CARE TRANSFORMATION COLLABORATIVE RHODE ISLAND

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ADVANCING INTEGRATED HEALTHCARE

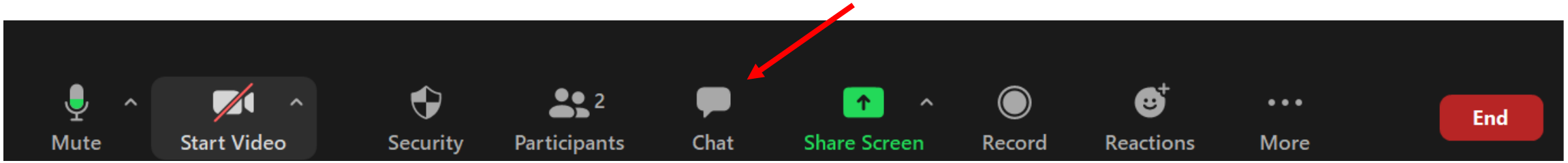
Pharmacy Quality Improvement Initiative Learning Collaborative

Care Transformation Collaborative of Rhode Island

November 8, 2021

Welcome!

- Please Chat in:
- - Your Name and Organization



- *Please mute yourself when not speaking*
- *Please use the 'Raise Hand' feature*

Agenda

- Welcome & Introductions *(5 mins)*
- Hypertension and Hospitalizations in the RI Health Information Exchange *(25 mins)*
  - *Feedback/Discussion*
- Review of PDSAs *(55 mins) (8 mins per team)*
  - *Key Learnings*
  - *Patient Case Study*
- Next Steps *(5 mins)*

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ADVANCING INTEGRATED HEALTHCARE

Hypertension and Hospitalizations in the RI Health Information Exchange

Rob McConeghy (Health Data Analyst)

Sarah Eltinge (Manager, Health Data Science)

Neil Sarkar (President & CEO).

RHODE ISLAND QUALITY INSTITUTE

Hypertension and Hospitalizations in the RI Health Information Exchange

11/10/2021

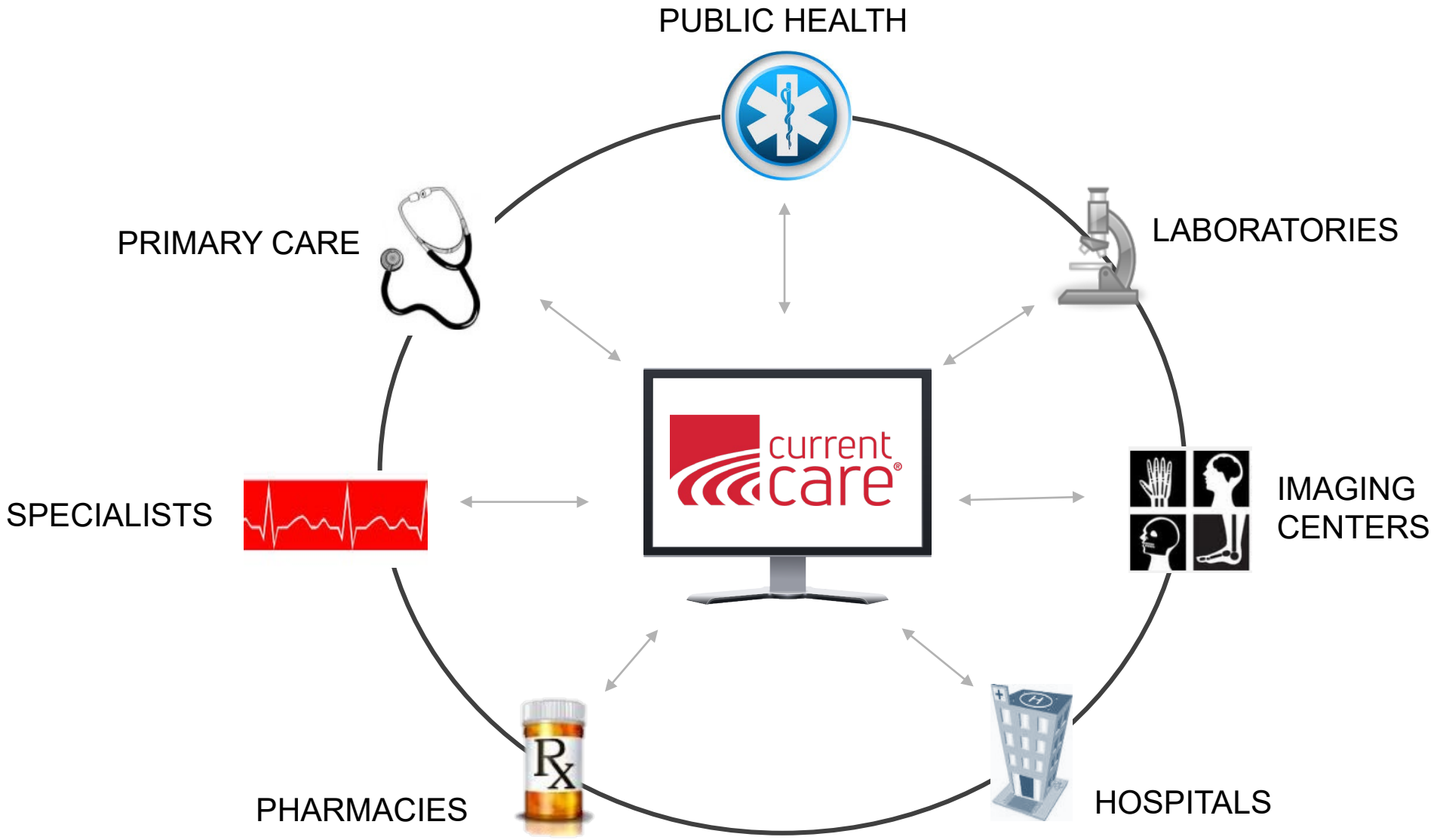
RHODE ISLAND QUALITY INSTITUTE

OUR STORY

- Operates Rhode Island's Health Information Exchange (HIE) as the state-designated Regional Health Information Organization (RHIO)
- The HIE – **CurrentCare** – is a secure repository protected under HIPAA and the RI Health Information Exchange Act of 2008
- Opt-In model with over 550,000 patients enrolled; will transition to Opt-Out model over the next two years.

CURRENTCARE

HOW IT WORKS



ELECTRONIC HEALTH DATA SOURCES

OVER 520 DATA SOURCES AND 1.1M PATIENTS

+ Hospitals
+ Labs
+ Imaging Facilities
+ Pharmacies
+ Pharmacy Benefit Managers
+ Private Medical Practices
+ Urgent Care Facilities
+ EMS
+ Skilled Nursing Facilities
+ Department of Corrections

Research Cohort: Pre-2019 Hypertension Diagnosis

- 18+ years old, RIQI CurrentCare Enrollees, with HTN before 2019
- HTN before 2019 is identified via 3 RIQI sources:
  1. Problem List from Continuity of Care Documents (CCDs)
     - Clinical Classification System (CCS) Category 98 or 99
  2. Diagnoses from hospital Admission, Discharge, Transfer (ADT) messages, CCS 98 or 99
  3. High Blood Pressure (sys >140 and dia >90; Stage 2, CDC definition)

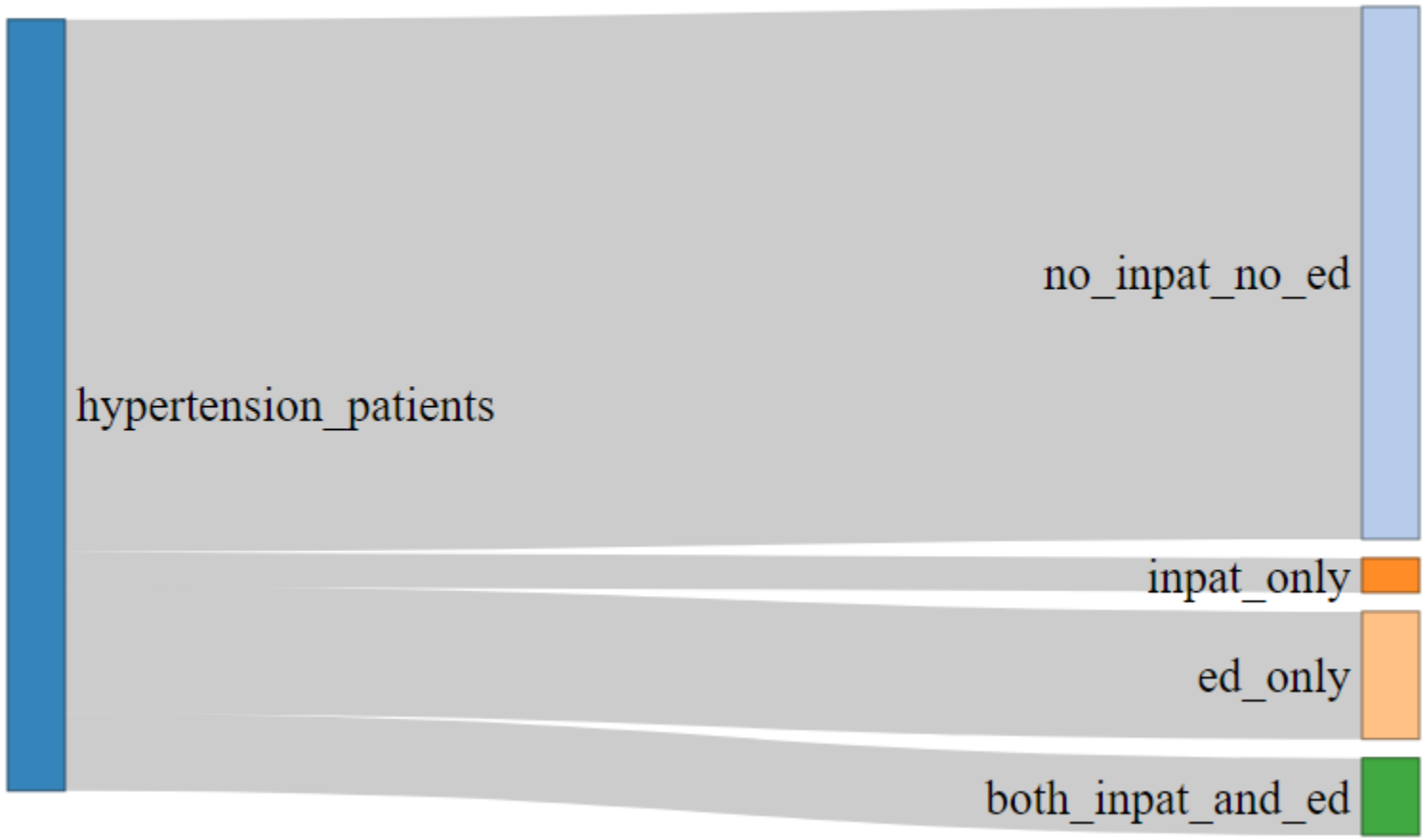
Distinct Patients	Problem Table	ADT	High BP Obs
135,811	17,845	120,776	22,025

2019 Hospital Outcomes for Hypertension Cohort

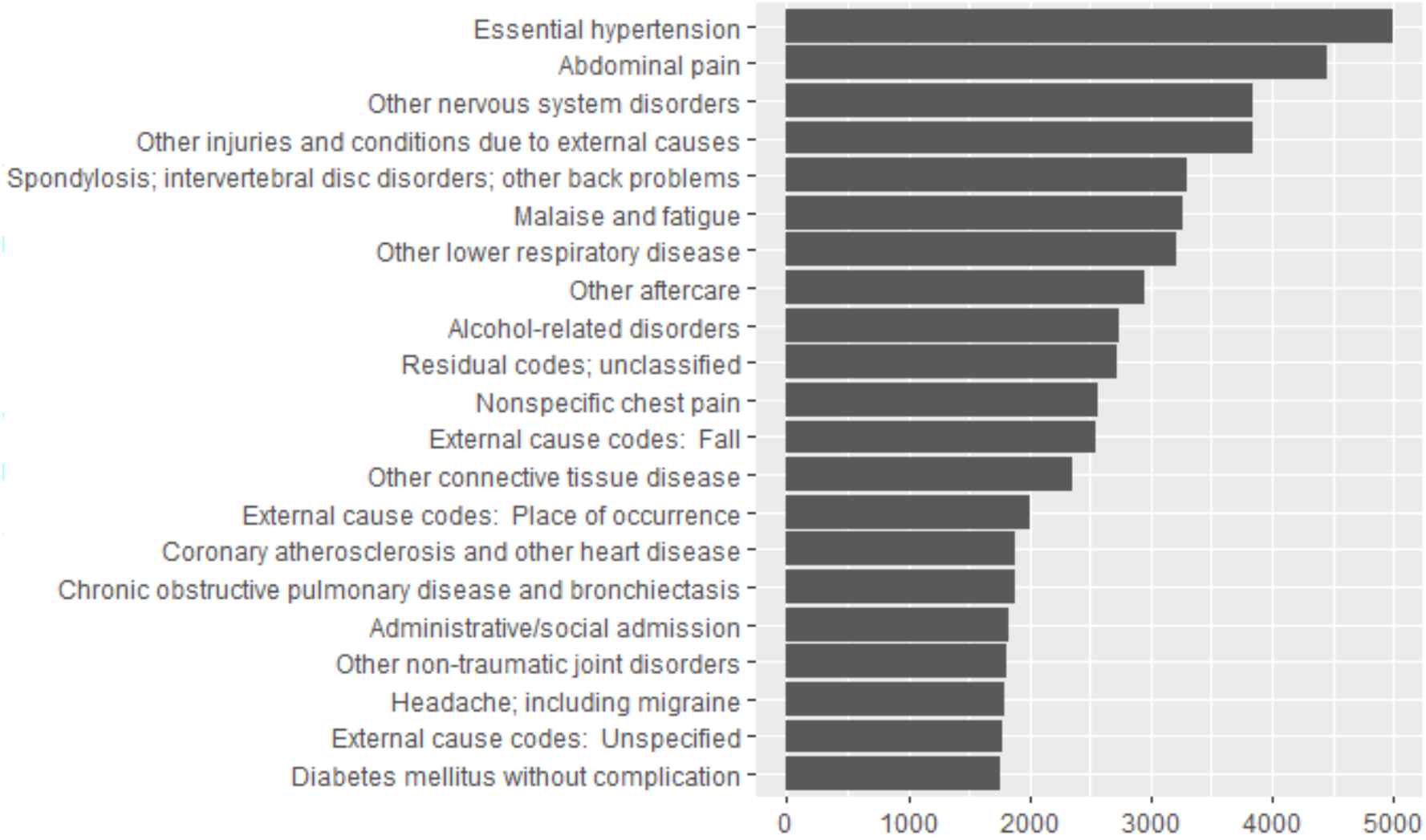
- ~20,000 HTN patients (14.4%) had ≥1 Inpatient Visit in 2019
- ~36,000 HTN patients (26.5%) ≥1 Emergency Department Visit in 2019
- On average, HTN patients 0.33 inpatient visits and 0.73 ED visits in 2019

Distinct Patients	≥1 Inpatient Visit	≥1 ED Visit
135,811	19,588	36,006

Visualizing HTN Outcomes: Sankey Diagram



Common ED Diagnoses of 2019 RI HTN Cohort



Only Hypertension: ED and Inpatient Visits

- How many ED and Inpatient visits had only hypertension as a diagnosis?
  - Must have either CCS 98 (essential) or 99 (non-essential)

Encounter Type	Number of Encounters	Number of Patients
Emergency Dept	279	236
Inpatient	13	12

How many Patients had 3+ ED Visits with a HTN Diagnosis?

- 4,075 patients had 3 or more ED Visits with HTN listed
  - Less than 4% of the cohort had 3+ ED visits with HTN listed
  - Note: Must also be cohort members (HTN pre-2019)

Additional Actionable Situations?

- What are additional situations in your practice that would be valuable to analyze using our HIE data?
  - Certain subgroups of HTN patients?

THANK YOU

HTTPS://WWW.RIQI.ORG

Rob McConeghy

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Thundermist Health Center

Decreasing ED visits and hospitalizations associated with short-term and long-term diabetes complications through the use of team-based care.

Key Learnings

Study

- Data Flaws
- Baseline Data
- Automatic Referrals
- Identified opportunities for improved clinical pharmacy DM visits
- Have met goal benchmark for A1c < 9% (currently at 75%, baseline was 71% and goal was 73%).

Act

- Run report for any new ED f/u or hospital admissions since starting automatic referrals to see if patients are being missed.
- Re-educate NCMs/RNs/MAs if referrals are not being made. If patient was missed, still outreach for an appointment for review.
- If the patient declines, complete a chart review and send to PCP.

Women Medicine Collaborative

Reducing hypertension ED visits by optimizing blood pressure control among women in a primary care practice

Study

- We plan to also include prospective patients with newly diagnosed HTN and BP >160/90, as well as patient with newly diagnosed HTN with risk factors, such as chronic kidney disease, diabetes, obesity, or history of cardiovascular event (MI or stroke). Therefore, we created a diverse cohort of patients to participate, which also loosely mimics the diverse types of patients that we previously saw that had utilized the hospital services for uncontrolled hypertension.

Act

- Initially very excited about the Withings capabilities to automatically integrate into the EMR, but unfortunately due to several factors, especially time, are not able to proceed with this cuff at this time, and will proceed with Omron cuffs.

Medical Associates of RI

Pharmacist-directed 24-hour ambulatory blood pressure monitoring in a high-risk population

Study

- Enrollment and rate 10% lower than expected; discharge rates as expected

Act

- **To improve enrollment rate**: 1) Perform chart reviews on patients referred for ASCVD and/or CKD who did not meet initial high-risk criteria; 2) enroll patients on 4+ antihypertensives.
- **To target vulnerable populations**: 1) Review schedule every Friday for two providers servicing Portuguese-speaking patients; 2) Target patients meeting updated criteria for enrollment

Providence Community Health Center

Decrease ER/IP Pediatric Asthma related admissions from patients at Capitol Hill

Study

- Among the top reasons why parents took their children to the ED were the following:
- 18% (n=9) of parents thought that the severity of the symptoms was urgent enough to bring the child to the ED without first calling the primary care provider
- 28% (n=14) of the patients were sent to the ED by their providers
- 12% of parents took the children to the ED because PCHC operating hours did not allow for a provider same day visit
- 18% (n=9) of parents called the clinic but found no appointments available

Act

- Create new access care points to children who visited the emergency room department with an asthma exacerbation by providing pharmacy consults that will include disease state information, effective medication uses and the relevance of following an asthma action plan.
- Flag patients in the EMR so rapid access to triage nurses and providers is easily accessible and open clinics to see sick children

Anchor Medical Associates

Pharmacist Managed Remote Patient Monitoring for high risk Heart Failure patients

Study

- We currently have a total of 26 patients active and engaged on the PriSM program for CHF related RPM monitoring. These patients generated 32 CHF related alerts during the month of October Management of patient onboarding, adherence reminders, calling patients to assess and address clinical alerts and troubleshooting of technical issues is now taking ~ 20 hours of clinical and non-clinical time per month of staff time. We have had difficulty expanding the program using the current workflow, software and staffing availability.

Act

- Provide patients with additional education regarding the importance of weight management.

Coastal Medical

Improving the Quality of Care and Reducing the Cost of Care for Patients with Heart Failure through Pharmacist Intervention

Study

- We have achieved $2.1 million estimated cost savings for CHF patients to date and $2.2 million in estimated cost savings for patients enrolled in any remote patient monitoring program in 2021
- Clinician survey results:
  - 86.67% of clinicians are either satisfied or very satisfied with RPM services
  - 91.38% of clinicians are either satisfied or very satisfied with pharmacy services

What did you learn?

Act

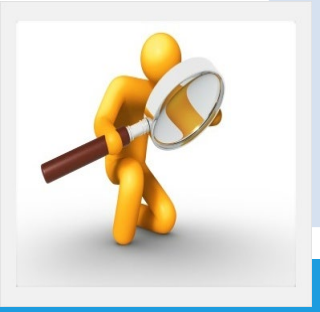
- Planning pilot for Paramedicine program for high-risk patients with ED utilization
- Launching virtual patient education classes to introduce patients to remote patient monitoring programs
- Refining workflows for long-term surveillance of those patients who do not frequently utilize ED and IP resources
- Considering best steps for referral to behavioral health in patients who have falsely elevated blood pressure readings due to anxiety around their health
- Continuing to work to establish connections with external cardiologist offices to collaborate in patient care

RIPCPC

Care Team Management of Patients with Diabetes to Reduce Preventable Ed/Inpatient Hospital Utilization

Study

- 21 out of 78 patients reviewed were determined that med choice/dose was the explanation of the ED/Hospital utilization. Sulfonylureas were determined to be a reason 53 % of these cases.
- Of the 21 patients where it was determined that med choice/dose was the causative reason, 9 changes to regimens were completed by hospital providers and 11 by pharmacists following TOC interactions.



Act

- Continue to monitor all patients for cause.
- During diabetes education visits, patients in 3 primary care practices will be provided with individualized Self-Check Plan (see below). Patients will be surveyed at the time of visit assess prior information and understanding of self-check plan.
- Follow up visits/telephonic check ins will be completed to assess usefulness of tool.
- Recognizing the large impact of sulfonylureas on ED visits for hypoglycemia, an additional more directed report will be requested from IT for patients >65 with A1c <7% on SU in 2 primary care practices.
- Discuss with Dr. Chen to see if he has any suggestions for better 2-way communication with his colleagues who are not part of our organization

Next Steps

- **December: Population of focus is risk stratified**
  - Team identifies how they want to risk stratify the data: age, gender, insurance, race, ethnicity, place of residence
- **January:** Team reviews risk stratification information and identifies need for additional action to better address patient needs
- **February:**
  - PDSAs Due: 2/4/22
  - Quarterly Learning Collaborative: 2/17/21 (7:30-9:00am)