require chronic medical support that also affects the characteristics of children admitted to the PICU. To emphasize this change in the PICU population, we described 20-year time trends in long duration admission and readmissions on a Dutch PICU.

**METHODS:** All patients aged 0-17 years admitted to the PICU Academic Medical Center, Amsterdam, The Netherlands between 1997 and 2017 were extracted from the PICE registry. Main outcome measures were: number of admissions and readmissions within the first year after discharge, length of PICU stay and cumulative admission days.

**RESULTS:** A total of 8,234 children (42.2% female, median age at admission 2.2 years (IQR 0.4-8.4)), were admitted on 11,195 occasions and accounted for 48,964 cumulative admission days. Between 1997 and 2012 the percentage of long stayers (i.e. admission ≥30days) increased from 1.5% to 3.0% annually, and decreased to 1.9% in 2017. Subsequently, cumulative admission days for long stayers increased between 1997 and 2012 from 28% to 45% of total cumulative admission days, and decreased to 34% in 2017. Readmission occurred overall in 1,510 patients (18.3%). Frequent flyers (i.e. ≥3readmissions; n=136, 1.7%) accounted for 5,178 cumulative admission days (10.6% of total admission days); no changes in time were observed.

**CONCLUSIONS:** Over the last 20 years significantly more patients were admitted for ≥30 days resulting in an increased burden on the PICU. This demands a new perspective to address this growing population of chronically ill patients admitted to the PICU.

**P0308 / #881**

**PAEDIATRIC SCOLIOSIS REPAIR: ASSESSING POST-OPERATIVE MONITORING AND THERAPEUTIC INTERVENTION REQUIREMENTS.**

S. Medani, R. Smyth, S. Agrawal

Addenbrookes Hospital, Paediatric Intensive Care, Cambridge, United Kingdom

**AIMS & OBJECTIVES:** Paediatric scoliosis surgery is associated with postoperative complications. Patients are routinely admitted post-operatively to the high-dependency unit (HDU) or paediatric intensive care unit (PICU) for close monitoring. Bed pressures lead to cancellations and cause significant stress. Objective was to assess if different types of scoliosis were associated with HDU/PICU length of stay (LOS) and with the requirement for intensive care interventions.

**METHODS:** Retrospective data collection from electronic health records for patients admitted to HDU/PICU following scoliosis surgery from 01/11/2014 to 01/10/2018. Variables studied included: age, type of scoliosis, LOS on HDU/PICU, and need of therapeutic interventions. JASP was used for statistical analysis.

**RESULTS:** There were 149 patients with a mean age of 12.9 years (3-18 years); 91 had primary scoliosis (14 Congenital, 77 Idiopathic) and 58 had secondary scoliosis (including neuromuscular and syndromic-scoliosis). Mean LOS was 1.36 and 2.5 days in primary and secondary groups respectively. This result was skewed by a lengthy admission for one patient. Thirteen patients required invasive ventilation; one from the primary and twelve from the secondary group (p<0.001). Four patients required vasopressor support; all were from the secondary group. There were non-significant relationships between LOS and recorded measures of Cobb angle and preoperative lung function.

**CONCLUSIONS:** Results of this study suggest that patients with scoliosis can be stratified as low and high-risk based on their underlying condition (primary vs secondary). This can help with post-operative admission planning and anticipating LOS in HDU/PICU and the need for respiratory and haemodynamic support. Further studies are needed to confirm these results.