Value Based Care Bootcamp: The Value of Cardiopulmonary Rehab
Karen Edwards, MS, RCEP, RRT, FAACVPR
Tedd Walsh, BS, ACSM-CEP, CCRP, FAACVPR
Marjorie King, MD, FACC, MAACVPR

Disclosures

- Karen Edwards
  - None
- Tedd Walsh
  - None
- Marjorie King
  - None
Objectives

• Panelists will review:
   The big-picture value of Cardiac and Pulmonary Rehab in Healthcare
   What data is important to track, why and how it can be utilized
   Practical strategies to implement value-based care principles in any rehab setting

Healthcare Transformation & Delivery

Core Concepts:

➢ Triple/Quadruple Aim
➢ Population Health Management
➢ Healthcare Reform - Value Based Care Alternate Payment Models
➢ Post Acute Care Preferred Provider Network - Cardiac & Pulmonary Rehab Services
➢ Million Hearts Campaign - Cardiac Rehab Collaborative

The 4 parts of the Quadruple, taken together, provide a useful framework for measurement of value in healthcare.

Cardiovascular & Pulmonary Continuum of Care: A Model of Program Quality & Sustainability

VBC - Cardiac and Pulmonary Services is no longer provided in silos - Shifting to episodic continuum of care as part of population health management
Value Based CR & PR

Key Concepts of VBC

- The patient must be at the center of care
- There must be engagement from all stakeholders
- Value = QUALITY/cost
- Quality benchmarks → workflow changes → improved patient outcomes and decreased spending

Delivery Changes in Care

VBC emphasizes the importance of accountability to deliver good process to improve clinical practice skills (VBC is the value counterpart of Evidence Based Practice).

How can we modify or tailor the way we are currently delivering care to Cardiac & Pulmonary patients to:
- Optimize program outcomes
- Maintain costs
- Optimize efficiencies
- Improve patient & staff experience?
Value Based Care in CR and PR

The AACVPR value based care initiative provides resources which assist cardiac & pulmonary rehabilitation professionals to

- Assign accountability
- Target efficiencies
- Strategize operational transformation
- Restructure the care delivery model
- Implement effective technology solutions in management
- Improve the patient and practitioner experience

https://www.aacvpr.org/Value-Based-Care

The Data

Data Drives Change

"Without data you’re just another person with an opinion." - Edwards Deming, Statistician, Developer of Plan-Do-Study-Act (PDSA)
Value Based Care

DATA → STRATEGIES → IMPROVED PATIENT CARE

- What data to use and where to find it?
- What do to with the data once collected?
- How to implement process change strategies?
- How to measure change/improvement?

What Metrics are Important to Whom & Why?

- **Payers/Hospital Administration**
  - Cost per patient episode
  - Readmission Rate
  - Excess Days in Acute Care (readmission, ED, observation)
  - HCAHPS
  - Mortality

- **Cardiac and Pulmonary Rehab Programs**
  - Number of referrals (including source) vs number enrolled
  - Time to enrollment (wait time)
  - Number of visits
  - Clinical Outcomes/Performance Measures (CR & PR)

What Metrics are Important to Whom & Why?

- **Patients**
  - What is Meaningful to Them? Which Clinical Outcomes (Performance Measures)
  - Cardiac Rehab: Functional Capacity, BP control, Depression, Tobacco Interventions
  - Pulmonary Rehab: Dyspnea, Functional Capacity, Quality of Life
  - Success with self management strategies
  - Satisfaction with healthcare experience
  - Mortality / Mortality (are they getting better)

~The point is, all are intertwined but priorities do not perfectly align~

Value Based Payment Attempts to Link These Metrics
The Value Based Care Committee is aware of the lack of Pulmonary Rehab specific strategies and has been focused on creating turnkeys specifically for this population.

MAKE USE OF REGISTRIES

- We are all busy and sometimes data collections seems like another task piled on our plates but…
- Data doesn’t always have to be collected at the department level.
- Most hospitals are participating in outcome registries and many of those have items directly relating to referrals, attendance, and disease cohorts.
- Check to see what yours is doing, and how you can leverage that to affect change in your department.
AACVPR REGISTRIES

- Compare your data to other cardiac/pulmonary programs.
- Can be sorted by like size, within your state, or all programs.
- Some monitoring systems will upload data for you, negating the need for individual input on a separate website.

DON’T FORGET THE BASICS

Excel/Access

- There is a simplicity and immediateness to using an Excel spreadsheet or generating your own database.
- Some measures may be important to you, but not included in these larger databases.
- These measures can still provide valuable information about your program even if they are not benchmarked against other programs and data.
DON'T JUST COLLECT, ANALYZE!

"Since most of the world's data is unstructured, an ability to analyze and act on it presents a big opportunity." Mikey Shulman, head of machine learning at Kensho, which specializes in artificial intelligence and analytics for the finance and U.S. intelligence communities.

• Find time to sit down and look at your data. Does your hospital have a Decision Support/Business Analysis department to help you out? Many do.
• In what areas do we think we are behind the curve? What changes do we need or want to make? What ideas do we have for program change and does the data support making that change?

WE MADE THE CHANGE, NOW WHAT?

• Remember to look at data points before and after your changes. Is it making a difference?
• Remember it may be as simple as doing chart reviews and marking whether staff is following through on the changes.
• Don't be afraid to change back to the old way if the new way isn't working. Or tweak the process even further and evaluate again.

How did that work out??

• "If we have data, let's look at data. If all we have are opinions, let's go with mine." — Jim Barksdale, former Netscape CEO
4P’s of Change

- **Problem**—clearly stated & defined parameters
- **Potential Solution**—how, who, when
- **Plan**—who execute steps to address situation
- **Policy/Process Change**—make that change

“The greatest discovery of all time is that a person can change his future by merely changing his attitude” – Oprah Winfrey

---

**Plan-Do-Study-Act**

- **Plan** – What do you want to change? What do you foresee happening?
- **Act** – “Final” data presentation. Do you need to adapt or change? Go back to the old way? Keep tweaking?
- **Do** – Implement the change. Can start with a small sample group if needed. Collect data regarding the change.
- **Study** – Analyze the data. Reflect. What did we learn? Did anything unexpected happen?

---

**Practical VBC Strategies**
VBC Strategies

- Questions to consider:
  - What is the problem/issue/concern?
  - What are the barriers?
  - What data are you tracking or need to track?
  - Is your program ready to implement the 4Ps of change?

Increase Referral Rate

- Consider adding CR & PR to hospital order set in EMR
- Email CR & PR paper order to physician offices to be printed as needed
- Meet with hospital inpatient discharge planners
- Promote program to inpatient hospitalists
- Regular rounding with leadership, administration, physicians and non-physician practitioners
- Provide printed brochures/flyers to physician offices & hospital common areas

Increase Enrollment Rate

- Group Orientation
- Rehab Program Video
- Physician by-in / support
- Schedule initial assessment before hospital discharge
- Appointment reminder calls
- Financial aid for co-insurance / co-pay
- Transportation barriers: family support, ride-share, access
- Establish a Philanthropic Fund (Turnkey)
- Group Screening (Turnkey)
- COPD Referral & Enrollment to PR (Turnkey) – NEW
- Reduce the Delay from Discharge to Enrollment (Turnkey)
- Enrollment in CR (Use of Video) (Turnkey)
- PR as a Strategy to Reduce Hospital Readmissions (Turnkey) NEW
- 2018 VBC Webcast: Group Screening Through Value Based Management Principles
- Participation in Cardiac Rehabilitation: Getting To 70% with Million Hearts (2018)
Increase Program Adherence

- Phone call/text/message to patient on same day if no show
- Problem solve transportation barriers
- Offer flexible days/times for attendance
- Hybrid program that includes motivational messages and ability to log home exercise
- Incorporate fun activities into rehab, such as trivia, monthly themes (e.g. Olympics), allow for social time
- Involve primary caregiver/support person in patient’s rehab progression

Connecting with Psychosocial Providers

Patient Barriers to PR program Adherence (Turnkey)

CR Medication Adherence (Turnkey)

2019 VBC Webcast: Tools and Tricks for Medication Adherence in Cardiac and Pulmonary Rehabilitation

Use of Text Messaging and Mobile Apps (Turnkey)

Tobacco Cessation Change Package Website

2017 R2R Webcast: Strategies for Improving Adherence - Day on the Hill Workshop Encore

Increase Program Completion Rate

- Define and clarify what determines “completion” of CR & PR
- Set clear expectations with patient at start of program; consider a goals contract
- Communication between rehab staff and referring provider/PCP regarding symptom & disease management
- Encourage/involve family members/caregivers in rehab process
- Hybrid program that includes data tracking, messages, outcome completion and other options

Diabetes Education CR (Turnkey)

Open Gym Format Schedule (Turnkey)

Establishing Standard of Care for Anxiety and Depression (Turnkey)

Establishing a Standard of Care for Anxiety and Depression Screening in PR (Turnkey)

Implementing Registered Dietitian Nutritionists (RDNs) into PR Programs (Turnkey)

2016 VBC Webcast: Incorporating a Registered Dietician into Your Pulmonary Rehab and Cardiac Rehab

https://www.aacvpr.org/Learn/Learning-Center/Virtual-Rehab-Module-Series

CR Referral Performance Measures in a Quality Improvement System (Turnkey)

Value-Based Care - Where the Rubber Meets the Road (2018)

R2R: The Rubber Hits the Road - An Interactive Session The Shift from Volume to Value Based Care (2017)

2017 R2R Webcast: Matching Program Operations to Meet Increasing Demand for Enrollment in Cardiac Rehabilitation and Improve Quality Outcomes

2017 R2R Webcast: Strategies to Improve Program Value - Using Measures and Registries Effectively


Improve CR & PR Outcomes

- Identify method for data collection
- Define and clarify program and patient outcomes with rehab staff:
  - What data are you tracking and why?
- Share program goals with patients (e.g. bulletin board, handouts)
- Review data quarterly to track progress toward goal and problem-solve with staff on how to improve outcomes
- Review with staff how outcomes are measured:
  - Is the process consistent?
  - Is there room for improvement in data collection?
**Enhance your Exercise Program**

- Don’t be afraid to ask why?
  - Are you doing something just because it has always been done a certain way?
  - What are you doing with the data you collect in the exercise room? What is needed for progression?
- **Consider continuous ECG monitoring vs non-monitored exercise sessions**
- Do you utilize interval training for exercise progression? How about interval training with PR patients?
- Is strength training an option for patients in rehab? What about flexibility & balance training?

- Accelerated Use of CR Sample Schedule (Turnkey)
- ECG Monitoring Based on Clinical Need (Turnkey)
- 2016 ACC Initiation Continuous ECG Telemetry Monitoring in Cardiac Rehabilitation: Matching the Need to the Patient

**Enhance your Education Program**

- How do you currently provide education to rehab patients? Group, small group, 1:1? What is/is not working well?
- Consider alternate methods: videos in rehab, links to videos and content to view from home, weekly message (emailed or though an app), booklet, handout/ffy
- Is the education you provide to patients individualized or cookie-cutter (everyone gets everything)?
- What does it mean to provide “education” (define education)? How can you incorporate education differently?

- https://www.aacvpr.org/Cancer-Patient-Resources
- https://www.aacvpr.org/Pulmonary-Patient-Resources
- https://www.aacvpr.org/Nutrition-Resources
- https://www.aacvpr.org/HeartFailure-Resources
- https://www.heart.org/
- https://www.lung.org/
- https://www.copdfoundation.org/
- Pulmonary Rehabilitation Toolkit: AACVPR and Pulmonary Fibrosis Foundation – 8 module series

**Improve patient care workflow**

- What data does staff need to obtain at each session?
- Do you offer open-gym style or set class times for rehab exercise sessions?
- Does your program allow rehab staff that do patient care to be directly involved with establishing the workflow process?
- How do patients utilize exercise equipment; self choice of modes? Exercise duration?
- What is your check-in/check-out process?
- Consider AACVPR CR & PR Program Certification

- Motivational Interviewing (Turnkey)
- Nutrition Assessment in CR (Turnkey)
- Open Gym: Sample Schedule (Turnkey)
- Pulmonary Rehabilitation/Respiratory Services, It’s Not Cardiac Rehab with a Pulse Oximeter (2019)
- Value-Based Care, Crucial Conversations and State of Mind News & Views
- CMS’ Value Based Programs https://www.cms.gov/Medicare/Quality-Initiative-Patient-Assessment-Instruments/Value-Based-Programs/Value-Based-Programs
- Program Certification: https://www.aacvpr.org/program-certification/faq
Enhance staff satisfaction in rehab

- Provide regular rounding with staff for opportunity to provide feedback on what is/is not working well.
- Time is of the essence. We ALL work hard. Staff want more time to see patients. How do we meet volumes and deliver excellent patient care?
- Consider cutting waste. Is there duplication in charting? What about the TIP? What do you do with the data?
- Encourage AAVPR certifications: Certified Cardiac Rehab Professional (CCRP) & Pulmonary Rehab Certificate
- Encourage AAVPR Membership and involvement in local affiliate

Increase revenue/cost-savings

- Connect with your regional MAC representative for support & guidance
- Be clear on the diagnosis codes and billing procedure codes for CR & PR and how it differs for CMS (Medicare) vs. private insurance.
- Bill for the services that you provide! Do not miss an opportunity to charge for two procedure codes or use multiple codes where warranted. Know the rules!
- Market your program as a cost-savings (especially PR) vs. only revenue generating

Every great dream begins with a dreamer. Always remember, you have within you the strength, the patience, and the passion to reach for the stars to change the world. - Harriet Tubman
Real World Example #1

• **Problem:** Pulmonary rehab referrals were obtained manually by visiting the pulmonology office or having the office fax referrals.
  • Before 10/7/20, the pulmonology medical office associated with our hospital used a different EMR than the hospital. We had to manually retrieve referrals from the office or they would fax them to our department. We would then have to send standing orders back to the referring doctor for signature.
  • This resulted in up to a week’s delay to call a patient for scheduling since we were only retrieving consults weekly.

Real World Example #1 Continued

• **Potential solution:**
  • All medical offices owned by the hospital converted their EMR to the same one used by the hospital on 10/7/20.
  • It was now possible to have orders signed within the EMR.
  • We saw an opportunity to streamline the process for referral and cut out extra paperwork and time.

• **Plan:**
  • We worked with IT, the pulmonology office manager, pulmonary rehab staff to implement a change.
  • The standing orders were reviewed to ensure desired items were still present.
Real World Example #1 Continued

• Process change:
  ▪ The consult went live with the referral automatically coming to pulmonary rehab as soon as the MD/DO entered it into the EMR.
  ▪ The referral now has the standing orders/protocol linked to it, eliminating the need for a second fax to the pulmonology office.
  ▪ Solution revisit: After 2 months of automatic referral, pulmonary MDs stated some referrals weren't being contacted. IT was brought in and it was discovered that 2 pulmonary rehab referrals were active in the EMR.

Real World Example #1 Continued

• Solution revisit cont.:
  ▪ IT was able to discontinue the inappropriate referral and pulmonology office staff was educated about the appropriate referral to use.
  ▪ Final Result: After 6 months, we found from the data the time from referral to initial patient contact went from 8 days to 4 days on average.

Real World Example #2

• What is the problem/issue/concern?
  ▪ Problem—clearly stated & defined parameters
  ▪ Problem Identified: Increasing no show rate in CR & PR

• What are the barriers?
  ▪ Patients are not telling staff ahead or time or calling in same day to cancel their appointment, resulting in no show

• What data are you tracking or need to track?
  ▪ We are tracking no show rate excel spreadsheet

• Is your program ready to implement the 4Ps of change?
  ▪ Yes
Real World Example #2 Continued

- **Potential Solution**—how, who, when
  - All staff continue to track no show rate daily in excel spreadsheet
  - Discussion with leadership led to setting goal of ≤7% no show rate
  - Patients need to have an easy way to contact staff about absence
- **Plan**—who executed steps to address situation
  - Supervisor purchased cell phone for each department site location
  - Supervisor/Leads created cell phone sheet with case manager information, class days/times, attendance goal, number to cancel (call or text) and COVID-19 guidelines & restrictions
  - Business card created with cell phone number and education link

Real World Example #2 Continued

- **Policy/Process Change**—make that change
  - Patient given completed cell phone sheet at initial assessment with business card stapled to sheet
  - Patients encouraged to call cell phone (not number for centralized scheduling) to cancel or reschedule appointments
  - Staff reinforce proper use of cell phone number to call or text about absence/need to reschedule
- **Follow-Up**—was the change effective?
  - Evaluation of quarterly data demonstrated a decreasing trend in no show rate, with 2 program meeting the goal ≤7% no show rate

Feel free to contact us:
Tedd Walsh: 
tedd.walsh@nkch.org
Karen Edwards: 
Karen.Edwards@multicare.org
Questions?

Please complete the program evaluation though the app.

Thank You for attending!