

Quality Measures to Improve Care of Seniors & People with Chronic Conditions for Dept of Medicine



Clinical Transformation: Health Care Redesign and Health Information Technology

Care Management Plus: Dissemination of Information Technology Tools for the Care of Seniors, www.caremanagementplus.org

Supported by **The John A. Hartford Foundation**, AHRQ, NLM, Intermountain, OHSU

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Overview

- Background
- Framework for quality measures
- Redesign Experience (ours + others)
- Recommendations



care
management
plus

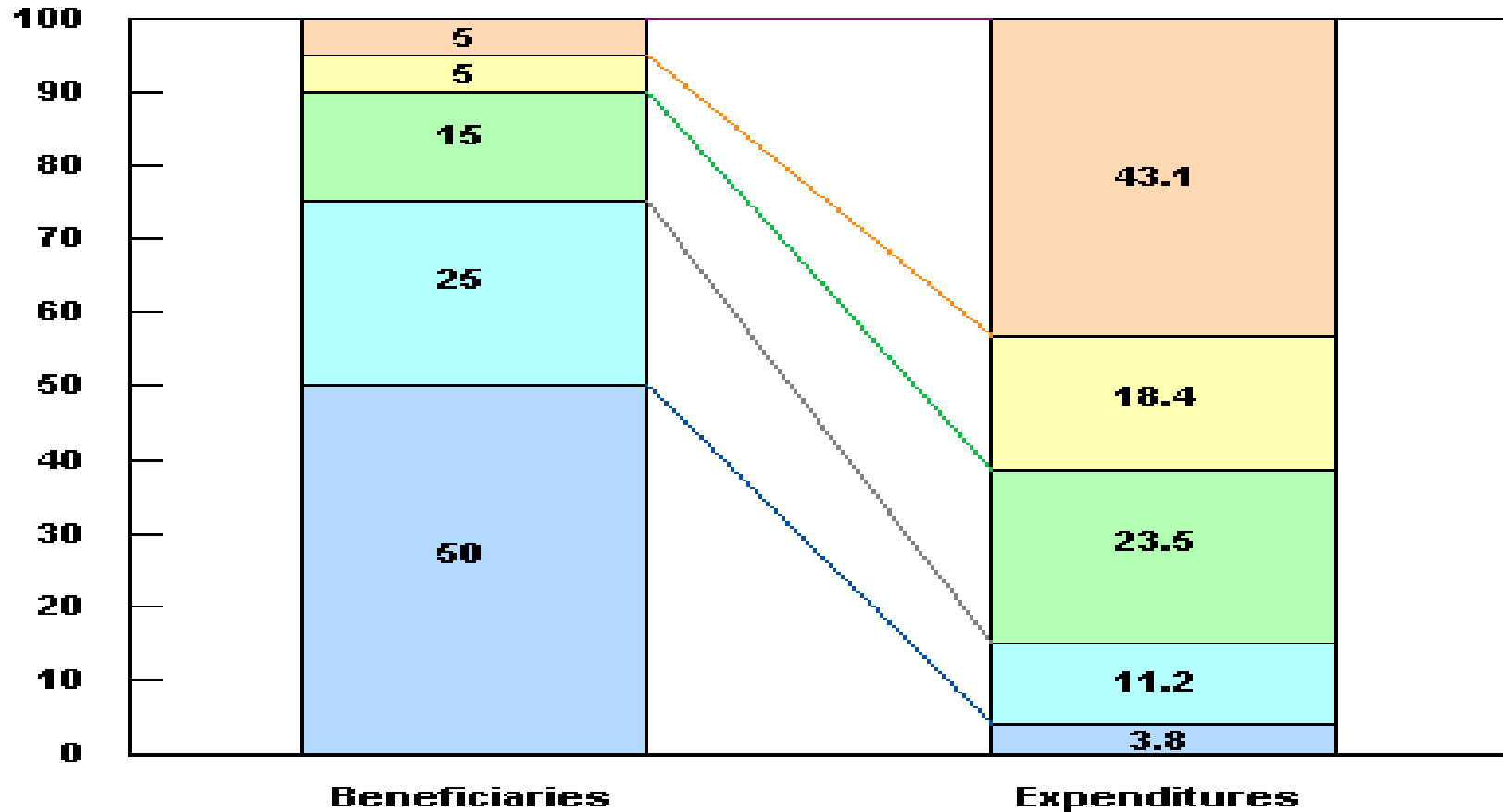
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Question

Which of the following is the strongest predictor of risk of death in 4 years for older adults?

- A. Has a doctor told you that you have diabetes or high blood sugar?
- B. Because of a health or memory problem, do you have difficulty with bathing or showering and difficulty with walking several blocks?
- C. Has a doctor told you that you have cancer or a malignant tumor, excluding minor skin cancers?
- D. Do you have a chronic lung disease that limits your usual activities or makes you need oxygen at home?
- E. Has a doctor told you that you have congestive heart failure?

Expenditures for Health Care



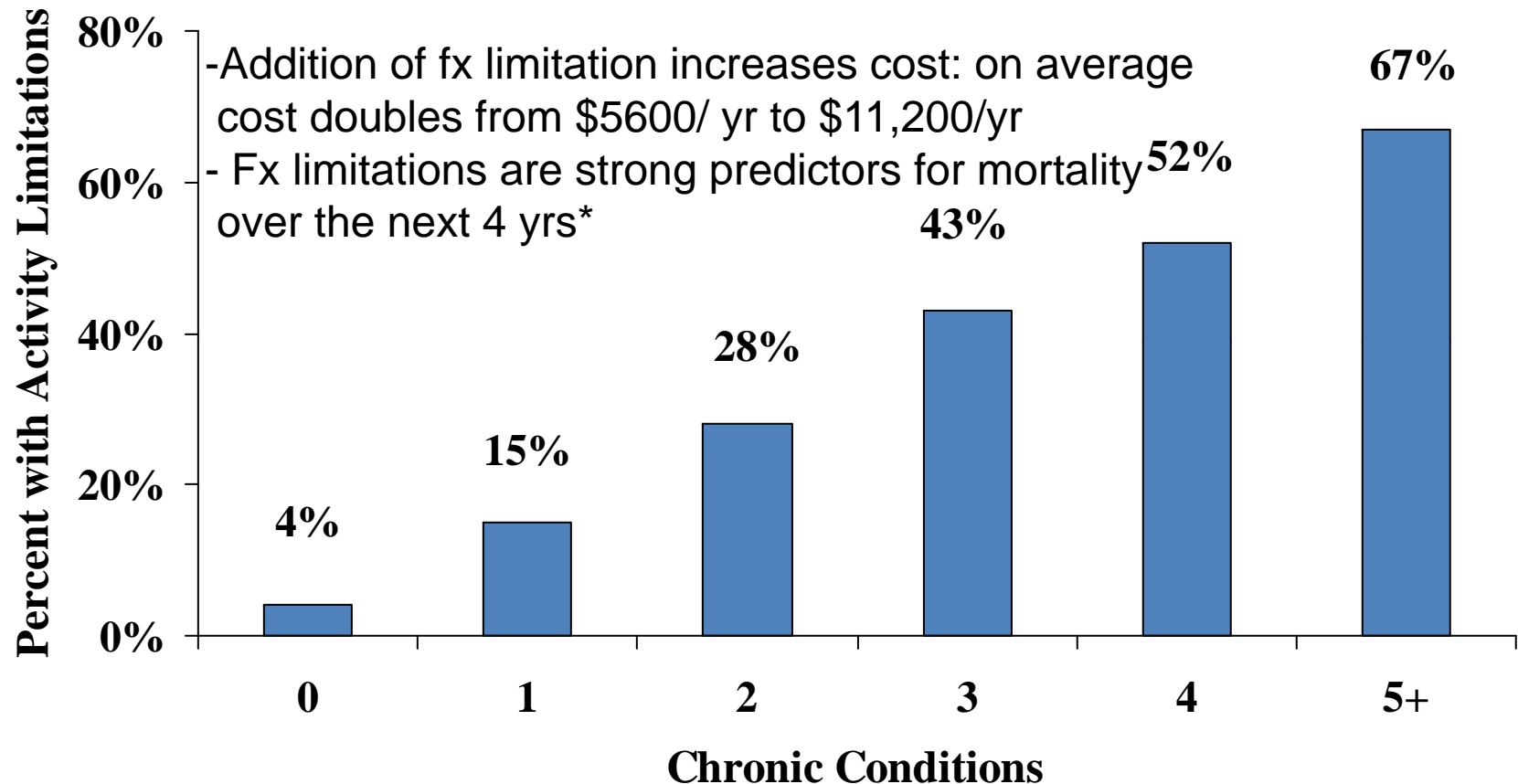
Quartile with highest needs account for 63.5% of expenditures

Top 5% account for 43% of expenditures

Health and Technology Systems have difficulty meeting these needs.

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Activity Limitations by Number of Chronic Conditions



Source: G. Anderson, "Hospitals and Chronic Care", PowerPoint Presentation to the American Hospital Association. Partnership for Solutions. 16 June 2004.

S. Lee, "Development and Validation of a Prognostic Index for 4-Yer Mortality in Older Adults" JAMA. 2006;295(7):801-808.

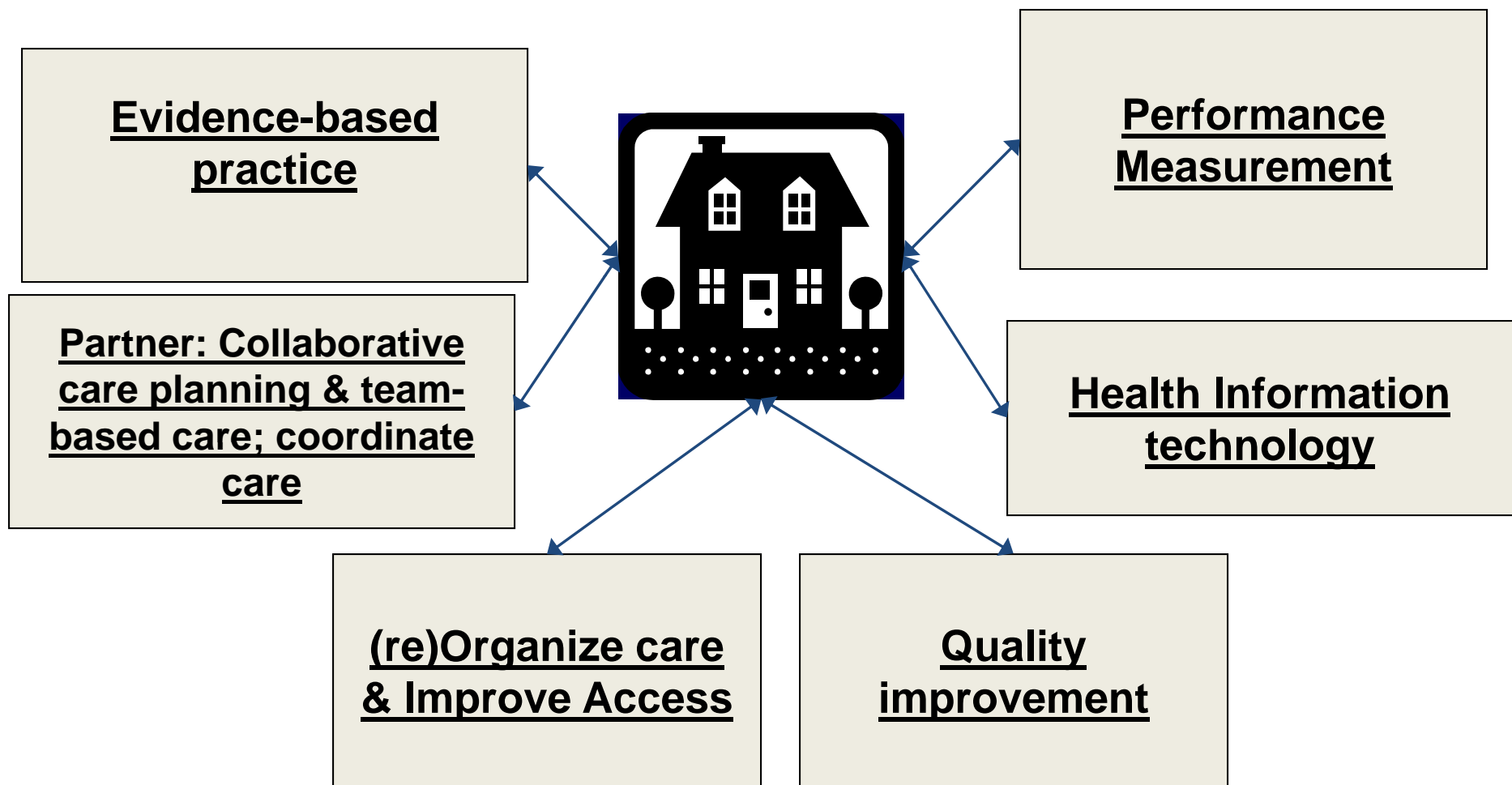
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Past: Heroism in the face of multiple illnesses

- Multiple diseases increase risk and coordination *exponentially* (5+ : 90 x risk of hospitalization; 10 x prescriptions; 13 providers vs. 2)
- To manage preventive and chronic illnesses in a primary care panel: 18 hours a day
- Patients with multiple illnesses *better* process quality scores but *worse* 'preventable' hospitalizations

Slide courtesy of DDorr

(some) Elements of a Medical Home



Intervention: Care Management Plus fills in core gaps



Larger infrastructure: Electronic Health Record, quality focus

Guideline Adherence in Diabetes: Results of Care Managers

Outcome	Odds Ratio
Overdue for HbA1c test	0.79*
HbA1c Tested	1.42*
HbA1c in control (<7.0)	1.24*

* $p < 0.01$

Dorr, HSR, 2005

Results from targeted redesign

EXHIBIT 4

Annual Outcomes For Seven Medical Home Demonstrations

	Hospitalization reduction (%)	ER visit reduction (%)	Total savings per patient (\$)
Colorado	18	-	169-530 ^a
Geisinger	15	-	-
Group Health ^b	11	29	71
Intermountain	4.8-19.2 ^c	0-7.3 ^d	640
North Carolina	40 ^e	16	516 ^f
North Dakota	6	24	530
Vermont ^g	11	12	215

Realities of Disease Management

- Chronic Disease Management
 - Diabetes, Heart Failure, Depression, Asthma.....
- Multiple associated quality measures with each chronic disease
- Complexities
 - Co-morbidities
 - Geriatrics: Assessing Care of Vulnerable Elders (ACOVE)

Assessing Care Of Vulnerable Elders (ACOVE)

- Identified vulnerable elders (age, ↓ function)
- Defined quality indicators based on literature review and expert panel for 22 conditions that affect older persons
- Examined as process of care (by structured interview and chart review) for each condition

http://www.rand.org/pubs/working_papers/WR515.3/

ACOVE Categories

- **Appropriate Use of Medication**
- **Chronic Pain**
- **Continuity and Coordination of Care**
- **Dementia**
- **Depression**
- **Diabetes Mellitus**
- **End-of-Life Care**
- **Falls and Mobility Problems**
- **Hearing Loss**
- **Heart Failure**
- **Hospitalization**
- **Hypertension**
- **Ischemic Heart Disease**
- **Malnutrition**
- **Osteoarthritis**
- **Osteoporosis**
- **Pneumonia**
- **Pressure Ulcers**
- **Preventive Care**
- **Stroke and Atrial Fibrillation**
- **Urinary Incontinence**
- **Visual Impairment**

ACOVE Findings

- Overall 54% of quality indicators met
- High numbers of quality indicators met for common diseases in older persons (hypertension, diabetes)
- Low numbers (29-41%) of quality indicators met for geriatric conditions (dementia, incontinence, etc.)

For People with Dementia

- Primary care visits are longer & more complex
- Hospitalizations are longer/more costly
- Utah has 5th fastest growing population of older adults
- Risk for Alzheimer's increases with age
- 38 Clinics (data from AGE QI study)
46,759 patients, age 69 and older (2007)
~9% with dementia-related diagnosis
Rare documentation of cognitive assessment
(and also rare documentation of functional ability)

Dementia ACOVE Quality Indicators (5 of 17)

1. IF a vulnerable elder is new to a primary care practice or inpatient service, THEN there should be a documented assessment of cognitive ability and functional status.
2. ALL vulnerable elders (VEs) should be evaluated annually for changes in memory and function.
5. IF a VE screens positive for dementia and is taking medications that are commonly associated with mental status changes in the elderly, THEN the physician should discontinue or justify continuing these medications.
7. IF a VE is newly dx'd with dementia, THEN complete blood count, thyroid testing, electrolytes, liver function tests, glucose, BUN, serum B12, syphilis test should be performed.
9. IF a VE has newly diagnosed dementia, THEN s/he should be screened for depression within 3 months.

➡ IMPLEMENTATION

Beacon Communities

- American Recovery and Reinvestment Act (2009)
- Office of the National Coordinator for Health Information Technology (ONC)
- Aim to demonstrate the potential for HIT to enable local improvements in health care quality, cost efficiency, population health.
- \$225 million
- 15 + 2 sites (Geisinger, Indiana HIE, U Hawaii)

SMOOTH TRANSITIONS

- Share information –Inside and Out
 - Providers, Nursing Homes, Home Care Agencies
- Identify baseline (**and current**) cognitive status and function
- Address and document advance directives and Physician Order for Life-Sustaining Treatment (POLST): Health Dept registry part of HealthInsight Utah Communities Beacon
- Identify and record family caregivers

Example Function Screen (OHSU)

Function - Windows Internet Explorer
https://iccis.ohsu.edu/Function.aspx?pd=1f0NVMiAsPg%3d

Add Function

Patient: Harry, Binnes **ID: 1324234**

Assessment Date:

Activities of Daily Living Score (ADL) Able to do without help:	Instrumental Activities Score (IADL) Able to do without help:
1. Get out of bed or chair <input type="radio"/> yes <input type="radio"/> no	1. Shop <input type="radio"/> yes <input type="radio"/> no
2. Walk <input type="radio"/> yes <input type="radio"/> no	2. Use a telephone <input type="radio"/> yes <input type="radio"/> no
3. Take a bath or shower <input type="radio"/> yes <input type="radio"/> no	3. Cook <input type="radio"/> yes <input type="radio"/> no
4. Get dressed <input type="radio"/> yes <input type="radio"/> no	4. Travel outside the home <input type="radio"/> yes <input type="radio"/> no
5. Go to the toilet <input type="radio"/> yes <input type="radio"/> no	5. Bills, Checkbook, Finances <input type="radio"/> yes <input type="radio"/> no
6. Feed self a meal <input type="radio"/> yes <input type="radio"/> no	6. Housekeeping <input type="radio"/> yes <input type="radio"/> no
	7. Take medications <input type="radio"/> yes <input type="radio"/> no

ADL: 0 **IADL: 0**

Total ADL or IADL score is the number of functions the individual is able to do independently: 6 = full function; 4 = moderate impairment; 2 = severe impairment

Mini Mental Status Exam Score (MMSE):
MMSE:

Pain Score (0-10):
Pain Score:

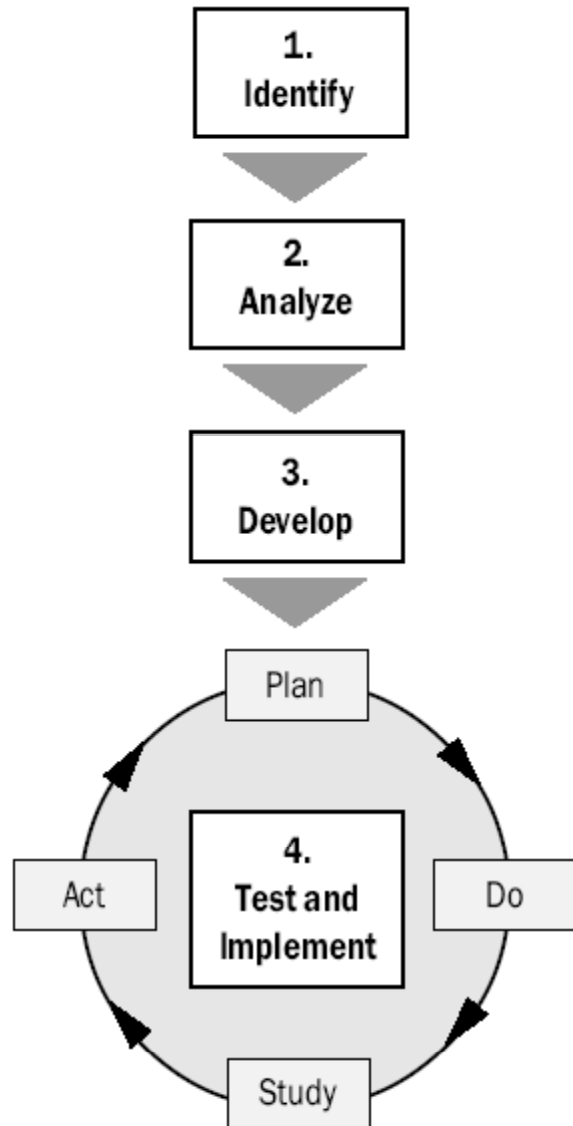
Notes:

Done Internet 100%

PROCESS

Step1. Choose evaluation metrics	Which metrics? Which population?
Step2. Create evaluation plan	Time frame for measurements; assistance needed
Step3. Data collection plan	Reports, resources Are measures already collected?
Step4. Implement plan	What's next step? Define goals. Plan on process refinement.

Evaluating process



1. Identify	Determine what to improve
2. Analyze	Understand the problem
3. Develop	Hypothesize about what changes will improve the problem
4. Test/ Implement	Test the hypothesized solution to see if it yields improvement; based on the results, decide whether to abandon, modify, or implement the solution

From Massoud, et al, 2001

Cognitive Care: Screening, Decision Tools and Treatment Cascade

- Kelly Davis Garrett, PhD Neuropsychologist
- Proposed addition to the Primary Care Clinical Program's Mental Health Integration at Intermountain
- Piloting outpatient / inpatient QI projects for cognitive assessment
- Questions / Discussion