

2019 California Society of Physical Medicine
& Rehabilitation:



Multidisciplinary Rehabilitation Optimization and Post Acute Disposition Barriers

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Disclosures:

- I have no conflict of interests to disclose for this presentation

Objectives:

- Describe trends in hospital populations, including for post acute care (PAC)
- Define post acute care levels and types of care
- Understand criteria for eligibility at each level of care
- Describe implementation strategies to optimize transition of care

Trends in Hospital Population:

- An Aging Population
- Increasing Surgeries/Interventions
- Decreasing Hospital Length of Stay
- Relatively Stable Number of Post-Acute Facilities

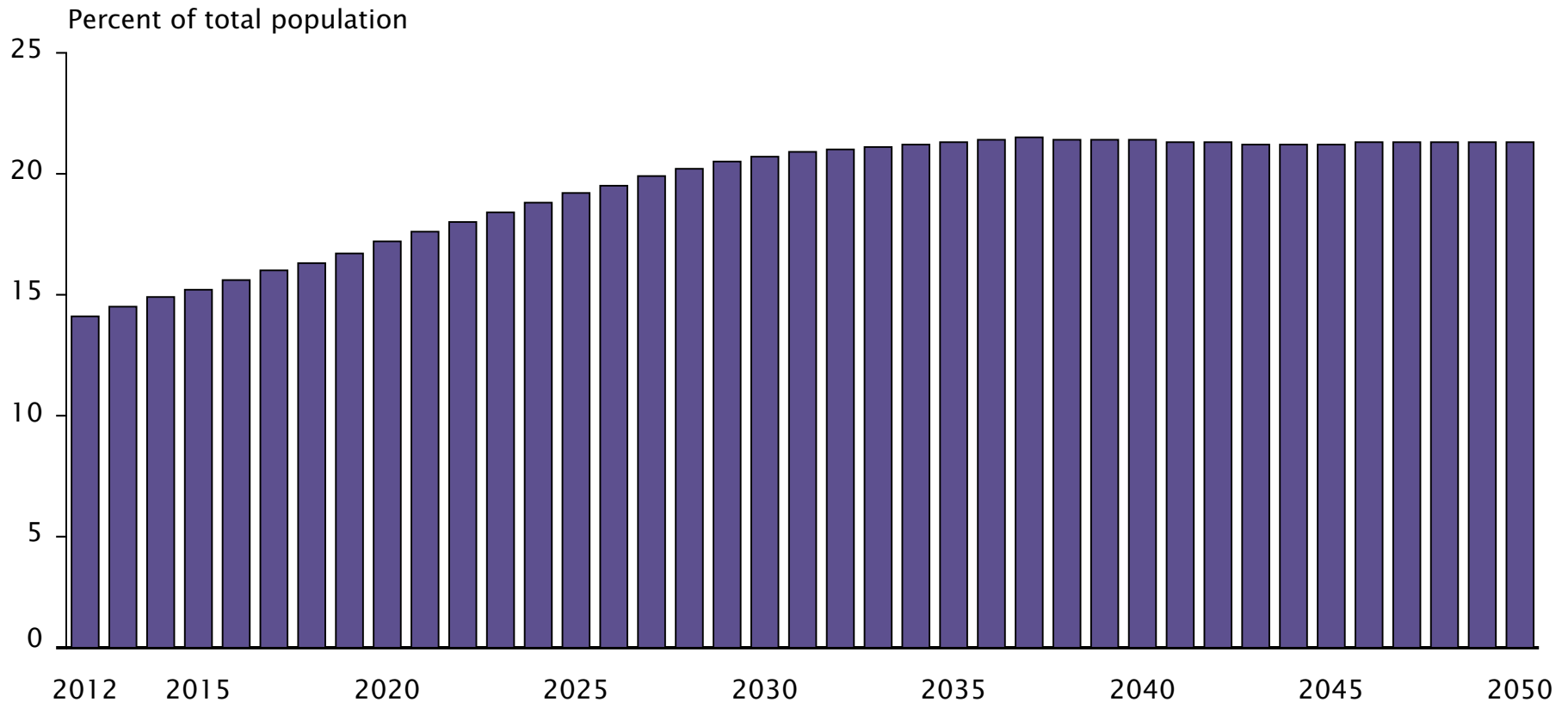
An Aging Population:

Population Aged 65 and Over for the United States: 2012 to 2050



Source: United States Census Bureau, 2012 Population Estimates and 2012 National Projections. May 2014.

An Aging Population:



Source: United States Census Bureau, 2012 Population Estimates and 2012 National Projections. May 2014.

Trends in Spine Surgery:

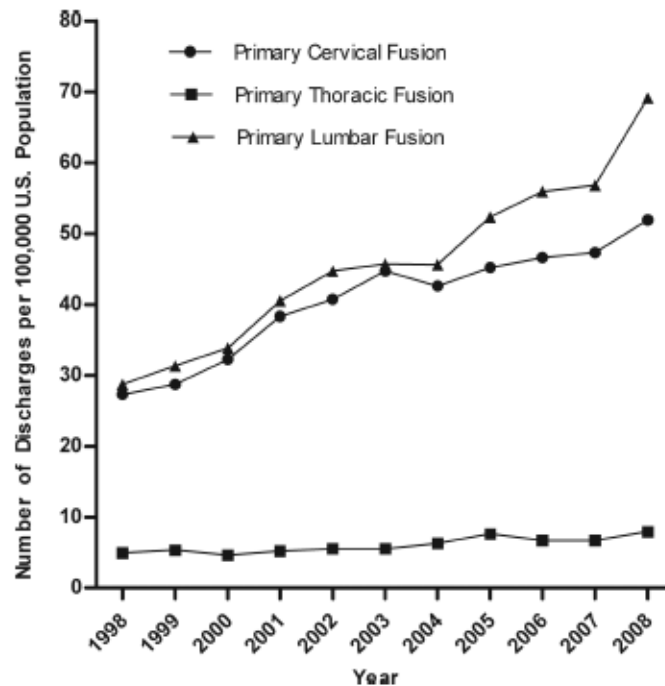


Figure 3. National estimates of annual rates for primary cervical fusion (*International Classification of Diseases, Ninth Revision, Clinical Modification [ICD-9]: 81.01–81.03*), primary thoracic fusion (*ICD-9-CM: 81.04–81.05*), and primary lumbar fusion (*ICD-9-CM: 81.06–81.08*) discharges from 1998 to 2008.

Source: Bae et al. Spinal fusion in the US. Analysis of trends from 1998 to 2008. *Spine*. 2012.

Trends Comparing Interventions:

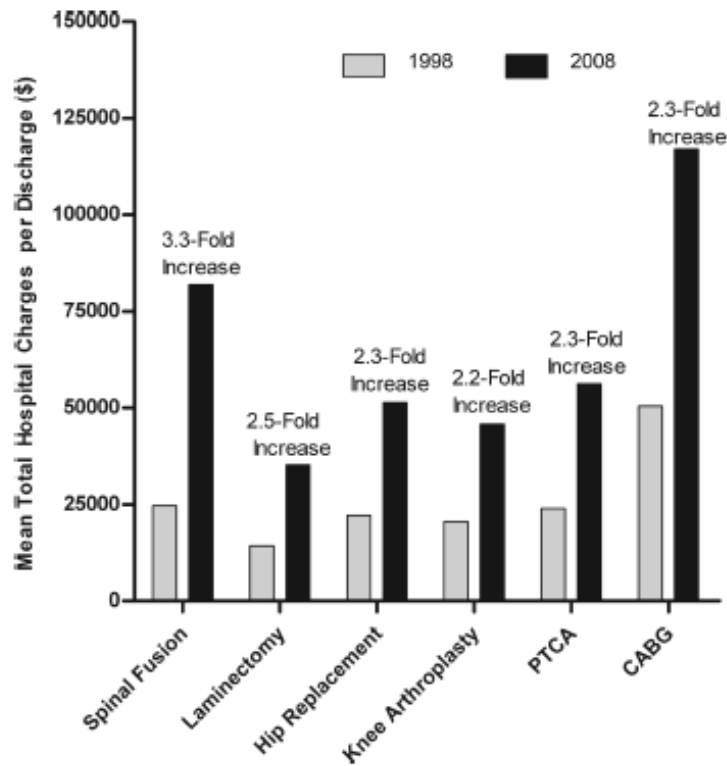


Figure 5. Mean total hospital charges per discharge for spinal fusion, laminectomy, hip replacement, knee arthroplasty, percutaneous transluminal coronary angioplasty (PTCA), and coronary artery bypass graft (CABG) for 1998 and 2008.

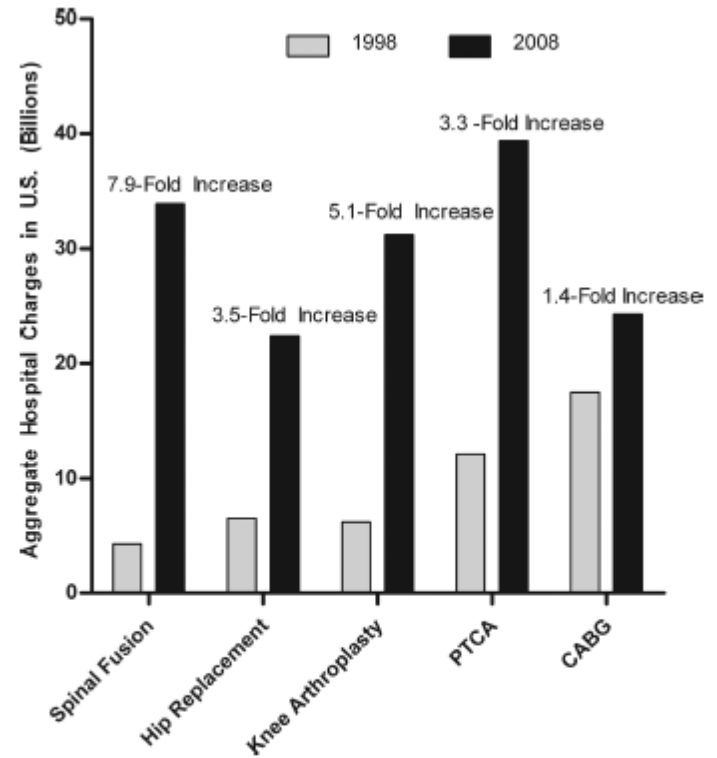
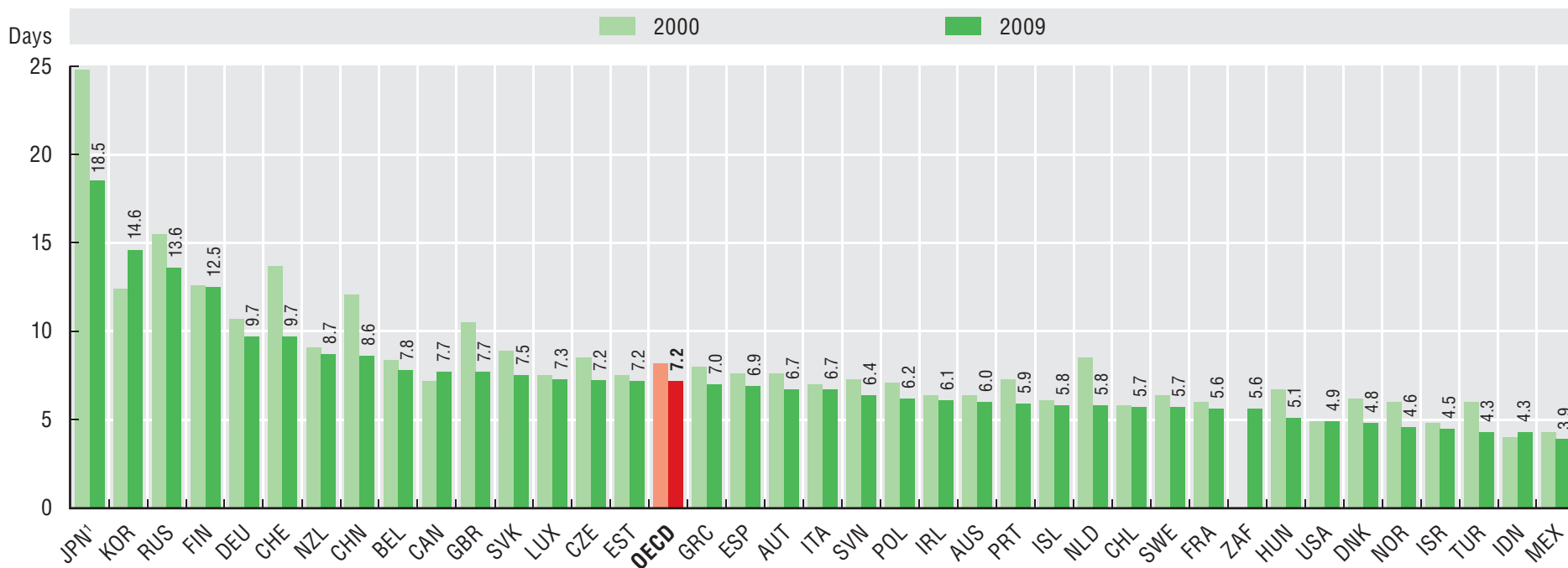


Figure 6. Aggregate hospital charges ("The National Bill") for spinal fusion, hip replacement, knee arthroplasty, percutaneous transluminal coronary angioplasty (PTCA), and coronary artery bypass graft discharges (CABG) for 1998 and 2008.

Source: Bae et al. Spinal fusion in the US. Analysis of trends from 1998 to 2008. Spine. 2012.

Hospital Length of Stay:

4.5.1 Average length of stay in hospital for all causes, 2000 and 2009 (or nearest year)



Source: OECD Health Data 2011. Health at a Glance 2011.

Spinal Cord Rehab Length of Stay:

- 1950-1953:
 - Average length of stay:
 - 138 days for all SCI impairment groups
- 1973-2010:
 - Median length of stay:
 - Complete Tetraplegia: 142 to 59 days
 - Incomplete Tetraplegia: 104 to 36 days
 - Complete Paraplegia: 84 to 39 days
 - Incomplete Paraplegia: 68 to 29 days

Sources: Whiteneck et al. The SCIR rehab Project. Treatment time spent in SCI Rehab. J Spinal Cord Med. 2009.
National Spinal Cord Injury Statistical Center. Annual report for the Spinal Cord Injury Model Systems 2008.

Number of Facilities:

Post-Acute Care Facility Statistics

Number of Facilities 2007-2016

Source: MedPAC analysis of data from the Provider of Services files from CMS

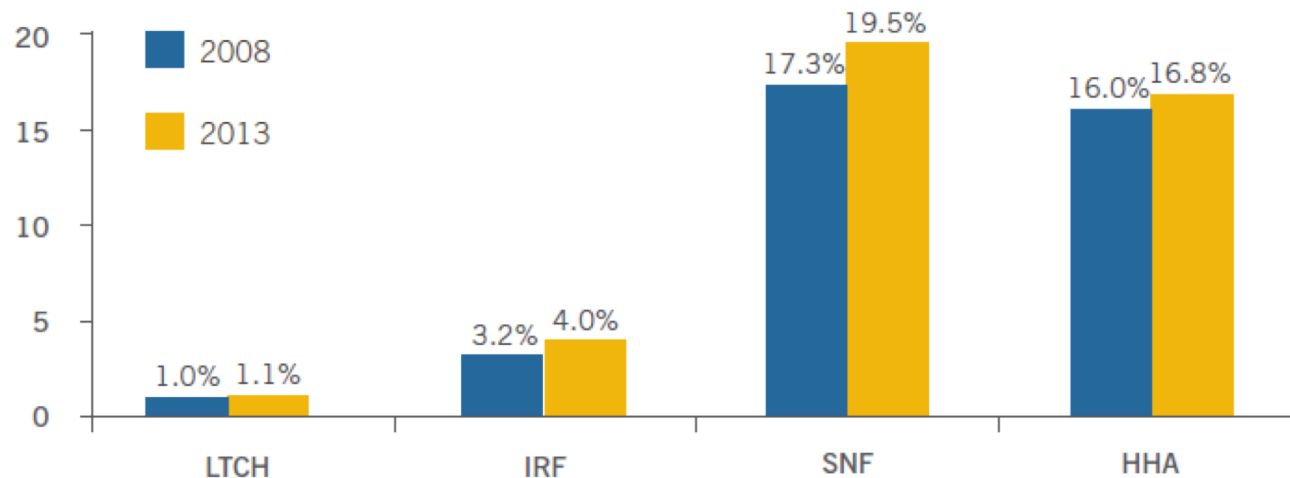


	2007	2009	2011	2013	2014	2015	2016
HHAs	9,291	10,568	12,054	12,613	12,461	12,346	12,313
IRFs	1,202	1,196	1,165	1,161	1,177	1,182	1,188
LTACHs	396	427	437	432	422	426	427
SNFs	15,047	15,062	15,120	15,163	15,173	15,223	15,263

Increased Discharges to PAC

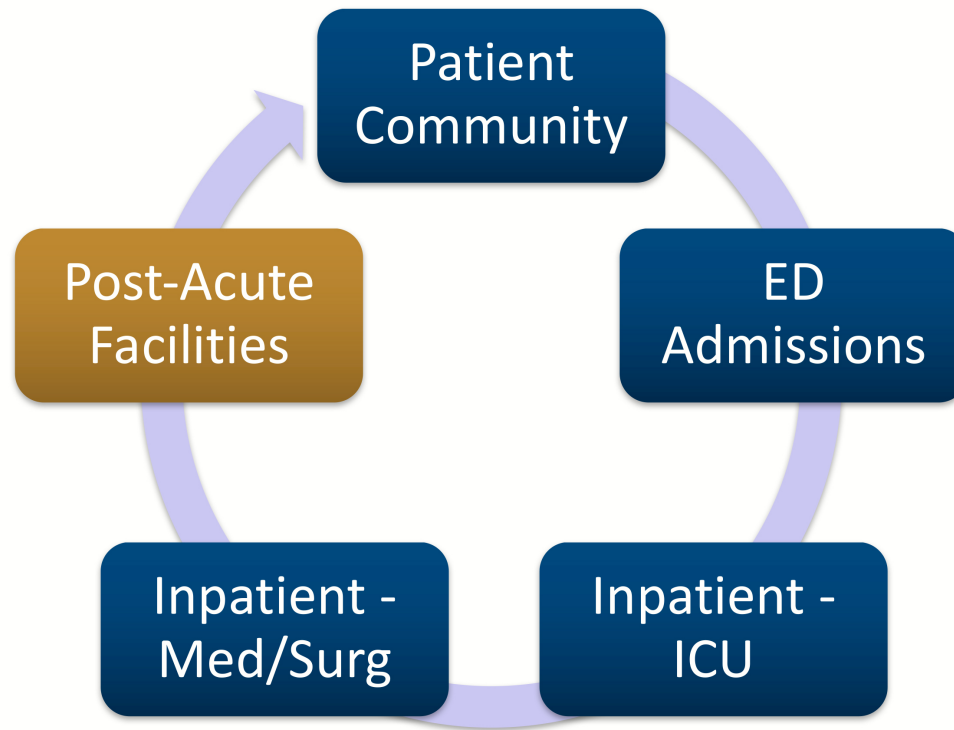
The percentage of Medicare beneficiaries discharged from a hospital to a PAC setting increased between 2008 and 2013.

Chart 1: Patients Discharged from Hospital to PAC Setting, 2008 and 2013



Sources: Medicare Payment Advisory Commission. (June 2008). *A Data Book: Health Care Spending and the Medicare Program*. Washington, DC. Medicare Payment Advisory Commission. (2015). *March Report to the Congress: Medicare Payment Policy*. Washington, DC.

Transition to Post Acute Care:



Avoidable Readmission:

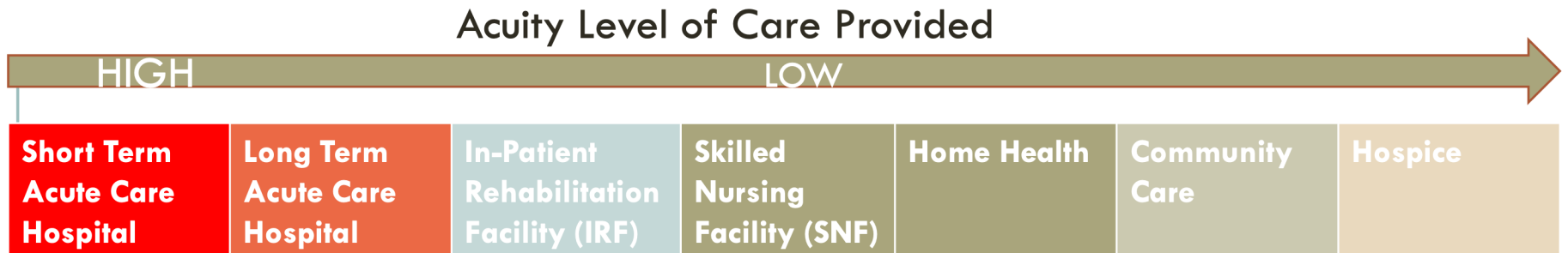
- 20% of acute hospital discharges are readmitted within 30 days (Medicare)
- Unplanned readmissions cost:
 - \$17.4 billion
 - 17% of Medicare costs in 2004
- Estimates as high as 75% readmissions are preventable

Sources: Jencks et al. Rehospitalizations among patients in the Medicare fee-for-service program. N Eng J Med 2009.
Medicare & Medicaid Statistical Supplement. Baltimore: Centers for Medicare & Medicaid Services, 2007.

Post Acute Care Partnerships Necessary in Transition of Care:

- Cost Effective Level of Care
- Improve Patient Safety
- Reduce Readmissions
- Reduce Mortality
- Decrease Length of Stay

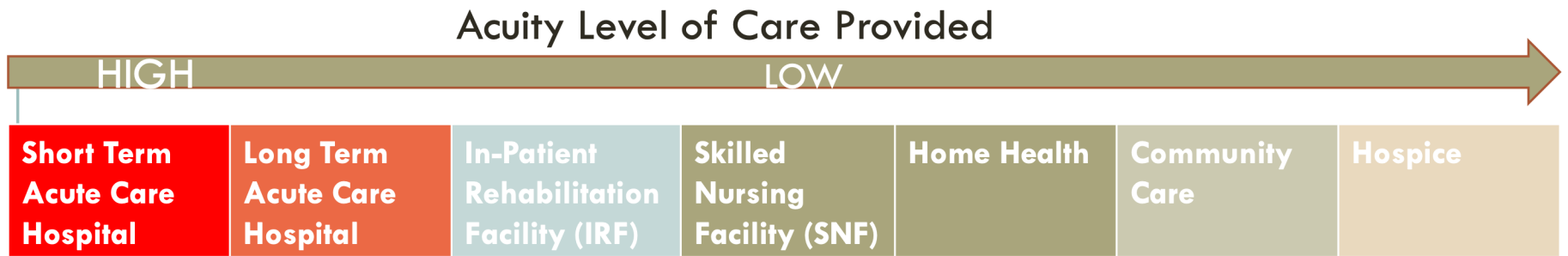
Levels of Care Continuum:



Determine Post Acute Care:

- Factors:
 - Hospitalization/Medical Stability
 - Diagnoses/Care Needs
 - Therapy Tolerance/Intensity
 - Nursing Care/Intensity
 - Physician Oversight/Response to Resuscitation
 - Expected Length of Stay
 - Family/Caregiver Support
 - Cost/Insurance

Long Term Acute Care Hospital:



Source: Healthcare Landscape. Integrating Acute to Post-Acute Care Settings. February 2018

Long Term Acute Care Hospital (LTACs/LTACHs/LTCHs):

- Licensed as an acute care hospital
 - Medically complex patients who require longer inpatient recuperative stays
 - 3 day ICU or mechanical ventilation on a respirator
 - Patient needs cannot be met in a less restrictive setting

Long Term Acute Care Hospital (LTACs/LTACHs/LTCHs):

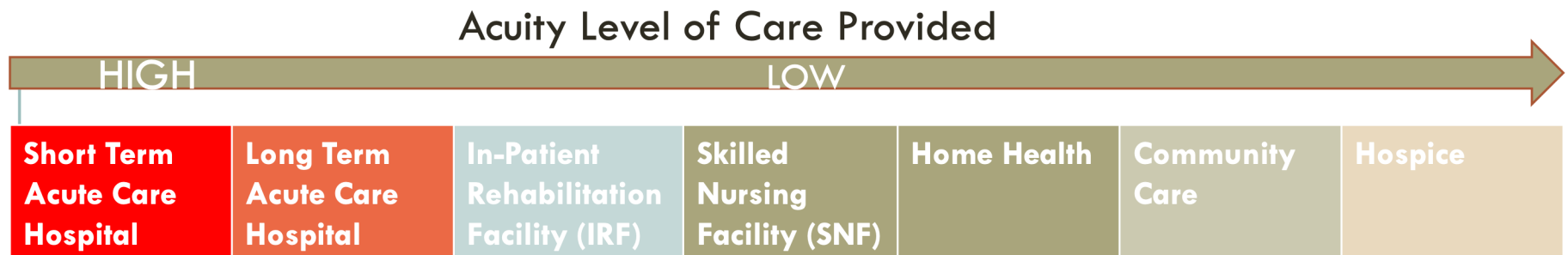
- Expectations of medical complexity
- Frequent Interventions
 - Ventilator Weaning
 - Tracheostomy Care
 - Parenteral Feeding
 - Cardiac Monitoring
 - Dialysis
 - Complex Wound Care
 - Wound Vac, Grafts, Flaps
 - Prolonged IV Therapies/Drip Titration



Long Term Acute Care Hospital (LTACs/LTACHs/LTCHs):

- Rapid Response to Resuscitation
- High intensity of MD/subspecialty consultations
- Moderate intensity of RN services
- No requirement of rehabilitation therapy
- Approximate Cost \$1500-3000/day
- Average Length of Stay (LOS) > 25 days

Inpatient Rehabilitation Facility (IRF):



Inpatient Rehabilitation Facility (IRF) /Acute Rehabilitation Unit (ARU)

- Freestanding or units within acute care care hospital
- Most intensive therapy level of care
- Hospital stay is not required

Inpatient Rehabilitation Facility (IRF)

- CMS Requirements
 - Appropriate IRF Diagnosis
 - Medical Necessity
 - Relatively Intense Therapy
 - Interdisciplinary Conferences
 - Significant Practical Improvement
 - Discharge Plan

Compliant IRF Diagnoses:

- Stroke
- Spinal Cord Injury
- Congenital Deformity
- Amputation
- Major Multiple Trauma
- Hip Fracture
- Brain Injury
- Neuro Disorders
- Burns
- Active Polyarticular Arthritis
- Systemic Vasculitides
- Severe/Advanced Osteoarthritis
- Knee Replacement with Hip Fracture
 - BMI > 50; >85 years

Inpatient Rehabilitation Facility (IRF)

- Medical Necessity:
 - Services must be reasonable and necessary (in terms of efficiency, duration, and amount) for the treatment
 - Tiered Comorbid Diagnoses
- Relatively Intense Therapy
 - 3 hrs/day 5 days/week vs 15 hrs/week
 - Multi discipline: PT/OT/SLP/Prosthetics

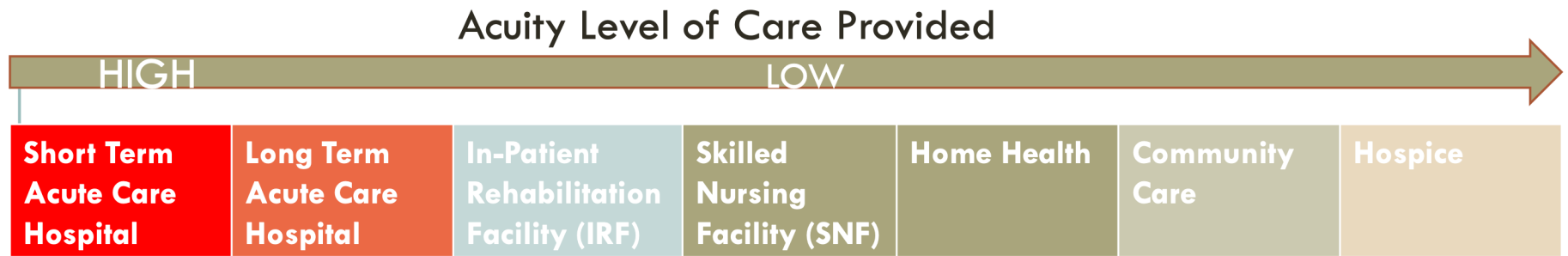
Inpatient Rehabilitation Facility (IRF)

- Interdisciplinary Approach:
 - Post Admission Physician Assessment within 24hrs
 - Plan of Care within 4 days
 - Weekly Formal Team Conference
- Significant Practical Improvement
 - Functional Independence Measures
 - Case Mix Group
- Discharge Plan to Community

Inpatient Rehabilitation Facility (IRF) /Acute Rehabilitation Unit (ARU)

- Rapid Response to Resuscitation
- High intensity of MD (3 days/week minimum)/Subspecialty consultation
- Moderate Intensity of RN Services
- Approximate Cost \$1500-2500/day
- Average Length of Stay (LOS) ~12 days

Subacute Rehabilitation/ Skilled Nursing Facility/ Transitional Care Unit:



Skilled Nursing Facility (SNF):

- Rehabilitation Candidates who do not qualify for IRF level of care
 - Unable to tolerate high intensity of therapy
 - Too high functioning but unable to live alone
- Criteria is not as tightly defined
- Medicare Part A covers up to 100 days
 - 100% Days 1-21, 80% 21-100 + copay

Skilled Nursing Facility (SNF):

- Medicare Requirements:
 - Must have 3 day hospital stay within preceding 30 days
 - No team meetings, but require to follow a Care Plan and Discharge Plan
 - RN to be on site 8hrs/day 7 days/week
 - MD must visit every 30 days for first 3 months, and 60 days thereafter
 - No requirement for therapies, but if there for skilled rehabilitation must receive them
 - Rehabilitation Utilization Group (RUG)

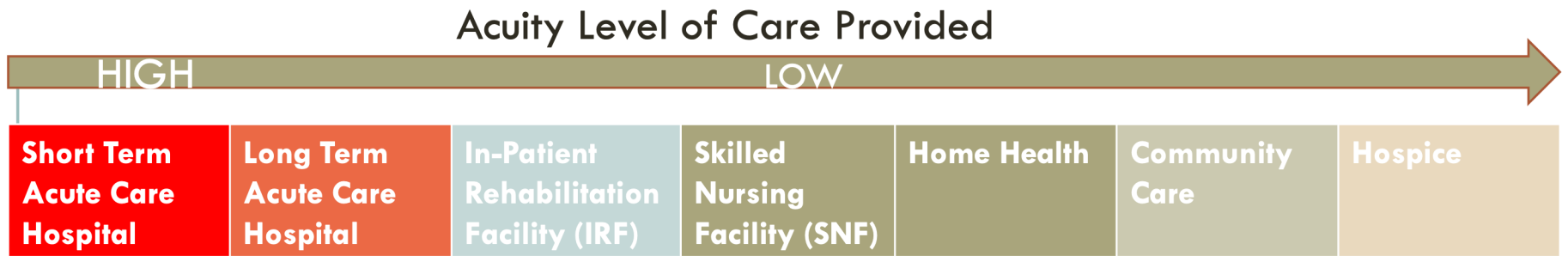
Skilled Nursing Facility (SNF):

- Slow response to resuscitation
- Low intensity of MD/Subspecialty
- Low-Moderate intensity of RN Services
- Low-Moderate intensity of therapies
- Approximate Cost \$150-400/day
- Average Length of Stay (LOS)
 - SNF: ~30 days

TCU vs SNF:

- Transitional Care is Hospital Based
 - Rapid Response to Resuscitation
 - Access to Diagnostic/Therapeutic Modalities
 - High intensity MD/Subspecialty
 - Moderate Intensity of Therapy
 - Typical 1.5 hr 5 days/week
 - Approximate Cost \$600-700
 - Average Length of Stay ~2 weeks

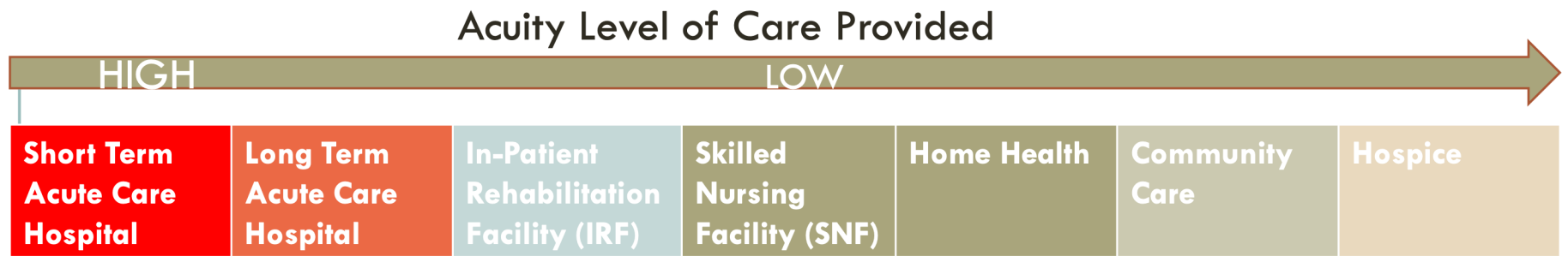
Home Health:



Home Health:

- Rehabilitation and Nursing provided in a community setting by a home care agency or visiting nurse
- Requirements:
 - Physician referral with face to face encounter to determine need for services
 - Within 90 days prior or 30 days after start
 - Patient unable to leave home independently because of a medical condition
 - Patient requires skilled services
 - Hospital stay not required

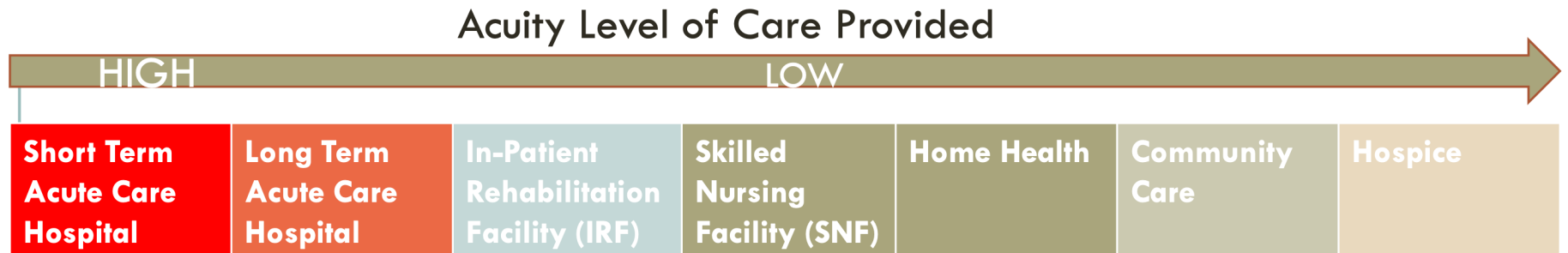
Community Care:



Outpatient Rehabilitation

- Provided in outpatient departments of acute care and rehabilitation hospitals
- Frequency usually 1-3 days/week
- Cap on Medicare expenditures for PT and SLP, and a second cap for OT

Levels of Care Continuum:



Choosing Level of Care:

- Multifaceted interaction between health care providers and patients
- Identify cost effective level of care
- Communication:
 - Clinician and Patient
 - Clinician and Health Care Providers/Team
 - Patient and Families/Care Support
 - Clinician and Community Care Clinician

Sector of Silos:

- As Prospective Payer System (PPS) and regulations were placed into each post acute care setting, this resulted in Silos of Post Acute Care
- Competition for the same patients
- Lack of cooperation or coordination

Barriers to Choosing Level of Care:



Barriers to Choosing Level of Care:

- Communication Gaps
 - MD, PT, OT, SLP, RN, CM, SW, PharmD
- Lack of information for decision making
 - Level of care, facilities, education, follow up
 - Unclear medical outcome
 - Role Clarity
- Lag time in identification and bed availability
- Patient/Family Expectations
- Insurance/Cost

Barriers to Choosing Level of Care:

- Internal Reasons/:
 - Financial Incentives at Levels of Care
 - Billing, Relationships, Ownership
 - Time Constraints/ Convenience
 - Easier to provide 1 option than multiple
 - Hospital Pressure
 - Pressure of decreasing length of stay
 - Lack of Resources
 - Staffing, time, work load
 - Outcomes/ Team ability to follow

Comparison of Level of Care:

- IRF vs SNF for IRF specific diagnoses:
 - Reduce average length of stay in post acute care
 - Reduce risk of mortality
 - Increase ability to stay home
 - Decrease ER visits
 - Decrease hospital readmission

Source: DaVanzo et al. Assessment of patient outcomes of rehabilitation care provided in inpatient rehabilitation facilities (IRFs) and after discharge. Vienna, VA.

Comparison of Level of Care:

- IRF vs SNF in Spinal Cord Impairment Groups:
 - Average length of stay:
 - 13.5 vs 22.2 days
 - Mortality in 2 year period:
 - 19.4% vs 26.1%
 - Number of days at home:
 - 597.9 vs 556.8 days
 - ER Visits:
 - 621.3 vs 701.6 visits

Source: DaVanzo et al. Assessment of patient outcomes of rehabilitation care provided in inpatient rehabilitation facilities (IRFs) and after discharge. Vienna, VA.

Implementation Strategies:



Models of Care in Progress:

- Building A Successful Acute/Post Acute Care/ Inter PAC Continuum
- Consolidating Models and Partnerships
- Evaluating and Acquiring Quality Improvement Data
- Creating Standardized Patient Assessment Data, Reporting Data

Improving Communication:

- Multidisciplinary Discharge Coordination
- “Transitionalist”
- Rehabilitation Consultation
- Patient and Care Education



Increasing Efficiency/Access:

- Case Management Electronic Referrals
 - E.g. AllScripts, Aiden
- Insurance Review/Coordination
 - On Site Coordinator
- Electronic Medication Prescriptions
- Consolidating Health Care Systems

Evidence Based Standardization:

- Hospital Resources
 - E.g. McKesson InterQual Criteria
- Insurance Resources
 - E.g. Milliman (Milliman & Robertson)
 - Utilization Review/Management
- Clinician/Patient Resources
 - E.g. Post Acute Care Transitions (PACT) and Project Re-Engineered Discharge (RED) Toolkits

Concerns for the Future:

- Balancing optimal rehabilitation with increasing medical costs
- Bundled Payments Trend
- Changing Insurance Models
- Lack of Growth of Rehabilitation Centers



Conclusions:

- Clear trends of an aging population, decreasing hospital length of stay, increased interventions and relatively stable rehab facilities
- Post acute care partnerships and choosing level of care is necessary for cost effective rehabilitation and patient care
- Implementation strategies include improving communication, efficiency, access, and standardization for care to optimize rehabilitation access

Questions?

