Caesarean delivery rate changes after audit and feedback with the Ten Group Classification System in a French perinatal network: a retrospective pre–post study

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Abstract

Objective: To study changes in caesarean delivery (CD) rates between maternity wards in a perinatal network after implementation of the Ten Group Classification System (TGCS) in an audit with feedback. Design A retrospective pre–post study of all births from 1 January 2012 to 31 December 2018. Setting A French perinatal network of 10 maternity wards in the Yvelines district of France. Population All live births of gestational age [?]24 weeks in the network. Methods During the pre-period (1 January 2012 to 31 December 2014), the audit and feedback provided only overall CD rates. During the post-period (1 January 2015 to 31 December 2018), CD rates for each TGCS group were provided. Regression models, adjusted for maternal characteristics and maternity ward, were used to compare CD rates globally and for each TGCS group. Variability of CD rates between maternity wards was analysed using the coefficients of variation. Main outcome measure CD rates. Results There were 51 082 women who delivered during the pre-period and 63 964 during the post-period. The overall CD rate did not decrease (24.5% during the pre-period versus 25.1% during the post-period). There were no significant differences in CD rates for any TGCS group after adjustment for maternity, maternal age and socio-demographic characteristics. Nor did audit implementation decrease CD rate variability between maternity wards or within TGCS groups. Conclusion Implementation of an audit-and-feedback cycle using the TGCS did not decrease either CD rates or variability between maternity wards.

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