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| **Patterns of prescribed asthma medicine use in Australian children: a population-based study** |
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| **Introduction/Aim:** Despite the widespread availability of asthma management guidelines, variation in asthma medicine prescribing practices has been observed in the paediatric population. We aimed to characterise the utilisation of asthma medicines subsidised by the Pharmaceutical Benefits Scheme (PBS) in Australians aged <18 years.  **Methods**: We used a 10% sample of individual-level PBS claims (July 2012-December 2016) for Australian children dispensed asthma medicines to examine annual trends in incident and prevalent use (for 2014-2016). We used a 12-month lookback period to define incident use and applied one tenth of the Australian Bureau of Statistics midyear population of residents ≤18 as the denominator for incidence and prevalence per 100 estimates  **Results:** During 2014-2016, 160,632 children were dispensed an asthma medicine; 72,159 (45%) were girls and the median age was 5 years (IQR 2-10 years). Annually, an average of 81,404 children were dispensed at least one asthma medicine. The annual incidence of asthma medicines use ranged from 8.5-8.9% and annual prevalence’s ranged from 13.5-14.6%.  The proportion of children who initiated fixed dose combination inhalers (FDC) annually was 1.2%, 1.1% and 1.0% for 2014, 2015 and 2016 respectively. Similarly the proportion of children who initiated inhaled corticosteroid (ICS) was 1.7%, 1.9% and 1.8% for 2014, 2015 and 2016. The proportion of children who initiated FDC without ICS in the preceding 12 months was around 1% annually. The total market share for the entire period for FDC was 12.43% amounting to a total of AUD 66,629,640.  **Conclusion:** Our data suggest that while the proportion of Australian children using asthma medication remained constant, a large proportion of children initiated FDC without a preceding ICS indicating prescribing of asthma medications not consistent with national guidelines.    **Grant Support: This work was funded by Rotary Club of Sydney Cove.** |