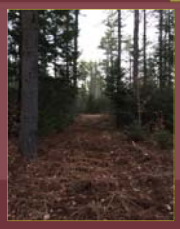
Defining the Best Clinical Transitions Through the Continuum of Care

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Disclosure

Dr Saltsman is a simple, country geriatrician in his own world

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Disclosure

Dr Saltsman is a simple, country geriatrician in his own world

WAYNES WORLD

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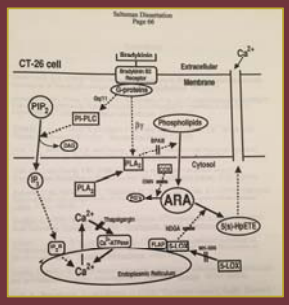
Natural Transitions



The Paths of Least Resistance

(why the continuum needs attention)

It is so much easier to:

1. Order a test
2. Treat the result and not the patient
3. Send a patient to the emergency room
4. Admit a patient from the emergency room
5. Not talk with patients and families
6. Write a brief discharge summary
7. Maintain the status quo on medications
8. Assume our colleagues will understand (everything)
9. Not consider palliative and hospice care
10. Continue care within silos

The Art of Medicine

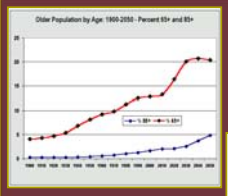
Do unto others
as you would have others
do unto your grandmother
--Geriatric Golden Rule

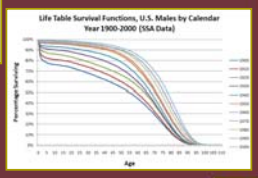
Do the right thing.
It will gratify some people
and astonish the rest.
--Mark Twain

Objectives

1. Understand how the healthcare system has evolved to mandate high-value, quality, and patient-centered care
2. Appreciate the importance of communication and education with patients/families/colleagues as patients transition through the continuum
3. Appreciate the role of post-acute care within the continuum of care (ie. Its NOT all about the hospital)

Aging and Survival



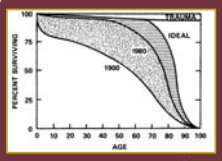


Quality vs Quantity

A 30+ Year Old Theory
(that helped create]the standard today)

Aging, Natural Death, and the Compression of Morbidity (1980)
---Dr. James F. Fries

"Speculation about immortality is rooted in antiquity and in human hope....Disability and lowered quality of life due to the most prevalent chronic diseases are inescapably linked with eventual mortality.High-level medical technology applied at the end of a natural life span epitomizes the absurd"



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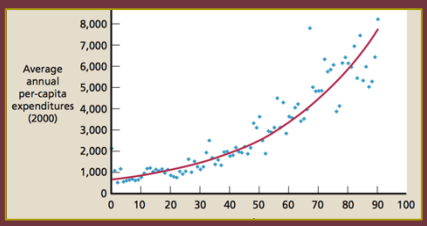
Age: Predictor of Healthcare Costs



AHRQ, 2000

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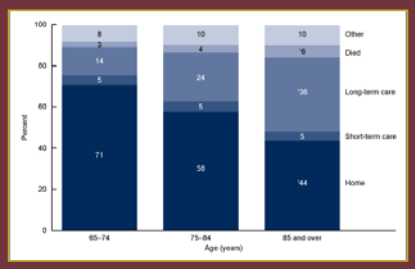
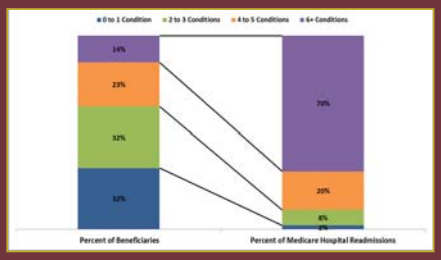
Age: A Predictor of Disposition



CDC

Utilization of Resources
Complex Care Patients



CMS, 2010

The Remediation of Healthcare
From the Cost Perspective

- Acute care services
  - Reduce length of stay
  - Reduce readmissions
- Non-acute care services
  - Improve Short-term care services
  - Improve Long-term care services
  - Improve home care services

30-day Readmission Costs, 2011

- $41.3 Billion for hospital patient-care costs
- 1.8 million Medicare patients cost $24 Billion
- CHF, 1.3 million patients, $1.7 Billion
- Psychiatric illnesses, $588 million
- Chemotherapy complications, $400 million

Payors: The failure in care coordination across the health care continuum tends to be a significant factor in hospital readmissions.

Fierce Health Finance

Readmissions (10/1-12/31/2003)

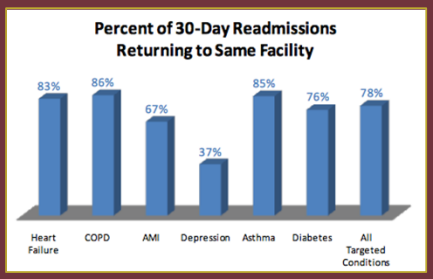
Medicare Claims Data: >11M patients

- 19.6 % 30-day, readmission rate
- 34 % 90-day, readmission rate
- ~50% had no outpatient follow-up
- CHF, COPD, PNA, psychoses, joint replacement, hip fracture
- DRG, LOS, #hospitalizations, post-hospital follow up—major indicators

"From a system perspective, a safe transition from a hospital to the community or a nursing home requires care that centers on the patient and transcends organizational boundaries"

Jenks, et. al., NEJM, 2009

Patient Retention on Re-admission



Pittsburgh Regional Health Initiative, 2010

Transitions to the ER from LTC

- Older NH residents accounted for 3857 of 208,956 ED visits
- 53.5% did not lead to hospital admission
- Of those discharged from the ER, 62.8% had normal vital signs on presentation and 18.9% did not have any diagnostic testing before ER discharge.
- Injuries were 1.78 times more likely to be discharged than admitted
- Infections were 2.06 times as likely to be admitted as discharged
- Computed tomography (CT) scans were performed in 25.4% and 30.1% of older NH residents who were discharged from the ED and admitted to the hospital, respectively (70% of these were CTs of the head)
- NH residents received centrally acting, sedating medications before ED discharge in 9.4% of visits

Burke, et. al., JAMDA, 2015

The Lack of Medication Reconciliation

- Approximately 1.5 million preventable adverse drug events (ADEs) occur annually as a result of medication errors, at a cost of more than $3 billion per year.
- Approximately half of all hospital-related medication errors and 20% of all ADEs have been attributed to poor communication at the transitions and interfaces of care.
- The average hospitalized patient is subject to at least one medication error per day.
- ADEs account for 2.5% of estimated emergency department visits for all unintentional injuries and 6.7% of those leading to hospitalization.
- The occurrence of unintended medication discrepancies at the time of hospital admission ranges from 30% to 70%, as reported in two literature reviews.

American Society of Health-system Pharmacists March, 2012

Skilled Nursing Front Line Perspectives

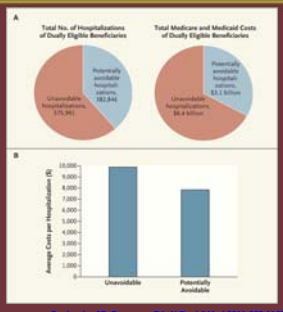
Measures for safe hospital transitions to the SNF

27 nurses participated in the study

- Hospitals need to communicate medical information at least 24 hours before SNF admission to ensure that needed medications and special equipment are available.
- Changes to the plan also need to be communicated immediately after the change is made.
- Immediate access to a prescribing provider with up-to-date knowledge of the individual as the individual is admitted to the SNF.
- More-focused, standardized, complete communi- cation of medical information

King, et. al., JAGS, 2013

Unavoidable and Potentially Avoidable Hospitalizations, 2005



Ouslander JG, Berenson RA. N Engl J Med 2011;365:1165-1167

Institute of Healthcare Improvement
Eliminating Waste in U.S. Healthcare

- Overtreatment
- Failures of Care delivery
- Failures of care coordination
- Administrative complexity
- Pricing Failures
- Fraud and abuse

Berwick and Hackbarth JAMA, 2012

Healthcare Improvement

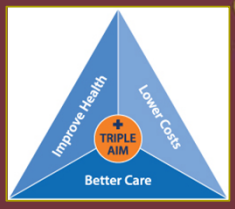
Volume ⟶ Value

Healthcare Improvement Equation

$$\text{Value} = \frac{\text{Quality (outcomes)}}{\text{Cost}}$$

Population Health

- Triple Aim
- Patient-centered care
- Patient-centered medical home
- Care Managers
- Behavioral Health



Accountable Care Organization (ACO)

- Groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to their Medicare patients.
- The goal of coordinated care is to ensure that patients, especially the chronically ill, get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors.
- When an ACO succeeds both in delivering high-quality care and spending health care dollars more wisely, it will **share in the savings** it achieves for the Medicare program.

CMMS

IMPACT Act, 2014

Improving Medicare Post-Acute Care Transformation

Population Health to the post-acute arena

- National Quality Strategy
  - Better care, healthy homes/communities, Affordable Care
- CMS Quality Strategy Goals
  - Reducing harm, patients as partners, communication/coordination of care, prevention/treatment for leading causes of mortality, promote best practices, and affordable quality care with new delivery models
  - Standardization of data across Domains
- Major Domains to Standardize
  - Skin integrity
  - Functional/cognitive assessment
  - Medication reconciliation
  - Incidence of Falls
  - Transfer of information in transitions
  - Utilization
  - Discharge to the community
  - Preventable hospital readmissions

IMPACT Act
Discharge Planning

- Develop a discharge plan within 24 hours of admission and complete the plan prior to discharge
  - Discharge instructions to patients
  - Have a medication reconciliation process
  - Send specific information to a receiving facility
  - Establish a post-discharge follow up process

A Hip Fracture Patient
In the Healthcare continuum

- 89 year old man presents to skilled nursing after a mechanical fall s/p femur fracture repair
- Pale, thin, deconditioned, fairly cognitively intact
- Orthostatic at baseline
- s/p BiV pacemaker for cardiomyopathy
- COPD, CKD, osteoarthritis
- Weight loss, anorexia, lightheadedness, nausea at baseline
- Amiodarone, digoxin, warfarin, diuretic
- Wife with cognitive impairment, both are limited to the home setting, with support from family

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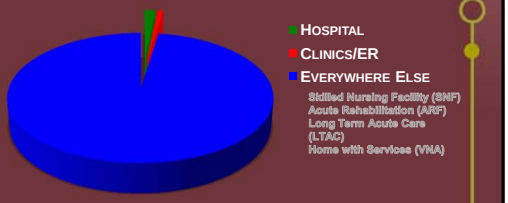
Definitions

- Transitions of Care (TOC)
  - the movement patients make between health care practitioners and settings as their condition and care needs change during the course of a chronic or acute illness. Coleman, caretransitions.org
- Continuum of Care
  - The collection of health care settings taken as a whole
- Disposition level
  - A Care management term for a setting of Post-acute Care or non-acute care
- Post-acute Care (PAC)
  - The disposition levels taken as a whole [long-term, acute care (LTAC), acute rehabilitation (ARF), skilled nursing (SNF), Home with nursing (VNA)]

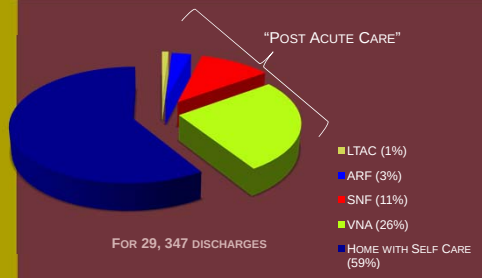
Age > 65 Transitioning within the Continuum of Care

Where Are Our Patients/Year?



www.cdc.gov

LHMC: What Composes "Everywhere Else"? (2012)



For 29, 347 discharges

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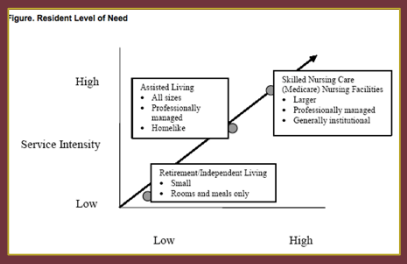
The Assisted Living Facility



Agency for Healthcare Research and Quality (12/12)

Models of Transitional Care

Care Transitions Model
the "Coleman" model

- Transitions coach
- medication self-management
- the personal Health record
- timely primary care/specialty care follow up
- Knowledge of red flags that indicate a worsening in condition and how to respond

Care Transitions Model
Outcomes—750 randomized participants

- 65 years or older
- nonpsychiatric condition
- be community dwelling
- reside locally to the hospital (for ease of home visits)
- have a working telephone
- be English speaking
- no history of dementia
- have no plans to enter hospice
- Have specific medical conditions

Table 3. Utilization Outcomes*

Variable	Intervention Group (n = 379)	Control Group (n = 371)	2-Sided P Value†		OR (95% CI)
			Unadjusted	Adjusted‡	
Rehospitalization					
Within 30 d	8.3	11.9	.11	.048	0.58 (0.35-1.00)
Within 90 d	16.7	22.5	.05	.04	0.64 (0.42-0.99)
Within 180 d	25.6	30.7	.15	.08	0.80 (0.54-1.19)
Rehospitalization for same diagnosis as index hospitalization					
Within 30 d	2.6	4.6	.21	.18	0.56 (0.24-1.31)
Within 90 d	5.3	8.6	.08	.04	0.59 (0.29-0.95)
Within 180 d	8.6	13.9	.045	.046	0.55 (0.30-0.99)

Abbreviations: CI, confidence interval; OR, odds ratio.
*Data are given as percentages unless otherwise indicated.
†To test statistical significance between the intervention and control groups, χ^2 test was used for unadjusted utilization outcomes, and logistic regression analysis was used for adjusted use outcomes.
‡Adjusted for age, sex, education, race/ethnicity, self-reported health status, chronic disease score, prior hospitalization and emergency department utilization, and discharge diagnosis.

Coleman, et. al., *Arch Intern Med.* 2006

Better Outcomes for Older Adults Through Safe Transitions (BOOST)

Society of Hospital Medicine (SHM) Vision:

- Identify patients at high risk of rehospitalization and target specific interventions to mitigate potential adverse events
- Reduce 30 day readmission rates
- Improve patient satisfaction scores and H-CAHPS scores related to discharge
- Improve flow of information between hospital and outpatient physicians and providers
- Improve communication between providers and patients
- Optimize discharge processes

BOOST Pilot at Lahey Hospital (2014)

- Two dedicated wards, patients age > 65 who satisfied specific high risk criteria
- Dedicated hospitalist, nurse educator, case manager, and nursing team
- Reduced 7-day readmissions by 30%
- Increased patient satisfaction by 49%
- Improved team cohesiveness (subjective) including primary provider
- NO effect on 30-day readmission rates and was not continued

Project RED (Re-Engineered Discharge)

- Language Assistance
- Follow-up appointments and testing needs
- Follow-up from testing while in the hospital
- Outpatient services/equipment needs
- Correct medications and compliance
- Discharge plans and national guidelines
- Patient understanding of the discharge plan
- Educate the patient about the diagnosis
- Assess patient understanding
- Review how to manage a problem
- Expedite information to other providers
- Provide Telephone support for discharge plan

Greenwald, Dedham and Jack / *Patient Safety* June2007

Project RED (Re-Engineered Discharge)

California hospitals: 2013/2014

- Bakersfield Memorial: 30-day readmissions reduction for Medicare patients , 11.3 % from 25 %, all-payer 30-day readmissions reduced to 6.5 percent from an average of 7.5 percent.
- St. Mary's Medical Center: focus on heart failure patients saw readmissions reduced to 7.7 % from 22.2 %, reducing all-cause readmissions to 5.7 %.

AHRQ, 2015

Project RED in Skilled Nursing Facilities

- Goal
  to increase patient preparedness for care transitions and lower rehospitalization rates in the 30 days after discharge from the SNF facility.
- 100 patients after initiation
- Hospitalization rates decreased to 10.2% from 18.9%
- Increased in patient satisfaction and preparedness for transition to home
- Outpatient follow-up increased from 50.2% to 70.2%

Berkowitz, et al., JAMDA, 2013

National Transitions of Care Coalition (NTOCC)

- I. Structure:
  - Patients should have an accountable provider or a team of providers during all points of transition. The provider(s) would provide patient-centered care and serve as central coordinator(s) across all settings, and with other providers.
  - The patient should have an up-to-date proactive care plan that would take into consideration the patient's and family's preferences and would be culturally appropriate. This care plan should be available to all providers involved in the care of the individual.
  - Use of a health information technology-integrated system that would be interoperable and available to both patients and providers.

NTOCC Measures Work Group, 2008

National Transitions of Care Coalition (NTOCC)

- II. Processes:
- A. Care team processes:
  - Care planning (including advance directives)
  - Medication reconciliation (this process includes patient and family)
  - Test tracking (laboratory, radiology, and other diagnostic procedures)
  - Tracking of referrals to other providers or settings of care
  - Admission and discharge planning
  - Follow-up appointment tracking
  - End-of-life decision making
- B. Information transfer/communication between care settings:
  - Timeliness, completeness, and accuracy of transferred information
  - Protocol of shared accountability in effective transfer of information
- C. Patient and family education and engagement:
  - Patient and/or family preparation for transfer
  - Patient and/or family education for self-care management (e.g., the NTOCC tools *"My Medicine List"* and *"Taking Care of My Health")*.
  - Patient and/or family agreement with the care transition (active participation in making informed decisions)

NTOCC Measures Work Group, 2008

National Transitions of Care Coalition (NTOCC)

- III. Outcomes:
- Patient's and/or family's experience and satisfaction with care received.
- Provider's experience and satisfaction with the quality of interaction and collaboration among providers involved in care transitions.
- Health care utilization and costs (e.g., readmissions, etc.).
- Health outcomes consistent with patient's wishes (e.g., functional status, clinical status, medical errors, and continuity of care).

NTOCC Measures Work Group, 2008

American Medical Director Association

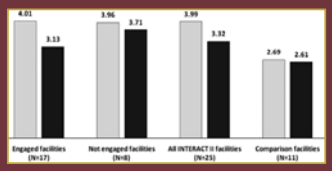
- Transitions of Care in the Long-term care continuum—Clinical Practice Guidelines (CPG)
  - steps to safer transitions
    - Communication with the team, warm hand-offs, palliative care discussions, verify patient/information arrival, accountability and responsibility at all transition steps, monitor performance with specific measures with continuous review and CQI
  - Planned/Unplanned transitions
  - Access and use is free
  - http://www.amda.com/tools/clinical/toccpg.pdf
- Other CPGs (ie. Acute change of condition)
- Know-it-all Series
- Checklists (Resident/Family, SNF to Home, AMA)

INTERACT
Interventions to Reduce Acute Care Transitions

- Based on the Affordable Care Act (ACA) requirement to generate quality-assurance and performance-improvement programs
- Reducing potentially avoidable hospitalizations of NH residents presents an opportunity to both improve care quality and avoid unnecessary health care expenditures.
- The tools included evidence-based practices and practice guidelines, and were designed to be simple and feasible to implement in everyday practice in NH
- Strategies and Tools:
  - Organizational and Leadership Commitment
  - Communication strategies and tools
  - Care paths
  - Advance care planning resources

Teena-Nelson, et. al., JAMDA, 2012

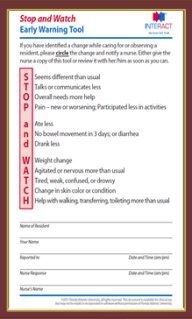
Utilization of INTERACT II
Reduction in Hospitalization Rates—6 Month Trial



- 25 nursing facilities enrolled—total reduction 17%
- Engaged NHs had a 24% reduction representing a mean absolute reduction of 0.90 hospitalizations per 1,000 resident days.
- NHs that were not engaged had only a 6% reduction.

Ouslander, et. l., JAGS, 2011

INTERACT Tools


Stop and Watch
Early Warning Tool

If you have identified a change while caring for or observing a resident, please circle the change and notify a nurse. Either give the nurse a copy of this tool or review it with her/him as soon as you can.

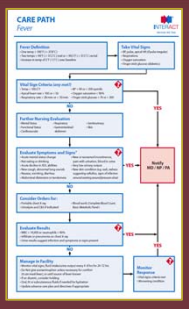
STOP
- Seems different than usual
- Talks or communicates less
- Overall needs more help
- Pain – new or worsening; Participated less in activities

and
- Ate less
- No bowel movement in 3 days; or diarrhea
- Drank less

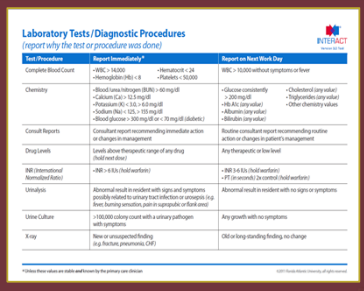
WATCH
- Weight change
- Agitated or nervous more than usual
- Tired, weak, confused, or drowsy
- Change in skin color or condition
- Help with walking, transferring, toileting more than usual

Name of Resident
Your Name
Reported to — Date and Time (am/pm)
Nurse Response — Date and Time (am/pm)
Nurse's Name

INTERACT TOOLS



INTERACT TOOLS



Laboratory Tests / Diagnostic Procedures
(report why the test or procedure was done)

INTERACT

Test / Procedure	Report Immediately*	Report on Next Work Day
Complete Blood Count	•WBC > 14,000 •Hemoglobin (Hb) < 8 • Hematocrit < 24 • Platelets < 50,000	WBC > 10,000 without symptoms or fever
Chemistry	•Blood Urea Nitrogen (BUN) > 60 mg/dl •Calcium (Ca) > 12.5 mg/dl •Potassium (K) < 3.0, > 6.0 mg/dl •Sodium (Na) < 125, > 155 mg/dl •Blood glucose > 300 mg/dl or < 70 mg/dl (diabetic)	• Glucose consistently > 200 mg/dl • Hb A1C (any value) • Albumin (any value) • Bilirubin (any value) • Cholesterol (any value) • Triglycerides (any value) • Other chemistry values
Consult Reports	Consultant report recommending immediate action or changes in management	Routine consultant report recommending routine action or changes in patient's management
Drug Levels	Levels above therapeutic range of any drug (hold next dose)	Any therapeutic or low level
INR (International Normalized Ratio)	•INR > 6 (hold warfarin)	• INR 3-6 (hold warfarin) • PT (in seconds) (in control) (hold warfarin)
Urinalysis	Abnormal result in resident with signs and symptoms possibly related to urinary tract infection or urosepsis (e.g. fever, burning sensation, pain in suprapubic or flank area)	Abnormal result in resident with no signs or symptoms
Urine Culture	> 100,000 colony count with a urinary pathogen with symptoms	Any growth with no symptoms
X-ray	New or unsuspected finding (e.g. fracture, pneumonia, CHF)	Old or long-standing finding, no change

*Unless these values are stable and known by the primary care clinician

INTERACT TOOLS

SBAR Communication Form
and Progress Note

INTERACT

Before Calling MD / NP / PA:

Situation

Background

Assessment

Vital Signs

Recommendation

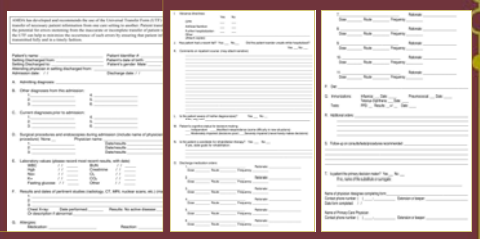
Resident Name

INTERACT TOOLS


Nursing Home to Hospital Transfer Form (additional information)

INTERACT

AMERICAN MEDICAL DIRECTOR ASSOCIATION
UNIVERSAL TRANSFER FORM



TRUISMS TO REMEMBER

- FORMS ALONE DO NOT CHANGE PROCESS
- PAPERWORK IS NOT COMMUNICATION
- GARBAGE-IN IS GARBAGE-OUT

--DR. JAMES LETT

Outcome Measures
Assessing Antibiotic Stewardship

Antibiotic Stewardship Checklist for PAC/LTC (v. 2.4)

(drafted by Wayne S Saltsman, MD, PhD, CMD)

Discharge Summary Information	Yes	No
The reason for antibiotic use is documented:		
The patient/family is aware of the need for antibiotic use:		
A signed, medication reconciliation sheet is available for review:		
The antibiotic order includes a dosage, route, frequency and duration of treatment:		
For patients receiving intravenous antibiotics, the facility is prepared and able to give the medication:		
The patient has poor kidney function (and requires special dosing of the antibiotic):		
Test results are available (to review the reason for antibiotic use):		
Allergies to antibiotics (and other medications) are listed, or "no known drug allergies" is documented:		
The patient has a history of Clostridium Difficile colitis:		
The patient is taking warfarin/Coumadin:		
While on antibiotic, there is monitoring or laboratory testing that needs to be completed (ie. antibiotic levels, C-reactive protein, liver and/or renal function testing):		
There needs to be communication or follow-up with an Infectious disease specialist:		
The patient requires isolation precautions:		
There is hospital/provider contact information provided for questions or concerns about the patient or antibiotic use:		

Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment (SUPPORT)

"…documented shortcomings in communication, frequency of aggressive treatment, and the characteristics of hospital death"

- 47% of physicians knew when their patients preferred to avoid CPR
- 46% of Do-Not-Rescuscitate (DNR) orders were written within two days of death
- 38% of patients who died spent at least 10 days in the ICU
- 50% of patients who died in the hospital reported moderated to severe pain at least half of the time

Journal of the American Geriatrics Society

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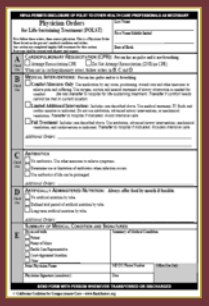
Palliative Care
In the Skilled Nursing Facility

- Palliative Care
  - To provide a better understanding of medical care choices and patient goals in times of serious illness, to help to relieve symptoms , and to provide emotional support for the patient and family.
- Center to Advance Palliative care (CAPC)
  - www.capc.org
- Palliative Care Leadership Centers (PCLC)
  - Increase the number of quality palliative care programs across the United States in order to improve access for all people facing serious illness
  - Foster sustainability and growth through leadership development, technical assistance and the use of standardized measures of program impact

Physician Orders for Life-sustaining Treatment



Advance Care Planning (ACP)

An opportunity in post-acute care

Houbin, et. al., JAMDA, 2014

- 55 randomized controlled trials on the efficacy of ACP interventions in adult populations
- ACP can be effective in changing completion of advanced directives and occurance of end of life discussions
- Improved concordance with patient's preferences for end of life care and received end of life care
- Improved quality of discussions, but no effect on symptoms: anxiety, depression, well-being, health status or pain

The post acute setting offers the ability to approach patients and their families, typically after a challenging hospitalization to work through issues and consider options

A Hip Fracture Patient

The utilization of all transitional care resources

- 89 year old man presents to skilled nursing after a mechanical fall s/p femur fracture repair
- Unable to tolerate therapy, weakness progresses
- Delirium, Health Care Proxy activated
- Orthostasis, weight loss, anorexia, continue
- Amiodarone and digoxin discontinued after speaking with Cardiology and reviewing history with primary MD
- Multiple discussions with family about goals and status
- Not readmitted to the hospital
- Discharged to home on Hospice

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Summary

- Our healthcare system has evolved to where patient-centered, high quality care WILL be the rule rather than the exception
- There are multiple programs to facilitate transitions of care, with the common themes of communication, consideration and education
- Post-acute care has become a vital player in the continuum of care and will continue to be within the new value-based system

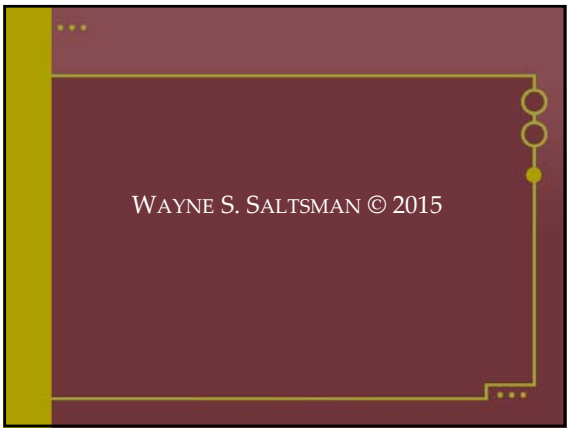
The True Healthcare Equation

$$VALUE = (DRT)\ (TIME_W)$$

Final Thought

Never doubt that a small group of thoughtful and committed citizens can change the world. Indeed, it is the only thing that ever has.

--Margaret Mead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