Effects of Merging Maternity Units on Obstetric Critical Care Admissions

Abstract Type: Original Research
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Introduction: Reshaping of health services resulted in the maternity units of two district general hospitals in the UK merging; hospital A becoming a stand alone midwife-led birth centre and hospital B increasing hospital triaged deliveries. We looked at the reasons for admissions to critical care services from the obstetric population before and after merger. Our hypothesis was that merging of the units with the inclusion of an obstetric close observation bay would lead to reduction in level 1 and 2 admissions to critical care.

Methods: Obstetric admissions to the critical care units of both hospitals in the year prior to merger were identified from ICNARC (Intensive Care National Audit & Research Centre) data and patient notes were reviewed. We looked at reasons for admission, levels of care (as defined by the Intensive Care Society) and length of stay. We compared these results with the obstetric critical care admissions in the year post merging.

Results: Prior to merger 16 critical care admissions were identified across the two sites. The most common cause was post partum haemorrhage (44%) of which 86% occurred at hospital A. The average length of stay was 33 hours. 25% of admissions required level 3 care. The remainder were equal numbers requiring level 1 and 2 care. In the year post merger, there were 10 admissions in the immediate post partum period, of which half were due to post partum haemorrhage. 3 further admissions were identified as readmissions more than 24 hours after hospital discharge. The average length of stay was 44 hours. 40% required level 3 care and the remainder required level 2 care. No patients required level 1 care.

Conclusion: Our results show a reduction in the number of obstetric admissions to critical care in the year following merging of the units. The proportion of these patients that required a higher level of care and the average length of stay have however increased. We postulate that the merging of maternity services and creation of a close observation unit within the labour ward, has resulted in more patients that would have otherwise required a critical care bed, being managed on the labour ward in a high dependency setting. The creation of a single larger obstetric unit has however also led to management of a higher risk obstetric population, and therefore those patients requiring critical care beds have generally needed higher levels of intensive care and longer stays.

References:
2. Smith R. Conservatives: Maternity units close under Labour NHS plans. Telegraph.co.uk 26 June 2008