It is well-documented that prior to discharge late preterm (LPT) infants (34 to 36 completed weeks' gestation) exhibit greater neonatal morbidity (hyperbilirubinemia, hypoglycemia, respiratory distress, sepsis, temperature instability) than full-term (FT) infants (37-41 completed weeks' gestation). Even healthy LPT infants, those with birth hospitalization ≤3 days, have been shown to have higher rates of post neonatal morbidity than FT infants. Information regarding post-birth rehospitalization among healthy LPT and healthy FT infants is limited.

**BACKGROUND**

- Rates of rehospitalization, ICD9 diagnoses, and median rehospitalization charges for healthy LPT infants (37-41 completed weeks' gestation).
- Even healthy LPT infants, those with birth hospitalization ≤3 days, have been shown to have higher rates of post neonatal morbidity than FT infants.
- Information regarding post-birth rehospitalization among healthy LPT and healthy FT infants is limited.

**OBJECTIVE**

- Compare post-birth rehospitalization rates, diagnoses, and charges of healthy LPT and healthy FT infants.

**DESIGN/METHODS**

- Birth certificate records were linked to hospital discharge records for five Florida birth cohorts (2002-2006).
- Merge rates exceeded 90%.
- Study sample consisted of singleton infants free from congenital anomalies and healthy (birth hospitalization ≤3 days): 40,260 LPT and 769,644 FT.
- Rates of rehospitalization, ICD9 diagnoses, and median hospital charges through the 1st year were computed for both groups of healthy LPT and FT infants, using 4 time epochs: 0-7 days, 8-30 days, 31-180 days, and 181-365 days.
- In Florida, 69% of LPT infants were discharged in the first 3 days compared to 94% of FT infants.
- 16% of healthy LPT and 10% of healthy FT infants were rehospitalized in the first year.
- Within the first seven days, 6% of healthy LPTs were rehospitalized compared to 1% of healthy FTs.
- In Florida, 69% of LPT infants were discharged in the first 3 days compared to 94% of FT infants.
- 16% of healthy LPT and 10% of healthy FT infants were rehospitalized in the first year.
- Within the first seven days, 6% of healthy LPTs were rehospitalized compared to 1% of healthy FTs.

**RESULTS**

<table>
<thead>
<tr>
<th>Gestation</th>
<th>Median Post Birth Hospital Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-7 days</td>
</tr>
<tr>
<td>Healthy Late Preterm 34-36 weeks</td>
<td>$5590</td>
</tr>
<tr>
<td>Healthy Full Term 37-41 weeks</td>
<td>$4119</td>
</tr>
</tbody>
</table>

**CONCLUSIONS**

- Although LPT infants are less likely to be discharged in the first 3 days of life, those that are discharged are at increased risk of readmission in the first year compared to FT infants.
- There appears to be little difference in the chief reasons for rehospitalization of healthy LPT and healthy FT infants during the first year of life.
- However, the finding of a higher median first week rehospitalization charge among healthy LPTs suggests greater acuity for similar readmitting diagnoses.

**ACKNOWLEDGMENTS**

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