USF HEALTH

UNIVERSITY OF SOUTH FLORIDA

# GERIATRIC WORKFORCE ENHANCEMENT PROGRAM (GWEP)

# FACULTY DEVELOPMENT MASTERWORKS SERIES

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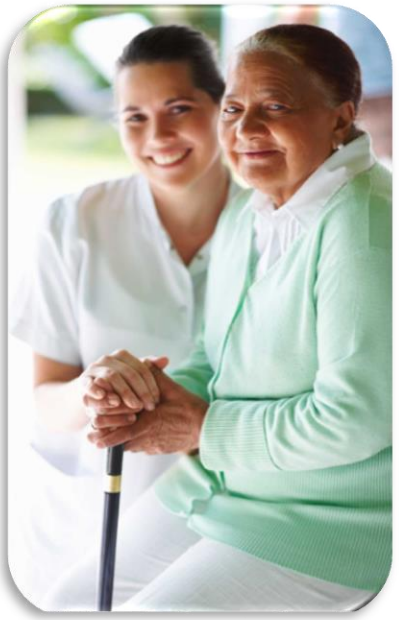

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# An Evolving Paradigm of Geriatrics and Managed Care

Alan R. Smith MD

USF Grand Rounds

5/11/2017

# Learning Objectives

- The participants will gain a broader understanding of how managed care may:
  - Contribute to improving the quality of care for geriatric patients
  - Contribute to improving medication adherence in the geriatric population
  - Identify and address social determinants of health
- Added bonus…Pearls of Wisdom

Every patient is like an autobiography and a mystery novel at the same time

Physicians must be constant readers and detectives to be at their best

# Case Study

- Pleasant, cooperative 67-year-old Caucasian female with a long history of insulin dependent diabetes mellitus, obesity, hyperlipidemia, and hypertension
- Patient lives alone and performs activities of daily living without assistance
- Myocardial infarction with associated heart failure in the past 6 months
- Stable since then on ace-inhibitor, selective beta-blocker, diuretic, statin therapy, and insulin
- Outpatient labs and cardiac studies stable post MI, Ejection Fraction 40%
- Presents abruptly to the hospital emergency department in acute pulmonary edema
- Treated with IV furosemide, oxygen, admission to the CCU and all signs of heart failure resolved within 2-4 hours
- No evidence of a new MI, arrhythmia, pulmonary embolus or change in ejection fraction after resolution of the pulmonary edema
- Patient discharged home on adjustment of medications, trial of brand name Lasix, and Low Salt Diabetic Diet reviewed

# Case Study

- Two weeks later, the patient  abruptly presents to the hospital emergency department in acute pulmonary edema
- Treated with IV furosemide, oxygen, admission to the CCU and all signs of heart failure resolve within 2-4 hours
- No evidence of a new MI, arrhythmia, pulmonary embolus or change in ejection fraction after resolution of the pulmonary edema
- Patient discharged home on adjusted medications, and Low Salt Diabetic Diet reviewed again
- One week later, she returns to the office for a follow-up visit
- Dietary indiscretion #1 identified!

# Case Study

- Three weeks later, the patient  abruptly presents to the hospital emergency department in acute pulmonary edema
- Treated with IV furosemide, oxygen, admission to the CCU and all signs of heart failure resolve within 2-4 hours
- No evidence of a new MI, arrhythmia, pulmonary embolus or change in ejection fraction after resolution of the pulmonary edema
- Diet reviewed in excruciating detail
- Mystery solved!

# Primum Non Nocere

# First, Do No Harm

# After you do everything Right, Ask yourself what can go Wrong

# No Surprises

Don’t stop searching for the answer of what went Wrong just because you did everything Right

# Managed Care and Quality Measures

# HEDIS & Medicare Stars Measures


**H**=HealthCare

**E**=Effectiveness

**D**=Data

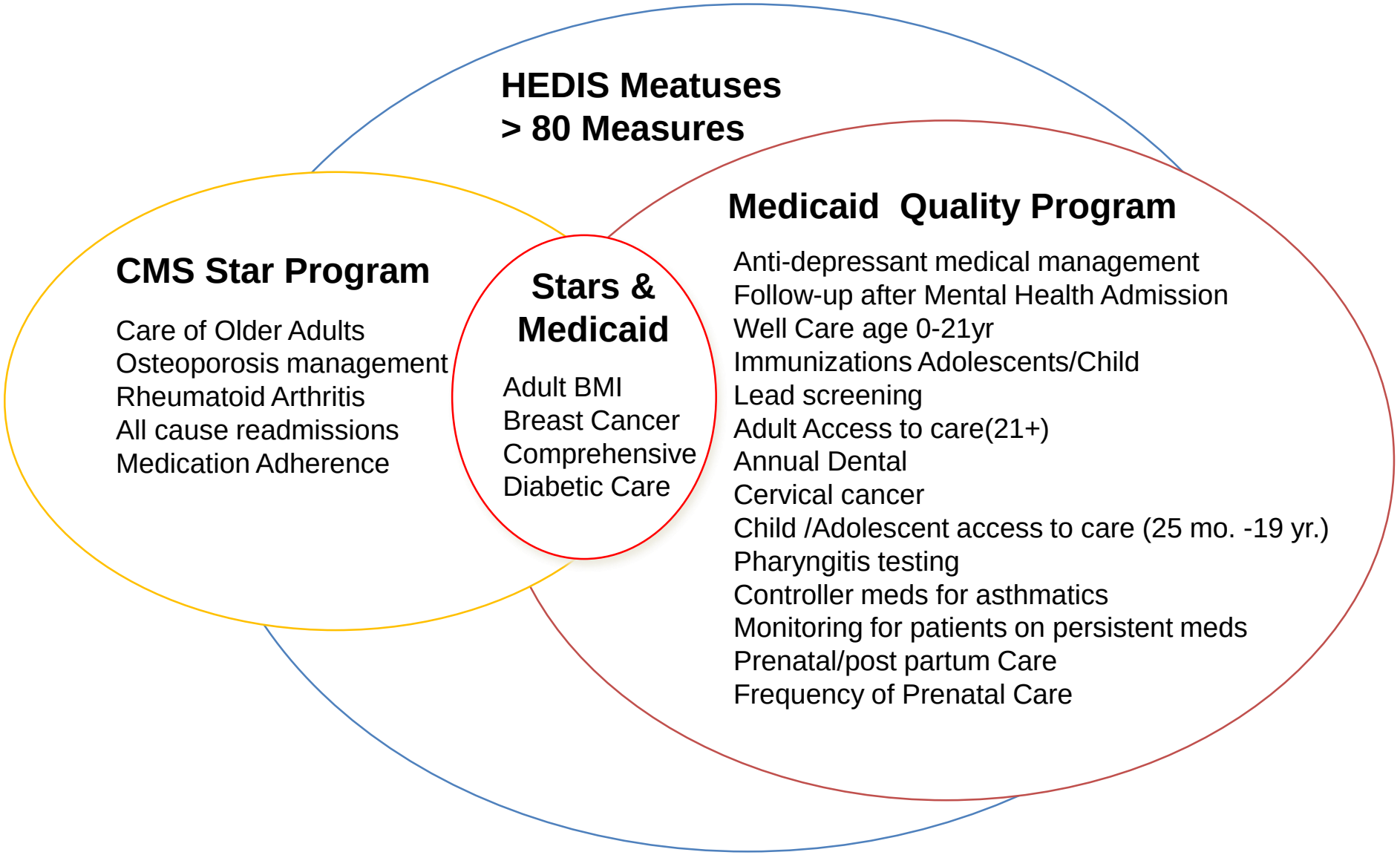
**I**=Information

**S**=Set

# What is HEDIS ?

- HEDIS is a set of standardized performance measures designed to provide information to various consumers on how well a health care plan is performing, allowing for equal comparison across health plans across the nation
- Offers over 80 measures for health plans to evaluate quality
- HEDIS® is a registered trademark of the NCQA
- NCQA utilizes HEDIS data for Commercial Insurance, Medicare and Medicaid Plans annual accreditation review
- Used by many states in evaluating Medicaid plans to pay for quality
- Used by CMS to evaluate and ensure Medicare members are receiving the best care possible

# HEDIS Measures



# HEDIS

- Breast Cancer Screening
- Colorectal Cancer Screening
- Adult BMI Assessment
- Care for Older Adults -- Medication Review
- Care for Older Adults -- Functional Status Assessment
- Care for Older Adults -- Pain Screening
- Osteoporosis Management in Women who had a Fracture
- Diabetes Care -- Eye Exam
- Diabetes Care -- Kidney Disease Monitoring
- Diabetes Care -- Blood Sugar Controlled
- Controlling Blood Pressure
- All-Cause Readmissions

# Clinical Initiatives

- Member Incentive Program
- Provider Incentive Program
- Provider Bonus for Improving Medication Adherence
- Provider Bonus for Appropriate 90 Day Refills
- Patient Care Advocates Assist Physician Offices
- Quality Improvement Practice Advisors
- In Home Assessments
- Mobile Strategy:
  - Diabetic Retinal Exams
  - In Home DEXA scans
  - In Home Assessments
  - Health Fair Bus – Mobile Mammography

# Managed Care and Medication Adherence

# Patient Safety Measures

<u>High-Risk Medications (HRMs)</u>

The percentage of members ≥ 65 who fill a high-risk medications

- Common examples:
  - Muscle relaxants (carisoprodol, cyclobenzaprine)
  - Antihistamines (diphenhydramine, hydroxyzine)
  - Sleeping aids (zolpidem, zaleplon)
    - Chronic use: > 90 days
  - Digoxin
    - Doses > 125 ug/day

<u>Adherence</u>

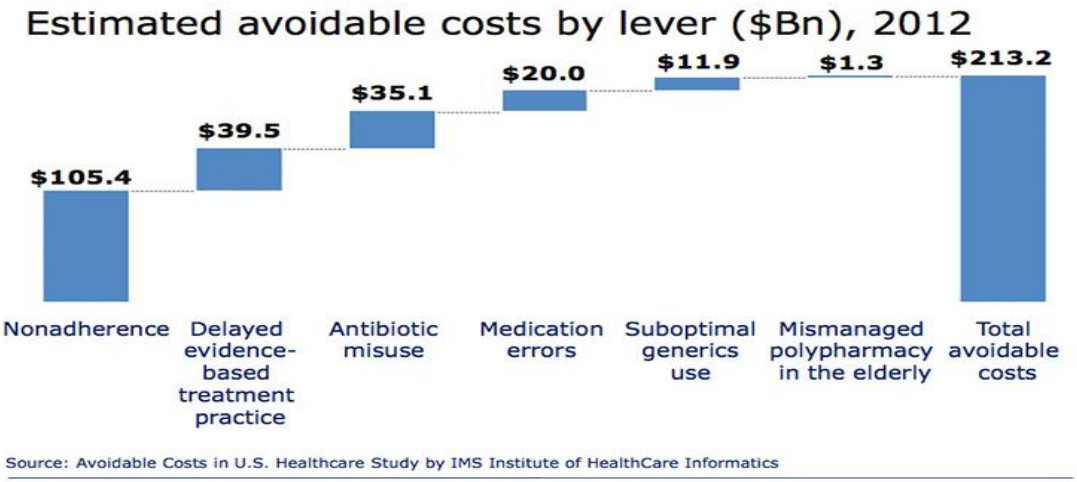
The percentage of members with a proportion of days covered (PDC) > 80%

- Three separate measures by drug class
  - Diabetes Medications
  - Hypertension Medications
  - Cholesterol Medications

$$PDC = \frac{\text{total days supplied}}{\text{\# of days in reporting interval}}$$

# National Perspective

- National findings indicate that increasing adherence leads to better outcomes and decreased healthcare costs
- Between $100 and $300 billion of avoidable health care costs have been attributed to non-adherence in the US annually, representing 3% to 10% of total US health care costs[1, 2]

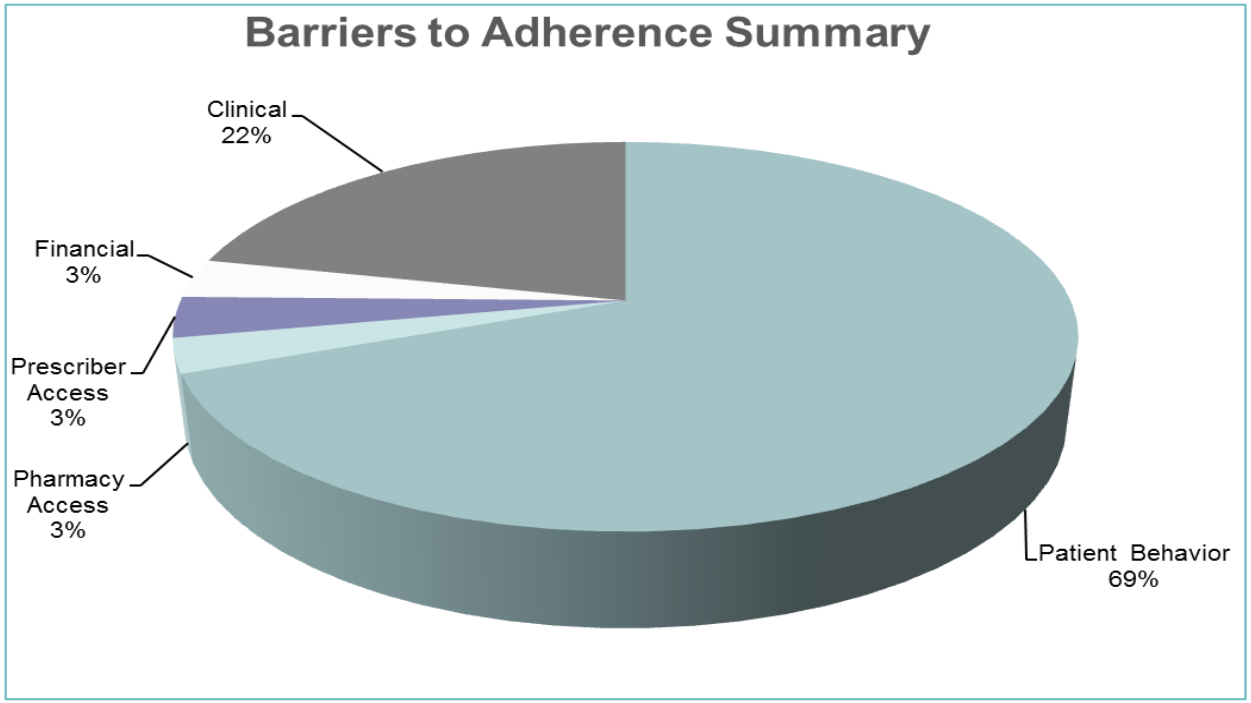



- An estimated 10% of hospitalizations in older adults may be caused by medication non-adherence[3, 4]


(1) IMS Institute for Healthcare Informatics. Avoidable costs in US health care. 2013. Available at: http://www.imshealth.com/deployedfiles/imshealth/Global/Content/Corporate/IMS%20Institute/RUOM-2013/IHII_Responsible_Use_Medicines_2013.pdf. Accessed February 26, 2015.
(2) Benjamin RM. Medication adherence: Helping patients take their medicines as directed. *Public Health Rep*. 2012;127(1):2–3.
(3) Sokol MC, McGuigan KA, Verbrugge RR, Epstein RS. Impact of medication adherence on hospitalization risk and health care cost. *Med Care*. 2005;43(6):521–530.
(4) Vermiere E, Avonts D, Van Royen P, Buntinx F, Denekens J. Context and health outcomes. *Lancet*. 2001;357(9273):2059–2060.

# Member Self-Reported Barriers to Adherence

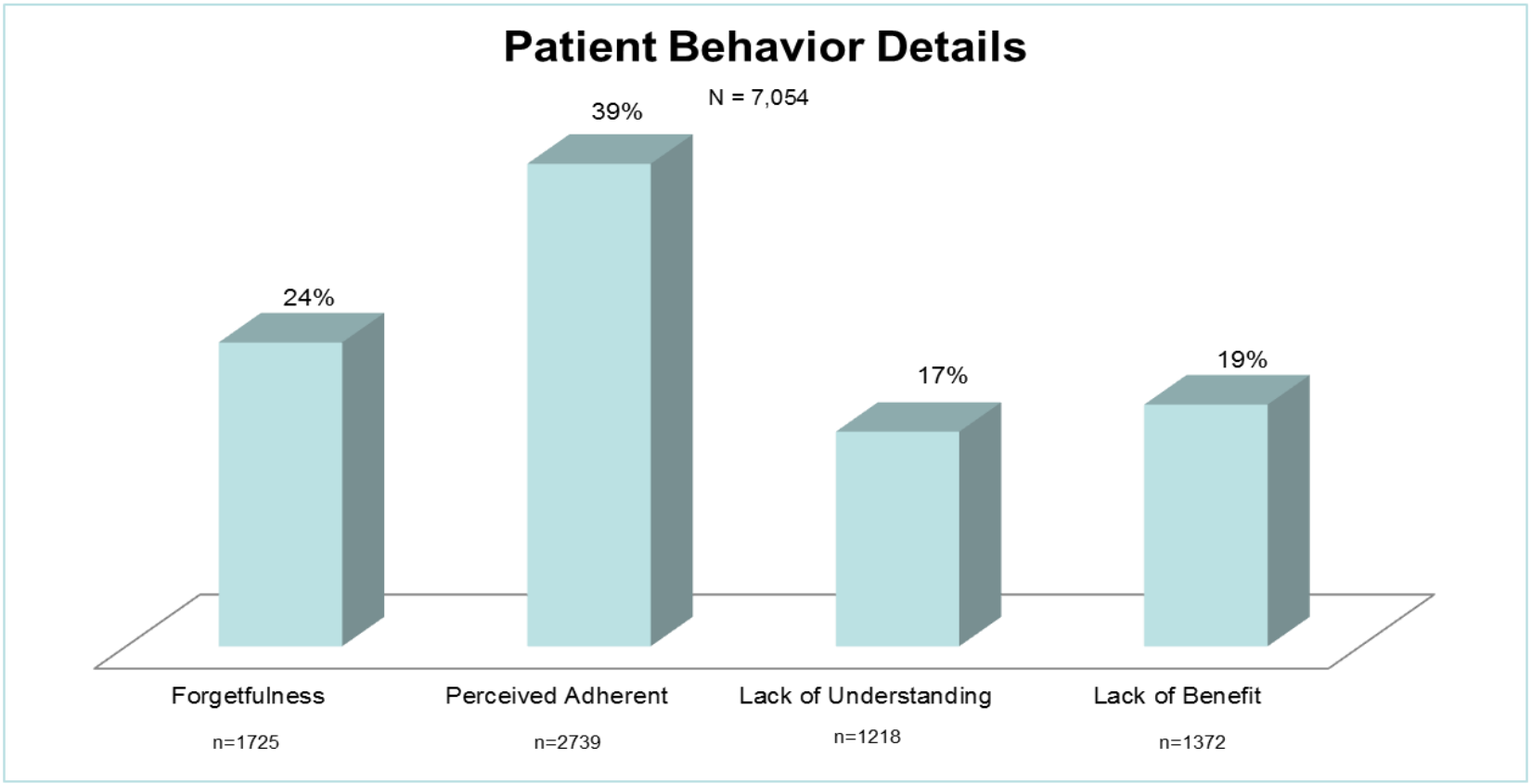
- Barriers to adherence were documented directly from member conversations
- Patient Behavior represented the most significant barrier (69%) to medication adherence as reported by our members
- Clinical Barriers (22%) includes side effects, polypharmacy, medication discontinuation and dose changes by prescriber.




Source: Member responses documented during the adherence interventions – MTM, Live clinician calls, IVR interactive calls, CAREConnects.

# Member Self-Reported Barriers to Adherence

- Member responses demonstrated that their perception plays the greatest role in adherence
- Over a third of members stated they were adherent when claim data shows otherwise (at or below 80% PDC)




Source: Member responses documented during the adherence interventions – MTM, Live clinician calls, IVR interactive calls, CAREConnects.

# Managed Care Adherence Efforts

| Name | Description |
|---|---|
| RxAnte - predictive modeling | RxAnte<br>(1) Identifies appropriate members for interventions<br>(2) Evaluates effectiveness of interventions<br>(3) Provides vendor ready intervention files<br>(4) Provides population view reports and Star Rating forecasts |
| Adherence Letters - Program Introduction | All adherence program members are initially mailed a letter explaining the program and the interventions that they can expect |
| Adherence Letters - General Adherence | Member letters offering common adherence barriers and tips for improvement |
| Live Adherence Calls | Live telephonic consultations to members from the MTM call center. Pharmacists and supporting staff identify member barriers and offers customized solutions. |
| Adherence IVR Calls - Barriers | Eliza IVR (interactive voice recognition) calls to members to identify adherence barriers, and offer adherence tips and solutions. Includes transfer to mail order if member requests |
| Adherence IVR Calls - Late Refill reminder | Eliza IVR calls to members late refilling a medication (daily). A direct transfer to the dispensing pharmacy is offered |
| Adherence - email reminders | Members may opt into this Eliza run program to receive periodic emails reminding them of pending refills, along with various helpful hints regarding adherence gathered during a previous outreach. |
| Adherence - text reminders | Members may opt into this Eliza run program to receive periodic texts gathered during a previous outreach reminding them of pending refills |
| Med Synchronization | Members in pharmacy network will receive point of sale medication counseling and medication synchronization |
| Point of Sale (POS) Pharmacy Counseling | Network pharmacists provide face-to-face adherence counseling |
| Quality Pharmacy NIP Visits | Network Improvement Process (NIP) face-to-face visits by state field pharmacy managers and directors to discuss quality care gaps. |
| Quality NIP Letter Campaign | Quarterly provider letters mailed by Rx quality team which detail members' pharmacy care gaps (adherence, HRM, and diabetes treatment) |
| EOB Teaser/Alerts | Colored 1-page insert in EOB to non-adherent members |
| CAREConnects | Members calling customer service line are routed to a discussion regarding adherence (after call resolution) if they are flagged with an adherence care gap |
| Care Gap display | Displaying of Care Gaps on the Provider Portal for case and disease state management access |
| Formulary Tier Assessment | Assessing formulary structure to ensure that adherence medication are on preferable tier when possible |
| Mail Order Benefits Incentive | Members may receive savings depending on plan and status |
| Member and Provider Newsletter | Articles in member and provider newsletters regarding medication adherence |

# How Providers Can Improve Adherence

- Review patient medications at each visit
- Perform medication reconciliation after inpatient treatment
- Discuss barriers to remaining adherent
- Promote 90 days supplies for chronic medications
- Manage patients' expectations around medication side effects and necessity
- Work with pharmacy or insurance tools when available to enhance your understanding of the patient's adherence to their medication regimen
- Managed Care Tools
  - Manageable lists of high priority patients needing adherence assistance
  - Real-time pharmacy data on focused medications
  - Flags for potential 30 to 90 days conversion opportunities
  - Provider Portals
  - Medication Therapy Management Programs (MTM)

# Medication Therapy Management

- Comprehensive review of patient's medications
- Improve the patient's understanding of the conditions for which they are taking medications, and how the medications work to improve or stabilize their conditions
- Improve the patient's understanding of the potential side effects of their medications
- Improve the patient's understanding of the importance of taking their medications regularly, and notifying their physician of any side effects or concerns
- Increase awareness that they can ask their pharmacist questions about their medications as well
- Address polypharmacy issues
- Perform medication reconciliation if applicable
- One Plan's experience showed an improvement in medication adherence of 7% in diabetics, 10% for hypertensives, 9% for statin use
- Similarly, a managed care polypharmacy program (>10 medications) completed 4,267 reviews, finding 3,858 medication therapy problems and resolving 52.7%

# Social Determinants of Health

# Determinants of Health

- The range of personal, social, economic, and environmental factors that influence health status are known as determinants of health
- Determinants of Health fall under several broad categories:
- Policymaking
- Social factors
- Health services
- Individual behaviors
- Biology and genetics
- It is the interrelationships among these factors that determine individual and population health
- Interventions that target multiple determinants are most likely to be effective
- Determinants of health reach beyond the boundaries of traditional medicine and public health sectors, such as education, housing, transportation, agriculture, and environment

# Policymaking

- Policies at local, state and federal levels affect individual and population health
- Raising taxes on tobacco and anti-smoking advertising can improve population health by reducing the number of people using tobacco products
- 1966 Highway Safety Act and the National Traffic and Motor Vehicle Safety Act authorized the Federal Government to set and regulate standards for motor vehicles and highways leading to improved car safety standards such as seat belts and air bags, and reduced rates of injuries and deaths from motor vehicles
- Food labeling regulations
- Calorie count laws for restaurants
- Alcohol laws and taxes
- Drug laws
- Bans on certain types of junk food in schools or vending machines
- Health and safety laws such as building codes and occupational safety/health laws

# Social Determinants

- Social Determinants of health reflect social factors and physical conditions in the environment in which people are born, live, learn, play, work and age
  - Availability of resources to meet daily needs, such as safe housing & local food markets
  - Access to educational, economic and job opportunities
  - Access to health care services
  - Availability of community-based resources in support of community living and opportunities for recreational and leisure-time activities
  - Social norms and attitudes, such as discrimination, racism, and distrust of government
  - Exposure to crime, violence, and social disorder (e.g. presence of trash and lack of cooperation in a community)
  - Social support and social interactions
  - Access to mass media and emerging technologies (e.g. cell phones, the internet & social media)
  - Socioeconomic conditions (e.g. concentrated poverty & the stressful conditions that accompany it)
  - Quality of education and job training
  - Transportation options
  - Public safety
  - Residential segregation
  - Language and literacy
  - Culture

# Physical Determinants

- Natural environment, such as green space (e.g. trees and grass) or weather and climate change
- Built environment, such as buildings, sidewalks, bike lanes and roads
- Worksites, schools and recreational settings
- Housing, homes, neighborhoods and community design
- Exposure to toxic substances and other physical hazards
- Physical barriers, especially for people with disabilities
- Aesthetic elements (e.g. good lighting, trees and benches)

# Health Services

- Both access to health services and the quality of health services can impact health
- Lack of access or limited access greatly impacts an individual's health status
- Barriers to accessing health services include:
  - Lack of availability
  - High cost
  - Lack of insurance coverage
  - Limited language access
- These barriers to accessing health services lead to:
  - Unmet health needs
  - Delays in receiving appropriate care
  - Inability to get preventive services
  - Hospitalizations that could have been prevented

# Individual Behavior

- Individual behavior plays an important role in health outcomes
- Changing behaviors such as substance abuse, diet and exercise can reduce rates of chronic disease
- Adoption of health-threatening behavior is influenced by material deprivation and stress. Environments influence use of tobacco, alcohol, poor diet, and low levels of physical activity
- Examples of individual behavior determinants of health include:
  - Diet
  - Physical activity; exercise vs. sedentary lifestyle
  - Alcohol
  - Cigarettes
  - Other drugs
  - Hand washing

# Biology and Genetics

- Some biological and genetic factors affect specific populations more than others, e.g. seniors are more biologically prone to being in poorer health than adolescents due to the physical and cognitive effects of aging
- Examples of biological and genetic social determinants of health:
  - Age
  - Sex
  - HIV status
  - Inherited conditions such as sickle cell anemia, hemophilia, cystic fibrosis
  - Carrying the BRCA1 or BRCA2 gene, which increases risk for breast & ovarian cancer
  - Family history of heart disease

# 2003 WHO Social Determinants of Health

- Social gradients
- Stress
- Early childhood development
- Social exclusion
- Unemployment
- Social support networks
- Addiction
- Availability of healthy food
- Availability of healthy transportation

# 2008 WHO - Two Broad Areas of Social Determinants of Health

- Daily Living Conditions
  - Healthy Physical Environment
  - Fair employment and decent work
  - Social protection across lifespan
  - Access to health care
- Distribution of power, money and resources
  - Equity in health programs
  - Public financing of actions on social determinants
  - Economic inequalities
  - Resource depletion
  - Healthy working conditions
  - Gender equity
  - Political empowerment/ Prosperity of Nations

# Healthy People 2020 Approach to Social Determinants of Health

- A “place-based” organizing framework, reflecting five key areas of SDOH
- Economic stability
  - Poverty
  - Employment status
  - Access to employment
  - Housing stability (e.g. homelessness, foreclosure)
- Education
  - High school graduation rates
  - School policies that support health promotion
  - School environments that are safe and conducive to learning
  - Enrollment in higher education
- Health and Healthcare
  - Access to health services – including clinical and preventive care
  - Access to primary care – including community-based health promotion and wellness programs
  - Health technology

# Healthy People 2020 Approach to Social Determinants of Health

- Social and community context
  - Family structure
  - Social cohesion
  - Perceptions of discrimination and equity
  - Civic participation
  - Incarceration and institutionalization
- Neighborhood and build environment
  - Quality of housing
  - Crime and violence
  - Environmental conditions
  - Access to healthy foods

# Health Inequities and the Social Gradient

- Health inequities are avoidable inequalities in health between groups of people within countries or between countries
- Social and economic conditions and their effects on people's lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs
- Where people stand in the social hierarchy affects the conditions in which they grow, learn, live, work, and age, their vulnerability to ill health and the consequences of ill health
- There is a social gradient in health that runs from top to bottom of the socioeconomic spectrum around the world, and in general the lower an individual's socioeconomic position, the worst their health
- Education correlates with mortality rates
  - Greater than a high school education – mortality rate 206/100K
  - Only a high school education – mortality rate 478/100K
  - Less than a high school education – mortality rate 650/100K

# Managed Care Assists with Social Determinants of Health

- Care managers assess members for social needs and gaps in their overall social support net
- Database with hundreds of community services available to patients across the state
- Care coordinators or care managers make referrals for patients to community services
- Most common referrals:
  - Medical and non-medical transportation
  - Medication assistance
  - Housing
  - Food pantry
  - Financial assistance
  - Utility assistance

# Thanks for your attention!

## Questions as time permits