Knowledge Translation

Getting Efficacious Interventions Incorporated Into Practice: Lessons Learned

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The knowledge translation movement emphasizes implementing effica-cious interventions in practice or using practice guidelines. However, a goal stated this way is demeaning of "usual care," has a flavour of supe-riority, and fails to acknowledge the value of "the way we do it now" for some people with particular characteristics. There is little wonder why some approaches to the implementation of efficacious interventions are met with resistance by frontline providers. I would like to offer some lessons learned from implementing random controlled trials of new practices compared to following usual or current care practices.

Approach

Approach refers to the style with which an investigator or clinician scien-tist goes about implementing or testing a new or best practice in a clini-cal setting. One successful approach to improving practice is to begin by having conversations with providers and managers in order to establish

- their most pressing issues related to practice
- what they believe they do well
- what they think they could or should improve, for whom, and in what circumstances
- what individual, team, management, and organizational issues act as barriers to the implementation of their ideas
- what is needed to address these barriers
- what should be done to move forward

There is a large literature in cognitive and social psychology on indi-vidual trials associated with the propensity to try out and use innovations (e.g., tolerance for ambiguity, learning style, motivations). This literature is for the most part ignored by researchers studying the implementation of best practices (Rogers, 1995).

Sometimes there are divergent ideas about what, in combination or alone, would improve outcomes. Comparing one's ideas with those currently being implemented in practice, or subjecting one's ideas to trial, presents an opportunity to study the impact of alternative interventions (effective for whom, and at what price?). This is sometimes called "trialability" or "reinvention," especially if best practices are modified to fit the context.

Appropriateness and Applicability

A best practice can be inappropriate or inapplicable in certain situations. Using a best practice inappropriately might include counselling people with a chronic illness when they are well adjusted (Roberts et al., 1995), or providing empowerment training to long-term-care residents with a serious mental illness (Byrne et al., 1999), or deploying emergency department quick response teams for the elderly (Weir et al., 1999). This is sometimes called "incompatibility." At times the so-called best practice is aimed at a person's deficit when opportunities to strengthen their competencies may be more effective and less expensive (Browne, 2003; Browne, Gafni, Roberts, Byrne, & Majumdar, 2004).

Preliminary information about who is and is not eligible for the best practice is necessary, to establish the appropriateness and applicability of the new intervention. Researchers might also learn of any systemic barriers, motives, or areas of resistance, and generally get a sense of the appropriateness of a particular best practice *at this time* and *in this setting,* with its culture and its nuances.

Before embarking on the implementation phase, do clinicians need to carry out other work, such as address their other priorities or transform the organizational culture into a "learning" culture at all levels? Different courses of action may have a "relative advantage." For example, we found that nurses working in critical-care burn units were not interested in a study to promote adjustment of burn survivors until they could find out why people with burn injuries were dying after the insertion of a Swan-Ganz catheter during the acute phase. It turned out that the correct procedure for inserting the catheter was not being followed. Further, the nurses thought we should study the adjustment of burn survivors after 1 to 12 years before embarking on a study to promote their adjustment following the burn injury. It transpired that the prevalence of poor adjustment among burn survivors was the same as that for the general population and was unrelated to the severity of the burn (Browne et al., 1985). In another trial, efforts to promote adjustment to chronic illness at three specialty outpatient clinics were shown to have no effect because 64% of the patients were well adjusted to begin with (Arpin, Fitch, Browne, & Corey, 1990). This is another example of incompatibility.

Accessibility

Accessibility is related to both users and providers of services. Do poor and vulnerable clients have geographic and cultural access to a service, or are they incapable of reaching out, because they are depressed or for other reasons, and taking advantage of the service (Browne, Roberts, et al., 2001; Byrne et al., 1998)?

Do frontline providers have access to the investigative resources necessary to pursue their initial interests? Nothing can happen without a relationship, and relationships require the exchange of goods or some knowledge about the costs and benefits of adopting a new approach. We researchers solicit clinicians' ideas and want their help with the logistics of implementing a new practice. Can they have our service in conducting their research, our respect for their question, and a real sense of collegiality and collaboration by offering the currency of co-authorship (Pringle, 2008)?

Acceptability

Acceptability refers to the willingness of practitioners and patients to accept new practices that are adopted (Markle-Reid & Browne, 2001). In order to have efficacious interventions put into practice, practitioners must be full participants both in addressing the nuances and logistics of the desired changes and in interpreting the findings. Often, the current practice is beneficial for some patients in particular circumstances (Roberts et al., 1995). In a trial of a counselling intervention for family caregivers of people with dementia, we found that counselling was beneficial only for those caregivers who had problem-solving difficulties at the outset (Markle-Reid & Browne, 2001). When we tried to counsel caregivers with good problem-solving skills, we merely increased their uncertainty about their relative's illness. Good practices are not necessarily useful in every context.

There are usually good reasons why practice patterns evolve as they do, although these may not always be expressed. As a clinician scientist, I wondered why the first thing hospital staff did after morning report was distribute the linen. As it happens, they were doing several things at once: providing an overview of patients' status, checking intravenous medications, and distributing the linen.

Adequacy and Appropriateness of Resources for Practice

Too often, best practices address only "slivers" of a client's situation, and in so doing can fail to produce the intended outcome (Roberts et al., 1999), as in the provision of social assistance without help for their mental health problems (Browne, Byrne, Roberts, Gafni, & Whittaker,

2001). For example, the homemaker services for which a client is eligible may be insufficient to address the person's underlying problems with depression (Markle-Reid et al., 2008). Parents of disabled children with complex needs receive instructions in best practices and activities to do with their child from physiotherapists, speech therapists, and occupational therapists. For an already overwhelmed mother of three, these additional expectations of her can be "the straw that breaks the camel's back." In the Canadian province of Ontario, mental health services for mothers are provided by agencies funded by the Ministry of Health and Long-Term Care, while services for children with complex needs are funded by the Ministry of Children and Youth; policies and funding serve to further fragment services for households and families.

Effectiveness of Behavioural Change Strategies

The implementation of best or effective practices requires changes in provider behaviour, organizational behaviour and policy (Browne, 1999), and client behaviour (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004). Yet the best practice guideline literature rarely addresses these fundamental issues. Other disciplines have processes for promoting behavioural change, such as cognitive behavioural therapy and strength-based, motivational, or problem-solving counselling. However, this expertise is rarely incorporated into the dissemination and uptake of medical or nursing practice guidelines or quality-assurance practices. Finally, the vast knowledge on the diffusion of innovations would be useful for guiding the implementation of new practices. This situation highlights the multiple levels of influence entailed in the adoption of a new practice (Greenhalgh et al., 2004).

Efficiency or Return on Investment

In our 18 years of economically evaluating the randomized trialling of new versus existing practices (Browne et al., 1999), we have learned several lessons about how to get efficacious interventions put into practice:

- Principles of community development, behavioural change, and diffusion of innovations must guide every step, by means of "learningful" conversations.
- A service agency can be said to have adopted a culture of learning when it compares its actual practices with its ideas about innovation in order to address its greatest challenges. Our "learnings" are "beyond main effects." There is usually an interaction between an alternative

intervention and the characteristics of the clients served. People and agencies with particular characteristics will benefit from the new service.

• "Usual care" is adequate for some patients.
• A uniform best practice is inappropriate, as no best practice is suitable in every context.
• No one service agency is mandated to address the needs of all clients. Strategic alliances between agencies can lead to proactive, integrated, comprehensive, and stepped care for people with complex conditions and circumstances. A system of national health insurance can realize savings in the same year by reducing its use of expensive crisis services.

Coverage

A "whole-of-government" approach is necessary (Proctor et al., 2006) because the efficiencies produced by strategic alliances between service agencies result in reduced expenditures for health care. These allied social care services funded by different parts of government should be rewarded for the savings they generate for ministries of health (Browne et al., 2001). This could serve as an incentive for the adoption of best practices, especially if the savings were to be pooled and retained at the local level.

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