1. CONTEXT
Providing effective and accessible services for people with chronic conditions, such as severe spinal cord injury and traumatic brain injury patients, in hospital and community settings, continues as a major challenge. This program of research has focused on policy analysis and the views of patients and front-line service providers. Clinical research is generally favoured and funded in health settings, making it difficult to attract funding for psycho-social research on rehabilitation and related areas.

With a focus on the areas of brain injury and spinal cord injury, this research has three streams: 1) Applied policy and systems research: work on how policy translates into local delivery contexts with emphasis on the financing, governance and administration of policy welfare programs and front-line policy work, and implementation analysis. 2) Rehabilitation and lifetime care for people with complex needs: focuses on the models of financing and management of lifelong care for people with acquired disability through neuro-trauma and progressive conditions. 3) Patient and family experiences living with complex/chronic health conditions and disability: work on the lived experiences of people, self-management and burden of treatment relative to issues such as disability and rehabilitation, complex health problems and palliative care.

2. SUMMARY OF IMPACT
Improved professional understanding of a problem leads to new services. The cumulative impact of the research program is the improved understanding of the patterns of service utilisation for people with acquired brain or spinal cord injury (and related chronic conditions) in the community, their recovery outcomes, and barriers to recovery and support. Prof Foster and her colleagues have identified ‘risk clusters’—patients at risk of hardship, poor health outcomes and limited support—and how the service system can better respond to the expressed needs and experiences of these people.

Decisions of health and human service organisations have been informed by research. Health and community service agencies have used the research findings to adopt practices that improve the rehabilitation outcomes in hospital and community-based living for people with acquired brain or spinal cord injury, and related chronic conditions. Shifts in allocation of public funds. Findings about the mismatch between the location of available rehabilitation services and where clients live, have assisted providers and policy makers to better prioritise the allocation of rehabilitation services.

3. RESEARCH UNDERPINNING IMPACT
Professor Foster has led more than 30 related research projects in the rehabilitation and service system field commencing in 1995 when she was Manager, Acquired Brain Injury Outreach Research Project, Princess Alexandra Hospital, Queensland. The major findings of this program of research that influenced policy and systems change in health and community settings include:
- Identification of patterns of service use for people with severe acquired brain and spinal cord injury, and financial, emotional and systemic barriers to service utilisation;
- Identification of people who are at risk of hardship, poor health outcomes and limited support—and how the service system can better respond to the expressed needs and experiences of these people;
- The benefits of multi-disciplinary services and research in this field of rehabilitation; and
- Financial costs of rehabilitation and service usage and strategies to enhance efficiency and access to services.

The main projects for this program of research were:
1. 2012. Financing and Management of Lifetime Care for Adults with Acquired Disability and High Care Needs. Study investigated the experiences and perspectives of disability care of 25 adults with acquired disability, their 22 nominated family members, and 18 service providers. Evidence from this study suggests that people with disabilities are more likely to live longer, may require additional medical attention, may have higher costs of care, and may have increased care needs. Findings provided the opportunity to better understand the needs of people with disabilities and improve the quality of life for people with disabilities.

2. 2012. Unmet health and rehabilitation needs of people with long-term neurological conditions in Queensland, Australia. This study adds to the limited evidence base on the provision of health and rehabilitation services to people with long-term neurological conditions requiring lifetime care. The findings highlight the unmet needs of people with disabilities and the potential demand for such services. The findings assisted rehabilitation service providers and policy makers to better understand the needs of people with disabilities and improve the quality of life for people with disabilities.

3. 2014. Person-centred care in a digital hospital: observations and perspectives from a specialist rehabilitation setting. This exploratory mixed-methods study investigated the use of electronic medical records (eMRs) in a SCI rehabilitation unit and the implications for person-centred care. Practitioners in this specialised setting were reconciling the emergent challenges of eMRs in practice with the advantages of improved accessibility and documentation legibility. eMR-increased task complexity and information retrieval, particularly for nurses. Practitioners’ persistence and adaptability demonstrated their commitment to person-centred care in the digital environment.

4. 2016. Translating the National Disability Insurance Scheme (NDIS) into practice: Examining choice, collaboration and capacity in the specific rehabilitation setting. The identification of implementation challenges, mechanisms and processes operationalising choice and collaborative support planning, and emergent resource and capacity issues within the NDIS.

5. 2017-2020. Tracking rehabilitation across complex environments (TRAce). A longitudinal cohort study. The aim of this mixed-methods study is to investigate rehabilitation trajectories and experiences of a 12-month cohort of SCI and ABI patients discharged from inpatient rehabilitation to assess social and spatial determinants of service use and wellbeing. The findings are expected to facilitate an understanding of people’s preferences for care and their needs and preferences for access to health care services.

6. 2017-2018. An investigation of social and spatial determinants of resource use trajectories and psychosocial well-being for SCI and TBI patients discharged from inpatient rehabilitation. (Gao, A. Foster, M). Using geographical analysis methods, this pilot study found that within the Brisbane region, the four types of rehabilitation services widely used by individuals with profound or severe disabilities (i.e., occupational therapy, physical therapy, psychology, and speech pathology) were concentrated in inner city suburbs that had a relatively low prevalence of profound or severe disabilities and low potential demand for services.

In contrast, rehabilitation services were sparsely distributed in suburbs with relatively higher prevalence of profound or severe disabilities and greater potential demand for such services. The findings assisted rehabilitation service providers and policy makers to better understand the needs of people with disabilities and improve the quality of life for people with disabilities.
Prof Foster states that her strength as a social work researcher is within a multi-disciplinary team approach and the networks she has built within health, community and academic settings. This fosters interest in and application of research evidence into policy and practice reforms, across settings and disciplines. She actively engages with health providers, policy makers and funders in her research. She stated that these relationships are essential to the research and that much of her time is spent building and maintaining these relationships. To achieve “buy-in” and impact, she commonly uses strategies such as:

- Professional roundtables and workshops—such as sessions with funders, Lifeline Care, the Public Trustee, MAC and senior departmental officials to ensure that “policy people are on board from word go”.
- Policy roundtables and workshops—such as sessions with government and industry.
- The 25/3/1 research reporting model—that is, a 25-page detailed report, 3-page summary, and 1-page brief.

Industry appointments, memberships and awards: Appointments to reference and advisory groups recognises Prof Foster’s expertise in disability research and provides opportunities to use research findings to influence policy and practice.

- 2012 Member National Disability Research and Development Roundtable, Queensland.

Professional development and training

Prof Foster and her colleagues actively engage in professional development and information exchange activities with disability and allied health professionals. These activities include:

- Presentations at international, national and state conferences including: APHCRI, the Motor Accident Insurance Commission, the National Disability Insurance Scheme (NDIS) and the Australian Centre for Healthcare Governance (TRaCE).
- Personalised rehabilitation in trauma management. Invited address: Princess Alexandra Hospital Symposium, Brisbane, 1 August, 2017.
- Strivens E, Foster M. Patient, carer and provider perspectives of older people’s care transitions across acute, sub-acute and primary care. Presentation. Research and Quality Symposium 2015: Health systems serving people, partnerships, collaboration, and responsiveness. Cairns Hospital Health Service, 5 August 2015.
- Foster M. Building strategic allied health research programs in a context of change: Keyexams. Showcasing Allied Health, Cairns Health and Carers Hospital, 19 June, 2013.
- Jackson C, Hollengrave S, Foster M, Burnett L. Translating research into practice for planning, implementing and evaluating innovative models of care in local contexts. Workshop, Primary Health Care Conference, Brisbane, 18-20 August 2012.
- Foster M. International Classification of Functioning and Health (ICF) and Application to Rehabilitation. Keynote address. Queensland University of Technology: Academy Health 2-Day Symposium, 11th – 12th August 2005.

Conferences also provide an avenue to disseminate findings to professionals and industry leaders.