
Thromboprophylaxis in US hospitals: Adherence to the sixth American College of Chest Physicians' recommendations for at-risk medical and surgical patients

*A retrospective, observational study of practice
trends in acute care hospitals using Premier
Perspective™ data*

Sample population

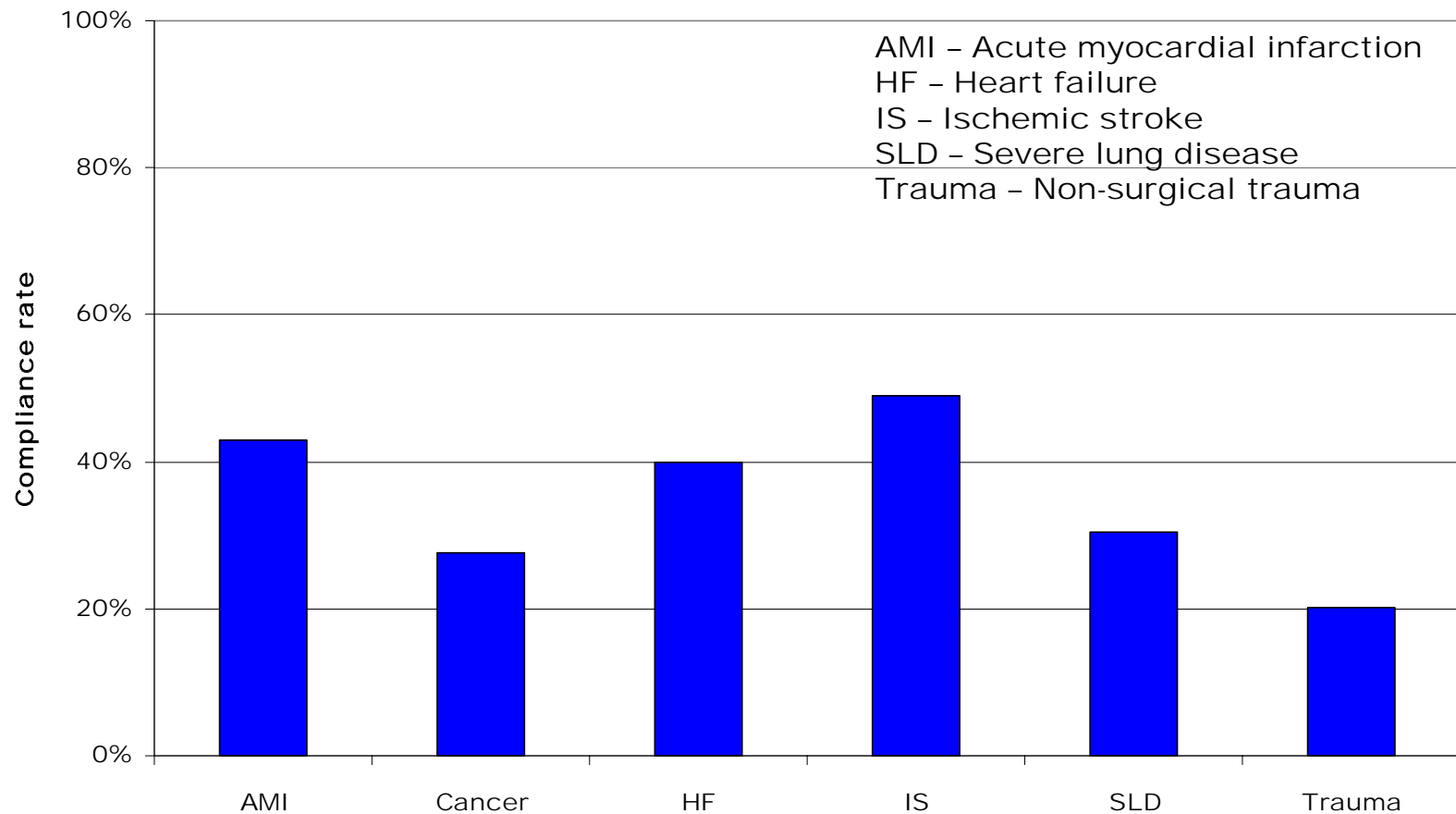
- 75,790 surgical and 200,400 acute medical discharges from the Premier Perspective™ inpatient database between Jan 2002 and Sept 2005
 - Study period reflects time that the 6th ACCP guidelines have been in effect
- Included discharges:
 - ≥ 40 years old
 - length of stay > 5 days
 - Had ≥ 1 ACCP-defined risk factor for VTE
 - Not contraindicated to VTE prophylaxis
 - Not transferred from another acute care facility

Study design – analysis

- The following information relating to VTE prophylaxis was collected
 - Type of mechanical or pharmacological VTE prophylaxis
 - Duration of VTE prophylaxis
 - Dosage of pharmacological VTE prophylaxis
- Appropriate prophylaxis
 - Defined as VTE prophylaxis which met ACCP-guideline recommendations for regimen type, daily dosage and duration of therapy

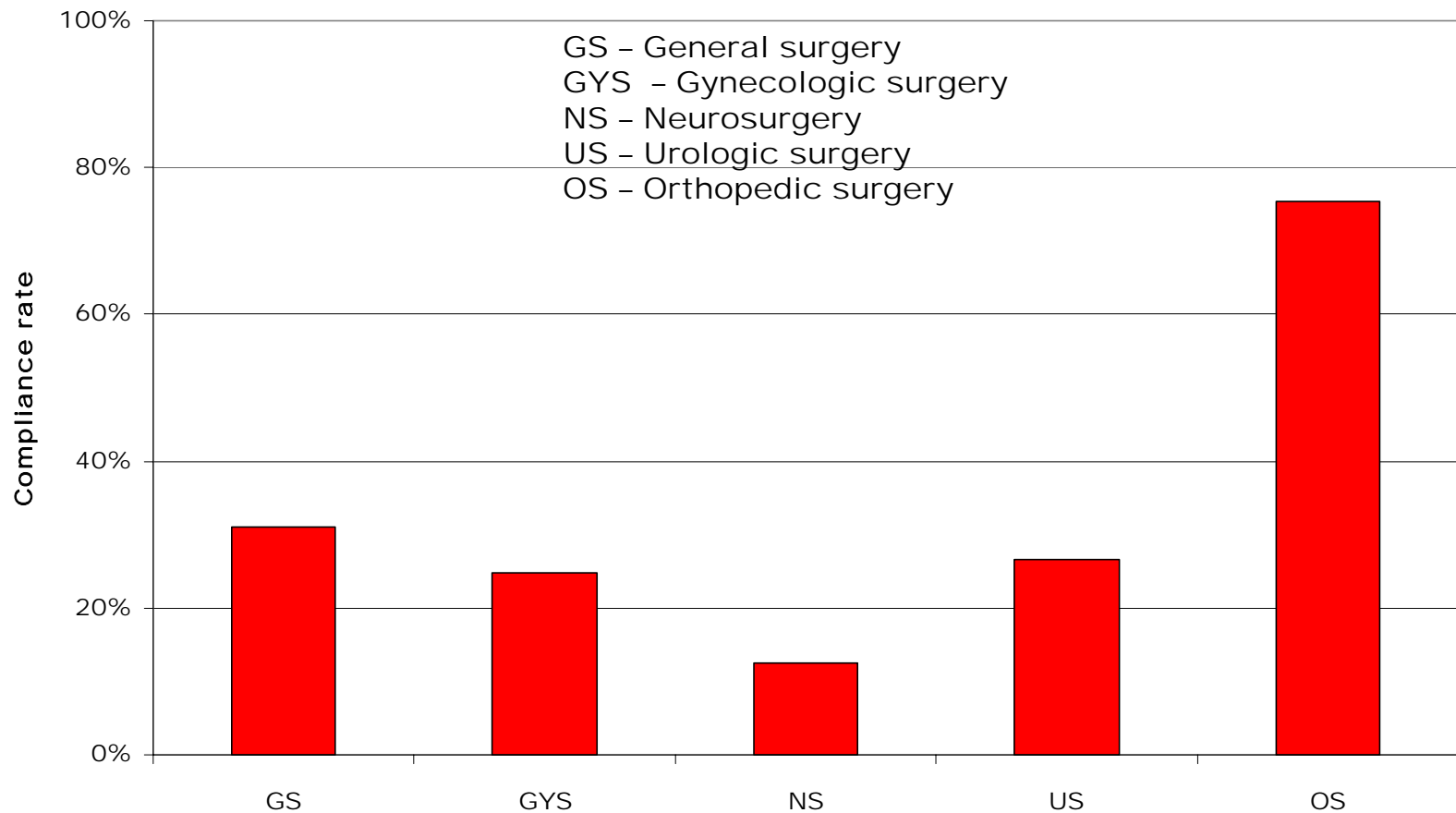
Results – acute medical illness

Compliance Rates for Acute Medical Diagnoses



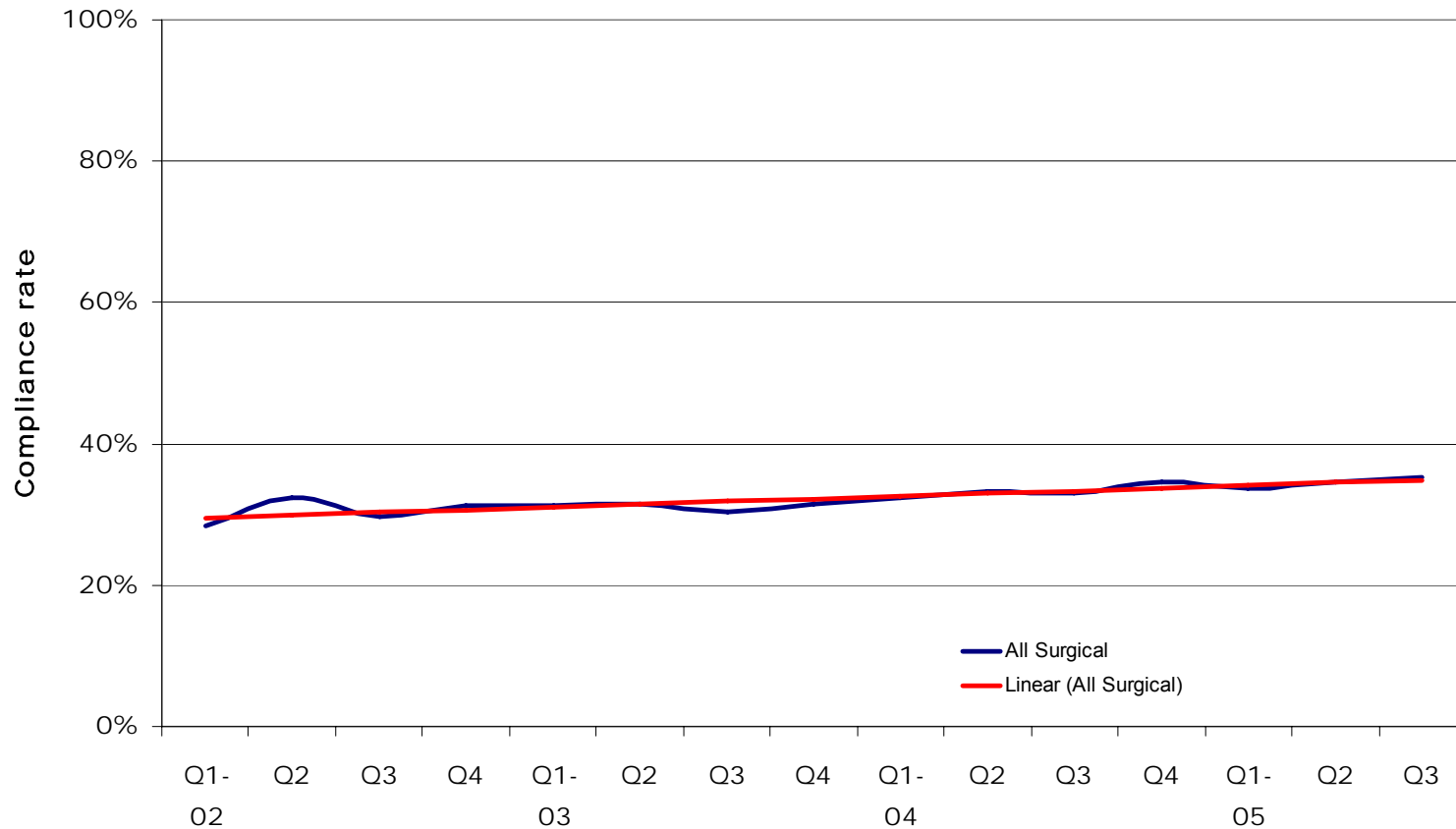
Results – surgical procedure

Compliance Rates for Surgical Procedures



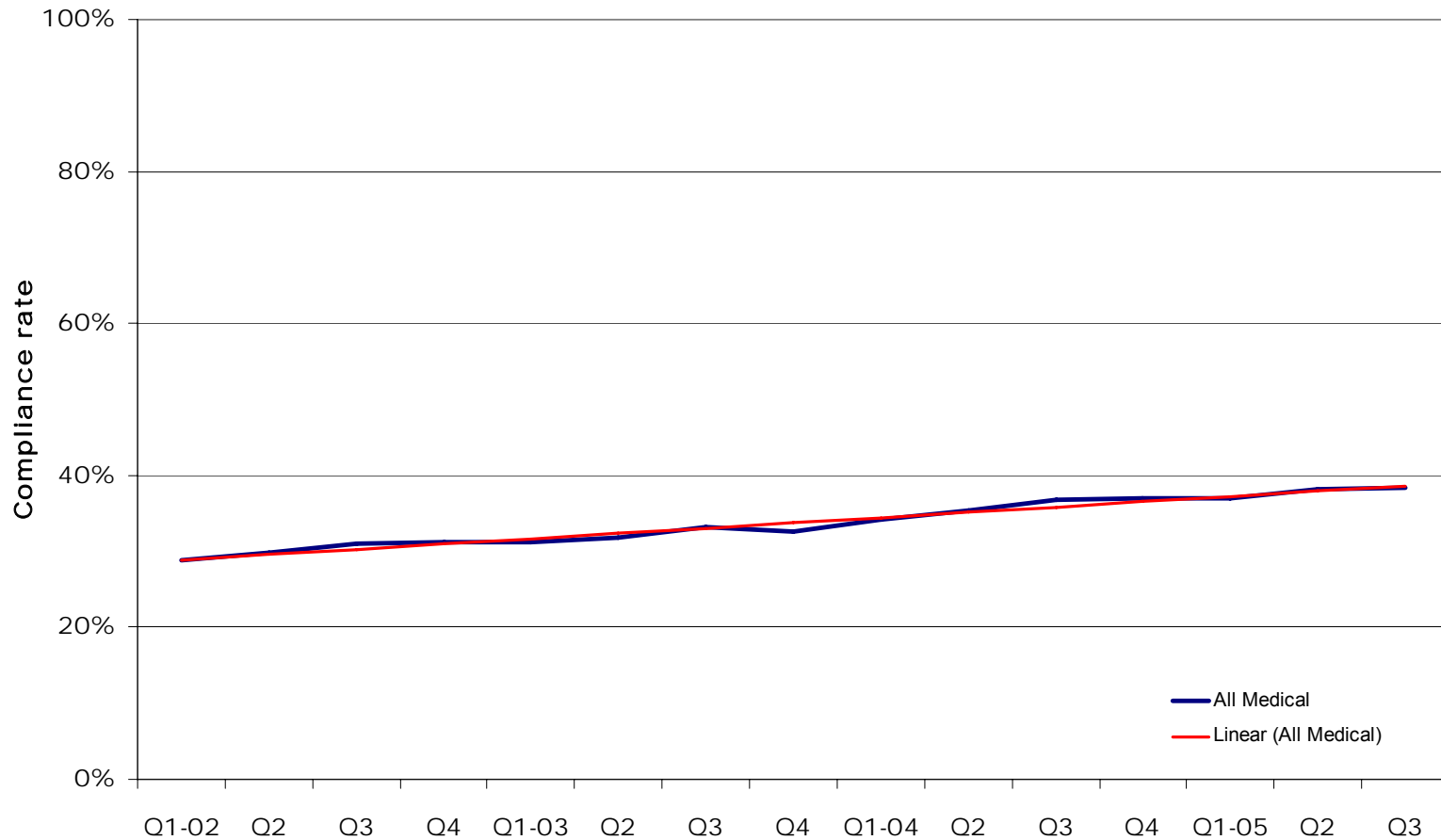
Results – all surgical by quarter

Composite compliance for all surgical groups by quarter
(weighted by discharge volume)



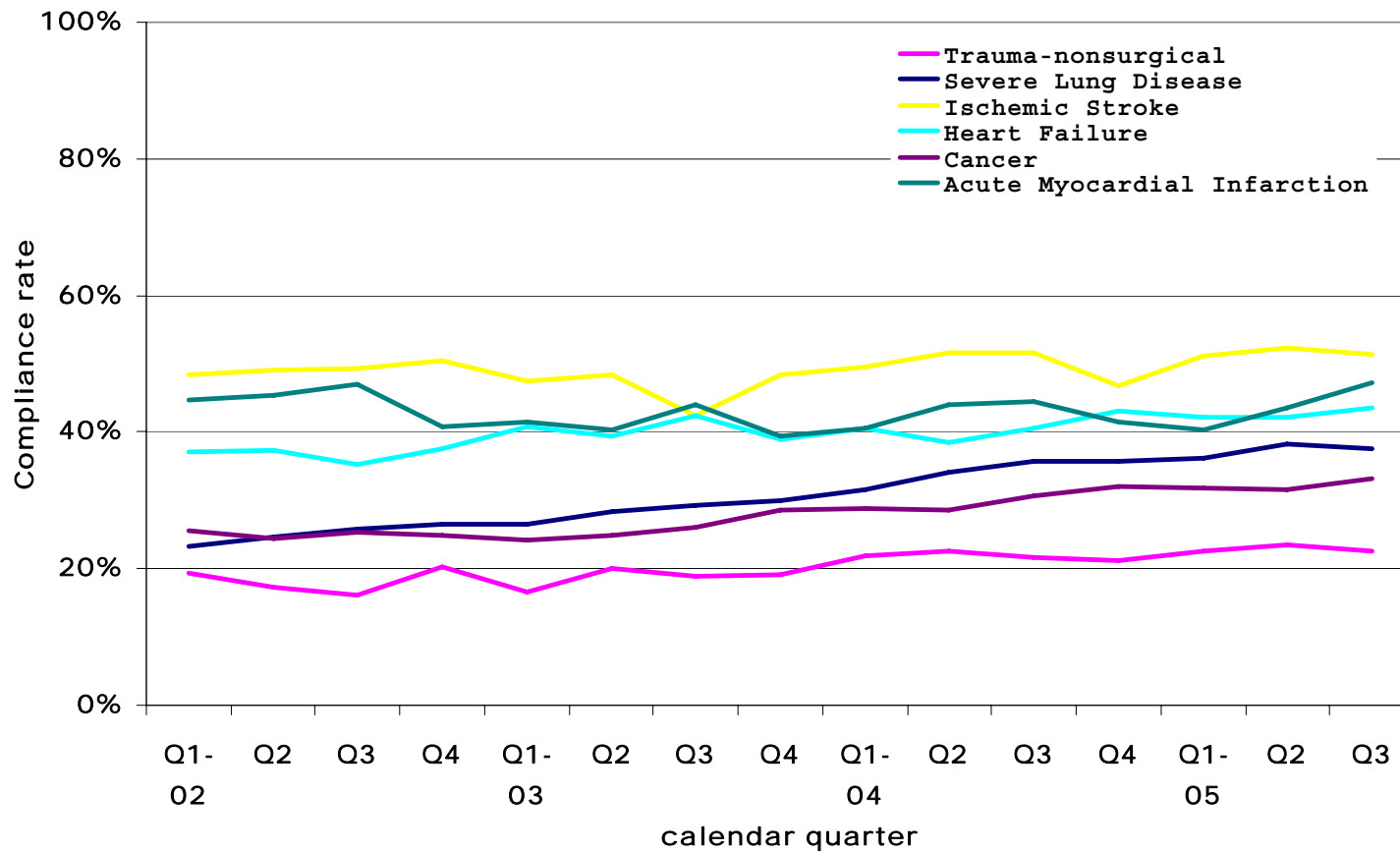
Results – all medical by quarter

Composite Compliance for all Medical Diagnoses by Quarter
(weighted by discharge volume)



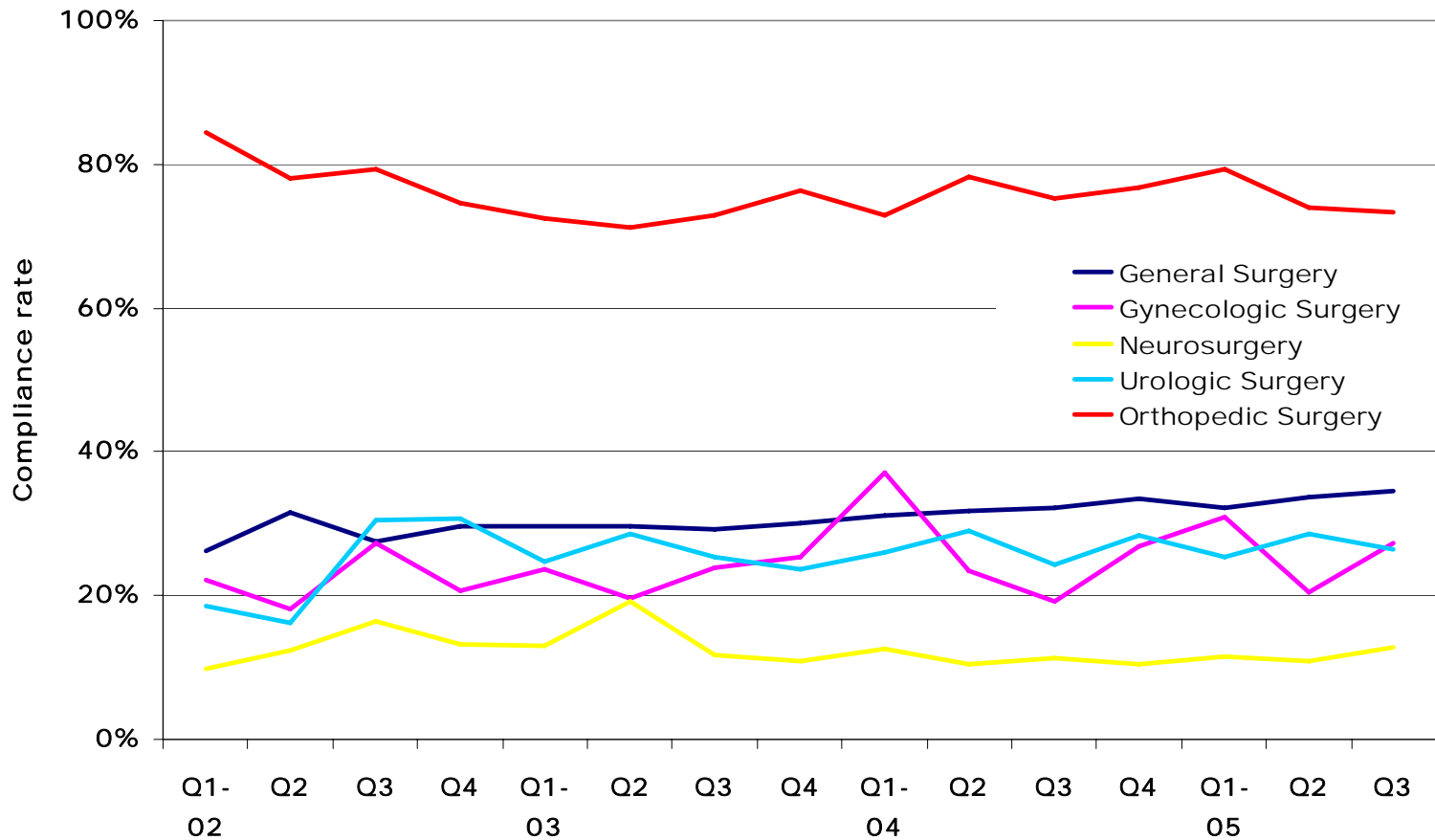
Trends – Acute medical illness

Compliance rate by discharge quarter by medical condition



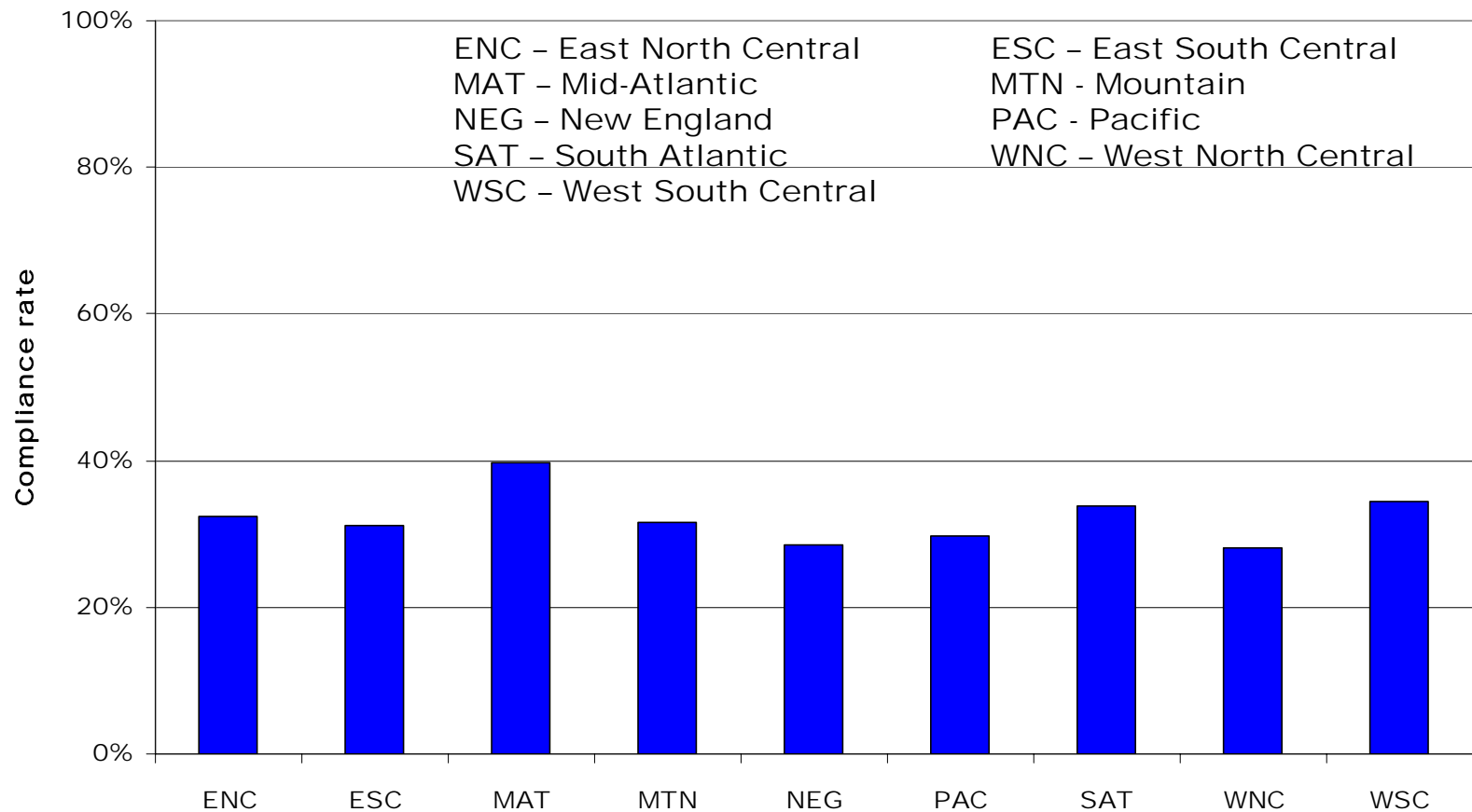
Trends – Surgical procedures

Compliance rates by discharge quarter by surgical category



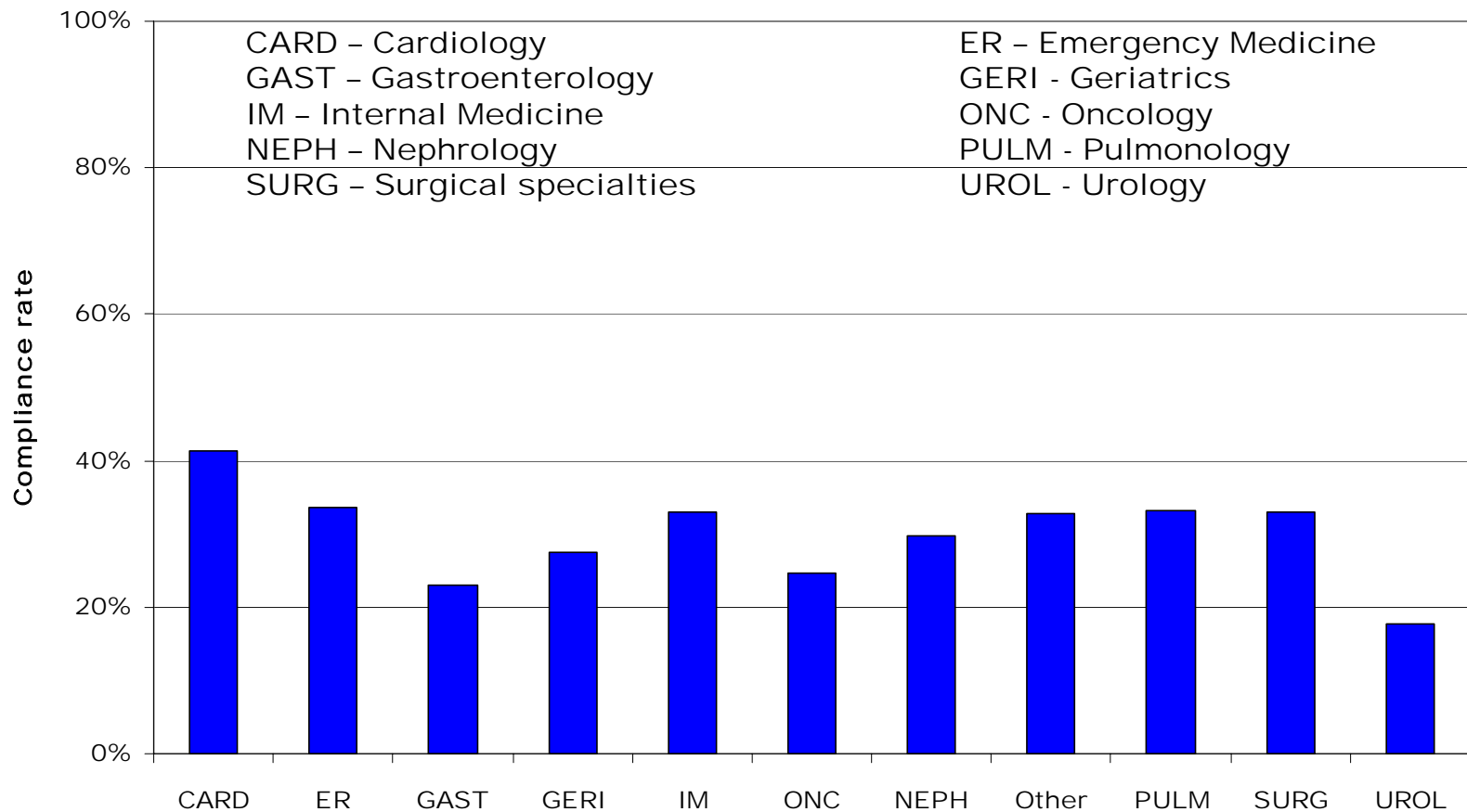
Results – by CMS region

Compliance Rate by CMS Region



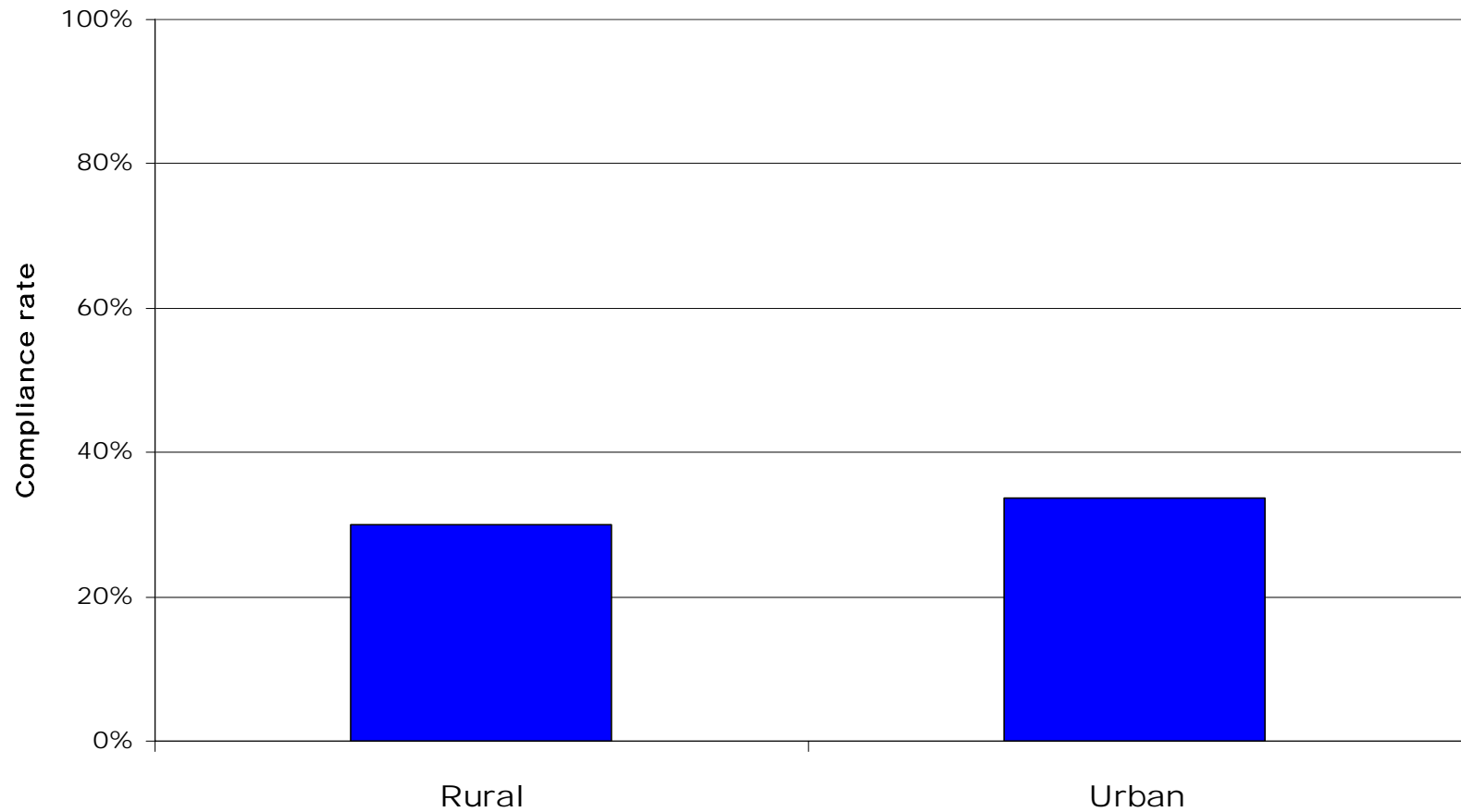
Results – by physician specialty

Compliance Rate by Attending Physician Specialty



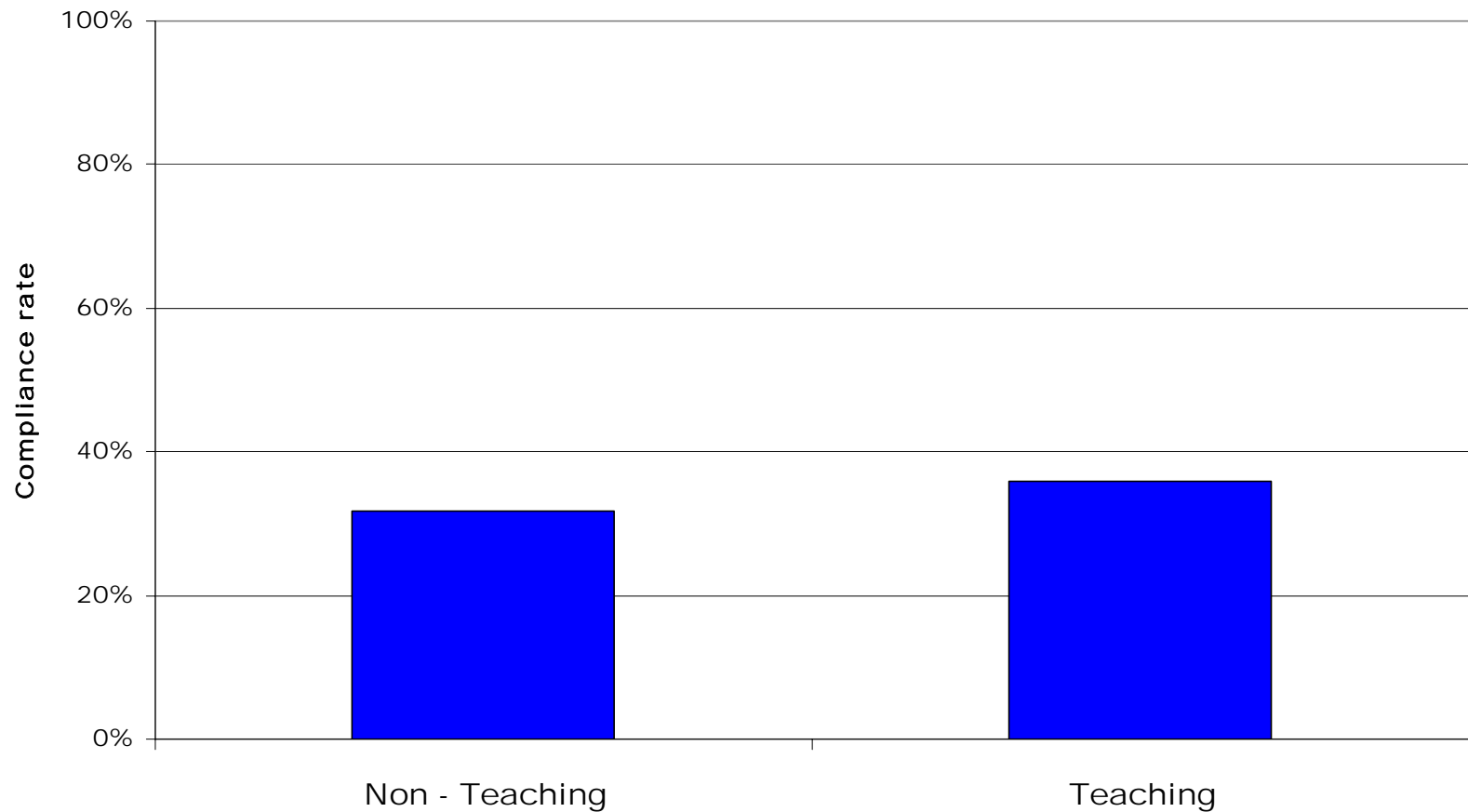
Results – by hospital population

Compliance Rate by Provider Population



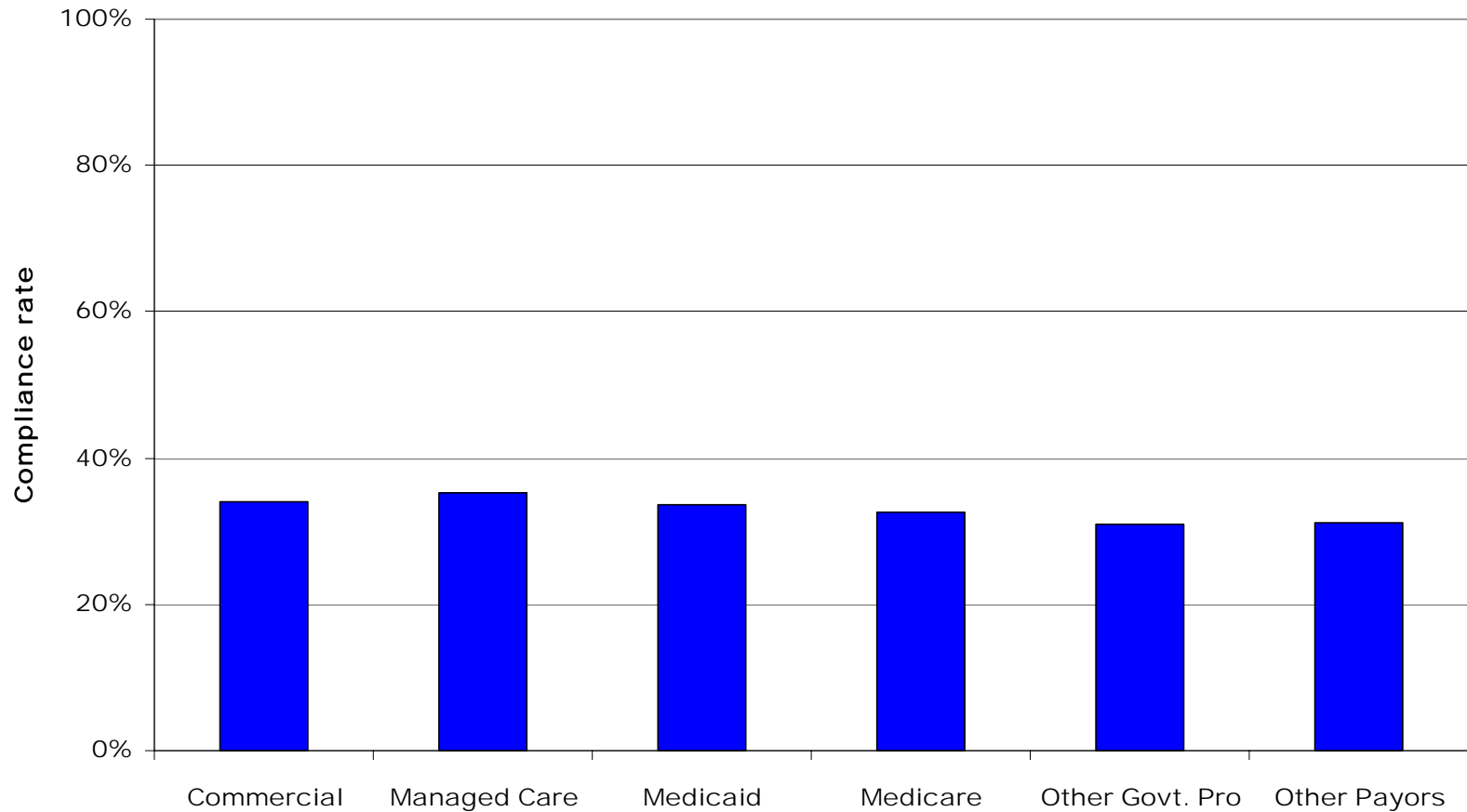
Results – by teaching status

Compliance Rate by Teaching Status



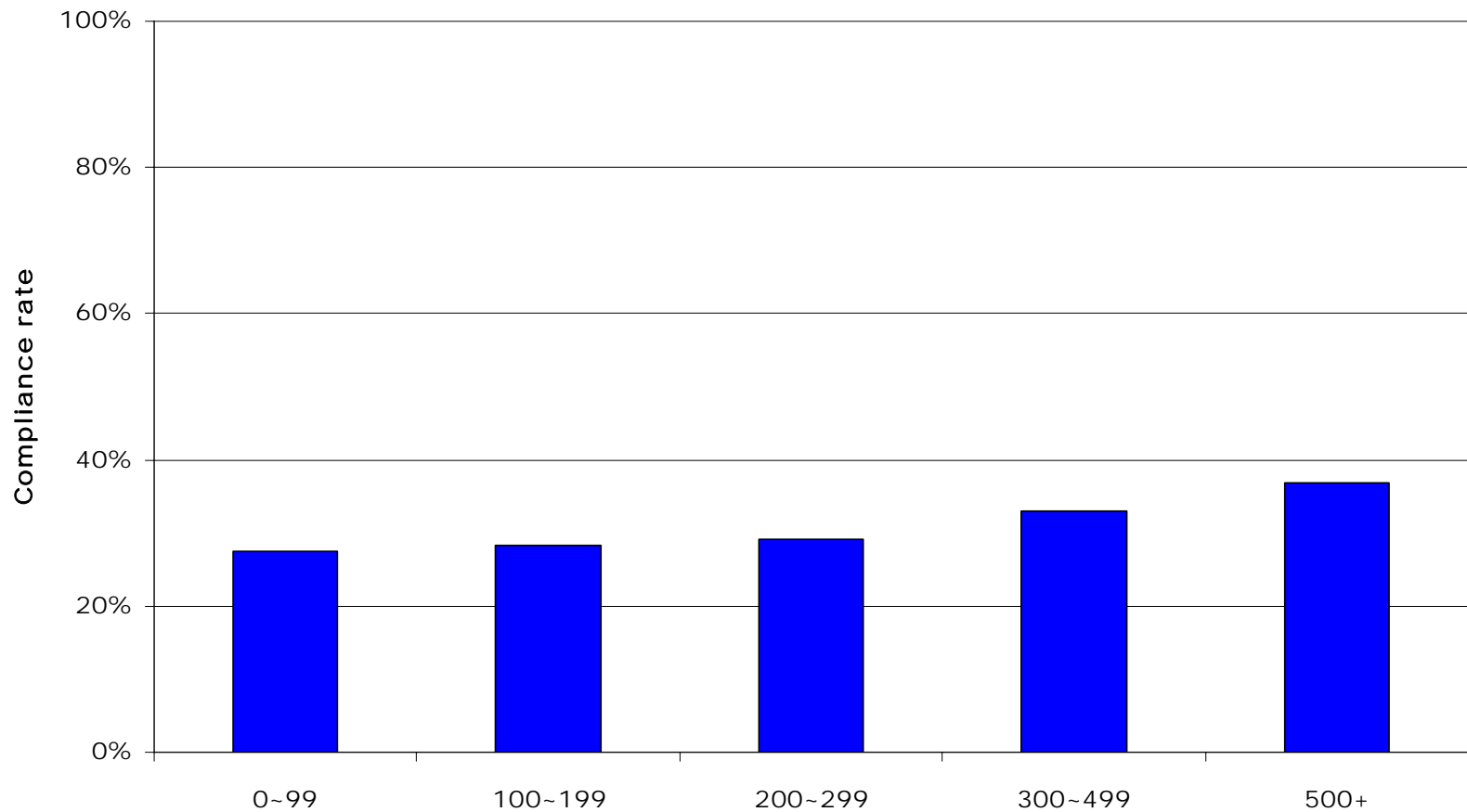
Results – by primary payer

Compliance Rate by Primary Payor



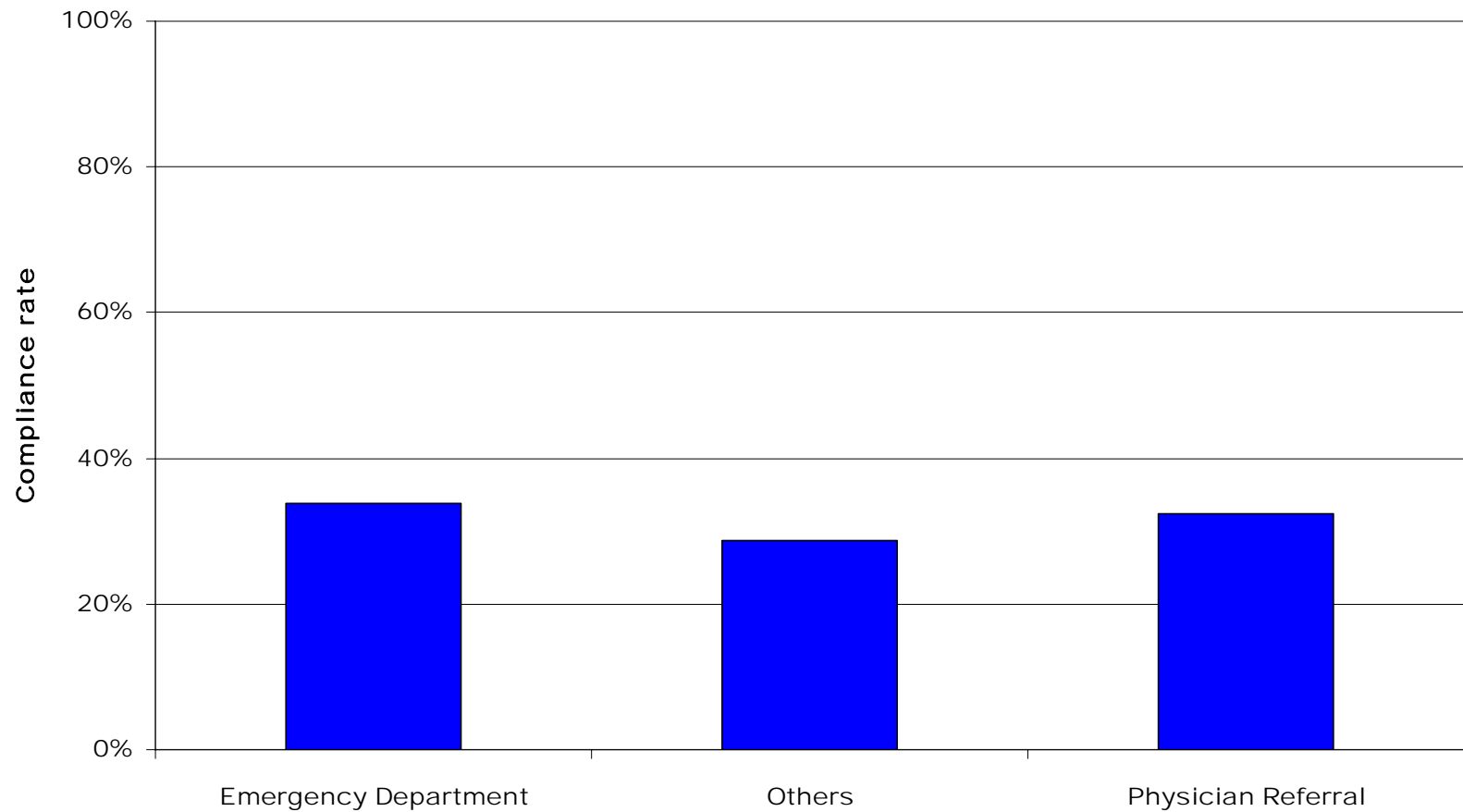
Results – by hospital bed size

Compliance Rate by Hospital Bed Size



Results – by admission source

Compliance Rate by Admission Source



Implications

- There is a significant gap in adherence to ACCP guidelines in surgical and medical patients.
- Two out of three patients did not receive the recommended thromboprophylaxis
- Rates for orthopedic surgery were significantly higher than other surgical procedures
- Care processes across specialty may require further study.
- More effort is required to increase awareness of ACCP recommendations for thromboprophylaxis.

Call to action

“Deep-vein thrombosis is preventable. We can reduce the risks of its serious and life-threatening complications if we raise education and awareness among the public and urge all healthcare providers to institute standard preventive measures.”

Bruce Evatt, M.D., Chief of the Hematologic Diseases branch at the CDC.