

# Brain and Spinal Cord Injury Project - BaSCI

Project Update  
July 2021 - December 2023



# Improving Specialist Services Together

It is exciting to share this project update and celebrate some of the results delivered so far through the Commonwealth-funded Brain and Spinal Cord Injury Project (BaSCI).

BaSCI, as we have come to know it, has seen \$24 million allocated across five (5) Hospital and Health Service (HHS) implementation sites to partner together and with their communities to work to improve services for people with brain and spinal cord injuries through a quality framework ensuring better access to safe and quality specialist rehabilitation services in Queensland.

The issues are complex for acquired brain injury and spinal cord injury rehabilitation. For individuals, the injuries are life altering, similarly for family and support networks. We have strong evidence to support the benefit of access to a high-quality specialist continuum of care to support recovery and quality of life. However, the high cost and specialisation required to deliver these services have made equitable provision and access across Queensland a challenge.

BaSCI has built an approach to solution design that has been led by the consumers, clinicians and operational staff involved through the project. It has required time, careful consideration and a maturing approach to working together to enable a shared vision of better outcomes for Queenslanders with brain and spinal cord injuries.

I was fortunate to attend the BaSCI Showcase for 2023 where the clinical community came together with consumers and representatives from interdependent sectors to profile the significant achievements of the work so far. Two things really stood out on the day. Firstly, the focus on the benefit to consumers, their families and the community from the impact of BaSCI to date. The program was truly consumer-centred from the opening address and this theme ran right through the day. Secondly, the overwhelming sense of collective enthusiasm to continue working together on shared problems was a highlight. The interventions and improvement actions, though delivered in separate locations and facilities across the state, are showing linkage across the system, pulling together data, evidence and learnings to share benefit across Queensland.

I am grateful for the efforts of Dr Neala Milburn and Dr Paul Chapman over 2023 in their roles as Project Clinical Leads, and Prof Timothy Geraghty prior to this time. There is so much to be celebrated about BaSCI to date and this project update shows this. The theme of clinician- and consumer-led solution design underpins this work and I encourage continued collaboration over the next 18 months. There is real opportunity with this federal funding to keep working together to change and improve the way specialist rehabilitation is delivered in Queensland now and to inform how it is delivered into the future.

**Dr Helen Brown**  
**Deputy Director-General, Clinical Excellence Queensland**

## Reflections from the Clinical Leads

At the start of last year, we stepped into the role of Clinical Leads for BaSCI, taking on the position after Prof Timothy Geraghty led the work through the crucial establishment period. Standing up an improvement initiative during the COVID-19 pandemic was incredibly challenging. The sub-acute sector experienced significant impacts during this time, including the loss of rehabilitation beds and the closure of entire units in many areas. The immense daily challenges and sense of uncertainty were not the ideal environment for envisioning reform and to focus on system-wide change and improvement. But it is not every day an opportunity like BaSCI presents itself and, today, change and improvement are precisely what has been achieved.

Queensland is a challenging place to organise and deliver specialist services. The geography is expansive and our population both diverse and dispersed. We know the benefit of patients being cared for as close to home as possible, but we also understand the limitation on resources and that we all need to work responsibly with financial stewardship. For specialist rehabilitation, while the challenges and improvement opportunities across the two subspecialty areas of brain and spinal cord injury services have nuances and specificity, the continuum of care crosses settings and sectors for life-long support as people age after an injury.

We have exceptional service capability in the Brain Injury Rehabilitation Service and the Queensland Spinal Cord Injuries Service both delivered through the Princess Alexandra Hospital in Metro South Hospital and Health Service. Spanning adult inpatient rehabilitation, transitional rehabilitation, and specialist community rehabilitation, a high-quality continuum of care has been established and delivered in the two subspecialty areas.

However, complex and multifaceted system issues and an increase in demand unmatched by service growth have created access issues to these established services.

BaSCI aims to improve equity for all Queenslanders with brain or spinal cord injuries regardless of where they live through better access to specialist rehabilitation for improved outcomes and experiences. Our system of care must respond to each individual's needs, and this is especially true for consumers that we know experience barriers to accessing care, including First Nations people and adolescent and young adults, and those living regionally or in remote areas. The growing community of providers must support and facilitate access to high quality specialist care that is networked across the state.

Since BaSCI began implementation in July 2021 we have seen a total of \$24M allocated to the improvement of services. We have passed the halfway point in the project. Collectively there are 17 acquired brain injury projects and 6 spinal cord injury projects delivered through 5 funded HHSs and reaching hundreds of patients right across Queensland, northern New South Wales and even into the Northern Territory. There are established multidisciplinary working groups who come together to share expertise and unpack challenging issues.

It is a privilege to work in rehabilitation teams alongside patients, their families, and support networks to help achieve their goals. The time-limited Commonwealth funding for BaSCI has presented a unique opportunity to bring consumers, clinicians, and administrators together to look at new ways to create a contemporary vision for specialist rehabilitation in Queensland that recognises the collective benefit of working together. This project update profiles the BaSCI work to date and the road ahead.

**Dr Neala Milburn and Dr Paul Chapman**  
**BaSCI Statewide Clinical Leads**

# The Brain and Spinal Cord Injury Project - BaSCI

## Our goal

Improving services to enable better care for people with brain and spinal cord injuries

- Improve **equitable and timely patient access** to specialist ABI and SCI rehabilitation services
- Test the effectiveness of **new models of care** and interventions to overcome barriers to access
- **Standardisation** of procedures and processes
- Enable earlier and **safe transitions** to community and home
- Facilitate **improved integration** between hospital and community health service providers
- Achieve **efficiencies** in patient flow, data management and performance.

## Expected outcomes

- Improved **patient experience** and clinical **outcomes**
- Increased **equity** in patient access to specialised brain and/or spinal cord injury services
- Increased **capacity and capability** of specialist brain injury and spinal cord injury services to meet patient need for services – service redesign/expansion, new models of care, upskilling regional and remote service providers
- Improved coordination, consistency and standardisation of care processes amongst service providers, **reduced variation** amongst services
- Increased **service measurability**, efficiency and effectiveness.

# Summary

This document profiles the achievements from July 2021 to December 2023, and the plan for continued implementation to the proposed project closure date of June 2025.

## Snapshot achievements

- Five Hospital and Health Service implementation sites stood up local BaSCI teams to deliver improvements for consumers with acquired brain injuries and spinal cord injuries across Metro South, Metro North, Gold Coast, Townsville, and Sunshine Coast Hospital and Health Services
  - Over 1000 consumers engaged in BaSCI-funded service pilots in Queensland to December 2023
  - More than 130 clinicians involved in project change management, service design, and improvement delivery across the state

## Acquired Brain Injury Rehabilitation Highlights

- 10 specialist Brain Injury Rehabilitation Unit (BIRU) beds piloted and transitioned to business as usual at Metro North HHS in the Surgical Treatment Ambulatory Rehabilitation Service (STARS) facility.
  - There are now 54 dedicated specific specialist BIRU beds in southeast Queensland.
- Innovative service models implemented to support patients with behaviours of concern in inpatient settings. These have demonstrated improvements in clinical outcomes and safety and have shown to be cost effective.
- Trialling an evidence-based model for the most severely brain injured consumers who have a prolonged disorder of consciousness (PDOC) resulting in advocacy for the development of a statewide networked service model.
- Non-admitted specialist ABI rehabilitation services for moderate to severe ABI have been established in all sites. This has expanded post-discharge specialist care options closer to home and is impacting how consumers access essential support and move through the system.
- Successful complex concussion services have addressed significant unmet need in Queensland.

## Spinal Cord Injury Service Highlights

- A new service offering of the statewide Queensland Spinal Cord Injuries Service (QSCIS) that includes an in-reach model: QuickStart. This service provides more timely access to SCI expertise to consumers with new SCI who would otherwise face a long waiting time for admission to the specialist unit and multidisciplinary support.
  - Access to formalised specialist management from the statewide service has reduced from 31 days down to 8 days.
  - 63% increase in referrals to QSCIS for newly-acquired spinal cord injuries highlighting previous unmet need
- Launch of North Queensland Spinal Cord Injuries Service (NQSCIS) in Townsville to support people with specialist care in the north with in-reach, outreach and outpatient care in partnership with QSCIS. Access to care closer to home enables consumers to benefit from the support of their family and community through their rehabilitation.
- New roles in Metro North, Gold Coast and Sunshine Coast to improve timely access to a specialist SCI clinician embedded in the service. This has improved patient safety by building capability of the local workforce and partnering with referrers and the statewide service to improve quality and continuity of care. These new roles are giving assurance and support to consumers with new injuries.

## Background

On 4 October 2020, the Commonwealth Community Health and Hospitals Program (CHHP) approved \$24 million over five years to Queensland to improve the patient experience, equity of access, and clinical outcomes for people with acquired brain injuries and spinal cord injuries within a quality framework.

Clinical Excellence Queensland assumed responsibility for the project with the Healthcare Improvement Unit (HIU) delivering the work through five (5) in-scope implementation sites including Metro South, Metro North, Gold Coast, Townsville and Sunshine Coast Hospital and Health Services (HHSs). These sites were included in the *Statewide adult brain injury rehabilitation health service plan 2016-2026* and the *Statewide adult spinal cord injury health service plan 2016-2026*. The plans, developed by System Planning Branch, recognise the need for changes to specialist rehabilitation services to meet growing demand and community expectations. Both documents have an overarching aim of equity through improved access to specialised services, system wide coordination and collaboration between providers. A state funded project, ABI-SCI Connect, was led by MSHHS 2018-2020, and aimed to implement short-term actions from the Plans. BaSCI has built on this foundational work.

The Statewide BaSCI Steering Committee was established in June 2021 and funding allocations for the first two (2) years of project activity were determined to progress three main workstreams aligned to project deliverables:

- 1. Data and KPIs:** improved collection of meaningful data to understand access, outcomes, quality & safety for monitoring service performance, ensuring continuous improvement and informing future planning.
- 2. Access Pathways:** development of pathways for both ABI rehabilitation and SCI services, supported by robust processes to ensure patients and treating teams can access clinically appropriate care, irrespective of where patients live or sustain their injury.
- 3. Service Pilots:** the testing or scaling of models and/or interventions that increase access to high quality, specialist rehabilitation closer to home, where appropriate.

A working group structure was established to bring together key clinical and operational subject matter experts across the state to progress the project deliverables. Each implementation site established project governance for the successful delivery of agreed work.

## Change Agents

Complex change requires dedicated resources.

Central to the project design and change strategy has been the provision of funding for a dedicated project team at the five HHSs consisting of a Clinical Lead, Project Officer and an Administration Officer. These teams, though staggered in establishment due to the challenges caused by COVID-19, are now fully staffed and are integral to the effective delivery of the project across the state, creating strong partnerships, shared vision, and working on solution design together.

*"I have never experienced an opportunity like this in my career. We have time to work through these challenges together. The Rehab unit and BaSCI team are buzzing!"*  
 – BaSCI HHS Project Officer

## Mandatory Milestone Deliverables

Under the agreement with the Commonwealth, annual mandatory deliverables must be achieved for the allocation of funding and project continuity. Current status against the agreement is included below.

Milestone	Date	Payment	Status
Report on the establishment of program design and governance	1/10/2020	\$2.65M	Achieved
Report on development of clinical pathways and data systems	1/8/2021	\$3.93M	Achieved
Report on implementation of first Service Pilot	1/8/2022	\$6.35M	Achieved
Report on implementation of second Service Pilot	1/8/2023	\$6.42M	Achieved
Report on implementation of third Service Pilot	1/8/2024	\$4.65M	On Track
Final report on project process, impacts, benefits and learnings	30/6/2025	\$0	On Track

## Reportable Service Pilots

The three packages of work reported to the Commonwealth combine a range of investments for strategies and interventions delivered through the in-scope HHS. The details of the Service Pilot packages are outlined in the following sections of the report.

<b>Service Pilot 1</b>	QuickStart: A collaborative in-reach model service, supported by embedded expertise at the bedside, aiming to improve timely access to specialist SCI care.
<b>Service Pilot 2</b>	The development and delivery of new services and models, across injury severity and the care continuum, to expand specialist ABI rehabilitation capacity and capability in Queensland hospitals.
<b>Service Pilot 3</b>	Brain Injury Community Integration Services: A networked model of specialist ABI rehabilitation coordination services delivered close to home supporting improved quality of life and community integration outcomes and building sustainable networks of support for individuals with ABI.



## Project Governance

In December 2022, in response to the [Department of Health Business Case for Change](#), BaSCI project governance was amended to align with the new [Integrated System Governance Structure](#), transferring financial delegation to the [System Quality Safety and Performance Management Committee \(SQSPMC\)](#). This transitioned the statewide Steering Committee to an Advisory Committee. The project FY 2023 – 2025 funding allocations were conducted through a criteria-led process and determined by the SQSPMC. A subsequent working group restructure for the project reformed workstream portfolios under the two subspecialist areas for effectiveness and impact. Details of the deliverables aligned to the reviewed project structure are captured in two sections in this document:

**Spinal Cord Injury Services**

**Service Pilot 1**

**Acquired Brain Injury Rehabilitation**

**Service Pilots 2 & 3**

## Solutions for Impact

The BaSCI federal funding envelope cannot address all aspects of service improvement for specialist ABI and SCI rehabilitation across Queensland. Considering this, priority has been given to targeted investments that have immediate and sustainable impact for consumers and the teams providing them care across the state. The measurable benefits of these improvements will be used to advocate for data-informed future service planning.





# Spinal Cord Injury Care

Reportable Service Pilot 1

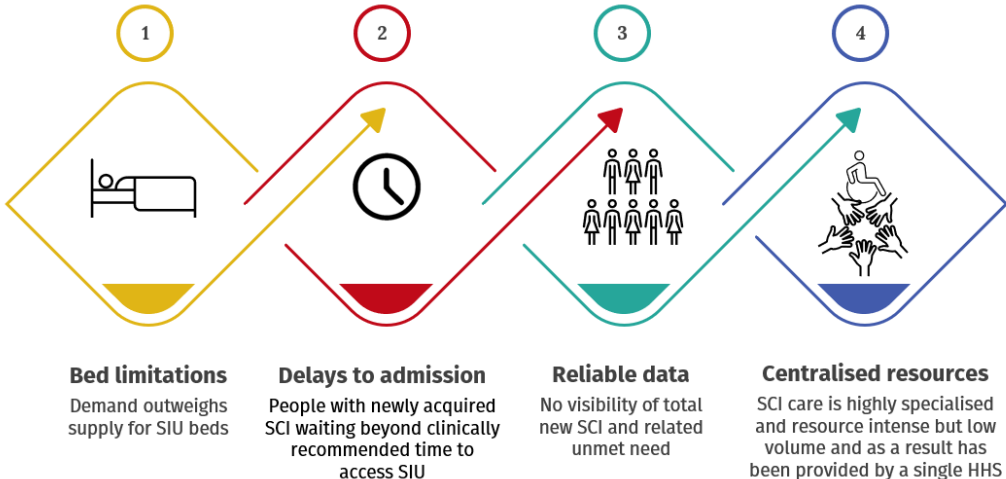
## Increasing equity and timely access to specialist spinal cord injury care and support

Spinal Cord Injury (SCI) is defined as damage to the spinal cord resulting from trauma or disease processes. SCI results in disorders of motor and sensory function below the level of spinal cord injury. Due to the multisystem disruption caused by SCI it can be a catastrophic, life-altering condition, even for people who may be able to walk independently or appear to be less severely impaired. SCI has low incidence and prevalence but requires complex and medical, surgical and rehabilitation interventions that require a highly skilled multidisciplinary workforce in specialist facilities for lifelong management.

Referral to a specialist spinal cord injury unit within 24 hours of injury is associated with better outcomes for consumers. Currently in Queensland, people with a new SCI are waiting too long to access inpatient early management and rehabilitation in the only Spinal Injuries Unit (SIU). These delays can result in secondary complications, increase inpatient length of stay and the need for invasive or complex treatments, and predispose consumers to further challenges in the rehabilitation and community phases of care, limiting both physical and mental health outcomes.

The SIU is a part of the continuum of services offered by the statewide Queensland Spinal Cord Injuries Service (QSCIS), that also includes outpatient, transitional, and outreach services. QSCIS is the [Statewide Service](#) for Queensland and hosted at the Princess Alexandra Hospital (PAH), with clinical and operational governance provided from Metro South Health.

### The challenges to address



Ideally an uplift of specialised SCI beds would improve services across Queensland. However, the space and funding required for high-cost, specialised units were not within project budget. Recognising there was an immediate need for patients to access specialist care, pragmatic interventions have been delivered to support patient safety.

## What has been done?

### Enhance QSCIS

Establish a new in-reaching team in the statewide service to provide more timely responsive care and support for consumers and treating teams across Queensland

### Standardised work

A core group to drive improvement work across statewide pathways and data

### North Queensland Spinal Cord Injuries Service

A specialist SCI service in Townsville to support North Queensland with a goal of operating under the umbrella of the statewide service

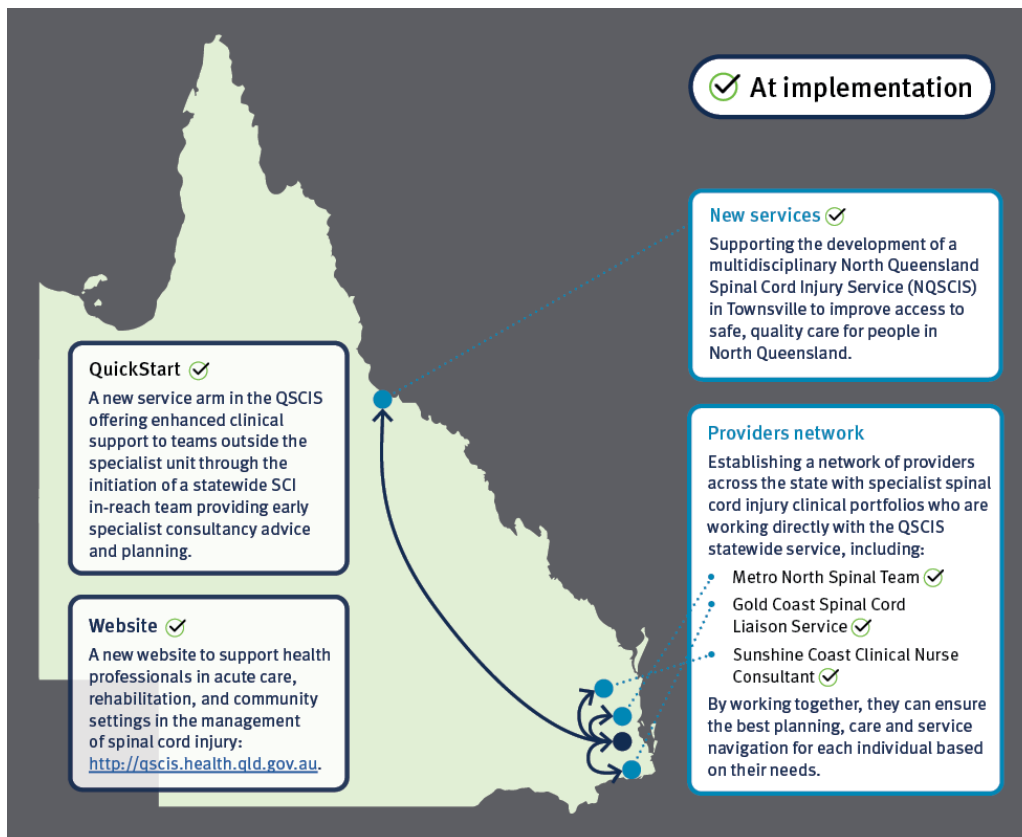
### Expertise on the ground

Embedded SCI roles at BaSCI sites in Metro North, Gold Coast and Sunshine Coast

*BaSCI has supported partnerships between the QSCIS statewide service and other care providers managing people with newly-acquired spinal cord injury.*

BaSCI funded collaborative roles		Pilot end
<b>Metro South</b>	6.5FTE	31 December 2024
<b>Townsville</b>	3.0FTE	31 March 2025
<b>Metro North</b>	1.6FTE	30 June 2024
<b>Gold Coast</b>	1.0FTE	30 June 2025
<b>Sunshine Coast</b>	0.4FTE	30 June 2025

## BaSCI actions for spinal cord injury care



# Impacts tracked to project goals

## **Equitable and timely access**

- Earlier specialist multidisciplinary SCI support from QSCIS through the QuickStart in-reach service
  - Pilot data shows people with new SCI are accessing specialist support **23 days earlier** than before the QuickStart pilot. Current wait time to first QuickStart intervention is an average of 4 days
- Where a local SCI embedded portfolio has been established this expertise can often be the same day the referral is made

## **New models**

- QSCIS have established a new service arm with QuickStart to move expertise to patients and their treating teams in responsive modalities right across Queensland
- The North Queensland Spinal Cord Injuries Service (NQSCIS) is working in close partnership with the QSCIS, establishing a collaborative care model with a goal of operating under the umbrella of the statewide service to better support people with SCI closer to home
- Embedded portfolios in other sites are supporting direct patient care for people with SCI as well as growing capability across the state through education and upskilling

## **Standardisation**

- QSCIS have launched an Education Hub online to provide clinicians managing people with newly acquired SCI with evidence based and accessible resources
- A new statewide pathway is being tested to support navigation and access for consumers to the most appropriate available care for their needs
- A core group of clinicians and consumers are confirming process standards to support the flow of consumers across the state between providers

## **Improved integration**

- Access to QSCIS services has been enhanced. Consumers who do not receive primary rehabilitation in the Spinal Injuries Unit at Metro South are now able to access the Transitional Rehabilitation Program where this level of specialist support is indicated, and service capacity is available
- The inclusion of a Transition Coordinator as part of the QuickStart team supports consumers in minimising barrier to the transfer from the SIU closer to home
- Embedded portfolios across the state have enhanced local capability, and the communication between consumers and providers, managing expectations and supporting safe transitions

## **Efficiency in patient flow and data management**

- The first iteration of a Queensland Minimum Data Set for Spinal Cord Injury was agreed in December 2023
- A pilot of this this new collection will commence early 2024
- BaSCI has impacted referral patterns with a **63% increase in referrals** for new SCI to the statewide service since project commencement helping to understand the true demand for specialist SCI care in Queensland
- Pilot data shows 57% of consumers with new SCI currently are not admitted to the SIU but cared for in general rehabilitation units informing future service requirements

## What does this mean for consumers?

- ❖ Timely access to highly specialised SCI clinical expertise in the acute and early inpatient phase of care that was previously only available on admission to the Spinal Injuries Unit.
- ❖ Local support available to deliver collaborative care with the treating team and QSCIS.
- ❖ Capability for some consumers to receive treatment closer to home, where appropriate. This avoids or shortens admissions in Brisbane, minimising the separation from family, friends, and community supports.
- ❖ Consistent communication supporting care options and the rehabilitation pathway.
- ❖ Assurance that teams across Queensland are working together.
- ❖ Accessible key contacts for local expertise and support.



*'Having a service like NQSCIS is really important to help patients live fulfilling independent lives,'  
Richelle (consumer) and Ali (clinician).*

*"I was over in rehab within a week. I was met early in the piece, and we started talking about all the unknowns. Bladder, bowel, sex, and fertility. And Doctor Do (QuickStart) brought even more specialisation to my care. But the transition home was the hardest part. It's good to know SPOT (Spinal Outreach Team, QSCIS) is there as a safety net for me now."*

*Consumer - Completed rehabilitation in Metro North supported by QuickStart and the local BaSCI team.*

*"It was a relief when the local [spinal] service started. Everything was explained to me in a way that I could actually understand, and that prepared me for my rehab at the Spinal Injuries Unit (SIU) from day one."*

*Consumer - Gold Coast resident who was transferred to SIU and supported before and after by the local Gold Coast BaSCI Spinal Cord Injury Liaison Service (SCILS).*

*"I was flown down to Brisbane to the Spinal Unit. I had nobody there. It was a big disconnect from my family and culture.... Just having Dr Tracey (BaSCI Townsville) who specialises in spinal to visit me in my home...and I would love to move home to Mt Isa and knowing there is a department here will make that so much easier ."*

*Consumer - a Kalkadoon Aboriginal woman from Mount Isa living in Townsville.*



# Acquired Brain Injury Rehabilitation

Reportable Service Pilots 1 & 2

## Building a networked model for specialist acquired brain injury rehabilitation to improve capacity and capability across Queensland

Acquired brain injury (ABI) affects approximately 1 in 45 Australians. Severity may vary from mild to severe, and the effects of an acquired brain injury varies depending on the part of the brain that is damaged. ABI-related disability can be devastating to an individual, their family and carers as it may affect cognitive, physical and emotional wellbeing along with the ability to independently function.

The care and rehabilitation required for recovery is complex, specialised and long-term, with input required from a range of health care professionals from acute care through to community settings.

BaSCI has built on the established model of the Brain Injury Rehabilitation Service (BIRS) delivered through Metro South HHS. Service growth and resourcing at the BIRS has not matched demand and the centralised model does not meet the need of consumers for care closer to home. These service pressures contributed to the System Planning Branch determining that BIRS did not meet the updated criteria for Statewide Service designation in early 2023.

The development of specialised brain injury rehabilitation options, outside of Brisbane South, has been a central focus. Through BaSCI, networked models and pilots of innovative and new services are now providing this specialised care to patients, closer to home.

## BaSCI objective for ABI rehabilitation in Queensland

Better **outcomes** and experiences after an acquired brain injury through improved **access** to high **quality** and culturally safe care that is responsive to the individual's needs regardless of where they live.



## Statewide BaSCI Initiatives for ABI Rehabilitation

Improved **meaningful data** about service access, quality and safety and patient outcomes

Consumer and evidence informed **service principles** to guide **future service direction** for ABI rehabilitation

Standardised patient **pathways** to facilitate service navigation and support access to the right care as **close to home** as possible for people with all severities of injury:

- Mild traumatic brain injury
- Moderate to severe acquired brain injury
- Very severe injury including prolonged disorders of consciousness

## Access to care closer to home in Queensland

[The Statewide adult brain injury rehabilitation health service plan 2016-2026](#) proposed geographic catchments for service coverage to ensure all consumers with an ABI in Queensland can access the care they need as close to home as possible. BaSCI has worked with sites to consider how a networked model of service can apply to ABI rehabilitation.

A networked model is patient-centred, delivering care by local providers as close to home as possible across all phases of ABI rehabilitation. Continuity of care is ensured by building capacity and capability of quality local services and having clear and formal governance between all providers. A performance monitoring and quality improvement framework is supported by meaningful data and sustainable funding mechanisms.

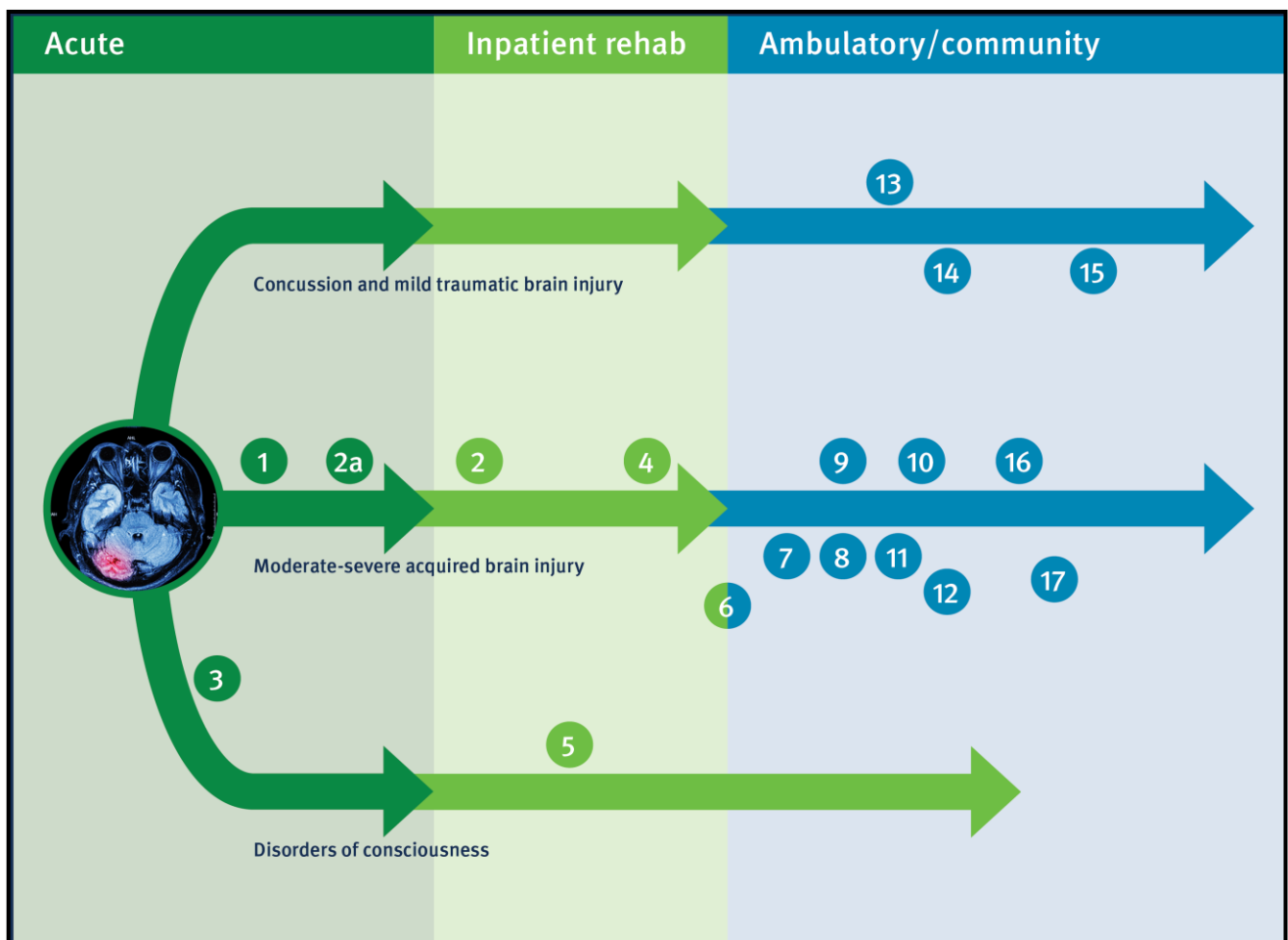
# Service Pilots - Models of cares

The capability and capacity of BaSCI sites varied across the state in terms of provision of specialist ABI rehabilitation. BaSCI has supported the development of a range of specialist services and models in response to local community need and existing service profiles. These have been informed by evidence, the existing model of service at the Brain Injury Rehabilitation Service, interjurisdictional scans and the partnerships growing through a maturing statewide clinical community.

## BaSCI projects to improve ABI rehabilitation Spanning the continuum of care and severity of injury

- 1 Metro South Acute ABI In-reach Project ✓
- 2 Metro North STARS Brain Injury Rehab Unit ✓
- 2a Metro North Brain Injury Referral and Triage Service ✓
- 3 Metro North Acute Disorders of Consciousness Project ✓
- 4 Gold Coast Behaviour Support Program ✓
- 5 Metro North Prolonged Disorders of Consciousness ✓
- 6 Metro North Hospital to Home ✓
- 7 Gold Coast ABI Outpatient Model
- 8 Sunshine Coast Neuro-intensive Rehabilitation Service ✓
- 9 Townsville ABI Multidisciplinary Follow-up Service
- 10 Metro North Specialist Ambulatory Project ✓
- 11 Townsville Culturally Safe Rehab Project
- 12 Sunshine Coast Hypertonicity Service ✓
- 13 Sunshine Coast Complex Concussion Clinic ✓
- 14 Metro South Concussion Clinic ✓
- 15 Townsville Concussion Clinic
- 16 Metro South Hybrid Transition Community Model ✓
- 17 Networked Specialist ABI Community Rehabilitation Coordination and Case Management Service

✓ Project delivered





# Models in focus

## Neurointensive Rehabilitation (NIR)

Sunshine Coast

This service facilitates high intensity, highly specialised ABI (and SCI) rehabilitation to patients who do not require overnight admission. This service allows for increased flow through acute and rehabilitation units by offering the same intensity of therapy offered by inpatient units, while allowing time at home for contextual practice of rehabilitation strategies.

NIR has proven to shorten inpatient rehabilitation length of stay, with some patients able to avoid it all together. Between March 2022 and December 2023, 1469 bed days have been saved, 58 from acute wards, and 1411 rehabilitation.

*"We were discharged from a general geriatric rehab unit to a home that could not accommodate us and almost no community supports. We heard things were happening at Sunshine Coast and made the tough decision to sell up and relocate so we could access specialist ABI rehabilitation after being discharged. Because of the skill, expertise, and intensity, and the excellent group dynamic, within a week she was walking again" – partner of ABI patient*

## Behaviour Support Program

Gold Coast

This model provides both group and individual recreational activities based on the interests of long-stay consumers with complex social and medical needs.

By assisting behavioural expression, the model prevents deconditioning and improves quality of life while promoting health and wellness. It also supports the overall Complex Management Unit team and model of care.

*"It makes me feel wanted. I enjoy games, drawing and talking." – participant*

The Unit reports a 75% reduction in Code Black Emergency Management and teams indicate increased participation in ward therapies as a result of rapport building with the Recreation Officers. As well as benefiting the consumer experience for participants, this low-cost model demonstrates return on investment.

## Culturally Safe Rehabilitation

Townsville

This work assessed the cultural safety of existing rehabilitation services by partnering with First Nations consumers, elders, & health service representatives to have a good look at how services are delivered. The process identified immediate and longer-term actions to address issues of cultural safety and improve experiences for better health outcomes for First Nations people.

The process can be replicated in services across Queensland to improve access to specialist rehabilitation for First Nation consumers who have higher rates of ABI than non-indigenous Australians but low representation in specialist rehabilitation services.

*"Lack of understanding pushes staff and First Nations people further apart. Improving communication skills to build trust, and rapport with patients and families is so important." – Indigenous Hospital Liaison Officer*

## Prolonged Disorders of Consciousness

Metro North

People who experience a prolonged disorder of consciousness (PDOC) following profound brain injury are low in number, but their needs create a substantial financial, emotional, and societal impact. Due to their extreme vulnerability and complete dependence on others, a duty exists to promote their interests and strive towards a quality of life that would be acceptable to them.

*“If we’re fighting to keep people alive, we should also be fighting to give them a life they would want to live.” – family member of ABI patient*

Metro North have developed a model of care to enhance both the acute and subacute hospital experience and outcomes for this cohort, and an opportunity remains for a sustainable statewide approach to whole-of-life care for people with these complex injuries.

*“Families can see the goals and trajectory of recovery and we can better support them through the process.” – clinician*

## Complex Concussion Care

Townsville, Sunshine Coast, Metro South, Gold Coast

Approximately 15-20% of patients who experience a mild traumatic brain injury will be impacted by post-concussion symptoms that include a variety of physical, cognitive, emotional & behavioural concerns in the weeks to months post-injury.

Prior to BaSCI, Queensland had no publicly-funded service options, and the complex nature of this presentation is not well managed in primary care settings.

BaSCI models have been established to support access to evidence-based, specialist multidisciplinary complex concussion care that is restoring function and returning consumers to employment and other meaningful life roles. These specialist services support General Practitioners with accessible pathways to care and reduces demand on already overburdened Emergency Departments.

*“Concussion clinic gave me my life back.”  
– consumer*

## Specialist Community Care

Metro South, Metro North, Gold Coast, Sunshine Coast, Townsville

Consumers consistently report the post-discharge phase of care as the most challenging in recovery.

*“It was like a blackhole when I left hospital. They got me up but then they let me go. I was completely alone.”  
– consumer*

Evidence-based specialist ABI community care has shown to be an essential part of the rehabilitation continuum. The Acquired Brain Injury Outreach Service (ABIOS) has been the single provider of this care in Queensland and reports significant unmet need across the state.

Launching in March 2024 is the Brain Injury Community Integration Service (BICS) operating across four (4) BaSCI sites. BICS has partnered with ABIOS as leaders in the specialist service to deliver this essential care to patients closer to home. This will support psychosocial adjustment and increase the chances of successful community integration for people with ABI.

# Monitoring performance for continuous improvement

Full evaluation reports of the various models that have been trialed under the service pilots will be delivered in a consolidated final project report in June 2025.

Another key deliverable to the Commonwealth under the project is improved and more meaningful data collection and analysis across the clinical subspecialty areas. Project assessment revealed some data rich pockets through site, service or setting specific collections. However, at a Queensland-wide level some gaps were noted. This prioritised:

1. Information on access and equity to established specialist services
2. Improved visibility of service activity in corporate systems

While some important detail regarding service utilisation and outcomes for rehabilitation in Queensland is available through established collections including the [Queensland Hospital Admitted Patient Data Collection](#) (QHAPDC), and the [Australasian Rehabilitation Outcomes Centre](#) (AROC), some key questions remained unanswered.

Who is missing out on the specialist care they need?  
What do consumers say about their experience?

To address this, new project collections have been established to monitor referrals across the state and are now maturing to understand:

- How patients move through services – measured by referrals received and acceptance of referrals to identified specialist services
- The timeliness of service access – measured by days on waiting list and reasons for removal from waiting list

Building on this collection, the project is developing the first iteration of Queensland minimum data sets for newly acquired SCI and ABI rehabilitation. Both focus on the domains of access, outcomes, quality and safety, and leverage the new project collections. This information helps to provide insight into what service gaps still exist and will be included in the BaSCI final report to inform future service planning.

*“We are starting to see how changes in the capability of one service impacts how people access alternative services in other areas of the state. Over time we will see this more.”*  
– BaSCI Clinician

*“This work is giving us a chance to understand better the needs of all Queenslanders who require specialist rehabilitation – not just those who get into the existing services.”*  
– BaSCI Clinician

One initiative under this portfolio is the commencement of specialist rehabilitation specific Patient Reported Experience Measures (PREMs), supporting meaningful feedback on existing specialist and BaSCI funded service models for continuous improvement.

Queensland Health administers a standard statewide PREM with a response rate for the this is 14%. Prior to the BaSCI PREM pilot, the average response rate for specialist units was 8%. This low response rate was most likely due to the general and non-rehabilitation specific nature of the questions in the Queensland Health PREM tool as well as the time and method of administering it to consumers with complex injuries.

BaSCI aimed to develop a PREM specifically for ABI rehabilitation SCI care, taking into consideration the long and often complex journeys consumers face, including multiple episodes of care, a variety of settings, and from multiple providers. In addition, it considered the specific needs of this patient group particularly the content and visual processing needs of patients with an ABI.

During the pilot phase, sites reported 50%-90% survey completion rates and plans are now underway to roll out PREM for ongoing service improvement.

## Ensuring sustainability

There is much to celebrate in the early implementation of BaSCI. While widescale health system change is complex, challenging and takes both time and significant investment of resources, BaSCI initiatives have seen rapid improvements for consumers, their families, communities, and the clinical teams working to support them.

Fostering a consumer and clinician led solution design process, coordinated across the state through the participating HHSs, has given autonomy and accountability to address specific local community needs, while linking to a shared improvement agenda.

New services have been established to address significant gaps addressing immediate patient safety issues across Queensland. Existing service capability and capacity has grown to provide a higher quality essential specialist of care closer to home, reducing distance travelled to receive care and the associated costs.

Growing the specialist care workforce is essential and clinicians across Queensland are working together to look at how to better partner and share knowledge, skills, and expertise. This is underpinned by more meaningful metrics to address challenges, and collectively plan for a future of specialist acute care and rehabilitation that supports more people to access quality care at the right place and time.

The opportunity presented with time-limited Commonwealth funding has seen integrated care across services, networking structures developed, and partnerships formed between providers. Through a collaborative approach, BaSCI is improving equity and achieving better outcomes for more consumers in Queensland.

The project has until June 2025 to continue to deliver on key milestones and to ensure the sustainability of this work. We have already seen service models made permanent at host HHSs through activity-based funding models. This has been achieved through strong metrics demonstrating excellent consumer outcomes and return on investment.

Some of the models being implemented however, do not align to traditional activity-based funding in hospital-based care. Continuing to demonstrate strong outcomes at both the consumer and system level will support these networked models, particularly in community settings, to be maintained into the future.

# Conclusion

It is an exciting time for specialist rehabilitation in Queensland and BaSCI has provided the opportunity to address significant community need.

Responsive actions have been taken across the state to improve care across the continuum through strengthened partnerships working together to improve access for patients to safe and quality services, closer to home.

Over the next 18 months, work will continue to grow and formalise partnerships to ensure a strong foundation is in place for continued maturing networks for sub-specialised rehabilitation beyond the Commonwealth funding period.

The maintenance of these new services will be underpinned by meaningful data and a continuous improvement approach being driven by people with SCI and ABI and their therapy teams.

The importance of this was highlighted in a recent consumer engagement session:

**“It’s not ticking a box and getting me up again and out of a hospital bed.**

**It’s about getting my life back.”**

**- Consumer**