Pediatric Perioperative Surgical Home (PSH)

Pediatric Anesthesiology 2015
Phoenix, AZ

Society for Pediatric Anesthesia and the American Academy of Pediatrics Section on Anesthesiology and Pain Medicine

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VP, Healthcare Delivery System Transformation
VHA Southeast
Educational Goals

- Highlight the need for the Pediatric PSH
- Define the Perioperative Surgical Home
- Outline the progress of the PSH Learning Collaborative
- Describe the unique characteristics of a Pediatric PSH
No Financial Disclosures

I have no financial interest in or affiliation with any commercial supporter or providers of any commercial services discussed in this educational material except I am:

- Medical Director, ASA PSH Learning Collaborative
- Texas Surgical Quality Collaborative (TxSQC) Board Member
- An employee of VHA Southeast.

My opinions are my own –

not my employer, ASA, or TxSQC
Problem: Patients Are Not Receiving Recommended Care

### The Quality of Health Care Delivered to Adults in the United States

**Abstract**

We have identified systematic information about the nations to which we have access in order to better understand the quality of care delivered in the United States. We did not perform a random sample of adults living in the United States and select them from our sample of national health care experience. We also obtained written comments of patients from medical records for the entire nation, which were mailed and used to create a national database of health care providers. We have structured aggregate data.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Compliance Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atrial Fibrillation</td>
<td>75.3%</td>
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<tr>
<td>Diabetes Mellitus</td>
<td>53.6%</td>
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<tr>
<td>Hyperlipidemia</td>
<td>51.4%</td>
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<tr>
<td>Asthma</td>
<td>46.5%</td>
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<tr>
<td>Colorectal Cancer</td>
<td>46.1%</td>
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<tr>
<td>Osteoarthritis</td>
<td>42.7%</td>
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<tr>
<td>Depression</td>
<td>42.3%</td>
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<tr>
<td>CHF</td>
<td>36.1%</td>
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<tr>
<td>Hypertension</td>
<td>35.3%</td>
</tr>
<tr>
<td>CAD</td>
<td>32.0%</td>
</tr>
<tr>
<td>Lower Back Pain</td>
<td>31.5%</td>
</tr>
<tr>
<td>Prenatal Care</td>
<td>27.0%</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>24.3%</td>
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</table>

**Non Compliance Averages**: 45%
SPA “Wake-up Safe”

- Risk of Acetaminophen overdose
- Hyperkalemia Statement
- Wrong Side Procedures
- Decrease risks of IV Medication errors

http://www.wakeupsafe.org/findings.iphtml
Value-Based Payment (VBP)
Acceleration of Timeline

- HHS Secretary Burwell announced in January that 30% of payments from traditional Medicare benefits will be tied to alternative payment models such as bundled payments, ACOs, medical or specialty homes.
- 50% of Payments will shift from FFS to Value-base payments by end of 2018
- Secretary Burwell also outlined a goal for 85% of all Medicare fee-for-service payments to be tied to quality or value payment incentives by 2016, and 90% by 2018.
Value-Based Payment (VBP)
Acceleration of Timeline

- The Health Care Transformation Task Force, whose members include six of the nation’s top 15 health systems and four of the top 25 health insurers, challenged other providers and payers to join its commitment to put 75 percent of their business into value-based arrangements that focus on the Triple Aim of better health, better care and lower costs by 2020. (www.hcttf.org)

- Aetna will rapidly expand beyond its current 30% VBP
- United Health Group will increase VBP arrangements to $65 billion by the end of 2018
- Anthem which operates Blue Cross plans in 14 states, recently stated its value-based contracts are currently worth $38 billion

Identified conditions in 38 of the largest freestanding US children’s hospitals that met all three of these criteria: high cost, high prevalence, or demonstrated high variation in costs:

- Hypertrophy of the tonsils and adenoids requiring tonsillectomy or adenoidectomy
- Otitis media requiring tympanostomy tube placement
- Acute appendicitis without peritonitis requiring appendectomy

Top ten conditions representing 36% of Cost

RSV Newborn
Chemotherapy
Scoliosis – Idiopathic
Hypoplastic L Heart
Hypertrophy Adenoids/Tonsils

Pneumonia
Acute RF
Asthma
Bronchiolitis
Birth wt. 500-749gms

Comparative Cost effectiveness


- Demonstrated wide variability in cost for **Appendectomy without peritonitis** by hospital
- Most common abdominal surgical emergency in children
- Approximately 80,000 cases/year in the United States
Reasons for variation in readmission rates across Children’s Hospitals

- Quality of the discharge instructions
- Differences in post discharge care – access to primary care
- Community factors - availability of paid leave for parents to care for recuperating children
- Cultural differences in the tendency to hospitalize children or in the availability of hospital beds
- After adjusting for age and chronic condition - possibly disease progression near the end of life
Chronic Conditions and 30 day readmission rate

- Neoplasms 21.1%
- Injury and Poisoning 17.3%
- Factors influencing health status and contact with health services such as transplantation, gastrostomy, tracheostomy 15.9%
- Disease of the genitourinary system 15.2%
- Diseases of blood and blood forming organisms 15.1%
- Diseases of the circulatory system 12.8%
- Diseases of the digestive system 12.7%
- Infectious and parasitic disease 12.1%
Strategy to Fix Healthcare

1. Organize into Integrated Practice Units
2. Measure Outcomes and Costs for Every Patient
3. Move to Bundled Payments for Care Cycles
4. Integrate Care Delivery Across Separate Facilities
5. Expand Excellent Services Across Geography
6. Build an Enabling Information Technology Platform

Source: Porter & Lee; Providers Must Lead the Way in Making Value the Overarching Goal; HBR 10/2013
Health System’s Need to evolve

From Pay for Procedures Fee-for-service More facilities/capacity Physicians/Hospitals acting independently Physicians & Hospitals working in parallel Hospital Centric Treat disease/episode of care

To Pay for Value Case rates/budgets/capitation Better access to appropriate settings Physicians/Hospitals collaboration for global risk Physicians & Hospitals working in a highly integrated manner Continuum of care (Population Health) Maintain health

Prepare for the future to remain relevant
Legal Advice Required for VBP Models

**Regulatory issues**

- Stark law – hospital inpatient and outpatient services are covered
- Anti-Kickback & fair market value, or else payment could be deemed to be a kickback for referrals
- False Claims Act, civil monetary penalty, providers based status rules, & tax exempt status
- ACA or FTC Safe Harbor

*I am not an attorney!*
PSH Model Defined

The PSH model is a patient-centered, physician-led interdisciplinary, and team-based system of coordinated care for the procedural and surgical patient.

- PSH spans the entire surgical experience from decision for the need for surgery to 30-90 days post discharge from a medical facility.
- PSH aim is to reduce variability in the perioperative care process.
- The goal of the PSH is to enhance value and help achieve the Triple Aim:

Better Patient Experience

Perioperative Surgical Home

Better Healthcare

Lower Costs

What is a Perioperative Surgical Home? AAOS June 2014
Perioperative Surgical Home

- Optimized Recovery After Surgery
- Michigan Surgical Quality Collaborative (MSQC)
- The Productive Operating Theatre (TPOT)

Fast Track Surgery
Bundled Payments
Surgical Care and Outcomes Assessment Program (SCOAP)

Alignment of Perioperative Care With Future Models of Payment  Sibert & Schweitzer ASA Newsletter Oct. 2014
Hospital View of Stakeholders

Providers
- Surgeons & Interventional Cardiologists
- Primary Care & Hospital Medicine
- Specialists
  - PARE (Pathology, Anesthesiology, Radiology, Emergency)
- Nurses, Pharm, RT, PT, CM, others

Post Acute Care Partners
- Home Health
- Skilled Nursing Facilities
- Oncology, Imaging, Rehab
- CM, PT, Community affiliates
PSH Overview Stakeholders

**Preoperative**
- Patient engagement
- Assessment & triage
- Optimization
- Evidence based protocols
- Education
- Transitional care plan

**Intraoperative**
- Right personnel for patient acuity and surgery
- Supply chain
- Operational efficiencies
- Reduced variation

**Postoperative**
- Right level of care
- Integrated pain management
- Prevention of complications

**Long Term Recovery**
- Coordination of discharge plans
- Education of patients and caregivers
- Transition to appropriate level of care
- Rehabilitation and return to function
- Reduced variation

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**Supporting Microsystems**
- Nursing
- Pharmacy
- Human Resources
- Laboratory
- Central Supply
- Social Services
- Radiology
- Info Technology

**Quality Improvement**

**Database**
Medicare’s growth in spending on post-acute care has more than doubled since 2001

Note: These numbers are program spending only and do not include beneficiary cost sharing.
Source: http://www.medpac.gov/documents/20130614_WandM_Testimony_PAC.pdf
Perioperative Care Clinic (PCC)

**Preoperative**
- Patient engagement
- Assessment & triage
- Optimization
- Evidence based protocols
- Education
- Transitional care plan

**Long Term Recovery**
- Coordination of discharge plans
- Education of patients and caregivers
- Transition to appropriate level of care
- Rehabilitation and return to function
- Reduced variation

Pre-op Clinics can expand to Post-Discharge Transitional Care Clinics
Using Project RED, Project Boost, and/or LACE Tool
PSH Learning Collaborative

- 44 Health Care Organizations
- Two Face-to-Face Meetings - July & Nov. 2014
- Many Webinars, Phone calls, e-mails & Premier-Connect Website
- Three Major Committees
  - Clinical Protocols & Operating Practices
  - Measurement & Performance Improvement
  - Payment
- Many Pilots in progress
- Development of Rapid Implementation Tool Kit
- Next Face-to-Face meeting in April 2015
Roger’s Adopter Categories Based on Degree of Innovativeness

- Innovators: 2.5%
- Early adopters: 13.5%
- Early majority: 34%
- Late majority: 34%
- Laggards (Traditionalists): 16%

Time to adoption (standard deviations from mean)

*Diffusion of Innovation*  Everett Rogers 1962
# Using Teamwork for Quality Process Improvement

**Projects: Need for Leadership**

**Define**  
- Project Charter  
- Project Team  
- CTQ  
- SIPOC  

**Measure**  
- Process Maps  
- Measurement system  
- Baseline metrics  

**Analyze**  
- Inputs/Outputs  
- FMEA  
- Cause & Effect  
- Variance Analysis  

**Improve**  
- Future State Map  
- Implementation Plan  
- Pilots/Tests of change  

**Control**  
- Transition plan  
- Control plan  
- Deployment plan  
- Best practice  
- Goals met!

<table>
<thead>
<tr>
<th>Quality of Solution</th>
<th>Acceptance of Change</th>
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<tbody>
<tr>
<td>Project Charter</td>
<td>WIIFM</td>
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<td>Project Team</td>
<td>Business Case</td>
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<td>CTQ</td>
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<td>SIPOC</td>
<td>Stakeholder Analysis</td>
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<td>CTQ</td>
<td>Impact Wheel</td>
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<td>Engaged Stakeholders</td>
<td>Change Mgmt</td>
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<td>Map the Transition</td>
<td>Strategy</td>
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<td>Stakeholder Mgmt</td>
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<td>“Champion” Framework</td>
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<td>Process observations</td>
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<td>Visual data</td>
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<td>Force Field Analysis</td>
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<td>Risk Assessment</td>
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<td>PDCA</td>
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<td>Knowledge Transfer</td>
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<td>plan</td>
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<td>RACI Matrix</td>
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*Many change management tools can (and should) be used in more than one phase.*
National Children’s Hospital

Adenoid-tonsillectomy
- Lower admission rate
- Lower complications
- Increased patient & family satisfaction
- Decreased costs

National Children’s Hospital

Launch of the Adenoidectomy PSH Pilot on January 29, 2015

Dr. Vidya Raman Physician Champion
NCH PSH Coordinated Care Bracelet
National Children’s Hospital

Adenoidectomy PSH

- EPIC - identify these patients in the header as PSH and have datasets applicable to them
- Target decrease in unanticipated admissions
- Improve Patient & Family Satisfaction
- Lower Complication rate
- Decrease Costs

Dr. Vidya Raman personal communication
Navigation Between PCMH & PSH

Create Consistent Seamless Journeys

PATIENT CENTERED MEDICAL HOME TEAM

- PHYSICIAN
- OFFICE STAFF
- SUB-SPECIALISTS
- URGENT CARE WALK IN CLINIC
- NURSING TEAM
- CLINICAL CARE COORDINATOR
- OTHER PROVIDERS, EDUCATORS, DIETICIANS

PERIOPERATIVE SURGICAL HOME PROCESS

- SURGERY DECISION
- SCHEDULING
- TRANSITIONAL CARE
- POST CARE
- SURGICAL EVENT
- PRE-OPTIMIZATION
Multispecialty Surgical Risk Score for Children

- The index is a new way to measure a surgical patient’s level of severity
- Can be used by physicians to identify high-risk patients as well as to provide a measure of risk adjustment for surgical outcomes.
- Viable tool for risk stratification because it is a reliable predictor of inpatient mortality

A novel multispecialty surgical risk score for children
Build infrastructure with minimal financial risk

6 Foundational Pillars of Population Health

I) Organization and Leadership, II) Care Delivery and Management, III) Physician Integration and Alignment, IV) Community Health Promotion, V) IT and Informatics, VI) Patient and Family Involvement
NCQA Certified PCMH
Growth Over 5 Years

Medical Homes Go Mainstream
Since 2008, there has been a significant rise in NCQA medical home recognition

Clinicians

Sites

* As of August 31, 2013
Source: National Committee for Quality Assurance
Existing Payment Models

Financial Models for Perioperative Surgical Home

- Medical Director
- *Co-Management
- Pay for Performance
- S Code or G Code
- * Bundled Payment
- Risk Sharing / ACO
- Capitation / ACO
Co-management – Basics

“Co-management is not an answer to value-based purchasing. Co-management has to be a part of a larger strategy. It’s a first step”

**Definition**
Multi-party management service agreement provides specific duties to perioperative care across continuum (Legal advice required).

**Compensation**
- **Meet performance metrics** based on quality and efficiency that are pre-established at the beginning of the contract
- **Fixed monthly pay** based on management hours worked
- **Payment is to practice** (“Manager”) not individual physicians (“Physician Participant”)

**Organizational Structure – One example**

- **Management Company**
  - Development Services:
    - Perioperative Surgical Home
    - Programmatic Initiatives
  - Management Services:
    - Oversee Clinical Operations
    - Operational/Clinical Improvement
    - Leadership/Medical Director
    - Committee Services
    - Payment Initiatives
  - Performance Improvement Metrics
    - Quality
    - Efficiency
    - Patient Satisfaction

- **Board of Managers**

- **Leadership Council**

- **XYZ Hospital**
  - Service Line
    - ORs
    - Identified Beds/Facilities/Programs
    - Equipment/Supplies
    - Clinical Staff
    - Service Line Administrator
    - Billing and Collections
    - Other?
Co-Management Model

Sample Performance Metrics

- Patient safety
- Patient experience
- Readmission rates
- National quality indicators
- Satisfaction – referral physician, employee
- Documentation (i.e. medical necessity)
- Efficiency
- Standardization
- Outcomes
Compensation example:

A. Maximum Co-management Fee: $1,000,000 for 20 physicians:
   - $186,000 fixed for hourly payments (Max. = $9,300 per year)
   - $814,000 performance bonus (Max = $40,700 per year)

Source: HealthCare Appraisers Inc. 2013
## Benefits of Co-Management

<table>
<thead>
<tr>
<th>Physician</th>
<th>Hospital</th>
</tr>
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<tbody>
<tr>
<td>✔ Management role in total program environment</td>
<td>✔ Organized physician input into management of service</td>
</tr>
<tr>
<td>✔ Compensation for quality performance</td>
<td>✔ Preparation for shared risk and continuum management</td>
</tr>
<tr>
<td>✔ Specific focus areas for joint activities</td>
<td>✔ Combined focus on specified areas</td>
</tr>
<tr>
<td>✔ Alignment for the future</td>
<td>✔ Pathway to VBP</td>
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Bundled Payment

A bundled payment or an Acute Care Episode (ACE) is payment for multiple providers bundled into a single comprehensive payment that covers all of the services involved in the patient’s care.

- Target self pay patients, self insured employers, commercial payers, or government payers such as Medicare or Medicaid.

- The **Bundled Payment Care Initiative (BPCI)** aims to incentivize care coordination across provider types and care settings by packaging payments to providers for services during a particular episode of care.
CMS National BPCI Round 2
Launched 2014

CMS launched in 2013 runs for 5 years (Round 1 = 236 participants)
In 2014 Round Two, **4,100 providers will join 2,400 hospitals** as candidates for Medicare's BPCI program.

- **Model 1:** Retrospective Acute Care Hospital Stay Only *(Not part of this round in 2014-15)*
- **Model 2:** Model 1 plus Post-Acute Care
  → (60 & 596 participants – which includes 1,964 providers)
- **Model 3:** Retrospective Post-Acute Care Only
  → (20 & 267 participants – which includes 4,453 providers)
- **Model 4:** Acute Care Hospital Stay Only – **Prospective**
  → (10 & 7 participants – including only 7 providers)
DRG 470 TJR Model 2
PSH or ‘VBP’ Example

‘90 Day’ Episode of Care Model

$4,500 + $11,100 + $6000 + $1,650 = $23,250

$23,250 x 98% = $22,785

Episodic period for model 2: 3 days prior to admission to 90 days postdischarge from hospital

$22,785

Bundled Episodic Model

Note: Any CMMI aggregate charges lower than $22,785 can be shared with providers via gain sharing model.
IRF = inpatient rehabilitation facility; PACS = post-acute care services; SNF = skilled nursing facility.
Considerations as you transition from FFS to VBP

Goal of CMS is to change payment system to decrease costs

Shifting payment for value NOT per unit (e.g. RVU or DRG)

Interests - Providing better value for our patients and U.S.A.
  - Improve Triple Aim
  - ‘Appropriately’ sharing the savings to reward the efforts of providers
  - Broad Provider Input - What does each stakeholder want/need?

Create Mutual Benefit to reach agreement
  - Nationally accepted benchmarked metrics that measure true outcomes
  - What is the ‘best’ percentage for incentives? (e.g. Blend FFS-VBP)

Continually evolving and changing
Lessons Learned in Value-based Models

- Use quality as the “Change Agent”
- Identify physician champions
- Better collaboration among health care providers

- Understand your costs & be transparent
- Integrate post-acute care
- Target Population = High Volume with High Variability

- Identify & resolve information systems barriers
- Use data to drive the process
- Shift towards evidence-informed practice

- Labor-intensive to administer program
- Improve the organization and coordination of care
- Identify & manage high risk population
PSH Payment Steps

- Create a sense of urgency — “The Burning Platform”
- Ownership and commitment to new expectations — patient-centered, value-based, high quality, and cost-effective care
- Creating the infrastructure to support Value Based Payments
- Cultural transformation — Coordinated Care
- If you are not involved, you do not share in the benefits

THANKYOU!

Mike Schweitzer, MD, MBA