



AHRQ's Initiative To Increase Use of Cardiac Rehabilitation



Preparing and Understanding Your Data to Support Systems Change

Module 4

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TAKEheart Training and Technical Assistance Components

Training sessions guided by the Million Hearts®/AACVPR Cardiac Rehabilitation Change Package (CRCP), located in the Resource Center [TAKEheart Website](#)

Monthly Training Sessions: What to do and Why -- Fourth of 10 modules

Implementation Guide (IG): Focus on the How
Supplemental documents which outline the content, and provide specific actions, steps and resources designed to assist with integrating the training material

Partner Hospital Peer Action Groups (PH PAGs): Discussion of the HOW

Meet with coaches to discuss module content, share ideas and offer support to other hospitals in the group



Promoting Health Care Quality and Patient Safety Through Certification and Education



American Hospital Association (AHA)/Health Research and Education Trust (HRET): TAKEheart AHRQ's Initiative to Increase Use of Cardiac Rehabilitation

Module 4: Preparing and Understanding Your Data to Support Systems Change July 29, 2021

The planners and faculty of TAKEheart Initiative Module 4 indicated no relevant financial relationships to disclose in regard to the content of their presentation.

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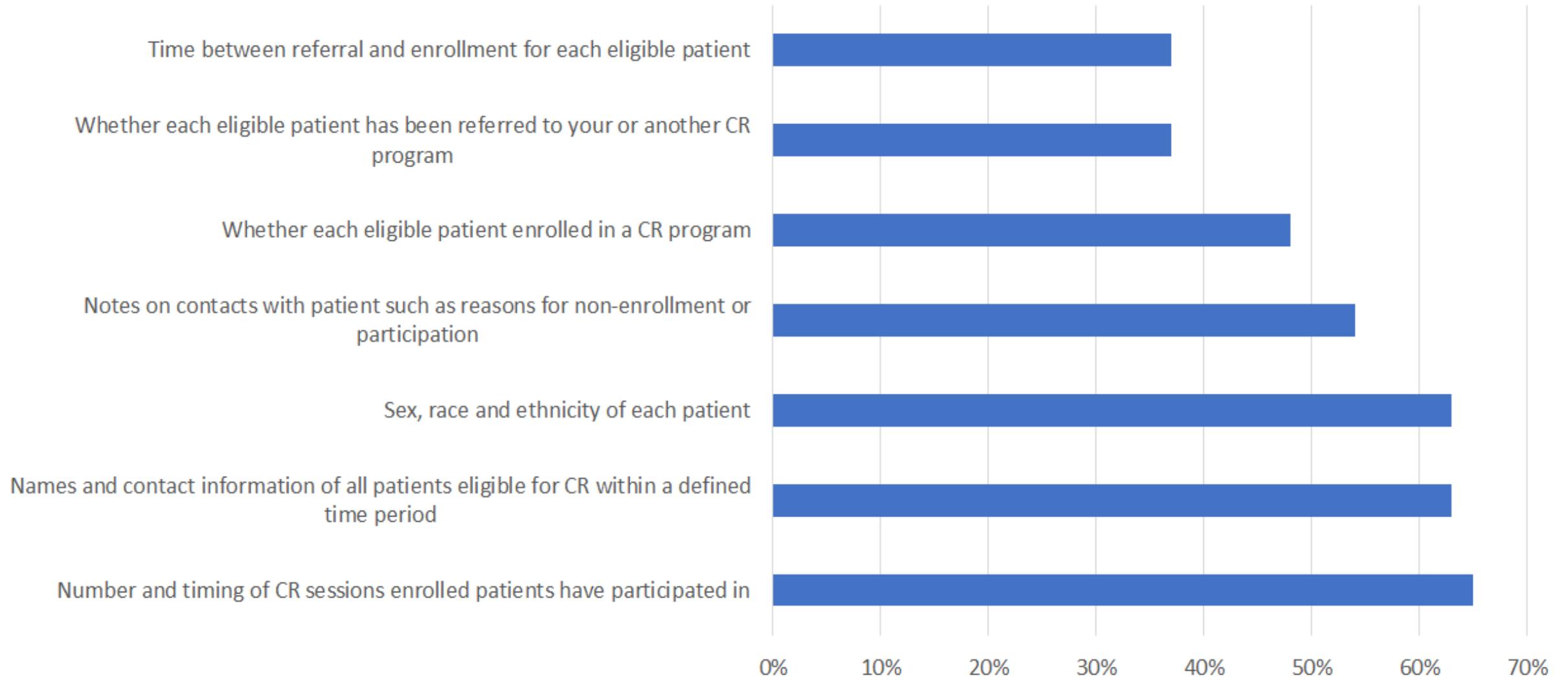
ABQAURP is an approved provider of continuing education for nurses. This activity is designated for 1.0 contact hours through the Florida Board of Nursing, Provider # 50-94.

Modules 1 – 3 Recap

PRIOR TRAINING

- 1** **Module 1 and 2** established the case for automatic referral with effective care coordination and began laying the foundation for systems change.
- 2** **Module 3** continued building the foundation by examining workflow processes and identifying gaps and opportunities to support automatic referral and care coordination, including processes for collecting, compiling and analyzing data.

Gaps in Data Available to TAKEheart Partner Hospitals



Learning Goals

 Upon completion of this module, you should be able to:

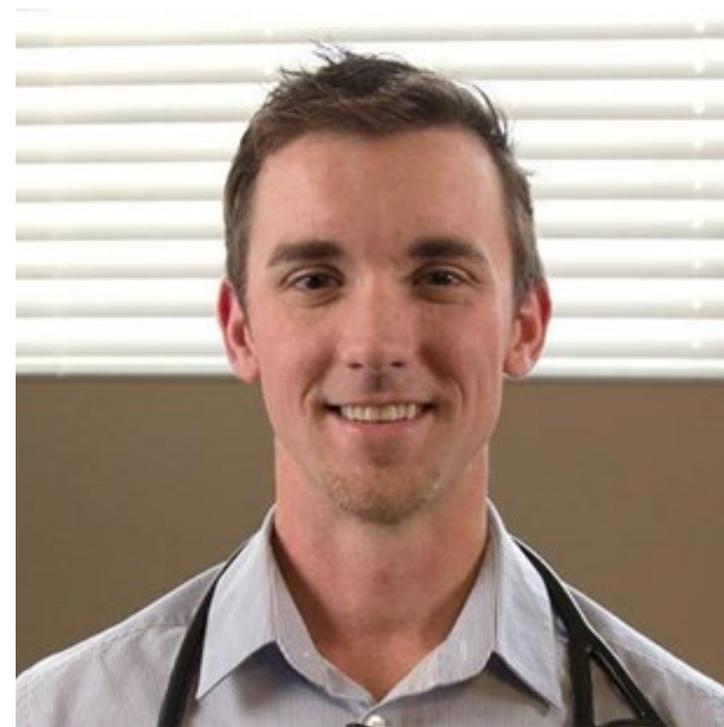
- 1 Understand the importance of data** and identify different data types.
- 2 Establish baseline data** for referrals, enrollment and adherence in CR.
- 3 Create a data collection plan** to measure and monitor performance of changes specific to automatic referral and care coordination.

Today's Presenters



Sherry Grace, PhD, FCCS, FAACVPR, CRFC

Professor, York University
Senior Scientist, University Health Network



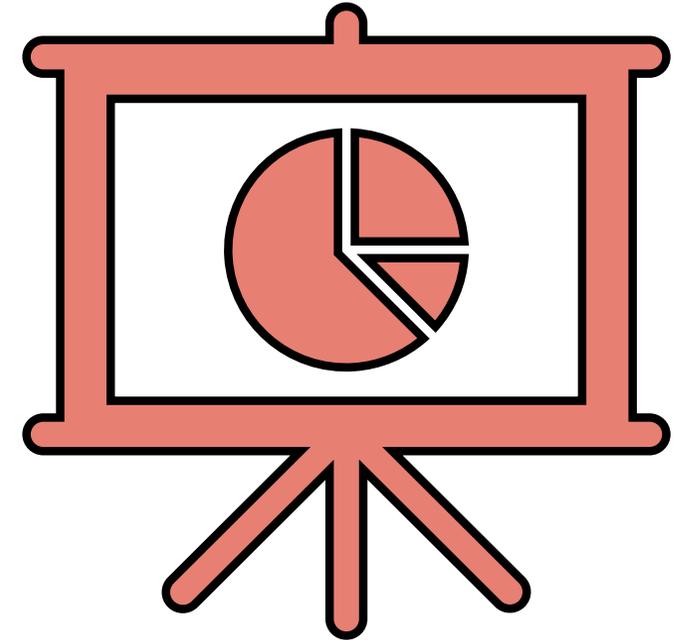
Matt Thomas, MS, MBA, ACSM-CEP

Director Cardiopulmonary Rehabilitation
Program, CHI Memorial

Why Are Data Important?

A VITAL INGREDIENT FOR CONTINUOUS IMPROVEMENT

- ❖ Establishes the starting point
- ❖ Identifies gaps/errors and discrepancies
- ❖ Sets targets for where you want to go
- ❖ Informs the implementation of a workable automatic referral system as well as the structuring and monitoring of care coordination activities



Data Helps

Establish the need for the TAKEheart project

Identify areas for workflow process improvement, i.e., referrals, care coordination

Monitor progress toward your TAKEheart aim statement

Monitor to ensure change is sustained over time

Drive continued change efforts-difficult to refute

Types of Data

Patient-level Data: patient specific

- Age
- Gender
- Zip code
- Diagnosis
- CR referral, enrollment, and participation

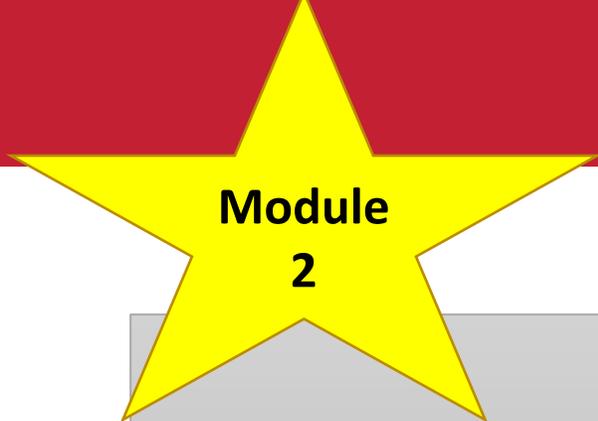
Aggregate Data: population specific

- # of patients eligible for CR
- # of patients referred to CR
- # of patients enrolled in CR
- CR referral, enrollment and participation overall and in underrepresented groups

Questions That Data Can Be Answered By Data Type

Data Type	What does it show?
Patient-level: age, gender, etc.	Shows the characteristics of patients who enroll or don't enroll
Patient -level	Shows which specific patients were (or were not) referred or enrolled
Patient-level: referral source	Shows which providers are referring or not referring
Aggregate	Can show where in the workflow process patients are dropping
Aggregate	Can be used to show what portion of eligible patients were or were not referred or enrolled
Aggregate: referral source	Can be used to show which providers are referring a smaller proportion of eligible patients

Who Needs To Be Involved?



**Module
2**

Clinical & non-clinical CR staff involved in referrals and care coordination

Medical Director/ CR Champion/ Acute care team

Patients (who enroll and who do not)

Representatives of IT, billing, and coding

QI representative

Data analytics representative

The Starting Point: Collecting Baseline Data

GOAL: Develop an understanding of current data before making changes

Automatic Referral	
Report	Benefit
All eligible patients at discharge	Provides information about the pool of potential patients
Patients referred at discharge based on diagnosis	Provides insights about missing eligible patients
Referrals by provider source	Provides insights about providers
Demographic profile of referred patients	Provides information about possible underserved populations

The Starting Point: Collecting Baseline Data (cont.)

Care Coordination	
Report	Benefit
# of patients enrolling	Provides insights about enrollment challenges
Patients enrolled by zip code	Provides info about the catchment area and disparities
# of patients contacted by care coordinator	Provides insights about care coordination efforts
Demographic profile of enrolled patients	Provides information about possible underserved populations

Key First Steps

Use the workflow process maps (**Module 3**) to understand what and where data is stored and who has access.

Use the **data planning tool** to help determine missing and available data to support automatic referral with care coordination.

Work together to gather the data your team needs

Experience from the Field

Discovering your baseline

❖ Who are the referral sources?

- Several providers
- One or two providers

❖ What is the referral profile?

- Majority of patients from 1 or 2 providers
- Equal distribution from a variety of providers

❖ What is the profile of your primary participant?

- E.g., 68y.o., Caucasian male w/ CABG

❖ What is the profile of your common non-participants

- E.g., 57y.o. Hispanic working woman w/AMI

Baseline Reports

❖ Spend time analyzing the reports and ask questions:

- Does the data in the reports meet your expectations?
- Do the reports make sense, or might there be a problem with data collection or entry?

Future Data Capture Plan

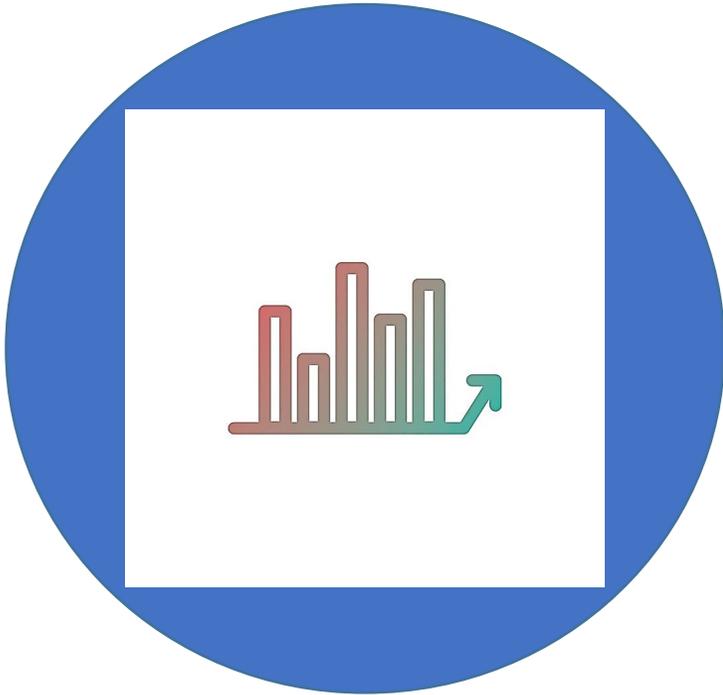
GOAL: Create capacity to track changes and manage eligible patients as you implement automatic referral and enhance care coordination

Components of Data Capture Plan:

- ❖ Are new processes required?
- ❖ Plan for increase in referrals and enrollment with automatic referral with care coordination
- ❖ Are additional resources required, software?
- ❖ Who will handle monitoring and reporting?
- ❖ How will you fill the roles?
- ❖ How will missing data to support automatic referral and care coordination be obtained?
- ❖ When will you have roles and responsibilities assigned?
- ❖ When will you start using the new processes?

Why is Measuring Change Important?

TIME FOR
CHANGE



- ❖ Collecting data helps to measure changes over time and informs decisions and actions
- ❖ Data help the team understand if the changes are working or adjustments are needed
- ❖ Progress can be tracked and communicated throughout the organization to drive continued improvement efforts
- ❖ Maintains accountability and promotes sustainability of change efforts.

Inpatient Referral Measure

Numerator:

Number of eligible inpatients referred to outpatient CR program

Denominator:

Number of inpatients discharged with appropriate ICD-10 codes

– **Exclusions**



Time Period:
Monthly to start

Enrollment Measure

Numerator:

Number of referred inpatients attending initial visit

Denominator:

Number of inpatient referrals received by the CR program

– **Exclusions**



Time Period:
Monthly to start

Additional Measures for TAKEheart



Automatic Referral

- ❖ Time from referral to enrollment
- ❖ Reason physician opted not to refer eligible inpatients

Care Coordination

- ❖ Number of inpatients who receive a CR education visit
- ❖ Patient adherence and completion rates

Tips For Success



Start small and expand over time



Create measures that allow monitoring of highest priority changes



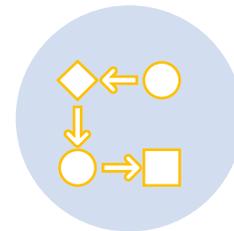
Keep data collection simple



Measure frequently to assess progress over time



Discuss progress and celebrate success



If no success, revisit the process workflows, adjust and try again

Story From The Field: Situation

Scenario –

Your hospital's cardiology clinic has been given approval to design and open a Heart Failure clinic in the coming year. Your program's medical director excitedly tells you that they anticipate an increase in Heart Failure referrals to program as they will now have opportunity to engage chronic HF patients from the community rather than the inpatient setting.

Task –

In preparation the service line administrator has asked you for an action plan on how your Cardiac Rehab program will accommodate the forthcoming growth.

Story From the Field: Diagnosing the Situation

In examining your data, you observe:

- HF dx make up 15% of your total referrals
- HF participation is low, accounting for only 2% of your Phase II volume
- HF patients are primarily referred from inpatient setting
- HF patients average LOS of 28 sessions
- Breakdown of your referring physicians show that 4/9 providers order Cardiac Rehab for HF patients
- There is no automatic referral order set for HF patients
- Current Phase II program is operating at 65% capacity based on staff and telemetry availability.

Opportunity:

- HF referrals from outpatient setting
- Automatic referral could have biggest impact on referral and participation growth
- Your operating capacity is sufficient

Story From the Field: Creating a Plan



IDENTIFY
STAKEHOLDERS



ESTIMATE
VOLUMES



ANALYZE
IMPACT ON
CURRENT
OPERATIONS



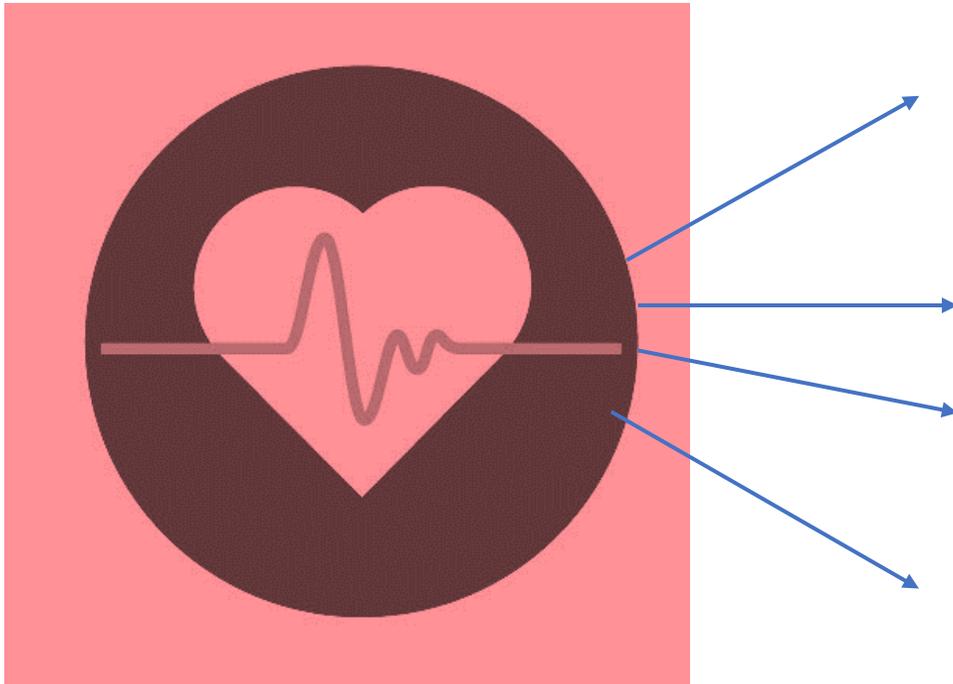
STAFFING &
RESOURCE
MANAGEMENT



DETERMINE
QUALITY DATA
METRICS

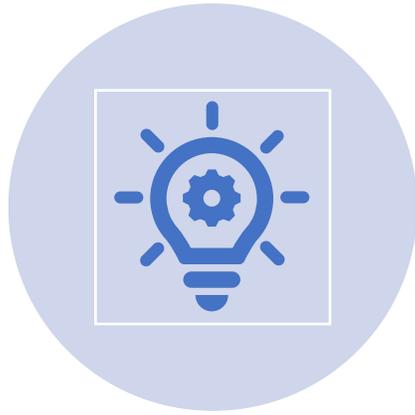
How Will You Know Interventions Are Working?

MONITORING



- Track measures over time
- Create a measure dashboard to communicate progress
- Join a registry to identify, track and manage CR patients (e.g., AACVPR, NCDR)
- Monitor referral behavior for EMR specification changes

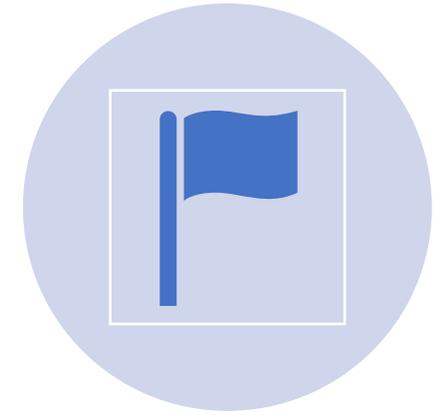
Data Visualization



PROVIDES A CLEAR IDEA OF WHAT THE INFORMATION MEANS BY GIVING IT A VISUAL CONTEXT THROUGH MAPS OR GRAPHS



RENDERS DATA MORE NATURAL TO COMPREHEND AND EASIER TO IDENTIFY TRENDS, PATTERNS AND OUTLIERS

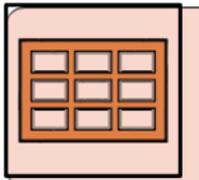


HELPS USERS PAY ATTENTION TO AREAS THAT INDICATE RED FLAGS OR PROGRESS

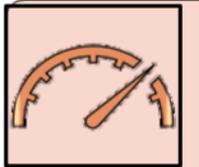
How To Visualize Data?



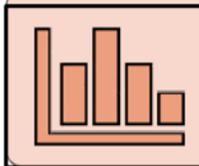
Charts



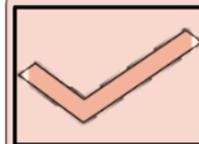
Tables



Dashboards



Graphs



Timelines

Tracking Your Measures

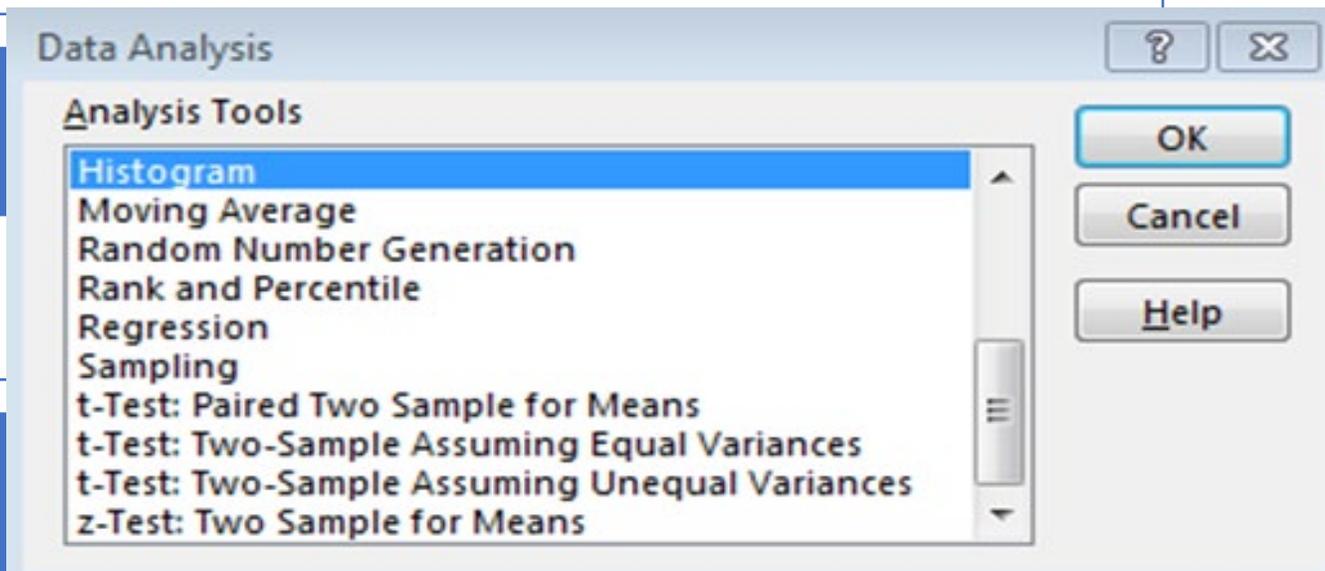
AACVPR Registry

Microsoft Excel

- Data Analysis Tool (Add-on)

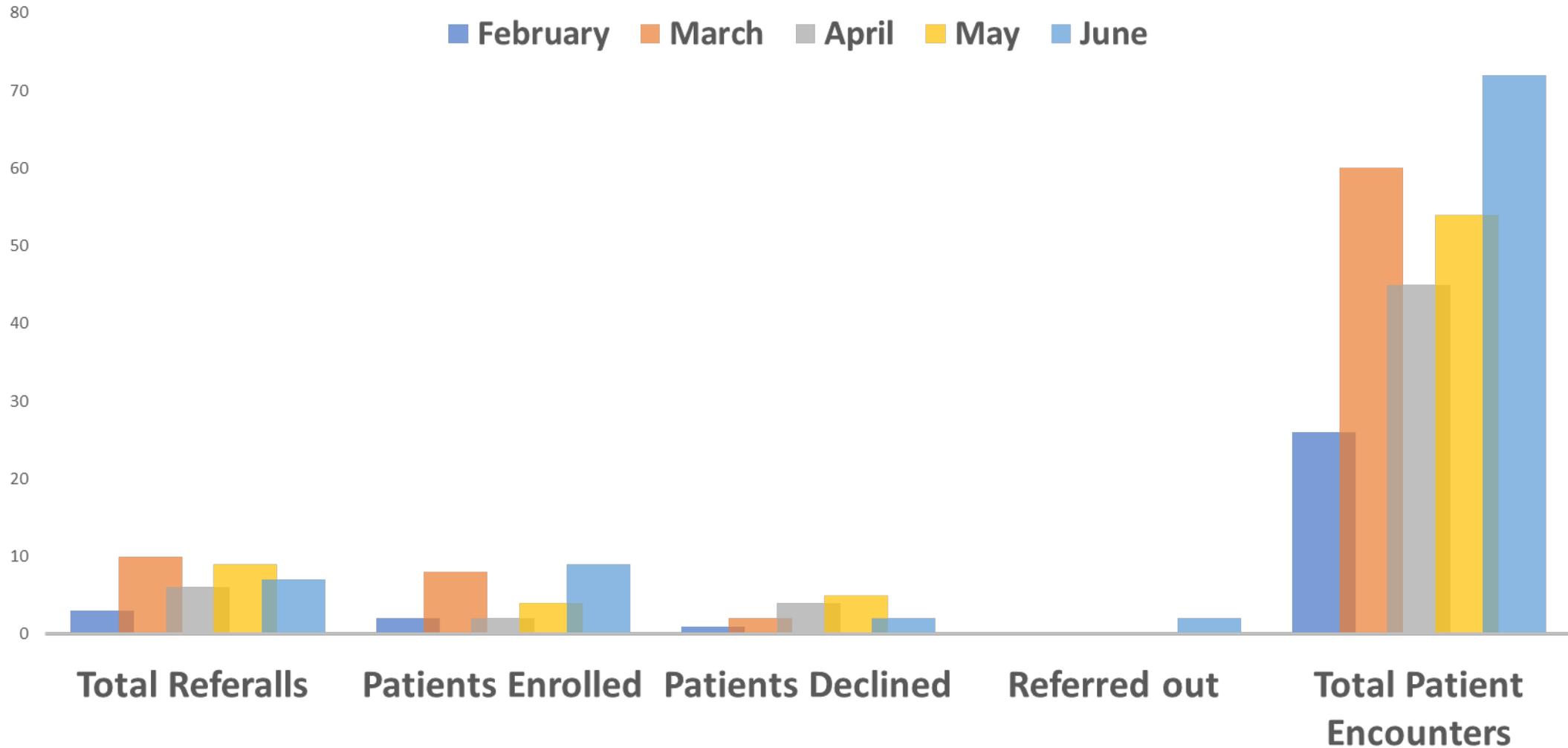
EMR (Epic)

- Work queues
- Revenue Reports



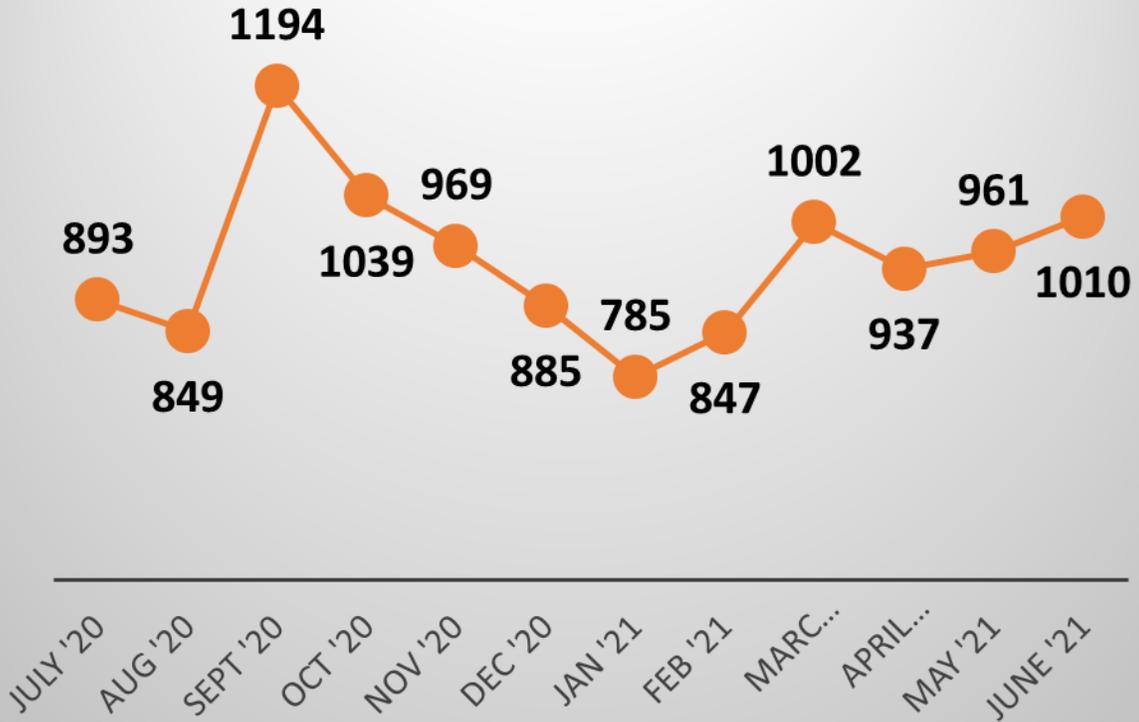
Data Tracking Example

PAD - SET Monthly Program Trends

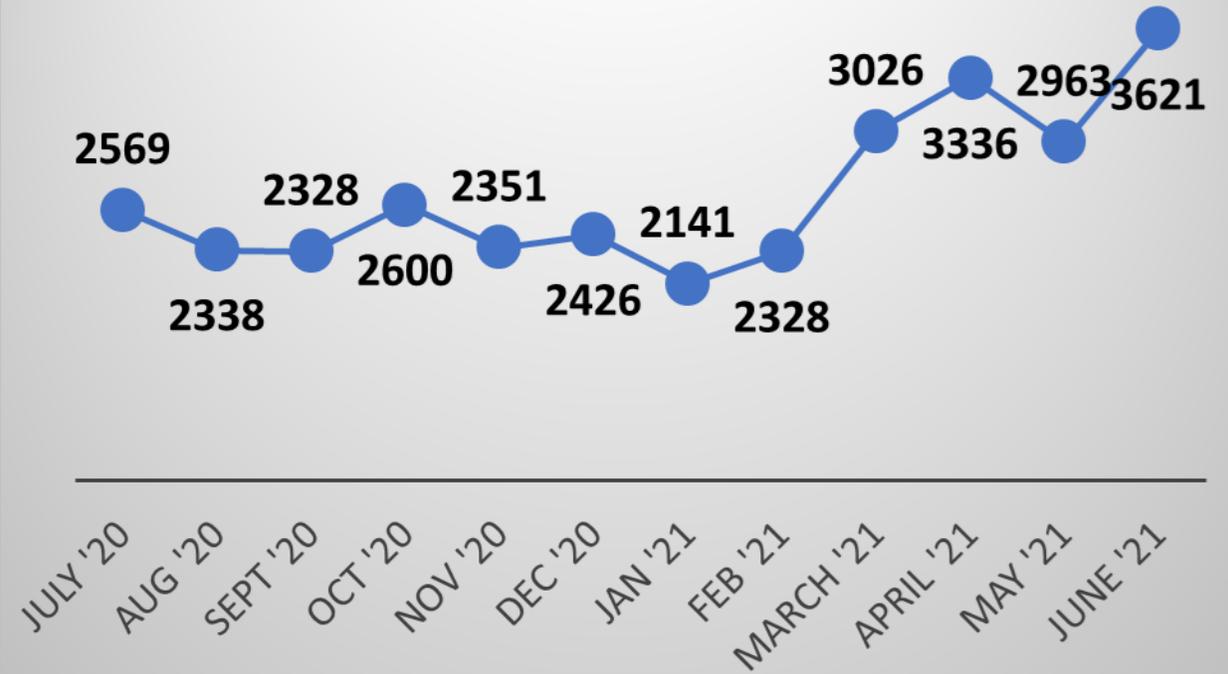


More Data Visualization

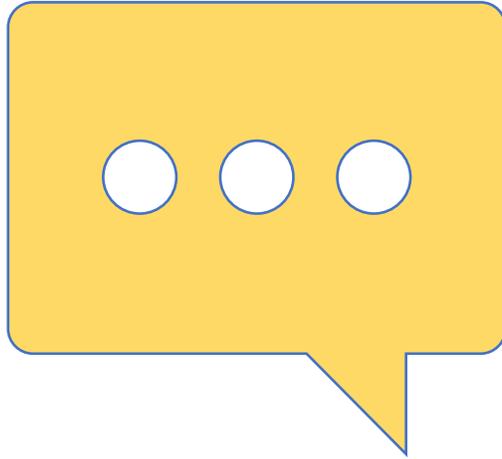
PI Net encounters by month



PII Net encounters by month

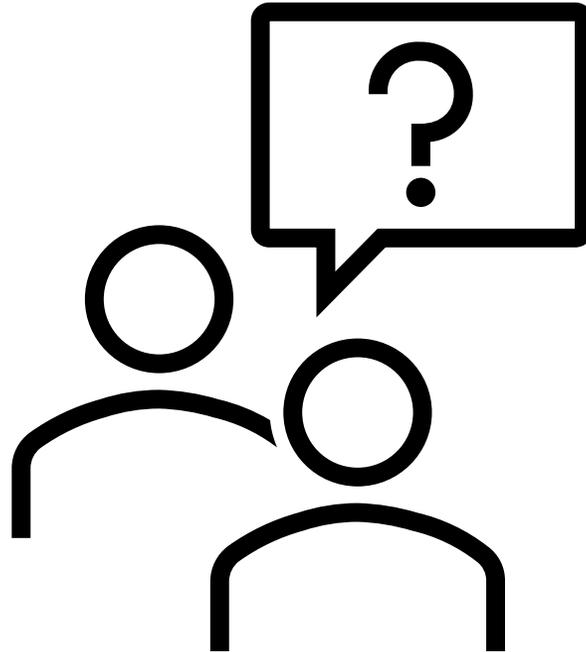


Audience Question



Question: In the chat box, let us know one insight from today's training session that will help you better work with your program's data.

Q&A



Action Steps



Feel free to contact coaches with questions

Continue	Working with your CR Team to establish baseline data Adding tasks and setting targets on the action plan for future data collection to track and monitor changes
Explore	Steps, actions and resources available in the Module 4 Implementation Guide
Discuss	Progress, challenges and solutions in your PH-PAG

Module 5

Building and Implementing a Successful Automatic Referral System

August 19, 2021, 3PM – 4PM ET

Registration link:

<https://abtassociates.webex.com/abtassociates/onstage/g.php?MTID=e4388d3fca8cdca2b9d5c84eb37c42e1d>

- Identify the appropriate patients, at the appropriate time
- Use workflow processes to tailor the system to your EMR
- The automatic referral system is a main step in effectively utilizing your data and should capture all eligible patients

Help us help you!

Please answer the survey questions as you leave the event today