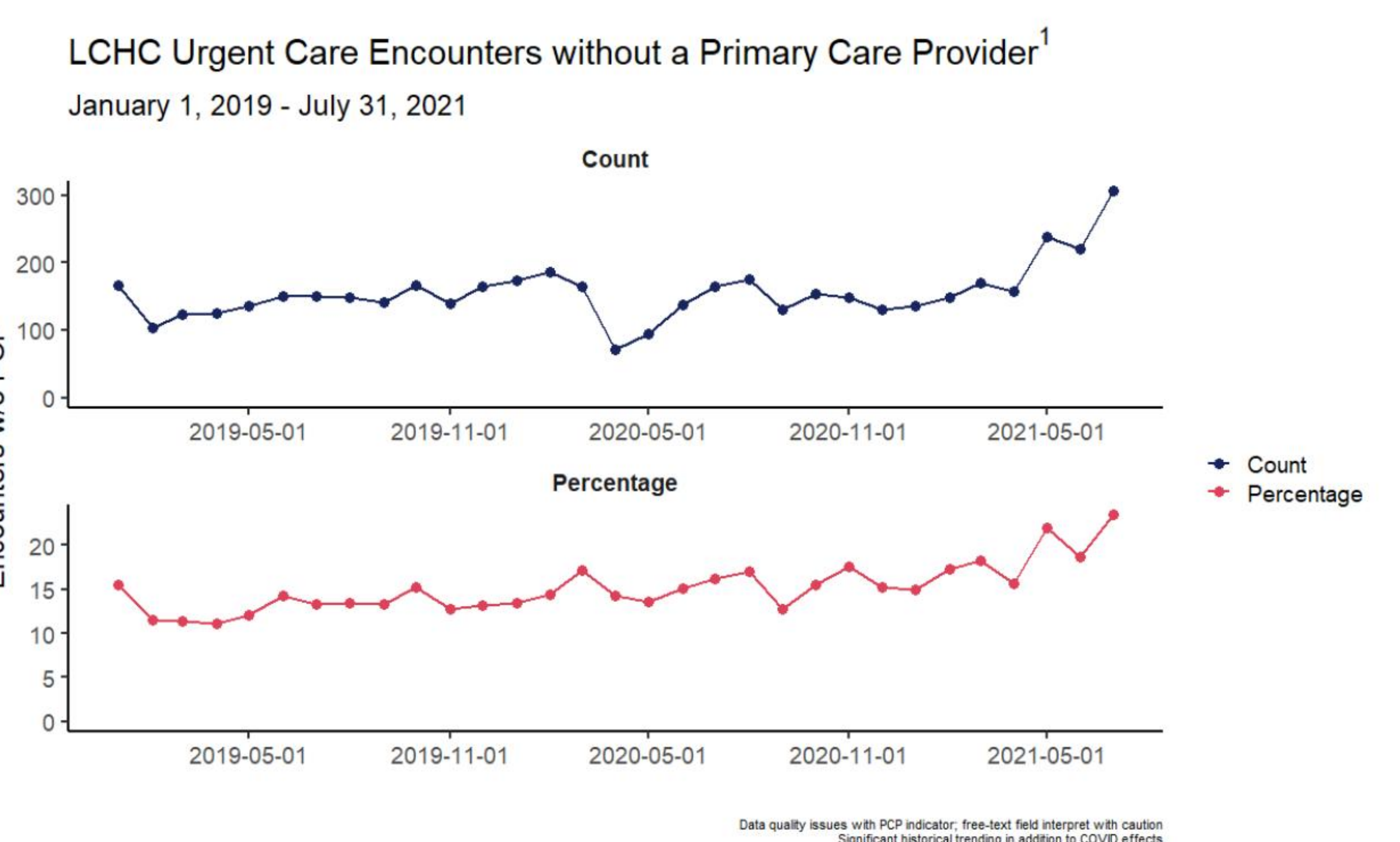
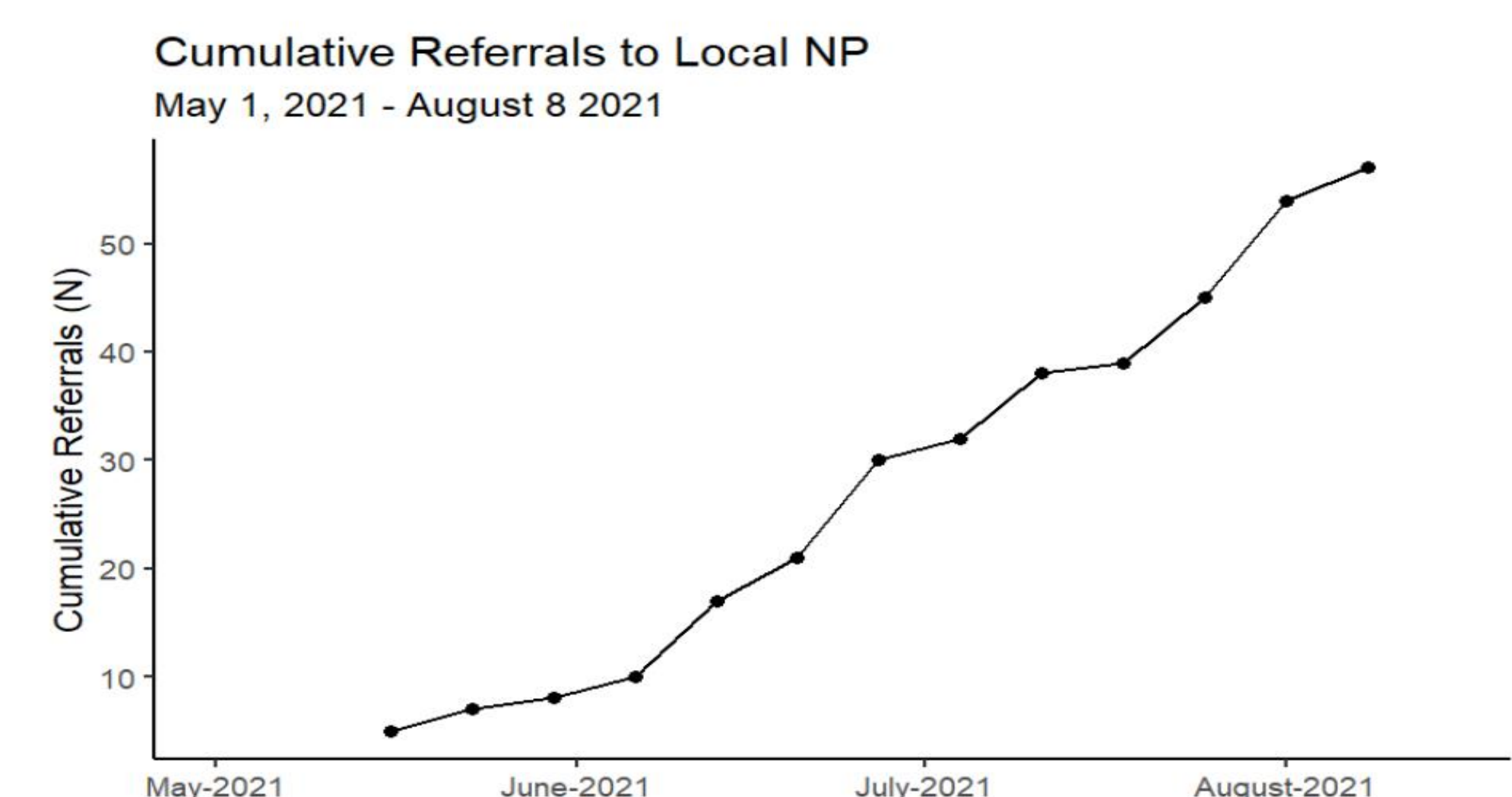
Minimal med refills seen over many months post COVID. When med refills started to rise found the majority were unattached patients with no PCP.

CHANGE IDEA

Use the Urgent Care to facilitate patient attachment to the new nurse practitioner's panel. Our new NP has taken on 67 unattached patients from the area in the last 2 months, from urgent care referrals and the local Primary Care Network (PCN) referrals.

FINDING

1. The population of patients without a primary care provider presenting to urgent care is growing out of proportion to the background increase in patient encounters to urgent care.
2. Patient behaviours drastically changed over the course of the past year since March 2020, heavily influenced by the global COVID-19 pandemic and local surges in case counts. In general, the numbers in urgent care fell at times when Public Health messaging urged people to stay home, and people exhibited fear behaviours of crowds and health care settings.



DATA ANALYSIS

1. Selected all emergency encounters from registration data with:

- Visit location 'LCHC'
- ER discharge date on or after January 1, 2019 and before or on July 31, 2021
- N = 32,497

2. Encounter flagged as a prescription refill encounter if the field [ED_Reason_for_Visit] has either one of the following verb-noun combinations, or only contains the acronym rx:

- **prescription and renew**
- **prescription and refill**
- **medication and renew**
- **medication and refill**

3. Manual collection of data by patient interview regarding reasons for visit for med refill were also collected.

4. James Saunders provided data analysis.

Improving the Care of Opioid Exposed Newborns at Victoria General Hospital

PROJECT TEAM

Project Lead: Dr. Katrina Stockley

Project Participants:

- Sponsors: Mila Erman/Emma Carrick
- Dr. Ricki Hagen, Dr. Sarah Lea, Dr. Marie-Noelle Trottier-Boucher, Shannon Cross, Heather Gates, December Hanson, Roseanne Holmes, Jessie Lane, Vanessa McFarlane, Kelly McMillan, Linda McPherson, Margaret Quigg, Lisa Roe, James Saunders

AIM STATEMENT

To decrease the Neonatal Intensive Care Unit (NICU) length of stay by 20% at VGH for babies born at greater than 36 weeks gestation who are exposed to opioids in utero by September 2021

PDSA CYCLES



PDSA 1: Eat Sleep Console RN education session (in person)

PDSA 2: Break relief to increase NICU RN attendance

PDSA 3: Change to online video to increase NICU RN attendance

PDSA 4: Health care aide (HCA) support in the NICU

PDSA 5: Allow HCA's to feed 'stable' babies

BACKGROUND

- Pregnant individuals and their newborns are a particularly stigmatized group in the ongoing Public Health opioid crisis in B.C.
- While best practices for caring for newborns exposed to opioids in pregnancy have evolved over time, provincial standards now emphasize culturally safe, trauma-informed approaches that prioritize parent-baby togetherness (rooming in and the Eat Sleep Console care model)
- Benefits of rooming in include:
 - Decreased newborn withdrawal symptoms & need for morphine treatment
 - Shorter newborn length of stay in hospital
 - Decreased parental trauma
 - Increased breastfeeding rates

zoom



PROBLEM

- Despite being the largest perinatal care centre in our health authority, Victoria General Hospital (VGH) has not yet adopted the provincial standard of care for newborns with opioid exposure (rooming-in and the Eat Sleep Console care model)
- As a consequence, many newborns are unnecessarily separated from their parent, resulting in:
 - NICU overutilization/increased healthcare costs
 - Interrupted bonding of the parent-baby dyad
 - Decreased parent satisfaction with care and further stigmatization

CHANGE IDEAS

- Implement the "Eat Sleep Console" (ESC) approach at VGH, which focuses on:
 - Rooming in
 - Non-pharmacologic care interventions
 - Empowering parents
- Increase staffing in NICU via health care aides (HCAs), to increase the delivery of non-pharmacologic care interventions for newborns with opioid withdrawal
- In progress: Keep parent-baby dyad together on postpartum unit with a 'travelling NICU RN' providing care if baby requires morphine

PROJECT SPREAD

- Eat Sleep Console Educational Presentations:
 - Perinatal rounds (GPs, Midwives, RNs)
 - Pediatric rounds (Pediatricians)
- Collaboration on updated island-wide clinical guideline "Caring for the Substance Exposed Newborn"
- Knowledge sharing with other centres actively using/implementing ESC (Nanaimo, Surrey, BC Women's Hospital)

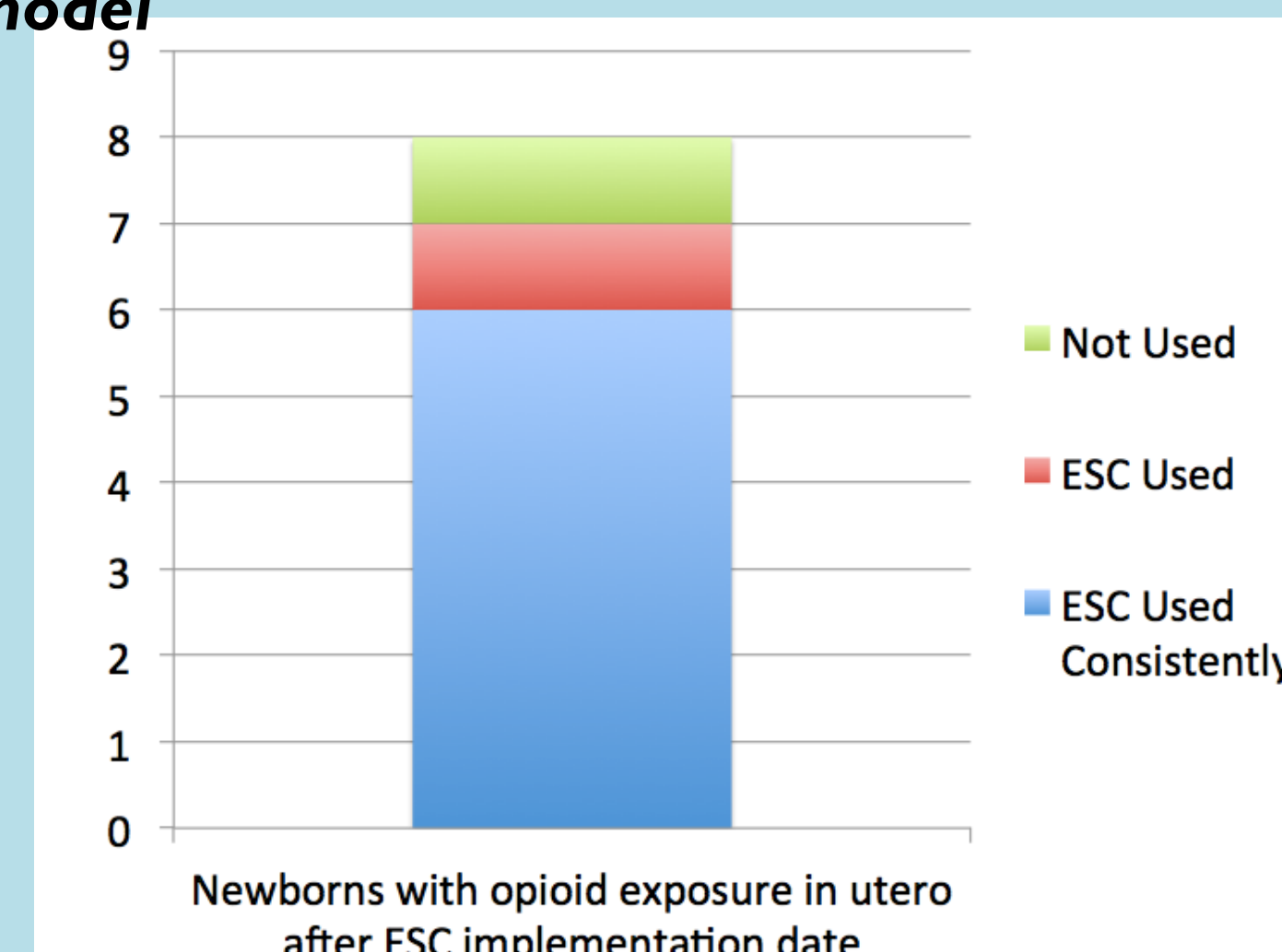
DATA ANALYSIS

- Registered Nurse (RN) staff surveys following ESC education sessions
- Chart review for post-implementation adherence to ESC model
- Enterprise Data Warehouse data for patient outcome measures:
 - Admission & length of stay in NICU
 - Duration of morphine treatment

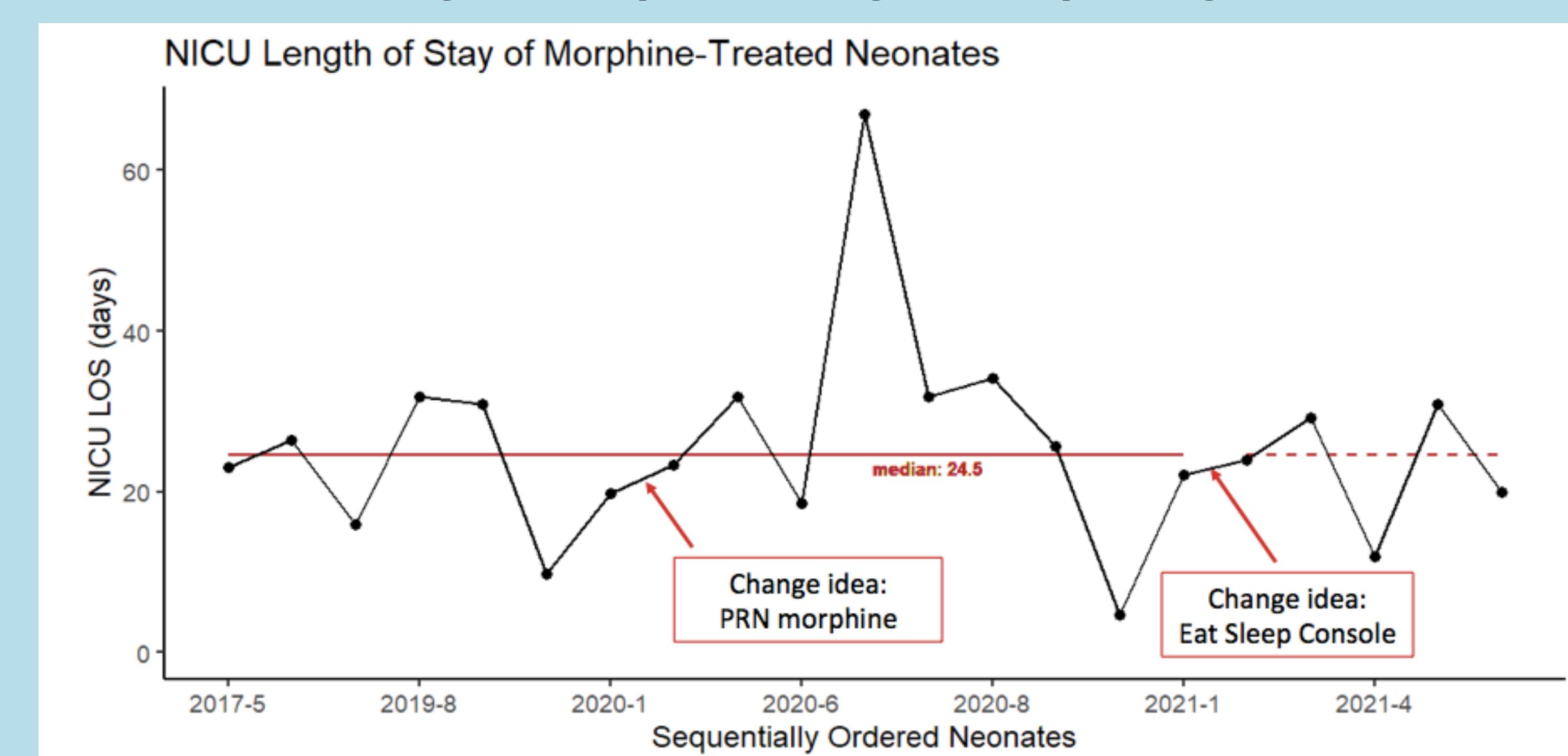
FINDINGS

- After the ESC education, the majority of RNs felt 'extremely comfortable' using non-pharmacologic care interventions and 'very comfortable' using the ESC model
- No change for outcome measures post-ESC implementation (yet!)
- Patient population changed significantly over the course of the project, which likely affected outcome measures (significant increase in the number of parents not stabilized on opioid agonist therapy, with ongoing illicit substance use).

1. After Eat Sleep Console implementation, 87.5% of newborns with opioid exposure were cared for using the ESC model



2. The median NICU length of stay did not significantly change after our interventions



Improving Antibiotic Usage in Gram-Negative Bacteremia

How Can We Optimize Treatment?

PROJECT TEAM

Project Participants:

- Dr. Alastair Teale – NRGH Infectious Diseases
- Kim Scott – NRGH Stewardship Pharmacist

AIM STATEMENT

The antibiotic stewardship team will review cases of inpatient gram-negative bacteremia at NRGH and will aim for a greater than 90% acceptance of recommendations, 25% decrease in length of parenteral therapy and a 10% decrease in average length of stay for these patients over the 3-month period of the intervention.

PDSA CYCLE



- An electronic form was created for prescriber feedback
- 3 months of inpatient cases of gram-negative bacteremia at NRGH were reviewed prospectively
- Data was collected from each stewardship review and stored in the VIHA REDCap database

DATA ANALYSIS

Data collected included (3 month pre and post intervention):

- Initial antibiotic therapy
- Acceptance of suggestions/guideline concordance
- Oral vs IV treatment duration
- Total antibiotic course duration
- Duration of hospital stay

FINDINGS

- Acceptance rate for suggestions was very high
- Total duration of antibiotic therapy did not change significantly, but a shorter duration of IV therapy was used in the post intervention group.
- (7.7 avg days IV therapy pre-intervention to 3.9 avg days post-intervention)
- Length of hospital stay did not change significantly

BACKGROUND

Gram-negative bacteremia (GNB) is associated with high rates of morbidity and mortality. Because of traditional prescribing practices, patients are often overtreated with broad spectrum parenteral antimicrobial therapy, leading to increased antibiotic costs, increased adverse events and increased length of stay. Appropriately designed studies have now shown narrow spectrum, oral options are as efficacious as parenteral options for stepdown and are associated with decreased cost and improved patient outcomes with less adverse events and length of stay.

PHARMACIST VOICE

"This intervention did not change my workload or process, as it was a similar recommendation note I'd leave previously, but the visibility and stated ID physician support increased physician acceptance drastically."

PROBLEM

GNB is often treated with broad spectrum parenteral therapy where narrow spectrum, oral therapy has been shown to be as efficacious, with easier administration and less adverse effects.

CHANGE IDEA

Cases of inpatient GNB at NRGH were reviewed and feedback regarding antibiotic treatment and suggestions for ongoing stepdown therapy were given via an electronic form left on the patient's electronic chart.

Retrospective Review n = 36
Prospective Audits n = 21
Total Reviewed n = 57

Fig. 1

Positive Blood Cultures - Identified Organism

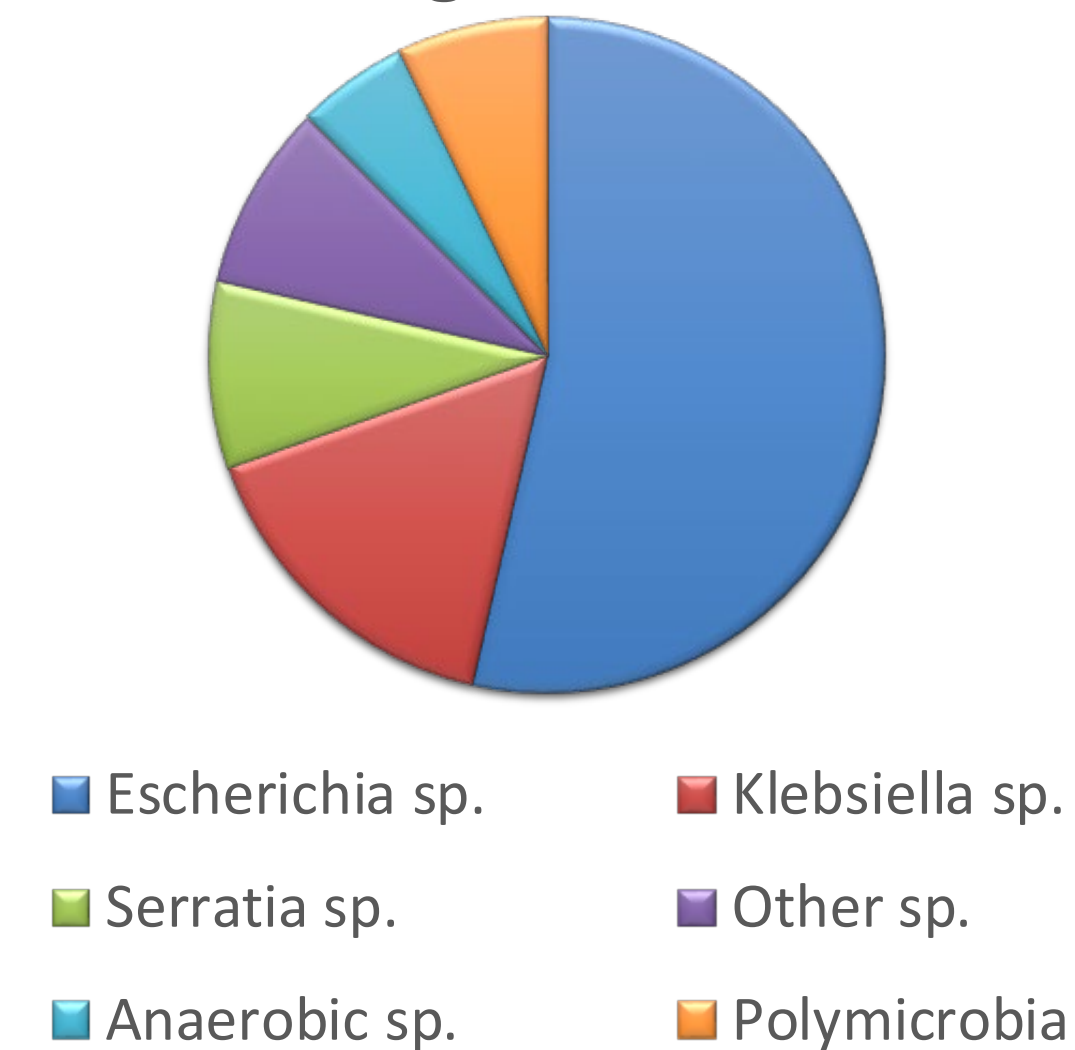


Fig. 2

Suspected Source of Infection

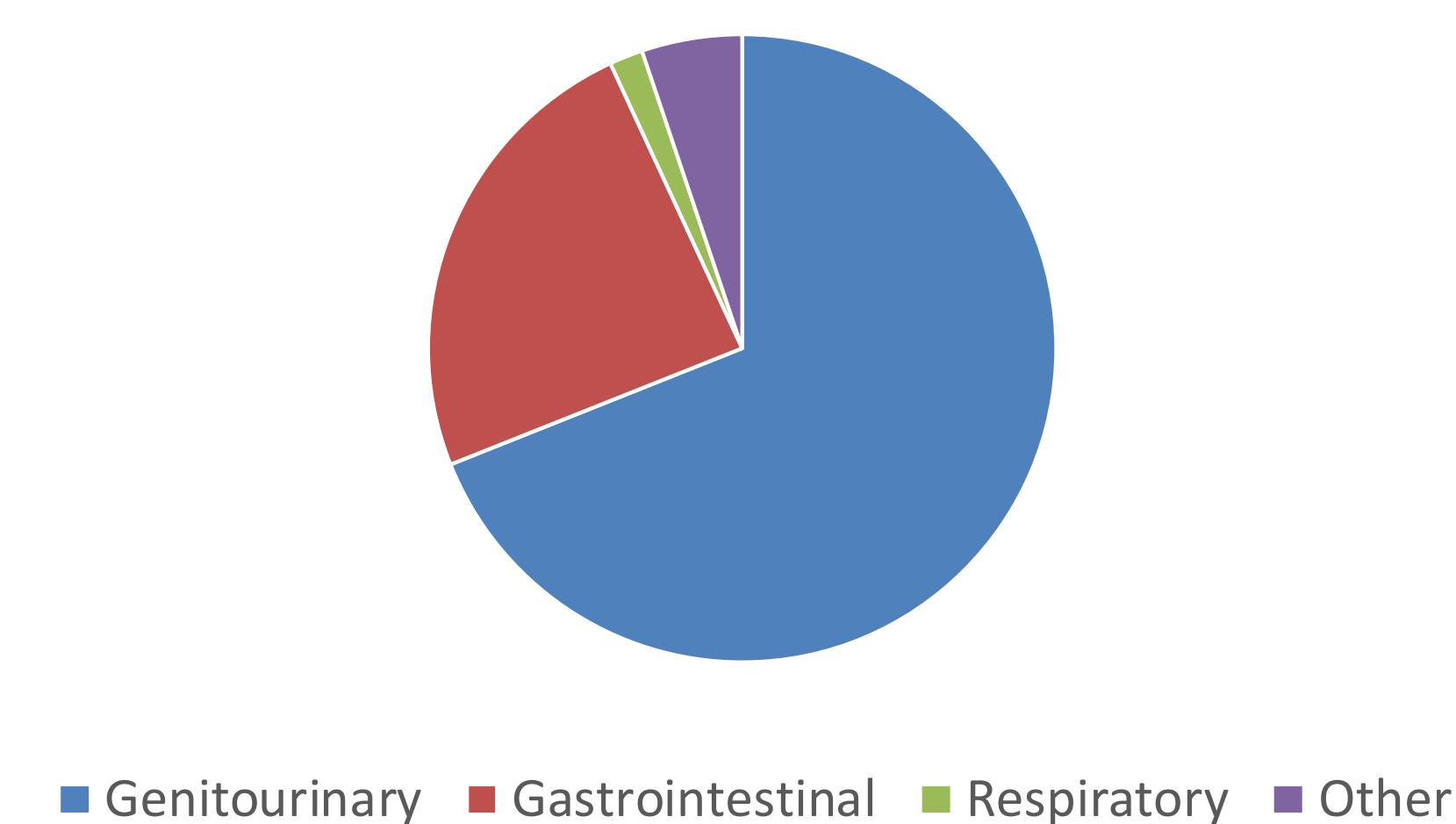


Fig. 3

Empiric Antibiotic at Time of Blood Culture Positivity

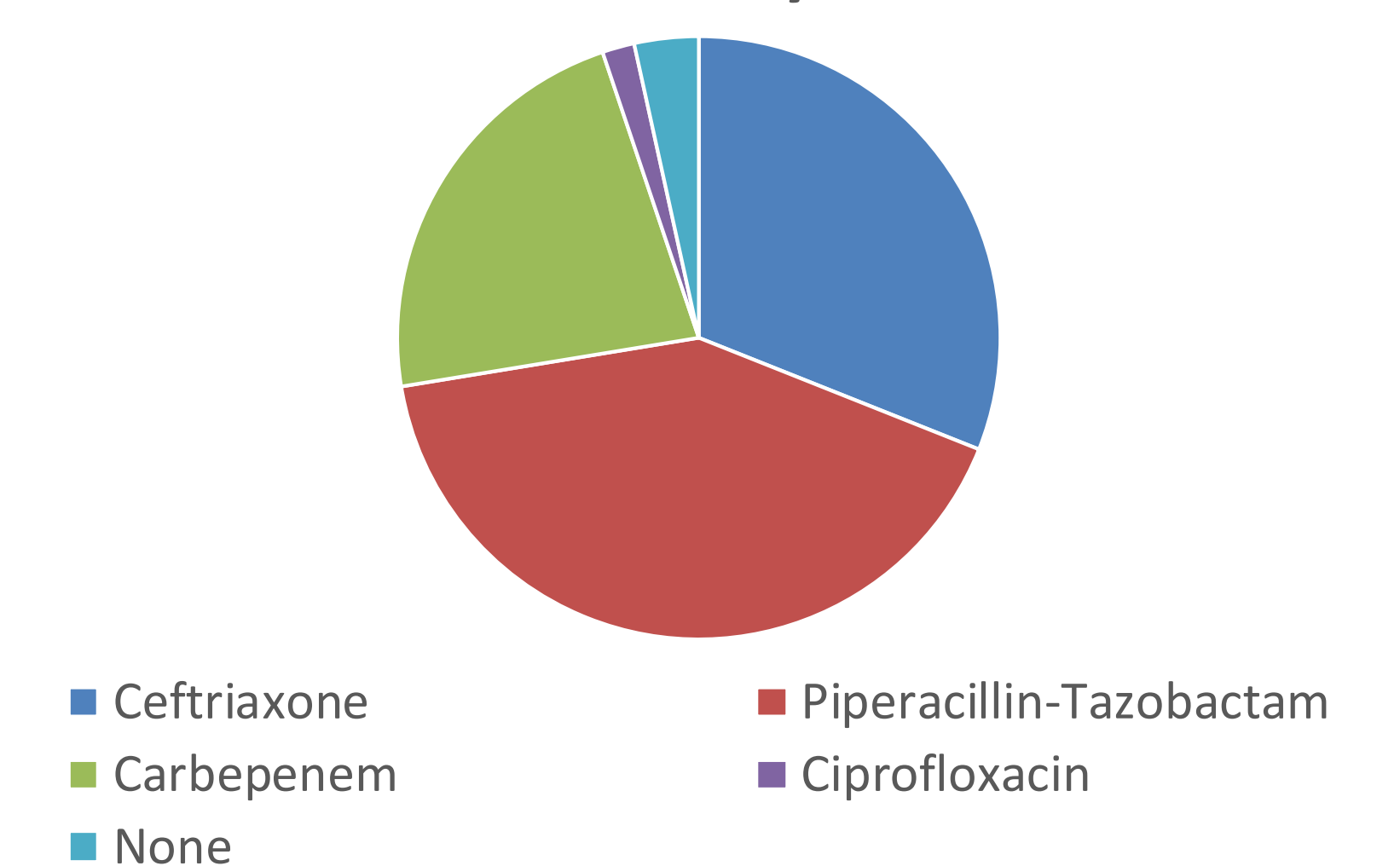


Fig. 4

Oral Step Down at Day 3/Following Stewardship Advice (%)

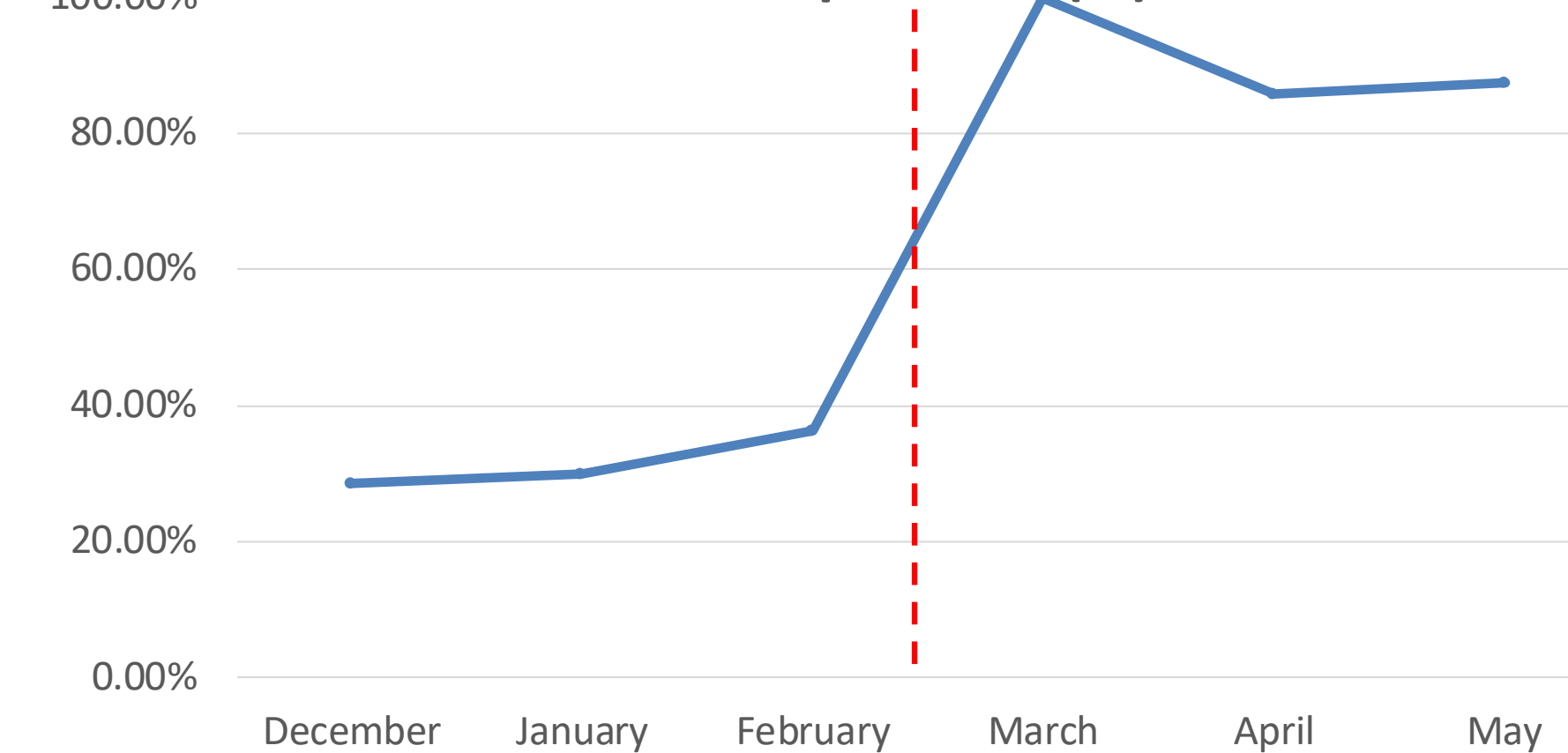


Fig. 5

Average Days of IV Antibiotic Therapy

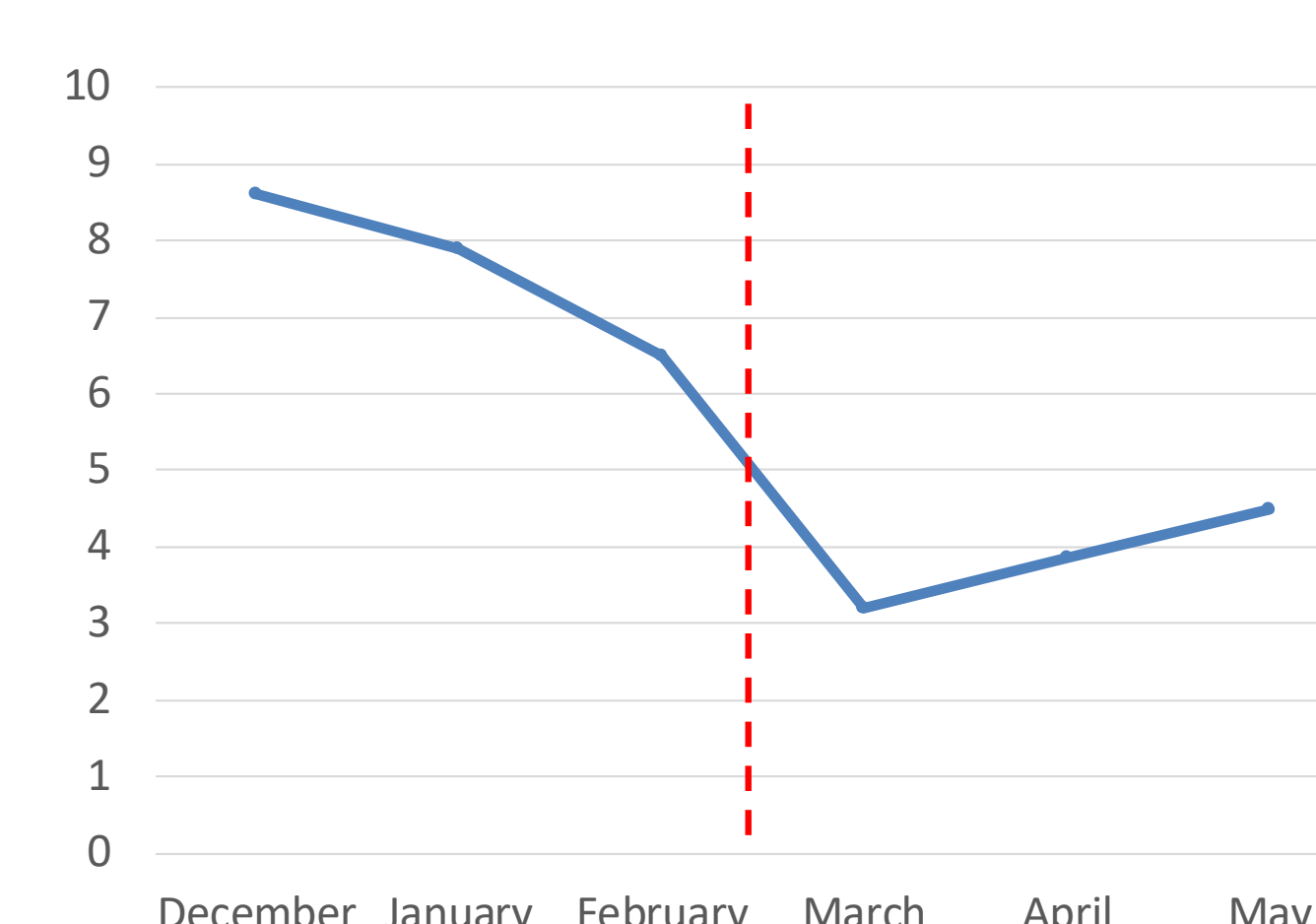
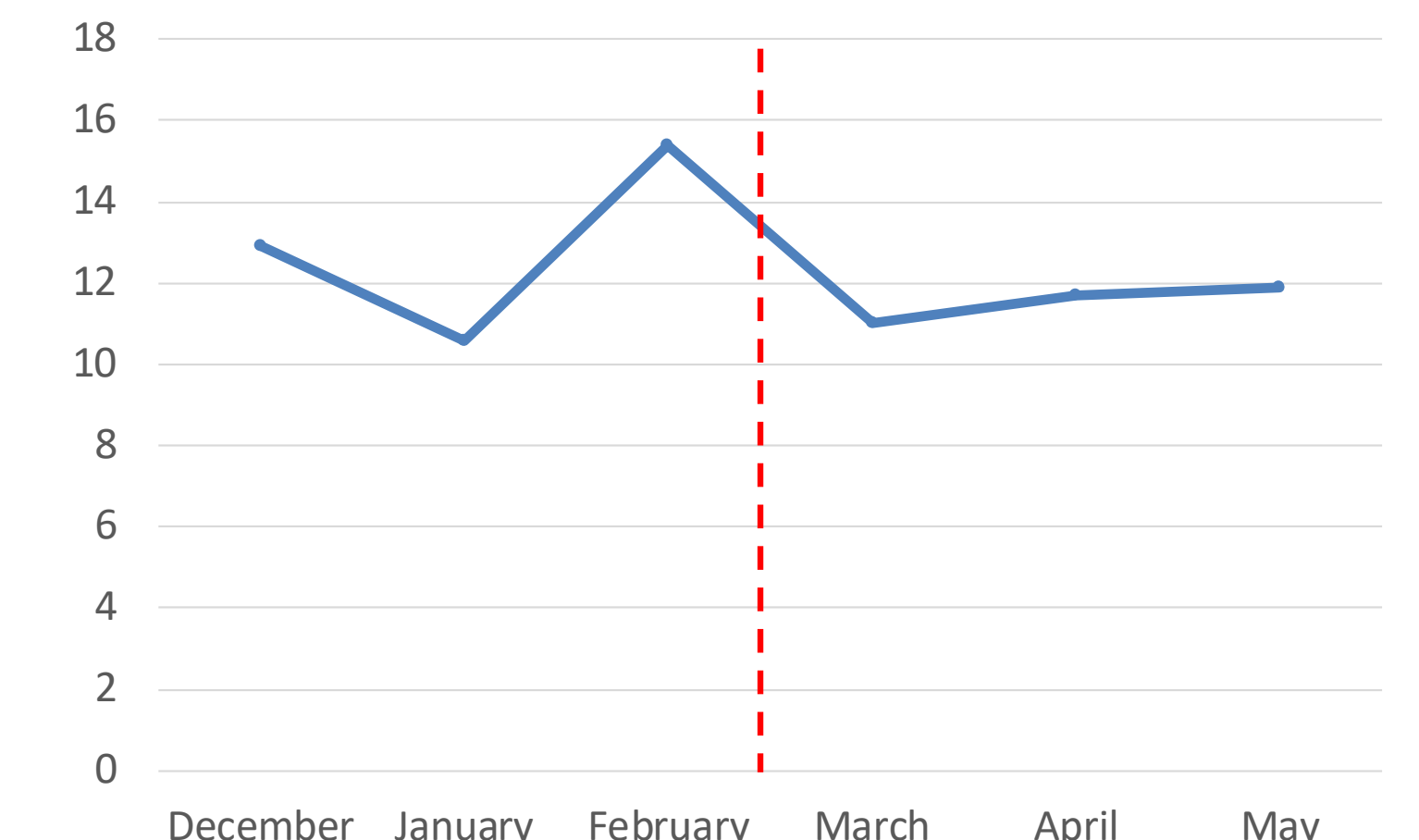


Fig. 6

Total days of Combined Antibiotic Treatment



CONCLUSIONS

This prospective audit and feedback project of inpatient gram-negative bacteremia at NRGH demonstrated the effectiveness of an electronic feedback form for antimicrobial stewardship, a high level of prescriber responsiveness to antimicrobial stewardship and a decrease in parenteral antimicrobial therapy used for treatment of GNB. This intervention could be used as a template for interventions targeting other specific infectious syndromes and broad-spectrum antibiotic use across other Island Health sites in the future.

BACKGROUND

- Opened November 2018 – 12 hours/day, 365 days/year
- Facing overwhelming demand for access to urgent and primary care services in the Western Communities (Esquimalt, Colwood, Langford, Metchosin, Sooke), often exceeding the capacity constraints
- Access to care and efficient resource utilization is critical

PROBLEM

More than 50,000 patients in the Western communities of Victoria do not have primary care provider (PCP) and many patients with a PCP lack timely access to care. As a result, demand for services at Westshore UPCC consistently exceeds capacity. Lack of access results in inappropriate Emergency utilization, poor patient outcomes and negative patient and provider experiences.



PDSA CYCLE



Initial PDSA cycles focused on project lead, Dr. Elizabeth Wiley, and Dr. Cal Shapiro integrating secure patient messaging into clinical service delivery in Dec 2020.

Subsequent PDSA cycles were planned to expand secure messaging to additional physicians as well as other team members (Registered Nurses, Medical Office Assistants, Mental Health & Substance Use consultant and social worker). However, further expansion was put on hold due to competing priorities.

DATA ANALYSIS

Data were collected from IHealth/Cerner including:

- Number of secure messages sent/received
- Number of patients engaged in secure messaging
- Demographic characteristics of patients engaged in secure messaging
- Type of messages sent/received

In addition, a patient experience survey was emailed on April 19, 2021 to patients who used MyHealth secure messaging.

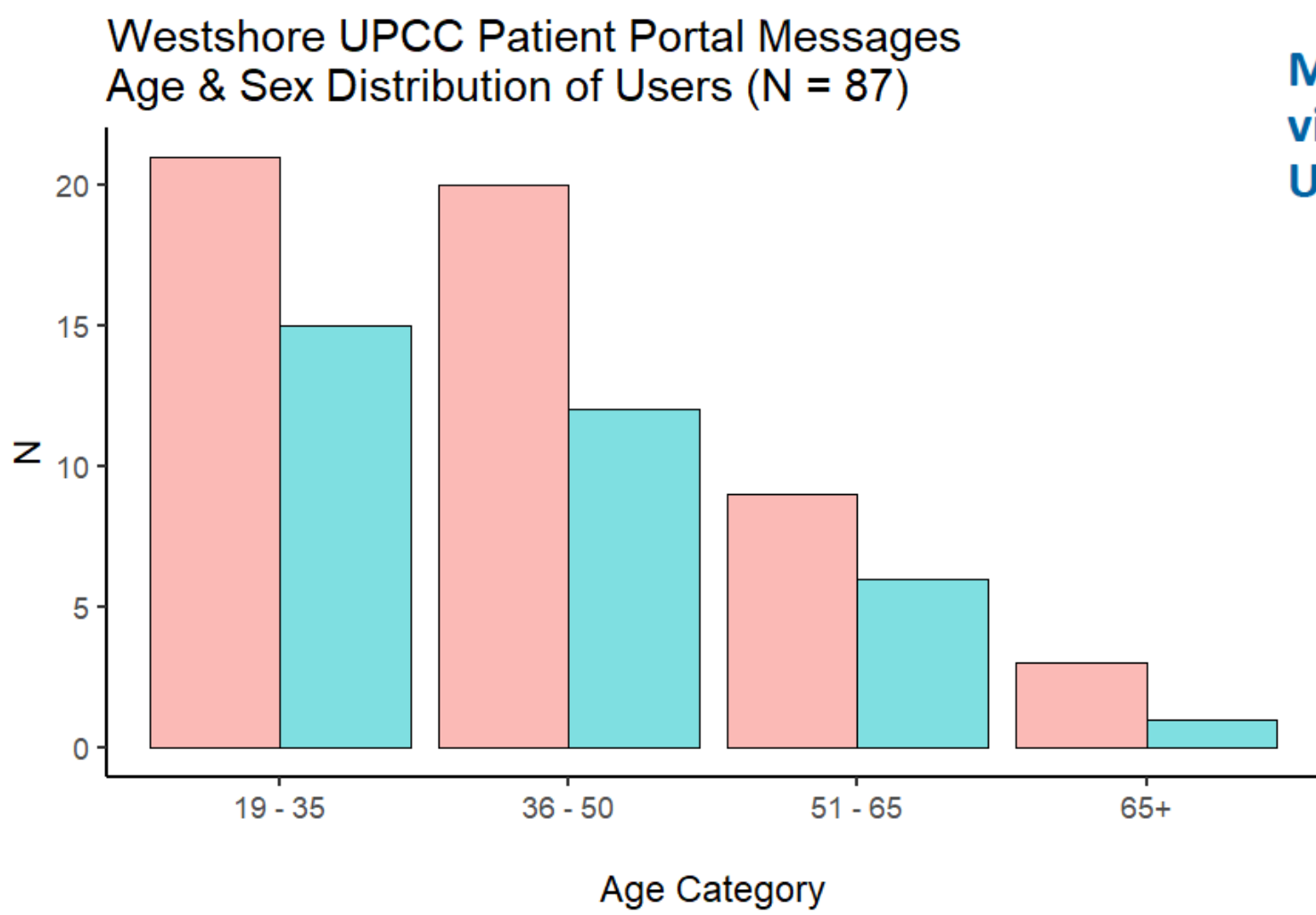


Figure 1. MyHealth Patient Portal Messaging User Distribution by Age and Sex

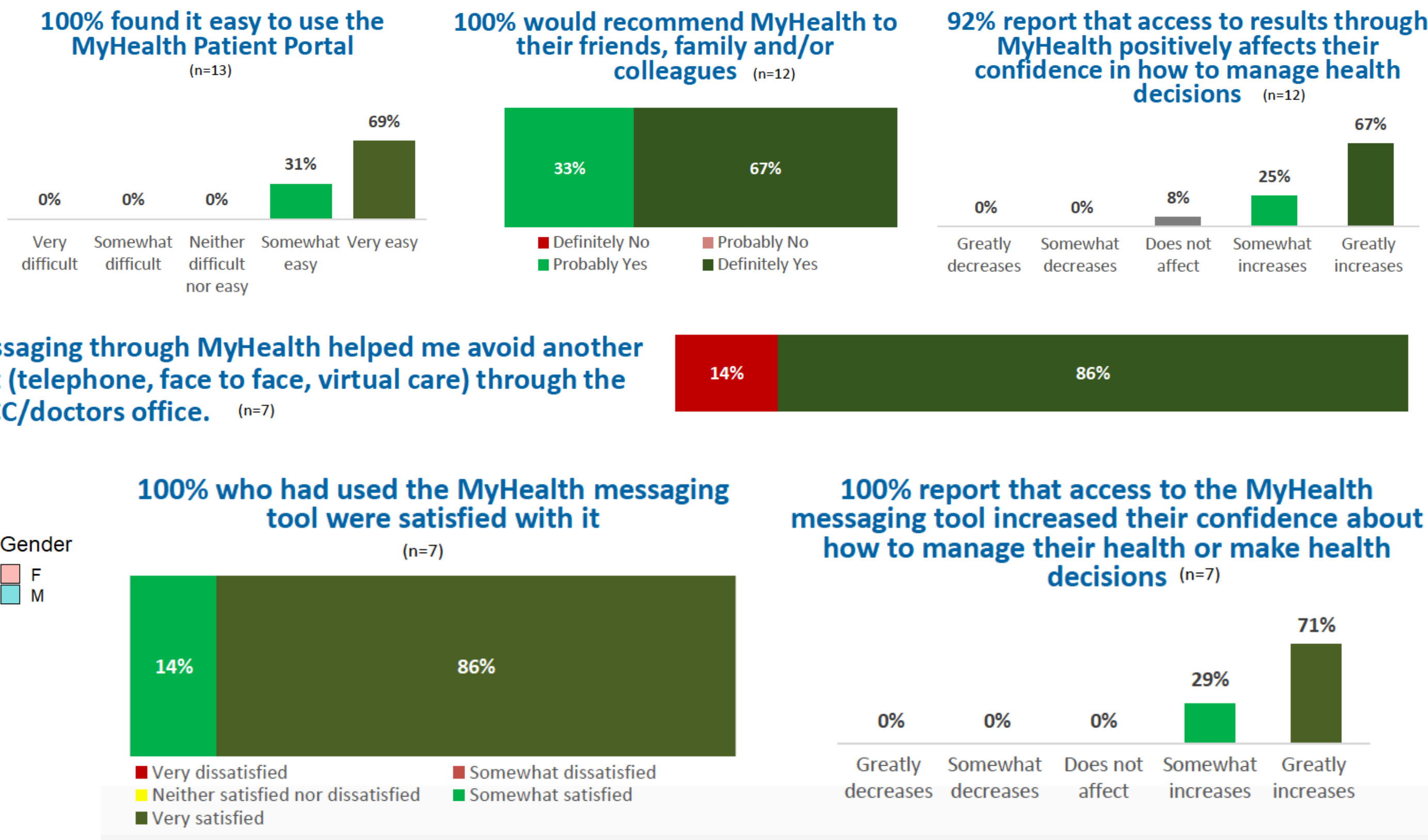
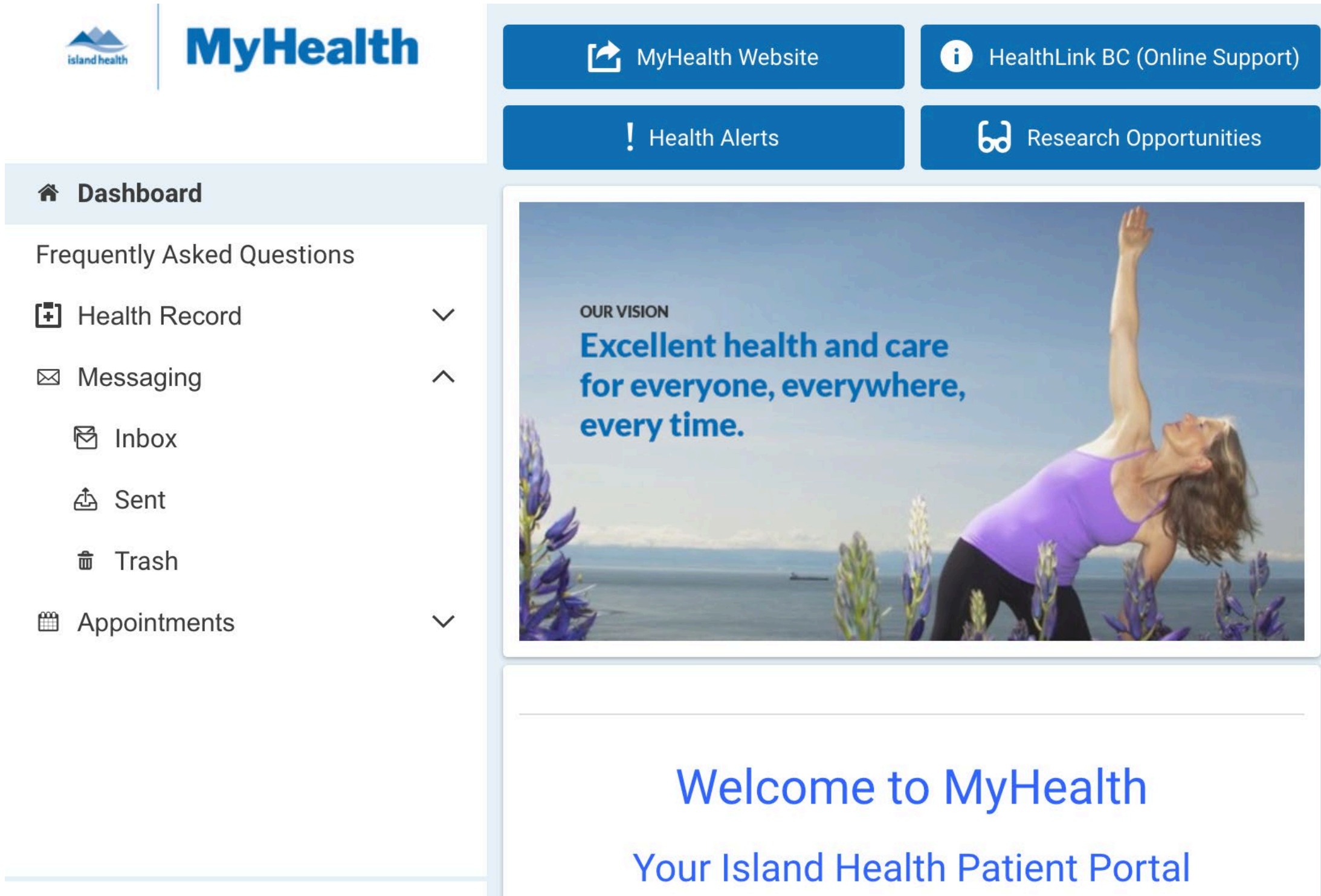


Figure 2. MyHealth Patient Portal Messaging Patient Experience Survey Results

AIM STATEMENT

The WUPCC clinical team will increase access to urgent care by increasing the total number of patients served each month by 5% by June 2021 through integration of MyHealth Patient Portal secure messaging into clinical care delivery.



PATIENT VOICE

“My doctor recently retired and this is the first time in 30 years that I have been without one. So I am learning how to access and navigate the medical system on my own and MyHealth will be a helpful tool”

“I feel the one on one contact with the health care provider eliminates the chance for errors or misunderstandings. The ability to ask questions and get direct answers from the comfort of home without having to make a trip to a office / clinic is great.”

“Not very good with phone calls, especially talking to docs, so its great to be able to choose my words and timing. Wonderful tool”

“I feel that this process is secure, accurate and will eliminate trips to my other health care providers as I can access the information from my home.”

PROJECT TEAM

Project Lead: Dr. Elizabeth Wiley

Participants:

- Patient Portal Team: Dr. Eric Shafonsky, Rebecca Campbell, Anita Wu, Ravi Grewal & Jordan Lanyon
- Katy Mukai, Surveys & Evaluation Manager
- Living Lab Team: Kelly Hays, Heather Rocheleau, Nick Frosh & Sarah Sheridan
- WUPCC Team: Dr. Cal Shapiro, Dr. Dan Horvat
- PQI Team: Dr. Alex Hoechsmann, Julia Porter, James Saunders

CHANGE IDEA

Integrate secure messaging using MyHealth Patient Portal into clinical service delivery at WUPCC to:

- Communicate test results and interpretation
- Support patient education and adherence through dissemination of educational materials
- Empower patients and support chronic disease management and monitoring
- Provide patients with lab requisitions, work notes, completed forms, etc.
- Allow patients an opportunity to more efficiently ask questions
- Enable more efficient use of patient and provider time by enabling asynchronous communication
- Free up more time for patients who require real time communication
- Minimize contact during the COVID-19 pandemic

FINDINGS

- More than 400 messages (n=437) were sent/received by 95 patients between December 2020-Aug 2021
- Messages were sent by two physicians, Dr. Wiley (n= 268, 97%) and Dr. Shapiro (n = 9, 3%)
- Demographic distribution of patients using patient messaging is summarized in Figure 1.
- Patient experience survey data is summarized in Figure 2.

CONCLUSION

Consistent with evidence from other jurisdictions, implementation of the MyHealth patient portal messaging at WUPCC resulted in:

- Increased patient access to follow up care including patient education, chronic disease management, prescription renewal, form completion and results review among others;
- Increased provider efficiency in providing follow up care including the use of standardized patient education materials and auto-text
- Positive patient experience as reflected in patient experience survey data