



# 2017 SPECIALTY DAY

MARCH 18, 2017 | SAN DIEGO, CALIFORNIA



## Session III: Health Care Reform and the Future of Trauma Care

9:50 am – 11:10 am

**Moderators: Douglas W. Lundy, MD and William T. Obremskey, MD, MPH**

9:50 am – 10:00 am Overview of MACRA  
*Andrew N. Pollak, MD*

10:00 am – 10:05 am How will this Impact the Practice of Fracture Surgery?  
*Steven A. Olson, MD*

10:05 am – 10:15 am How has Reform Affected Fracture Surgery Reimbursement and Quality in England?  
*Peter V. Giannoudis, MD, FACS*

10:15 am – 10:25 am Can Fracture Surgery be Bundled?  
*Alex Jahangir, MD*

10:25 am – 10:35 am How does Fracture Surgery Fit into the Value Paradigm?  
*Michael Suk, MD, JD*

10:35 am – 10:45 am How will Reform Affect the Fracture Surgeon Workforce?  
*Philip R. Wolinsky, MD*

10:45 am – 11:10 am Discussion  
*Douglas W. Lundy, MD*  
*William T. Obremskey, MD, MPH*



---

**HANDOUT COMING  
SOON**

---

## How Will Health Care Reform Impact the Practice of Fracture Surgery

Steven A. Olson, MD

### ***Impact on Surgeons Performing Fracture Surgery***

Health Care Reform in the United States = MACRA

In 2018 – Physician Quality Reporting System (PQRS) will be replaced with

- Merit Based Incentive Payment System (MIPS)
- Alternative Payment Models (APMS)

The Majority of Fracture Surgery will be covered by MIPS

MIPS payments will be determined by a physician's performance

Performance will be based on 3 categories

60% Quality, 25% Advancing care information, 15% Improvement Activities

### **Quality Measures**

What are quality measures?

Who determines what quality measures are used?

What makes a good quality measure?

Attribution, Residual distinction

What is OTA doing to help members report quality measures?

---

### ***Impact of Health Care Reform on Overall Burden of Fracture Surgery***

Who provides fracture care?

Most uncomplicated fractures are managed in community hospitals. An important point of care for all of us.

Important work to establish competencies of the general Orthopaedic Surgeon in fracture care

### **Unanswered Questions about the Impact of Health Care Reform:**

Will surgeons continue to see fracture care as an important second specialty in their practice?

Will surgeons who work mainly in APMs be willing to continue to provide fracture care (MIPS) in the future?

### **Unanswered Questions about the Impact of Bundled Payments on Fracture Surgery:**

For Surgeons – Will bundled payments force changes in the selection criteria for elective patients, applying evidence based criteria for care provided? Will surgeons work to increase efficiency in the OR and Clinics?

For Hospitals - Will hospitals have incentives to see low volume surgeon or high cost surgeons as high risk outliers?

Will hospitals respond by focusing even more support to successful service lines?

References:

<https://qpp.cms.gov/>

[www.cdc.gov/nicpc/wisqars](http://www.cdc.gov/nicpc/wisqars);

<https://www.usbji.org/>

[Http://www.aaos.org/uploadedFiles/PreProduction/Advocacy/Federal/Issues/AAOS%20MACRA%20Briefing%20Final.pdf](http://www.aaos.org/uploadedFiles/PreProduction/Advocacy/Federal/Issues/AAOS%20MACRA%20Briefing%20Final.pdf)

Porter ME., A strategy for health care reform--toward a value-based system. N Engl J Med. 2009 Jul 9;361(2):109-12.

Olson SA, Obremskey WT. Aligning physician and hospital incentives: CORR Symposium 471 2013

Olson SA, Mather RC 3<sup>rd</sup>: Understanding how orthopaedic surgery practices generate value for healthcare systems. Clin Orthop Relat Res. 2013 Jun; 471(6):1801-8.

## **How the reform affected fracture surgery reimbursement and Quality in England?**

Professor Peter V Giannoudis BSc, MD, FRCS  
Academic Department of Trauma and Orthopaedics  
School of Medicine, University of Leeds  
Leeds General Infirmary, Clarendon wing Level A, Great George Street  
LS1 3EX, Leeds, United Kingdom  
Tel: +44 (0) 113-392-2750, Fax: +44 (0) 113-392-3290  
Email: [pgiannoudi@aol.com](mailto:pgiannoudi@aol.com)

Health care reform refers to governmental policies that affects health care delivery at a National level of a given country. Such aspects of a National health service may be affected as the extent of the coverage, length of hospitalization, expansion of the array of health care providers consumers may choose among, prescription of drugs, acquisition of equipment and services, pricing and cost containment.

Recently, in the UK like any other westernized country the government has implemented health care reforms related to the service provision of orthopedic trauma patients which also included alternations in the issue of reimbursement.

### **How funding works in England**

Payment by Results (PbR) is the tariff based payment system that has transformed the way funding flows around the NHS in England. It is the payment system in which commissioners pay healthcare providers for each patient seen or treated, taking into account the complexity of the patient's healthcare needs. The two fundamental features of PbR are nationally determined currencies and tariffs.

Currencies are the unit of healthcare for which a payment is made. Tariffs are the set prices for a given currency PbR covers the majority of acute healthcare provided in hospitals, and there are national tariffs for admitted patient care, outpatients and A&E. The currency for admitted patient care and A&E is the healthcare resource group (HRG). HRGs are clinically meaningful groups of diagnoses and interventions that consume similar levels of NHS resources. With some 26,000 codes to describe specific diagnoses and interventions, grouping these into HRGs allows tariffs to be set at a sensible and workable level. Under the latest version, HRG4, there are over 1,500 tariffs. Each HRG covers a spell of care, from admission to discharge. The currency for outpatient attendances is the attendance itself, divided into broad medical areas known as treatment function codes (TFCs).

When a patient is discharged, clinical coders translate their care into codes using two classification systems, ICD-10 and OPCS-4. Patient data is submitted to a national database called the Secondary Uses Service (SUS), which groups clinical codes into HRGs and calculates a payment Commissioners either pay variable amounts on the basis of actual activity undertaken or agree monthly payments to providers in the NHS standard contract, which are then adjusted for the actual value of activity in the monthly SUS report

### **Additional payments**

**Top-up fees:** Certain specialist services are remunerated by an additional 'top-up' fee.<sup>3</sup> For example, there is an orthopaedic top-up code recognising the additional cost of specialized activity in the same HRG.

**Trim points:** These represent the expected duration of stay. If the actual length of stay exceeds this, excess bed days are calculated automatically from data entered by receptionists and secretaries.

**Uplifts:** Market force uplifts are paid centrally to the trust.

**TARN:** The Trauma Audit and Research Network (TARN) data and injury severity score are interrogated to award money for meeting major trauma targets. A fee is paid to major trauma centres to reimburse them for the extra, complex work they take on. The TARN coding team identifies appropriate cases from the HRG codes.

**CQUIN:** Commissioning for Quality and Innovation (CQUIN) payments represent small amounts of money provided by the commissioners but they are withheld unless certain agreed targets are met, even where specialist services exist and other quality assuring outcome measures are achieved.

Different policies supported by the National Institute for Health and Care Excellence (NICE) working group have been implemented focusing on the timely and co-ordinated care in different cohort of patients in order to improve outcomes. For successful application of these policies the best practice tariff (BPT) has been introduced in high volume areas with significant unexplained variation in quality of clinical practice and clear evidence of what constitutes best practice. The hip fracture BPT represents a great example of this reform. The BPT indicators for hip fracture care include:

- (a) time to surgery within 36 hours from arrival in an emergency department, or time of diagnosis if an inpatient, to the start of anaesthesia
- (b) involvement of an (ortho) geriatrician:
  - i) admitted under the joint care of a consultant geriatrician and a consultant orthopaedic surgeon
  - ii) admitted using an assessment protocol agreed by geriatric medicine, orthopaedic surgery and anaesthesia
  - iii) assessed by a geriatrician (as defined by a consultant, non-consultant career grade (NCCG), or specialist trainee ST3+) in the perioperative period (defined as within 72 hours of admission)

- iv) postoperative geriatrician-directed
  - a. multi-professional rehabilitation team
  - b. fracture prevention assessments (falls and bone health).

To qualify for the best practice tariff, all the characteristics in (a) and (b) (i) to (iv) above must be achieved. Compliance is being monitored through the National Hip Fracture Database (NHFD). The tariff is paid in 2 parts with the top-up payment for best practice paid quarterly. The 'base tariff' (that is the payment a provider receives for not doing best practice) has been adjusted such that it is £110 lower than the 'conventional tariff' (what the tariff 'would be' if we didn't have best practice tariffs). This is to ensure that if current best practice provision is maintained, then the policy will be cost neutral. The 'best practice tariff' is £335 higher than the 'conventional tariff' i.e. £445 higher than the 'base tariff'. In other words, if you do best practice in one year, you will receive £445 more per case than if you don't. For example, a unit treating 350 hip fractures / year with 90% meeting the BPT requirements will result in just over £140,000 of additional income (0.9 x 350 x 455).

The concept of the Best Practice Tariff is to provide an initial financial incentive to encourage all Trusts to take the first step to improve the quality of care of this vulnerable group of patients. But has actually made any difference? **Figure 1** below illustrates the increase in the number of patients over a period of time that met the BPT criteria in England.<sup>1</sup>



**Figure 1.**

There is also evidence that the reforms implemented in the management of hip fracture patients had a positive impact in terms of reducing the mortality rate in this cohort of patients.<sup>2</sup>

Data collected from the National Hip Fracture Database (NHFD) in regard to 30-day mortality after hip fracture			
Author	Year	No of patients	30-day mortality rate (%)
NHFD	2013	64,838	8.02
NHFD	2012	61,508	8.2
NHFD	2011	53,879	8.5
NHFD	2010	54,129	8.8
NHFD	2009	53,427	9.2
NHFD	2008	52,600	10.4
NHFD	2007	52,435	10.9
NHFD	2006	50,732	11.3
NHFD	2005	51,408	11.4
NHFD	2004	50,995	11.0
NHFD	2003	51,985	11.5

As noted there is a continuous decrease in the 30-day mortality rate

**Figure 2.**

The BPT for hip fractures patients represents one example of success in England in terms of reimbursement and quality improvement. Other clinical entities include lower limb complex trauma, major trauma (polytrauma patients) and patients with pelvic and acetabulum reconstruction.

## References

1. <http://www.nhfd.co.uk>
2. Giannoulis D, Calori GM, Giannoulis PV. Thirty-day mortality after hip fractures: has anything changed? Eur J Orthop Surg Traumatol. 2016 May;26(4):365-70.

# Can Fractures Be Bundled

OTA Specialty Day March 18, 2017

Alex Jahangir, MD, MMHC

Medical Director, Vanderbilt Center for Trauma, Burn, and Emergency Surgery

Associate Professor of Orthopaedic Surgery

Division of Orthopaedic Trauma

Vanderbilt University Medical Center, Nashville, TN

- Bundled Payment for Care Improvement
  - Keys to Success
    - Appropriate Patient Selection
    - Implant Pricing Control
    - Adherence to Preop and Post Op Protocols
    - Diligent Postcare Management
    - Reproducible surgical procedures
- Surgical Hip and Femur Fracture Treatment (SHFFT)
  - Begins July 1, 2017
  - 865 hospitals will participate
  - MS-DRG 480-482
  - CMS expects 109,000 patients enrolled
  - Savings of \$4.9 Billion annually
- The Vanderbilt Experience and Process
- Problems with SHFFT
  - Absence of risk adjustment
  - Not all fractures are the same
  - High utilization of postacute care inpatient rehabilitation services for Fracture Patients
- Keys to Success
  - Implant Pricing Control and Reproducible Surgical Procedures
  - Adherence to Preop and Post Op Protocols
  - Diligent Postcare Management
  - Need a great team of people who are committed

## References:

- 1) Phieffer L, Page AE, Lundy DW. Are you Ready for SHFFT? *AAOS Now*. Jan 2017.
- 2) Althausen PL, Mead L. Bundled Payments for Care Improvement: Lessons Learned in the First Year. *J Orthop Trauma*. 2016 Dec;30 Suppl 5:S50-S53.
- 3) Iorio R, Bosco J, Slover J, Sayeed Y, Zuckerman JD. Single Institution Early Experience with the Bundled Payments for Care Improvement Initiative. *J Bone Joint Surg Am*. 2017. 99(1).



---

**HANDOUT COMING  
SOON**

---



**Session III: Health Care Reform and the Future of Trauma Care**  
How will reform affect the fracture surgeon workforce?

**Topics:**

What is the current medical workforce?

What is the current surgical workforce?

What is the current Orthopedic Surgeon workforce?

What is the current Orthopedic trauma surgeon workforce?

What are the workforce projections?

How have past workforce projections worked out?

**Bibliography**

AAMC, Center for Workplace Studies, The complexities of physician supply and demand: projections through 2025,  
<https://members.aamc.org/eweb/upload/The%20Complexities%20of%20Physician%20Supply.pdf>

AAMC, 2016 Update, The complexities of physician supply and demand from 2014-20125  
[https://www.aamc.org/download/458082/data/2016\\_complexities\\_of\\_supply\\_and\\_demand\\_projections.pdf](https://www.aamc.org/download/458082/data/2016_complexities_of_supply_and_demand_projections.pdf)

AAOS Orthopedic Practice in the U.S. 2014 January 2015  
<http://www.aaos.org/2014OPUS/?ssopc=1>

Etzioni DA, Liu JH et al. The aging population and its impact on the surgery workforce, Ann Surg 238(2), 2003: 170-177

Gire JD, Gardner MJ, et al. Are early career orthopedic trauma surgeons performing less complex trauma surgery? J Orthop Trauma 30(10), 2016: 525-530

Judd KT, Cannada L, et al. Correlation of Orthopedic trauma practice opportunities and number of fellows trained: are trauma-specific opportunities scarce? J Orthop Trauma 27(6), 2013: 352-354

Sielatycki JA, Sawyer JR, et al. Supply and demand analysis of the orthopedic trauma surgeon workforce in the United States. J Orthop Trauma. 30(5), 2016: 278-283

Williams TE, Satiani B, et al. The impending shortage and the estimated cost of training the future surgical workforce. *Ann Surg* 250(4), 2009: 590-597