

# Pediatric Readmissions: Development of a New Federally-Sponsored Measure

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# Why Measure and Prevent Readmissions?

Readmissions are

- A potential signal of increased disease morbidity
- A patient-centered quality outcome
  - Reflect effectiveness of care coordination and care transitions
- Responsible for exposure to safety risks of hospitalization
- Disruptive to patients and families
- Costly



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# Adult Readmissions Overview

- CMS publicly reports 30-day Medicare readmission rates for:
  - Acute myocardial infarction (20%)
  - Heart failure (25%)
  - Pneumonia (18%)
- Reporting for all-condition readmissions and readmissions for other specific conditions is coming
- Rates for adults show significant variation across hospitals
  - Suggests some readmissions might be preventable
- CMS reduces Medicare payments to hospitals with readmission rates significantly above average



# Pediatric Readmission Measure Development Process

- Literature review
- Expert interviews
- Exploratory analytical work, including analysis of pediatric readmission prevalence
- Development of all-condition measure
- Development of condition-specific measures
- Pilot testing of measures



# Measure Outcome

$$\frac{\# \text{ of index admissions with } \geq 1 \text{ readmission within 30 days}}{\text{Total } \# \text{ of index admissions}}$$



# Measure Focus

- Population: Patients aged <18 years old
- Facilities: General acute care hospitals, including children's hospitals
- Data source: Administrative claims (using ICD-9-CM codes)



# Exclusions

## Hospitalizations for:

- Birth of healthy newborns
- Mental health conditions
- Obstetric care, including labor and delivery

## Readmissions for:

- Chemotherapy
- Planned procedures



# Adjustment

Readmission rates adjusted to account for differences in hospitals' patient populations

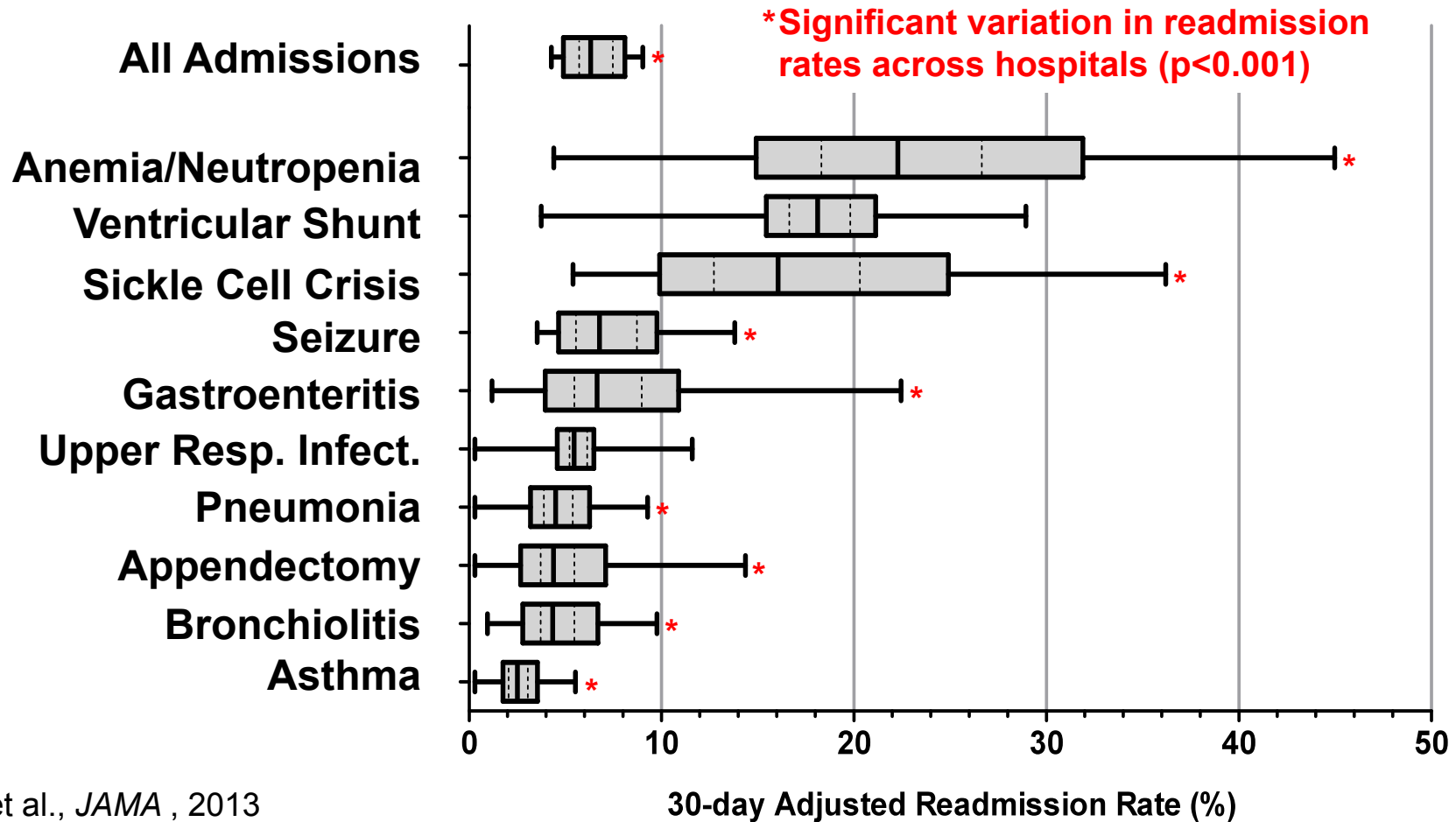
- Age
- Gender
- Chronic conditions
- Insurance status





# Variation in Pediatric Readmissions

Adjusted 30-Day Readmission Rate Variation Across 72 Children's Hospitals for Condition-Specific Admissions



Berry et al., *JAMA*, 2013

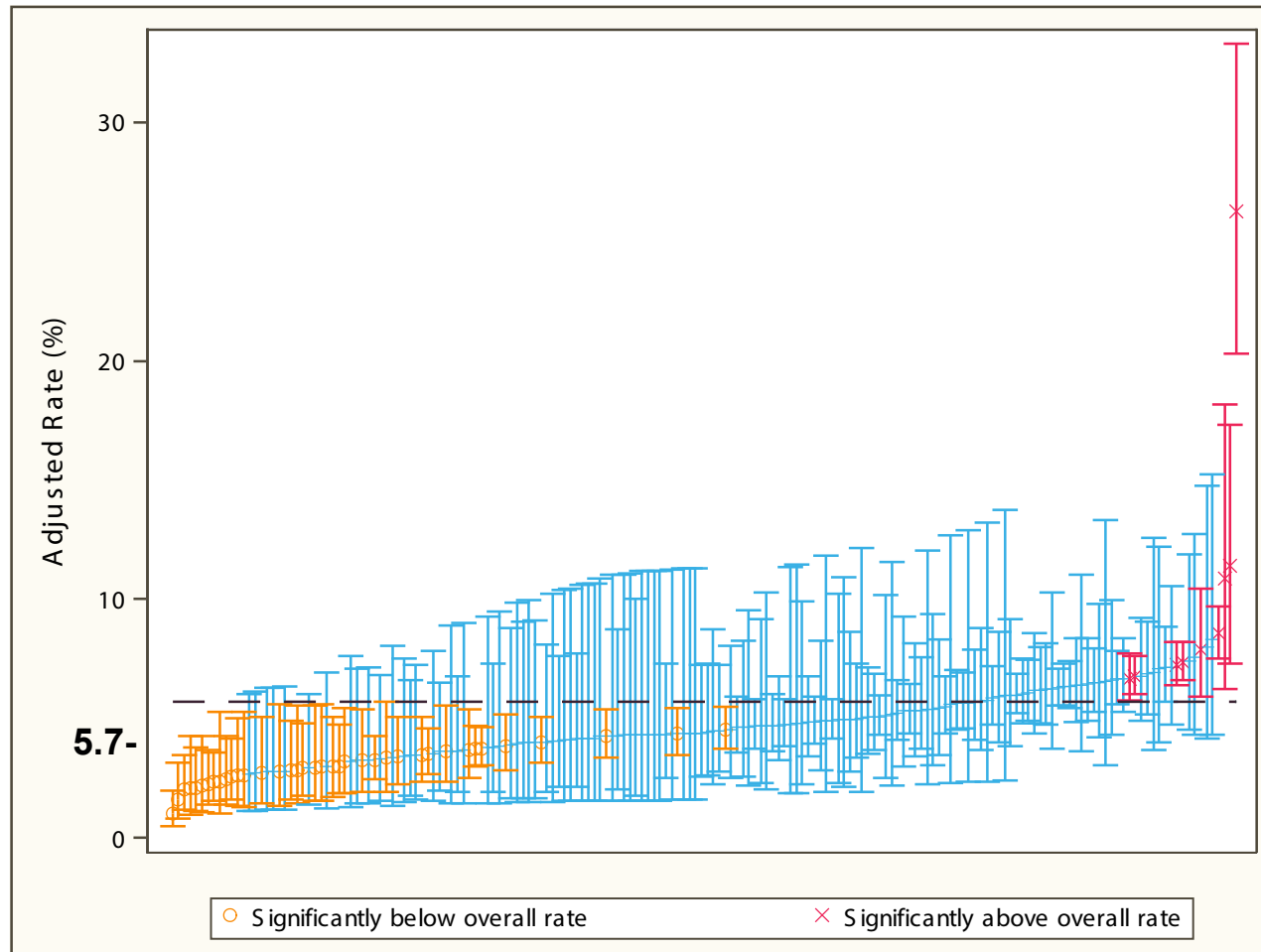


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# Case-Mix-Adjusted Readmission Rates: New York, 2008



AHRQ Revisit dataset



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# Next Steps

- Pilot testing by the New York State Quality and Safety Office
  - Other states?
- Development of condition-specific readmission measures
  - Appendectomy
  - Lower respiratory infection
  - Potentially others, such as mental health conditions?
- Exploration of reasons for readmission



# Potential Users of Measure

- CMS
- States
  - By Medicaid/SCHIP programs
  - For state-wide reporting (using all-payer claims datasets)
- Private insurers
- Hospitals



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