Supplementary file 1

Diagnostic codes† extracted from the National Neonatal Research Database (NNRD):

Respiratory distress syndrome if any of the following:

'15574'- signs of respiratory distress of newborn
'15572'- Respiratory distress syndrome
'11010179'- respiratory distress-signs of
'15571' Respiratory Distress (ARDS)

Pulmonary hypoplasia if any of the following:

'16143'- Hypoplastic lungs
'16154'- Hypoplasia and dysplasia of lung
'10892'- Pulmonary hypoplasia
'16151'- Agenesis of lung

Persistent pulmonary hypertension of the newborn if any of the following:

'15241'- Primary pulmonary hypertension (not PPHN)
'15242'- Secondary pulmonary hypertension (not PPHN)
'10010891'- Pulmonary hypertension (secondary)
'10891'- Pulmonary hypertension (secondary)
'10890'- Pulmonary hypertension (primary)
'10010890'- Pulmonary hypertension (primary)
'15621'- Pulmonary hypertension (PPHN)
'10829'- Persistent Pulmonary Hypertension of the Newborn (PPHN)
'15630'- Persistent Pulmonary Hypertension (PPHN secondary to other condition)
'15629'- Persistent Pulmonary Hypertension (PPHN: idiopathic)

Meconium Aspiration Syndrome:

'15588'- Meconium aspiration syndrome

Congenital pneumonia if any of the following:

'15577'- Congenital pneumonia due to viral agent
'15581'- Congenital pneumonia due to Streptococcus, group B
'15580'- Congenital pneumonia due to Staphylococcus
'15583'- Congenital pneumonia due to Pseudomonas
'15585'- Congenital pneumonia due to other organisms
'15584'- Congenital pneumonia due to other bacterial agents
'15582'- Congenital pneumonia due to Escherichia coli
'15578'- Congenital pneumonia due to Chlamydia
'15586'- Congenital pneumonia (unknown or unspecified cause)
'15587'- Congenital pneumonia
Congenital diaphragmatic hernia if any of the following:

'16495'- Congenital diaphragic hernia
'16497'- Eventration of diaphragic hernia
'1001925'- Unspecified repair of diaphragmatic hernia
'1006671'- Repair of congenital diaphragmatic hernia
'10905'- Recurrent congenital diaphragmatic hernia
'11660'- Prosthetic repair of congenital diaphragmatic hernia (specify)
'11657'- Primary repair of congenital diaphragmatic hernia
'1001924'- Other specified repair of diaphragmatic hernia
'11597'- Other repair of diaphragmatic hernia (specify)
'10694'- Morgagni diaphragmatic hernia
'1015977'- Diaphragmatic hernia - right
'1015978'- Diaphragmatic hernia - left
'1010217'- Diaphragmatic hernia - left
'10010246'- Diaphragmatic hernia - congenital

Prolonged rupture of membranes >24 hr if any of the following:

'15406'- Prolonged preterm rupture membranes >24hr
'15459'- Prolonged rupture membranes (PROM: Term)
'15407'- Prolonged rupture membranes >24hr
'15462'- Preterm pre-labour rupture of membranes (PROM >24hrs)

† These diagnostic codes are specific to the Badger Net EPR system developed by Clevermed Ltd and from which the NNKD pulls neonatal data.
Supplementary file 2

Congenital heart disease diagnoses in order of frequency

<table>
<thead>
<tr>
<th>Diagnoses</th>
<th>&lt;29</th>
<th>29 to 33</th>
<th>≥34</th>
<th>N (column percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventricular Septal Defect (VSD)</td>
<td>79</td>
<td>85</td>
<td>160</td>
<td>324 (27.9%)</td>
</tr>
<tr>
<td>Atrial Septal Defect (ASD)</td>
<td>111</td>
<td>52</td>
<td>96</td>
<td>259 (22.2%)</td>
</tr>
<tr>
<td>Pulmonary stenosis</td>
<td>31</td>
<td>23</td>
<td>15</td>
<td>69 (5.9%)</td>
</tr>
<tr>
<td>Transposition of the great arteries</td>
<td>4</td>
<td>11</td>
<td>52</td>
<td>67 (5.8%)</td>
</tr>
<tr>
<td>Ventricular hypertrophy</td>
<td>11</td>
<td>13</td>
<td>26</td>
<td>50 (4.3%)</td>
</tr>
<tr>
<td>Atrioventricular Septal Defect (AVSD)</td>
<td>1</td>
<td>8</td>
<td>25</td>
<td>34 (2.9%)</td>
</tr>
<tr>
<td>Coarctation of aorta</td>
<td>4</td>
<td>7</td>
<td>19</td>
<td>30 (2.6%)</td>
</tr>
<tr>
<td>Congenital malformations of cardiac chambers and connections</td>
<td>2</td>
<td>4</td>
<td>23</td>
<td>29 (2.5%)</td>
</tr>
<tr>
<td>Tetralogy of Fallot</td>
<td>5</td>
<td>6</td>
<td>14</td>
<td>25 (2.2%)</td>
</tr>
<tr>
<td>Other congenital heart diagnoses</td>
<td>34</td>
<td>55</td>
<td>186</td>
<td>275 (23.7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>282</td>
<td>264</td>
<td>616</td>
<td>1162</td>
</tr>
</tbody>
</table>