

# Healthcare Funding News

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## From the Editor

In this spring edition of Healthcare Funding News we review important research on activity-based funding and highlight some key new additions to the field. We also highlight the upcoming Canadian Association for Health Services and Policy Research Conference. We are pleased to announce the redesign of our website, [www.healthcarefunding.ca](http://www.healthcarefunding.ca). The new site features new content, better organization, and responsive design. Please feel free to contact us ([editor@healthcarefunding.ca](mailto:editor@healthcarefunding.ca)) with any comments.

## COMMENTARY

### New Research in Activity-Based Funding

Activity-based funding (ABF) is a hospital funding mechanism that has grown in popularity over the past three decades. With its roots in the US in the early 80's, ABF has been implemented in most developed countries around the world as they shift away from global hospital budgets (Sutherland, 2011). ABF quantifies and values a hospital's 'output'—the sum of the expected costs of its patients' hospitalizations. These values are typically based on diagnosis-related groups (DRG), or the equivalent Canadian counterpart CMG+ , which are groupings of types of hospitalizations with similar clinical characteristics and expected costs (Fetter, Shin, Freeman, Averill, & Thompson, 1980).

Using ABF, hospitals are paid based on the type and volume of services provided to patients. Hospitals can retain the surplus, the difference between cost of service and ABF payment amount. These powerful financial incentives can prompt hospitals to increase activity levels, efficiency, and cost effectiveness. For these reasons, ABF has been a popular mechanism used to accomplish certain policy objectives such as improving wait times, increasing transparency in hospital funding, and improving quality. In contrast, Finland and Ireland have implemented ABF primarily to determine hospital budgets (O'Reilly et al., 2012).

Recently, there has been a renewed focus on the effects ABF has had on provider behaviours, and if ABF has in fact helped improve efficiency, quality and transparency in hospitals. Busse and Quentin have published a book on this topic, looking at the effects and unintended consequences of ABF and the use of DRGs in twelve European countries (Busse & Quentin, 2011). They determine that transparency has increased, but studies on different aspects of efficiency are inconclusive, while quality remained largely unaffected. Another study based in Europe has looked into the motivation of ABF implementation and its impact in England, Finland, France, Germany and Ireland; the authors have found that ABF has been associated with an increase in activity, declines in length of stay, and a reduction in growth of hospital expenditures (O'Reilly et al., 2012). In contrast, one paper reviewing the impact of ABF on wait times in the Netherlands found that although waits were reduced significantly, the effect was at the expense of growing hospital costs (Schut & Varkevisser, 2013). It should be noted that that ABF was one of a number of policy changes made during that period, so these rapidly growing costs may not have been solely due to the ABF.

Other recent studies examined the effects of ABF in specific clinical departments. Two studies, one in Taiwan and the other in Norway, looked at the effect of ABF on cardiac care patients. The study in Taiwan compared provider behavior for patients undergoing cardiovascular procedures paid under fee-for-service (FFS) to those paid using DRG-based funding. The authors found that patients whose hospitalizations were remunerated under the DRG payment system experienced a 10% decrease in length of stay compared to the FFS group with no significant difference in health outcomes post discharge (Cheng, Chen, & Tsai, 2012).

The study in Norway examined the effect of ABF on average lengths of stay in elderly heart disease patients using data from 2000–2007. Their results showed a significant negative association between ABF and length of hospital stay, despite several changes in the ABF poli-

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cies due to political decisions during the study period (Yin, Lurås, Hagen, & Dahl, 2013).

In Canada, BC has used ABF to set a foundation for province-wide best practices in renal care. Renal care is delivered through six health authorities in BC, but they are all paid under an ABF model through one provincial agency. Since the implementation of the ABF model for renal care in 2005, the annual budget has grown less than the renal patient growth while maintaining or improving clinical outcomes (Levin, Lo, Noel, Djurdjev, & Amano, 2013).

It should be noted that ABF requires timely and accurate capture of all essential information related to the care, which may not be feasible for many health systems or areas of care. For example, in July 2013 Australia implemented ABF for mental health, but the infrastructure in place to support ABF required considerable development. Of specific concern is the incentives that ABF provides for the continuation and expansion of treatment for mental health issues in acute care settings, rather than transitioning to more efficient community- and home-based mental health systems which are not funded through ABF (Rosenberg & Hickie, 2013).

Among the vast research being conducted on ABF around the globe, a common theme is the difficulty in assessing the impact of ABF and a shortage of empirical evaluations. Regardless, ABF continues to be implemented in various health care sectors as a replacement for global budgets or to address specific policy goals. The funding model has been slowly gaining more traction in Canada with limited applications in Ontario and BC. A benefit of being “late to the party” is the ability to look at all the current evidence available, which is exactly what authors Palmer, Martin and Guyatt (2014) intend to do, to help inform decision-makers on the impacts of ABF on Canada’s health care system (Palmer, Martin, & Guyatt, 2014).

## UPCOMING CONFERENCE

### Convergence of Health Policy and Evidence—Bridge Over Troubled Water

The healthcare funding team will be giving a presentation at the upcoming Canadian Association of Health Services and Policy Research (CAHSPR) conference in Toronto, May 12–15. The focus of the conference this year is evidence-informed policy and decision making.

#### Poster presentation

#### Funding hospital volume and effect on readmissions: Experience from the trenches

Nadya Repin, Guiping Liu, Trafford Crump and Jason Sutherland

British Columbia fundamentally changed the way it funded acute care in April 2010, partially remunerating hospitals based on the activities they perform. This is commonly referred to as activity-based funding (ABF). This research examines the impact of ABF on readmission rates in the BC healthcare system. We analyzed British Columbia’s population of monthly acute hospital summary discharge data from 2008/09 to 2012/13 to analyze the all-cause readmissions 7 days after hospital discharge. Within regional health authorities, readmission rates vary across hospitals, but the differences are not always statistically significant. Changes in readmissions data provide one perspective regarding changes in the quality of care provided to patients in BC.

If you are interested in the selection and collection of patient-reported outcome measures (PROMs), check out our other presentation: Evaluating the feasibility of collecting patient-reported outcomes for elective surgical care in a large Canadian health authority: Experience from the field.

Registration and more information is at [www.cahspr.ca](http://www.cahspr.ca).

This newsletter was produced by the editorial team of [www.healthcarefunding.ca](http://www.healthcarefunding.ca), a reliable and impartial resource for literature, news, and discussion regarding health care funding policies in Canada and internationally.

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