

## 2016 Defense Health Information Technology Symposium

# Using Adjusted Clinical Groups for Care Coordination in the MHS Population Health Portal



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**“A joint, integrated, premier system of health, supporting those who serve in the defense of our country.”**



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# Learning Objectives

- Review Patient Centered Medical Home principles
- Outline challenges and barriers to care coordination
- Describe how Adjusted Clinical Groups (ACG) markers are created and managed
- Demonstrate ACG in the MHS Population Health Portal
- Discuss how ACG markers can assist in identification of high risk individuals for poor care coordination

# Agenda

- Benefits and Challenges of Care Coordination
- Nuts and Bolts of ACG Creation
- Availability of ACG in the MHS Population Health Portal (MHSPHP)
- How to use ACG / MHSPHP for Care Coordination

# The Patient Centered Medical Home

- Provides relationship-based primary care
- Accounts for pts physical & mental health care needs
- Coordinates care across the broader health care system
- Delivers accessible services
- Demonstrates a commitment to quality & improvement

# Relationship Based Primary Care



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“They don’t assist on the transition [from the hospital back to] home. You have to be tough; be an advocate,” said an 82-year-old man caring for his wife, who has terminal cancer and dementia.

“Sometimes, I have to spend all day on the phone to my doctor, even to get an appointment,” said an 81-year-old woman.

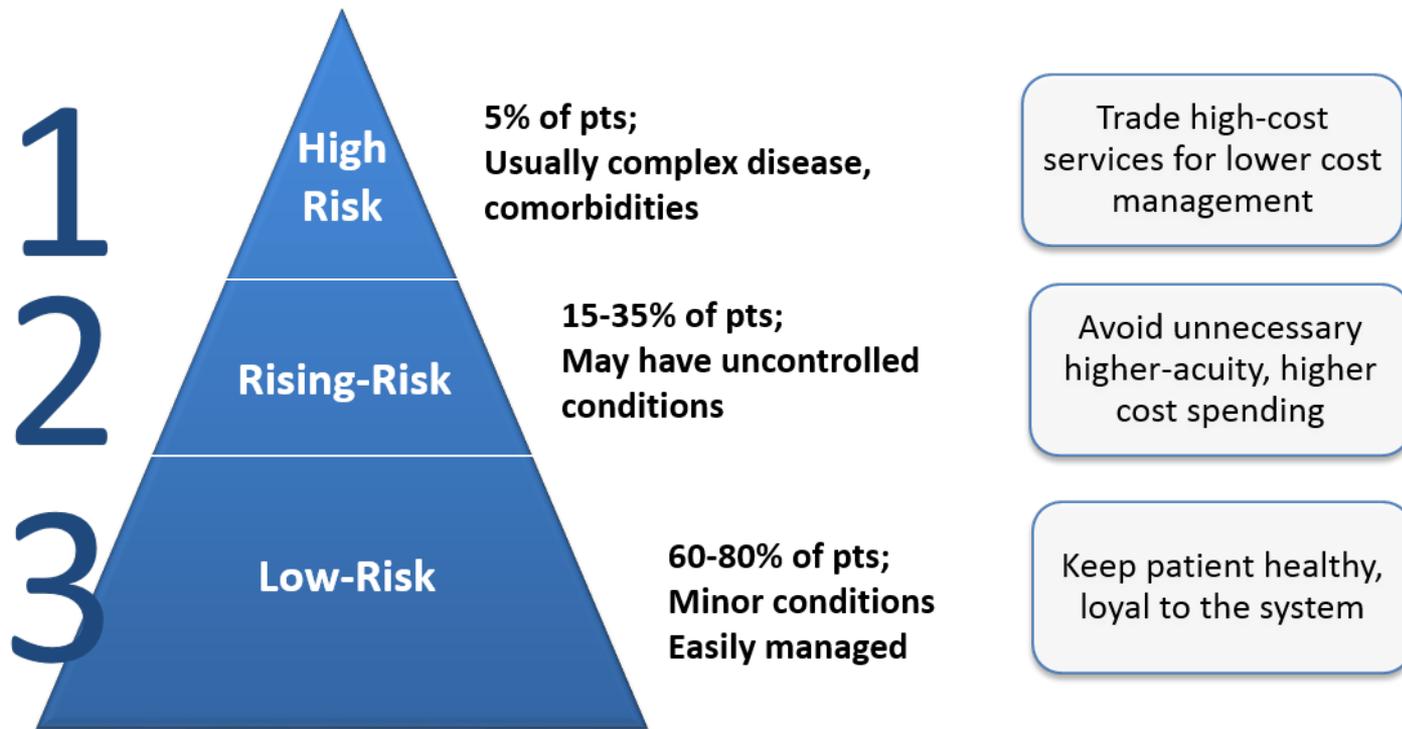
*Coordinating Care for Adults With Complex Care Needs in the Patient-Centered Medical Home: Challenges and Solutions. January 2012. AHRQ Focus Group Interviews*

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# What is Good Care Coordination?

- Identify high risk patients who need help with coordination
- Conduct and update regularly needs assessments
- Develop and individualize care plans
- Facilitate access to medical home and other services
- Regularly monitor and communicate

# Premier Health Plans Target Populations



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# The *HIGH*-Risk Patient

... has **at least** one complex condition, multiple comorbidities, and psychosocial problems



The typical high-risk patient should have a one-to-one relationship with the health system, principally through a high-risk manager.

## PROVIDERS SHOULD AIM TO:

- 1** Deliver intense, comprehensive, proactive management
- 2** Trade high cost acute care for low cost care management wherever and whenever it is clinically effective to do so

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# The *RISING*-Risk Patient

... represents ~20% of population and has **multiple Risk Factors** that could push them into the high risk category if left unaddressed, such as the diabetic who is obese and smokes.



The typical rising-risk patient should be managed in the medical home.

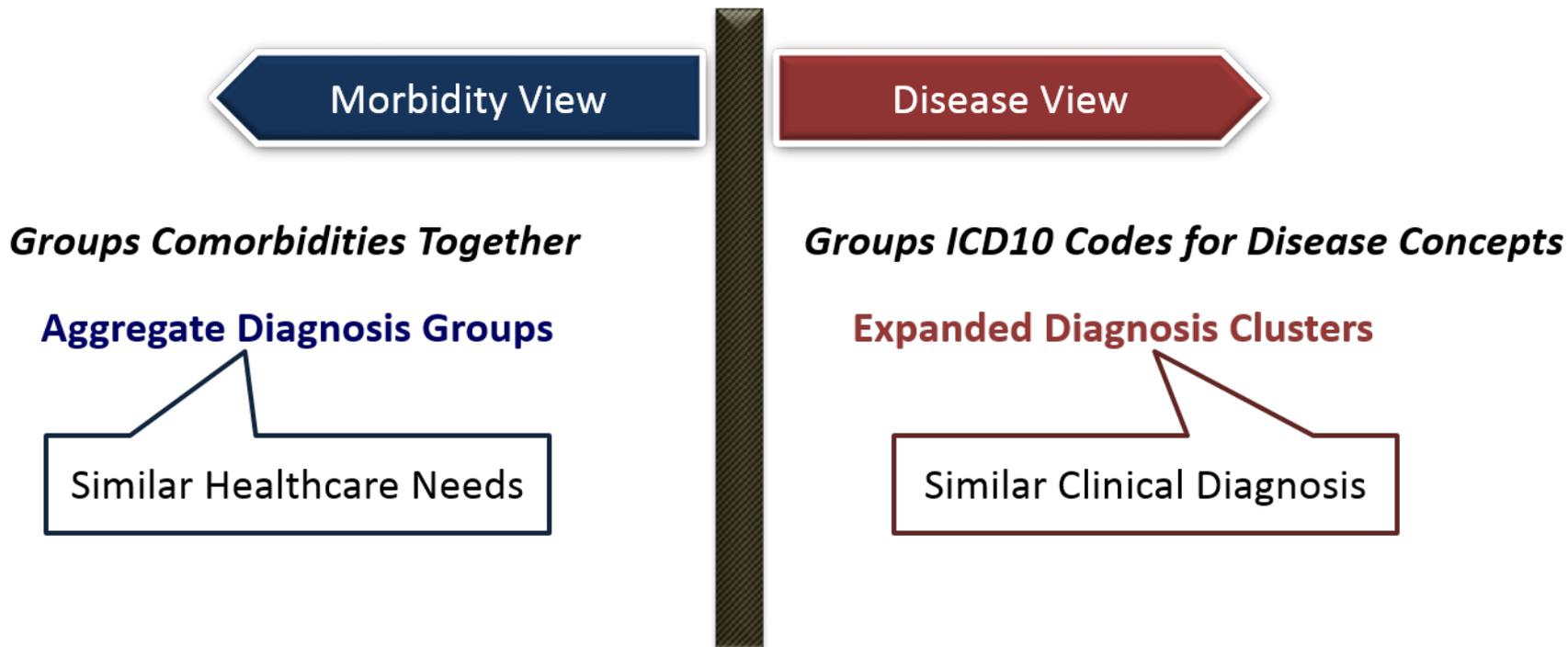
## PROVIDERS SHOULD AIM TO:

- 1** Avoid unnecessary spending & keep patients from becoming high risk
- 2** Manage patients in enhanced primary care setting, such as the medical home

# Care Coordination Challenges & Factors

- Factors that contribute to poor coordination
  - Tyranny of the urgent
  - Too many chefs in the kitchen ...
  - Dilution of care – multiple providers
  - No primary care / generalists involved in care
  - No oversight of total care
  - Focus on chronic conditions and not patient problems
- Coordination is difficult to measure

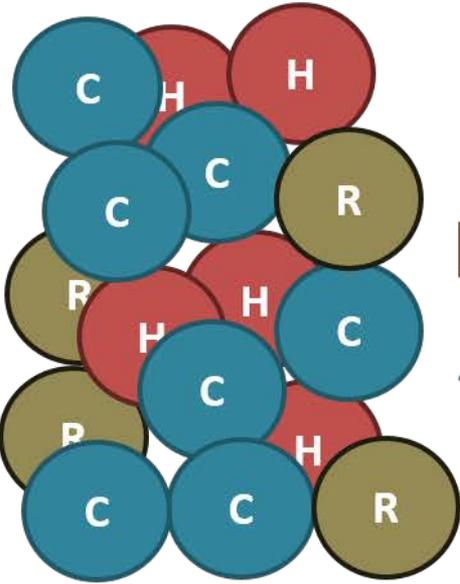
# ACG to the Rescue!



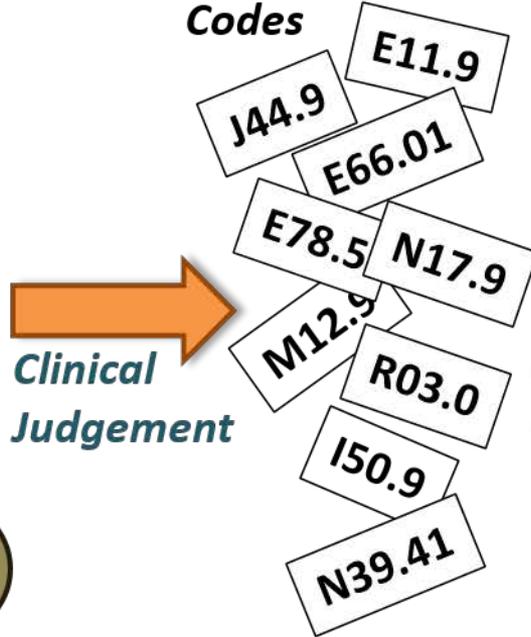
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# Morbidity Perspective

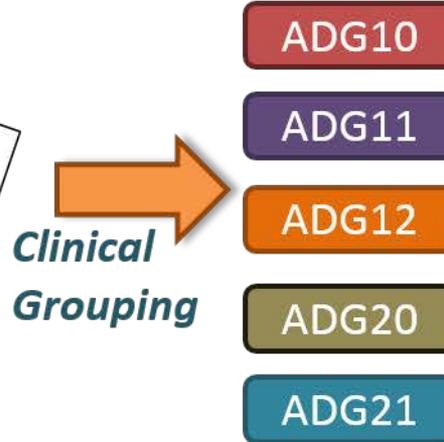
**Healthcare Encounters**



**Diagnostic Codes**



**Morbidity Groups**



**ACGs**



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# Resource Utilization Bands (RUB)

*Versus*

# Illness Burden Index (IBI)



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Cost of Individuals in ACG Group in Past Year Compared To Average Person in MHS

**IBI**

2015

2016



ACGs

**RUB**

2017

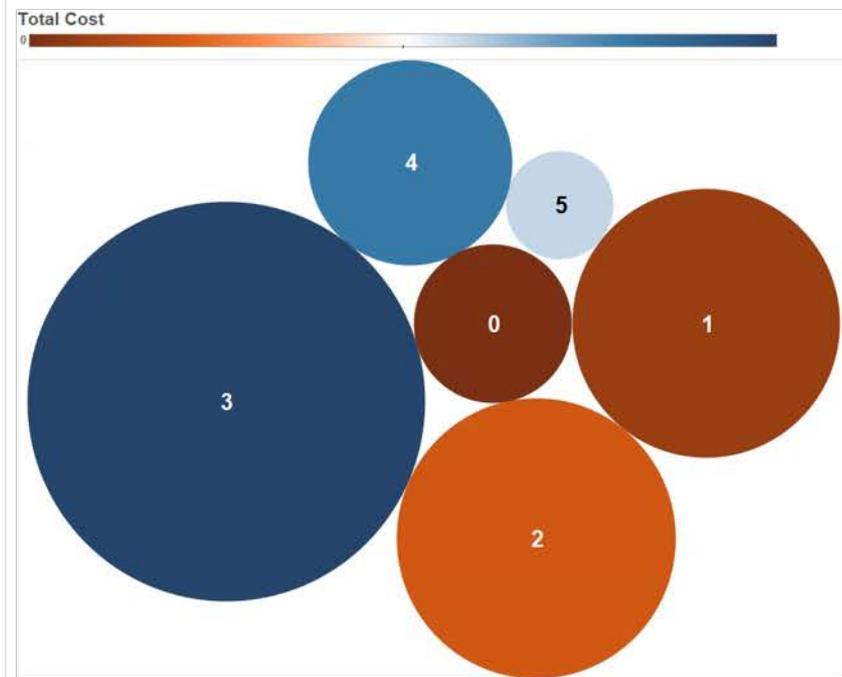
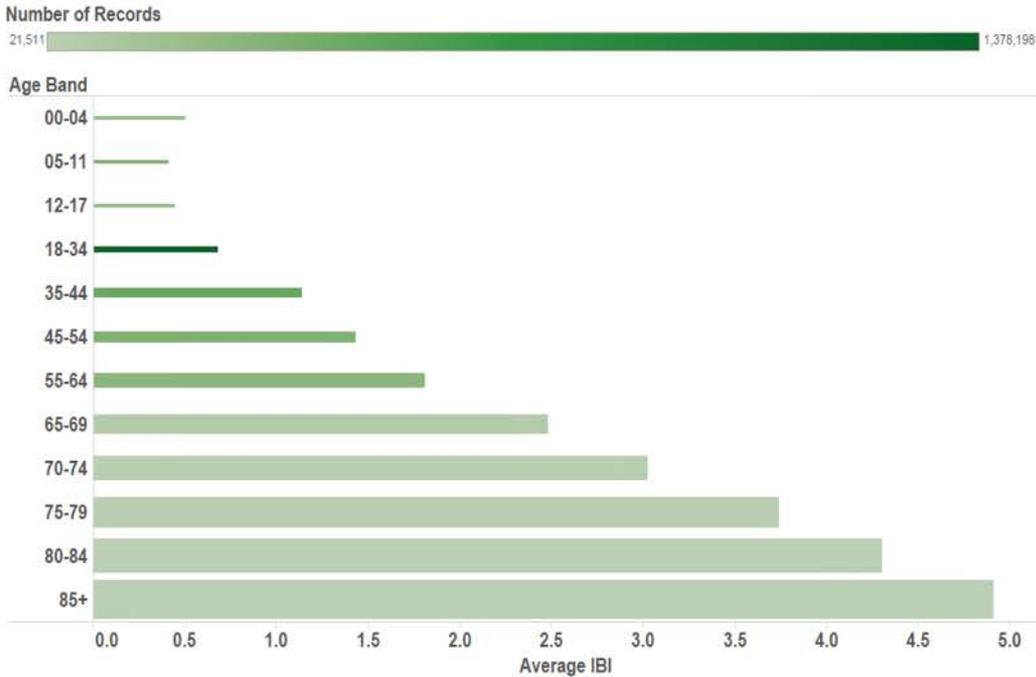
Expected Resource Use In Coming Year Based on Comorbidities (ACG)

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# Illness Burden Index & Resource Utilization Band

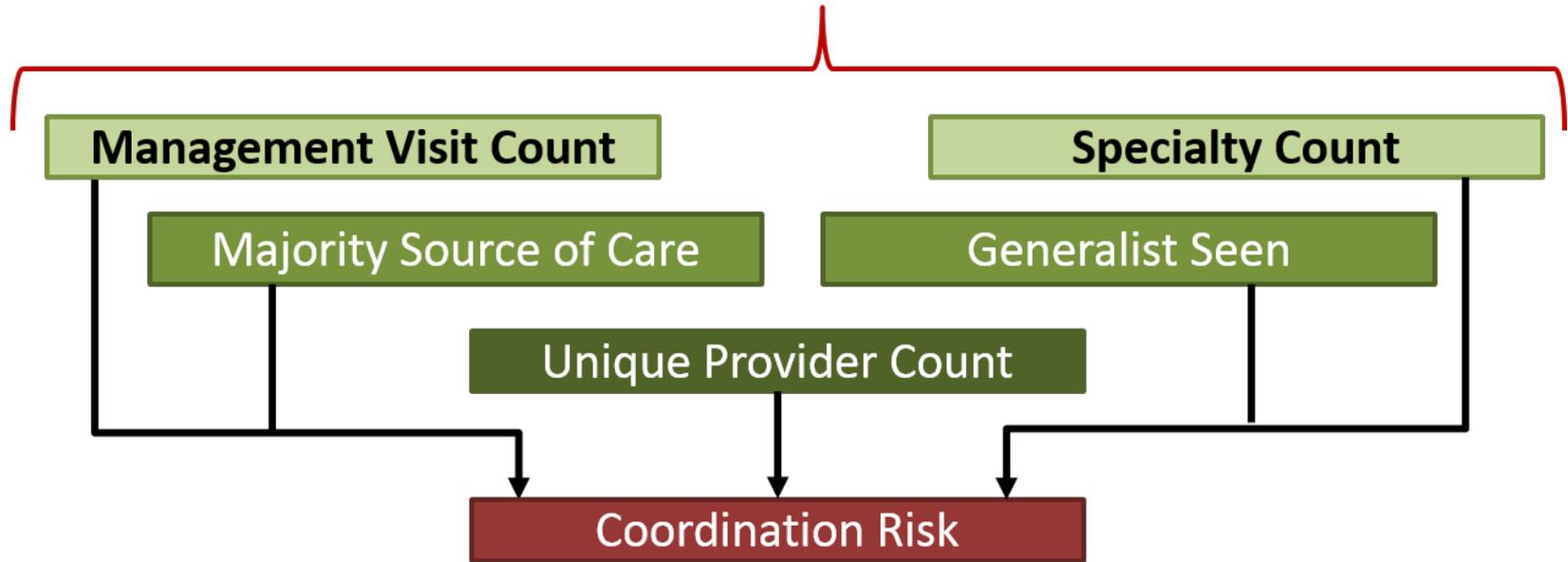


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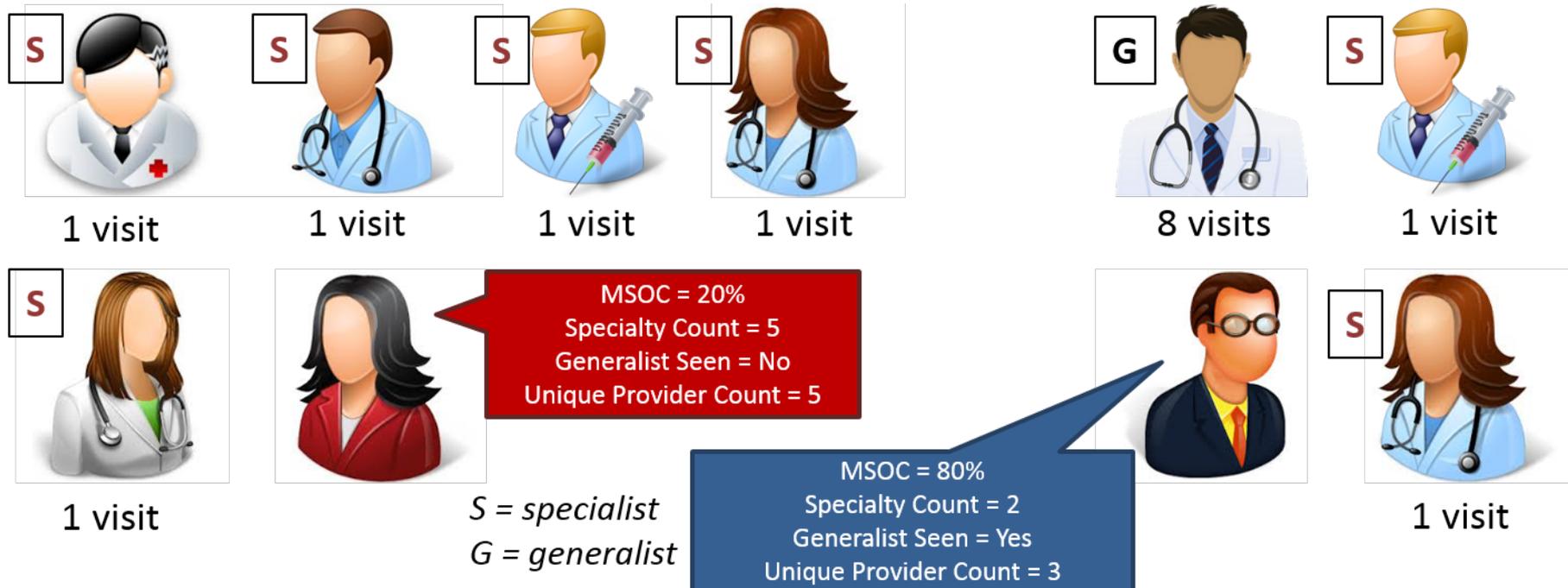


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## ACG Coordination Markers



# Coordination Markers



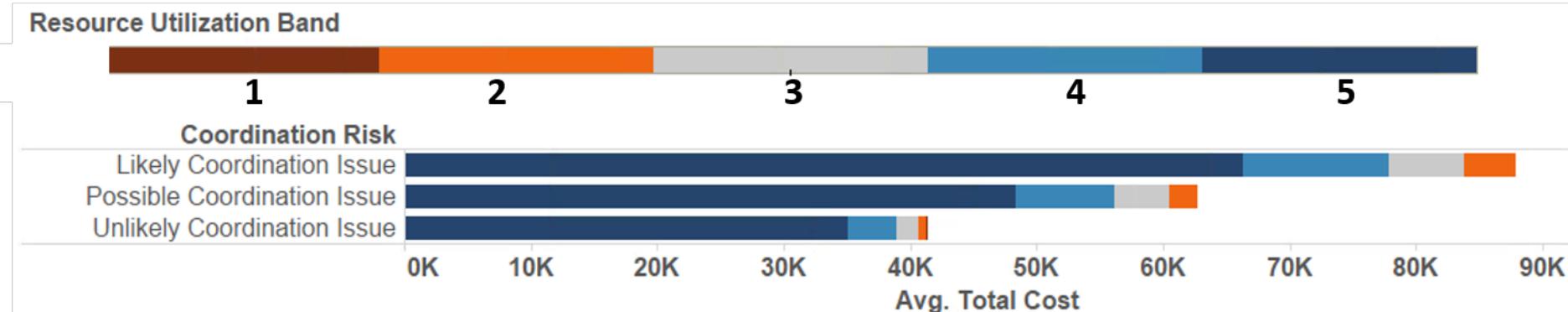
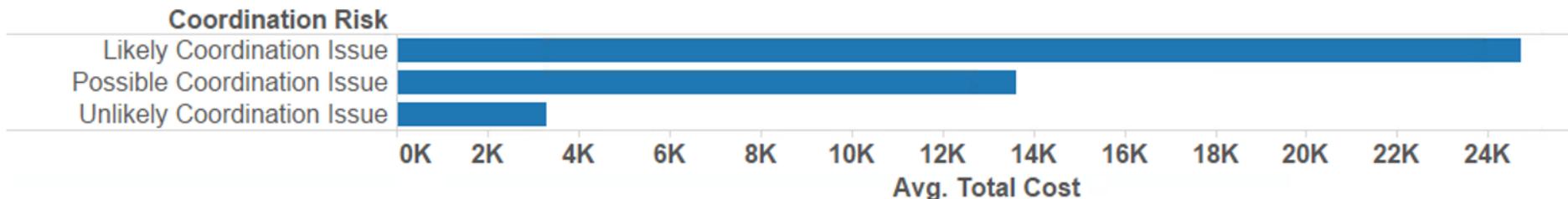
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# Cost of Poor Coordination



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# The Impact of Poor Coordination

**6 x** *more*  
**Adverse Events**

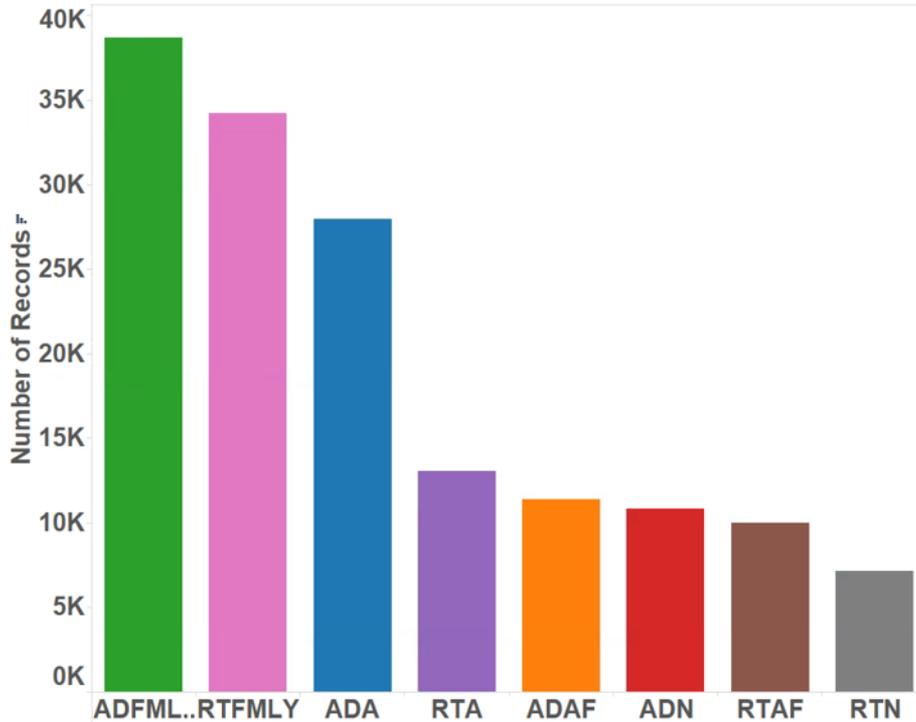
**4 x** *more*  
**ER visits**

**3 x** *more*  
**Hospitalizations**

**8 x** *more*  
**Costly**

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# Coordination Issues for Active Duty & Families



- **38,000 ADFMLY**
- **51,000 ADSM**
- **29,000 R-ADSM**
- **34,000 RTFMLY**

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# Medical Management Registry

CarePoint application portal

UptoDate Search UpToDate... Search this

BROWSE PAGE

Set as Home Page

100 items per page | 1 - 100 of 41234 items

Discuss	Age	Age Band	Sex	BENCAT	Marital Status	Pregnant	Pregnancy without Delivery	Delivered	Low Birth Weight	Frailty Flag	Frailty Concepts	Chronic Condition Cnt
+	36	35-44	F	ADAF		0	N	0	0	N		3
+	53	45-54	M	RTN		0	N	0	0	N		0
+	47	45-54	F	RTFMLY		0	N	0	0	N		0
+	29	18-34	M	ADAF		0	N	0	0	N		0
+	4	00-04	M	ADFMLY		0	N	0	0	N		1
+	5	05-11	F	ADFMLY	S	0	N	0	0	N		1
+	29	18-34	F	ADAF	M	0	N	0	0	N		0
+	56	55-64	F	RTAF	M	0	N	0	0	N		3
+	45	45-54	F	RTFMLY		0	N	0	0	N		0

*Over 100 variables available for enrolled population for medical management*



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# Using Queries for Identification

Query Builder

Filters My Filters

AND/OR	(	Selected Field	Operator	Value	)
	▼	Coordination Risk	Contains ▼	LCI	▼
AND ▼	▼	Resource Utilization Band	Equal ▼	5	▼

Available Fields: Choose a Field... ▼

Search Clear

Out of 39,998 enrolled  
to a facility ...

1286 remain on registry  
when you enter:

Coordination Risk = LCI  
RUB = 5

# Titration of Query

Query Builder

Filters My Filters

AND/OR	(	Selected Field	Operator	Value	)
	▼	Coordination Risk	Contains ▼	LCI	▼
AND ▼	▼	Resource Utilization Band	Equal ▼	5	▼
AND ▼	▼	BENCAT	In (Comma Delimited) ▼	ADA,ADAF,ADN	▼

Available Fields: Choose a Field... ▼

Search Clear

**When you add Bencat  
for ADA, ADAF, ADN  
You are left with 78**

# Sample of Results



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RUB	IBI	Unique Provider CNT	Specialty CNT	Majority Source of Care	Outpt Visits	ER Visits	Admissions
5	5.88	13	5	16	98	0	0
5	5.88	22	4	33	52	1	2
5	14.61	8	10	15	184	15	2
5	14.61	21	6	25	32	0	0
5	14.61	15	8	23	223	0	2
5	5.88	11	6	19	58	1	0

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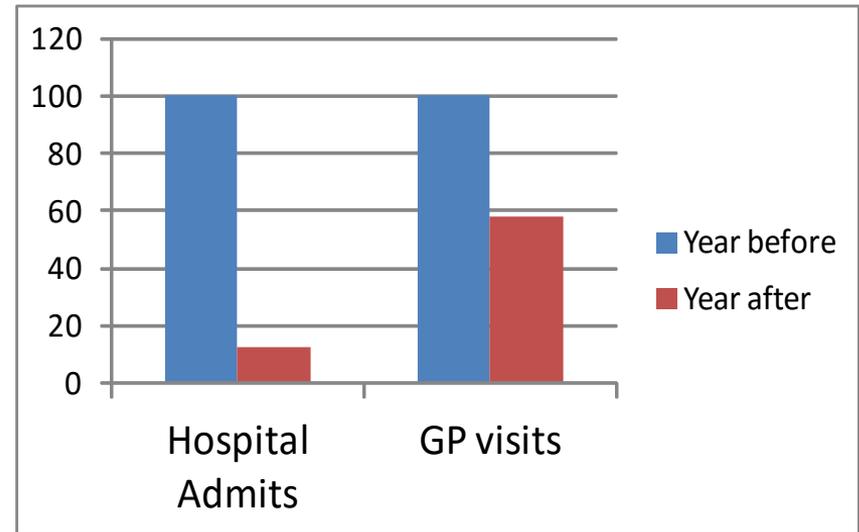
# Does It Work?

- Mayo Clinic found ACG better at predicting future hospitalizations, ER visits, and future high resource utilization<sup>1</sup>
- Group Health (US) reduced specialty care visits using ACG<sup>2</sup>
- Canadian study found patients with the frailty marker had a statistically significant increased hazard of death (HR 2.23) after surgery<sup>3</sup>
- Northern Spain demonstrated that ACG was able to predict patients at high risk for unplanned admissions (ROC 0.8)<sup>4</sup>

# UK Study Results

- Care coordinators co-located with General Practitioners
- Targeted 5% of the population
- Multidisciplinary team input
- Used coaching, motivational interviewing, and contingency planning
- Transitioned patients to self management (average 12 weeks)

630 patients across 10 practitioners - standardised to 100  
Castlefields and Phase 2 projects



*Used with Permission from David Cochrane*

# Success – Patient’s Perspective

- Relatives
  - “Since (her) input my mother has a better understanding of the health care services available to her and is more confident”
  - “I am grateful to (her) for all the help she has given to ensure my Mum receives a good standard of care.”
- Patient
  - “ ... she talks to me, answers any questions and we sort out any problems together. She listens to me, a thing most people have forgotten how to do. She came into my life like a breath of fresh air.”

# Take Away

- Care coordination is a key pillar of PCMH
- It can be one of the greatest challenges for patients in need and one of the greatest rewards for the team
- MHSPHP provides ACG markers to help identify, and monitor potential coordination issues for high risk patients
- Better care coordination reduces negative outcomes, and healthcare costs, but improve patients satisfaction and engagement

# Questions?



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# Evaluations



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Please complete your evaluations

# Contact Information

David Carnahan, Col, MD, MSCE  
Chief, Enterprise Intelligence  
[david.carnahan@us.af.mil](mailto:david.carnahan@us.af.mil)

Susan Chao, MS  
Chief, Analytics and BI  
[susan.chao@us.af.mil](mailto:susan.chao@us.af.mil)