

Time modifier billing code: Interrupted time series analysis.

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Background: Alberta has the highest percentage of fee-for-service Family Physicians in Canada at over 80%. In 2019 as part of a cost containment strategy, the Alberta government proposed a policy change to eliminate the most used fee code that compensates family physicians for extended visit times (16-25 minutes). Optimal length for patient visit times varies throughout the world and countries with health systems that place emphasis on relational continuity demonstrate a trend towards longer appointment times. In Canada, the relationship between visit length and outcomes is not known.

Implementation: What would be the likely consequences of eliminating the extended visit code? We examined this question using two different observational methods, to improve confidence in our findings: a retrospective longitudinal cohort (time series) around the time the code was introduced in 2009, and a cross-sectional cohort at current time. We explored the usage patterns of that fee code, its association with the outcomes of emergency department visits and hospitalizations, along with physician billings.

Results: We found rates of emergency department visits decreased after the time-modifier code was implemented starting in 2010. This effect was maintained in the years that followed. A similar but less pronounced effect was observed in the hospitalization rates. The cross-sectional analysis had to include an interaction term because family physicians selectively extend visits for patients at risk, but when that is accounted for, the same effect is observed as in longitudinal results. The code was not used ubiquitously among primary care providers, especially in rural areas. Female physicians used it more often. Users use it for an average of 40% of 03.03A office visits. Non-users of the code earned more income than their user-colleagues.

Conclusion: We believe our findings will fill an important gap in informing the importance of an extended time service billing code in a fee-for-service system in reducing ED visits and hospitalizations.

Advice and Lessons Learned:

The fee-for-service time-modifier code, introduced in 2009, resulted in reduced ED visits and hospitalizations. It is likely that discontinuing the code would result in increased ED and hospital utilization, costing much more than removing the code would save. Usage of the time-modifier code was not uniform among primary care. Users of the code had different practice patterns and provider demographics. Our next step is to model the uptake of the code by primary care providers and explore the health system utilization and down-stream costs between users and non-users of the code.