

### 3782.9] Length of Stay Variation by Hospital Type

Svetlana Katsnelson, George E. Fryer, Jr., Daniel A. Rauch.. Pediatrics, New York University School of Medicine, New York, NY.

**BACKGROUND:** Hospitals and hospitalists are increasingly being asked to measure their outcomes. An easy metric to assess is length of stay (LOS). However, there are no national standards for LOS. Furthermore, where some data exists for specific diagnoses, it is unclear if the data is comparable to the results from a single institution or provider.

**OBJECTIVE:** To establish the mean LOS for the most common pediatric DRGs and examine the effect of several hospital variables on LOS.

**DESIGN/METHODS:** We utilized the Kids Inpatient Databases (KID) of 2003 to establish the most common medical and surgical DRGs for children. Newborn, psychiatric, and oncologic DRGs were not considered. 8 of the most common (5 medical, 3 surgical) were analyzed to establish the mean LOS and examine the effect of hospital type (HT, not a NACHRI hospital vs free standing children s hospital v children s unit in general hospital), teaching status (TS), region, and location (urban vs rural) on LOS. The 8 DRGs were: viral meningitis (VM), cellulitis, simple pneumonia, kidney and UTI, bronchitis and asthma, craniotomy, appendectomy (AP), and lower extremity and humerus (LE &H). SUDAAN software was used to accommodate the complex sample design of the KID.

**RESULTS:** For the 8 DRGs there were varying effects on LOS of hospital variables. All DRGs except craniotomy had significant differences in LOS based on one of the variables. Region was a significant factor for all medical DRGs. HT and TS were significant for half the DRGs.

Multivariate LOS analysis

DRG (Mean LOS)	HT	TS	Region	Location
VM (2.72)	NS	NS	p=.0000	NS
Pneumonia (2.94)	p=.0000	p=.0031	p=.0000	p=.0002
Asthma (2.56)	p=.0000	NS	p=.0000	NS
Cellulitis (2.95)	NS	p=.0142	p=.0000	p=.0000
UTI (3.14)	p=.0071	NS	p=.0000	p=.0075
Craniotomy (7.88)	NS	NS	NS	NS
AP (1.81)	NS	p=.05	p=.0003	NS
LE &H (1.99)	p=.0000	p=.0000	NS	NS

NS=not significant

**CONCLUSIONS:** National means for LOS can be established from the KID database. Significant variation occurs based on hospital variables. To truly assess an individual hospital's LOS for a given DRG it will be necessary to compare to similar type hospitals within the region. These standards should be made available on a regular basis so that LOS data can be compared meaningfully.

First Author is a Medical Student  
E-PAS2008:633782.9