Applying change management theories to support implementation of activity-based funding

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Abstract
Activity-based funding (ABF) was formally adopted in Australia in 2011 as part of the National Health Reform Agreement. It is a system to support funding of public hospitals based on the number of services provided to patients, by determining the price to be paid for those services. Key elements of ABF include classifications, costing, pricing and activity data. ABF is an entirely new model of providing Commonwealth funding to state and territory public health services. Although the stakeholders most affected by this change are state and territory health departments, clinical and administrative staff are also affected and their support for this new funding model is required for ABF to be considered successful.

This article considers a range of change theories that might be applied to innovations like ABF, and considers how Health Information Managers can promote acceptance of ABF in the hospital setting.

Keywords (MeSH): Diffusion of Innovation; Health Care Reform; Financing, Government; Health Information Management

Diffusion of innovation theory overview
Diffusion of innovation theory was developed by Everett Rogers in the 1950s from research investigating why particular farmers delayed the decision to use an improved variety of corn, despite being aware of the benefits. Rogers undertook further investigation looking at adoption of innovations across a range of sectors, including education and health, and found there were several common themes that emerged. These included:

1. A common pattern of adoption by the cohort over time; the sources and types of information that influence the decision to adopt; and that the earliest adopters of an innovation tended to have a more ‘cosmopolitan’ outlook. (Rogers 2004). The theory explains how a new initiative, or innovation, is incorporated through a social system over time. There are four key concepts:

1. Innovation
Rogers (2003:12) defined an innovation in terms of its perceived newness: ‘An innovation is an idea, practice or object that is perceived as new by an individual or other unit of adoption. It matters little whether the idea is “objectively” new as measured by the lapse of time since its first use or discovery. The perceived newness of the idea for the individual determines his or her reaction to it. If the idea seems new to the individual, it is an innovation.’ Glor (2009) provided an alternate definition, which places more focus on innovation as an improvement: ‘[Innovation]… is the conception, early adoption and implementation of significant new services, ideas or ways of doing things as government policy in order to improve or reform services, ideas and ways of doing things.’

2. Communication channels
This concept refers to how much, and how frequently people discuss and share information about a particular innovation (Kaminski 2011). Communication channels may include the media, or person to person exchange. Other communication methods, particularly for innovations affecting healthcare providers, include: academic research and publications, professional conferences, lectures and workshops, and audio or video records (Sanson-Fisher 2004) and could also extend to social media, such as podcasts, blogs and Twitter.

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Types of innovation
According to Rogers (2003) there are three types of innovation decisions: (i) the optional innovation decision is where individuals have the ability to choose whether to accept the innovation or not; (ii) a collective innovation decision occurs when members of a social system agree to adopt an innovation; and (iii) an authority innovation decision occurs when those in positions of influence or power decide to adopt an innovation, and the other members of the social system are obligated to accept that decision.

Activity-based funding (ABF) has been endorsed at the highest levels of government, and so for hospitals, clinicians and staff, and consumers, there is no option but to participate in this new funding method. As such, it is an authority innovation decision. However, there is still a significant opportunity to ensure that this innovation is well accepted by the stakeholders who are impacted by the decision.

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3. Time
There are three components of time in the innovation diffusion process: the adoption process, adopter categories, and rate of adoption. Not all people will take up an innovation at the same time. Rogers (2003) found that people could be grouped into adopter categories and that the rate of adoption by these groupings followed a bell curve pattern (see Figure 1). The key to managing a change project is to achieve a point of critical mass, which occurs at the point in time when enough people have adopted an innovation to make it self-sustaining (Rogers 2004).

4. The social system
Diffusion of innovation theory describes the social system as ‘a set of interrelated units that are engaged in joint problem solving to accomplish a common goal’ (Rogers 2003:23). The social system in which an innovation is introduced has a large bearing on how the change is spread and accepted. In particular, the structure and culture of the social system is an important consideration. Do you work in a hierarchical bureaucracy? Your organisation may have a formal structure that may be important to factor into your planning. There may also be informal social networks to consider.

Other relevant change theories
Diffusion of innovation is not the only theory that may be used for change projects, and there is no ‘one size fits all’ approach to these types of initiatives. A good approach might be to build a change plan that incorporates a combination of several evidence-based approaches.

Theory of reasoned action/planned behaviour
The theory of reasoned action (TRA) applies to behaviour that is entirely under the control of the individual. TRA suggests that the best predictor of behaviour is the intention of the individual to perform it. The theory of planned behaviour (TPB) asserts that the best predictor of performing a behaviour is the intent of the individual, predicated on three factors: (i) attitude (whether the individual considers the behaviour to be a good or bad thing); (ii) subjective norms (the perception of pressure by others to perform the behaviour); and (iii) the level of perceived control that the individual considers they have to perform the behaviour (University of Twente n.d.). Therefore, TPB applies to behaviour that is not entirely under the control of the individual. As discussed earlier, the introduction of ABF has been an authority innovation decision and for this reason TPB may be an important theory to consider.

Technology acceptance model
The technology acceptance model was developed to explain why users accept or reject information technology. The theory argues that two variables, ‘perceived ease of use’ and ‘perceived usefulness’, are the main factors influencing the adoption of technology. It is claimed that these variables influence attitudes towards and then the intention to use a system (Legris, Ingham & Collerette 2003). This theory could be usefully applied to the adoption of the ABF through efforts to ensure that ABF applications are easy to use and by providing clinicians with data that might also be used for benchmarking or research purposes.

Organisational learning
Attewell (1992) argued that innovation diffusion theory gave too great a focus to the individual, and did not sufficiently consider the external structures that influence the adoption of innovations. He proposed a theory of organisational learning, which suggests that a focus on developing the individual and corporate knowledge is the key to the successful introduction of an innovation. Put simply, comprehensive adult education and learning opportunities should be made available to all stakeholders and incorporated into change initiatives.
Top manager and the network/institutional perspective

Top manager theory describes how senior leaders within organisations appear to have particular demographic characteristics that may make them more likely to support innovations. Given their structural power, top managers also have the authority to promote innovations in their work. The network/institutional perspective acknowledges that organisations may be influenced by other organisations that they engage with, and that this connection may also spread influence (Young, Charns & Shortell 2001). Examples where this might be seen are through a local health or hospital network, or a paediatric hospital network. In the United States, network effects have been studied in Veterans Affairs service networks.

A suggested approach

Whether you are supporting ABF implementation, or any other project, consider whether there are elements of these theories that might assist you in your change efforts. An example of activities that might occur as part of an ABF change management project are set out in Table 1.

These approaches are scalable and can be applied to any change, not just ABF. If you are working at the health service level, consider the adopter categories in terms of each site. Ask yourself which is your innovator hospital? This is the place to start your change efforts. If you are working at a hospital level, think about which departments are first to implement new technology. Consider how you might build relationships with the most influential clinical and administrative staff to support your efforts, and what could be done to increase the perceived usefulness and ease of use for your affected stakeholders.

Finally, how do you eat an elephant? One bite at a time! You may be more successful if you break the implementation of a project like this into achievable ‘chunks’ or stages.

Table 1. Example of ABF change management activities by phase

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<th>Phase</th>
<th>Activities</th>
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| Planning phase    | - Undertaking a stakeholder analysis, including identifying innovators and top managers to support the initiative
|                   | - Prepare an implementation plan (considering rolling out by adoption group, and think about where network effects might be applied) |
|                   | - Prepare the communication plan                                            |
|                   | - Prepare the learning and training plan                                     |
| Awareness phase   | - Start promoting ABF                                                        |
|                   | - Commence opinion leader activity, explaining the changes and benefits      |
| Interest phase    | - Explain implementation approach and impacts                               |
| Evaluation phase  | - Offer partial trial or pilot                                               |
|                   | - Increase opinion leader activity                                           |
| Implementation phase | - Provide high levels of support to users (e.g. service to answer classification queries and provide guidance on hospital/state policy) |
| Adoption phase    | - Provide support reinforcing the decision to adopt (e.g. benchmarking against other sites or areas, testimonials in newsletters) |
| Planning phase    | - Modify communications and approach as required for next group of adopters |

References


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* This paper was prepared while the author was Manager, Classification Development, Independent Hospital Pricing Authority, and a student at the University of Tasmania