

# ACO Accelerated Development Learning Session

San Francisco, CA  
September 15-16, 2011

## Module 2B: Reshaping Care Delivery



September 15, 2011  
3:30–5:30 p.m.

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# Session Learning Objectives

- Identify patient-centered medical home (PCMH) process components that can help ACOs deliver population health
- Enumerate methods to identify patient risks
- Understand effectiveness of care management
- Identify the role of care coordination in transitions of care
- Understand the importance of patient engagement
- University of Michigan experience
- Final thoughts



# PCMH and Delivery Redesign

## Key components of a PCMH

- Coordination of care
- Evidence-based care
- Extended access
- Link to community services
- Patient registries
- Patient Web portal
- Self-management support
- Specialist referral
- Test tracking
- Care management

Redesign the work appropriate to level of training/  
professionalism of the team member

- Physicians
- Medical assistants
- Nurses
- Outpatient office assistants

# PCMH Staffing and Adding Staff

- Univ. of Michigan Staffing

- Total support staff/MD FTE = 3.45
- Clerical staff/FTE = 1.85
- MA/LPN/FTE = 1.2
- RN/FTE = 0.36

- Costs to add new staff members for PCMH

(average Univ. of Michigan salary without benefits)

- Medical assistant \$25,000
- Office assistant \$28,000
- Dietician \$52,000
- Social worker (BS) \$41,000
- Social worker (MSW) \$54,000
- LPN \$ 40,000
- RN \$ 80,000
- PA/NP \$ 93,000
- PharmD \$104,000
- GM MD \$165,000

# Paying for Additional Team Members: The University of Michigan Experience

- *Pay for Participation*: BCBSM\* payment for PCMH implementation and other initiatives
- *E&M Uplift*: BCBSM PCMH-designated sites received an additional 10% E&M payment for BCBS patients
- *T-Code Billing*: BCBSM and Blue Care Network payment for face-to-face and telephone encounters by licensed staff

	Period	Funds to PCMHs
Pay for Participation	FY 2009	\$648,000 <sup>†</sup>
E&M Uplift	FY 2010	\$593,000
T-Code Billing	FY 2010	\$227,000
Total		\$1,468,000

\* BCBSM = Blue Cross Blue Shield of Michigan

<sup>†</sup> An additional \$610,000 of these funds were allocated to a central unit to support PCMH activities

Add. Cite: RJ Gilfillan et al. *Am J Manag Care.* 2010;16:607-614

# Using Information Technology to Support the PCMH

- Population management
  - Patients needing pre-visit planning (obtain tests before visit)
  - Patients needing clinician review or action
  - Patients on a particular medication
  - Patients needing reminders for preventive care, specific tests, follow-up for chronic conditions
  - Patients who may benefit from care management support
- Clinician reminders at the point of care
  - Screening tests
  - Immunizations
  - Risk assessments (e.g., smoking, diet, depression)
  - Counseling (e.g., smoking cessation)

# Patient Outcomes After 26 Months in the PCMH National Demonstration Project (NDP)

	Facilitated Practices	Self-Directed Practices	p-value
NDP components adopted	10.7	7.7	0.005
Improvement in Ambulatory Care Quality Alliance starter set	8.3%	9.1%	0.20
Improvement in chronic care scores	5.2%	5.0%	0.003
Improvement in prevention scores	4.3%	-0.7%	0.68

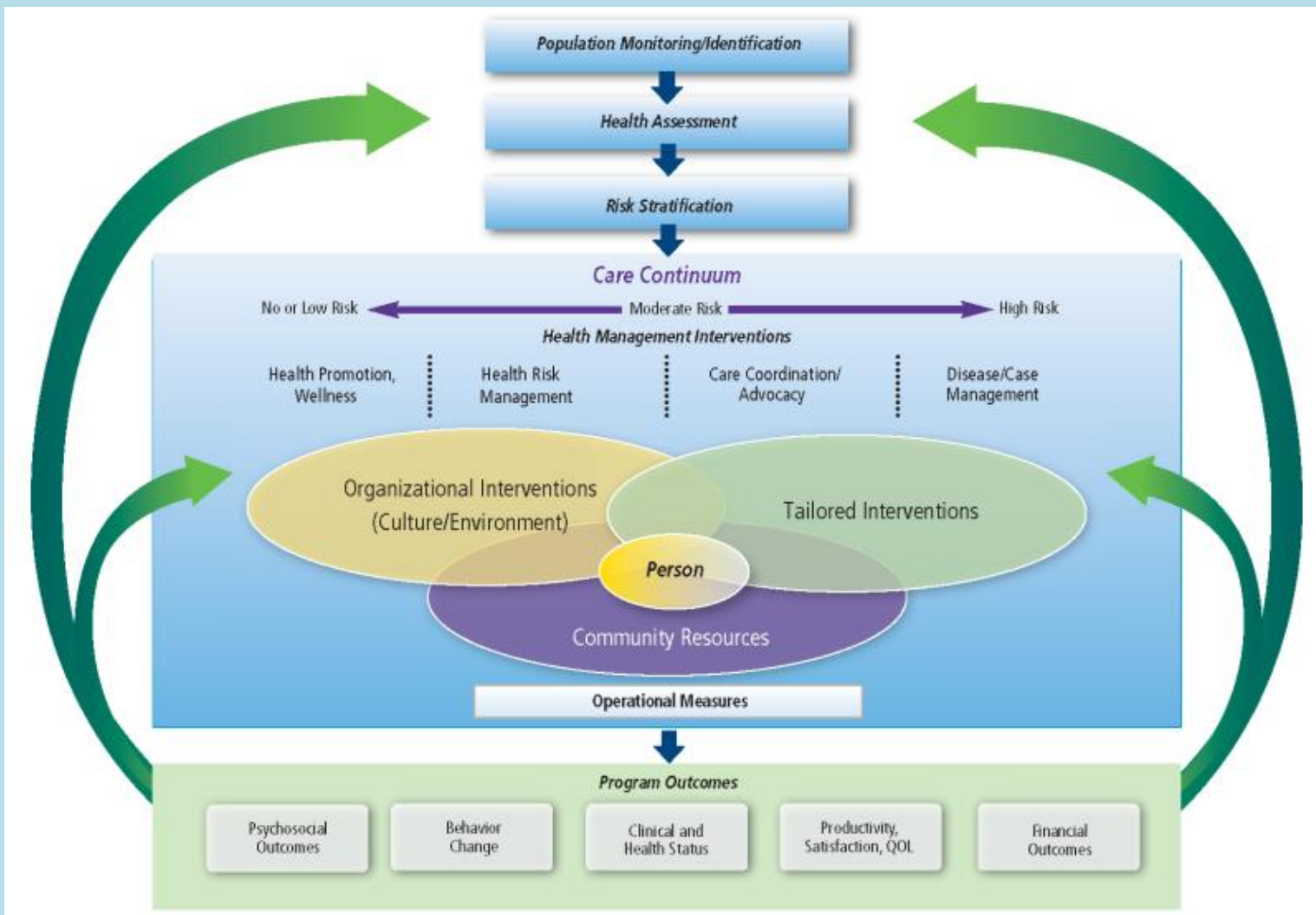
## No significant improvement in patient-rated outcomes by or between groups for:

Access to care	Clinical practice experience
Care coordination	Service relationship experience
Comprehensive care	Patient empowerment
Personal relationship over time	Self-rated health status

CR Jaen et al. Patient Outcomes at 26 Months in the Patient-Centered Medical Home National Demonstration Project. *Ann Fam Med* 2010;8(Suppl 1):s57-s67. doi:10.1370/afm.1121.



# Population Health Conceptual Framework



Outcomes Guideline Report Volume 5. Care Continuum Alliance

# Integrated Population Management

- *Population profiling*: Predictive modeling to risk-stratify the population
- *Primary prevention*: Driven by patient and physician reminder systems
- *Case management*: Case managers in each office provided by health plan create patient-centered intervention plans
- *Disease management*: Address needs of moderate-risk chronic disease patients
- *Remote monitoring*: For high-risk or post-hospital discharge patients using home interactive voice response and in-home wireless devices
- *Transitions of care management*: Case manager contacts and manages transitions for all patients leaving hospitals or other settings
- *Pharmaceutical management*: Medication adherence and reconciliation by physicians and case managers
- *Life planning*: Case managers facilitate advance directive discussions

RJ Gilfillan et al. Value and the Medical Home: Effects of Transformed Primary Care. *Am J Manag Care.* 2010;16:607-614

# Integrated Care: PCMH and ACO

- Determine and update care coordination needs
- Create and update a proactive plan of care
- Communicate:
  - Between health care professionals & patients/family
  - Within teams of health care professionals

**PCMH**

- Across health care teams or settings

**PCMH & ACO**

- Facilitate transitions
- Connect with community resources
- Align resources with population needs

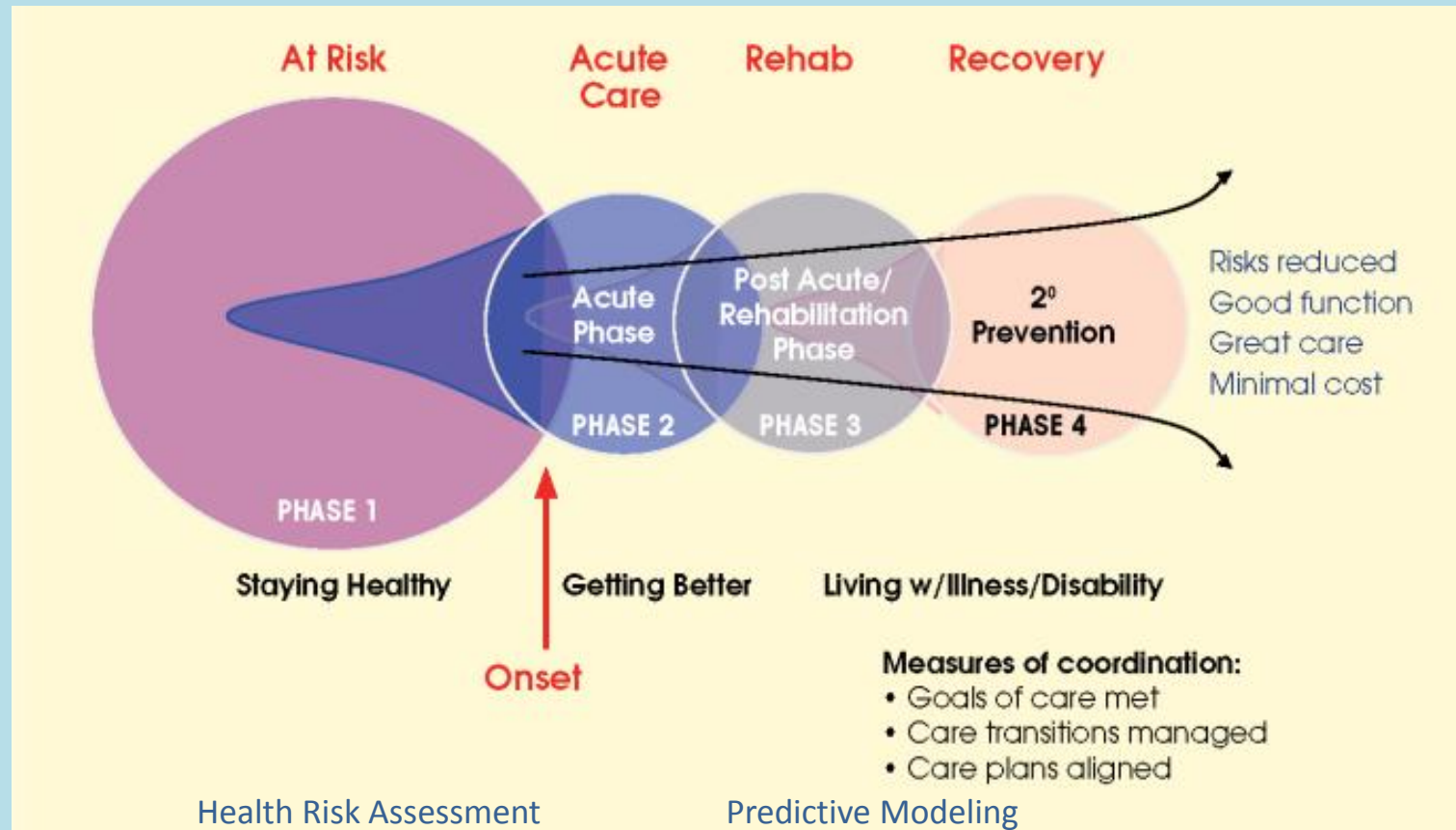
**ACO**

K Grumbach. *Creating Value: Better Care Coordination*. Centered Medical Home and Accountable Care Organizations. March 2011. Washington, D.C.

# Agenda

- PCMH and ACOs
- Enumerate methods to identify patient risks
- Understand effectiveness of care management
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# National Quality Forum Measurement Framework Across Continuum of Care Needs

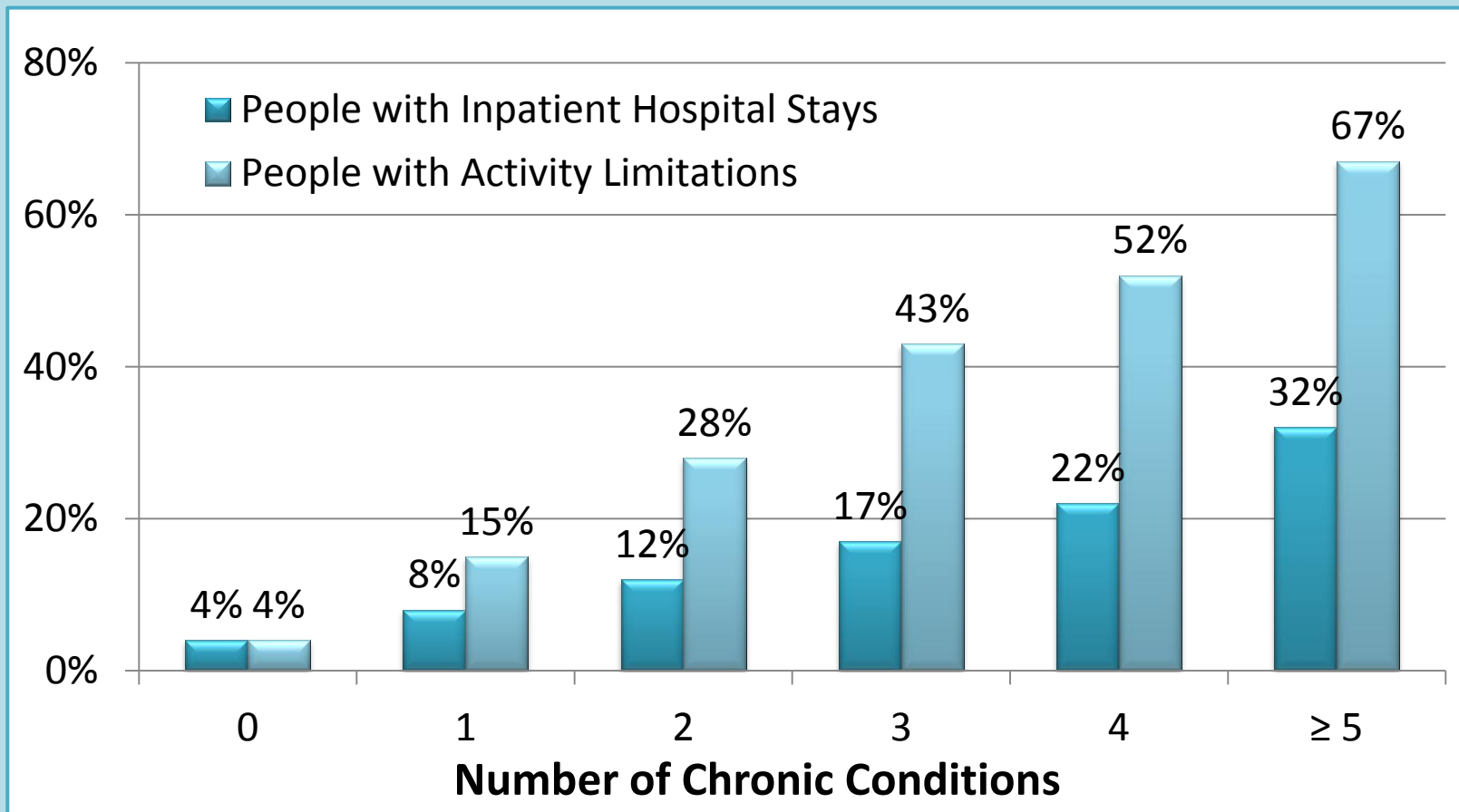


National Quality Forum: Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care; [http://www.qualityforum.org/Projects/Episodes\\_of\\_Care\\_Framework.aspx](http://www.qualityforum.org/Projects/Episodes_of_Care_Framework.aspx)

# Health Risk Assessment

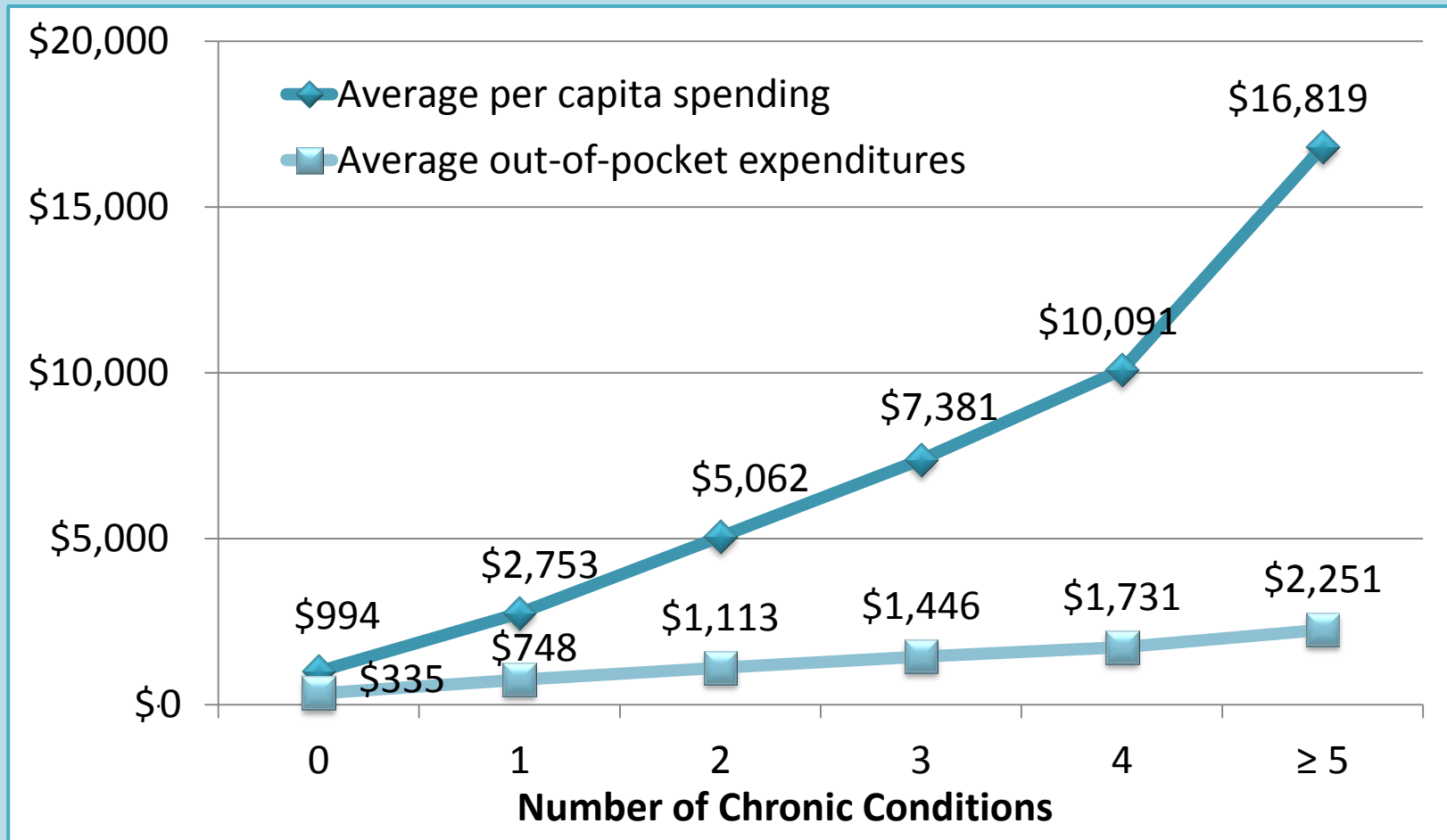
- Self-reported information via questionnaires on
  - Health behaviors
  - Screening and preventive services status
  - Safety precautions
  - Financial issues
  - Self-efficacy
- Health data information
  - Medical claims
  - Pharmacy data
  - Laboratory results

# Impact of Chronic Conditions on Hospitalizations and Activity Limitations



G. Anderson. *Hospitals and chronic care*. Partnership for Solutions, American Hospital Association Meeting. 16 June 2004. Data from the Medical Expenditure Panel Survey 2000.

# Spending by Number of Chronic Conditions



GF Anderson. Medicare and chronic conditions. *NEJM* 2005;353:305-308. (Data from Med Exp Panel Survey 2001).

GF Anderson. *Chronic conditions: Making the case for ongoing care*. Baltimore: Johns Hopkins University. November 2007.



# Identifying High-Risk Individuals for Care Management

- Physician referral
- Vulnerable Elders Survey<sup>1</sup>
  - Designed to identify older people at increased risk of functional decline or death
- Probability of Repeated Admission survey<sup>2</sup>
  - Uses eight risk factors to identify older people who will have high health care costs, high levels of chronic disease and functional disability, and high risk for repeated hospital admission

<sup>1</sup> D Saliba et al. *J Am Geriatr Soc* 2001;49:1691–1699.    <sup>2</sup> C Boult et al. *J Am Geriatr Soc* 1993;41:811–817.

# Health Risk Predictive Modeling

Methodology	Description
Adjusted Clinical Groups	Developed by Johns Hopkins includes population-based health risk assessment and predictive modeling
Chronic Illness and Disability Payment System	Population-based risk model developed to support Medicaid applications
Symmetry Episode Risk Groups	Ingenix's predicts health care utilization and costs on a prospective and retrospective basis
Impact Pro	Ingenix's predictive modeling suite including high risk prediction, care management, and underwriting
DxCG	Varisk's population-based health risk assessment and predictive modeling
Risk Navigator Clinical	MEDai's predictive modeling suite including high risk prediction, care management, and underwriting
3MTM Clinical Risk Grouping Software	3M's predicts health care utilization and costs on a prospective and retrospective basis

Accountable Care Organization Learning Network. Toolkit. Table 8. [www.alearningnetwork.org](http://www.alearningnetwork.org)

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# How Accurate Is Predictive Modeling With Incomplete Data?

- Physician organizations do not possess complete patient claims data from which diagnosis code information used by the software is derived
  - In an ACO, you **may** receive full data for attributed patients
- Therefore, accurately measuring patient risk is problematic because patients may receive services from multiple providers
- Comparing risk scores across different insurance groups (e.g., Medicare, Medicaid) may be problematic as some predictive models differ across insurance groups
- The Univ. of Michigan evaluated DxCG RiskSmart software

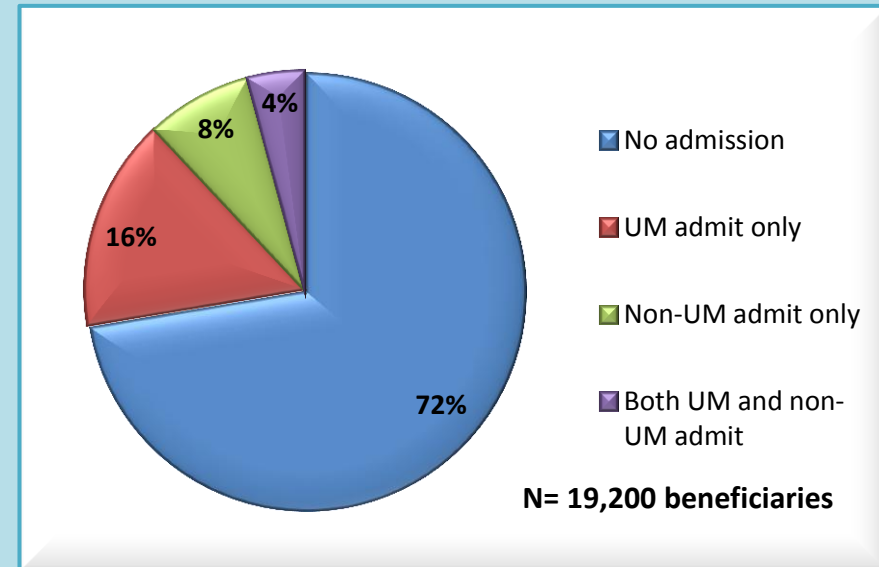
# UMHS DxCG RiskSmart Evaluation: Medicare Summary Results

- Claims from UM providers accounted for ~2/3 of the total diagnoses found in the CMS Medicare data
  - Therefore, lower average risk scores for UM data only
- Incomplete diagnosis codes affect both concurrent and prospective risk scores
  - Prospective risk not affected to the same extent as concurrent scores
  - Average risk scores are much higher than median risk scores because of outliers

	CMS Total Claims	CMS UM Claims Only	Percent of Total
<b>Diagnosis Codes</b>			
Inpatient	80,993	49,427	61.0%
Clinician / Outpatient	1,075,729	698,063	64.9%
Total Diagnoses	1,156,722	747,490	64.6%
Average Unique Diagnoses/ Beneficiary	21.15	13.45	63.6%
<b>Risk Scores Total Population</b>			
Average Concurrent	1.564	1.088	69.6%
Median Concurrent	0.538	0.304	56.6%
Average Prospective	1.428	1.152	80.7%
Median Prospective	0.873	0.724	82.9%

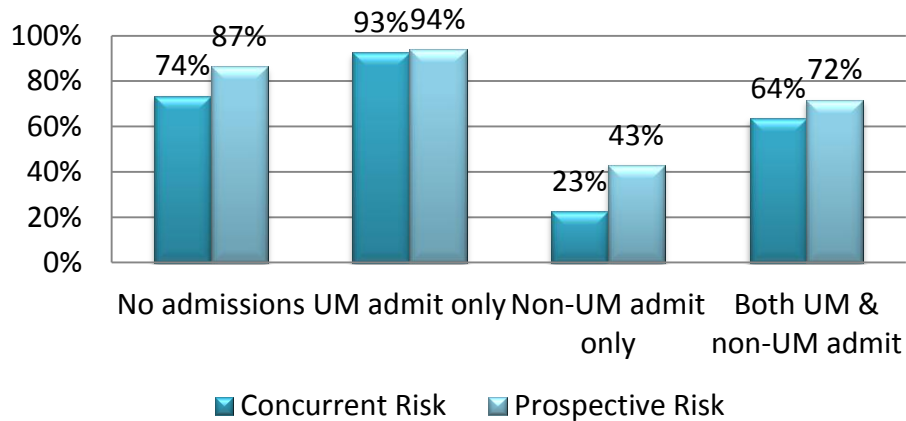
# UMHS DxCG RiskSmart Evaluation: Medicare Summary Results *continued*

- The proportion of both concurrent and prospective patient risk captured by UM diagnoses is directly related to inpatient utilization patterns



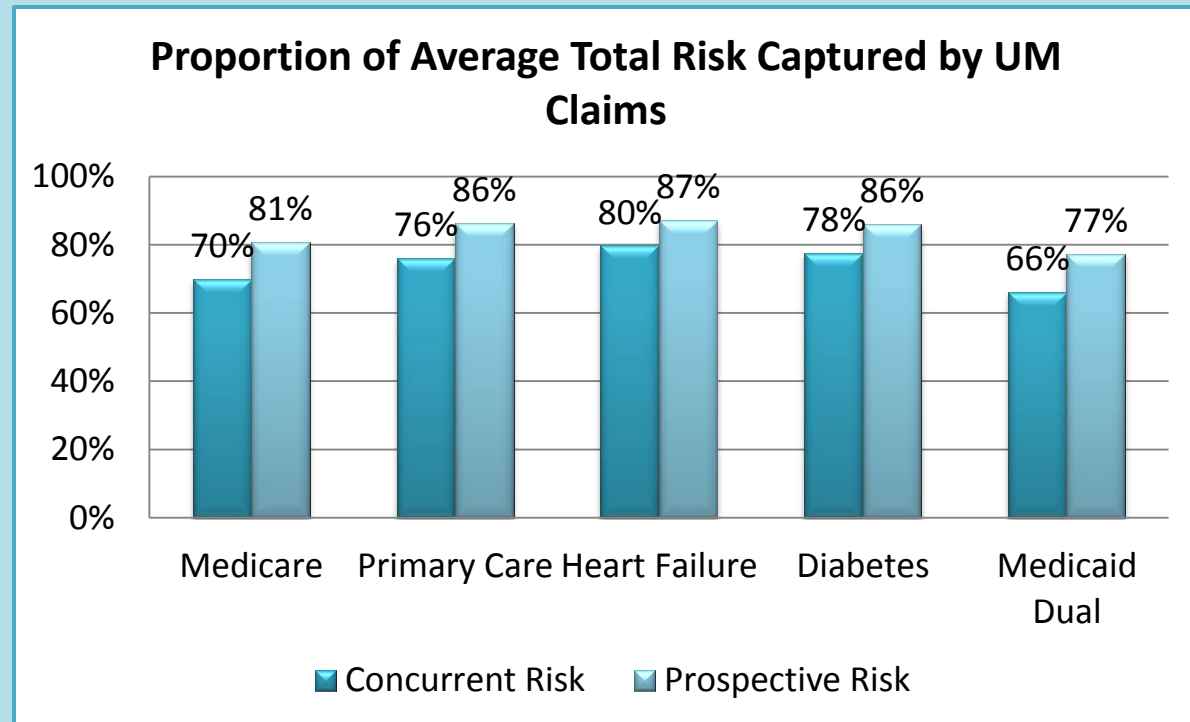
- UM risk scores for patients with non-UMHS admissions are the most understated, but they represent a small proportion of Medicare beneficiaries

**Proportion of Average Total Risk Captured by UM Claims**



# UMHS DxCG RiskSmart Evaluation: Medicare Compared to UM Established Patients

- The proportion of total risk captured by UM claims is higher for patients on UM chronic disease registries and established with a UMHS physician
- Medicaid patient risk captured is lower than that of Medicare
- For groups with large market share or managed care populations, modeling may work



# Identifying High-Risk Medicare Beneficiaries: Prospective Risk Assignment Agreement for Full Medicare Claims vs. UM Medicare Claims Data

Quartile Placement with Medicare Full Claims Data\*

Quartile	1	2	3	4
1	3,991	817	0	0
2	536	3,085	1,180	0
3	212	680	3,035	1,006
4	66	218	591	3,803

Quartile Placement  
UM Medicare Claims

<b>72.4%</b>	<b>Total risk quartile agreement</b>
<b>15.6%</b>	<b>Prospective risk predicted higher than full CMS claims (false positive)</b>
<b>12.0%</b>	<b>Prospective risk predicted lower than full CMS claims (false negative)</b>

- Almost ¾ of the Medicare beneficiaries fell into the same prospective risk quartile using the two data sources.

\* Quartile 1 = Highest risk; Quartile 4 = Lowest risk.

# Identifying the 300 Highest-Risk Medicare Beneficiaries

- We compared Medicare's full claims data with UM claims data to identify the 300 highest risk patients
  - Agreement on 194 cases (65%)
- We assessed what proportion of UM Medicare patients with diabetes predicted to have the highest cost actually were in the top 300 diabetics based on cost the following year

Who predicted high cost	Actual Top 300 cost
UM & CMS (n=235)	103 patients (43.8%)
UM only (n=65)	19 patients (28.8%)
CMS only (n=65)	8 patients (12.3%)



# Agenda

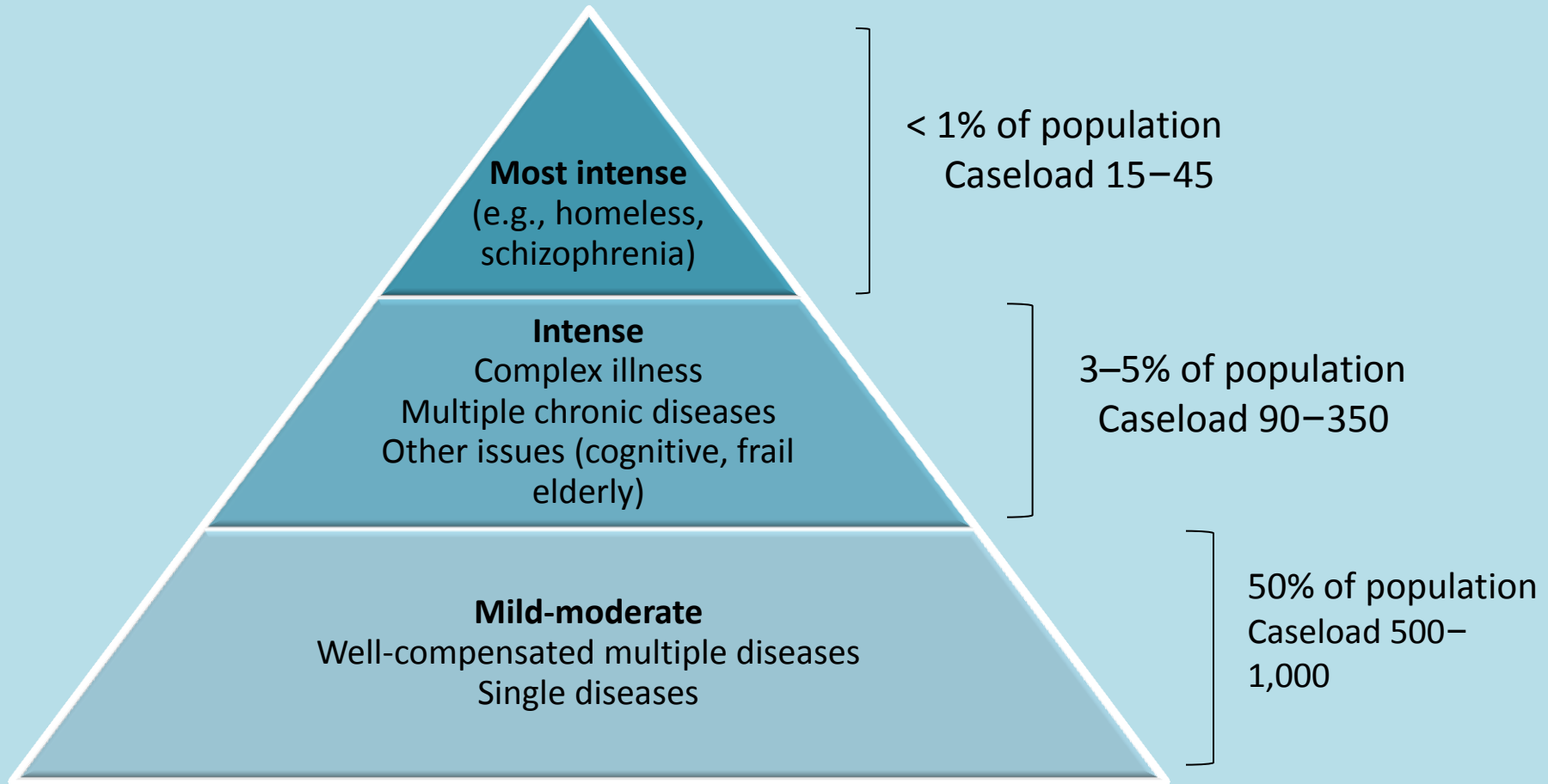
- PCMH and ACOs
- Enumerate methods to identify patient risks
- **Understand effectiveness of care management**
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# What Is Care Management?

- Care management is a set of activities that can assist patients and their caregivers in managing medical conditions more effectively
- The goals of care management are to
  - Improve patient functional status
  - Enhance care coordination
  - Stop duplication of services
  - Decrease health care expenditures
  - Increase patient's self-management

T Bodenheimer et al. *Care management of patients with complex health care needs*. Synthesis Project of the Robert Wood Johnson Foundation; 2009.

# Care Management for Different Populations



D Dorr, B Williams, S Bernstein, C Bunker. Adapting the Medical Home for Older Adults and Patients with Complex Issues workshop. Society of General Internal Medicine Annual Meeting. May 2009.

# Interventions by Care and Case Management, Based on Risk

Risk Burden	Focus
High	Priority contact by a case manager and expedited referral to the PCMH for review of status
Medium	Targeted and risk-appropriate, remote-based coaching, periodic notification of patients of care gaps, assistance with health systems access
Low	Reminders, with condition-appropriate educational material

Care Continuum Alliance. *Achieving Accountable Care: Essential Population Health Management Tools for ACOs*. Washington, DC 2011.

# Types of Care Management Programs

Type	Characteristics
Primary care	Located within primary care practice
Vendor-supported	Nurses work from call centers; health plan lists
Integrated delivery systems	Located within physician group but not necessarily based in primary care practice; will see patient
Hospital-to-home	Care managers meet with patients prior to discharge or follow-up with patients after discharge
Home-based	For home-bound patients; most services in home

T Bodenheimer et al. *Care management of patients with complex health care needs*. Synthesis Project of the Robert Wood Johnson Foundation; 2009.

# Key Components of Care Management

1.	Identify patients most likely to benefit from care management
2.	Assess the risks and needs of each patient
3.	Develop a care plan together with the patient/family
4.	Teach the patient/family about the diseases and their management
5.	Coach the patient/family how to respond to worsening symptoms
6.	Track how the patient is doing over time
7.	Revise the care plan as needed

T Bodenheimer et al. *Care management of patients with complex health care needs*. Synthesis Project of the Robert Wood Johnson Foundation; 2009.

# Disease Management for Chronically Ill Medicare Beneficiaries

- Since 1999, Medicare has conducted seven disease management projects involving 300,000 beneficiaries enrolled in 35 programs across 25 states
- Programs included provider-based, third-party, and hybrid models
- Outcomes:
  - 3 improved quality with budget neutrality
  - 4 were close to covering fees
  - 28 did not substantially improve quality or reduce costs

DM Bott et al. *Health Affairs* Jan/Feb 2009; 28(1):86-98.

D Peikes et al. *JAMA* 2009;301(6):603-618.

# Care Management: The Guided Care Study

- *Cluster randomized controlled trial* in 3 health care systems
- *Subjects*: 850 older high-risk patients (11/2006–6/2008)
- *Guided care team*: 1 RN, 2–5 physicians + office staff
  - 50 to 60 “highest risk” patients per team (14 teams)
- Guided care program
  - Comprehensive assessment
  - Evidence-based care plan
  - Monthly monitoring
  - Transitional care
  - Care coordination
  - Self-management support
  - Caregiver support
  - Community services access
- No effect across multiple outcomes (hospital admissions, 30-day readmissions, ED visits, PCP visits, specialist visits, home care episodes)

C Boulton et al. The effect of Guided Care teams on the use of health services. *Arch Int Med* 2011;171(5):460-466.

J Bernstein. The elusive benefits of chronic care management. *Arch Int Med* 2011;171(5):466-467.



# Characteristics of Successful Care Management Programs

Characteristic	Comment
Patient selection	Pick the right patients (complex but not too sick)
Encounter type	Person-to-person +/- home visits (not telephone only)
Staff training	Usually RNs; training is critical; monitor workload
Team based care	Place care managers close to physicians (not remote)
Informal care	Patients often need “informal caregivers”
Coaching	Teaching self-management skills to patients/caregivers
Dose intensity	Impact varies depending on program emphasis

T Bodenheimer et al. *Care management of patients with complex health care needs*. Synthesis Project of the Robert Wood Johnson Foundation; 2009.

D Peikes et al. *JAMA* 2009;301(6):603-618.

# Impact of Care Management: Quality and Cost

Setting	Quality Improvement	Cost Reduction
Primary care	Strong evidence	Some evidence
Vendor-supported	Strong evidence	Inconclusive
Integrated delivery systems	Strong evidence	Inconclusive
Hospital-to-home	Strong evidence	Strong evidence
Home	No evidence	No evidence

T Bodenheimer et al. *Care management of patients with complex health care needs*. Synthesis Project of the Robert Wood Johnson Foundation; 2009.

# Agenda

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# Care Coordination—A Definition

*“Care coordination is the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient’s care to facilitate the appropriate delivery of health care services.”*

KM McDonald et al. Care coordination. Vol 7 of: KG Shojania et al. editors. Closing the quality gap: A critical analysis of quality improvement strategies. Technical Review 9. AHRQ Publication No. 04(07)-0051-7. June 2007.

# Background on Care Coordination Comprehensive Geriatric Assessment

- Multidisciplinary and multidimensional teams focus on
  - Physical health
  - Functional status
  - Cognitive/affective
  - Social/environmental
- Meta-analysis of 28 RCTS showed
  - 12% reduced risk of hospitalization
  - 18% reduced mortality
  - 25% increased likelihood of living at home
  - 41% increased chance of cognitive improvement

AE Stuck et al. Comprehensive geriatric assessment: A meta-analysis of controlled trials. *The Lancet*; Oct 23, 1993;342:1032.

# Comprehensive Geriatric Assessment: Meta-Analysis of Controlled Trials

**Geriatric Evaluation & Management Unit Trials**  
*(designated in-patient unit for CGA)*

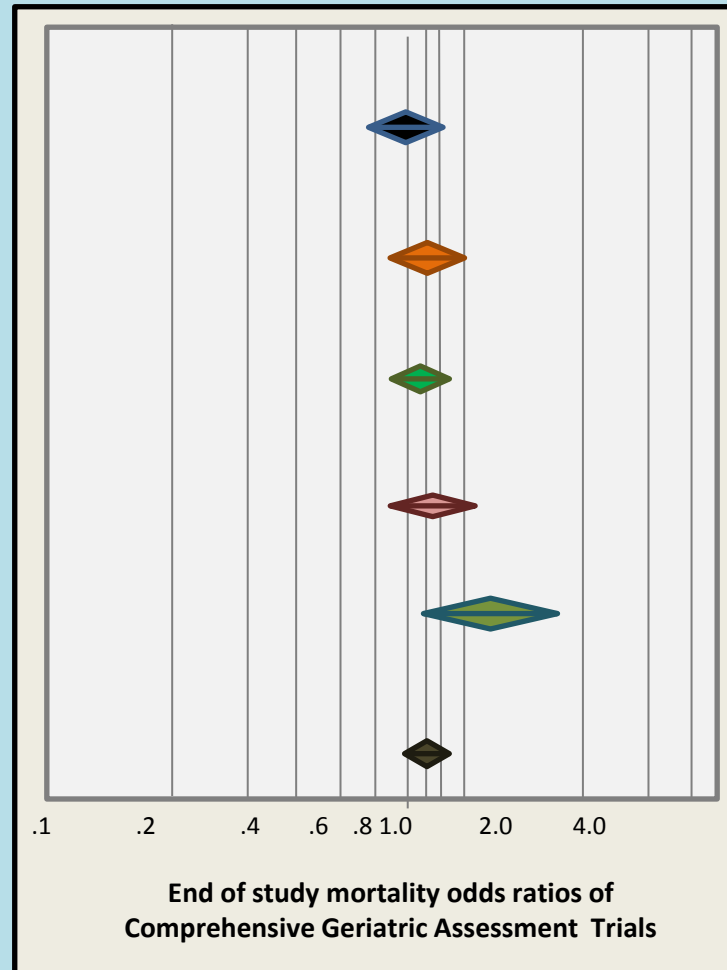
**Inpatient Geriatric Consultation Service Trials**  
*(consult service provides CGA)*

**Home Assessment Service Trials**  
*(in-home CGA for community dwelling elders)*

**Hospital Home Assessment Service Trials**  
*(in-home CGA for recently discharged patients)*

**Outpatient Assessment Service Trials**  
*(CGA provided in outpatient setting)*

**All Comprehensive Geriatric Assessment Trials**



Improvement limited  
to in-patient programs

AE Stuck et al. Comprehensive geriatric assessment: A meta-analysis of controlled trials. *The Lancet*; Oct 23, 1993;342:1032.

HK Kuo et al. The influence of outpatient comprehensive geriatric assessment on survival. *Arch Gerontol Geriatr.* 2004 Nov-Dec;39(3):245-54.

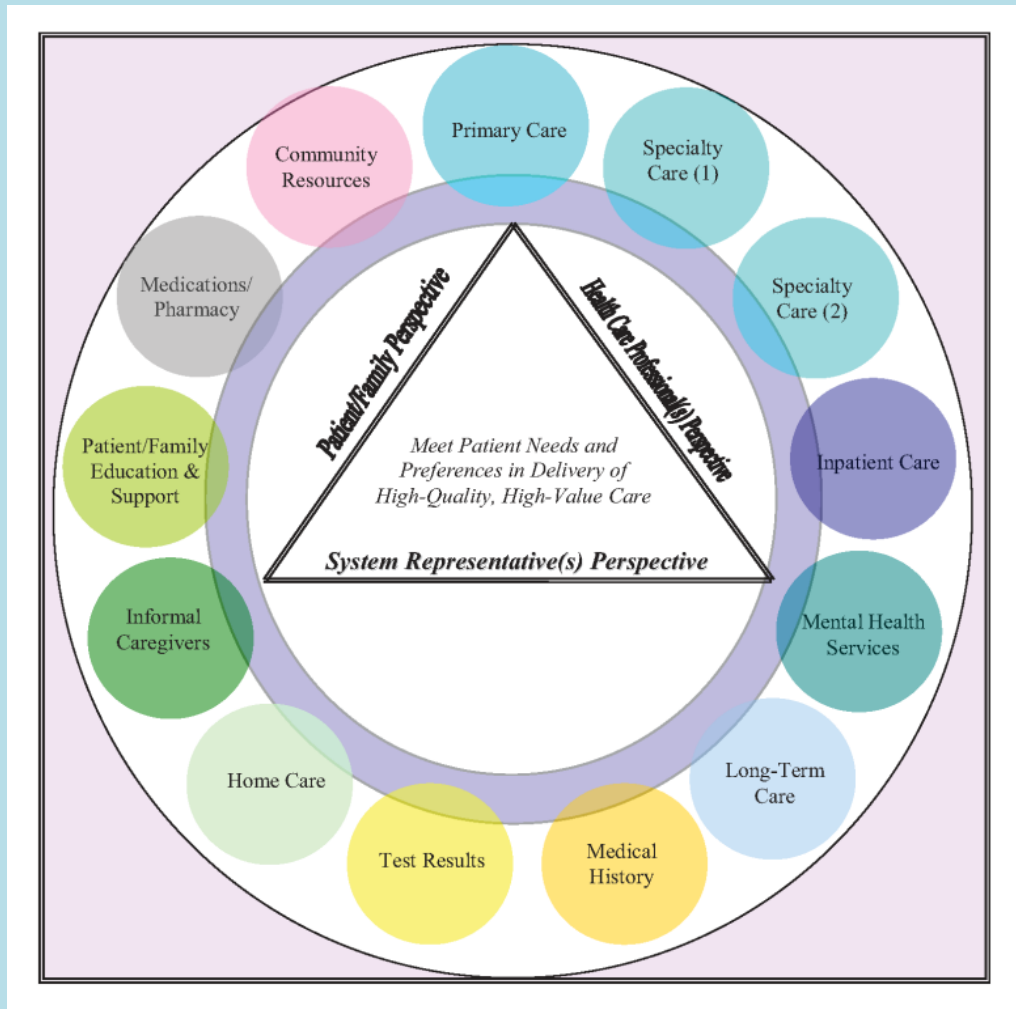
# Goals of Care Coordination

- To *transfer information*, such as medical history, medication lists, test results, and patient references, appropriately from one participant in a patient's care to another (including the patient)
- To *establish accountability* by clarifying
  - who is responsible for each aspect of a patient's overall care
  - the extent of that responsibility
  - when that responsibility will be transferred to other care participants
- The accountable entity (e.g., physician, care team, health care organization, patient, or family) accepts responsibility for failures in the aspects of care for which it is accountable.

D Meyers et al. *The Roles of PCMHs and ACOs in Coordinating Patient Care*. AHRQ Publication No. 11-M005-EF. Rockville, MD: December 2010.

E Fisher & K Grumbach. *Creating Value: Better Care Coordination. PCMH and ACO*. March 2011. Washington, D.C

# Care Coordination Ring

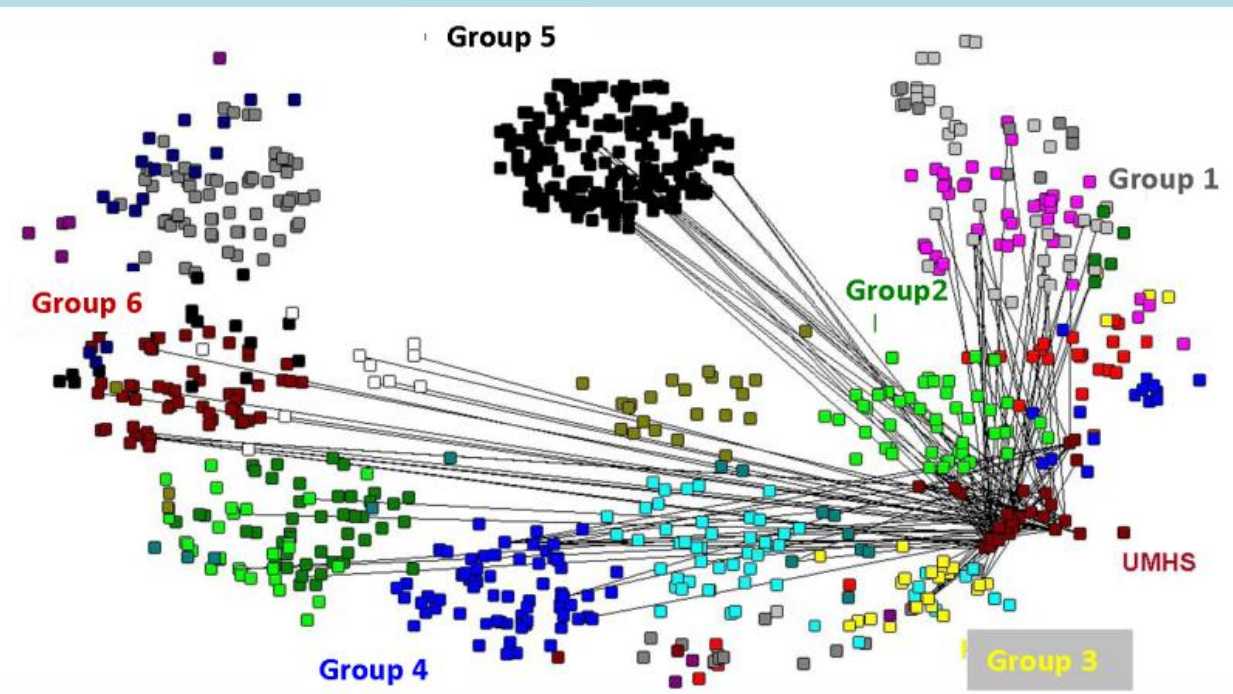


KM McDonald et al. Care coordination. Figure 1. In: KG Shojania et al. *Closing the quality gap: A critical analysis of quality improvement strategies*. Technical Review 9. Vol. 7. Rockville, MD: AHRQ, June 2007. AHRQ Publication No. 04(07)-0051-7.



# Care Coordination Between Primary Care Providers

Relationships between University of Michigan Primary Care units with other physician organizations based on shared BCBSM members (7/09–6/10)



- **Nodes**—represent a primary care practice (PCP) unit within or outside your PO that had at least 1 shared member with one of your practice units
- **Lines**—represent a PCP unit within your PO that shares at least 5 members with another practice unit, either within your PO or outside your PO

Data provided by BCBSM to assist physician organizations to help support decisions for linking primary care practice units into systems of care within your physician organization and identifying potential hospital partnerships that may have the most natural relationships based on BCBSM member experience.

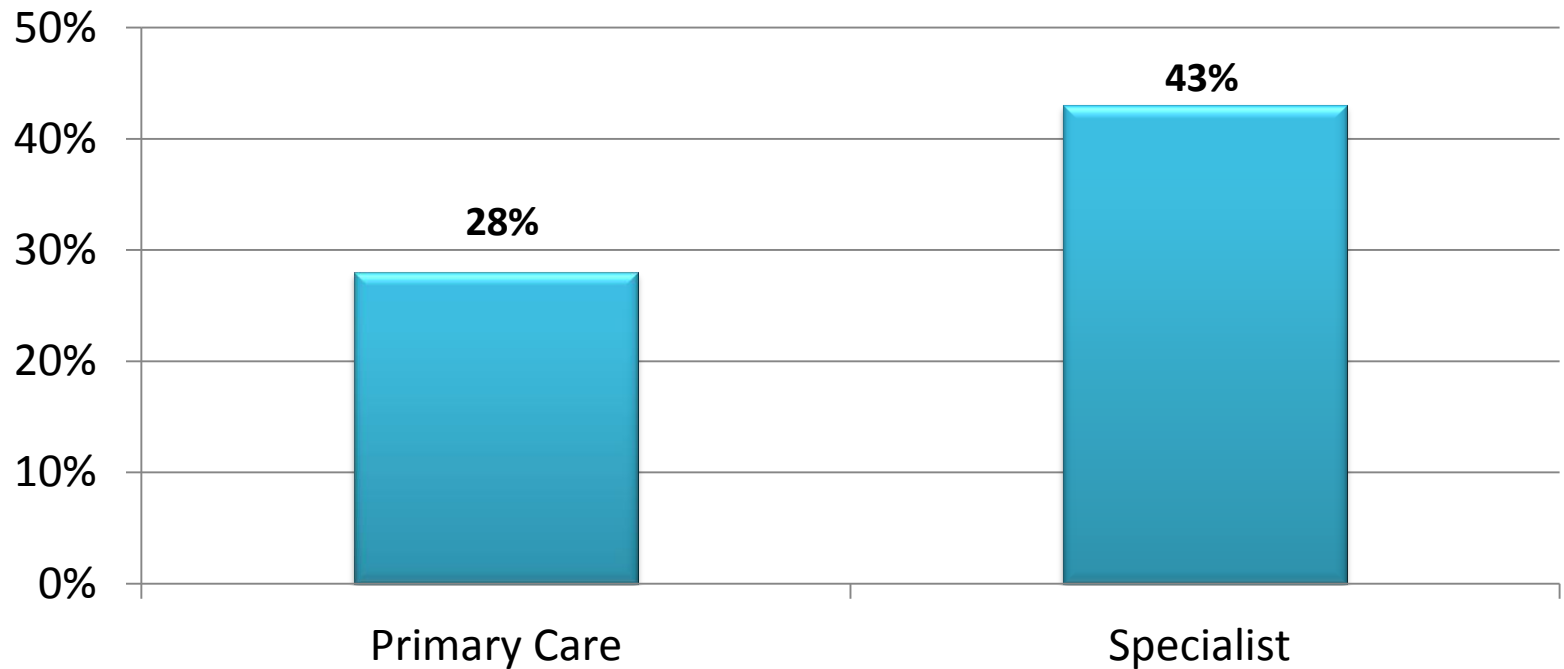
# Where Do BCBSM Patients Attributed to University of Michigan Physicians Get Cardiology Care?

	University of Michigan Primary Care Clinics																									Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
UM Cardiology	1	18	48	41	6	41	14	7	28	6	19	25	26	34	5	2	2	22	5	14	2	39	22	2	7	436
Cardiology 1		2	5	1		2			3	5	2	1	1	1				1		1		2	1		1	29
Cardiology 2				5		1							1		1			2								10
Cardiology 3			1	1					1									1				1				5
Cardiology 3						2			1									1								4
Cardiology 4													1	1				1				1				4
Cardiology 5				1		1												1				1				4
Cardiology 6		3																				1				4
Cardiology 7				2									1													3
Cardiology 8			1	1										1												3
Cardiology 9		1										1														2
Cardiology 10		1	1																							2
Cardiology 11																		2								2
Cardiology 12									1													1				2
Cardiology 13					1															1						2
Cardiology 14		1	1																							2

Data provided by BCBSM to assist physician organizations to help support decisions for linking primary care practice units into systems of care within your physician organization and identifying potential cardiology partnerships that may have the most natural relationships based on BCBSM member experience. This table shows only 15 of the 47 cardiology groups used by these patients.

# Problems with Care Coordination Between Primary Care and Specialty Physicians

**Dissatisfaction with quality of information received by  
PCPs and Specialty Physicians from each other**



TK Gandhi et al. Communication breakdown in the outpatient referral process. *J Gen Intern Med* 2000;15:626-31.

# Improving Care Coordination Between PCPs and Specialists

- Electronic referral
  - Can speed access, reduce costs, and improve care coordination
  - Many consultations can be done without seeing the patient
    - Dermatology: provide advice based on a patient's history plus a digital photo
- Referral agreements
  - Specify responsibilities of PCPs and Specialists, including
    - which clinical conditions should be managed by PCP
    - which studies should be performed before referral
    - timeliness to referral

T Bodenheimer. *Coordinating Care — A Perilous Journey through the Health Care System*. NEJM 2008;358;10:1064-71

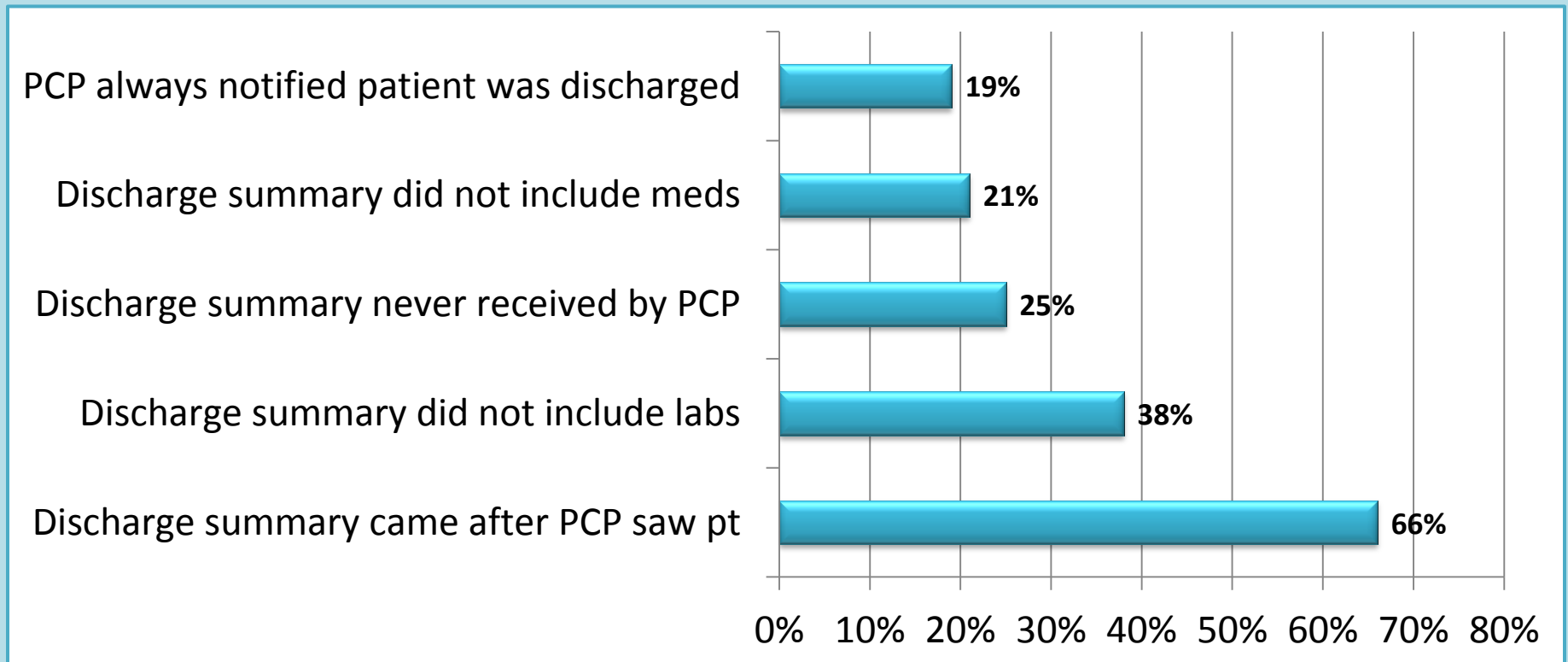
# Where Do BCBSM Patients Attributed to University of Michigan Physicians Get Hospitalized?

## University of Michigan Primary Care Clinics

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	Total
UM Hospitals	17	90	76	128	67	99	79	47	58	16	47	66	60	5	34	39	18	24	36	26	27	106	1	43	23	19	7	1258
Hospital 1	4	21	12	9	6	14	8	5	17	6	23	5	5		2	2		2	3	20	8	4		9	5	5	3	198
Hospital 2		9	1	2					55	10	19	7	2							1		2		3		4		115
Hospital 3	1		1			11	6	2					1					5	10			1		1		1		40
Hospital 4		2		4	1	5	4		2	1		2	1		1	1		5	1			3		1		1		35
Hospital 5				15	4				1		1						10							1				32
Hospital 6		1		14	2	3	1										1	1	4									27
Hospital 7		3		4		2	1				1	1	2		1										2		1	18
Hospital 8						1			5	6	1	1											1	1				16
Hospital 9		3	1			1	2					1	1		2			2	1			1						15
Hospital 10		1		3			3	1				1						3	1			1						14
Hospital 11		1		4	3		2			1	1	1			1													14
Hospital 12					2				3				2				3		1			2				1		14
Hospital 13			1	4	3	1						2						1				1						13
Hospital 14		1	1			2											1	1				3				2		11

Data provided by BCBSM to assist physician organizations to help support decisions for linking primary care practice units into systems of care within your physician organization and identifying potential cardiology hospital partnerships that may have the most natural relationships based on BCBSM member experience. This table shows only 14 of the 66 hospitals used by these patients.

# Problems with Care Coordination Between Hospital Physicians and PCPs



S Kripalani et al. Deficits in communication & information transfer between hospital-based and primary care physicians. *JAMA* 2007;297: 831-41.

# Characteristics of Care Coordination Activities Programs

Determine and update a patient's care coordination needs based on

- Patient's health, history, functional status, self-management behaviors, treatment

Create and update a proactive plan of care and goals of care

- Between health care professionals and patients and their families
- Within teams of health care professionals/across health care teams or settings

Communicate

- Between health care team and patient/family, within and across teams or settings

Facilitate transitions

Connect with community resources

Align resources with population needs

- Using a systems-level approach to assess the needs of populations and to identify and address gaps in services

D Meyers et al. The Roles of PCMHs and ACOs in Coordinating Patient Care. AHRQ Publication No. 11-M005-EF. Rockville, MD: December 2010.

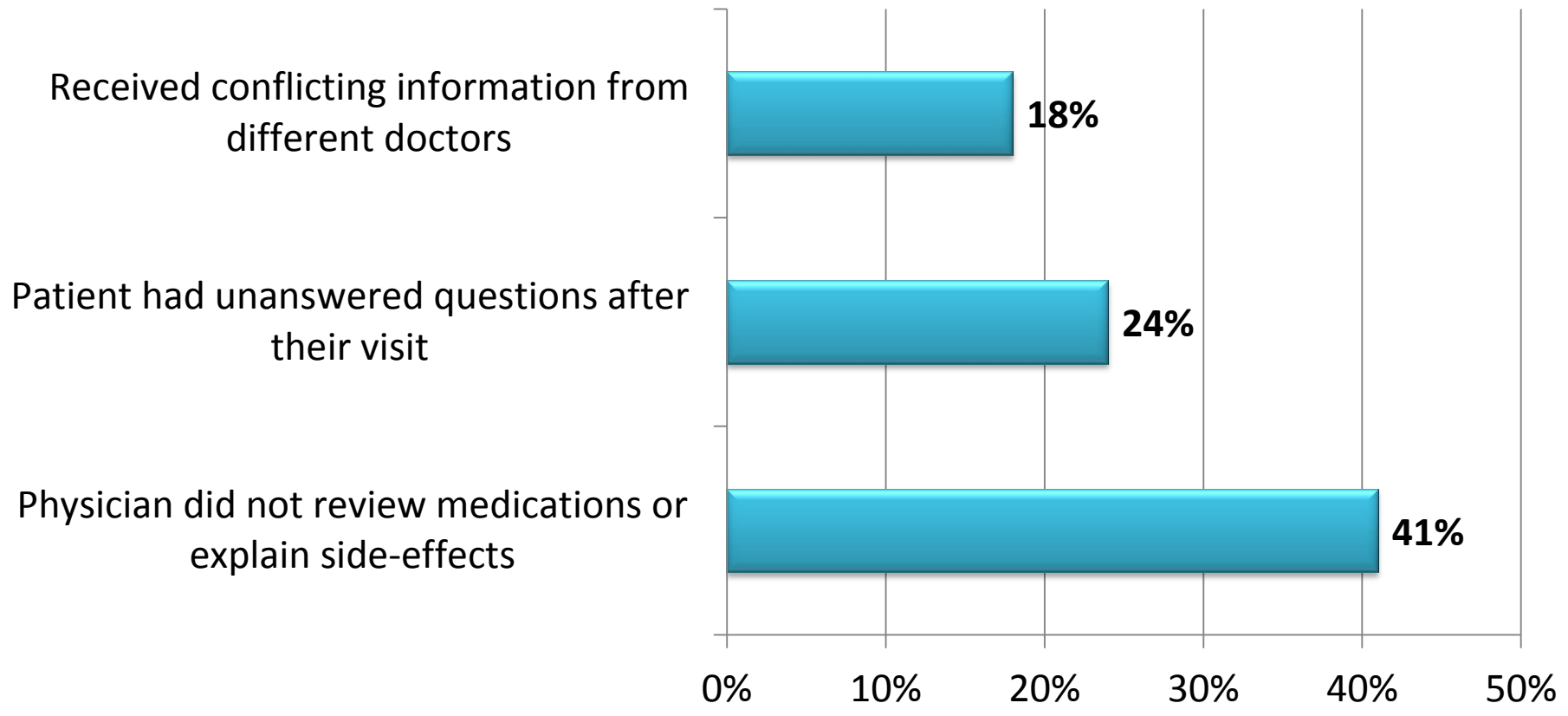
E Fisher & K Grumbach. *Creating Value: Better Care Coordination. PCMH and ACO.* March 2011. Washington, D.C.

# Agenda

- PCMH and ACOs
- Enumerate methods to identify patient risks
- Understand effectiveness of care management
- Identify the role of care coordination in transitions of care
- **Understand the importance of patient engagement**
- University of Michigan experience
- Final thoughts



# Patient-Reported Problems in their Interactions with Physicians



C Schoen et al. Primary care and health system performance: adults' experiences in five countries. Health Aff (Millwood) 2004; Suppl Web Exclusives:W4-487–W4-503.

# Patient Engagement Framework

Find safe, decent care <ul style="list-style-type: none"><li>• Performance, cost, access, style</li></ul>	Participate in treatment <ul style="list-style-type: none"><li>• Monitor symptoms, learn meds</li></ul>
Accurate communication <ul style="list-style-type: none"><li>• Report symptoms/meds, ask questions</li></ul>	Promote health <ul style="list-style-type: none"><li>• Set goals for behavior/treatment</li></ul>
Organize health care <ul style="list-style-type: none"><li>• Make appt, bring insurance/tests</li></ul>	Get preventive health care <ul style="list-style-type: none"><li>• Evaluate screening tests, vaccines</li></ul>
Pay for health care <ul style="list-style-type: none"><li>• Insurance, check cost, keep receipts</li></ul>	Plan for the end of life <ul style="list-style-type: none"><li>• Advance directives, medical DPA</li></ul>
Make good treatment decisions <ul style="list-style-type: none"><li>• Evidence base, options</li></ul>	Seek health knowledge <ul style="list-style-type: none"><li>• Assess risks, understand condition</li></ul>

Center for Advancing Health. A New Definition of Patient Engagement: What is Engagement and Why is it Important? 2010.

J Gruman et al. Patient Education and Counseling. 2010; 78(3):350-356,

# Patient Barriers to Care Function

- Health Literacy *"the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions"*
- Cognitive Function
  - working memory (i.e., short-term memory)
  - semantic learning (i.e., processing and recall of new information)
  - executive cognitive function (i.e., the capacity for behavioral self-regulation)

A Chugh et al. Better Transitions: Improving Comprehension of Discharge Instructions. *Frontiers of Health Services Management* 25(3): 11-32.

# Screening for Patient Barriers to Care

- Health Literacy
  - Rapid Estimate of Adult Literacy in Medicine (REALM )
  - Short Test of Functional Health Literacy Adults (S-TOFHLA)
  - Newest Vital Sign (NVS)
  - Chew’s 3-item Health Literacy Screening
- Cognition
  - Mini-Mental Status Exam (MMSE)
    - Clock Drawing Test; “John Brown 42 Market Street Chicago”;
  - Montreal Cognitive Assessment (MOCA)

# Interventions for Improving Comprehension in Patients with Low Literacy or Impaired Cognition

- Low literacy
  - Provide instructions using a variety of media
  - Provide verbal and written instructions or use pictures for illustration
  - Teach-Back/check for understanding/simulations
- Impaired cognition
  - Provide detailed counseling to family and other caregivers
  - Involve social services from admission
- Impaired cognition and low health literacy
  - Schedule discharge instructions when caregivers can be present
  - Train interdisciplinary team in strategies to improve comprehension
  - Simplify written materials and discharge instructions

A Chugh et al. Better Transitions: Improving Comprehension of Discharge Instructions. *Frontiers of Health Services Management* 25(3): 11-32.

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# University of Michigan Multiple Clinical Interventions



# Transition Involves Shared Responsibilities

- Improve the discharge process
  - BOOST/MI STAAR\*
  - Discharge document
  - Discharging MD/hospital
- Identify gaps in care
  - Call-back
  - Home care program
- Improve the receiving process
  - Patient-centered medical home
  - Provider-delivered care management
  - Sub-acute service/hospice
  - Accepting MD/hospital

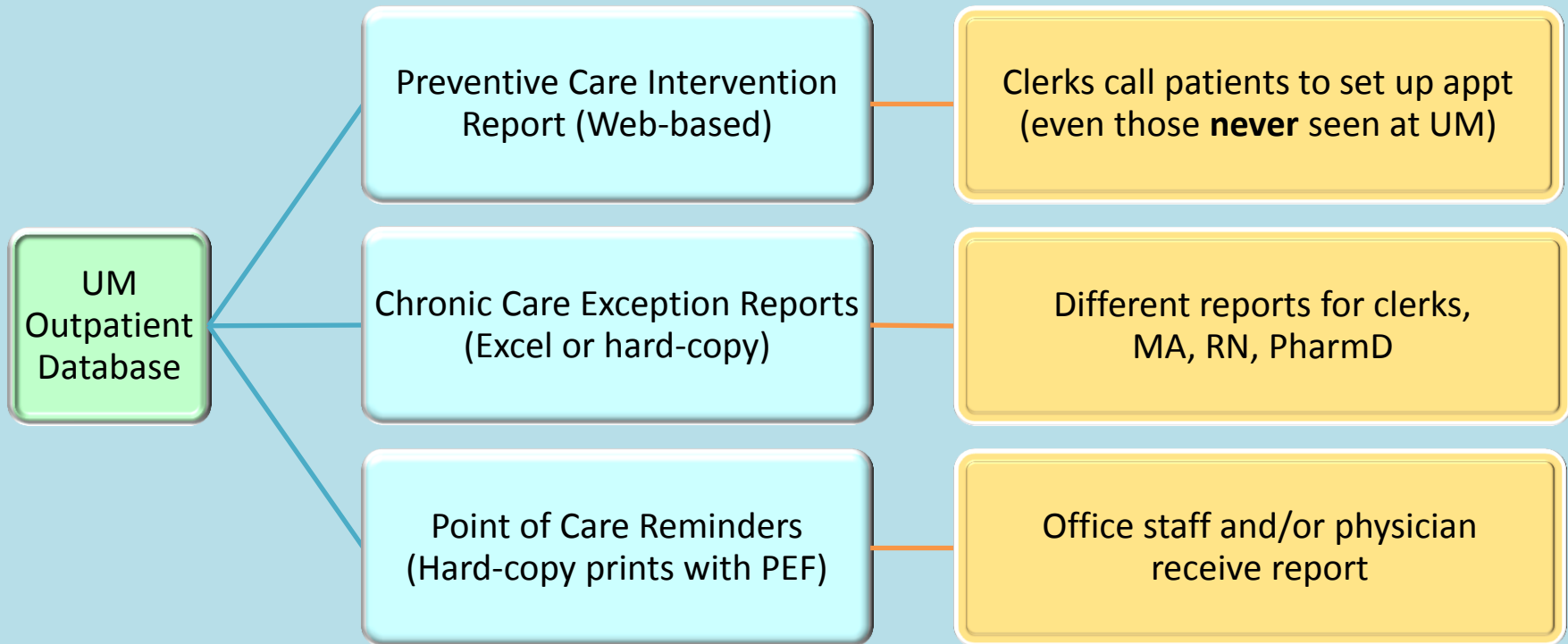
\* There are multiple other transition programs, including the Transitional Care Model, Naylor's Advanced NP Program, and Project RED



# University of Michigan Primary Care Chronic Disease Management

- Eight chronic disease registries
  - Asthma
  - Diabetes
  - Chronic Kidney Disease
  - Controlled Substances
  - CAD/CVD
  - COPD
  - Heart Failure
  - Pediatric Obesity
- Developed an internal algorithm for primary-care-based care management based on number of chronic diseases, level of control, medications
  - Care management provided by nurses and/or PharmDs
  - Pilot program funding provided by BCBSM

# Actions to Improve Prevention and Chronic Disease Management





# CarePartners

Home

Resources

Contact Us



The CarePartner Program was created so that people in contact with someone living with a chronic illness can better support that person in managing their self-care, and can help fill in some of the gaps in services available through the patient's healthcare system. The CarePartner program links people with chronic illnesses with an informal caregiver living outside of their home. That helper is called the patient's "CarePartner" – they may be a family member or friend living in the same town or could even be someone like an adult child living at a distance.

- Use computer-managed interactive voice response systems to help manage patients with chronic disease (e.g., CHF, diabetes, depression)
- Link patients and providers with informal caregivers

Sign In

User Name:

Password:

Sign In

[Forgot password?](#)

# University of Michigan Complex Care Management

- Targets select populations of patients
  - Medicare patients discharged from Internal Med or Psychiatry
  - Medicaid managed care, underinsured (county plan), uninsured
- Medical director (0.3 FTE), 4 RNs, 2 social workers, 3 support staff
- Volume by complexity (May 2009–June 2010)\*
  - Level 0 (unable to contact or refused care) 4,695
  - Level 1 (single event, stable with support, compliant) 13,649
  - Level 2 (multiple barriers, identifiable goals) 1,259
  - Level 3 (multiple comorbidities, mental health dx, SES) 698
  - Level 4 (untreated /recurrent mental health or chronic dz) 183

\* # of patients discharged from hospital or who had an ED visit. Related programs include Geisinger's ProvenCare, Everett Clinic's Intensive Outpatient Care Program, Guided Care, Dartmouth's Gold Star Program

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# Sample Measures to Assess Chronic Illness Care and Coordination of Care

Assessment of Chronic Illness Care (ACIC)

ACOVE-2: Continuity and Coordination of Care

Coleman Measures of Coordination of Care

Consumer Assessment of Healthcare Providers & Systems (CAHPS)

Care Coordination Measurement Tool (CCMT)

Care Transitions Measure (CTM-3)

Hibbard's Patient Activation Measure

Patient Assessment of Care for Chronic Conditions (PACIC)

Program of All-Inclusive Care for the Elderly (PACE)

KM McDonald et al. Care coordination. Appendix. In KG Shojania et al. *Closing the quality gap: A critical analysis of quality improvement strategies*. AHRQ Publication No. 04(07)-0051-7.

JH Hibbard et al. Development & Testing of a Short Form of the Patient Activation Measure. *Health Services Research* 2005;40(6, Part I): 1918-30.

## Next Steps ...

- How is your organization linking your PCMH efforts and move toward ACOs?
  - Connected EHRs, financial incentives, active data management, patient attribution, community engagement
- How are you using Care Management and Care Coordination Services?
  - Coordinated across all care settings, managed across provider groups
- How are you actively engaging patients in their health care?
  - Advance care planning, shared decision making, barriers (literacy/cognition), patient activation



## Module 2B: Reshaping Care Delivery

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