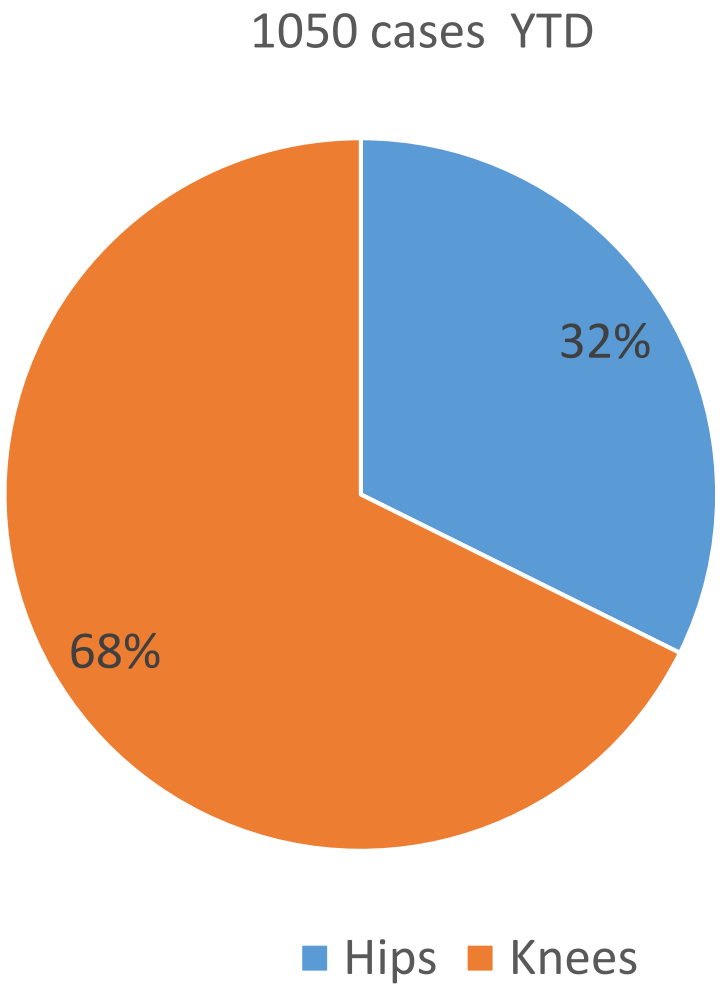
A Standardised Care Pathway with Global Billing

Second Level Technology

Since inception:

45 surgeons

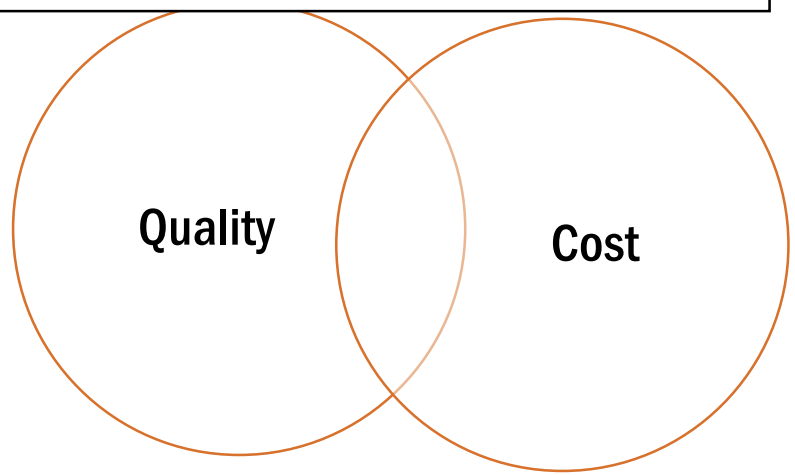
National footprint



Mission:

To deliver: data driven, quality inspired, Value Based Care

Better quality can often be delivered at lower cost



Key Cost drivers:

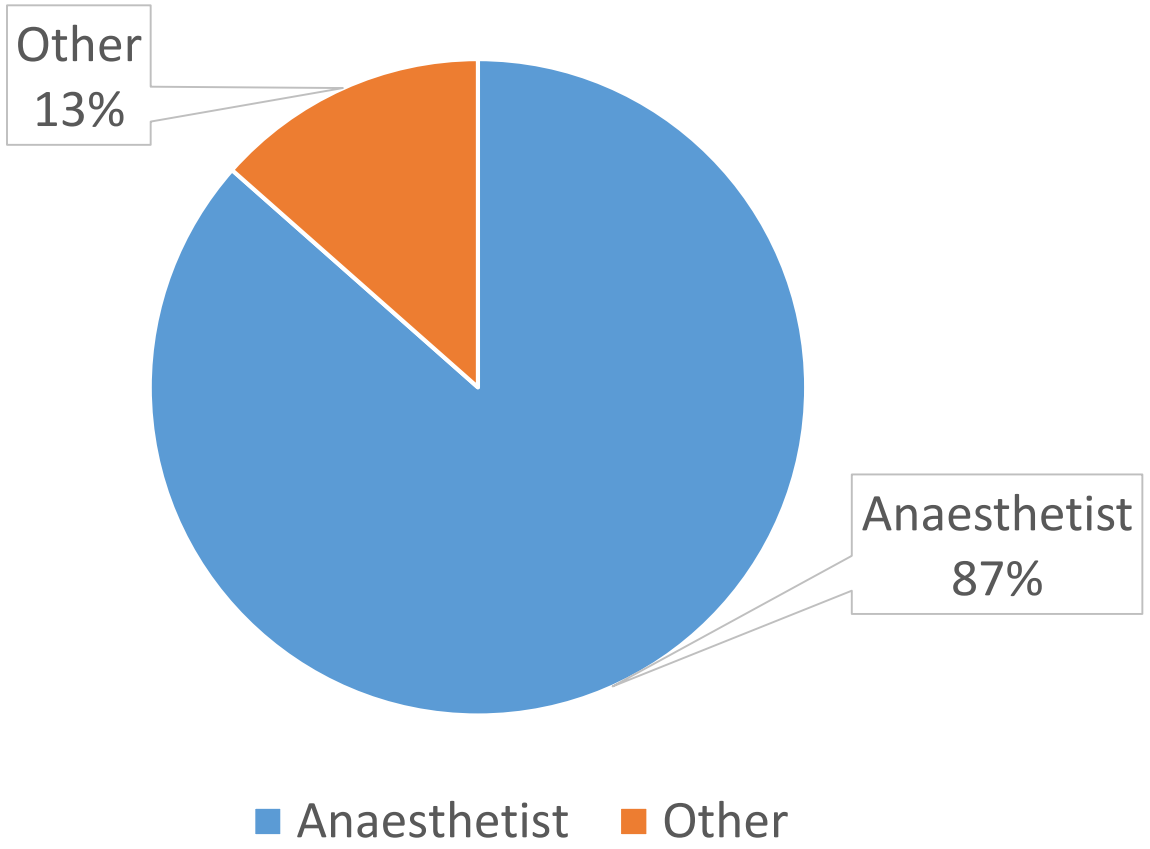
- theatre time
- length of stay
- level of care (ICU and high care utilization)
- surgical consumable utilization
- drug utilization
- clinician costs
- radiology & pathology costs

Quality Indicators – Unique to ICPS:

- Patient Reported Outcome Measures (WOMAC score)
- Adherence to best practice guidelines including: antibiotic usage, use of blood products, catheterisation
- Pre-operative patient consultation and optimization
- Adverse event reporting - Return to theatre during index admission, and 30/90 day post operative mortality and readmission rates

Clinical Innovation 1:

Pre-operative assessment and Optimisation



Clinical Innovation 2:

Anaesthetic pre-operative assessment and ASA scoring

The ASA physical status score can be used as a predictor of postoperative mortality and functional status following both hip and knee arthroplasty and may predict early failure of arthroplasty (necessitating revision).

Reference:

The relationship between the American Society Of Anesthesiologists physical rating and outcome following total hip and knee arthroplasty: an analysis of the New Zealand Joint Registry

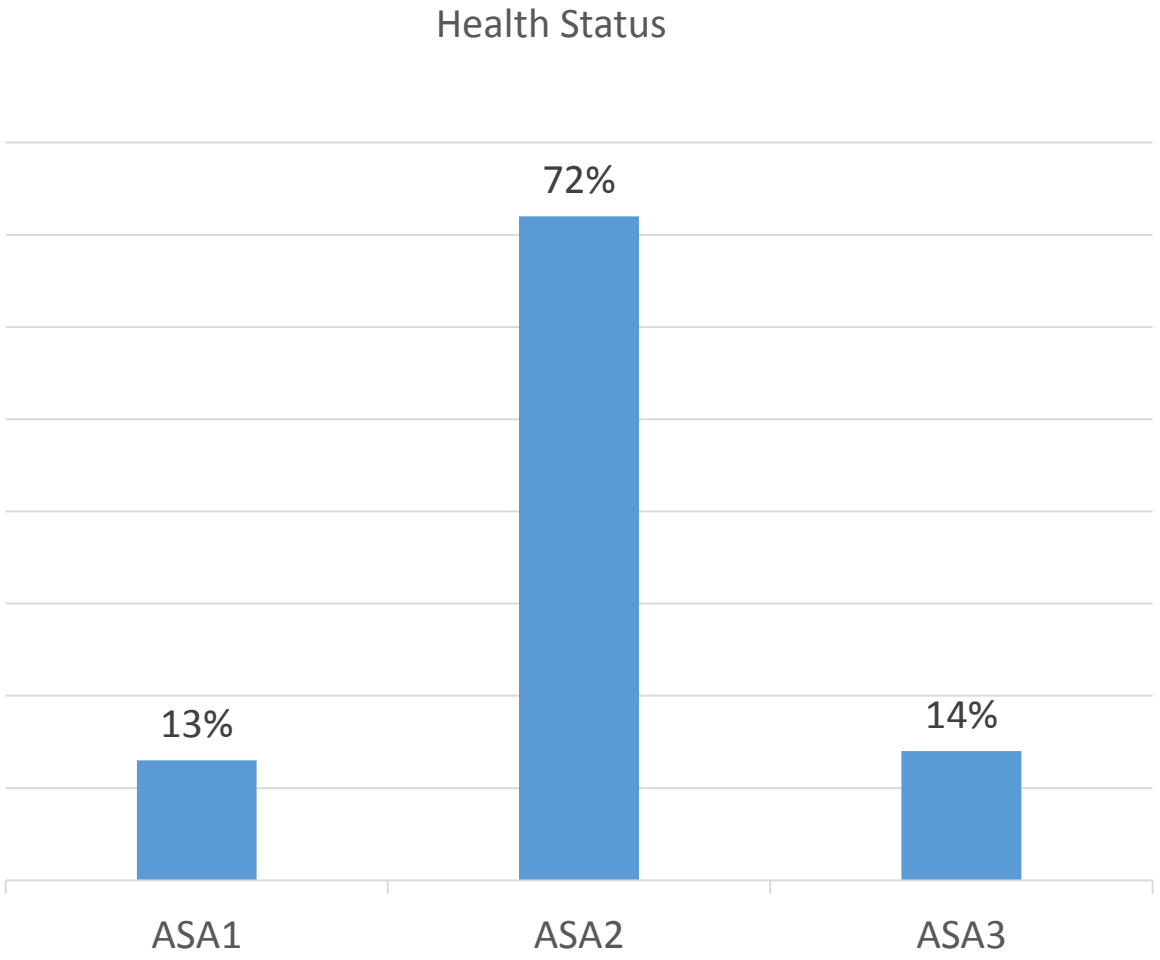
Hooper GJ1, Rothwell AG, Hooper NM, Frampton C. J Bone Joint Surg Am. 2012 Jun 20;94(12):1065-70. doi: 10.2106/JBJS.J.01681

ICPS Patient Profile analysis:

Average BMI 32.7

Majority osteoarthritis

Hypertension most frequently associated comorbidity



Clinical Innovation 3:
Patient reported outcome measures

WOMAC – Western Ontario and Mcmaster University Osteoarthritis Index

- Self reporting
- Validated for osteoarthritis and joint arthroplasty
- Assesses pain, stiffness and function
- Can be linearly transformed to a 0–100 scale, with higher scores indicating more severe impairment.

References:

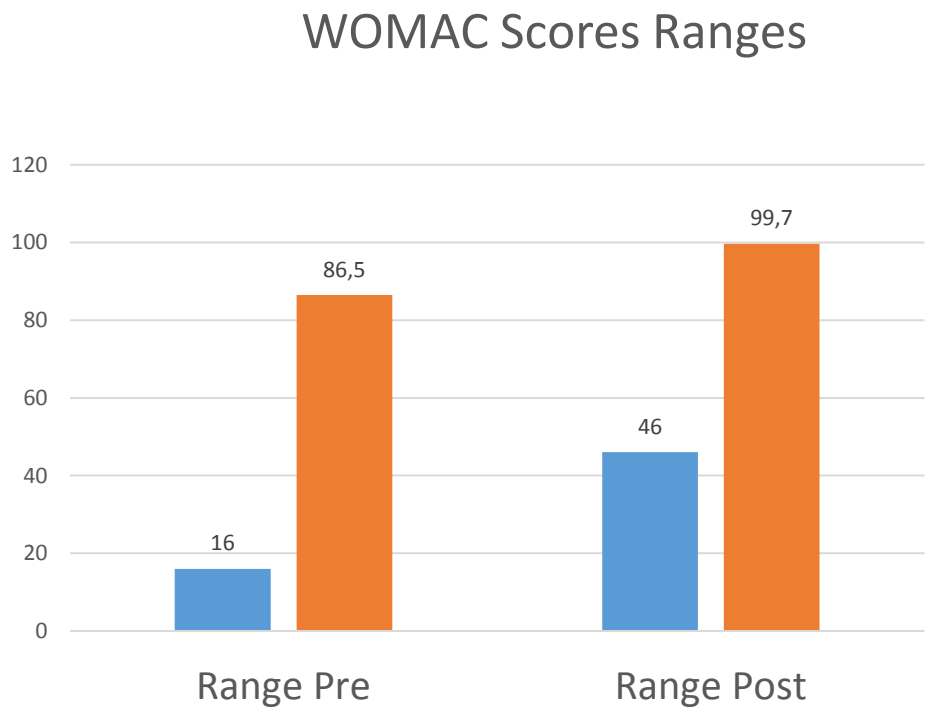
- F. Wolfe, S.X. Kong

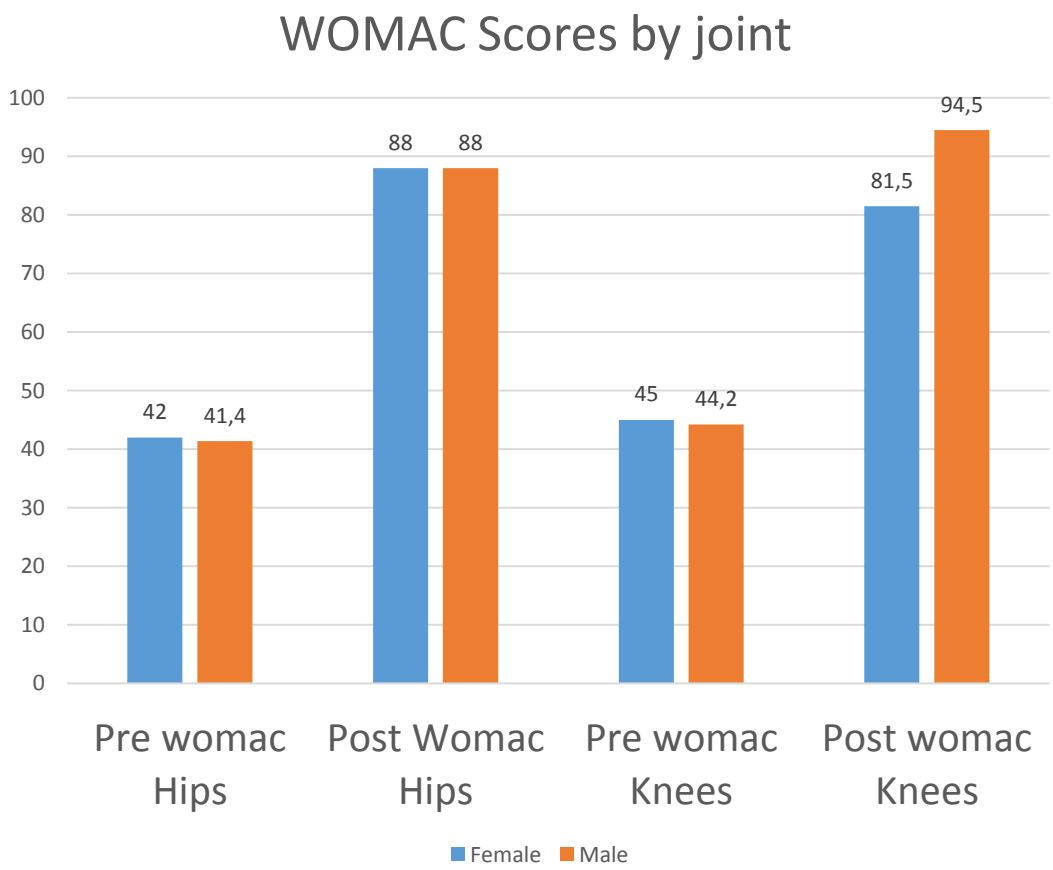
Rasch analysis of the Western Ontario MacMaster questionnaire (WOMAC) in 2205 patients with osteoarthritis, rheumatoid arthritis, and fibromyalgia Ann Rheum Dis, 58 (1999), p. 563

- F.M. Impellizzeri, A.F. Mannion, M. Leunig, *et al.*

Comparison of the reliability, responsiveness, and construct validity of 4 different questionnaires for evaluating outcomes after total knee arthroplasty J Arthroplasty, 26 (2011), p. 861

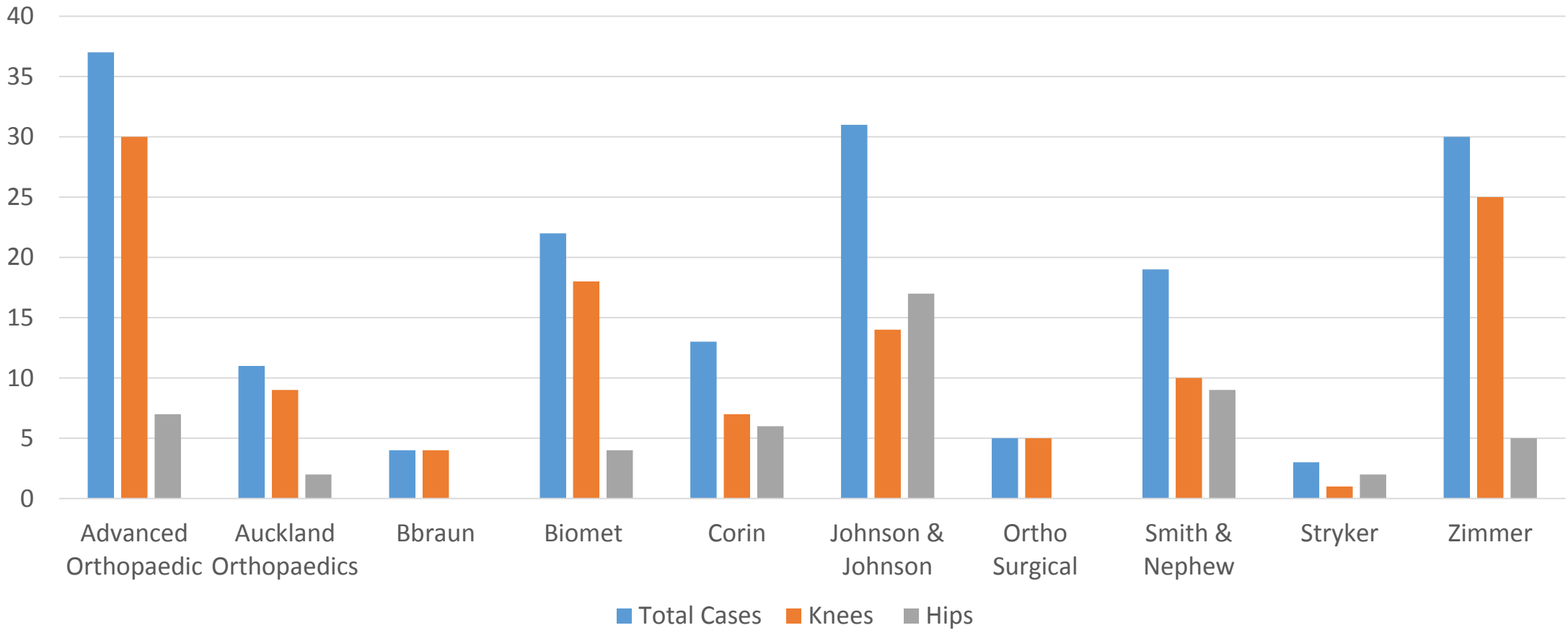
Quality Measures





Clinical Innovation 4:

Standardised Prosthesis via an evidence based formulary



Clinical Innovation 5:
Guideline adherence

- Pre operative oral intake guideline
- Standardise anaesthetic with the routine use of spinal anaesthesia over general anaesthesia
- Minimization of routine urinary catheterization and wound drainage
- Use of intra-articular high volume local anaesthetic
- Blood conservation strategies
- Stepwise multimodal analgesic approach to acute pain management
- Prophylactic antibiotic adherence
- Prophylactic anticoagulation standardisation
- Early mobilisation

Outcomes:
reduced level of care and length of stay

LOS	**3.8 v 6.9 days**
HC utilisation	**4.9% v 70%**
ICU utilisation	**0.75% v 12%**

Outcomes : adverse event reduction

Categories:

1. Heart attack (acute myocardial infarction), pneumonia, or septicemia/shock during the index admission or within seven (7) days of admission; admission to HC more than 2 days, admission to ICU
2. Surgical site bleeding, superficial wound infection during the index admission or within 30 days of admission
3. Mechanical complications or peri-prosthetic joint infection/ deep wound infection and pulmonary embolism or death during the index admission or within 30 to 90 days of admission.

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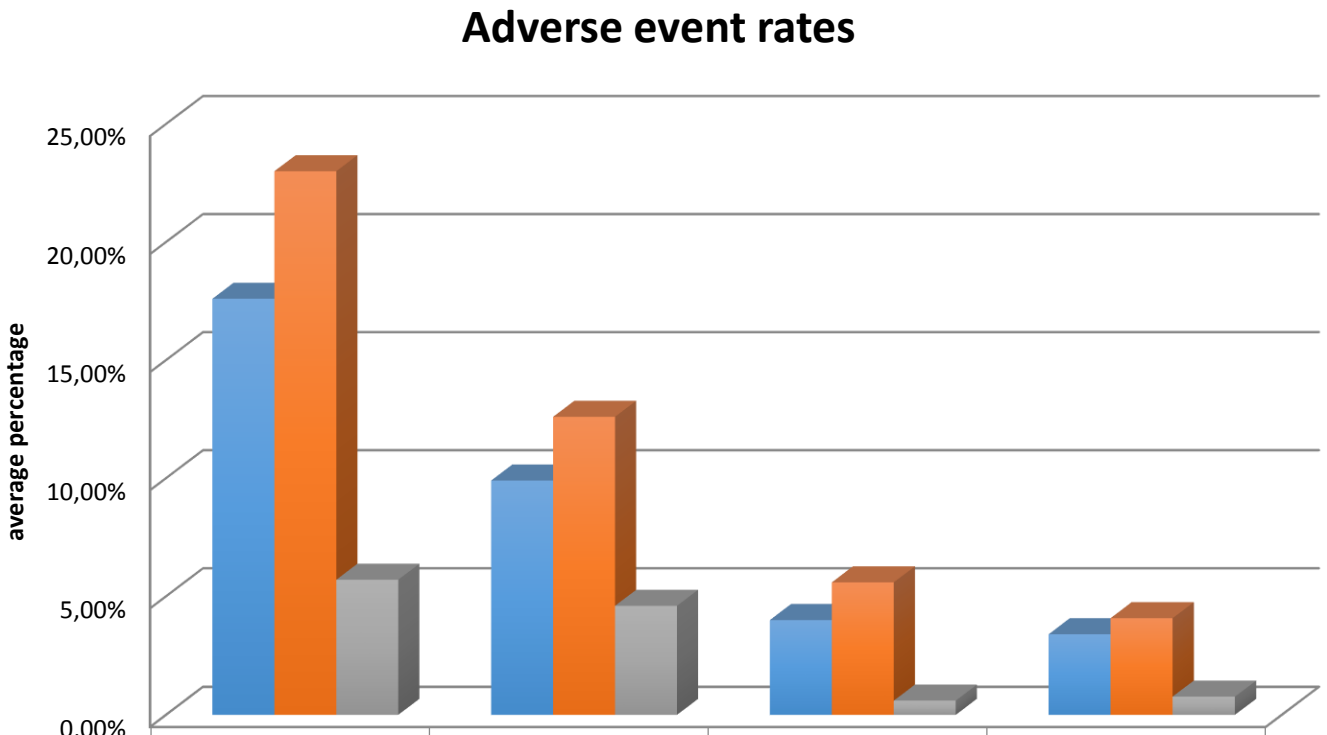

	Total Adverse event rate	Type1	Type2	Type2
MSO	17,60%	9,90%	4%	3,40%
FUNDERS	23%	12,60%	5,59%	4,08%
ICPS	5,70%	4,60%	0,60%	0,77%

Strategic issues:

Opportunities

- Alternative re-imbursement models (fixed fees) eliminate fee-for- service for routine uncomplicated elective surgery which can help reduce over servicing
- Global fees reduce admin costs, eliminate unbundling and multiple coding, and improve efficiency

Threats

- Concern by SA Anaesthetic Society that global fees are a breech of the Ethical Business Practice policy of the HPCSA
- Global billing has been incorrectly interpreted to fall foul of the Fee Sharing prohibitions contained in the Ethical Business Practice policy of the HPCSA
- The implication of the current policy is that in a fixed fee environment savings are only possible via irresponsible cost cutting