

Evolving Trends in the Inpatient Care of Early Onset Scoliosis

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Disclosures

- **Murphy** – committee member: POSNA, SRS
- **Barfield** – none
- **Corrigan** – none
- **Sawyer** - Mosby: Publishing royalties, financial or material support
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Background

- EOS  rapidly advancing/evolving field

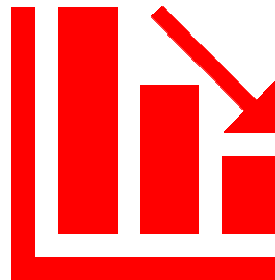
- 10 year 
 - Patient population
 - Inpatient hospital experience
 - Financial metrics

Hypothesis

- # patients
- associated hospital charges



- average length of stay
- rate of complications



Methods **PHIS** *Pediatric Health Information System*



PHIS – Pediatric Health Information System

Aged 0-10

Diagnosis of scoliosis
2009-2018.

Methods

- Average Number of cases/center
- Average length of stay
- Rate of complications
- Hospital based charges

Results

- 50 participating children's hospitals



Number of Patients Treated



treated at each hospital

- 2009: 58

- 2018: 75 (range 20-217)

- $p=0.012$



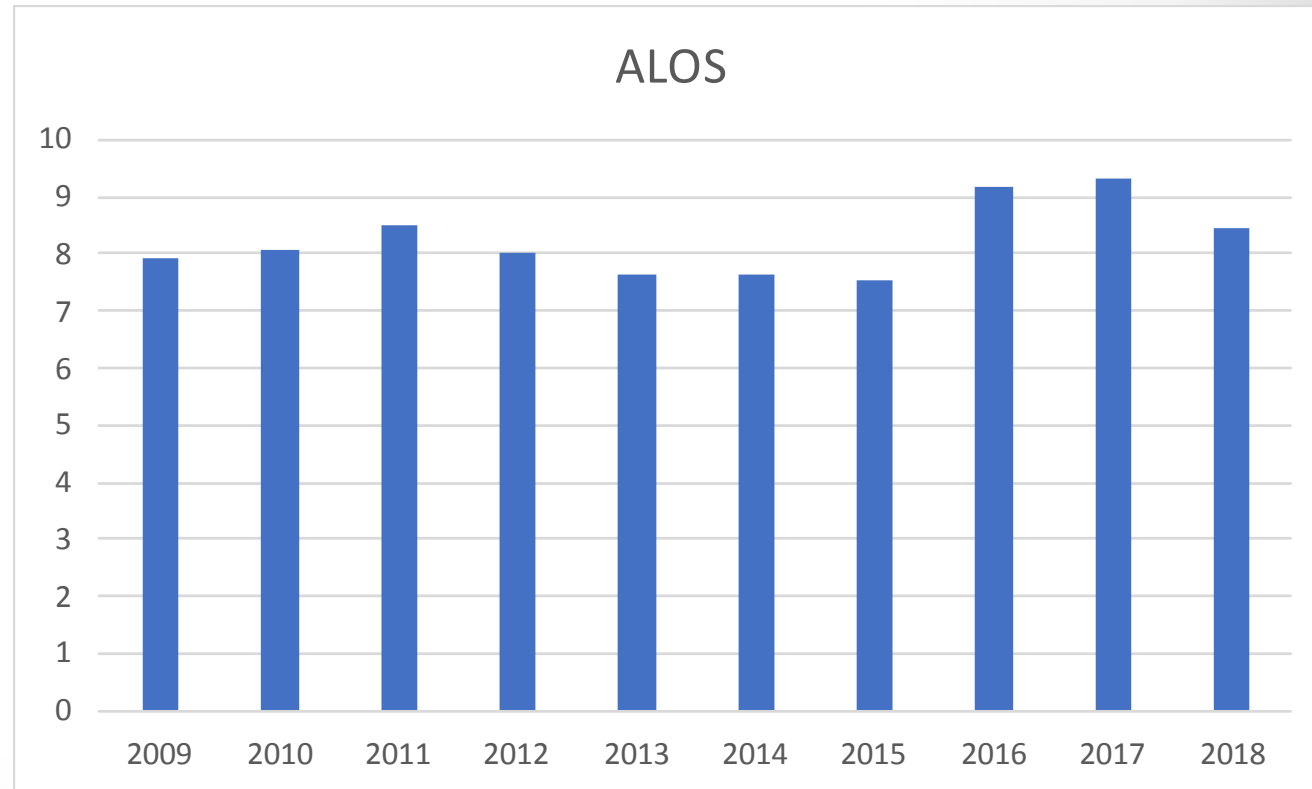
Length of Stay

- Similar across all years

- 2009: 7.95 days

- 2018: 8.08 days

- $p=0.83$



Surgical Complications

Rates unchanged

○2009: 17%

○2018: 17%

• $p=0.95$



Medical Complications

- Increase in the rates of medical complications
 - 2009:0.36%
 - 2018: 1.4%
 - $p=0.004$
- Increase in the rate of infection
 - 2009: 39%
 - 2018: 47%
 - $p=0.007$

Medical Complications

- Increase in the rates of medical complications
 - 2009: 0.36%
 - 2018: 1.4%
 - $p=0.004$
- Increase in the rate of infection
 - 2009: 39%
 - 2018: 47%
 - $p=0.007$

Hospital Based Charges

2X  during study period

2009: \$80,753

2018: \$145,311

$p=0.001$



Conclusions

Patient Volume Increasing

Room for Quality Improvement?

Charges up

LOS Stable

High rates of infection with these kids

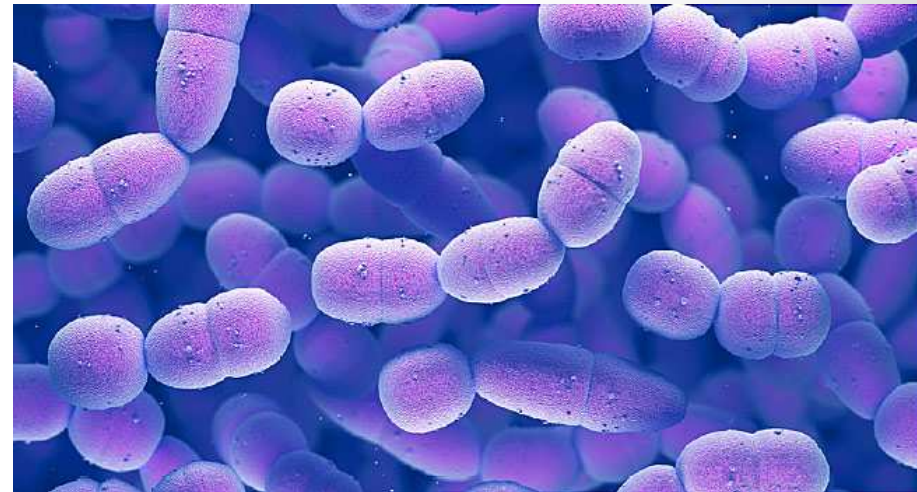
Limitations

- PHIS
- Associated Diagnosis of EOS – for ALL admissions
- Not linked to procedures/CPT codes



Take Home

- Volume Up
- Room for Improvement
 - 8-day (!!) hospital stay
 - 47% (!!) rate of infection



SICKER PATIENTS???

Thank You

