



Hospital Funding Policies: Day Surgery Resource Intensity Weights

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In April 2010, an activity-based funding (ABF) program was launched in BC, under the direction of the Health Services Purchasing Organization (HSPO). One motivation of the initiative was to create financial incentives for hospitals to reduce the incentive to restrict services in order to meet budget targets.

One aspect of this funding reform that we monitor is changes over time in Resource Intensity Weights (RIWs) for day surgery. Day surgeries are typically planned surgical events that occur over the course of a single day and patients are rarely hospitalized overnight. RIWs measure the intensity of resource use associated with hospitals providing different types of surgical treatments. RIWs, as designed by the Canadian Institute for Health Information (CIHI) typically adjust for the age and morbidity profile of a patient to reflect that some patients with a higher burden of disease often require more intense care. RIWs are relative case weights that are used with the CIHI Case Mix Groups (CMGs), which measure the intensity of resource use (relative to cost) associated with different procedures, taking into consideration the demographic characteristics of a patient (1). RIWs are valuable because they can be used to measure the volume of clinical activities in a hospital, and adjust for the intensity of care provided.

In BC, day surgery RIWs are not adjusted for acuity. They are adjusted for age, anaesthetic technique and investigative technology (i.e. MRI, CT scan, X-ray). Changes in the sum of a hospital's RIWs represent some combination of

What is this research about?

The CIHR-funded *BC Hospitals: examination and assessment of Payment Reform (BCHeaPR)* study examines the impact of activity-based funding on acute care hospitals and related services in BC. Over time, the study team will release analyses on the effects of the change in funding policies. Check www.healthcarefunding.ca for updates and policy implications.

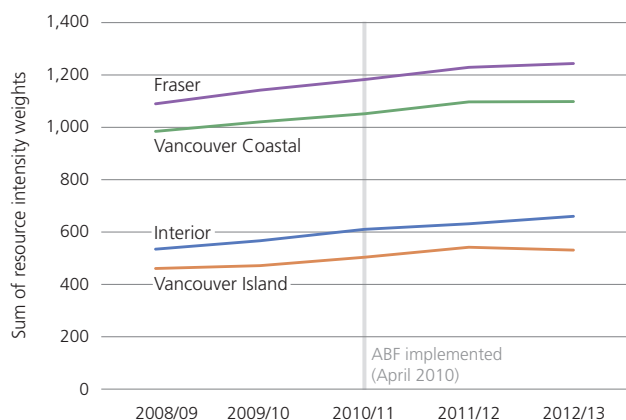
changes in volume, surgical complexity or patient age. The higher the sum of RIWs the higher the estimated total cost of treating patients. Hospitals in BC that are part of the ABF initiative are—in part—funded based on RIWs.

Impact of the Incentive

Figure 1 shows the changes over time in RIWs for day surgeries for hospitals whose funding is affected by RIWs. The introduction of ABF is not associated with an increase in RIWs in health authorities. RIWs show a long term increasing trend across all health authorities until 2011/12, where in all health authorities except Interior Health, RIWs drop slightly.

Figure 2 shows the sum of RIWs for day surgery for the four largest ABF hospitals in BC for 2008/09 to 2012/13. RIWs in each hospital have increased slightly over the study period; however, there is no clear change corresponding to the introduction of ABF in BC.

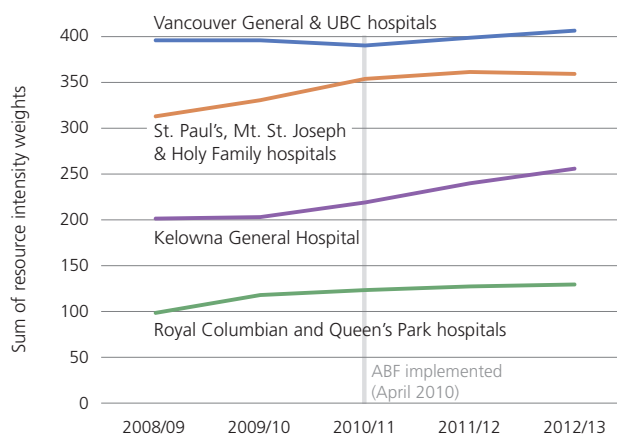
Figure 1: Sum of resource intensity weights for day surgery, 2008/09 to 2012/13, for hospitals beginning activity-based funding in April 2010, by health authority



Conclusion

In BC, the sum of RIWs earned by hospitals through the treatment of day surgery patients has trended upwards since before the introduction of ABF, although at different rates across health authorities. These changes may be attributable to increases in the number of day surgeries, intensity of care provided in the day surgery setting or other factors not measured in available clinical or administrative datasets. Changes in RIWs provide one important point of data regarding hospital spending and funding. This project will continue to calculate and report on changes in RIWs on a periodic basis.

Figure 2: Sum of resource intensity weights for day surgery, 2008/09 to 2012/13, for hospitals beginning activity-based funding in April 2010, for the four largest hospitals in BC



Technical Notes

Resource intensity weights (RIWs) measure the volume of clinical activities of hospitals.

The study population included BC residents, as well as non-residents who received health care services in BC.

Only hospitals that were included in the HSPO's activity-based funding program are included. The four largest ABF hospitals in BC were selected according to the total number of inpatient cases in the fiscal year 2012/13.

Reference

1. Manitoba Centre for Health Policy. *Term: Resource Intensity Weights (RIWTM)* [Internet]. 2009.

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Contact: Nadya Repin
 Centre for Health Services and Policy Research
 University of British Columbia
nrepin@chspr.ubc.ca
www.healthcarefunding.ca | www.chspr.ubc.ca