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| **Author (year)** | **Study design** | **Number of patients** | **Age** | **Patient population** | **Study variables  (socio-economic status, insurance type, ethnicity, environment, sex)** | **Primary and secondary outcome variables** |
| **Bratton et al., (2002)** | Retrospective cohort study | 1333 | <18 years | Children with a primary diagnosis of asthma admitted to one of 14 PICU’s in the U.S.A. | Insurance type (commercial, health maintenance organization, Medicaid, self-pay or ‘other’) | PICU LOS, hospital LOS, duration of mechanical ventilation, PRISM-III score |
| **Epstein et al., (2014)** | Retrospective observational study | 5390 | 1-12 years | Children with a primary respiratory diagnosis admitted to the PICU in the U.S.A. | Ethnicity, neighborhood’s ethnicity and median income, insurance type | PIM2-score, mortality |
| **Files et al., (2009)** | Retrospective chart review | 125 | <18 years | Children with asthma admitted to the PICU in the U.S.A. | Ethnicity | Need for PICU admission, mechanical ventilation |
| **Frigyesi et al., (2017)** | Prospective observational study | 21972 | <18 years | Children with a respiratory insufficiency admitted to the PICU in Sweden | Sex | PICU LOS, mortality |
| **Hardelid et al., (2018)** | Retrospective data analysis | 1961 | < 16 years | Children with an influenza infection admitted to the PICU in England | Ethnicity, socio-economic status | Mortality, type of ventilation |
| **Jroundi et al., (2019)** | Retrospective cohort study | 13501 | 2-17 years | Children from four states in the U.S.A. hospitalized for asthma with a prior asthma-related admission to a PICU | Ethnicity, median household income for the state, type of medical insurance | Asthma-related readmission |
| **Leimanis Laurens et al., (2020)** | Retrospective chart review | 187 | <5 months | Infants admitted to the PICU in the U.S.A. with a severe respiratory illness | Diet (breastfed, formula fed), insurance status,  median household income (from zip code) | PICU LOS, readmission, mortality |
| **Mukherjee et al., (2022)** | Prospective observational study | 2195 | <14 years | Children with asthma admitted to the PICU in England | Socio-economic status (English Index of Multiple Deprivations categorized in domains of income, employment, health, education, housing, crime and living environment) | PIM2-score, mechanical ventilation, PICU LOS, survival |
| **O’Donnell et al., (2010)** | Prospective observational study | 4641 | <1 year | Infants with an acute respiratory failure admitted to the PICU in England or Wales | Ethnicity | Mortality |
| **Rodriguez-Martinez et al., (2022)** | Cross-sectional cohort study | 1215 | <5 years | Children with an infection with RSV admitted to the PICU in Colombia | Ethnicity, socioeconomic stratum (high, middle and low based on socioeconomic factors, such as income, employment, housing, and education), type of health insurance coverage | Respiratory failure (need for (non)-invasive ventilatory support), need for PICU admission, mortality |
| **Sala et al., (2011)** | Retrospective data analysis | 3318 | <18 years | Children with asthma admitted to the PICU with respiratory failure in the U.S.A. | Ethnicity | PICU LOS, PIM2-score, PRISM-III score, respiratory failure (mechanical ventilation) |
| **Samir et al., (2011)** | Retrospective study | 230 | 2-11 years | Children with asthma admitted to a PICU in Canada | ETS | PICU LOS, clinical asthma score |
| **Silber et al., (2017)** | Multivariate matched cohort design | 11079 | 3-18 years | Children with asthma admitted to the PICU in the U.S.A. | Ethnicity, medical insurance type | PICU LOS, need for PICU admission |
| **Slain et al., (2018)** | Single-center retrospective study | 145 | 2-11 months | Infants with a bronchiolitis admitted to the PICU in the U.S.A. | Median household income, ethnicity | PICU LOS, hospital LOS, PIM2-score, mechanical ventilation |
| **Swathi et al., (2021)** | Prospective observational study | 2793 | 2 months-5 years | Children and infants with an acute respiratory disease admitted to the PICU in India | Breastfeeding practices (diet), socioeconomic class as per modified Kuppuswamy scale | Hospital LOS, need for PICU admission, mechanical ventilation, mortality |