

Comparison of Different Approaches to Neonatal Follow-up

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Background: The post-discharge follow-up approach at the Special Care Baby Unit (SCBU) at New Zealand's largest district health board was changed in May 2016. Follow-up care was changed from being led by paediatrician assigned on admission to SCBU, to being led by a paediatrician as a member of a geographically-assigned multidisciplinary team.

Aim: Determine the relative risk of adverse outcomes in patients under the new follow-up approach.

Methods: A retrospective cohort study including all cases 9 months prior and 12 months following the change of approach. Outcomes assessed were: a) at least one visit to the emergency department (ED), and b) at least one paediatric ward readmission. Exposure and outcome data was objectively collected using anonymised hospital data system event logs.

Results: In 1048 cases, the relative risk of needing an ED visit, and needing a paediatric ward readmission, were 1.035 (0.8622-1.242; p=0.7136) and 0.998 (0.950-1.05; p=0.934), respectively. The relative risk of either outcome was 1.01 (0.963-1.06; p=0.710). Stratified analysis did not show confounding by ethnicity, deprivation (NZDep2006), birth weight, gestational age, or length of stay in SCBU.

Discussion: The new follow-up approach introduced in May 2016 is not associated with a statistically significant risk for emergency department presentation and/or paediatric ward re-admission. However, effects of the new follow-up approach, such as potentially improved teamwork, may be better assessed through qualitative measures.