



# GRACE TEAM CARE

*Geriatric Resources for Assessment and Care of Elders*

**Steven R. Counsell, MD**

Mary Elizabeth Mitchell Professor and Director, IU Geriatrics

Scientist, IU Center for Aging Research

E-mail: [scounsel@iu.edu](mailto:scounsel@iu.edu)

# Background

- ❑ Older persons with multiple chronic illnesses and geriatric conditions:
  - Often do not receive recommended standards of care
  - Account for a disproportionate share of expenditures
- ❑ New models of care are needed that:
  - Improve quality without increasing costs
  - Optimize the roles of primary care and geriatrics healthcare professionals
  - Integrate medical and social care

Institute of Medicine (IOM). *Retooling for an Aging America*. Washington, DC: The National Academies Press; 2008.

# Background

- ❑ PCPs have limited time and resources to provide comprehensive care to older patients

⇒ **GRACE**

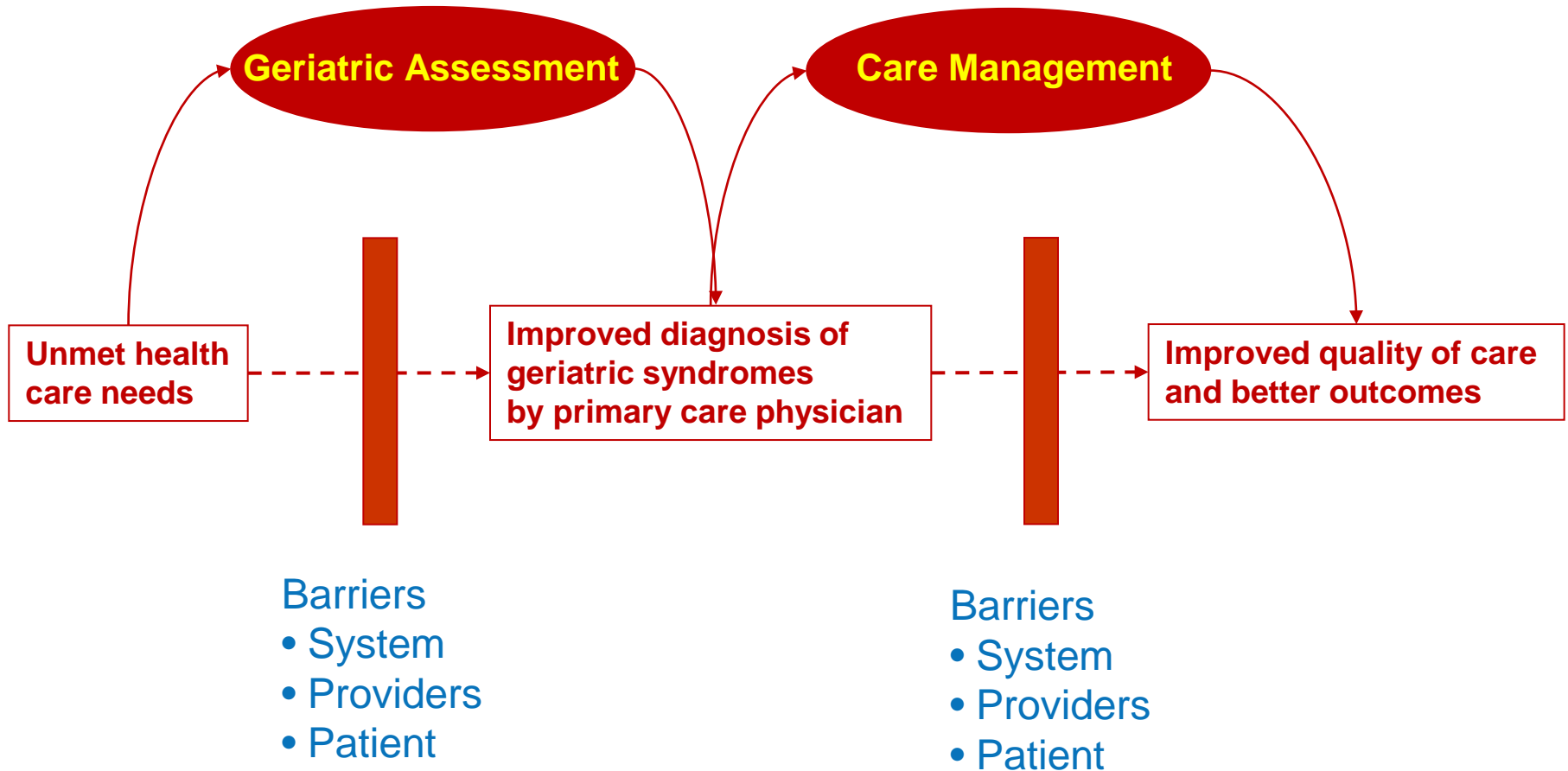
**Geriatric  
Resources for  
Assessment and  
Care of  
Elders**



**GRACE**

**Team Care Model**

# GRACE Intervention



# Unique Features of



- In-home assessment and care management by team of experts
- Specific care protocols to manage common geriatric conditions
- Integrated EMR documentation
- Web-based care management tracking
- Integrated pharmacy, mental health, hospital, home health, and community-based services

# GRACE Team Care

1. In-home geriatric assessment by a NP and SW team
2. Individualized care plan using GRACE protocols
3. Weekly interdisciplinary team conference
  - Geriatrician
  - Pharmacist
  - Mental Health Liaison





# GRACE Team Care

4. NP and SW meet with PCP
5. Implement care plan consistent with participant's goals
6. Ongoing care management and caregiver support
7. Ensure continuity and coordination of care, and smooth care transitions





# Transitional Care

- Check hospital and ED alerts
- Communicate baseline status and care plan
- Collaborate in planning transition
- Deliver transitional care including home visit
  - ✓ Proactive support of participant and family/caregiver
  - ✓ Reconcile medications/provide new medication list
  - ✓ Ensure post-discharge arrangements implemented
  - ✓ Inform PCP and schedule follow-up visit
- Review in GRACE team conference

# GRACE Protocols

- Advance Planning
- Health Maintenance
- Medication Management
- Difficulty Walking/Falls
- Depression
- Dementia
- Caregiver Burden
- Chronic Pain
- Malnutrition/Weight Loss
- Urinary Incontinence
- Visual Impairment
- Hearing Impairment

# GRACE Protocol: Difficulty Walking / Falls

## PCP Review

- Confirm diagnosis and update EMR
- Evaluate and treat causes
- Order lab evaluation (check CMP, CBC, TSH, B12)
- Optimize pain medication
- Consult physical therapy
- Consult Geriatrics or Neurology

## Routine Team

- Monitor orthostatic vital signs
- Increase fluid intake
- Prescribe walking program
- Provide patient education on falls prevention

# GRACE Protocol: Memory Loss/Dementia

## PCP Review

- Confirm diagnosis and contributing causes
- Evaluate metabolic causes (check CMP, TSH, B12)
- Discontinue anti-cholinergic medication(s)
- Start cholinesterase inhibitor
- Consult Geriatrics or Neurology

## Routine Team

- Monitor social supports
- Discuss advance directives and long-term planning
- Help set up supportive home environment
- Encourage good nutrition and physical activity
- Provide education on dementia, behavioral issues and community resources

# GRACE Protocol: Advance Care Planning

## PCP Review

- Patient conference to discuss values and goals
- Patient conference to discuss preferences
- Evaluate patient's decision-making capacity
- Consult Neuropsychology for legal competency

## Routine Team

- Monitor for changes in goals and preferences
- Encourage identification of DPOA for health care
- Facilitate family conference
- Assist in obtaining in-home services
- Facilitate alternative housing

# GRACE Protocol: Caregiver Burden

## PCP Review

- Monitor caregiver for signs of stress or depression
- Consider family conference to identify sources of help
- Recommend caregiver obtain medical care and/or supportive counseling
- Consult Geriatrics for evaluation of spouse or elderly caregiver

## Routine Team

- Monitor need for counseling or medical referral
- Monitor need for increased assistance and/or respite
- Refer to community resources for education and support groups
- Provide education on common issues of caregivers

# GRACE

## Results



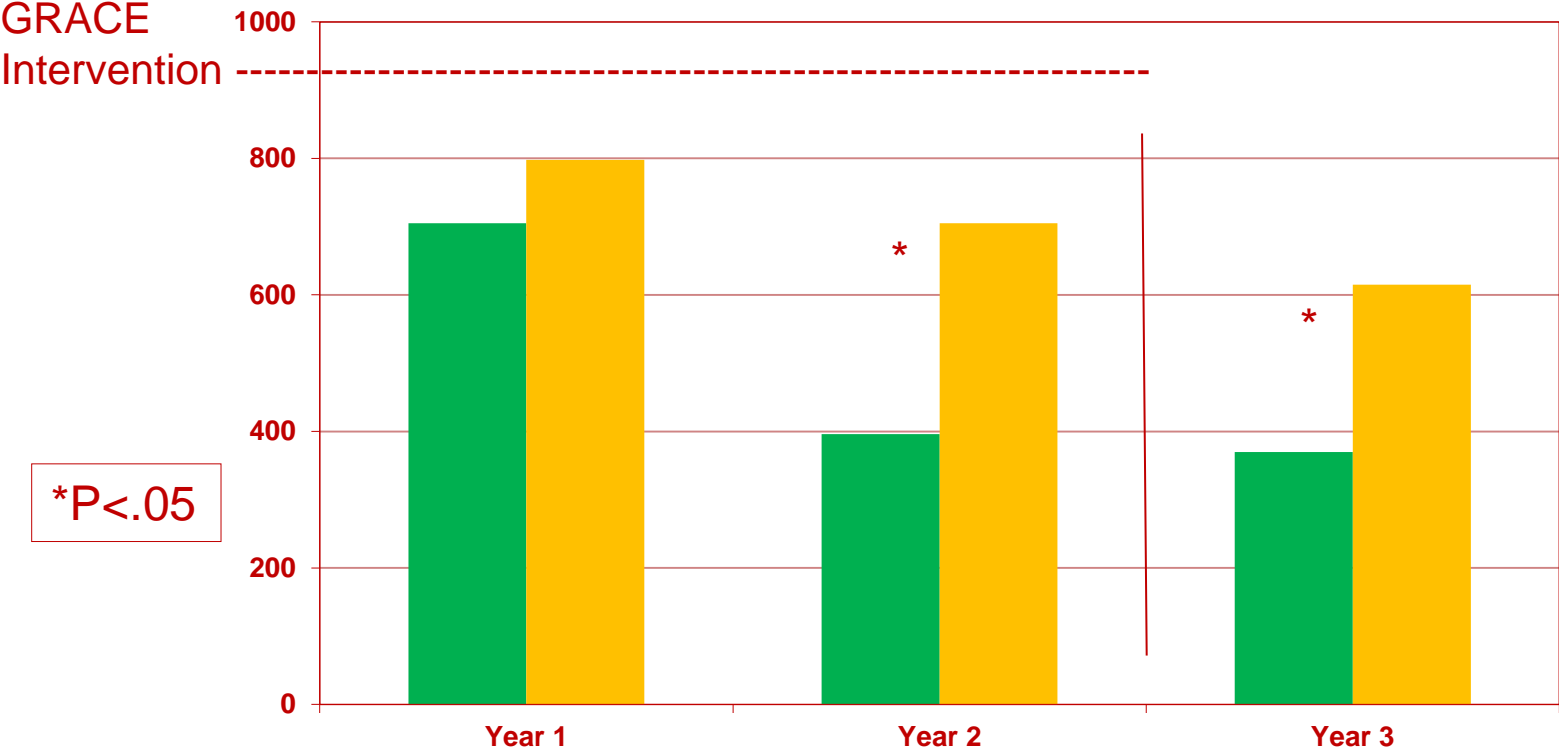
# GRACE Trial: Better Quality and Outcomes

- Better performance on ACOVE Quality Indicators
  - ✓ General health care (e.g., immunizations, continuity)
  - ✓ Geriatric conditions (e.g., falls, depression)
- Enhanced quality of life by SF-36 Scales
  - ✓ General Health, Vitality, Social Function & Mental Health
  - ✓ Mental Component Summary
- Lower resource use and costs in high risk group
  - ✓ Fewer ED visits and hospitalizations
  - ✓ Reduced acute care costs offset program costs

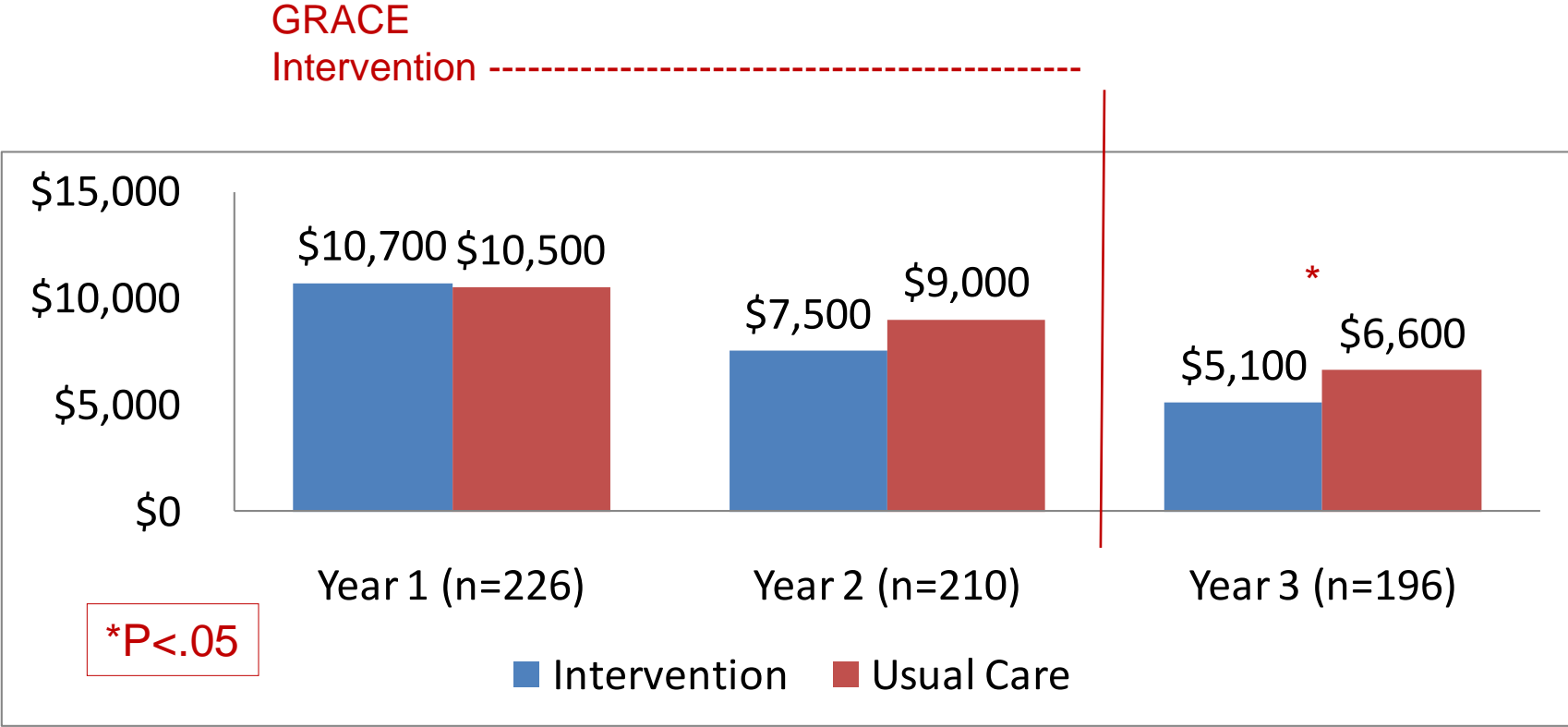
Counsell SR, et al. JAMA 2007;298(22):2623-2633.

Counsell SR, et al. J Am Geriatr Soc 2009;57:1420-1426.

# High Risk Patients: Decreased Admissions



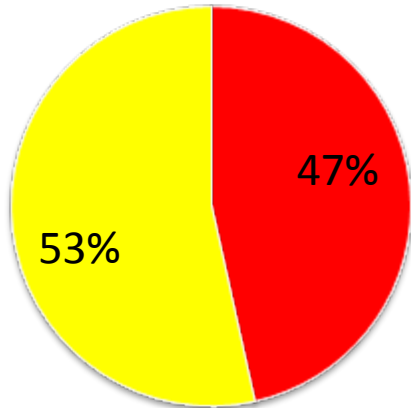
# High Risk Patients – Lower Costs



# High Risk Patients – Total Two Year Costs

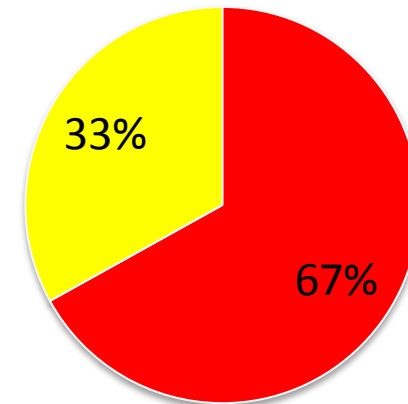
## Intervention

- Acute Care
- Chronic and Preventive Care



## Usual Care

- Acute Care
- Chronic and Preventive Care



# Keys to Success

1. NP/SW team assigned by physician and practice site
2. Focused on geriatric conditions and medication management to complement primary care
3. Provided recommendations for care and resources for implementation and follow-up
4. Incorporated proven care transition strategies
5. Provided home-based and proactive care management
6. Integrated with community resources and social services
7. Developed relationships through longitudinal care

**GRACE**

**Dissemination**

# GRACE Team Care Implementations

## HealthCare Partners – Southern California

- The SCAN Foundation

## VA Healthcare System – Indianapolis

- VHA Office of Geriatrics and Extended Care

## ADRC Evidence-Based Care Transition Programs

- ACA: U.S. Administration on Aging & CMS
- Tech4Impact: Center for Technology and Aging

## IU Health Medical Advantage Plan – Indianapolis

- Indiana University Health Physicians



## Demographics (n=171)

- Mean Age, 85 years (range, 48-109)
- 74% Female
- 94% enrolled from high risk chronic care – HomeCare Program (mean 6.0 months)
- 6% enrolled post-acute

## Satisfaction (>90% agreed)

### GRACE model...

- Increased overall patient satisfaction
- Improved quality of life
- Very helpful in providing care to older patients
- Led to better follow-up and coordination of care

## Quality (>95% performance)

- Screened for falls and depression
- Used protocols for falls and depression when indicated
- Medication list to patient
- Surrogate decision-maker documented

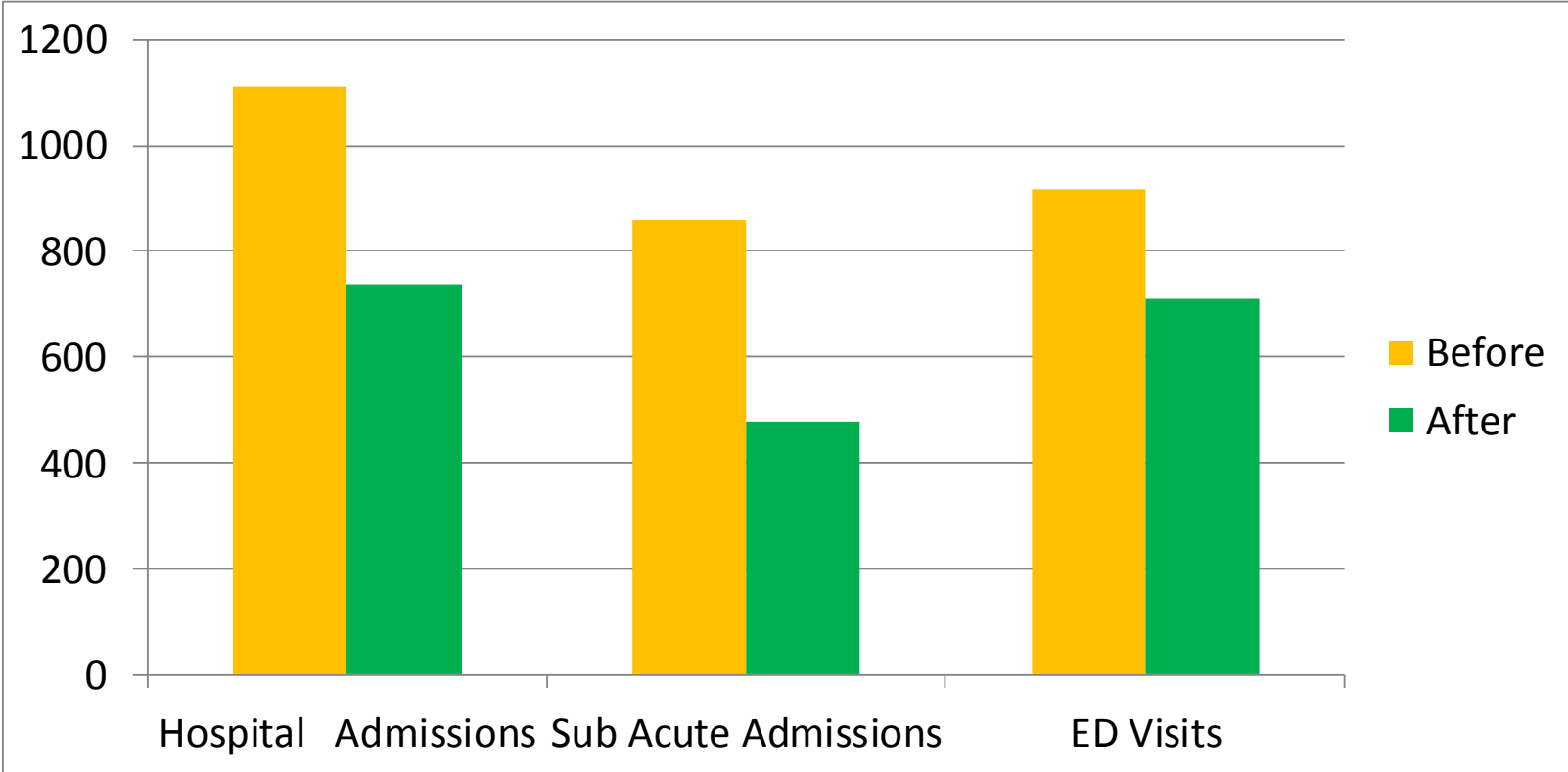
## Outcomes (n=172)

Before/After (12 months)

### **Reduced Utilization**

- ▼ 34% Hospital Admissions
- ▼ 29% Hospital Bed Days
- ▼ 44% Sub Acute Admits
- ▼ 53% Sub Acute Bed Days
- ▼ 22% ED Visits

# Utilization Rates Before and After GRACE



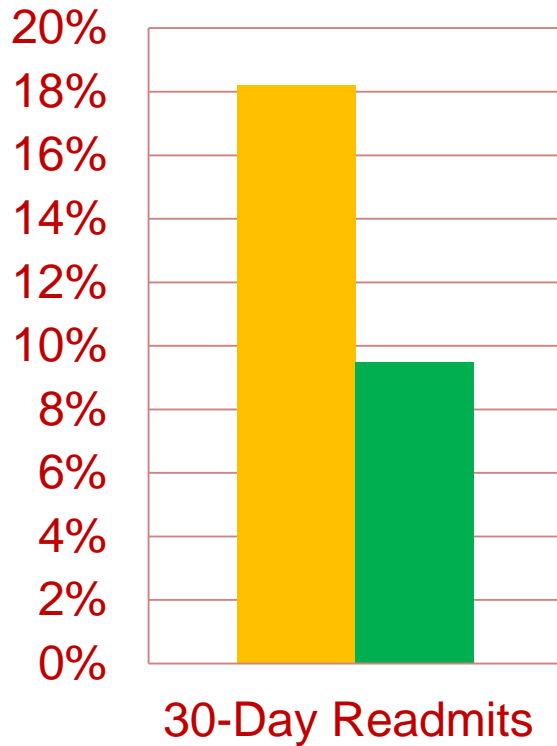
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IU Geriatrics

# Readmission and Hospitalization Rates



DEPARTMENT OF VETERANS AFFAIRS  
RICHARD L. ROUDEBUSH VA MEDICAL CENTER  
1481 WEST 10<sup>th</sup> STREET  
INDIANAPOLIS, IN 46202



Control  
GRACE

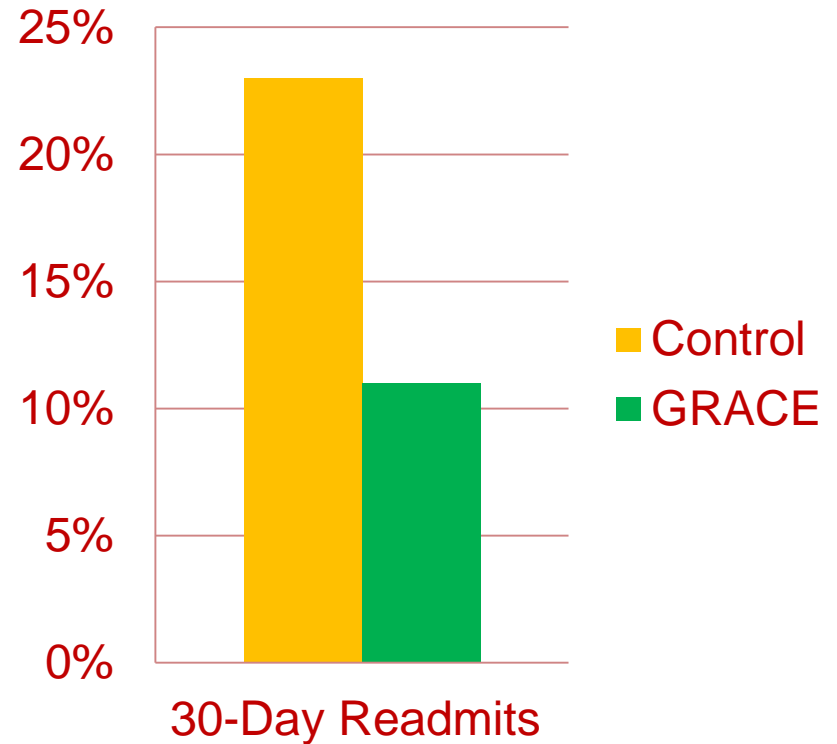


# Indiana ADRC Care Transitions Program



## GRACE Care Transition

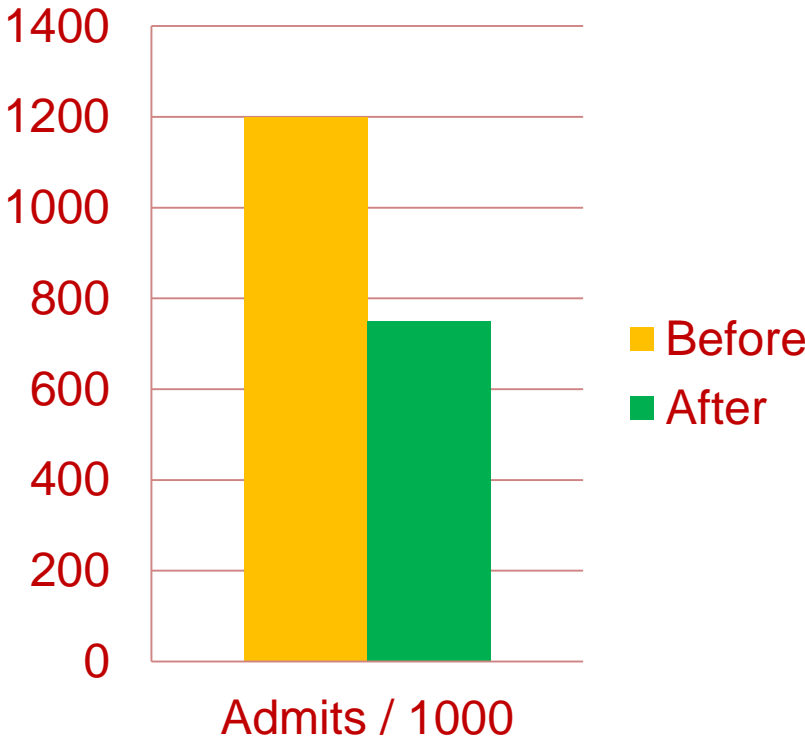
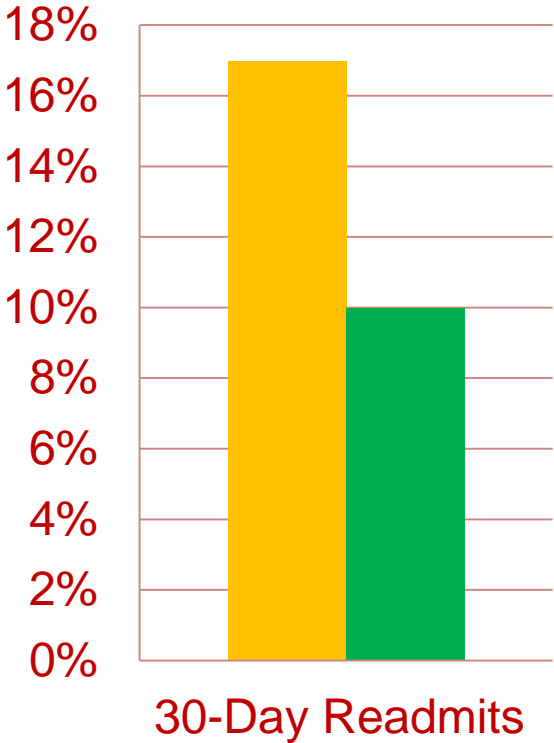
- Discharge Plan – RN Care Mgr
- Options Counseling – **ADRC SW**
- Care Transition – Medical Group NP and **ADRC SW**
- Care Management – Medical Group NP and **ADRC SW**
- Medicaid HCBS – **ADRC SW**



# Readmission and Hospitalization Rates



IU Health Physicians



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# GRACE Team Care Dissemination

## GRACE Team Care™ Replication in California

- The SCAN Foundation
  - UCSF Medical Center
  - Health Plan of San Mateo
  - Whittier Hospital Medical Center

## VA Healthcare System Transformation-21

- VHA Office of Geriatrics and Extended Care
  - San Francisco VAMC
  - Cleveland VAMC



# The Case for GRACE

## *Costs*

- *7 FTE (3 NP, 3 SW, 1 Coordinator)*
- *0.3 FTE (.1 Med Dir, .1 MH, .1 Pharm)*
- *Mileage home visits*
- *Increased MH and Rehab utilization*
- *Caseload of 300*

## *Return*

- *↓ 30% Hospital admits*
- *↓ 35% SNF admits*
- *↓ 25% ED visits*
- *Appropriate risk adjustment*
- *Better satisfaction & quality scores*
- *PCP efficiency gains*

# Opportunity in Older Adults with Complex Health Care Needs

- Evidence-based
- Flexible
- Integrated
- Reduces high cost utilization
- Infuses geriatrics principles
- Includes mental health
- Collaborative team approach
- Patients and physicians are highly receptive

# GRACE Training and Resource Center

**Director: Dawn Butler, MSW, JD**

Phone: 317-630-8018

Email: [butlerde@iu.edu](mailto:butlerde@iu.edu)

**Website**

<http://graceteamcare.indiana.edu>



## Implementation Support

- GRACE Website
- On-Site Training
- GRACE Training Manual
- GRACE Care Protocols
- Web-Based Care Management Tracking Tool
- GRACE Dashboard
- Consultation

# Dissemination Facilitators (and Barriers)

- “Early adopter” clinical champion
- Key stakeholders support as win-win-win
- Strong primary care and valued clinical geriatrics
- Financial incentives for system and providers
- Shared EMR and care management software
- Dedicated staff for start-up (not “add on” duties)
- GRACE site visit, training, technical assistance, and flexibility for adaptation to local health system

# Health Policy Issues

- Financial incentives
  - ACOs and PCMH
  - MA Plans and DE Special Needs Plans
  - State Dual Eligible Demonstrations
  - CMS Innovation Awards
  - Start-up investment (e.g., Meaningful Use for EMR)
- Workforce development
  - Primary care
  - Geriatrics
  - Inter-professional team



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