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A time series would have been better

The recent study by Elaine Bland and colleagues could be an interesting example of how physician practice patterns are affected by remuneration methods.¹ The authors pooled a year's worth of data before and after the remuneration method changed at their hospital. They found that the rate of elective induction of labour decreased from 38.6% to 33.3% and concluded from these results that remuneration methods affect intervention rates. We are concerned that their analysis may be incorrect.

Although the average rates of labour

induction during the periods before and after the change in billing policy are different, this difference could be due to a constant downward trend rather than to the change in remuneration. The downward trend could be caused by factors such as a realization that "increasing intervention is not necessarily associated with improved outcome."¹ The fact that no changes were seen in the control hospital does not negate this potential bias, because large practice pattern variations can exist between hospitals.²

We believe that instead of pooling data for the years before and after the change in remuneration method, the authors should have presented the data as a time series. The proportion of deliveries that were induced could have been calculated for set time intervals before and after the change in remuneration method. Interventional time series analysis, which controls for both linear trends and seasonal variations,

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could then have been used.³ This analysis would more accurately determine the effect of changes in remuneration method on the rate of labour induction.

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