Neurosurgery and Quality Improvement: A Pay for Participation Model

PFP Summit Concurrent Sessions III

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Introduction

Collaboration among surgical boards, specialty societies, industry, private payers and government is needed if we hope to improve the quality of surgical care.

Prospective collection of patient data, processes of care and outcomes - with feedback to individual surgeons in a non-punitive environment - has reliably improved surgical quality.

We believe that such a system should be instituted for neurosurgeons in the U.S.

Current P4P Programs

Based primarily on process measures

Most likely to improve quality if a strong evidence base links processes of care to improved outcomes

Medical specialties have a relatively large number of such evidence based process measures

Improving Surgical Quality: Process Measures

Use of process measures is unlikely to improve the quality of surgical care

Evidence based surgical process measures are rare.

Surgical RCTs often:

- Lack equipoise
- Have unrepresentative surgeons and patients
- Are unblinded with ambiguous end points

Improving Surgical Quality: Outcomes Measures

Outcomes assessment is a better way to determine surgical quality but:

- Outcomes based P4P programs require accurate risk adjustment to be valid.
- Collecting outcomes data alone might reward highly skilled surgeons but would not lead to overall QI.
- Gaming the system and avoiding high risk patients are concerns.

Improving Surgical Quality: Other Options

- Centers of Excellence
  - Directing patients to hospitals expected to produce superior surgical outcomes
- Pay for Participation
  - Prospective collection of patient characteristics, processes of care and outcomes data, with comparative performance feedback to surgeons in a non-punitive environment

Centers of Excellence

Patients are directed to specific hospitals and surgeons by restricting payment, tiered health plans, economic incentives to patients, public reporting of surgeon or hospital case volumes, process quality indicators and outcomes.

Positives

Such programs can be instituted quickly by using structural quality indicators case volumes and mortality rates.

May improve surgical quality by having surgeons and hospitals compete to be in the top tier.

Centers of Excellence

Negatives

- Structural and process quality indicators do not correlate with better outcomes for most procedures.
- Redistributing surgical patients is difficult in a competitive, private payer health care financing environment.
- Redistributing CMS surgical patients could have significant, negative political implications.
- Surgeon level outcomes are often unreliable because of limited sample size and inadequate risk adjustment
- High volume surgeons at low volume hospitals have better outcomes than low volume surgeons at high volume hospitals.
- Programs based on measures that do not accurately reflect hospital or surgeon specific performance will always be viewed as unfair and will be strongly opposed by professional groups.

Pay for Participation

Infrastructure to allow surgeons to collaborate for QI

Requires accurate, surgeon-specific collection of data regarding patient characteristics, processes of care and outcomes by data abstractors or direct reporting

Requires feedback to surgeons on their performance in relation to their peers

Surgeons review their individual data to gauge their performance and to link patient characteristics and processes of care to outcomes

Pay for Participation

Surgeons or hospitals are compensated for participation.

Data are not publicly reported.

An iterative process that uses data collection to refine indications and improve patient selection.

Effectiveness is judged by improvement in morbidity, mortality and cost of care for individual surgeons and for the group.

Pay for Participation

Positives

- Surgeon acceptance is high in a non-punitive environment. No public reporting reduces incentives for gaming the system and avoiding high risk patients and increases incentives for collaboration.
- Has been demonstrated to improve adherence to evidence based process indicators and improve outcomes for many procedures
- Allows refinement of surgical indications, reducing overuse and underuse of services

Pay for Participation

Negatives

- Surgeons, hospitals and payers are often competitors, not collaborators.
- Cost savings depend on refined surgical indications and decreased complications. These require time to develop and there are no immediate cost savings.
- Advocates of public reporting believe it improves care and is necessary for patient education.
- Auditing is problematic.

Neurosurgery's Pay for Participation Program

Developed on the principles that the program must:

- Be surgeon-specific
- Include prospective patient characteristic, process and outcomes data collection
- Supply non-punitive feedback to surgeons
- Allow analysis of aggregate data for publications
- Limit the data collection burden as much as possible
- Include the ABNS and specialty societies

Neurosurgery's Pay for Participation Program

- Development
  - AANS/CNS Washington Committee's Quality Improvement Workgroup (QIW)
    - Concept development, funding opportunities
  - AANS/CNS Data Collection Committee (DCC)
    - Choose a uniform data collection system and determine governance
  - ABNS
    - Develop data collection instruments for MOC that can also be used for P4P

Neurosurgery's Pay for Participation Program

- Oversight groups review universal data set to look for patterns of patient characteristics and processes that lead to favorable or unfavorable outcomes and for surgeon outliers
- Outliers are contacted regarding QI efforts such as focused CME, patient selection criteria etc.
- Best practices to be presented at national and regional meetings and published in peer reviewed journals
- One data collection effort for P4P, state and hospital reporting requirements and MOC

Neurosurgery's Pay for Participation Program

Progress to date

- On-line lumbar stenosis pilot project completed as proof of concept. Developed by QIW and funded by AANS
- 15 procedure-specific data collection instruments developed by ABNS for on-line use for MOC and P4P
- AANS/CNS DCC working on a single data collection platform and governance

Next Steps?

Will industry, private payers and CMS accept pay for participation as a viable quality improvement option?

Can we find a partner for a demonstration project?

Thank You for Your Attention