Quality and Cost in Neurological Surgery

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Disclosure

• Nonfinancial disclosures
  – Published on this topic
  – I am an active health care policy and socioeconomic advocate for organized neurosurgery
    • one of six voting members of the AANS/CNS Washington Committee
    – American Association of Neurological Surgeons
    – Congress of Neurological Surgeons
    • CANS representative to the Council of State Neurosurgical Societies
      – California Association of Neurological Surgeons

At the conclusion of this presentation participants will be able to:

• Describe the difference between process and efficiency measures
• Explain the make-up and role of the AMA/PCPI, the NQF, and the AQA in developing, approving and implementing quality measures as well as the degree of physician input and influence on this process
• Describe the legislative background and current structure of the CMS PQRI initiative
• Describe new measurable criteria for quality assessments in neurosurgery
• Integrate identified mechanisms for quality management in neurosurgical care into current practice

Avedis Donabedian (1919-2000)

• Primary architect of the field of quality in health care
• 1960’s – 1985 main researcher in the field
  - Explorations in Quality Assessment and Monitoring, Volumes 1-3, 1960-85
  - 1: Definition of Quality and Approaches to its Assessment
  - 2: The criteria and Standards of Quality
  - 3: Methods and Findings of Quality
    - Quality Measures
      - Structural Measures
      - Process Measures
      - Outcomes Measures

Avedis Donabedian (1919-2000)

• Structural Measures
  - Certifications
    - e.g. License, RRC-accredited training ABNS, MOC
  - Case volume
  - HIT infrastructure for participation and monitoring
• Process measures
  - Quality Measure: Did patient receive antibiotics at the appropriate time?
  - Efficiency Measure
    - Was the procedure indicated under EBM Practice Parameter Guidelines applicable to the diagnosis
  - What is the median ALOS for a CPT code
• Outcomes Measures
  - Risk-adjusted mortality rate per CPT or diagnostic code
  - Discharge to other than home rate per CPT or diagnostic code
  - Procedure-, or Diagnosis-specific outcome measures
    - Unable to assess reasonableness of procedural choice (hemorrhage, miasma, etc.)
Evidence-Based Quality

- **Evidence**
  - Peer-reviewed literature of published clinical trials
  - RCT, Cohort, C-C
  - Individual/institutional empirical measurement and feedback
    - e.g. NSQIP

- **Evidence-based measure sources**
  - Outcomes studies
    - Outcomes measures (quality measures)
    - Evidence-linked multidisciplinary clinical practice parameter guidelines
    - Process measures (quality and efficiency measures)
    - Empirically-validated measurement programs (internal and external validity)
    - e.g. NSQIP
  - Expert consensus IS NOT an evidence-based source of quality or efficiency measures

Quality vs Efficiency Measures

- **IOM Quality**
  - The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge (Six Dimensions)
  - Quality Measures
    - Process Measures
    - Outcomes Measures

- **CMS Efficiency**
  - Absence of waste, overuse, misuse and errors
  - Limitation of unexplainable practice utilization variation
  - When a given level of "output" is achieved at the lowest total cost
  - Efficiency Measures
    - Cost of Care Measures
    - Utilization Appropriateness Measures
      - Overuse, Misuse, Under-use
    - EBP, Best Practice Benchmarks, EBM Practice Parameter Guidelines

Data Sources

- All measures depend on Databases
  - Claims data (billing inpatient and outpatient)
  - Readily available administrative data
  - Not trusted by providers, crude risk adjustment
  - Discharge data (inpatient)
  - Readily available administrative data
  - Not trusted by providers, crude risk adjustment
  - Provider surveys
    - Limited by reliability of self-reported data
    - Contain few of the variables needed for risk adjustment
  - Patient surveys (e.g. access, timeliness, satisfaction)
    - Pts least reliable source of technical details of their own diagnosis and care
  - Medical record extractions
    - Most accurate and contains the most useful variables for risk adjustment
    - Not uniform in organization or extent of documentation
    - Most expensive and time consuming
    - EHR advances may improve
  - Voluntary Prospective registries
    - Most trusted by physicians
    - Not all participate, not all patients included
    - Medical specialty buy-in

Data Sources

- Limited by existing health information technology (HIT)
  - Ideal
    - Electronic medical record (EMR) consistent and compatible across health systems
      - E-B disease-specific risk adjustment
      - Fair linking of measured outcomes to interventions
  - Currently Feasible
    - Existing medical claims data
      - Structured for billing and maximizing reimbursement
      - Critically dependent on coding sophistication and fidelity
      - No detailed or disease-specific clinical context
      - Attempts to "make a silk purse out of a sow's ear" suspect
      - "All-patient-refined" (APR) – DRG
    - 3M software, AHRQ-endorsed

Neurosurgery Example - Extramural

- Academic medical center multidisciplinary stroke service rated for stroke DRG’s using AHRQ National Healthcare Quality Report methodology and publicly reported
  - 2003 - lowest mortality rate for stroke in MA
  - 2004 - 2nd-worst mortality rate for stroke in MA
- No change in personnel
- No change in clinical pathways, protocols or Rx philosophy
  - All 2004 31 deaths individually reviewed
  - Only 1 instance of potentially avoidable care delivery morbidity
  - All others severity of initial presentation and/or family non-intervention decisions

Neurosurgery Example - Intramural

- Ventriculostomy mortality rates reported to Office of Statewide Health Planning and Development (OSHPD) which then publicly reports via website
  - 2005 - UCI 55% ventriculostomy mortality rate vs 37% at UCSF and <15% at all other UC sites
  - Should be <1-2% - essentially a “cerebral a-line”
  - Actual ventriculostomy-related deaths – 0%
  - Placebo EVD moves patient out of traumatic stupor and coma DRG into DRG 1 (craniotomy age >1Y with complications & comorbidities)
  - If patient dies and EVD is the only surgical procedure performed, death is attributed to EVD rather than underlying disease
  - Was actually a measure of superior coding and billing practices at UCI vs other UC hospitals

APR-DRG

- Neurosurgery example

  - Valid subarachnoid hemorrhage risk adjustment
    - Evidence-based, disease-specific variables:
      - Clinical grade
      - Hunt & Hess, GCS, etc.
      - CT scan Fisher Grade
      - Age
      - Presence of hydrocephalus
      - Development of re-hemorrhage
      - Development of vasospasm
      - Development of intracranial hypertension
      - Requirement for intubation and mechanical ventilation
      - Development of CWS or SIADH
      - Development of status epilepticus

APT-DRG - SAH

<table>
<thead>
<tr>
<th>Severity of Illness</th>
<th>Expected Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>Hypertension, Chronic obstructive pulmonary disease (COPD)</td>
</tr>
<tr>
<td>Moderate</td>
<td>Dehydration, Malnutrition, COPD, Decubitus ulcer, CHF, Hypotension</td>
</tr>
<tr>
<td>Major</td>
<td>Cerebral edema, Hypertension, Hypothermia, Respiratory failure, CHF, Hypotension, Dehydration, Malnutrition, COPD, Decubitus ulcer, CHF, Hypotension</td>
</tr>
</tbody>
</table>

Institute of Medicine

- National Academy of Science (NAS)
  - Honorific society, March 3, 1863, Abraham Lincoln
  - Nominations only by an established member (NA2?)
  - IOM established in 1970, as a separate institute within NAS (IOM?)
  - 1440 regular members
    - 9.9% Harvard (HJU, HMS, HSPH)
    - 12.4 X its representation as 1/125 US Accredited Medical Schools
  - few practicing physicians
    - directly & continually responsible for patient care
  - many administrative and leadership academicians
  - many non-clinical faculty (public health, health policy, epidemiology, etc)
  - <10% surgeons (only 56 in section 6A – surgery subsection)
  - < 0.5% neurosurgeons (peak n=7, now n=6)
  - Almost no private practitioners
Institute of Medicine

• Not simply an honor society any more
  – Has its own internal agenda
    • e.g. ongoing Quality Initiative started 1996 now in Phase III
      1. (1996-99) - Documenting the seriousness and pervasiveness of the US healthcare quality problem
      2. (1999-2001) - Define the nature of the problem in terms of overuse, misuse, and underuse of healthcare services, and lay out a vision for how the healthcare system and related policy environment must be radically transformed
      3. (2002-present) - Operationalize the vision through multiple efforts focusing on reform in three overlapping levels of the system
        » Environmental level
        » Level of the Healthcare Organization
        » Interface between clinicians and patients
  – Periodically commissioned by government agencies
    • President
    • Congress
    • Dept HHS
    • AHRQ
    • CMS

CMS Quality Improvement Roadmap 2005

• System Strategies (5) for improving care
  1. Work through partnerships
    • (within CMS, with Federal and State agencies, and with nongovernmental partners)
  2. Publish quality measurement and information
    • (includes both the beneficiary audience and the professional/provider/purchaser audience)
  3. Pay in a way that expresses commitment to quality and rewards rather than inadvertently punishing providers and practitioners for doing the right thing - (P4P)
  4. Promote health information technology
    • (includes both standards promotion and payment for HIT results)
  5. Become an active partner in creating and using information about the effectiveness of healthcare technologies to bring effective innovations to patients more rapidly and to monitor the effectiveness of technologies for which we are paying

CMS Quality Improvement Roadmap 2005

• MMA 2003 – Medicare prescription drug, improvement and Modernization Act - mandated quality review which triggered CMS strategic planning process
• Identified four strategies that if adopted by providers can lead to high performance
  1. Measurement and reporting of quality
  2. Adoption and use of health information technology (HIT)
  3. Re-design of care processes
  4. Change in organizational culture and management
• Strategic planning resulted in the CMS QI Roadmap
  – Issued July 2005
  – Strongly influenced by IOM – Crossing the Quality Chasm

Agency for Healthcare Research and Quality - AHRQ

• Established in Dec 1989 as the Agency for Health Care Policy and Research (AHCPR) within Dept HHS
  – Public Law (PL 101-239)
  – After collapse of healthcare reform debate 1993-4 intramural analysis of national outcomes data & creation and dissemination of national clinical guidelines removed from potential scope
  – 1999 name changed to AHRQ to reflect elimination of direct influence on healthcare policies
• ~80% of annual budget goes to funding extramural Evidence-Based Practice Center (EPC) grants (originally 13 in 2002, now down to 11)
• Tasked with producing Evidence-Based Practice Parameter Guidelines

AHRQ

• Funds the extramural EPCs
  – E-B Care studies
  – E-B Clinical Practice Parameter Guidelines
• Supports the NGC along with the AMA & the AHIP
• Tasked the AQA (Ambulatory Quality Alliance) with implementing quality and efficiency measures
• Produces the annual National Healthcare Quality Report (NHQR)
  – 2003 – present - every December
  – Currently no neurosurgery core measures among 178 analyzed
• Is developing a uniform patient satisfaction measurement instrument
• Consumer assessment of healthcare providers and systems (CAHPS)
• Promotes extending P4P beyond Medicare to commercial third party payers
  – Pay for Performance: A Decision Guide for Purchasers

Government Accountability Office - GAO

• Formerly – General Accounting Office, f 1921
• Independent, nonpartisan legislative branch agency that works as an investigative arm for Congress and also advises Heads of Executive Agencies (e.g. HHS and AHRQ, CMS)
  – “Congressional Watchdog”
• Studies and audits tax expenditures
• Managing Director, Health Care
  – Marjorie E. Kanof
• Comptroller General – David M Walker (7th CG)
  – Appoints members of MedPac and its Chair
Medicare Payment Advisory Committee (MedPac)

- Independent federal body established by the Balanced Budget Act of 1997 (PL 105-33)
  - To advise Congress on issues affecting Medicare
    - Two times per year
  - 17 Members appointed by the Comptroller General of the US of the General Accountability Office (GAO)
    - 3 year renewable staggered terms
    - Serve part-time

- 3/05 – Recommended that CMS use claims data to measure physician’s resource use and educate them as to their performance relative to their peers
  - recommended that up to 50% of physician reimbursement eventually be linked through P4P
    - Testimony and report to Congress March 2005

- 3/06 - Advised congress that P4P was ready for implementation and recommended moving forward

President’s Advisory Commission on Consumer Protection and Quality in the Healthcare Industry

- The President’s Advisory Commission on Consumer Protection and Quality in the Healthcare Industry (PACCPQHI) was established by Executive Order 13017 on September 5, 1996 by then President, William Clinton.
- The first report of the PACCPQHI November 20, 1997 called for establishment and endorsement of a Consumer Bill of Rights and Responsibilities (Patient’s Bill of Rights).
- Their final report entitled, “Quality First: Better Healthcare for All Americans” called for formation of a single forum of providers, business, labor, consumers, insurers and government to set health care quality standards for measurement and reporting.
- The goal was to identify and endorse “valid”, consensus-based, quality measures.

AMA Physician Consortium for Performance Improvement - PCPI

- Convened by AMA in 2000
- >100 national medical specialties and state medical societies, the Council of Medical Specialty Societies, the American Board of Medical Specialties (and 2 of its member Boards), AHRQ, & CMS
- Neurosurgery
  - AANS/CNS (Washington Committee, QIW)
  - ABNS not represented
  - Develops evidence-based physician performance measures
    - PCPI work group initiated
    - Requests by NQF, AQA, etc.

National Quality Forum (NQF)

- Origin
  - President’s Advisory Commission on Consumer Protection and Quality in the Healthcare Industry
      - formation of a single forum of providers, business, labor, consumers, insurers and government to set health care quality standards for measurement and reporting
      - “valid”, consensus-based quality measures
      - In this circular revision, it is directed that if medical quality indicators are endorsed by voluntary consensus standard bodies, the government is obligated to adopt them
        - The NQF was incorporated as a private organization in May 1999
        - The AQA, originally known as the Ambulatory Care Quality Alliance (ACQA), was formed in September 2004
National Quality Forum  
(NQF) - 2006 – n=335
- 121 (36.1%) - Hospitals, Hospital Assocs, Integrated Health delivery net
- 77 (23.0%) - Certification Bodies, Quality Improvement Assoc
- 40 (11.9%) - Physician Associations/Coalitions or Group Practices
- 24 (7.2%) - Patient Advocacy/Watchdog Groups & Employee Unions
- 23 (6.9%) - Large Employers or Employer HC Purchasing Consortiums
- 20 (6.0%) - Drug, Implant, or Medical Supply Companies
- 13 (3.9%) - Federal, State, or City Agencies (including CMS & AHRQ)
- 10 (3.0%) - Pharmacist/Pharmacy Associations
- 5 (1.5%) - Nursing Associations
- 2 (0.6%) - Optometry Associations

- Neurosurgery - represented via AMA & ACS only
  - No AQA, SQA, Washington Committee, AANS, or CNS seats
- Neurosurgery joined 2007 – 1 seat

Ambulatory Quality  
Alliance - AQA
- Originally ACQA (Ambulatory Care Quality Alliance)
- Collaborative effort initiated September 2004 by the American
  Academy of Family Physicians (AAFP), the American College of
  Physicians (ACP), America’s Health Insurance Plans (AHIP) and the
  AHRQ
  - Non-surgical primary care societies are the lead physician
    organizations
- >125 members representing physicians, consumers, employers,
  government, health insurance plans, and accreditation/quality
  improvement programs
  - Steering Group - AAFP, AHRQ, AACP, ACP, ACS, AMA, AQA, AHIP,
    National Partnership for Women and Families, Pacific Business Group on
    Health, STS
  - 54.5% physician societies (45.5 insurance, government, and patient advocates)
  - Poor surgical representation
    - 18% surgical societies (ACS, STS)
    - 18% indirectly represent neurosurgery (AMA, ACS)
  - General Membership
    - AANS/CNS Washington Committee QIW representative
    - Surgical Quality Alliance (SQA – QIW representative)
    - Together neurosurgery only 2/125 (1.6%) of membership

Ambulatory Quality  
Alliance - AQA
- Contracted with both AHRQ and CMS
  - Pilot studies for public reporting on quality measures
- July 2006, joined with Hospital Quality
  Alliance into a new National Quality Alliance
  Steering Committee
  - Transparent reporting public and private of
    quality and cost-of-care measures
  - General principle that only NQF-approved
    measures will be implemented

Surgical Quality Alliance –  
SQA
- Coalition of 13 surgical societies (AAN/CNS representative – QIW)
  - American Academy of Ophthalmology
  - American Academy of Otolaryngology - Head and Neck Surgery
  - American Association of Neurological Surgeons
  - American Association of Orthopaedic Surgeons
  - American College of Obstetric Surgeons
  - American College of Surgeons
  - American College of Thoracic Surgeons
  - American Society of Colon and Rectal Surgeons
  - American Society of General Surgeons
  - American Society of Plastic Surgeons
  - American Society of Vascular Surgeons
  - American Urological Association
  - Congress of Neurological Surgeons
  - Society for Vascular Surgery
  - Society of Thoracic Surgeons

- Functioning under the rubric of the ACS with an uncertain voice
  - No independent seat at AQA or NQF
  - Not contracting with AHRQ and CMS for surgical measures in parallel for AQA for
    ambulatory primary care measures

P4P - Physician Performance  
Measures

- Disenfranchised
  - Functions only as one of many
    inputs to AQA
Paying For Quality – P4P

• Apparent CMS Principles
  – Demonstration projects first, Then generalize
  – Hospitals first, Then physicians
  • Double standard – above vs below the line
  – Quality measures first, Then efficiency measures
    – Phase 1 - Quality – Process Measures, Outcomes
      – How well you did what you did
    – Phase 2 - Efficiency – Cost Measures, EBM Best Practice (EBM Clinical Practice parameter Guidelines)
      – Should you have done it? Did you do it with reasonable cost?
        > Unexplainable variation, overuse, misuse, under-use
    – Low amount at risk first (5-15%), Then up to 50% of reimbursement (MedPac)
• Beyond CMS – AHRQ
  – Expansion to commercial 3rd party payers
  • Pay for Performance: A decision Guide for Purchasers. Apr 2006

Physician Quality Reporting Initiative - PQR

• 2006 Tax Relief and Health Care Act (TRHCA) (PL 109-432) required the establishment of a PQR system including an incentive payment for eligible professionals who satisfactorily report data on quality measures for covered services furnished to Medicare beneficiaries during the second half of 2007
  – Lump sum incentive payment for up to 1.5% of allowable charges
    – Subject to a cap based on volume reporting
    – Additional money (unlike MedPac recommendation)
  – Report up to 3 measures in 80% of patients
  – 74 quality measures
    • Very few applied to neurosurgery
      – Clipping vs shaving hair
      – Antibiotics prior to incision
      – Sequential compression devices

2007 PQR: What happened?

➢ Data reporting period of July – Dec 2007
➢ 99,000 participated (about 16% of those eligible)
  ➢ <2% of Neurosurgical practices participated
  ➢ Slightly over half actually received a bonus
  ➢ Average bonus for individual - $600
  ➢ Average bonus for group - $4700

PQR and Beyond

Stacey Lambeth-Schoeck, ACMPE

In the end…. GA Spine & Neurosurgery Center experience

• Participation for 27 weeks (July 1- Dec 31, 2007)
• 285 workforce hours, estimated once reporting started
• Add cost of admin, training, testing, etc.
  – Initial investment cost $7210
• Bonus payment of $1,544.10
• Loss of $5,665.90
• Estimation for 2008: 320 hours, cost of $3800
  – Elected not to participate in PQR 2008

2007 PQR Survey

• 61% found participating difficult
• 22% successfully downloaded their feedback report, and of those who did, less than half found it to be instructive
• Survey respondents are “discouraged” by their participation in PQR
• Survey respondents are “furious” by the inability to know why CMS deemed them unsuccessful participants in the program
Changes in PQRI

- **2007 PQRI:**
  - 74 measures, 1.5% bonus subject to cap
  - 99,000 medical professionals (16% of those eligible) attempted to participate, only half qualified for the bonus
  - Ave. individual bonus: $600; ave group bonus: $4,700
- **2008 PQRI:**
  - 119 measures, 1.5% bonus (no cap), alternative reporting mechanisms
    - group measures, registries, 6 or 12 months
    - Results pending

What is happening in 2009?

- **2009 proposed program has some changes**
  - 153 Quality measures
  - Increased number of measure group reporting, including "perioperative" and "back pain" groups
  - Begin accepting data from EHRs for limited subset of measures
  - 2% bonus payment
  - Encourages alternate reporting methods, such as registries (6 or 12 mo)
    - Registry submission requires successful reporting on 30 consecutive case, only 2 of which must be Medicare
    - public reporting of all physicians who attempted to report, starting with 2007 data

2009 PQRI Measures Applicable to Neurosurgery

<table>
<thead>
<tr>
<th>Perioperative Care</th>
<th>Stroke</th>
<th>Low Back Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timing of Antibiotic Prophylaxis:</td>
<td>CT or MRI Reports</td>
<td>Actions Taken at Initial Visit (pain and functional assessment, patient history, etc)</td>
</tr>
<tr>
<td>Ordering Physician</td>
<td>Carotid Imaging Reports</td>
<td></td>
</tr>
<tr>
<td>Timing of Prophylactic Antibiotics:</td>
<td>DVT Prophylaxis for Ischemic Stroke or Intracran Hemorrhage</td>
<td>Physical Exam at Initial Visit</td>
</tr>
<tr>
<td>Administering Physician</td>
<td>Discharged on Antiplatelet Tx</td>
<td>Advice for Normal Activities</td>
</tr>
<tr>
<td>Discontinuation of Prophylactic</td>
<td>J-PA Considered</td>
<td>Advice Against Bed Rest</td>
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<tr>
<td>Antibiotics:</td>
<td>Screening for Dysphagia</td>
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<tr>
<td>VTE Prophylaxis</td>
<td>Consideration of Rehab Services</td>
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<tr>
<td>Selection of Prophylactic Antibiotic:</td>
<td></td>
<td></td>
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<tr>
<td>1st or 2nd Generation Cephalosporin</td>
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</tbody>
</table>

PQRI: 2010 and beyond

- CMS may publicly identify successful PQRI reporters and/or publicly report actual performance data
- Physician Resource Use Feedback Program
- CMS’ Plan to Transition to a Medicare VBP Program for Physicians
  - Differential fee schedule payment based on performance or serving as medical home
  - Addressing multiple levels of accountability (individual professionals vs. larger teams/organizations)
  - Promotion of integrated care: shared savings models/bundled payments
- Administration’s Budget Blueprint: Medicare payment policies that forge closer tie between payments and performance/efficiency

AANS/CNS Concerns with PQRI Expansion

- CMS is moving forward with public reporting and possibly P4P before:
  - Correcting technical flaws of PQRI
  - Having risk-adjustment mechanisms in place
  - Testing which public reporting formats are most accurate and user-friendly
  - Finding evidence that quality/efficiency measures improve health outcomes and reduce system costs

HIT Provisions in American Recovery & Reinvestment Act (ARRA) 2009

Incentives/Penalties to Computerize Health Records in 5 Years

- $19 billion: Medicare payment incentives/penalties to spur use of EHRs
- Physicians must adopt/use in a *meaningful* manner certified EHRs within 5 yrs
  - ONC/NIH will certify eligible EHRs that meet certain standards; provide a gov-sponsored EHR for nominal fee
  - "Meaningful use" to be defined by HHS, but will include e-Rx, information exchange standards, and reporting quality measures to CMS
- Bonus payments available over 5 yrs on a sliding scale starting in 2011, followed by penalties for non-adoption
- Rural health professional shortage areas eligible for higher bonus
- Physicians may qualify for hardship exemption to avoid penalties (up to 5 yrs)
Medicare Payment Incentives/Penalties for EHR Adoption and Use

<table>
<thead>
<tr>
<th>Adoption Year</th>
<th>Year 1 Bonus</th>
<th>Year 2 Bonus</th>
<th>Year 3 Bonus</th>
<th>Year 4 Bonus</th>
<th>Year 5 Bonus</th>
<th>Payment Reduction</th>
<th>Total Reduction</th>
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<tbody>
<tr>
<td>2011/2012</td>
<td>$18,000</td>
<td>$12,000</td>
<td>$8,000</td>
<td>$4,000</td>
<td>$2,000</td>
<td>$44,000</td>
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<tr>
<td>2013</td>
<td>$15,000</td>
<td>$12,000</td>
<td>$8,000</td>
<td>$4,000</td>
<td></td>
<td>$39,000</td>
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<tr>
<td>2014</td>
<td>$12,000</td>
<td>$8,000</td>
<td>$4,000</td>
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<td></td>
<td>$24,000</td>
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<tr>
<td>2015</td>
<td></td>
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<td>-1%</td>
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<tr>
<td>2016</td>
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<td></td>
<td>-2%</td>
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<tr>
<td>2017</td>
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<td></td>
<td>-3%</td>
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<td>2018</td>
<td></td>
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<td></td>
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<td>-3% to -4%*</td>
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<tr>
<td>2019</td>
<td></td>
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<td></td>
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<td>-3% to -5%*</td>
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</tbody>
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** If the percentage of professionals using EHRs is <75% by 2017, HHS can increase the fee schedule adjustment by 1% up to, but not to exceed, 5%.

Concerns Regarding HIT Provisions

- Unrealistic timeline/inappropriate use of penalties:
  - Lack of interoperability standards
  - When will list of certified EHRs be finalized? Cost?
  - Current EHR systems developed for primary care settings, not fully adapted for specialty care
  - Result → Difficult for physicians to take advantage of bonus, high risk of penalty

- Cost vs Benefit:
  - Cost to upgrade to EHRs over 5 years ($124,000) vs Maximum total incentive ($44,000) vs Estimated starting penalty in 2015 ($5,100/yr)

Neurosurgery Strategy – Summary

- Point out and fight unjust and ill-conceived proposals policies that negatively impact on neurosurgical patient care and access
- Play for time
- Develop and bring up our own valid and meaningful measures ASAP
  - Quality Measures – QIW – Outcome measures
  - Efficiency Measures – JGC – EBM Practice Guidelines
  - NeuroPoint Alliance, LLC
  - Work with ACS NSQIP to develop a neurosurgery module?
- Fight to get our own measures and processes recognized & accepted

Funding for NPA

NeuroPoint Alliance, LLC

- Formally incorporated in 2008
- User-friendly online registry that will allow neurosurgeons to:
  - Satisfy MOC case reporting requirements
  - Satisfy Medicare and other third-party payer quality reporting requirements
  - Conduct general clinical research and device tracking
- Contract with Outcomes Sciences Inc. to build/administer database
- Finalizing agreement w/ ABNS to share Key Case data
- Developing data collection instruments that evaluate most common neurosurgical CPT codes to add to Key Case data points
- Exploring funding opportunities: industry, health plans, government