



*Good Things Come in Threes:*  
A Guide to Achieving Medication  
Adherence Quality Measures

Kristen Shuler, MSN, FNP-C  
Shawn Riser Taylor, PharmD, CPP, CDCES  
Appalachian Mountain Community Health Centers

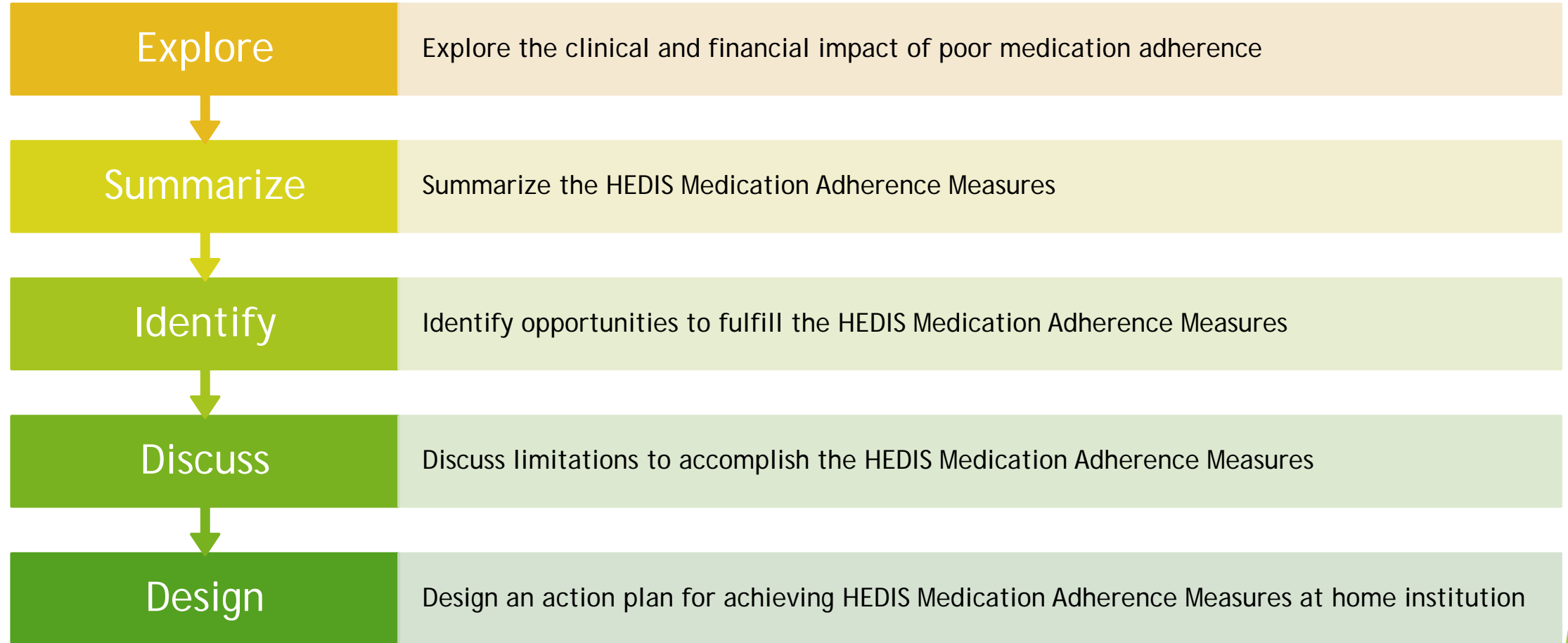


*"To Deliver Timely, Comprehensive And Quality Health Services With Dignity And Respect  
To WNC Residents, Regardless Of A Person's Ability To Pay"*

# Disclosures

▶ None

# Objectives

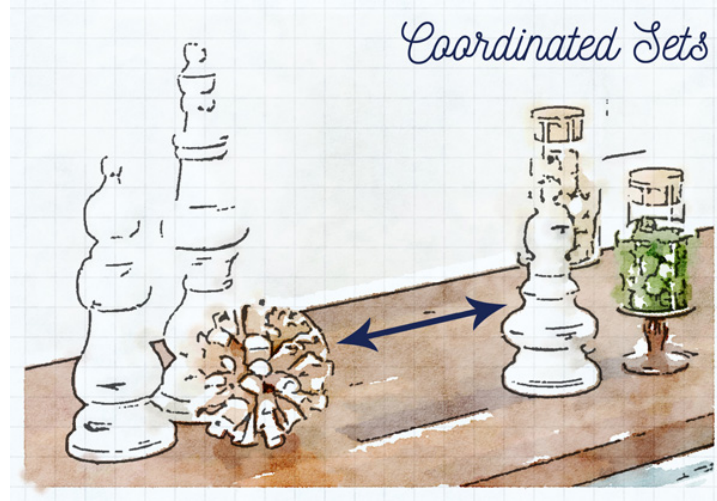




# *Omne Trium Perfectum*

Passion - Integrity - Results - Partnership





**REUSE**   
**REDUCE**  
**RECYCLE**

# Triple-Weighted Medication Adherence Measures

- ▶ Diabetes
- ▶ Hypertension
- ▶ Dyslipidemia



# The Healthcare Effectiveness Data and Information Set

- ▶ Tool used by 90% of US Health Plans (one of the nation's most widely used performance improvement tools)
- ▶ Expanded to medical providers and practices in 2008
- ▶ HEDIS® includes more than 90 measures across 6 domains of care
- ▶ 191 million people enrolled in plans that report HEDIS results



# STARS Performance

- ▶ Medicare Advantage system for measuring quality performance for ACOs
- ▶ Each measure is weighted differently
- ▶ All measures are important, but to perform well, the higher-weighted measures are more impactful on the overall score
- ▶ Without performing well (at least 4 star) on Med Adherence, the ACO cannot achieve target performance

| Measure Description                                     | Weight | Scenario 1  | Scenario 2  | Scenario 3  | Scenario 4  | Scenario 5  |
|---|--------|-------------|-------------|-------------|-------------|-------------|
| Medication Adherence for Hypertension (RAS antagonists) | 3      | 5           | 4           | 4           | 3           | 3           |
| Medication Adherence for Diabetes Medications           | 3      | 5           | 4           | 4           | 3           | 2           |
| Medication Adherence for Cholesterol (Statins)          | 3      | 5           | 4           | 4           | 3           | 2           |
| Breast Cancer Screening                                 | 1      | 4           | 5           | 5           | 5           | 5           |
| Controlling Blood Pressure                              | 1      | 4           | 5           | 5           | 5           | 5           |
| Diabetes Care - Eye Exams                               | 1      | 4           | 5           | 5           | 5           | 5           |
| Diabetes Care - Blood Sugar Controlled                  | 3      | 4           | 5           | 4           | 5           | 5           |
| Diabetes Care - Kidney Disease Monitoring               | 1      | 4           | 5           | 5           | 5           | 5           |
| Care for Older Adults Medication Review                 | 1      | 4           | 5           | 5           | 5           | 5           |
| Care for Older Adults Pain Assessment                   | 1      | 4           | 5           | 5           | 5           | 5           |
| Colorectal Cancer Screening                             | 1      | 4           | 5           | 5           | 5           | 5           |
| Osteoporosis Management in Women who had a Fracture     | 1      | 4           | 5           | 4           | 5           | 5           |
| Statin Therapy for Patients with Cardiovascular Disease | 1      | 5           | 4           | 4           | 5           | 5           |
| Statin use in Persons with Diabetes                     | 1      | 5           | 4           | 4           | 5           | 5           |
|   | 22     |             |             |             |             |             |
| <b>Aggregate Star Rating</b>                            |        | <b>4.50</b> | <b>4.50</b> | <b>4.32</b> | <b>4.18</b> | <b>3.91</b> |

# Financial Impact Example - 3000 MA Patients

| STARS RATING | PAYOUT PPPY | TOTAL     |
|--------------|-------------|-----------|
| <3           | \$0         | \$0       |
| 3            | \$62        | \$186,000 |
| 3.25         | \$70        | \$210,000 |
| 3.5          | \$80        | \$240,000 |
| 3.75         | \$90        | \$270,000 |
| 4            | \$100       | \$300,000 |

# HEDIS Medication Adherence Triple-Weighted Measures

| Measure Description                                     | Weight    | Scenario 1  | Scenario 2  | Scenario 3  | Scenario 4  | Scenario 5  |
|---|-----------|-------------|-------------|-------------|-------------|-------------|
| Medication Adherence for Hypertension (RAS antagonists) | 3         | 5           | 4           | 4           | 3           | 3           |
| Medication Adherence for Diabetes Medications           | 3         | 5           | 4           | 4           | 3           | 2           |
| Medication Adherence for Cholesterol (Statins)          | 3         | 5           | 4           | 4           | 3           | 2           |
| Breast Cancer Screening                                 | 1         | 4           | 5           | 5           | 5           | 5           |
| Controlling Blood Pressure                              | 1         | 4           | 5           | 5           | 5           | 5           |
| Diabetes Care - Eye Exams                               | 1         | 4           | 5           | 5           | 5           | 5           |
| Diabetes Care - Blood Sugar Controlled                  | 3         | 4           | 5           | 4           | 5           | 5           |
| Diabetes Care - Kidney Disease Monitoring               | 1         | 4           | 5           | 5           | 5           | 5           |
| Care for Older Adults Medication Review                 | 1         | 4           | 5           | 5           | 5           | 5           |
| Care for Older Adults Pain Assessment                   | 1         | 4           | 5           | 5           | 5           | 5           |
| Colorectal Cancer Screening                             | 1         | 4           | 5           | 5           | 5           | 5           |
| Osteoporosis Management in Women who had a Fracture     | 1         | 4           | 5           | 4           | 5           | 5           |
| Statin Therapy for Patients with Cardiovascular Disease | 1         | 5           | 4           | 4           | 5           | 5           |
| Statin use in Persons with Diabetes                     | 1         | 5           | 4           | 4           | 5           | 5           |
| <b>Aggregate Star Rating</b>                            | <b>22</b> | <b>4.50</b> | <b>4.50</b> | <b>4.32</b> | <b>4.18</b> | <b>3.91</b> |



# How is Adherence Measured?

- ▶ Proportion of Days Covered (PDC)
  - ▶ Adherence  $\geq$  80% PDC
  - ▶ Non-adherence  $<$ 80% PDC

What are some situations in your clinic where pharmacies may not be capturing claims data?

## Captured by pharmacy claims data



# Pharmacy Claims Data

Drug name,  
dosage form,  
strength

Fill date,  
days-supply

# Medication Adherence

Passion - Integrity - Results - Partnership



# Medication Adherence

- ▶ Extent to which a person's medication-taking behavior corresponds with agreed upon treatment recommendations by the healthcare provider
  - ▶ What to take
  - ▶ When to take
  - ▶ How to administer



# For Every 100 prescriptions written....








# Medication Adherence

- ▶ List reasons patients may not consistently take medications as prescribed.
  - ▶ Intentional
  - ▶ Unintentional



JJ is a 62-year-old female with diagnoses of diabetes, heart failure, dyslipidemia, osteoporosis and hypothyroidism.

|                      |   |
|----------------------|---|
| Carvedilol 3.125mg   | Take one tablet by mouth twice daily      |
| Lisinopril 40mg      | Take one tablet by mouth daily            |
| Glipizide 10mg       | Take one tablet by mouth twice daily      |
| Semglee 100 u/mL     | Inject 24 units subcutaneously once daily |
| Rosuvastatin 20mg    | Take one tablet by mouth daily            |
| Levothyroxine 88mcg  | Take one tablet by mouth every morning    |
| Caltrate + Vitamin D | Take one tablet twice daily               |
| Fosamax 70mg         | Take one tablet by mouth once weekly      |
| Furosemide 20mg      | Take one tablet by mouth daily            |
| Rybelsus 7mg         | Take one tablet by mouth every morning    |
| Metformin 500mg      | Take one tablet by mouth twice daily      |



# Why are people on so many medications?

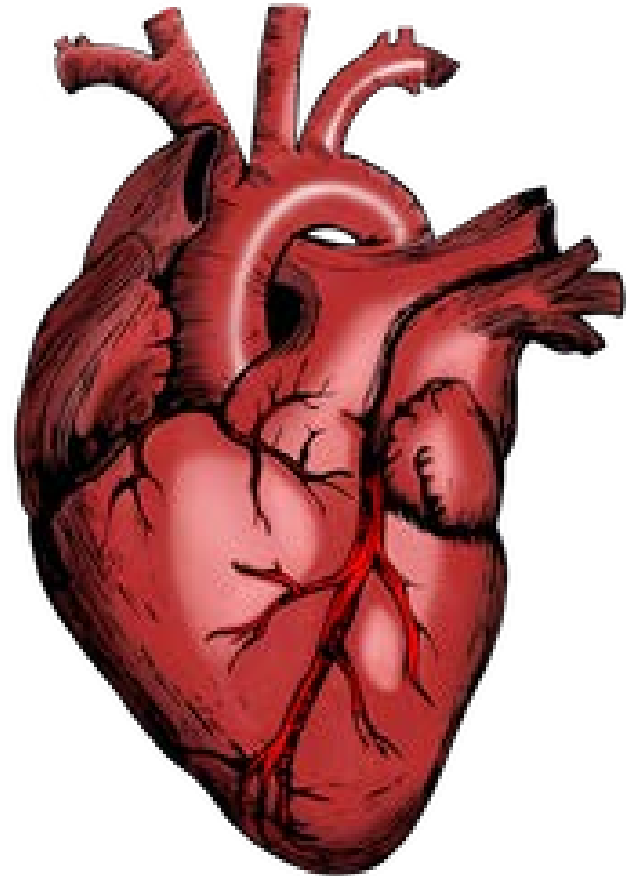
A collection of medical supplies is arranged on a dark surface. From left to right, there is a blister pack of white pills, a small round container of pills, a white pill bottle cap, a white digital glucose meter with a screen and 'S' and 'M' buttons, a clear insulin pen, and a white insulin pen. The text 'Why are people on so many medications?' is overlaid in a light green color at the top left.

# Why are people on so many medications?

- ▶ Treatment resistance
- ▶ Complex pathophysiology

# Why are people on so many medications?

- ▶ Post-cardiovascular event
  - ▶ Statin
  - ▶ Beta-blocker
  - ▶ ACEi/ARB
  - ▶ Anti-platelet and/or anti-coagulant





# Clinical Impact of Poor Medication Adherence

- ▶ Longer duration of medication therapy lends to poor medication adherence
  - ▶ Adherence to statin therapy

50% at 3 months

40% at 12 months

**Discontinuation of statin therapy  
within 1 year increases risk of death  
by 25%**



# Financial Impact of Poor Medication Adherence

- ▶ **Two-thirds** of medication-related hospitalizations are linked to poor medication adherence in the US
  - ▶ \$100 billion spent annually



# Factors that Influence Medication Adherence

|                             |                              |
|-----------------------------|------------------------------|
| Cognitive health            | Health literacy level        |
| Health professional contact | Depression                   |
| Social support              | Disease/medication education |
| Financial cost              | Insurance status             |
| Language/communication      | Dosage form                  |
| Polypharmacy                | Regimen complexity           |





Identify 3 ideas to improve  
medication adherence at your  
health center.



# Developing a Plan to Improve Medication Adherence

## 1. Assemble a team

- a) Clinicians
- b) Support Staff
- c) Administrators
- d) Patients
- e) Outside partners





# Developing a Plan to Improve Medication Adherence

## 2. Collect information

- a) How are we doing now?
- b) What factors influence adherence in our population?
- c) What are we doing now?
- d) What else have we already tried?
- e) Brainstorm ideas
- f) Assess feasibility of ideas



# Developing a Plan to Improve Medication Adherence

3. Gather list patients with poor medication adherence
  - a) Accountable care organization platforms
  - b) Third party payer platforms
  - c) Community pharmacy reports



# Developing a Plan to Improve Medication Adherence

## 4. Establish workflow(s)

- a) Prioritize patients
- b) Establish process for problem identification (why?)
- c) Triage to appropriate resources
- d) Align with other policies, procedures, and protocols
- e) PDSA

# Best Practice Pearls

Passion - Integrity - Results - Partnership



# Best Practice Pearls

- ▶ Education
  - ▶ Same day as new medication start or medication change
  - ▶ Intentional follow-up consults
  - ▶ Disease state & lifestyle change specialists



# Best Practice Pearls

- ▶ Pharmacy interventions
  - ▶ Know your community pharmacist
  - ▶ 90-day supply prescriptions
  - ▶ Automatic, synchronized refills
  - ▶ Pill packs, organizers
  - ▶ Co-pay assistance





# Best Practice Pearls



Treat underlying diseases



Telehealth consults



Digital platforms



Financial incentives

Passion - Integrity - Results - Partnership

Basit, et al. Gen Hosp Psychiatry. 2020;62:28-36.; Thakkar, et al. JAMA Intern Med. 2016;176:340-49.; Bingham, et al. Ann Pharmacother. 2021 May;55(5):637-49.



# Best Practice Pearls

- ▶ Interdisciplinary team
- ▶ Timely consults
  - ▶ Transitions of care
  - ▶ New diagnoses, medications
- ▶ Home visits



Develop a 3-item Action Plan to  
improve medication adherence  
at your health center.


# Medication Adherence *of the Future*

- ▶ Polypills
- ▶ Ingestion monitoring
- ▶ 3-D printing
- ▶ Pharmacogenomics



Passion - Integrity - Results - Partnership

Thom, et al. JAMA. 2013 Sep 4;310(9):918-29.; Castellano, et al. J Am Coll Cardiol. 2014 Aug 12;64(6):613-21.; Selak, et al. BMJ. 2014 May 27;348:g3318.; Alipour, et al. Pharmacy (Basel). 2020 Jun 16;8(2):103.; Chai, et al. AIDS Behav. 2021 Jun;25(6):1661-74.



JJ is a 62-year-old female with diagnoses of diabetes, heart failure, dyslipidemia, osteoporosis and hypothyroidism.

|                      |   |
|----------------------|---|
| Carvedilol 3.125mg   | Take one tablet by mouth twice daily      |
| Lisinopril 40mg      | Take one tablet by mouth daily            |
| Glipizide 10mg       | Take one tablet by mouth twice daily      |
| Semglee 100 u/mL     | Inject 24 units subcutaneously once daily |
| Rosuvastatin 20mg    | Take one tablet by mouth daily            |
| Levothyroxine 88mcg  | Take one tablet by mouth every morning    |
| Caltrate + Vitamin D | Take one tablet twice daily               |
| Fosamax 70mg         | Take one tablet by mouth once weekly      |
| Furosemide 20mg      | Take one tablet by mouth daily            |
| Rybelsus 7mg         | Take one tablet by mouth every morning    |
| Metformin 500mg      | Take one tablet by mouth twice daily      |



*Good Things Come in Threes:*  
A Guide to Achieving Medication  
Adherence Quality Measures

Kristen Shuler, MSN, FNP-C  
Shawn Riser Taylor, PharmD, CPP, CDCES  
Appalachian Mountain Community Health Centers