Transitions in Care

(Lost in Transition, Lost in Translation, Lost in the System)

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Quality and Safety Leadership Series

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Care Transitions Collaborative Baton Rouge-based project

- CMS Special Recognition Award by CMS
- Pairing of pt & health coach
- "Termed Care Transitions, this Baton Rouge-based project was cited by CMS last week as one of the nation's most innovative health care projects."

Objectives for Breakout

- ✓ Overview of Topic/the Problem -- Care Transitions
- ✓ Common Themes in Recent Literature
- ✓ Specialty Populations
  - ✓ Heart Failure
  - ✓ COPD
  - ✓ ESRD
- ✓ What the Future Holds

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The Problem

- 2009 ~ 20% Medicare beneficiaries discharged from hospital → rehospitalized within 30 days; 34% were readmitted within 90 days (Jencks et al NEJM 2009)
- 2004 ~ 13% of Medicare beneficiaries discharged from hospital → ≥ 3 provider transfers during a 30 day period (Coleman et al Health Serv Res 2004)
- Hospital → Community → Hospital accounts for **~$15B** in annual Medicare spending

Hospital Readmission

- Hospital readmission begins with hospital discharge
  - Every transition has 2 sides
- Problems at home
  - Patients are people too
  - Healthcare providers expect too much
  - Many assumptions are made
- Problems with our system

Patient Level Causes of Readmissions

- Medication errors
  - Improperly managed by healthcare team
  - Mistakes/errors
  - Non agreement between settings
  - Inadequate communication to patients
  - Patient non-adherence; poor understanding
- Lack of reliable follow-up care
  - Receiving providers unaware
  - Patients unable to access follow-up providers

Problems with Our Healthcare System

- Complexity
- Fragmented medical care
  - Providers are people too & often at the mercy of the system
- Isolated information is **not** safe medical management
  - EHR, paper, ½ & ½, FAX, email

Other Outcome Measures

- Hospital readmission rates
- Hospice utilization
- Medication discrepancies identified
- Aver Care Transitions Measure Score
- HCAHPS Scores
- Return to ED

Terminology Transitions of Care

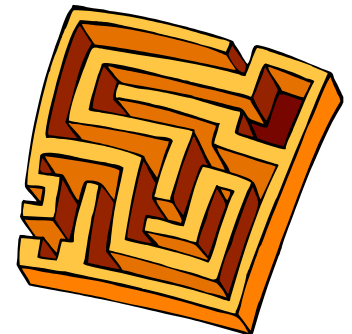
Common, relatively brief but **critically important** intervals that begin when **preparations are made** for a pt to leave one provider/setting & ends when the **pt is received** by another provider/setting

Bridging from one provider to the next;

one setting to the next setting

The Issue

- Transitions in Care
  - Suboptimal & fragmented
  - Impact chronically ill patients (adults and pediatrics)
  - Delay in care
  - Medication mishaps
  - Impact clinical outcomes
  - Adversely impact the patient
  - Increased use of healthcare services, cost
  - Decreased patient satisfaction



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What happens?

- Medication errors
- Patients not getting adequate/timely followup care
- Home care not utilized adequately
- Advanced directives not followed

- PCPs not aware of hospitalization
- Receiving provider not getting adequate information
- Patients poorly engaged in process

Vulnerable Populations

- Those patients with
  - Chronic illness(es)
  - Elderly, frail
  - Lack of family/caregiver support
  - Uninsured/poorly insured

Types of Transitions

- Hospital to home
- Home to hospital
- Within hospital setting
- SNF to hospital
- Hospital to SNF
- SNF to ED and return to SNF
- Nursing home to home care
- Practitioner to practitioner

Changing Definitions

- **Transitional Care**
  - Set of actions designed to ensure coordination & continuity of healthcare as pts transfer between different locations or different levels of care in the same location
- **Care Coordination**
  - Managing & coordinating services supplied by different providers
- **Continuity of Care**
  - Seeing the same provider
  - Relational continuity

Hospital readmission rates are one proxy measure for the quality of transitional care

New Problem?

- Transitions in Health Care—Managing Change
  - J of Med Rec Asso
- Policy Issues in Long Term Care: A Model of Transitions
  - J of SC Med Society
- Easing Transitions with a Core Training Group
  - Nursing Connections
- Medication Reconciliation: To and From Long Term Settings
  - Res Social Admin Pharm
- Community Based Transition Model: One Agency's Experience
  - Home Health Nurse

New Problem? **NO!**

- Transitions in Health Care—Managing Change
  - J of Med Rec Asso **1986**
- Policy Issues in Long Term Care: A Model of Transitions
  - J of SC Med Society **1986**
- Easing Transitions with a Core Training Group
  - Nursing Connections **1989**
- Medication Reconciliation: To and From Long Term Settings
  - Res Social Admin Pharm **2011**
- Community Based Transition Model: One Agency's Experience
  - Home Health Nurse **2011**

Why So Significant?

- Complexity of healthcare
  - Increase in use of specialists; number of interactions with caregivers
  - Technology -- help or hindrance ?
    - Rush to EHR EHR, paper, hybrid world
    - Systems, hospitals, labs, physician offices are not well connected
    - Communication
- Regulatory issues, insurance
- Cost of healthcare

Affordable Care Act 2010

- $500M Community Based Transitions Program 2011-2015
- $10B Center for Medicare and Medicaid Innovation 2011-2019
- Value Based Purchasing
- Health homes
- Payment bundling
- Submission of performance data from Accountable Care Orgs

ACO Measures: Aim is Improved Care

- Patient & Caregiver Experience (7)
- Care Coordination-Transitions (6)
- Care Coordination-Information Systems (4)
- Patient Safety (2)

ACO Measures: Aim is Improved Care

- Patient & Caregiver Experience
  - Getting timely care, appointments & info
  - How well do your doctors communicate
  - Helpful, courteous, respectful office staff
  - Patient's rating of doctor
  - Health promotion & education
  - Shared decision making
  - Health status or functional status

ACO Measures: Aim is Improved Care

- Care Coordination --- transitions
  - Risk-standardized, all-condition readmission
  - 30-day post-discharge physician visit
  - Medication reconciliation
  - Care transitions measure
  - Management of ambulatory-sensitive conditions (diabetes, COPD, HF, dehydration, bacterial pneumonia, cath asso. UTI, etc)

ACO Measures: Aim is Improved Care

- Care Coordination ---information systems
  - % of PCPs meeting HITECH meaningful use requirements
  - % of PCPs using clinical decision support
  - % of PCPs meeting eRx incentive program requirements
  - Patient registry use

ACO Measures: Aim is Improved Care

- Patient Safety
  - Healthcare-acquired conditions composite (foreign body retained, central-line associated blood stream infections-CLABSI, falls & trauma, cath associated urinary tract infection-UTI, & others
  - CLABSI bundle use

ACO Measures: Aim is Improved Health

- Preventive Health
- At risk populations
  - Diabetes
  - **Heart Failure**
  - Coronary Artery Disease
  - Hypertension
  - **COPD**
  - Frail Elderly

ACO Measures: Aim is Improved Health

- Improved Health—Heart Failure
  - LV Function Assessment
  - LV Function Testing
  - Weight Measurement
  - Patient Education
  - HF Prescription Rates: Left Ventricular Systolic Dysfunction
    - ACE inhibitor or ARB rates
    - Warfarin Therapy for atrial fibrillation

ACO Measures: Aim is Improved Health

- Improved Health – COPD
  - Spirometry evaluation
  - Smoking cessation counseling
  - Bronchodilator therapy based on FEV_1

ACO Clinical Quality Measures

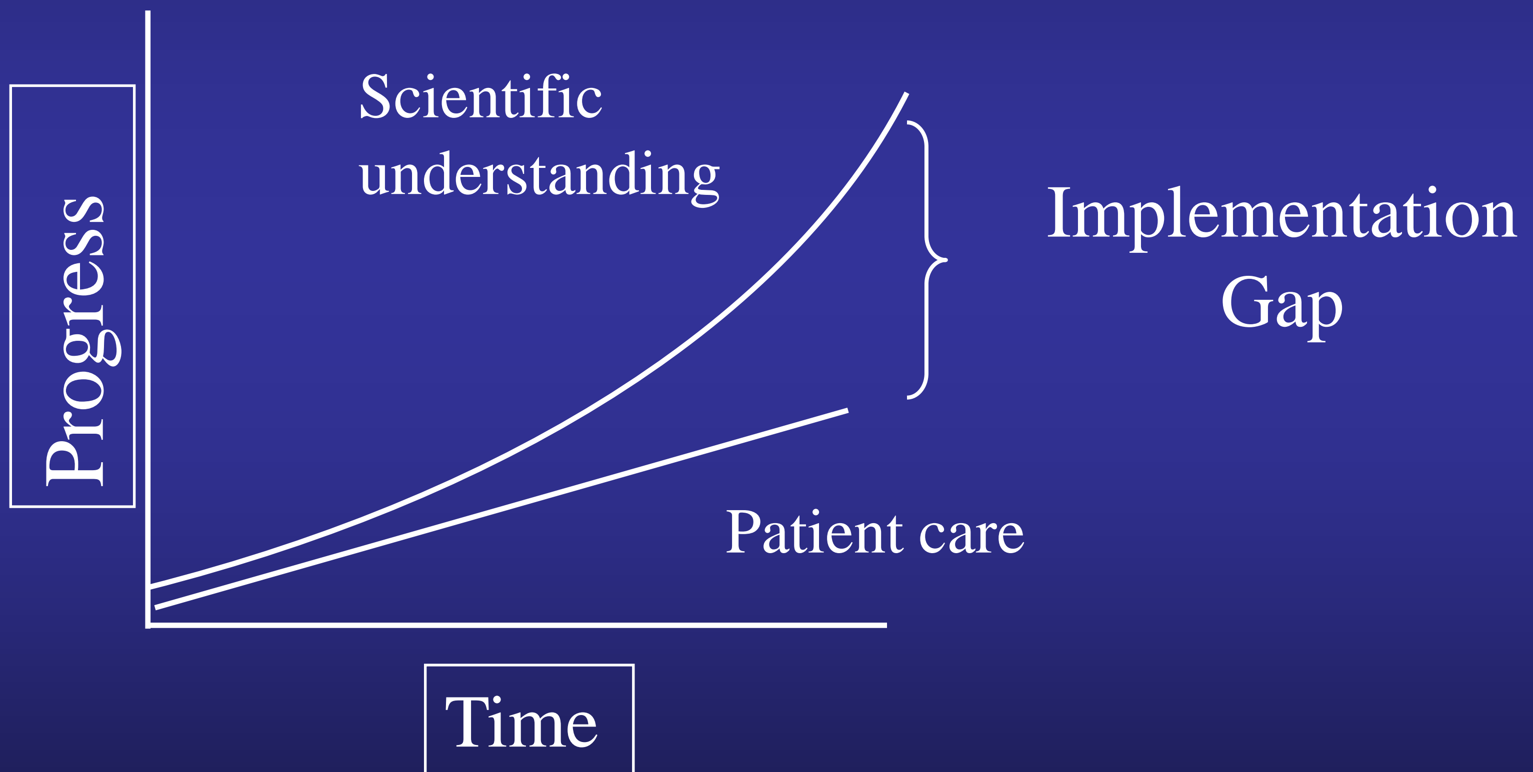
- **Readmissions**
  - All cause risk adjusted readmission index
  - 30 day post discharge physician visit
  - Post discharge medication reconciliation
  - Pt reported survey
- **Ambulatory Sensitive Conditions Admissions**
  - AHRQ (PQIs)
    - Diabetes (2)
    - COPD
    - Heart Failure
    - Pneumonia
    - UTI
    - Dehydration/volume depletion

The Importance Of Transitional Care In Achieving Health Reform, Health Affairs 30(4), 2011: 746-754.

- **Identified 3 proven strategies that have reduced all-cause readmissions through six or twelve months**
  - Adopt Effective Interventions
  - Transparency & Accountability
  - Workforce Development

Mary D. Naylor, Linda H. Aiken, Ellen T. Kurtzman, Danielle M. Olds, and Karen B. Hirschman

Quality Improvement: Bridging the Implementation Gap



The Chronic Care Model

Community

Resources and Policies

Health Systems

Organization of Health Care

Self-Management Support

Delivery System Design

Decision Support

Clinical Information Systems

Informed, Activated Patient

Productive Interactions

Prepared, Proactive Practice Team

Improved Outcomes

Developed by The MacColl Institute
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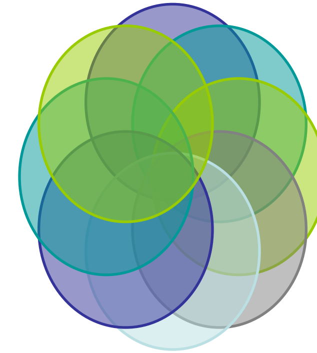
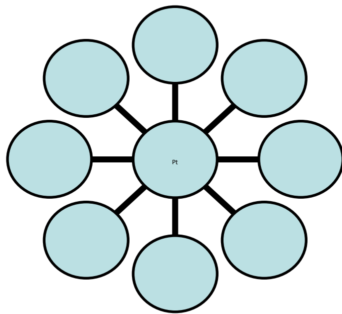
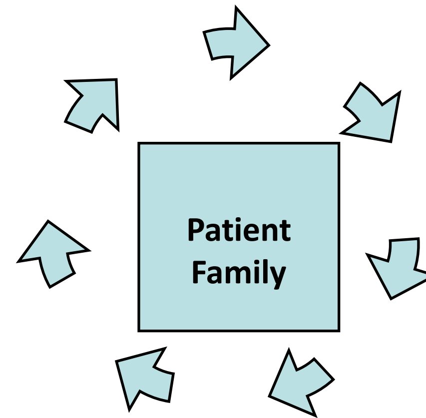





Patient
Family

Characteristics of Interventions

- Low intensity, high intensity interventions
- Duration of intervention
- Single vs multiple disease conditions
- Ability for pt/family to engage in intervention (ed, stress, cost, disease trajectory)
- Preparation of team
- Characteristics of providers
- Local practice environment

Guided Care for Multimorbid Adults

- Boult et al. Gerontologist 2007
- Seven precepts of chronic care innovation
  - disease mgmt
  - self mgmt
  - lifestyle modification
  - transitional care
  - caregiver education/support
  - health enhancement
  - geriatric eval/mgmt
- Nurse carries caseload of 50-60, served by 2-5 physicians

Common Themes in Transition of Care…

- Patient/family education
- Symptom management techniques
- Medication education
- Ongoing communication with pt/family
- Use of coach, mentor, navigator, advocate
  - Connection to PCP
  - Timeliness of followup appt
  - Preempt exacerbations
- Interdisciplinary communication re: pt needs
  - Pharmacy, Rehab, Homecare
- Medical or healthcare home

The Coming Age of the Patient Navigator

- *Cheryl Clark, for HealthLeaders Media*, April 26, 2011

They're called embedded care managers, patient navigators, even geriatric coordinators. In fact, they're called dozens of other names as well.

The goal (wherever they work) is the same: to make sure that gaps in care are shut

Cost effective? Yet to be determined

National Transition of Care Coalition

- Accountable provider at each end of transition
- Documentatoin of transition

Intervention Programs/Packages

Care Transitions Interventions → Coaches, personal HR, med tool

Transitional Care Nursing → Risk assessment, nsg training materials

CMS Discharge √List → Pt/family checklist of important items

BOOST → Screening, provider discharge √list, teach back instructions, data & tracking

Intervention Programs/Packages

Best Practices Intervention Package (BPIP)	→	Comprehensive manual for HHA process improvement
InterAct	→	Communication tools, clinical care paths
Transforming Care at the Bedside (TCAB)	→	(Re)Admission assessment, teach-back, pt communication, scheduled follow-up
Re-Engineered Discharge	→	Nse discharge advocate, pharm follow-up, med teaching, PCP follow-up

Resources..

- Boutwell, Griffin, Hwu, Shannon. Effective Interventions to Reduce Hospitalizations: A compendium of 15 Promising Interventions. Cambridge, MA: IHI, 2009.

- The Commonwealth Fund

  Silow-Carroll, Edwards, Lashbrook. Reducing Hospital Readmissions: Lessons from Top-Performing Hospitals,

  Synthesis Report, April 2011

- Health Research & Educational Trust
  - Health Care Leader Action Guide to Reduce Avoidable Readmissions

- CMS

The Care Transitions Intervention

- Test an intervention -- encourage older adults/caregivers to assert a more active role during care transitions
- Quasi exp design intervention group vs. control
- Community dwelling elderly adults (HF, COPD, CAD, DM) → hospitalized
- Provided tools and interventions
  - **Medication self-management**
  - **Patient centered-record**
  - **PCP and specialist follow-up**
  - **Knowledge of red flags, warning sx**.
- Early intervention; evaluated risk of rehospitalization 30, 60, 90 days

Coleman, E. et al; JAGS 52:1817-1825, 2004

Mrs. Smith

82yr with chronic HF has difficulty walking due to arthritis in knee & osteoporosis; lives alone; difficulty with ADLs, walking and moving portable O2

Bringing home the "medical home" for older adults

Landers, Suter & Hennessey   Cleveland Clinic J Med 77(10) Oct 2010

Leaders' Action Guide

1. Examine your hospital's current rate of readmissions
2. Assess and prioritize your improvement opportunities
3. Develop an action plan of strategies to implement
4. Monitor your hospital's progress

Health Research and Educational Trust, January 2010

Health Care Leader Action Guide to Reduce Avoidable Readmissions

- During hospitalization
  - Risk screen pts and tailor care
  - Establish communication with PCP, family, home care
  - Use "teach back" for pts/caregiver
  - Use interdisciplinary clinical team
  - Coordinate pt care across team
  - Discuss end-of-life treatment wishes

(HRET 2010)

Health Care Leader Action Guide to Reduce Avoidable Readmissions

- At Discharge
  - Implement comprehensive discharge planning
  - Educate pt/caregiver using "teach-back"
  - Schedule and prepare for follow-up appts
  - Help pt manage medications
  - Facilitate discharge to nursing homes with detailed instructions/partnerships with nursing home practitioners

(HRET 2010)

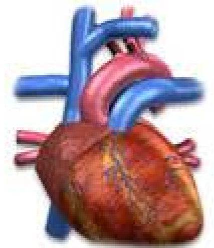
Health Care Leader Action Guide to Reduce Avoidable Readmissions

- Post Discharge
  - Promote patient self management
  - Conduct pt home visit
  - Follow-up with pt via telephone
  - Use personal health records to manage pt info
  - Establish community networks
  - Use telehealth in patient care

(HRET 2010)

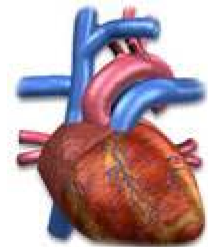
HF Low Risk Intervention

- Rich et al. Multidisciplinary intervention to prevent readmission of elderly pts with CHF, NEJM 1995
- HF patients with multiple hospitalizations
- Randomized controlled trial – intervention IP medication review, specialized pt ed combined with brief home care followup by home care & phone followup from hospital
- Readmissions dropped by 50% in intervention group



Heart Failure

- **Prevalance of Congestive Heart Failure:**
  - 4.8 million Americans (NHLBI); 2% age 40-59; 5% age 60-69; 10% over 70's
- **Incidence of Congestive Heart Failure:** Each year, there are an estimated 400,000 new cases. (Source: excerpt from NHLBI, Congestive Heart Failure Data Fact Sheet: NHLBI)



The Bridge Project: Improving Heart Failure Care in Skilled Nursing Facilities J Amer Med Dir Asso, March 2011

Purpose-evaluate (1) current state of HF management (admissions, protocols, staff knowledge) & (2) acceptability/effect of a HF staff educational program.

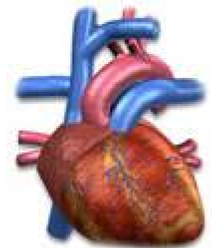
SNF surveyed - HF disease management techniques; staff evaluated HF knowledge & confidence in pre- and post-HF disease management training.

All-cause rehospitalization rates ranged from 18% to 43% in the SNF groups

Overall-lack of identification & tracking of HF patients

No HF-specific disease management protocols at any SNF, staff had limited knowledge of HF care.

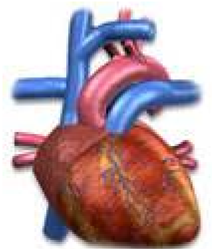
Identification of Patients and Education



Heart Failure

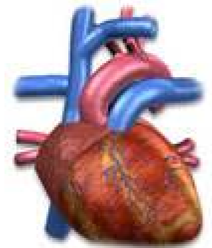
Sochalski et al. What Works in Chronic Care Management: The Case of Heart Failure, Health Affairs, Vol 8(1), Jan/Feb, 2009

- Pooled & reanalyzed data from 10 randomized trials
- Key factors
  - Pts enrolled in programs using multidisciplinary teams
  - Programs using in-person communication
- Combined factors, significantly fewer readmissions (2.9% reduction) and readmission days (6.4% reduction) as compared to routine care



Mayo Clinic Proceedings 2011 (Dr. Dunlay)

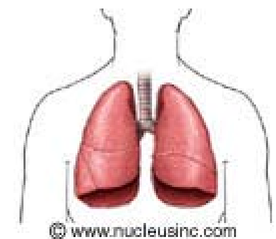
- Heart failure pts skip doses, delay filling prescription or stop taking medications due to costs
- Study n > 200
- Nearly 50% had stopped taking statins due to cost
- Almost 25% had skipped doses to save money



COPD

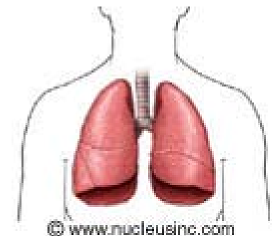
COPD

- **Prevalence**
  - Estimated 24 million Americans; 4th leading cause of death in the United States, accounting for over 100,000 deaths per year
- **Nursing home care**
  - Number of residents with chronic obstructive pulmonary disease: 190,000
  - Percent of residents with chronic obstructive pulmonary disease: 13% (CDC)



Italy, Denmark-Remote Monitoring COPD

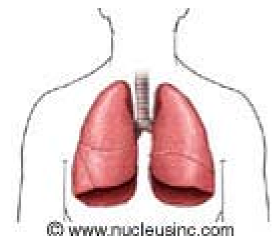
- Secure Living Program (described press release 2009)
- Wireless, sensor-equipped monitoring devices to 30 elderly pts (>80) with COPD
- Plan to discharge COPD pts who would be more comfortable at home



Systematic Review Dx Mgmt COPD & Asthma

Lemmens, Nieboer, Huijsman. Systematic Review of Integrated Use of Disease Management interventions in Asthma & COPD. Resp Med, Jan 2009

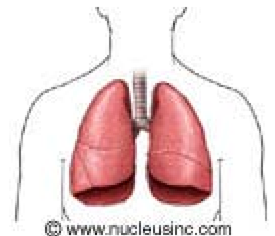
- Eval 36 studies with single or multiple interventions
- Interventions
  - Case management
  - Continuity of care
  - Education patient, provider
  - Self management
  - Multidisciplinary team



Advance Care Planning for Pts with COPD: Past, Present, Future

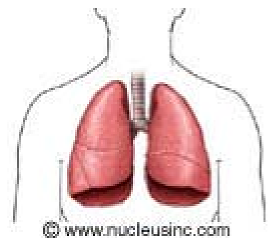
- Why is advance care planning important?
- What kind of planning do pts with COPD and their families want?
- What is the current status of advance care planning?
- How should clinicians communicate about advance care planning?

Janssen, et al., Pt Ed & Counseling, 2011



Advance Care Planning in COPD: Barriers and Opportunities

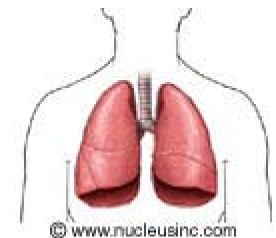
- Symptom management
- Integration of palliative care with disease directed treatment
- Pul Rehabilitation may be platform to coordinate integrated care



VA COPD Readmission Study

- Bronchitis and Emphysema Advice and Training to Reduce Hospitalization (BREATH) study that ended in February 2009 (early)

- To evaluate the efficacy and cost-effectiveness of an intervention incorporating self-management education, an action plan, and case-management to decrease the risk of hospitalizations due to COPD among veterans



- Pittsburgh Tribune-Review http://www.pittsburghlive.com/x/pittsburghtrib/news/pittsburgh/s_727193.html#ixzz1KUcmeFU0

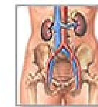
ESRD

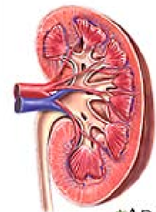
- > half million pts have received diagnosis of ESRD
- > 360,000 pts on dialysis (7200 are pediatric pts)
- Only disease-specific condition explicitly guaranteed Medicare coverage
- 2008 – costs for ESRD rose 13.2% to equal $26.8 billion
- Adjusted all cause mortality rates ESRD 8x higher for dialysis vs general population

ESRD

- Near universal Medicare entitlement for ESRD has now been in effect for nearly 40 years (Oct 1972)
- Medicare expenditures 2008 $26.8B
- Non-medicare expenditures + $12.7B

(Rettig, R. NEJM 346:7, Feb 17, 2011)

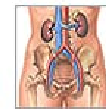




ESRD as a Window into America's Cost Crisis in Health Care.

Felix Knauf and Peter S. Aronson
Section of Nephrology, Department of Internal Medicine, Yale University School of Medicine, New Haven, Connecticut

J Am Soc Nephrol 20: 2093–2097, 2009. doi: 10.1681/ASN.2009070715



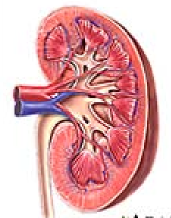
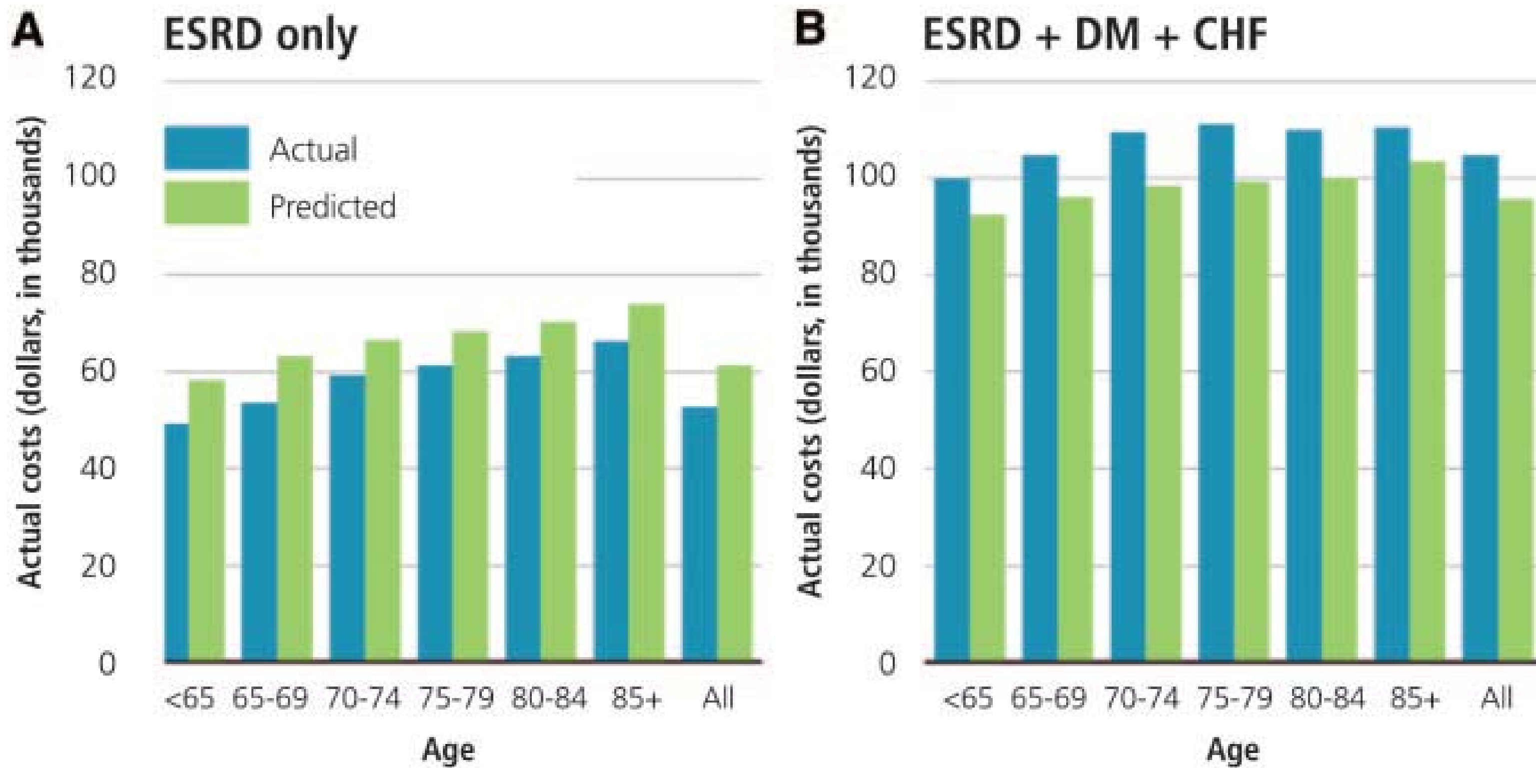
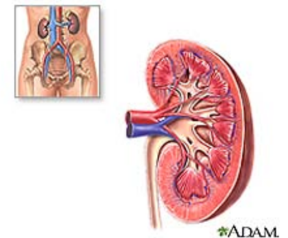


Figure 2. The fastest growing subgroup of patients starting dialysis care is the elderly. (A) Incident counts16 and (B) adjusted rates of ESRD patients in the United States.16



ESRD Preventable Hospitalization

- Mathew, Young & Shrestha
- J Am Med Dir Asso Feb 2011
- Nursing home residents with chronic kidney disease
- Potentially avoidable acute care admissions 27% factors identified:
  - Presence of HF OR 1.4
  - Excessive med use OR 1.3
  - Lack of training to nsg staff on how to communicate effectively with MD about pts' condition OR 1.3s

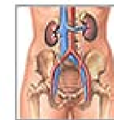


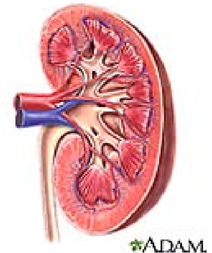
Impact of Self-Management Support on the Progression of Kidney Disease

- Chen et al. Nephrol Dial Transplant 0:1-7, 2011
- Randomized Self Mgmt vs Non Self Mgmt groups;
  - Self Mgmt health info, pt education, telephone based support, support group; 12 month follow-up
  - Self Mgmt fewer hospitalizations (18.5% vs 44.5%), however reasons for hosp did not differ, improved lab parameter

Pharmacist Medication Review in Clinic

- Mirkov. Implementation of a Pharmacist Medication Review in clinic for Haemodialysis Pts, NZ Med Journal, June 2009.
- Reviews done over 6 month period
- Average # of meds 13
- Drug related problems identified in 92% of reviews
  - Non-adherence
  - Needed dose decrease
  - New meds needed





Palliative Care in Advanced Kidney Disease

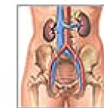
- Nurse-led joint renal and specialist palliative care clinic
- Optimal symptom mgmt, empower pts to make own choices, support in advance care planning (EOL care)

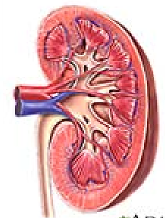
Harrison & Watson Intl J Palliative Nsg 17(1):42-46, Jan 2011

Disease Management Programs for CKD Patients: The Potential and Pitfalls

Rocco, M. Disease management Programs for CKD Patients: Potential and Pitfalls, Am J Kidney Disease, March 2009 (suppl 3)

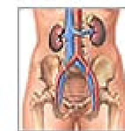
- Disease mgmt important, but difficult in this population
- Challenges
  - Identifying pts with CKD
  - Developing a program (multisystem involvement); need for differing physician specialties
  - Complexity of implementing
  - Cost

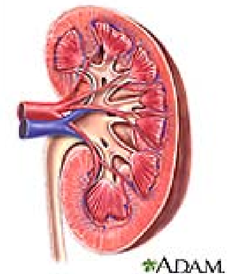




ESRD Consensus Standards (prop 3/11)

- 11 proposed (7 pediatric, 4 adult)
- Periodic assessment of post-dialysis weight by nephrologists (CMS)
- Proportion of patients with hypercalcemia (CMS)
- Standardized hospitalization ratio for admissions (CMS)
- National Healthcare Safety Network bloodstream infection measures (CDC)





In Summary…..