

MOTIVATIONS AND INCENTIVES: EXPLORING ASSISTIVE TECHNOLOGY SERVICE DELIVERY FROM THE PERSPECTIVES OF MULTIPLE STAKEHOLDERS

Desleigh de JONGE^{a,d} Natasha LAYTON^b Francis VICARY^c and Emily J STEEL^d

a LifeTec Queensland, Brisbane, Queensland

b School of Health and Social Development, Deakin University, Melbourne, Victoria

c Independent Living Centre, Yooralla, Melbourne, Victoria

d School of Health and Rehabilitation Sciences, The University of Queensland, Brisbane, Queensland

ABSTRACT

Knowledge and ideas about disability and Assistive Technology (AT) shape society's construction, funding and delivery of AT services. Concepts such as individualism and objectivity have supported the progression of AT device design and the measurement of AT outcomes. Dominant ideas, however, may suppress other conceptions that offer alternative approaches to, and therefore outcomes of AT service delivery. This paper analyses AT service delivery from the perspectives of key stakeholders, utilizing reflective strategies informed by situational analysis and a pluralistic approach. The complexity of AT service delivery is deconstructed by describing experiences and validating the perceptions of AT users, practitioners and funding schemes, and then identifying the implicit and explicit influences on their actions. It explores the multiple and differing ideas about disability and AT, and discusses these in the context of current policies and systems. It challenges readers to recognize the dominant ideas shaping practice, and consider alternative approaches in an attempt to refine AT service delivery.

BACKGROUND

AT service delivery includes clinical and non-clinical aspects of provision, and typically involves not only the individual using the device, but also practitioners and third-party funding sources (Cook & Polgar, 2008). Traditionally, professional discourses have

dominated service development and evaluation, using positivist approaches which hold a presumption of rationality, asserting systematic development and use of specific interventions to achieve agreed outcomes (Hall, 2004; Yerxa, 2014). The dominance of this approach has contributed to the suppression and underrepresentation of the views of marginalized groups such as service users (Healy, 2005; Hill, 2011; Salmon, 2003). This has resulted in a gap between the stated intent of consumer-responsive services and the ability to actually gather, understand and prioritize the views of service users (Hall, 2004). It has been argued that failing to access perceptions of service users and other stakeholders results in services developing without critique (Trinder, 2008), with serious consequences for service quality.

PURPOSE

Aligned with subjectivist epistemology, this paper adopts a pluralistic approach, identifying key stakeholders in AT service delivery and explicitly comparing their views. This approach recognizes that the notion of success is itself pluralist in nature, varying across involved stakeholders (Salmon, 2003). This is a valuable methodology for service evaluation, because it affords equal importance to the experiences and perceptions of all stakeholders (Hall, 2004). Gathering the views of key stakeholders provides methodological triangulation and is used in this paper to develop a deep understanding of the structures and processes driving AT provision systems, and the tensions constraining performance.

The analysis in this paper is also informed by an economic perspective, which has become dominant in public policy as services work to optimize outcomes and manage competing priorities with limited resources (Drummond, Sculpher, & Torrance, 2005). A key microeconomic principle is the understanding that the actions of stakeholders in systems or services are both intrinsically and extrinsically motivated. Intrinsic motivations are often driven by the stakeholder's sense of identity, values and the need to satisfy personal, professional and economic needs (Goodwin, Nelson, Ackerman, & Weisskopf, 2008). Extrinsic motivations arise from imperatives 'outside' the stakeholder, and usually involve incentives such as gaining power or social status, or avoiding negative consequences. Examining AT service delivery from an economic perspective requires a detailed description of stakeholders and the motivations and incentives influencing their actions and interactions within systems. The actions of stakeholders have both intended and unintended consequences (externalities) (Goodwin et al., 2008). This analysis examines the experiences and practices of AT users, practitioners and funding bodies in AT service delivery.

METHOD

This study was completed in three phases, analyzing data from multiple sources. In the first phase, the experiences and perceptions of the stakeholders were identified by a process of deep reflection and discussion between the authors, based on their embedded experiences of AT service delivery systems, in their roles as AT users (FV), AT practitioners and educators (NL & DdJ), and advisors to and reviewers of AT funding schemes (NL & FV). Data from the reflections were analyzed thematically, to explicate and differentiate incentives and motivations.

The second phase involved multiple stakeholder groups discussing and validating the results separately. The incentives and motivations of AT users, practitioners and funding schemes were generated using Delphi techniques in a workshop held during the Australian Rehabilitation and Assistive Technology Association's (ARATA) conference

(Layton & de Jonge, 2008) and initial findings presented at another conference (de Jonge, Layton, & Vicary, 2009). The incentives and motivations of AT users were further triangulated and refined by members of the Aids and Equipment Action Alliance (AEAA), a multi-stakeholder consumer advocacy group in Victoria.

In the third phase, new and alternative data gathered from the validation phase was integrated into the analysis of the initial reflections. The data were then analyzed in relation to conceptual frameworks and discourses identified from the authors' research into and familiarity with literature on health and social service development and evaluation.

RESULTS

AT users

AT users are intrinsically motivated to optimize their participation in and contribution to society. Through their lived experience of disability, they must respond to changes in their own skills and interests, and environmental and technological developments. Differences in self-management approaches and skills may reflect the spectrum of AT users, from novice to expert, in addition to individual preferences and personalities.

Factors affecting AT users' actions include their knowledge (or lack thereof) of devices, and their understanding of processes and delegations in AT service delivery systems. Novice AT users who seek funding or other support may lack the knowledge required to navigate AT service delivery systems independently, and may experience difficulties sourcing information or accessing specialist practitioners. Even experienced AT users often encounter difficulties when interacting with AT service delivery systems, as many people with disability experience low social status and thus limited power to influence funding schemes. This situation provides a strong incentive for AT users to develop skills in communicating their goals in the language of the funding schemes, however leaves users feeling constrained and dependent. To avoid being ostracized by society, AT users are also extrinsically motivated to acquire devices that minimize the visibility of their disability and impact on

others. Many AT users invest their own resources trying to create AT solutions combining devices with environmental design and personal support, as public funding does not usually extend across all life domains.

AT practitioners

AT practitioners are trained in different disciplines but share intrinsic motivations to develop their skills and knowledge, and apply these to practical problems. Practitioners aligned with a profession may be motivated by its espoused values, or by the codes of conduct imposed by regulatory bodies.

The information that practitioners seek from service users, and their understanding and subsequent actions are shaped both by their discipline or specialty (professional lens) and by the service context in which they work. Eligibility criteria, performance standards and operational procedures set by funding schemes or provider organizations are extrinsic factors that sometimes conflict with a practitioner’s priorities or service user’s needs. For example, service structure will govern the capacity of AT practitioners to develop ongoing relationships with users and engage with their changing needs over time, or have ‘one off’ encounters where their involvement is confined to assessment and prescription, and commonly ceases at the point of purchase or after time-limited follow-up. Incentives for practitioners working in public or not-for-profit sectors may include reduction of waiting lists and users’ short-term functional gains as opposed to enhanced long-term community participation and well-being, while practitioners working for suppliers or private consulting organizations work toward customer loyalty and market growth.

Funding schemes

Funding schemes operate in a financial context of finite resources and competing priorities, and a temporal context of budget cycles. Utilitarian or egalitarian principles often underpin the populations or interventions targeted in policy objectives. Funding schemes are externally motivated to use their finite resources prudently and maintain control over the way in which moneys are divested. The distribution of resources is often a key

performance indicator used to assess whether the policy objectives have been met within the allocated budget, and determine the sustainability of funding based on this measure of cost-effectiveness. Funding schemes are also vulnerable to pressure from lobbyists, individuals, and interest groups and are influenced by politics and changing policy initiatives. While the stated policy intent may embed laudable goals in terms of valued outcomes, in practical terms, limited resourcing and bureaucratic processes make it likely that funding schemes count ‘outputs’ rather than ‘outcomes’, and are unlikely to seek out or examine instances of unmet need.

DISCUSSION

This discussion of the motivations and incentives of AT stakeholders commences with a vision of ‘what good looks like’ from the perspective of the central stakeholder: the AT user. AT users’ views are presented (see Table 1) as the standard against which to compare system performance.

Table 1: Criteria for good AT service delivery from the users’ perspective (de Jonge et al., 2009).

a.	Determination of the best combination of devices, personal care and environmental design.
b.	Access to sufficient funding for good quality and long-lasting devices.
c.	Funding to meet AT needs in every area of life.
d.	Holistic assessment of needs, so that each device works well and doesn’t interfere with other supports.
e.	Consideration of AT needs across the lifespan and as needs change.
f.	Support throughout the process of getting AT, including device trial, training and maintenance.
g.	Access to resources when needed.
h.	Active involvement in decision-making.
i.	Consideration of personal preferences and identity so that AT is chosen to suit lifestyle and participation.

The actions and motivations of each of the stakeholders influence processes and outcomes of AT service delivery, presenting two key challenges:

1. To ensure that the needs of AT users remain the focus of AT service delivery; and

2. To develop and sustain a system that delivers quality outcomes.

The responsibilities for addressing these challenges range from individual to systemic changes. The following is a summary of key actions:

The findings suggest a need for AT users to be proactive in expressing their needs and seeking assistance throughout the process, but this on its own is insufficient. For AT users to make informed choices, they require opportunities to form preferences and discuss the implications of their choices. In order to realize choices, service delivery systems must fund a broader range of supports to meet individual requirements, sourcing AT devices with improved usability and acceptability.

The effectiveness of AT practitioners would be substantially enhanced by extended contact with AT users, working with them through the AT provision process. This requires investment in the development of AT expertise and an evidence-based approach to its provision.

The context and structures within which AT funding schemes operate impel them to reflect on current practice and reform to align with contemporary concepts of disability rights and inclusion. Reforms will require greater flexibility in resource allocation across the public sector, along with repositioning of AT users giving them greater control of delivery and input into design. The change would target operational activities, rather than strategic objectives, including financial governance, quality management and performance evaluation.

CONCLUSION

This paper has drawn on the experiences of AT users, practitioners and funding schemes from an AT system described as under-resourced, unaware and unresponsive (National People with Disabilities and Carers Council, 2009). It is a system that forces funding schemes to be gatekeepers and AT practitioners to define, navigate and support service users to access a limited range of devices. AT users are disempowered and disenfranchised by having their access to potentially enabling supports restricted by inflexibility in resource allocation and inconsistent access to skilled practitioners. These proposed changes are fundamental to addressing the challenges of meeting user

needs and enhancing quality and sustainability, and should be considered an investment in inclusion. Such reforms require support from research that provides evidence of the impact of device usability and 'soft technologies' on outcomes for users and society, and will stimulate innovation from stakeholders wishing to take advantage of the increasing scope for supporting people who are ageing and people with disability.

REFERENCES

- Cook, A. M., & Polgar, J. M. (Eds.). (2008). *Cook and Hussey's Assistive Technologies: Principles and Practice* (3rd ed.). St Louis: Mosby Elsevier.
- de Jonge, D. M., Layton, N., & Vicary, F. (2009). *Keynote Address A fresh analysis of the AT system in Australia: listening to and understanding the perspectives of stakeholders in order to meet AT users expectations*. Paper presented at the NSW ILC Conference, Parramatta.
- Drummond, M. F., Sculpher, M. J., & Torrance, G. W. (2005). *Methods for the economic evaluation of health care programs*: Oxford university press.
- Goodwin, N. R., Nelson, J. A., Ackerman, F., & Weisskopf, T. (2008). *Microeconomics in context*: ME Sharpe.
- Hall, J. E. (2004). Pluralistic evaluation: a situational approach to service evaluation. *J Nurs Manag*, 12(1), 22-27.
- Healy, K. (2005). Chapter 4: Alternative service discourses: consumer rights and religion and spirituality. In K. Healy (Ed.), *Social work theories in context: creating frameworks for practice*. (pp. 70-82). Houndmills, Basingstoke, Hampshire New York: Palgrave Macmillan.
- Hill, S. (2011). *The Knowledgeable Patient: Communication and Participation in Health (A Cochrane Handbook)* (Vol. 2): John Wiley & Sons.
- Layton, N., & de Jonge, D. M. (2008). *Workshop: AT in Australia*. Paper presented at the Australian Rehabilitation and Assistive Technology Association (ARATA) National Conference, Seventh Biennial Conference, Adelaide.
- National People with Disabilities and Carers Council. (2009). *Shut Out: the experience of people with disabilities and their families in Australia - National Disability Strategy Consultation*

Report. Canberra: Commonwealth Government.

- Salmon, N. (2003). Service evaluation and the service user: a pluralistic solution. *The British Journal of Occupational Therapy*, 66(7), 311-317.
- Trinder, L. (2008). A Critical Appraisal of Evidence-based Practice *Evidence-based Practice* (pp. 212-241): Blackwell Science Ltd.
- Yerxa, E. J. (2014). In search of good ideas for occupational therapy. *Scandinavian journal of occupational therapy*, 21(S1), 11-19. doi:10.3109/11038128.2014.952882