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Validation of an Acuity Measurement Tool for Maternity Services

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Abstract: The TrendCare Patient Dependency System is currently utilized by a large number of Maternity Services across Australia, New Zealand and Singapore. In 2012, 2013, and 2014 validation studies were initiated in all three countries to validate the acuity tools used for Women in Labour, and Postnatal Mothers and Babies. This paper will present the findings of the validation study. Aim: The aim of this study was to; Identify if the care hours provided by the TrendCare Acuity System was an accurate reflection of the care required by Women and Babies. Obtain evidence of changes required to acuity indicators and/or category timings to ensure the TrendCare acuity system remains reliable and valid across a range of Maternity care models in three countries. Method: A non-experimental action research methodology was used across four District Health Boards in New Zealand, two large public Australian Maternity services and a large tertiary Maternity service in Singapore. Standardized data collection forms and timing devices were used to collect Midwife contact times with Women and Babies included in the study. Rejection processes excluded samples where care was not completed/rationed. The variances between actual timed Midwife/Mother/Baby contact and actual Trend Care acuity times were identified and investigated. Results: 87.5% (18) of TrendCare acuity category timings matched the actual timings recorded for Midwifery care. 12.5% (3) of TrendCare night duty categories provided less minutes of care than the actual timings. 100% of Labour Ward TrendCare categories matched actual timings for Midwifery care. The actual times given for assistance to New Zealand independent Midwives in Labour Ward showed a significant deviation to previous studies demonstrating the need for additional time allocations in Trend Care. Conclusion: The results demonstrated the importance of regularly validating the Trend Care category timings with the care hours required, as variances to models of care and length of stay in Maternity units have increased Midwifery workloads on the night shift. The level of assistance provided by the core labour ward staff to the Independent Midwife has increased substantially. Outcomes: As a consequence of this study changes were made to the night duty TrendCare Maternity categories, additional acuity indicators developed and times for assisting independent Midwives increased. The updated TrendCare version was delivered to Maternity services in 2014.

Keywords: maternity, acuity, research, nursing workloads

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