

-2.6 from the recommended nursing establishment. Following on from this, BadgerNet demonstrates lower than recommended provision of 'Qualified in Specialty' (QIS) nurses. 11 incidents were reported by Neonatal Unit staff during the same period (for June 2015 – March 2016) regarding staffing/acuity concerns. 5 (45%) were in November 2015 and 4 (36%) in December 2015.

Staff reported an incident on 18/02/16 confirming that the Neonatal Unit had to close to admissions due to acuity; neonate **I&S** died the same day.

4.0 Findings

Significance of change in mortality levels

There has been a step change in mortality levels in the Neonatal Unit since June 2015. The monthly average numbers and the frequency of mortality over time have increased.

Fluctuation due to common cause variation cannot account for the increased mortality seen in the Neonatal Unit.

Activity as a contributory factor

The number of admissions to the Neonatal Unit is recorded as higher than average for some months during 2015/16; the monthly 'total care days' also shows a sustained period of above average during this period.

Similar periods of increased activity recorded in previous years have not been associated with an increased mortality. Therefore activity levels alone cannot account for the increase but may be a contributory factor.

Acuity as a contributory factor

There is evidence of increased acuity within the second half of 2015 with high acuity 'care days' for both intensive care and high dependency care demonstrating a sustained run of above the average monthly figures over the period.

A sustained increase in low birth weight admissions (<2000g) also corresponded with the increase in mortality levels.

There were no notable trends in prematurity the second half of 2015, with the exception of a small increase in the rate of admissions at 31-36/40 gestation.

Therefore an increased and sustained acuity level may be a contributory factor.

Nurse Staffing Levels as a contributory factor

There is evidence that the Neonatal Unit does not consistently meet the BAPM recommended nurse staffing levels or the recommended provision of 'Qualified in Specialty' nurses.