

IHA CHA Medical Device Conference | May 22, 2008

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University of California, Berkeley

Chair, Medical Technology Project, IHA

Value Assessment and Purchasing for Medical Devices: The California Perspective

OVERVIEW

- **IHA Medical Device Project: Goals**
- **Performance metrics**
 - Device prices
 - Device costs as percent of reimbursement
 - Procedure reimbursement by payer
 - Contribution margin by payer
- **Examples: Cardiac defibrillator implant, total knee replacement, lumbar spine fusion**
- **Lessons learned and next steps**

IHA Medical Device Project

OBJECTIVE:

To improve assessment and efficient use of high value medical devices.



- Develop complete and comparable data sets
 - Initial focus on Orange County/Long Beach
 - Eventual intent in expanding statewide

- Highlight best practice strategies in managing the cost of medical devices and fostering hospital-physician collaboration
 - Collaboration with CA Hosp Assoc (CHA)
 - Statewide survey of best practices

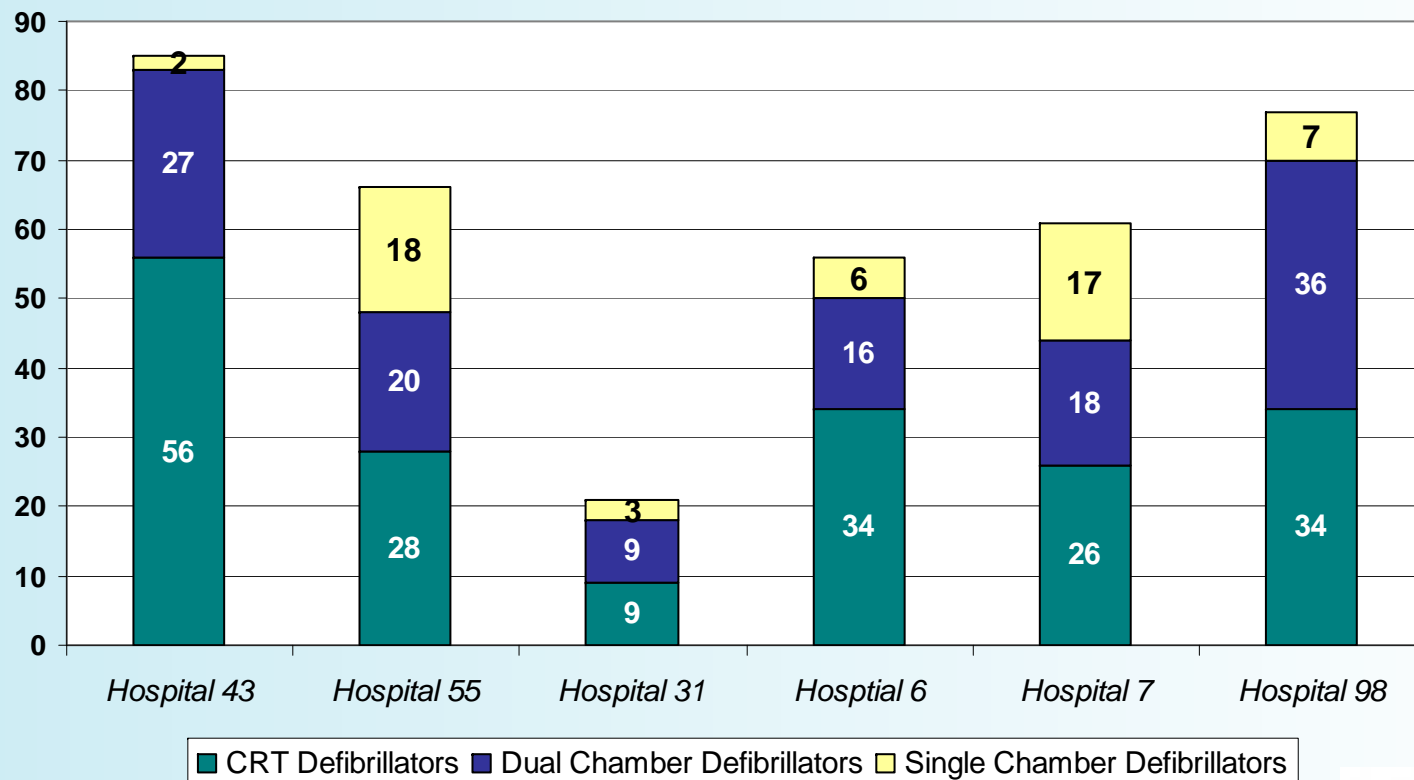
IHA Medical Device Project

Procedures/Devices of Interest

Data have been aggregated for the following device-intensive procedures:

Interventional Cardiac Procedures <ul style="list-style-type: none">➤ PCI (Stents)	Orthopedic Surgery <ul style="list-style-type: none">➤ Total Knee➤ Total Hip➤ Hip/Knee Revisions
Cardiovascular Surgery <ul style="list-style-type: none">➤ Cardiac Valves	Spine Surgery <ul style="list-style-type: none">➤ Spinal Fusion (Cervical/Lumbar)
Cardiac Rhythm Management <ul style="list-style-type: none">➤ Pacemakers➤ Defibrillators/CRTs	

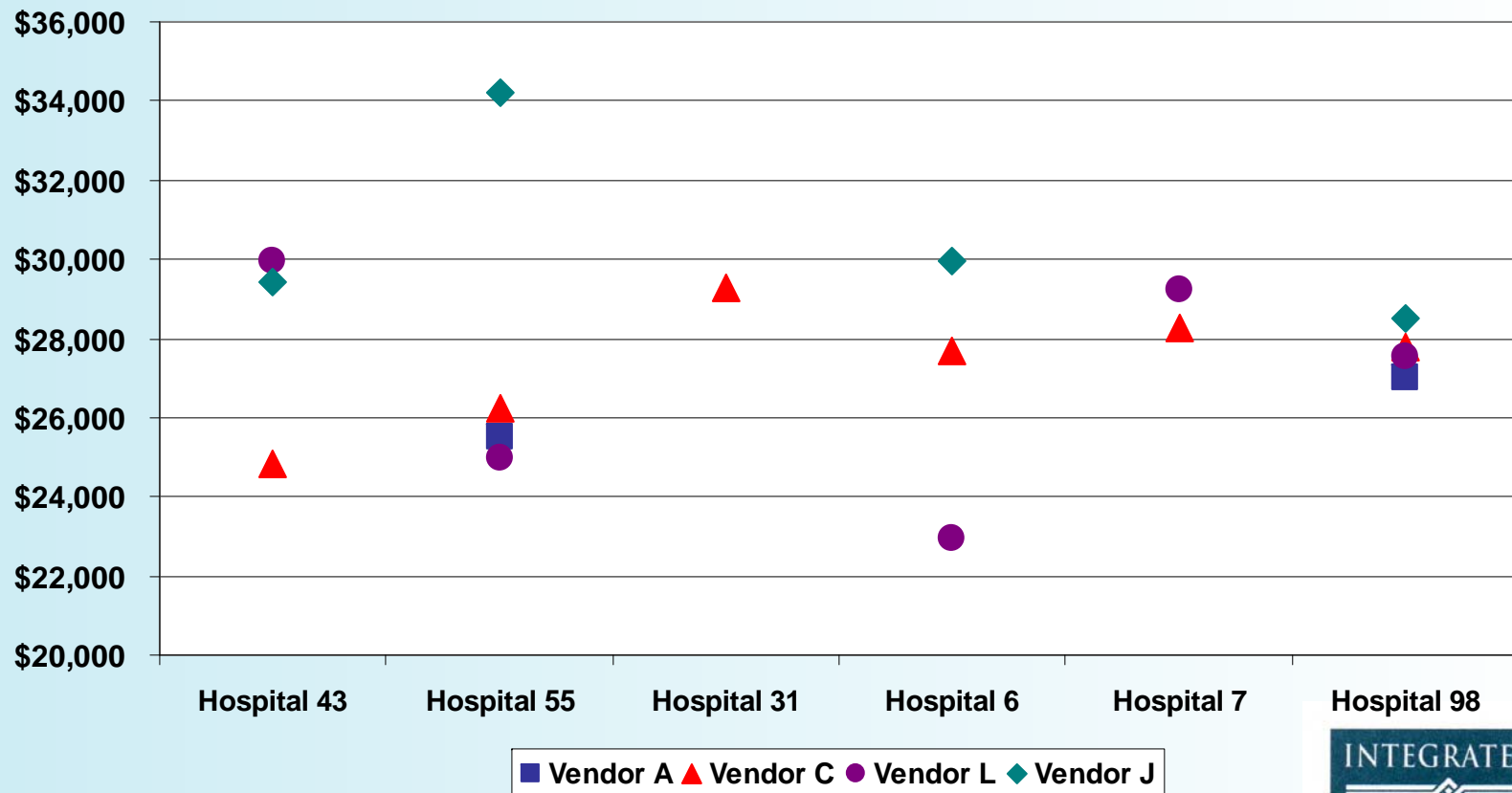
Cardiac Defibrillator (DRG 515) Procedure Volume by Type of Implant



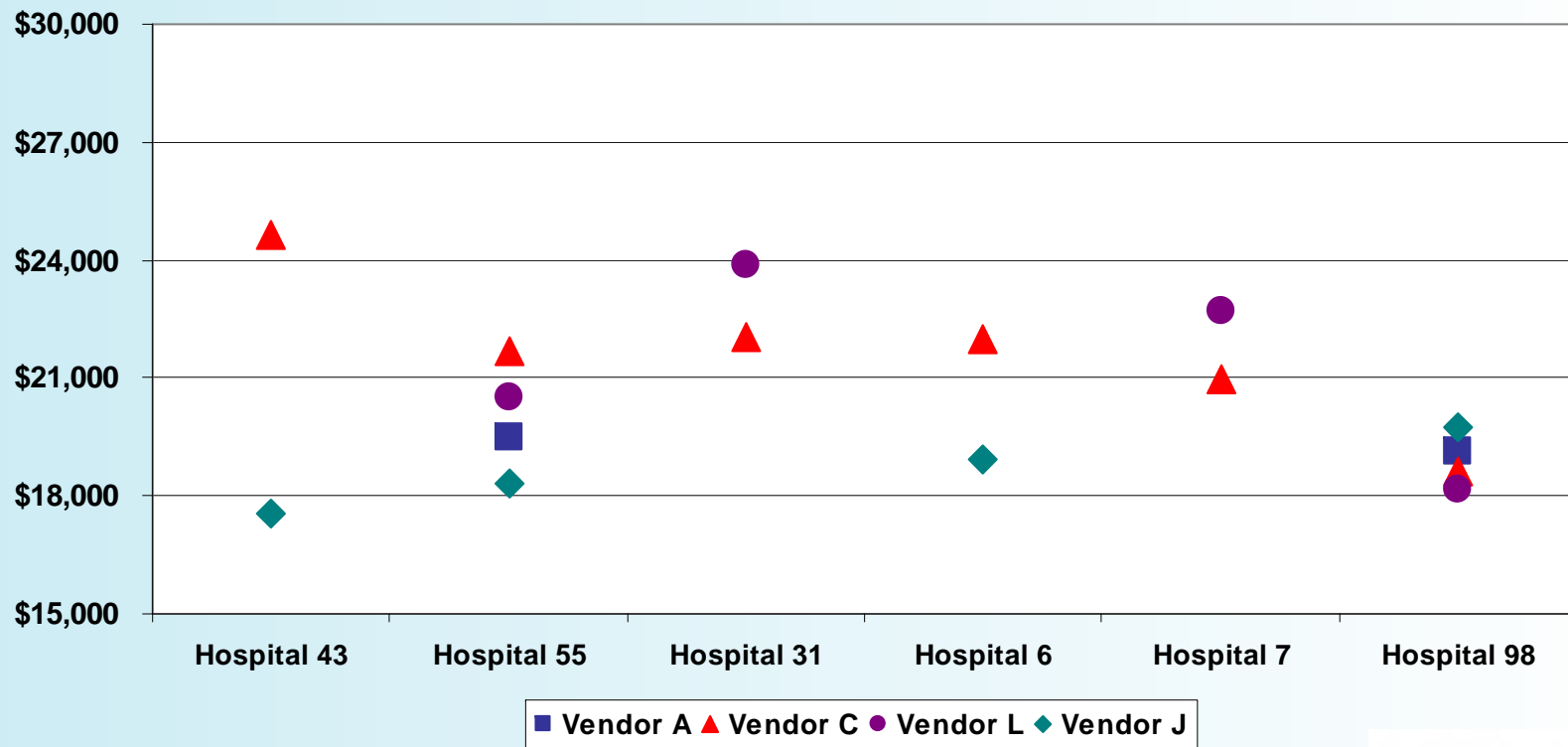
Cardiac Defibrillator (DRG 515)

CRT Defibrillators

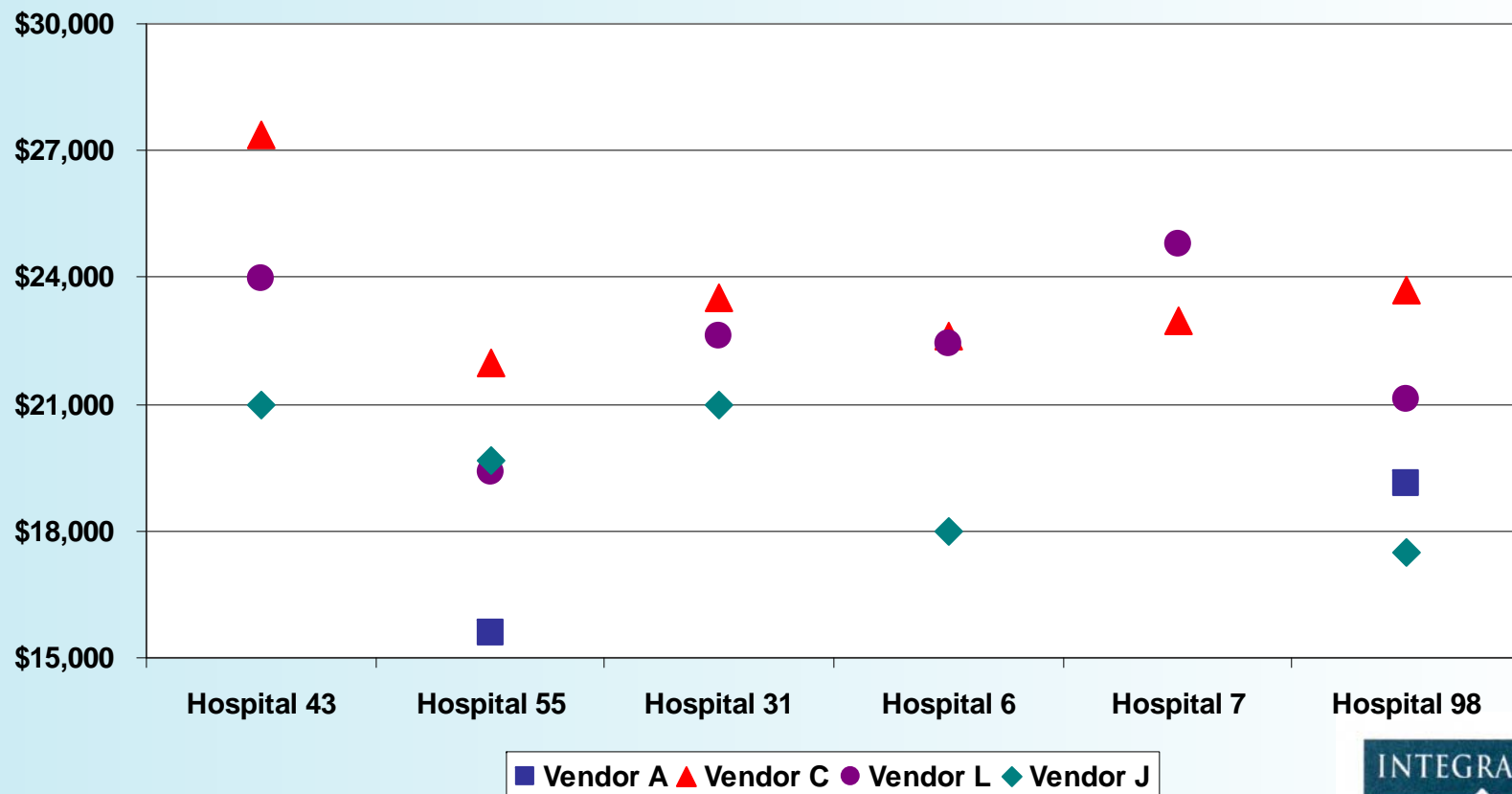
Implant Cost per Case, by Vendor



Cardiac Defibrillator (DRG 515) Single Chamber Implant Cost per Case, by Vendor

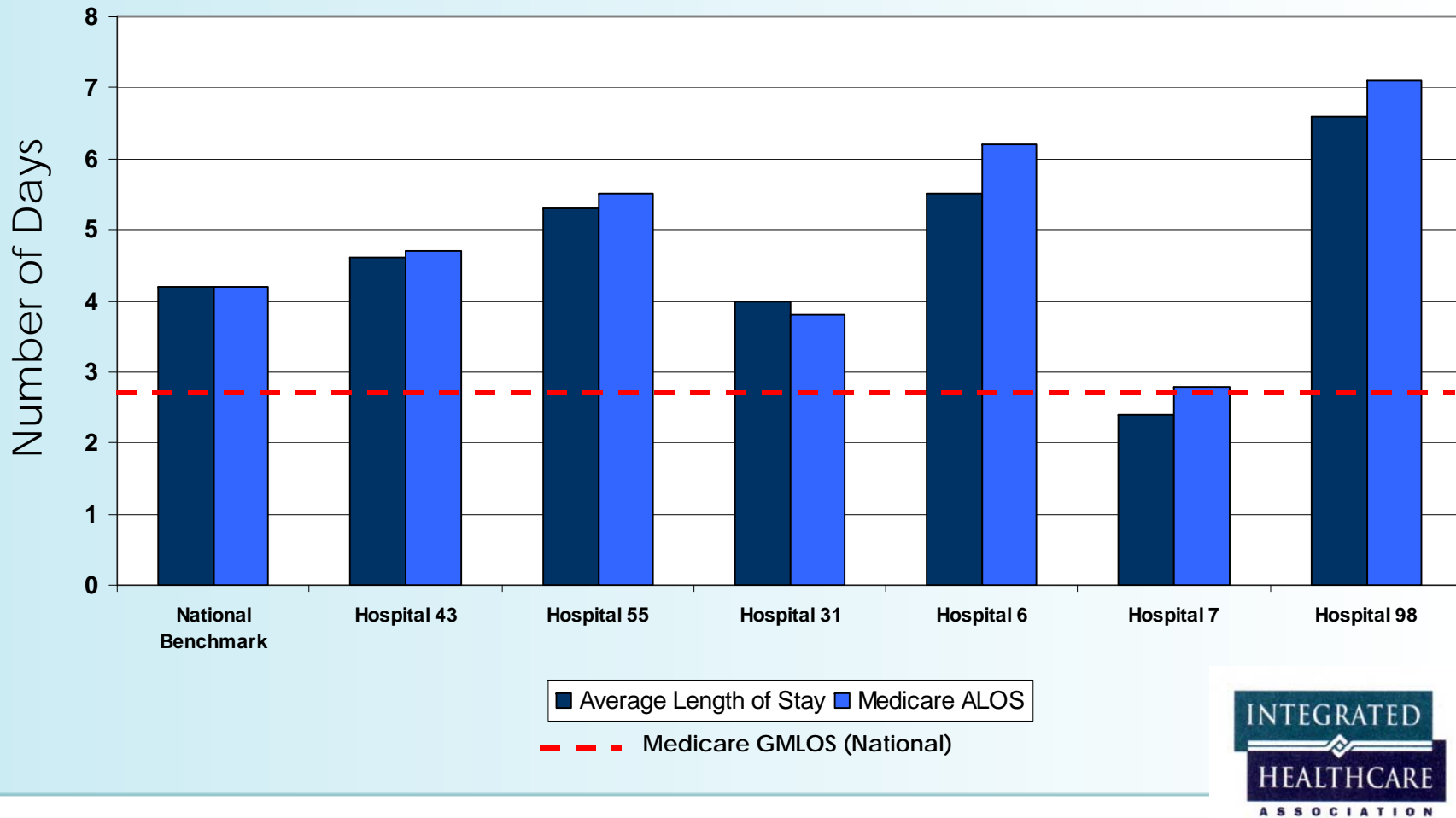


Cardiac Defibrillator (DRG 515) Dual Chamber Implant Cost per Case, by Vendor



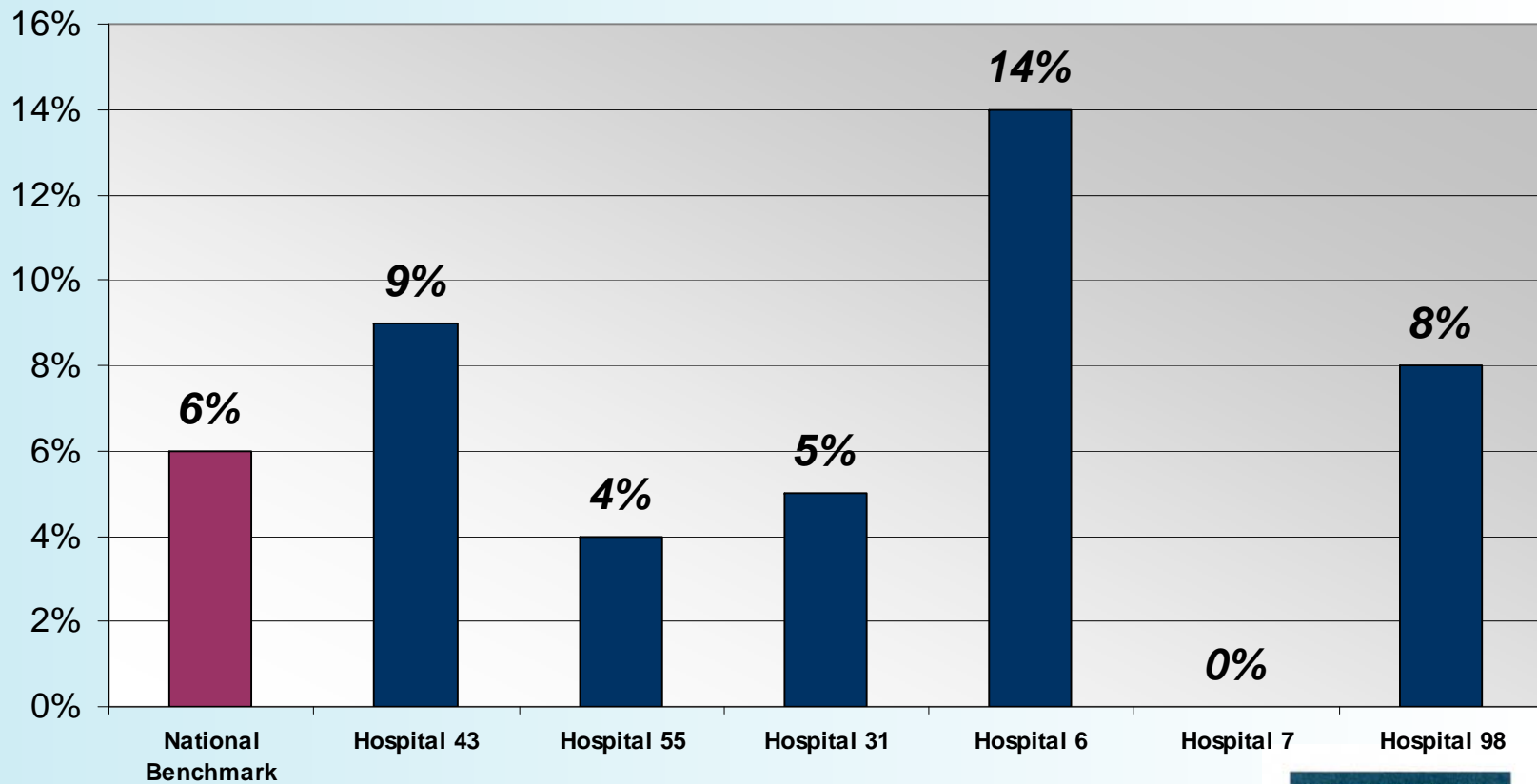
Cardiac Defibrillator (DRG 515)

Average Length of Stay



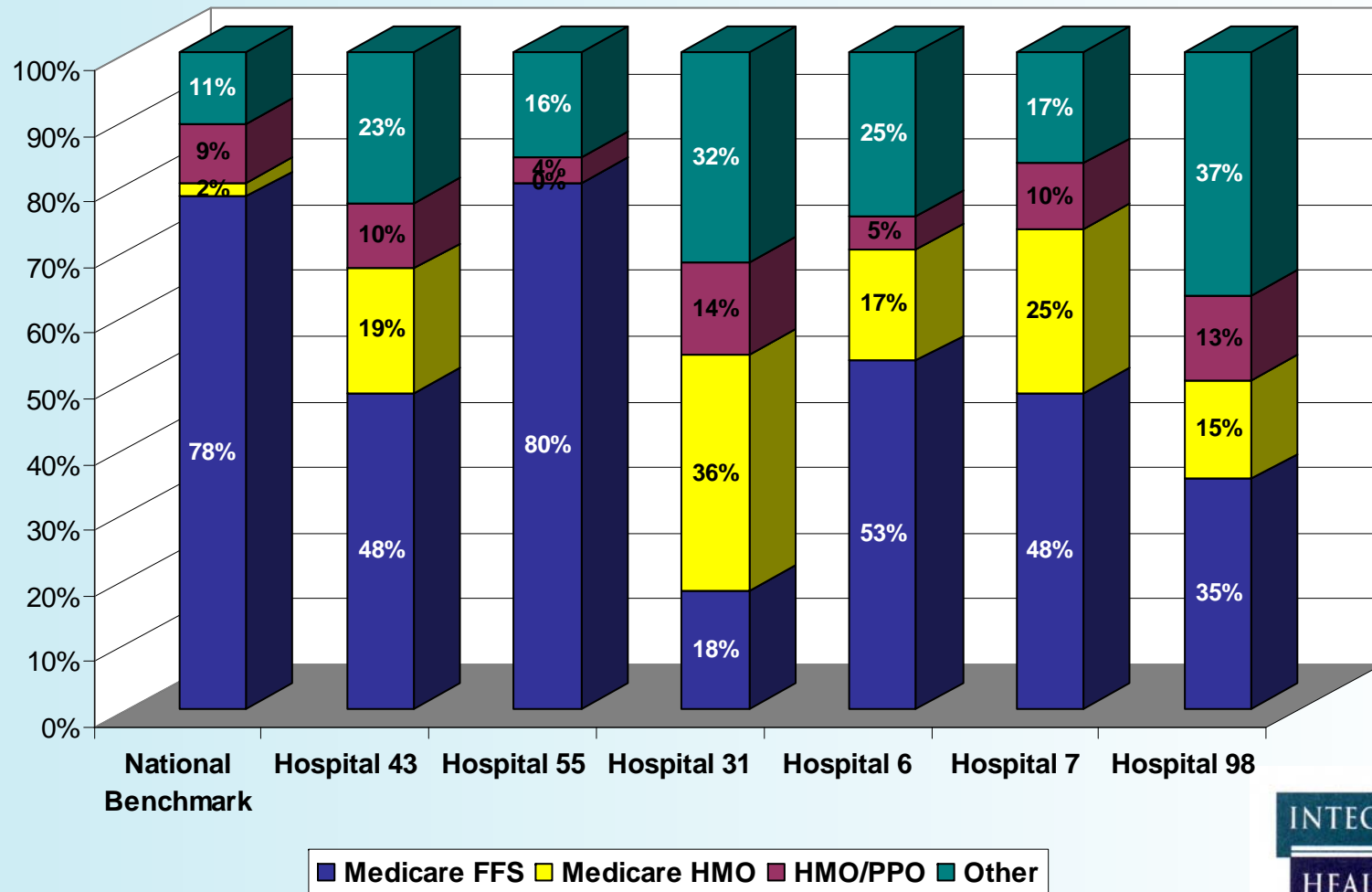
Cardiac Defibrillator (DRG 515)

Complication rate across hospitals



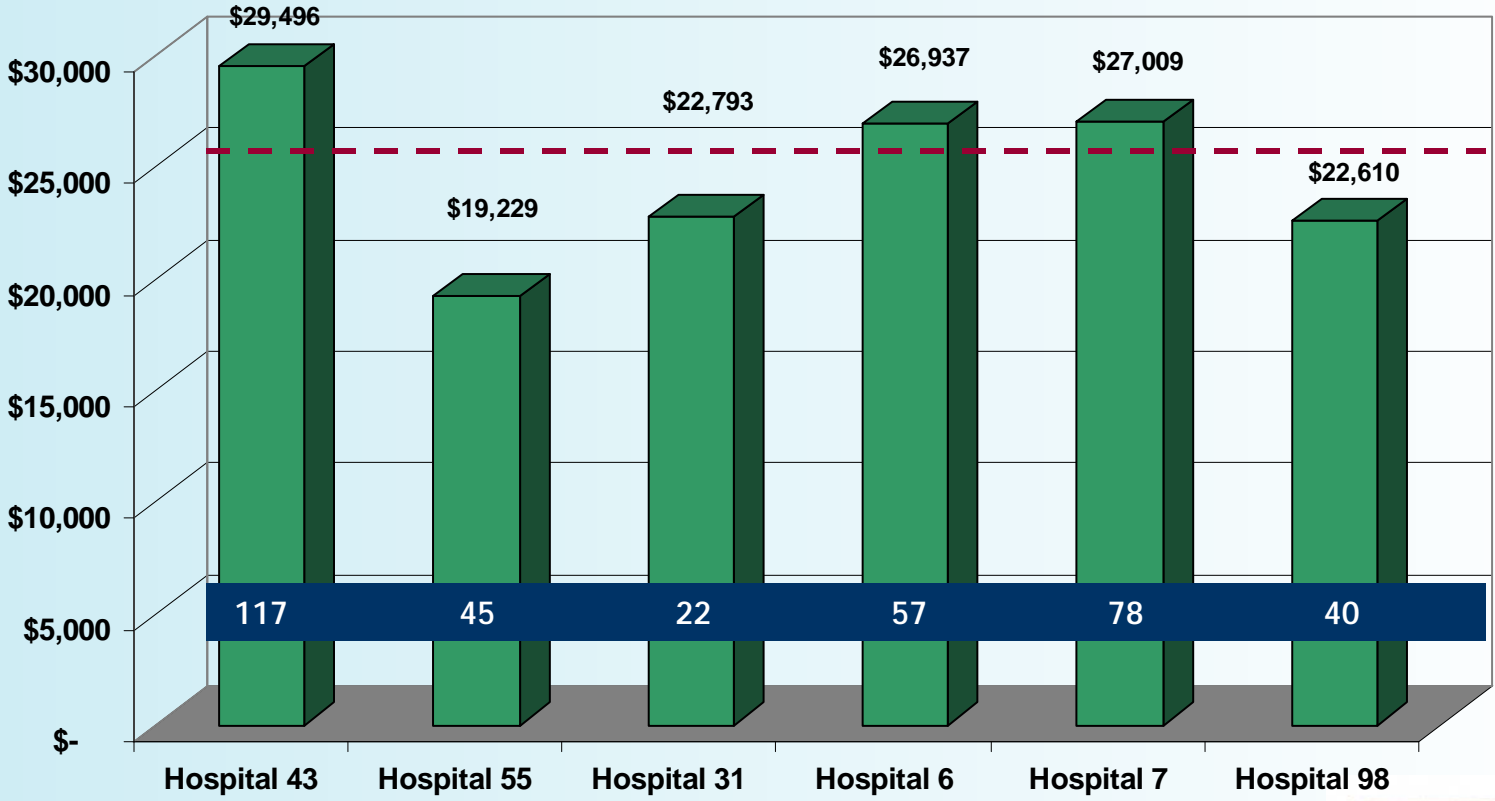
Cardiac Defibrillator (DRG 515)

Payer Mix Across Hospitals



Cardiac Defibrillator (DRG 515)

Average Implant Cost per Case

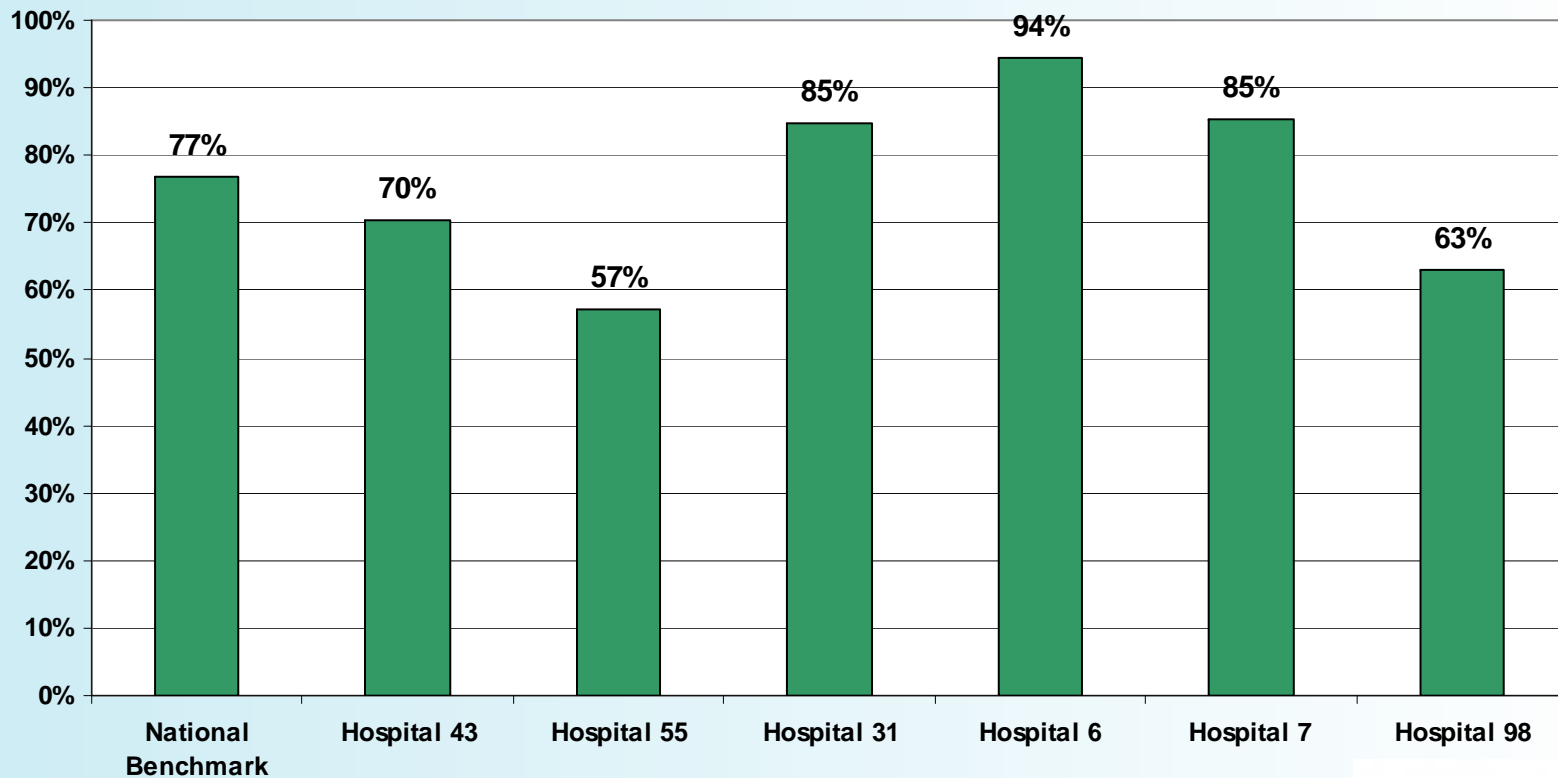


Hospital Volume
- - - National Benchmark



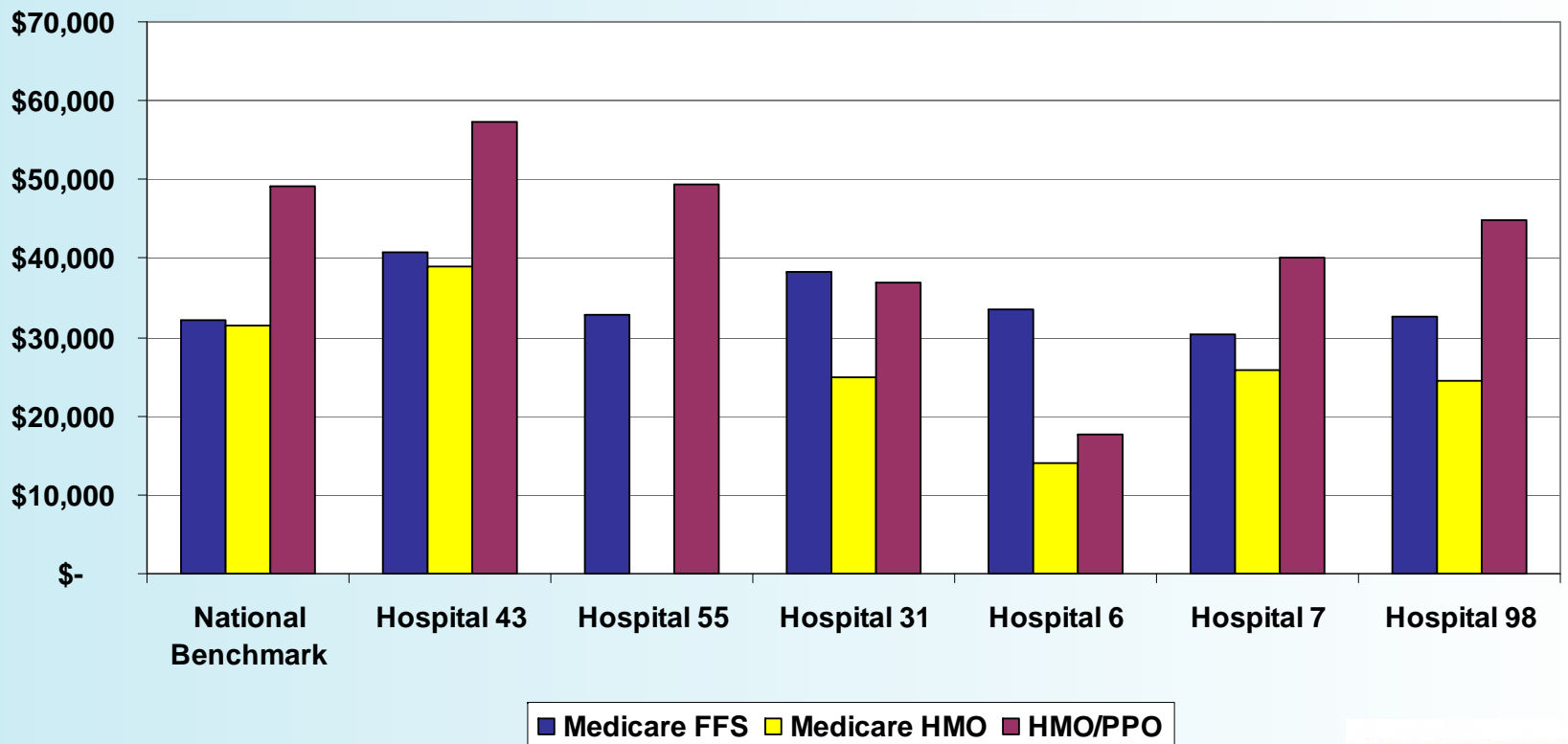
Cardiac Defibrillator (DRG 515)

Implant cost as % of average reimbursement



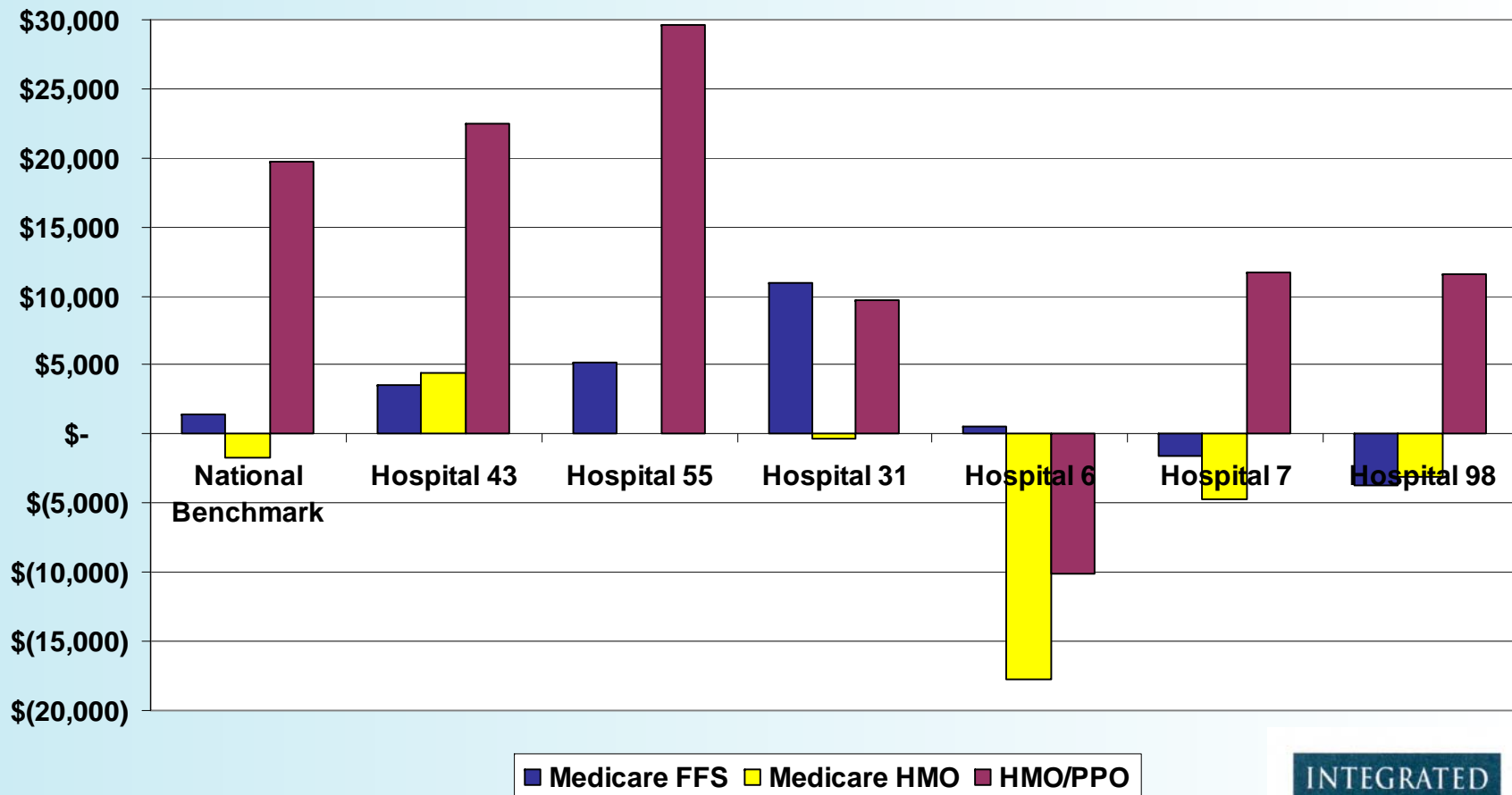
Cardiac Defibrillator (DRG 515)

Average reimbursement per case, by payer



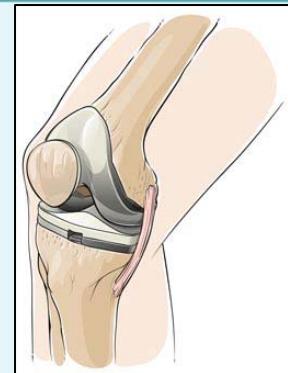
Cardiac Defibrillator (DRG 515)

Contribution margin per case, by payer



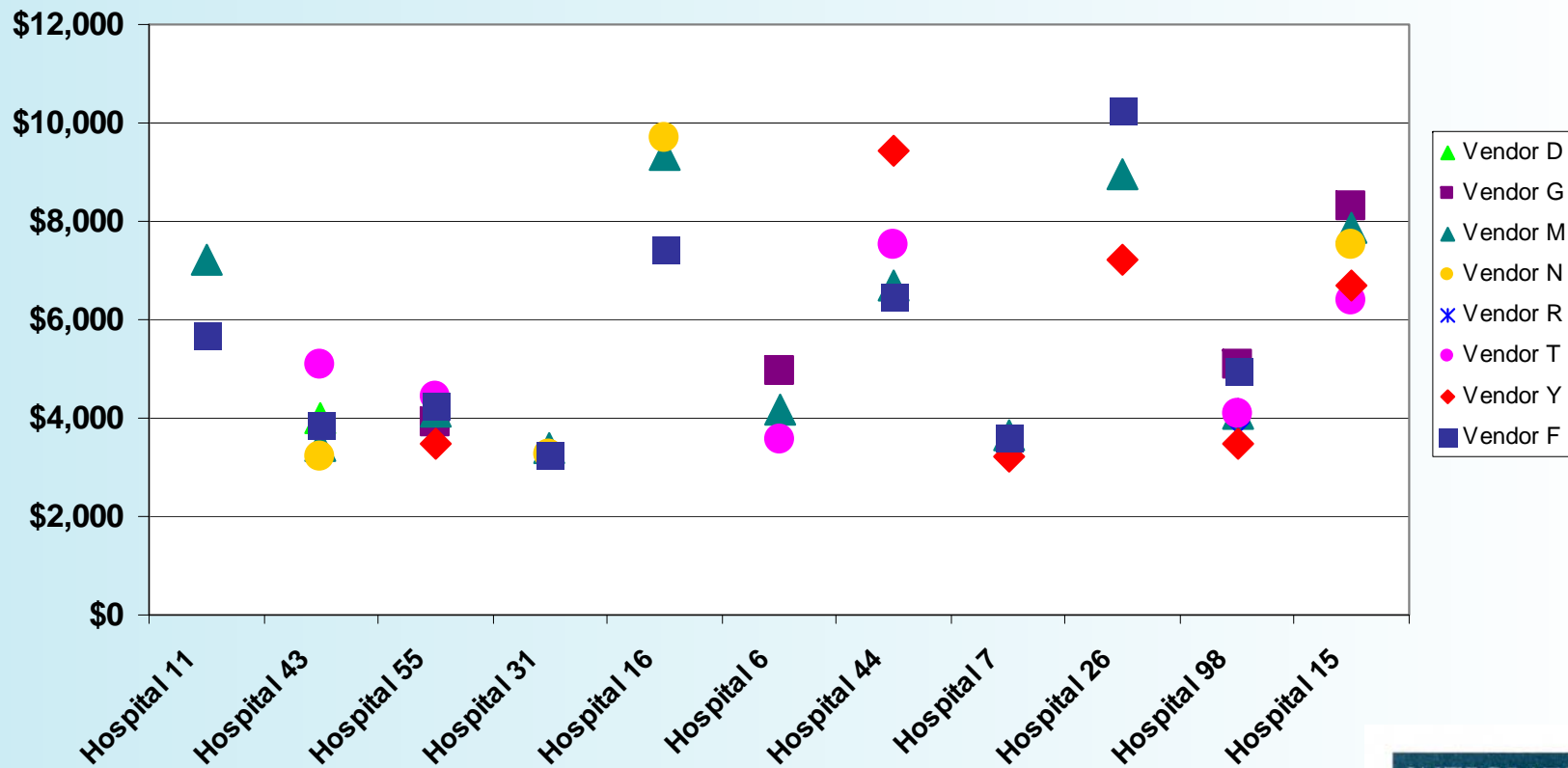
Value Assessment and Purchasing for Medical Devices

Total Knee Replacement (DRG 544, ICD-9-CM 81.21)



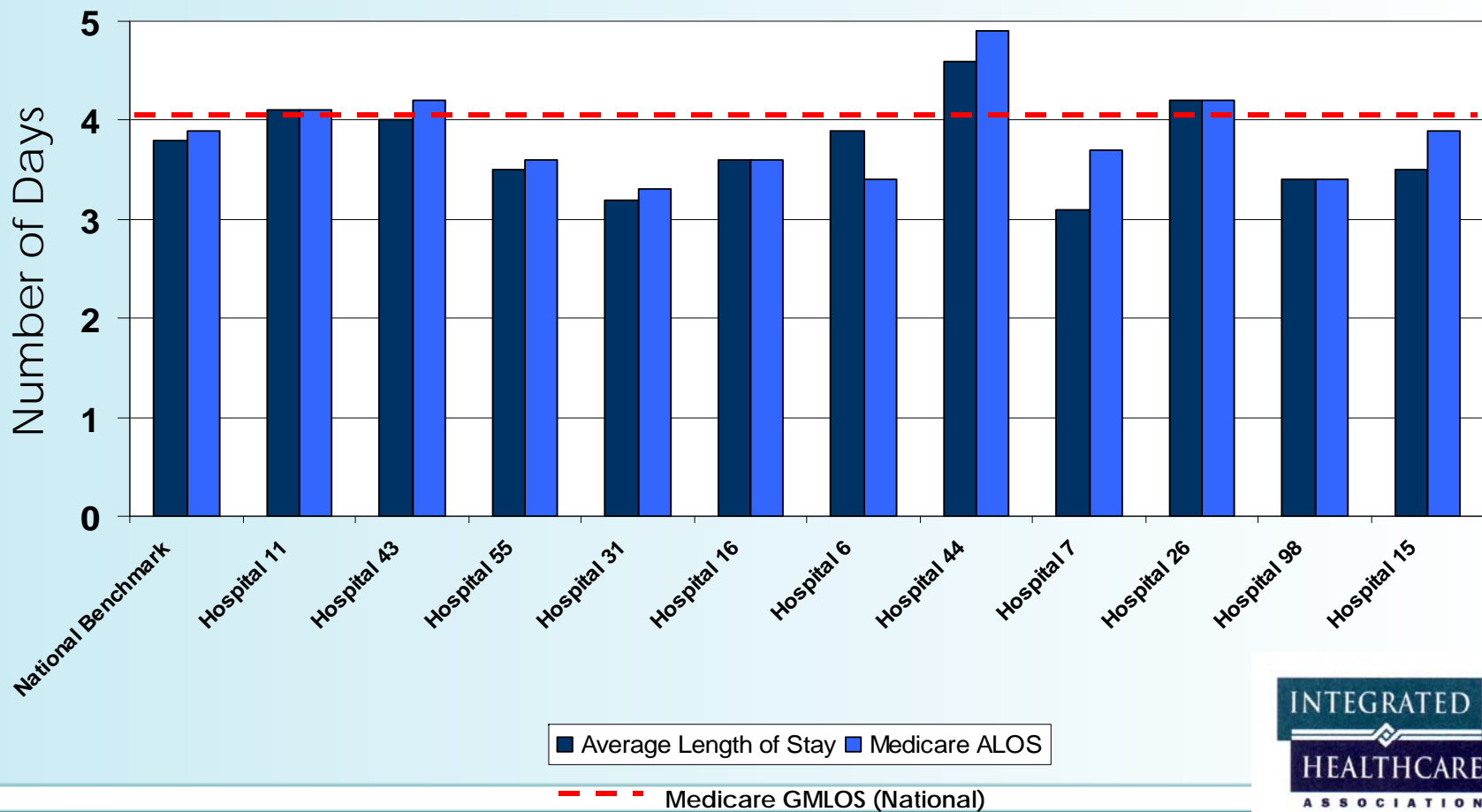
Total Knee Replacement (DRG 544, ICD-9-CM 81.51)

Implant Cost per Case, by Vendor



Total Knee Replacement (DRG 544, ICD-9-CM 81.51)

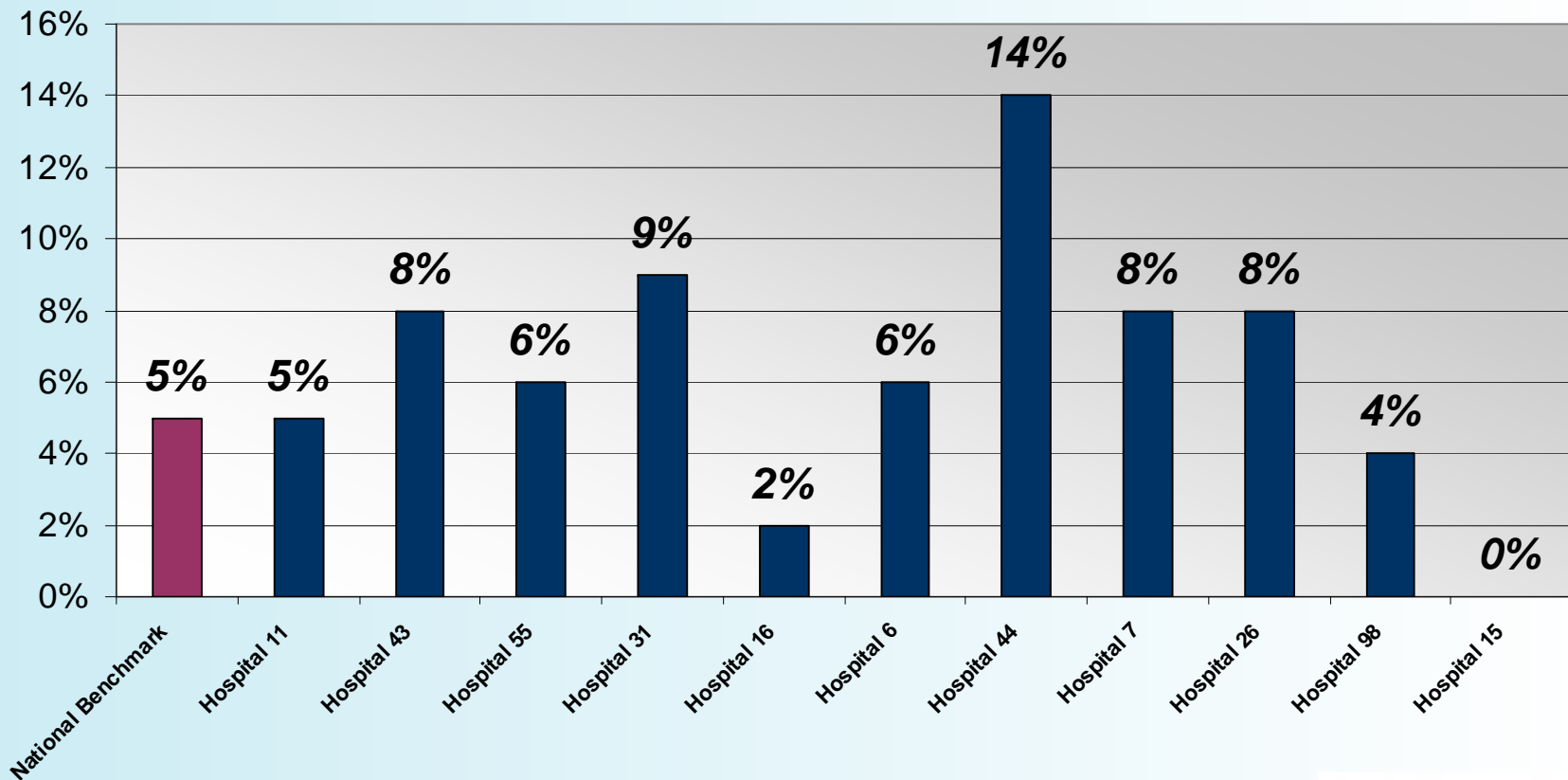
Average Length of Stay



Total Knee Replacement

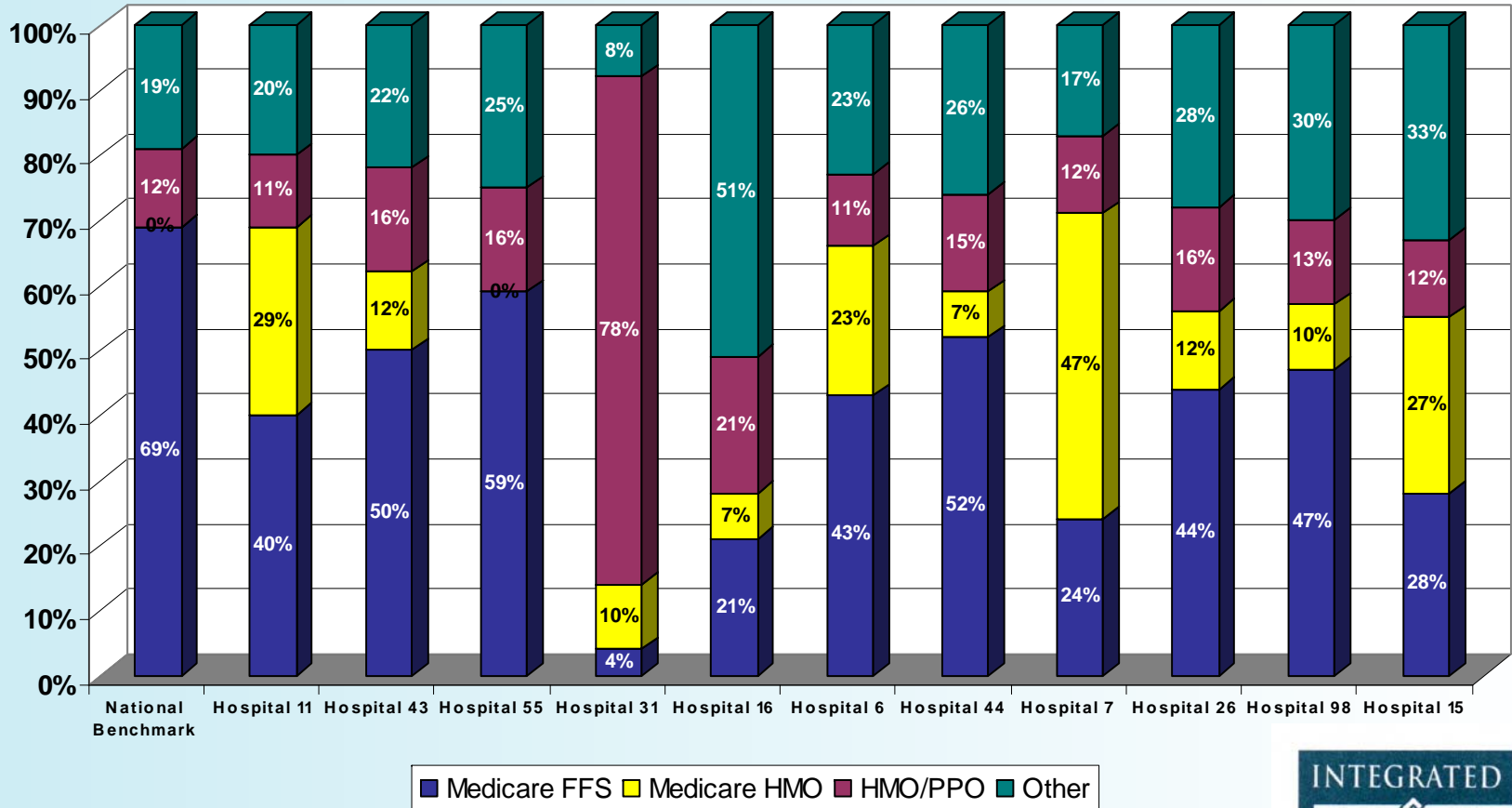
(DRG 544, ICD-9-CM 81.21)

Complication rate across hospitals

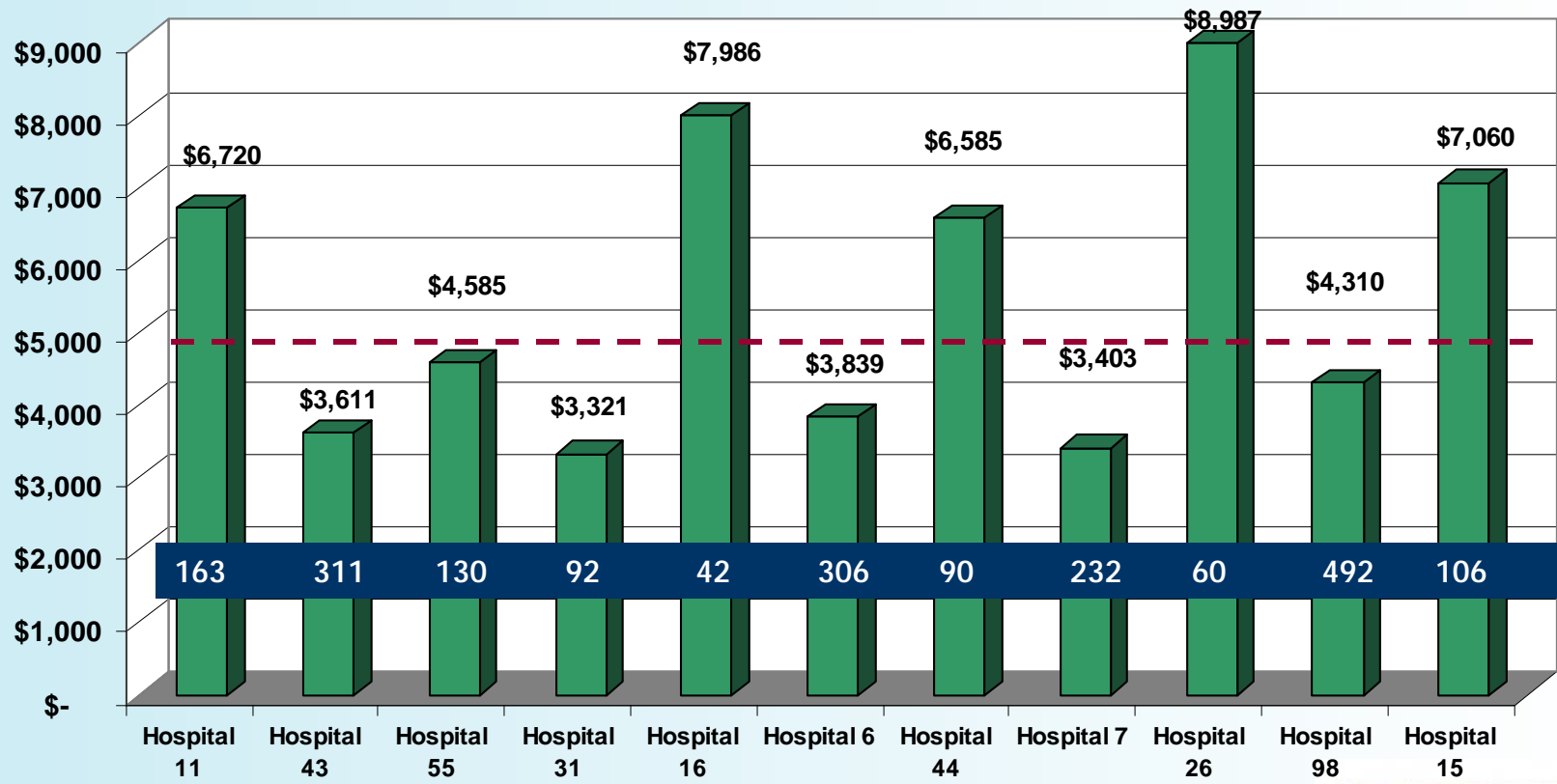


Total Knee Replacement (DRG 544, ICD-9-CM 81.51)

Payer Mix Across Hospitals



Total Knee Replacement (DRG 544, ICD-9-CM 81.51) Average implant cost per case

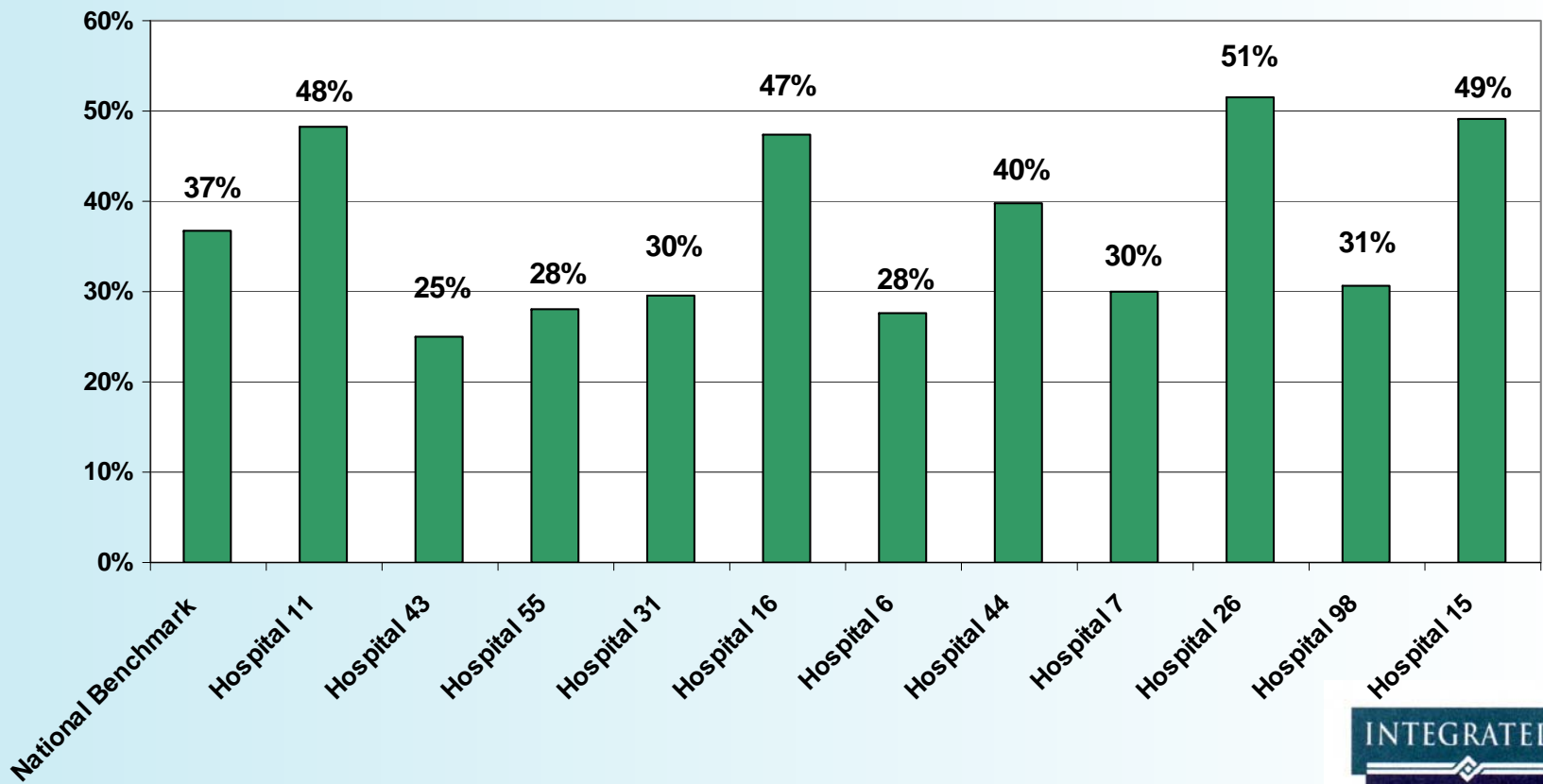


Hospital Volume
- - - National Benchmark



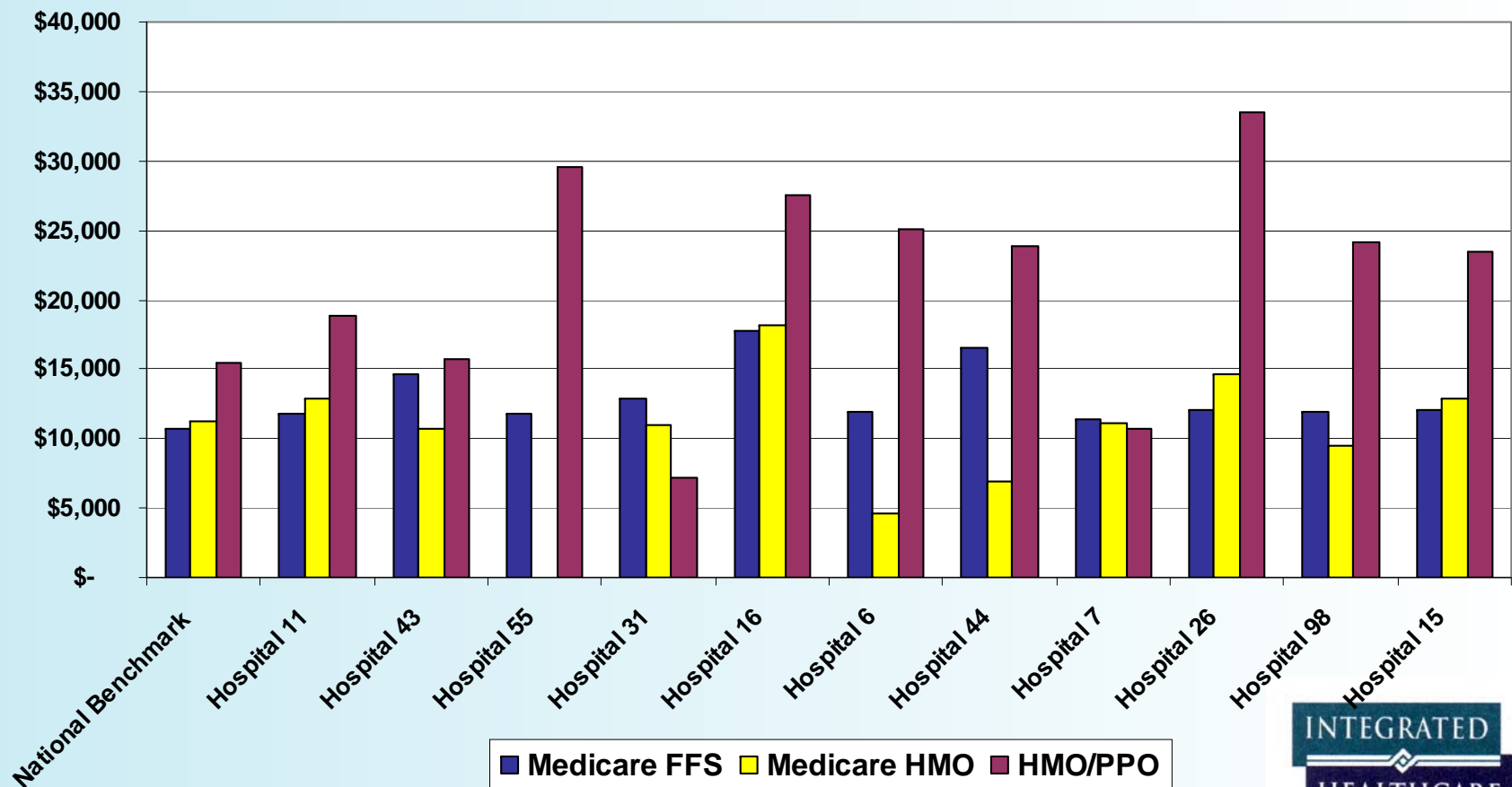
Total Knee Replacement (DRG 544, ICD-9-CM 81.51)

Implant cost as % of reimbursement



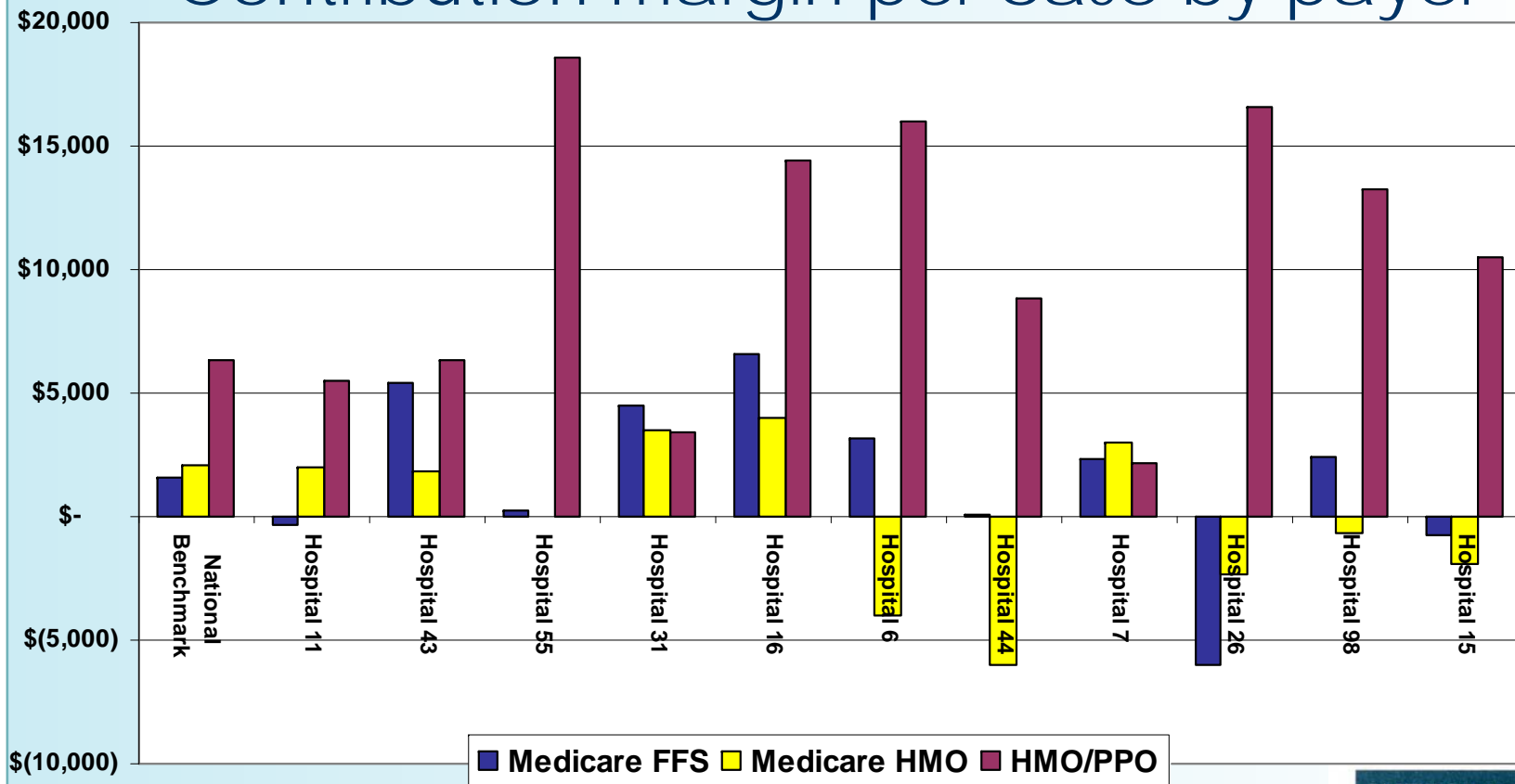
Total Knee Replacement (DRG 544, ICD-9-CM 81.51)

Average reimbursement per case by payer



Total Knee Replacement (DRG 544, ICD-9-CM 81.51)

Contribution margin per case by payer



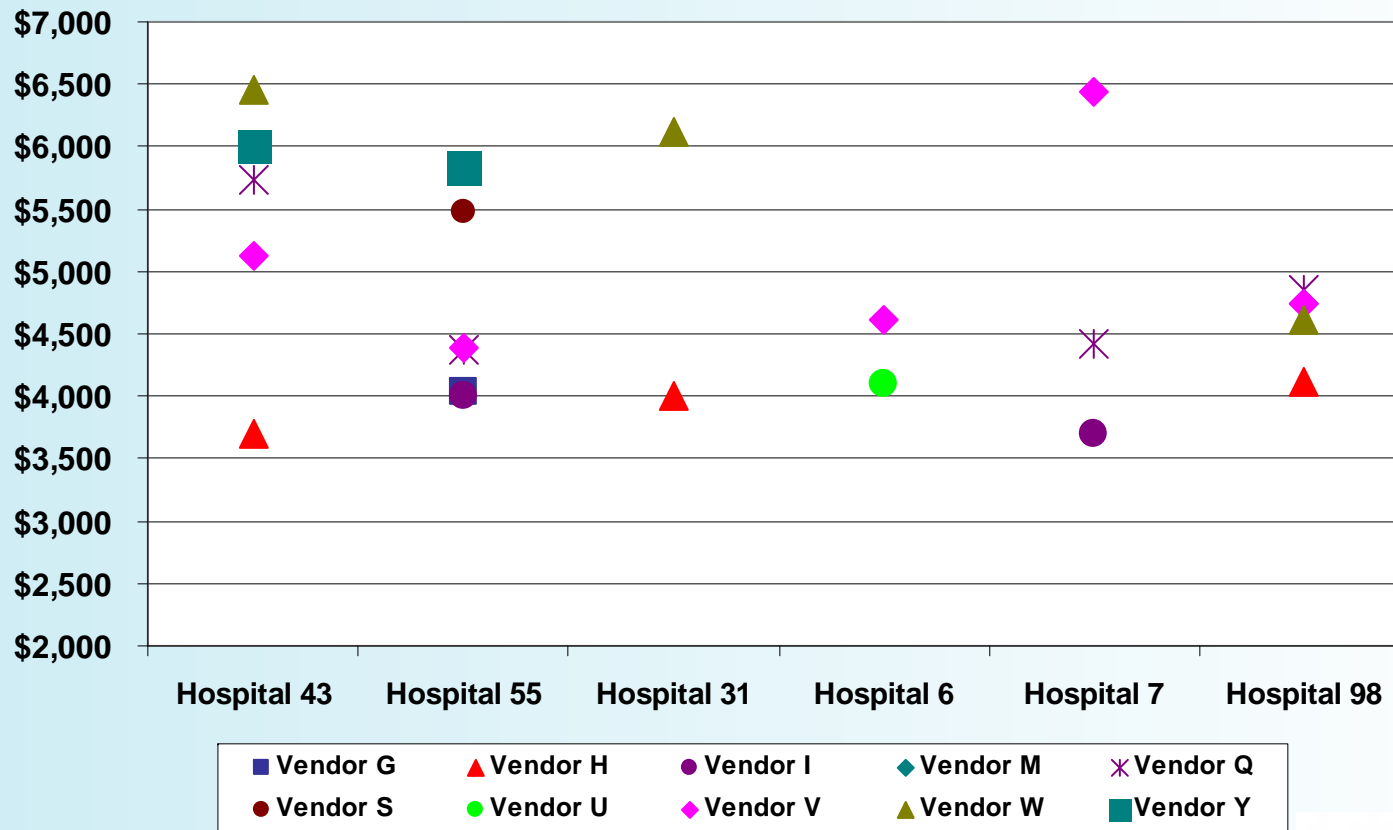
Value Assessment and Purchasing for Medical Devices

Lumbar Spine Fusion (DRG 498)



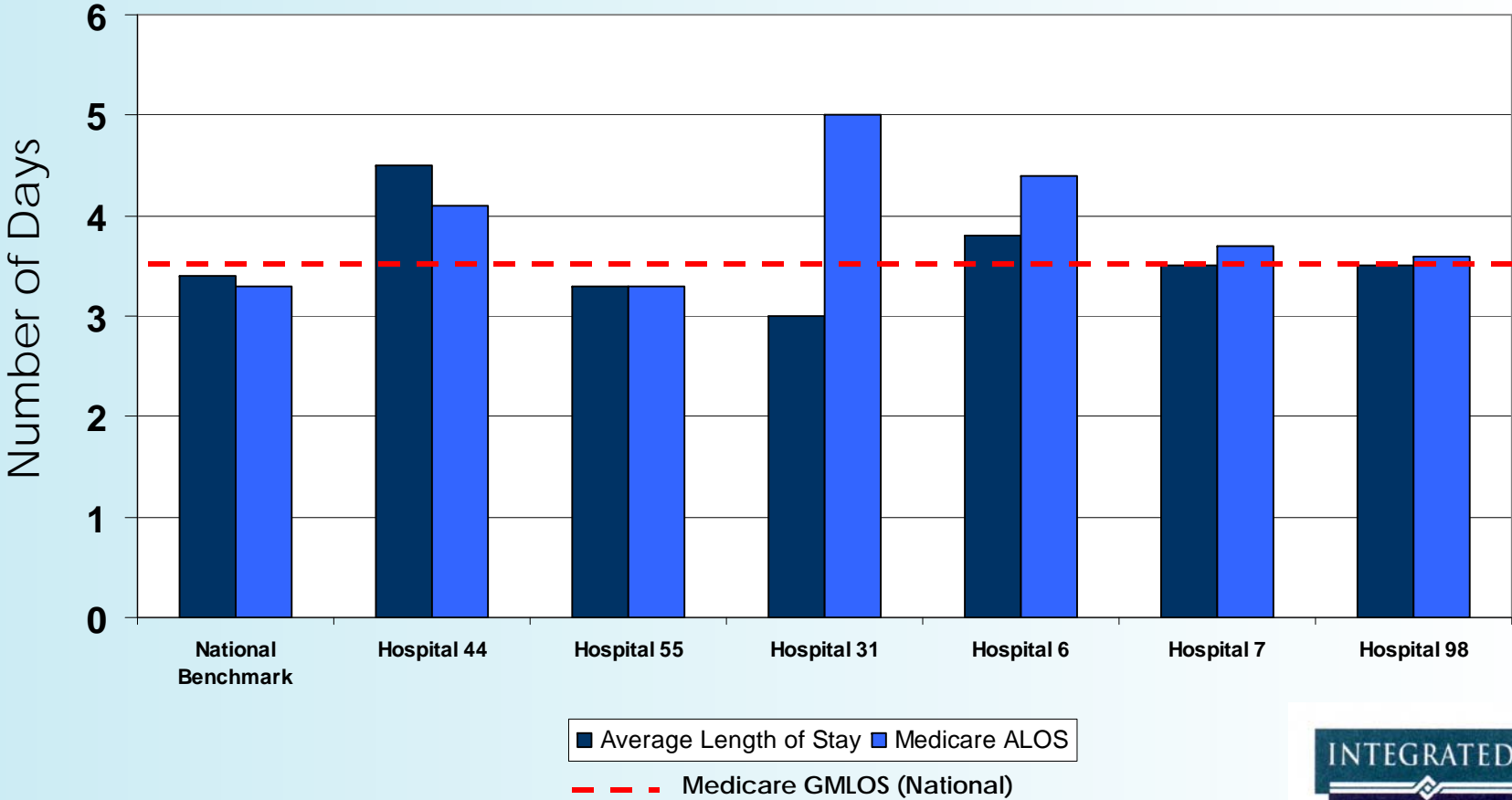
Lumbar Fusion (DRG 498)

Implant Cost per Case, by Vendor



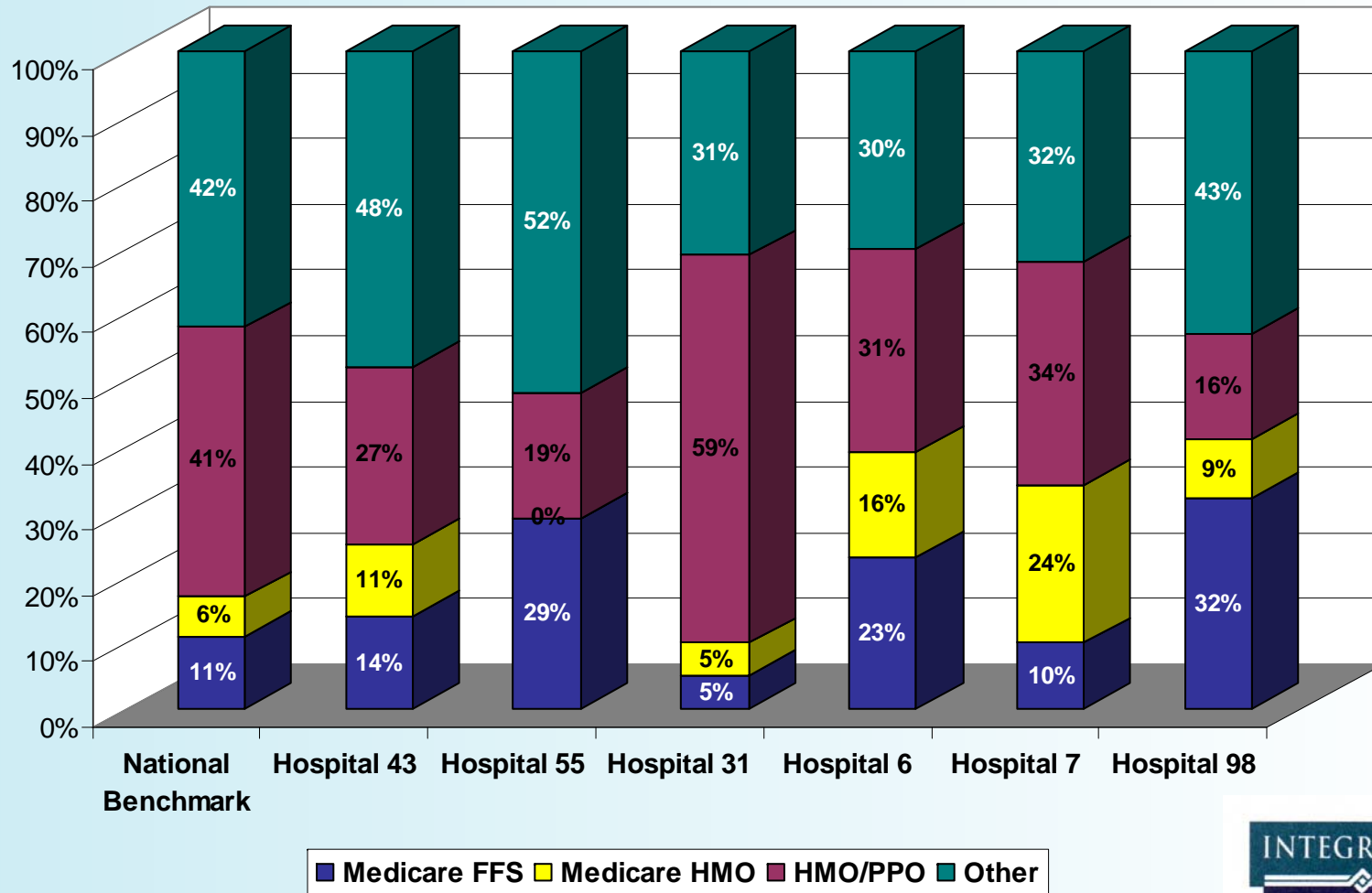
Lumbar Fusion (DRG 498)

Average Length of Stay



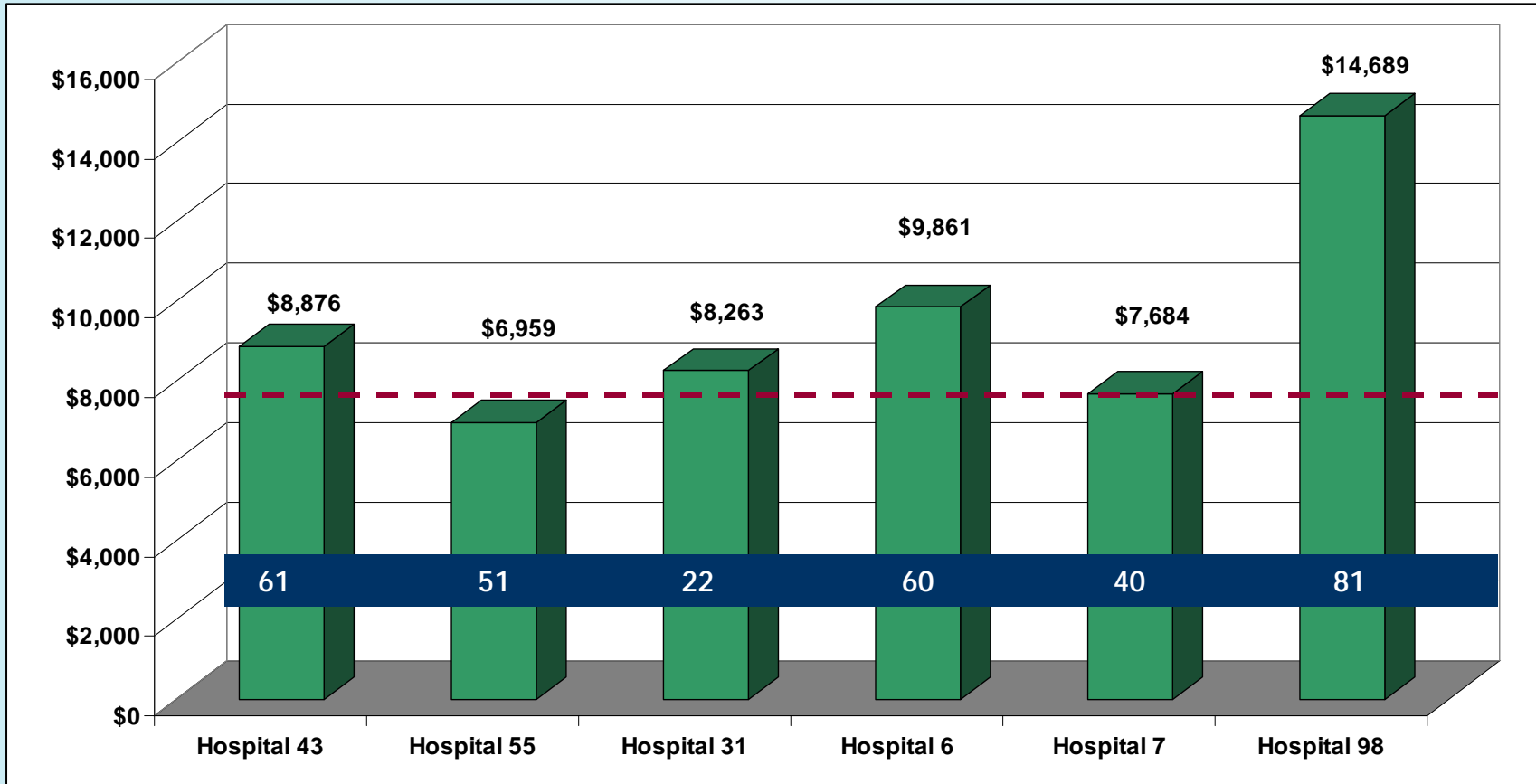
Lumbar Fusion (DRG 498)

Payer Mix Across Hospitals



Lumbar fusion (DRG 498)

Average implant cost per case*



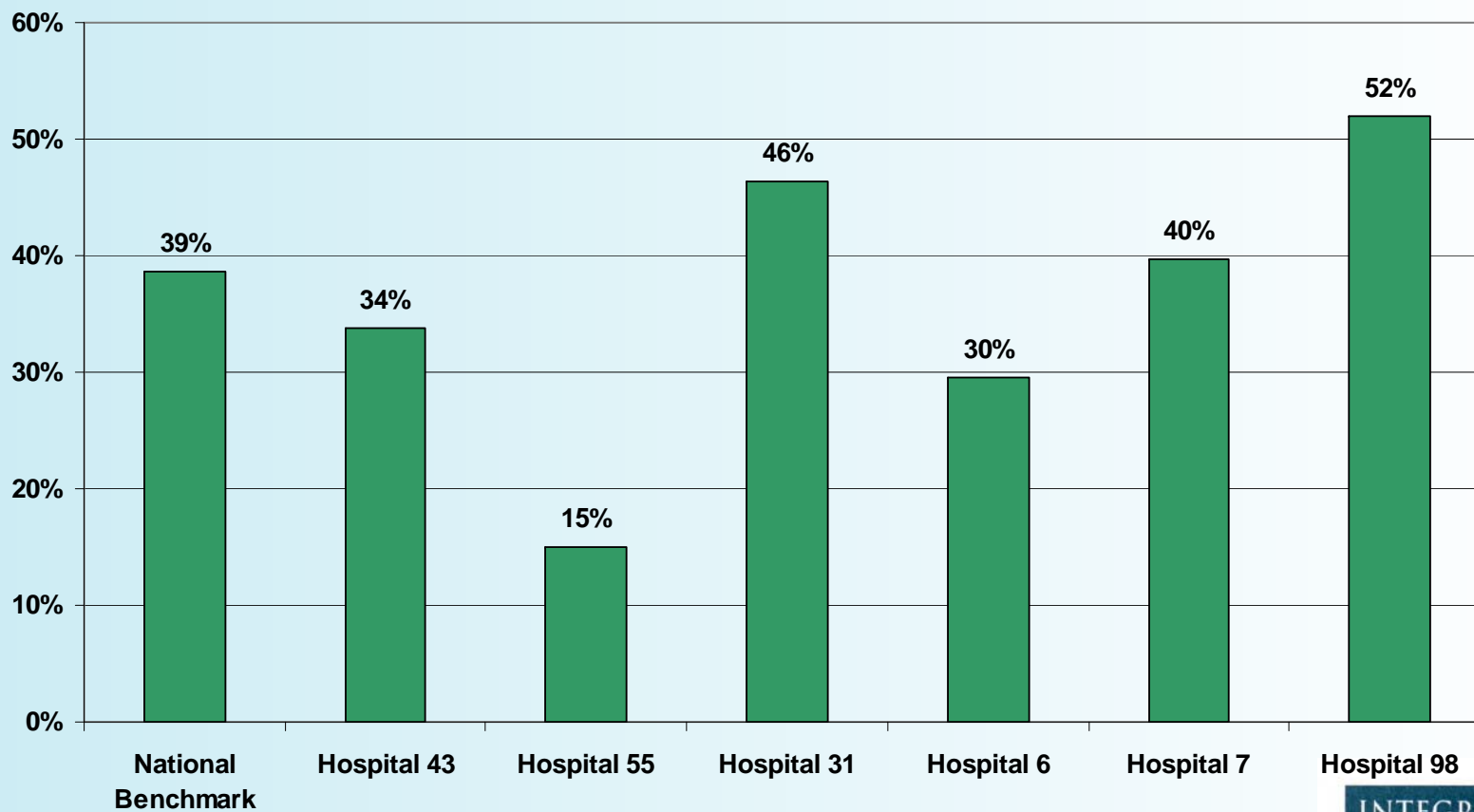
Hospital Volume
 - - - National Benchmark



*Implant cost per case reflect 1 level lumbar fusions only.

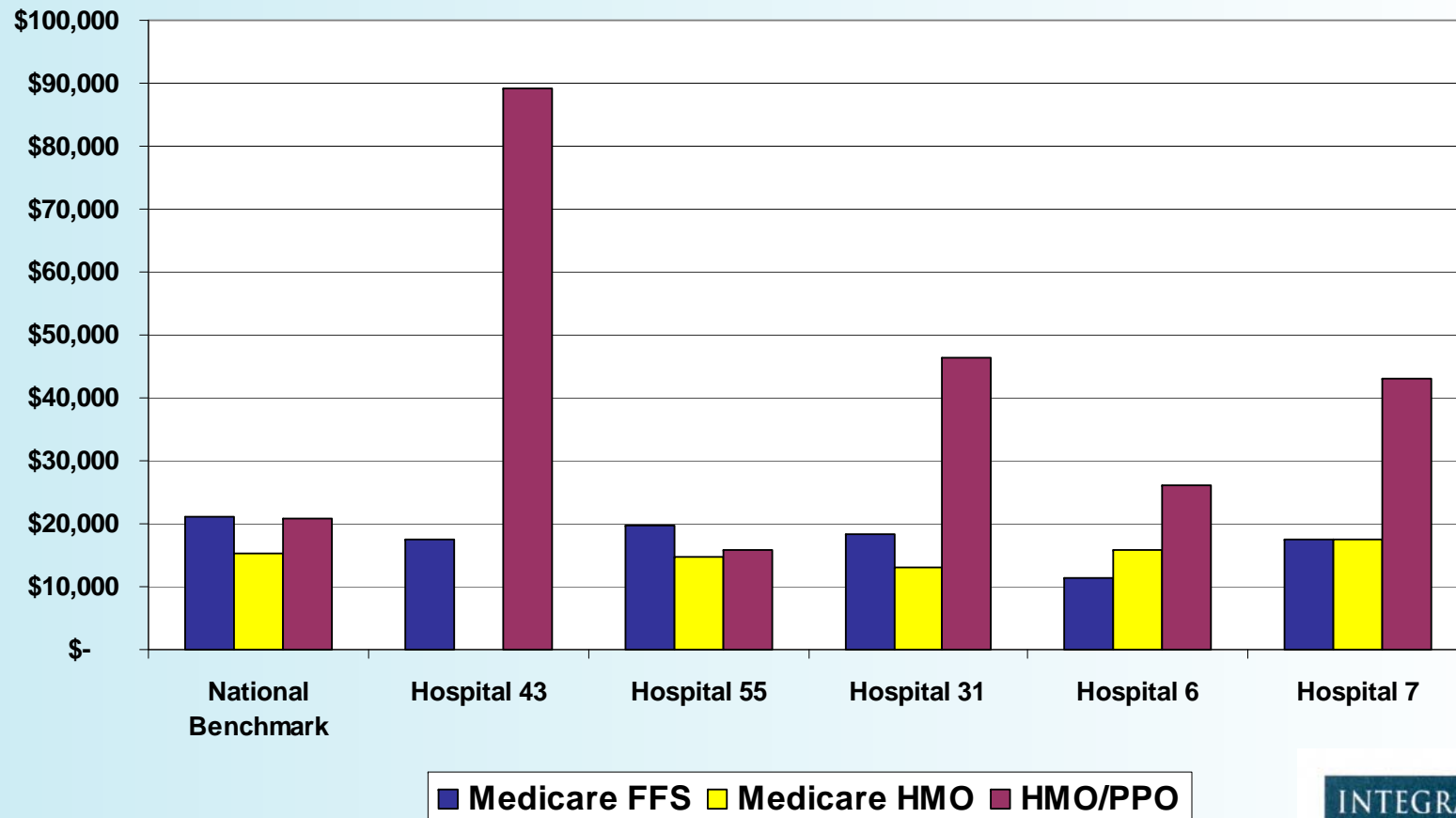
Lumbar Fusion (DRG 498)

Implant cost as % of reimbursement



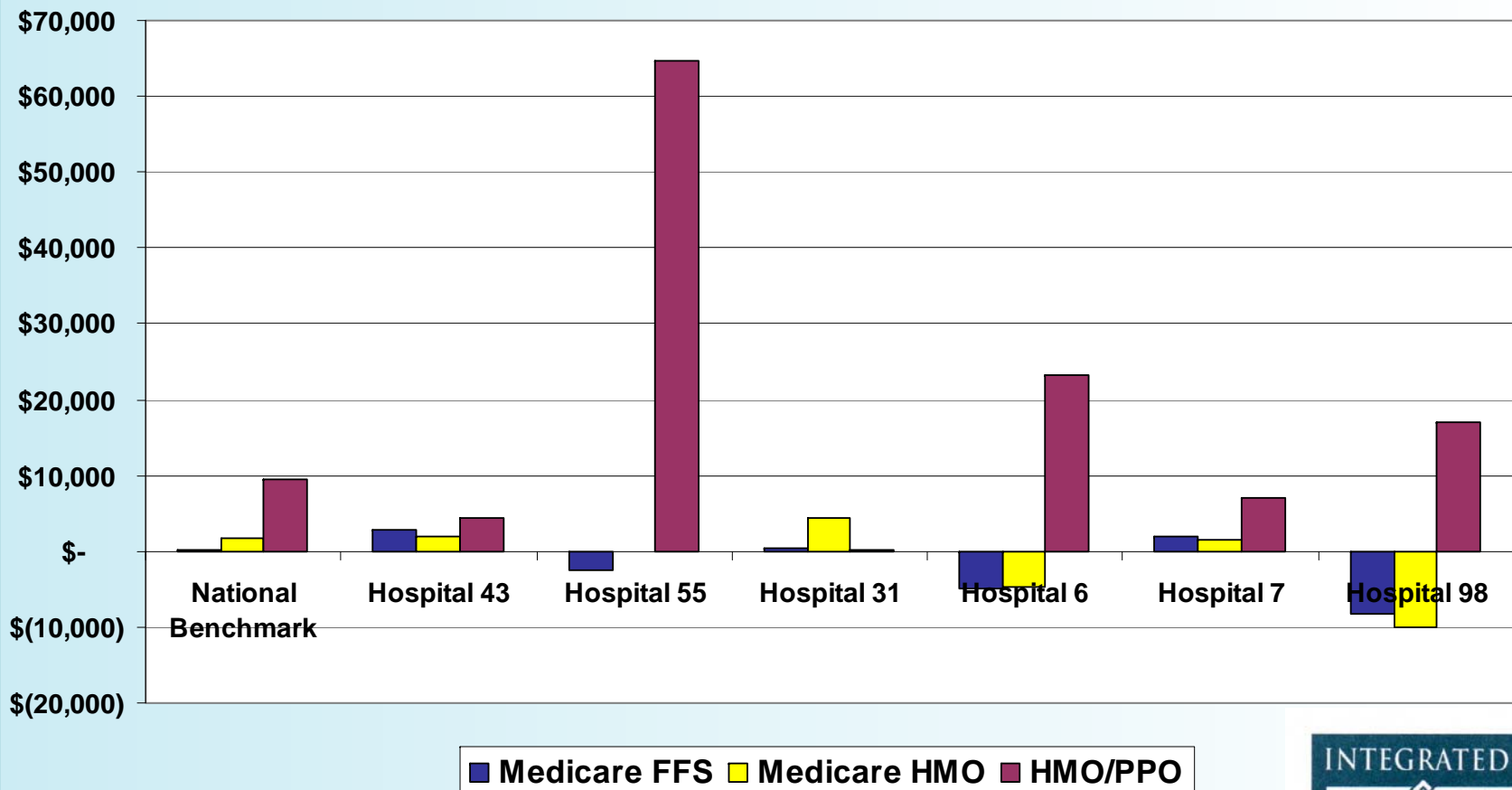
Lumbar Fusion (DRG 498)

Average reimbursement per case, by payer



Lumbar Fusion (DRG 498)

Contribution margin per case, by payer



IHA Next Steps for Medical Technology

1. Adopt/develop episode pricing for device-intensive procedures/services
 - Use health plan claims data?
 - Better payment methods for health plans and hospitals (compared to carve-outs)?
2. Work with GPOs and hospitals to improve data comparability across hospitals
3. Expand from Orange County statewide
4. With better data and performance incentives, foster improvements in quality and efficiency in California

Challenges

1. Data comparability and integration:
 - Insurer claims, hospital accounting
2. Medical groups and IPAs often are disconnected from acute inpatient care costs and utilization patterns
 - Capitation incentives diluted, data are poor
3. Hospital service lines are under-developed
4. Tensions between insurers and hospitals over “carve-out” payments for medical devices
5. Hospitals and device firms often have adversarial, non-cooperative, relationships

IHA Goals and Principles for Health Care Technology

1. Expand P4P principles (quality and efficiency) to high-value but high-cost procedures and devices
2. Foster cooperation between physicians, hospitals
3. Find areas of common interest among all stakeholders, including physicians, hospitals, medical groups, health plans, device firms, purchasers, consumers, and policymakers
4. Improve quality and outcomes for patients