

Primary clinical reasons for admission of term infants to neonatal care in England

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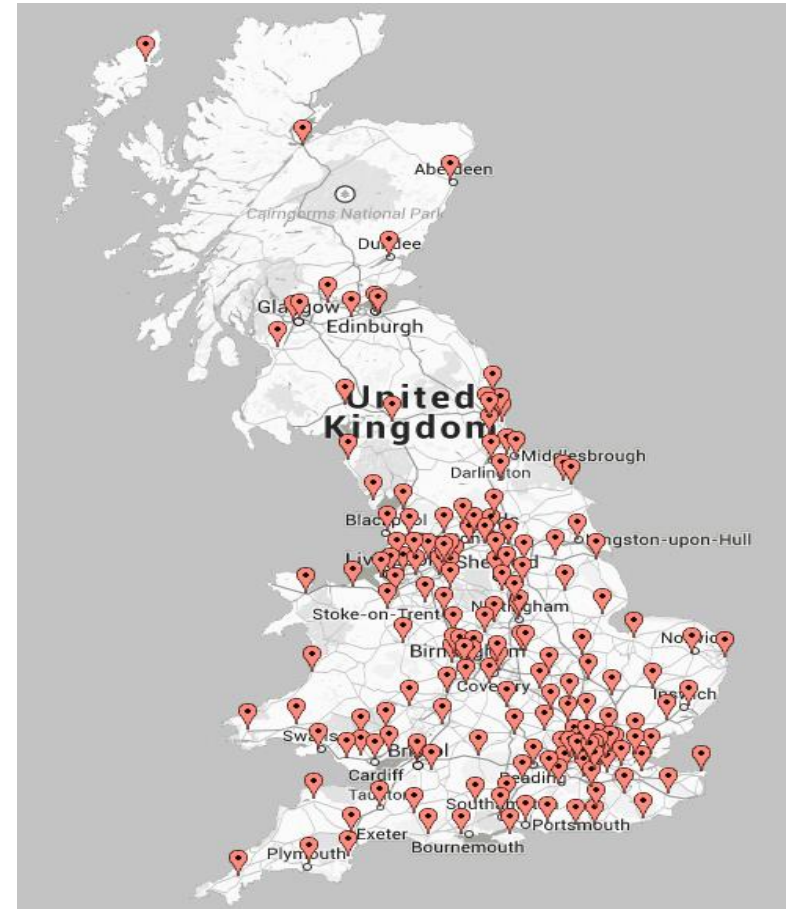
Background

- Indicator 5.5 is based upon a commitment to reduce incidents leading to severe harm and death
- Recent ONS data has shown that term admissions to neonatal care are increasing
- Existing literature shows that some term admissions may be modifiable (Tracy et al 2007)

- To carry out an analysis for NHS England on term admissions to neonatal care
- To identify term admissions to Neonatal Units in England using the National Neonatal Research Database
- To identify the top 5 reasons for term admissions
- To inform discussions on further analyses and interventions to reduce term admissions

Data source

- Data obtained from the National Neonatal Research Database (NNRD)
- This comprises extracts from the electronic health records of all admissions to NHS Neonatal Units (NNU)
- Electronic health record information documented by clinical staff
- 171 NNU in England contributed data to the NNRD in 2011, 165 in 2012, and 163 in 2013 (100%)



Patient characteristics

- Live born term infants (≥ 37 weeks gestational age) admitted to NNU in England (first admission only) from 01 January 2011 to 31 December 2013
- Admitted within the first 28 days of birth
- Received at least 1 day of care on a Neonatal Unit
- Term infants with major congenital anomalies (N=1123) excluded
- Data on “primary clinical reason for admission” were extracted

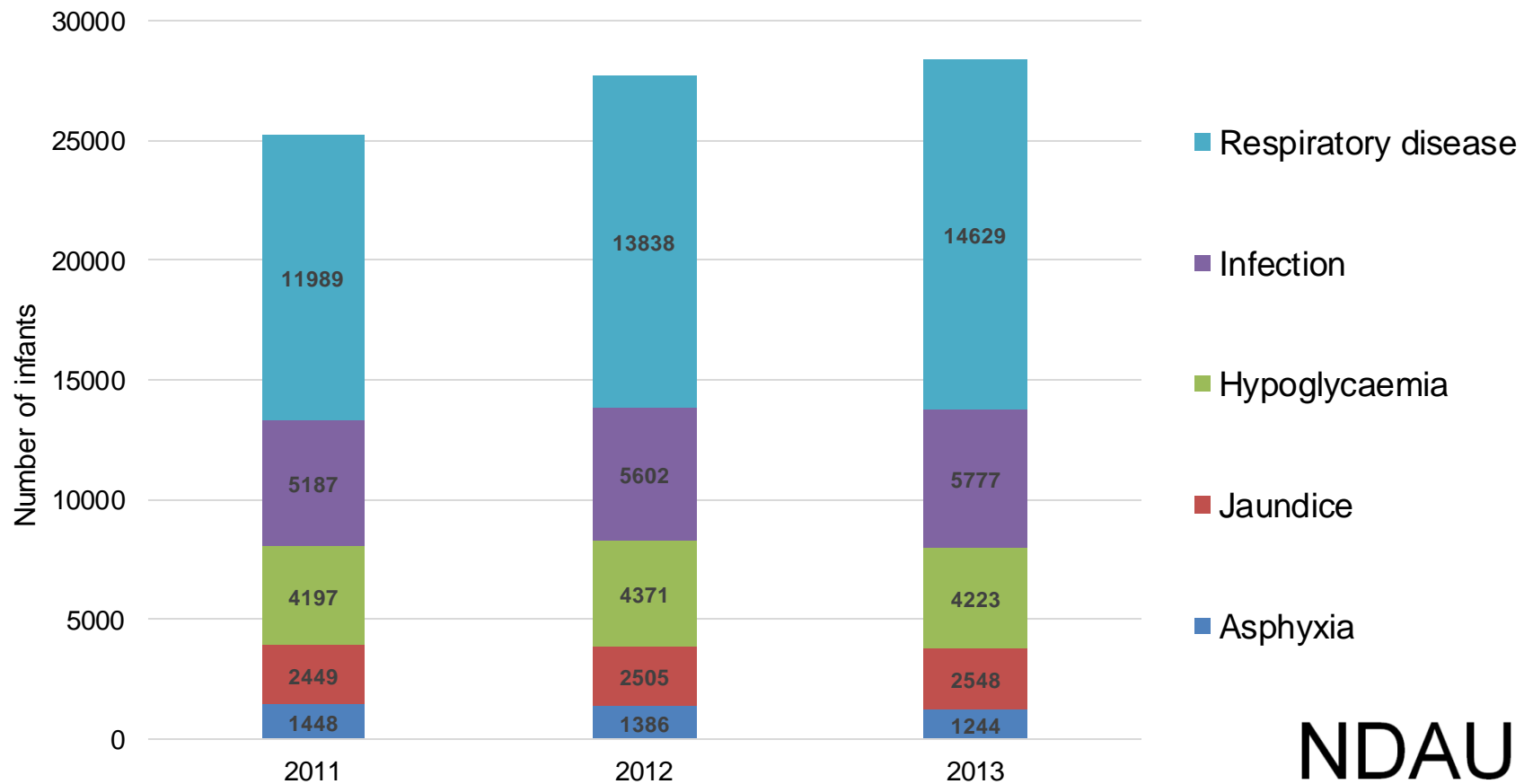
Methods

Each of the 5 primary clinical reasons for admission were cross-tabulated using a range of variables that include (depending on the reason for admission):

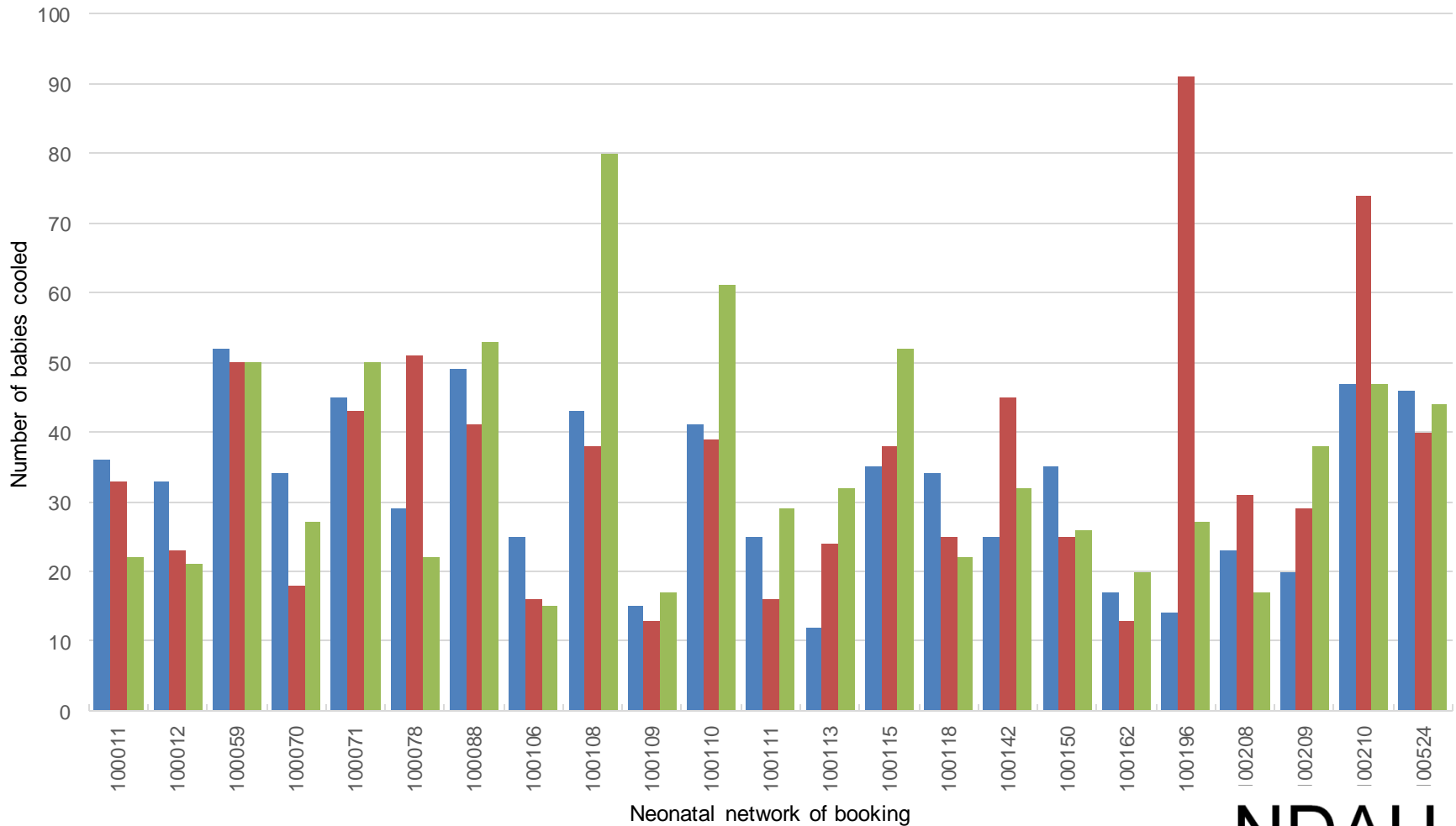
- Gestational age
- Problems during pregnancy
- Mode of delivery
- Meconium staining
- Antenatal steroids
- Admission source location
- Mother's rhesus type
- Mother's ethnicity

Five primary clinical reasons for admission

Term infants receiving at least 1 day of Neonatal Unit care by admission year
01 January 2011 to 31 December 2013



Therapeutic hypothermia



Discussion

- Over 30,000 term infants are admitted to NHS neonatal units in England each year
- This equates to approximately 5% of all term births and approximately half of all neonatal unit admissions
- The top 5 reasons for admission are also high cost litigation issues (hypoglycaemia, jaundice, and asphyxia)
- Term admissions for respiratory disease appear to be increasing
- Further evaluation is necessary to determine the extent to which term admissions are preventable