Central Adelaide Local Health Network
Central Adelaide Rehabilitation Service (CARS)

CARS Ambulatory Services
- Proposed Model of Care

February 2017
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# ABBREVIATION LIST

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ABI</td>
<td>Acquired Brain Injury</td>
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<tr>
<td>BI</td>
<td>Brain Injury</td>
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<tr>
<td>BIRU</td>
<td>Brain Injury Rehabilitation Unit</td>
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<tr>
<td>BIRCH</td>
<td>Brain Injury Rehabilitation Community &amp; Home</td>
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<td>CALHN</td>
<td>Central Adelaide Local Health Network</td>
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<td>CARS</td>
<td>Central Adelaide Rehabilitation Service</td>
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<td>DRS</td>
<td>Day Rehabilitation Service</td>
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<td>ESD</td>
<td>Early Supported Discharge</td>
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<td>HRC</td>
<td>Hampstead Rehabilitation Centre</td>
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<td>IDT</td>
<td>Interdisciplinary Team</td>
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<td>Local Health Network</td>
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<td>MDT</td>
<td>Multi-Disciplinary Team</td>
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<td>NDIS</td>
<td>National Disability Insurance Scheme</td>
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<td>nRAH</td>
<td>New Royal Adelaide Hospital</td>
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<td>NTRU</td>
<td>Neuro-trauma Rehabilitation Unit</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>RAH</td>
<td>Royal Adelaide Hospital</td>
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<td>RITH</td>
<td>Rehabilitation In The Home</td>
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<td>SABIRS</td>
<td>South Australia Brain Injury Rehabilitation Service</td>
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<td>SASCIS</td>
<td>South Australia Spinal Cord Injury Service</td>
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<td>SCI</td>
<td>Spinal Cord Injury</td>
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<td>SORT</td>
<td>Spinal Outreach Rehabilitation Team</td>
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<td>THIC</td>
<td>Transforming Health Implementation Committee</td>
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<tr>
<td>TQEIH</td>
<td>The Queen Elizabeth Hospital</td>
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1. Purpose of Document

This document outlines a proposed model of care for ambulatory rehabilitation services as a part of Central Adelaide Rehabilitation Services (CARS). It sets out the service components that are required to continue to meet the needs of the community and deliver the key elements of Transforming Health, and provides recommendations for the objectives and principles of care, the design of services, and enablers for change. The proposed model of care aims to:

- Ensure CARS delivers services in line with the current reform, including newly endorsed models of care in rehabilitation, namely the Neuro-trauma Rehabilitation Unit at the new Royal Adelaide Hospital, SA Spinal Cord Injury Service – Sub Acute Service Hub Model of Care, SABIRS Brain Injury Rehabilitation Unit Proposed Model of Care.
- Align with and facilitate delivery of the Transforming Health Rehabilitation Services Project.
- Manage the current identified gaps in ambulatory rehabilitation service delivery.
- Address the expected increase in rehabilitation utilisation across the Local Health Network (LHN).

For the purposes of consistency with current CARS model of care documents, the term ‘patient’ is used throughout whilst recognising that individuals accessing ambulatory and other community based services are generally referred to as ‘clients’.

2. Background

Demand for Rehabilitation Services

The young elderly population (65 – 84 years) in South Australia will almost double in size over the next thirty years due to the large baby boomer cohort \(^1\) with the most dramatic increase expected by 2026 \(^2\).

The rapid increase in the number of young elderly in our population will drive up demand for rehabilitation services.

Transforming Health

Transforming Health recognises the need for expanded ambulatory services to allow rehabilitation to occur early in the patient journey and where possible in a patient’s home \(^3\).

Under Transforming Health a number of expert clinical working groups were established to develop model of care elements as defined, to ensure rehabilitation service compliance with Standards, and to ensure rehabilitation services will be delivered in line with the Transforming Health values, which are centred on six quality principles – patient centred; safe; effective; accessible; efficient and equitable.
This included the Ambulatory Rehabilitation Expert Working Group which worked on pathways, standards and principles specific to ambulatory rehabilitation services and produced a suite of recommendations. The recommendations included:

- Ambulatory rehabilitation services, including Rehabilitation in the Home (RITH) and Day Rehabilitation Services (DRS), will be increased across each LHN, supported by telehealth. The expansion of services and use of telehealth will improve access to services and the time it takes to be admitted to rehabilitation from an inpatient facility.
- A statewide referral process with consistent admission criteria to reduce discrepancies in who is able to access rehabilitation services across the state and ensure patients are directed to the most appropriate rehabilitation setting; home or centre based with telehealth capacity, or an inpatient facility. Wherever possible, South Australians will be offered rehabilitation in their own homes.
- Standardised operating principles and rehabilitation standards to ensure the consistent provision of equitable, accessible and effective rehabilitation services to South Australians.
- An agreed set of key performance indicators (KPIs) for monitoring and reporting, resulting in better patient outcomes.
- A recovery unit to accommodate patients under 65 years who are not suitable for ambulatory rehabilitation but do not require intensive inpatient rehabilitation (with a minimum of 2 hours a day therapy) or who are waiting for home modifications and support services.

These recommendations were endorsed by the MCAG and the Transforming Health Implementation Committee (THIC) and should be considered in conjunction with this proposed model of care.

Challenges Ahead for Ambulatory Rehabilitation Services in CALHN

In order to continue to meet the needs of the community in line with newly endorsed models of care for rehabilitation under Transforming Health, planning is required to address current and expected future shortfalls in ambulatory rehabilitation services in CALHN. Some known service realignments impacting on ambulatory services include:

- The transfer of rehabilitation activity (24 beds) to the Northern Adelaide LHN likely in early 2017 with a review of LHN borders in the Central East of Adelaide to provide better access to rehabilitation for residents in these suburbs; impacting both inpatient and ambulatory rehabilitation services.
- A 12 bed NTRU opening at the nRAH in 2017 to provide early rehabilitation to patients following a spinal cord injury (SCI) or brain injury (BI), as described in Section 3.
- Transfer of services from Hampstead Rehabilitation Centre (HRC) to The Queen Elizabeth Hospital (TQEH) is still undetermined with further consultation to occur in 2016.
Key to the success of these initiatives will be the establishment of efficient discharge pathways from inpatient to ambulatory services as well as viable and responsive ambulatory rehabilitation services that facilitate early discharge, support hospital avoidance and continue with intensive rehabilitation programs in the community.

This document outlines essential elements for ambulatory rehabilitation services to meet the needs of the acute and subacute sectors within CALHN and the broader South Australian community.

3. Central Adelaide Rehabilitation Service (CARS)

CARS spans the continuum of care from acute and sub-acute inpatient services to ambulatory rehabilitation. It includes amputee, stroke, orthopaedic and medical rehabilitation specialties within CALHN, as well brain injury (BI) spinal cord injury (SCI) rehabilitation specialties that include outreach services to regional and rural areas in South Australia and the Northern Territory. As such the latter comprise the statewide services – The South Australian Brain Injury Rehabilitation Service (SABIRS) and South Australian Spinal Cord Injury Service (SASCIS).

Service Descriptions - Essential Service Components in CARS

**Early Specialist Rehabilitation in the Acute Setting** (implementation to commence in 2017)

Provides early rehabilitation intervention in the acute care setting through a specialised multidisciplinary team (MDT). The objectives of this service are to:

- Eliminate the need for a transfer to a sub-acute inpatient facility and expedite a transition to the community or,
- Provide early interventions which will result in improved outcomes for the patient.

An example of this service type in CALHN is the 12 bed Neuro-trauma Rehabilitation Unit (NTRU) scheduled to open at the new Royal Adelaide Hospital (nRAH) in 2017 which will provide early rehabilitation to patients following a SCI or BI. For further details refer to the [Neuro-trauma Rehabilitation Unit Draft Model of Care](#).

**Sub-Acute Inpatient Rehabilitation**

Provides individualised, multi-disciplinary specialist inpatient rehabilitation programs that promote collaboration with patient, family and carers across the specialties of general rehabilitation (stroke, orthopaedic, amputee, burns, medical) SCI and BI rehabilitation in the inpatient setting. For these models of care refer to: [Relocation of Rehabilitation services: SA Health](#)
Home, Community and Centre Based Rehabilitation Services
Provides ambulatory rehabilitation across the specialities of general, SCI and BI rehabilitation to patients in accessible locations in the community. It delivers early supported discharge, community integration and hospital avoidance functions utilising a suite of service delivery models.

Specialist Rehabilitation Allied Health Outpatient Services
Provides rehabilitation services (primarily allied health) at various sites across CALHN to support hospital avoidance, contribute to early supported discharge and manage ongoing rehabilitation related health issues in the community. It is co-located with other rehabilitation services and integrates into existing pathways and processes to provide seamless patient care.

Specialist Rehabilitation Outpatient Clinics
Operate either as single discipline (allied health or medical) or multidisciplinary clinics to provide follow up post discharge from inpatient services in collaboration with aligned ambulatory services. As such they provide a team based, one stop service for patients re-presenting with rehabilitation or condition specific issues who require specialist assessment and where appropriate rapid entry to ambulatory rehabilitation services or further medical follow up. As a result the clinics contribute to hospital avoidance activity and provide an entry point to rehabilitation services.

Specialist Rehabilitation Outreach Services
Operate under the statewide models (SABIRS and SASCIS) to provide access to specialist services in regional and remote areas through the application of telehealth, centre based clinics and where appropriate one to one, home or community based services.

CARS ambulatory services link to new Models of Care for Acute & Sub Acute Sectors
Ambulatory rehabilitation services have co-dependencies with acute and sub-acute inpatient services and medical and allied health outpatient services and cannot be considered in isolation. For example when inpatient service delivery is limited, ambulatory services need to fill service gaps to ensure patient throughput, which may increase the number of ambulatory services required.

Similarly the impact of an under resourced ambulatory rehabilitation service can lead to extended length of stay in inpatient settings, as the lack of available timely rehabilitation services prevents patients transitioning to the community.

In developing the CARS Ambulatory Services - Proposed Model of Care key documents relating to the models of care of other aligned services were considered, namely:
The CARS Ambulatory Services - Proposed Model of Care has been developed to be consistent with the philosophies, processes and implementation plans of the aligned services, and thereby contribute to the development of a self-supporting and sustainable system for rehabilitation.

It is also recognised that further development of pathways into community services and the strengthening of partnerships with Primary Health Care (PHC) services and other out of hospital services will be required for the effective management of rehabilitation patients.

Refer to Appendix 1: Current & Proposed Referral Pathway – Inpatient to Ambulatory Rehabilitation

4. Ambulatory Rehabilitation

Ambulatory rehabilitation is essential to ensure the effective transition of patients from inpatient settings to integrated and independent lives in the community, and the avoidance of further hospitalisation.

For the purpose of this document Ambulatory Rehabilitation Services refers to the suite of services provided outside of a hospital including:

- Home, community and centre based rehabilitation
- Specialist rehabilitation outpatient services
- Specialist rehabilitation outpatient clinics
- Specialist rehabilitation outreach services

The Australian Faculty of Rehabilitation Medicine (AFRM) Standards for the Provision of Rehabilitation Medicine Services in the Ambulatory Setting, 2014, outlines the increasing requirement for, and reliance on, ambulatory models of care for the provision of rehabilitation.

As described in this document; the functions of ambulatory rehabilitation services are to:

- Facilitate the effective throughput of patients from health facilities
- Facilitate earlier safe discharge from inpatient facilities
- Prevent readmissions to hospital and assist to maintain individuals in their own home
- Reintegrate individuals back into the community
- Provide better access to convenient, contextually appropriate rehabilitation in the community
- Offer patient centred and cost effective services
• Support the ongoing effective care of patients by acting in a consultative role to outer metropolitan, rural and remote area NGOs and health providers as well as informal carers.

Such functions can deliver long term benefits for the community and the individual patient; potentially minimising the need for extended community care.

CALHN In-Scope Services

The CARS Ambulatory Services - Proposed Model of Care covers all ambulatory rehabilitation services within CALHN, including the two statewide specialist services and aligned rehabilitation based outpatient services and clinics, namely:

• Day Rehabilitation Service (DRS), (including Stroke Follow Up and Amputee Rehabilitation Services and Clinics)
• *Rehabilitation in the Home (RITH).
• SABIRS Ambulatory Services - Brain Injury Rehabilitation Community and Home (BIRCH) and medical, driving, concussion and spasticity outpatient clinics.
• SASCIS Ambulatory Services - Spinal Outreach Rehabilitation Team (SORT), specialist single and multidisciplinary outpatient services and clinics (including medical, seating, upper limb, driver assessment, physiotherapy, physical education and exercise physiology clinics and services), outreach services.
• Other outpatient services and clinics based throughout CALHN that provide services for rehabilitation clients as part of their service may be considered for the purposes of planning and integration of relevant outpatient services and clinics. These individual services are not named at this stage of planning and will be further considered when the implementation and operationalisation of plans commence.

Other standalone outpatient service and clinics in CALHN that are not involved in rehabilitation / or linked to CARS are considered out of scope.

* It is recognised that Rehabilitation the Home (RITH) is categorised as an inpatient service however due to the nature, functions, interactions and co-dependencies of the service it has been included in the document and considered in scope.

Refer to Appendix 2: CALHN Ambulatory Rehabilitation Service Descriptors
Refer to Appendix 3: Ambulatory Rehabilitation Outpatient Clinics and Services
The Philosophy of Rehabilitation

The World Health Organisation defines the rehabilitation process for people with disabilities as:

“... a process aimed at enabling them to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels.”

These concepts are a well-accepted definition for rehabilitation – they underpin services currently operating in CARS and are the centre of the CALHN Ambulatory Services - Proposed Model of Care.

Expanded CARS ambulatory services will be built around the patient, allowing for flexibility within programs to deliver the appropriate care to attain goals and meet the optimal level of function for the patients at a particular stage of their rehabilitation. Programs timeframes will be designed based on an individual patient’s goal attainment, progress and patient preference.

CARS ambulatory services will allow for assessed episodic return of the patient to ensure optimal pace and delivery of services. Existing community services will be utilised and facilitated to provide appropriate follow up, avoid duplication of services and link to the patient pathway.

5. Functions of Ambulatory Rehabilitation and Essential Service Elements for Delivery

Ambulatory rehabilitation provides functions that support patient flow across the care continuum. An expanded ambulatory service will support the successful implementation of new models of care for inpatients in CALHN and where feasible consideration should be given to establishing the expanded ambulatory service before other proposed reform activities such as the transition of the inpatient rehabilitation services to TQEIH and the establishment of the NTRU at the new RAH.

The core functions of Ambulatory Rehabilitation and the essential service elements to deliver them are presented below.

Hospital Avoidance

Hospital avoidance includes avoidance of unplanned hospital readmissions and emergency department presentations for patients who may otherwise be admitted to hospital. The role for ambulatory rehabilitation services in delivering hospital avoidance strategies includes:

- Early identification of issues and timely management of complications post discharge.
- Facilitation of a planned admission for the management of more complex issues.
For longer term / lifelong services; promoting self-management and health maintenance, early identification, prevention and management of deterioration and morbidity with the capacity for clients to self-refer.

It is recognised that a proportion of readmissions to hospital are necessary for specialist acute management, however the mode of hospital admission can impact the final outcome for a patient. A planned admission via a specialist ambulatory service is preferable to an unplanned emergency department presentation, the latter putting the patient at risk of deterioration due to a delay in accessing the appropriate services and placing unnecessary pressure on the health system. Pathways from the community to the sub-acute and acute inpatient sectors via a specialist multidisciplinary service are considered to be an integral component of this overall model.

Further to this, the important contribution made by community and PHC services in hospital avoidance needs to be recognised through integrated pathway and partnership development that supports the maintenance of patients in the community.

Hospital avoidance requires access to a responsive multidisciplinary team in the community and in a patient’s home where necessary. Resources required include:

- Nursing intervention to respond to wound, skin, continence and medication issues
- Medical review at the commencement of rehabilitation programs and throughout as required.
- Allied health intervention to respond to issues relating to psychological and social instability, deterioration in function and risk of falls.
- Access to equipment.
- Partnering with existing government and non-government organisations to support activities of daily living (ADLs) in the short term e.g. Healthcare at Home.
- Partnering with other community and support services in order to strengthen the response e.g. Extended Care Paramedics (SA Ambulance Service), Area Geriatric Services, mental health services, Healthcare at Home, Hospital in the Home.
- Development of protocols with other government agencies e.g. Disability SA to address the barriers to service and equipment provision relating to location of the patient.

**Hospital Avoidance Strategies CARS Ambulatory Rehabilitation Services**

CARS ambulatory services will provide hospital avoidance services to current and eligible patient groups.

- For DRS and RITH the service will be provided to current active patients.
- For SORT and BIRCH the service will be provided to the wider eligible patient group due to the nature of the conditions managed and the longer term services offered by these programs.
There is an identified need for ambulatory services to have the capacity to respond to clinical events which put patients at risk of hospitalisation with either a period of rehabilitation or a planned multidisciplinary approach to the patient’s management. This may involve enhanced medical and nursing services in the community.

Early Supported Discharge

Early supported discharge (ESD) allows a patient’s care to be transferred from an inpatient environment to a community setting. It enables appropriate patients to continue their rehabilitation therapy at home and/or in a centre, with the same or similar intensity and expertise that they would receive in hospital.

The National Institute for Health and Care Excellence (NICE, 2012) recommends that ESD is considered for all stroke and hip replacement patients who are able to transfer independently from a bed to a chair, or with assistance as long as a safe and secure environment can be provided, and an ongoing program of rehabilitation is required. Where a similar level of intensity of rehabilitation is offered to an inpatient service, ESD programs have been shown to positively influence clinical outcomes and in some cases, in particular for stroke survivors, has shown that home based rehabilitation is preferred by the patient and produces positive effects on length of stay.

ESD in CARS Ambulatory Rehabilitation Services

ESD services will be available to appropriate patients across the rehabilitation speciality areas and will be delivered by each of the in-scope ambulatory services. These services will be offered in a range of settings (home and centre based) and will be supported by the increased access to telehealth. This will support current initiatives to reduce inpatient LOS and align with the strategic direction of CALHN.

Strategies to support successful implementation of ESD include the:

- capacity to provide an adequate intensity of rehabilitation to support ESD functions
- transport to centre based programs
- short term ADL services / support workers to higher acuity home based patients
- capacity to assess a patient’s home in a timely manner and where appropriate prior to a planned admission to an inpatient service as a part of a prehabilitation program
- early assessment, follow up and provision of minor modifications and equipment
- statewide services to utilise RITH programs in other LHNs
- adequate step down services and accommodation options
- telehealth facilities to support early detection and timely management of issues
Post Hospital Discharge Rehabilitation (Community, Centre & Home Setting)
Providing a responsive rehabilitation service to all patients who have identified rehabilitation goals and who are transitioning from an inpatient stay to the community helps CALHN to achieve the standards set out in Transforming Health regarding access to ambulatory services: Following hospital admission 80% of patients who need outpatient therapy start within 7 days. These services may be offered within a client’s home, community or rehabilitation centre, or combination, by a dedicated rehabilitation team.

Post Hospital Discharge Rehabilitation services overlap with ESD as they cater for patients who may not have been considered for ESD as result of high complexity and/or reduced functional capacity.

Post Hospital Rehabilitation in CARS Ambulatory Rehabilitation Services
Post Hospital Discharge Rehabilitation Services will be available to appropriate patients across the rehabilitation speciality areas. These services will be offered in a range of settings (home, community and centre based). They will support current initiatives to reduce inpatient LOS and align with the strategic direction of CALHN. These services are resourced and will operate on a no waitlist policy in order to eliminate the risk of functional decline post hospital discharge.

Telehealth facilities will need to be accessible by all services to facilitate increased intensity and improve accessibility for patients.

Post Hospital Discharge Rehabilitation Services will be offered to BI and SCI patients in the context of a broader catchment area with statewide coverage facilitated by telehealth facilities. This will provide expanded capacity for outreach into regional areas; providing one to one clinic based input, home based monitoring and interventions, and clinician consultancy as required.

Life Role / Occupation Based Rehabilitation
Life Role / occupation based rehabilitation is provided to assist the patient to return to premorbid function with the aim of going beyond the daily self-care routines and addressing the patient’s life roles - which may include parenting, study, paid or unpaid work and driving. For this reason this stage of rehabilitation usually occurs further along a patient’s rehabilitation journey when recovery in mobility and personal care activities have stabilised.
Life Role / Occupation Based Rehabilitation in CARS Ambulatory Rehabilitation Services

Life Role and Occupation Based Rehabilitation services are designed around the patient to allow appropriate pacing, grading and episodic return for management of issues as they arise. CARS’ patients will access these services as required. This includes:

- Patients who have suffered a SCI or BI by the nature and complexity of their conditions require comprehensive team based rehabilitation which addresses the patient’s capacity to return to a rich and integrated life.
- Patients undergoing general rehabilitation patients when assessed as appropriate by the Day Rehabilitation Service (DRS).

The service delivery mode will support the maintenance of patients by existing community services as appropriate:

- New pathways for referral will continue to be developed with the staged introduction of the National Disability Insurance Scheme (NDIS), and CARS’ interface with the NDIS is recognised as critical for service delivery. The interface will support smooth transitions with a ‘no wrong door’ approach, enabling coordinated and integrated plans, supports, referrals and transitions.
- Ambulatory services will continue to build partnerships and pathways for patients to access a range of other services (e.g. community organisations, peer support services, non-government organisations, Lifetime Support Services) to provide supportive, culturally, age and geographically appropriate services including recreation, health and wellbeing programs in the community.

Prehabilitation

Prehabilitation is the process of enhancing an individual’s functional capacity before an operation to enable him or her to withstand the stress of surgery, or before other medical interventions such as chemotherapy.

Prehabilitation from a multidisciplinary team which offers strength training, education, nutritional support and advice and has the capacity to plan for discharge (including equipment and care needs) prior to surgery can result in an expedited discharge from hospital with an improved baseline function and in some cases may eliminate the need for an inpatient rehabilitation episode.

Prehabilitation in CARS Ambulatory Rehabilitation Services

Prehabilitation will be made available as an approach to support LOS strategies in Central Adelaide for known susceptible groups, for example orthopaedic surgery patients. Prehabilitation will be initiated at the point of initial outpatient consultation once an admission for an elective procedure is planned and will be provided by MDTs with specialist skills in this area.
Multi-Disciplinary Specialist Rehabilitation Outpatient Services & Clinics

Specialist rehabilitation outpatient services and clinics for complex patient groups, provided by an Interdisciplinary team (IDT) or MDT, are an important adjunct to a high functioning rehabilitation service. Single discipline clinics continue also as an adjunct to post hospital care and maintenance of the patient in the community.

Patients have timely access to a team of specialists with the objectives of:

- Providing complex functional health reviews, assessment and rehabilitation inputs to prevent, identify and address secondary complications, promote lifelong wellness.
- Providing consultation and support to maximise ongoing recovery and rehabilitation within the community e.g. return to driving which may not have been possible or appropriate to address during a rehabilitation episode.

**MDT Specialist Outpatient Services & Clinics in CARS Ambulatory Rehabilitation Services**

MDT Specialist Outpatient Services & Clinics will deliver a rehabilitation focussed single point of assessment services with access to a comprehensive team of specialists in one appointment. The service will be offered in an appropriate timeframe after hospital discharge where another rehabilitation service is not engaged.

MDT Specialist Outpatient Services & Clinics are integrated into ambulatory rehabilitation services to avoid duplication and over servicing and can be accessed by known patients through self-referral portals.

Enhancement of existing services will allow ambulatory rehabilitation for conditions like stroke, amputation, SCI, BI to be integrated in the MDT Specialist Outpatient Services & Clinics.

**Outreach Services**

Outreach services provide access for patients in regional and remote areas to specialist services via clinic, home and community based services with telehealth capacity.

**Outreach in CARS Ambulatory Rehabilitation Services**

SCI and BI services provide regular multidisciplinary outreach clinics in key country and outer metropolitan locations in SA, providing direct assessment and complex health reviews, consultation, and education, using collaborative work practices to build local capacity for managing patients. Centre based clinics, with in-reach and home based consults and additional input via phone, email, telehealth are provided when required.

Enhancing the outreach service by integrating it with the statewide ambulatory rehabilitation services, will ensure improved access and allow for growth to better meet the needs of all patient groups.
Investment in both centre and home based telehealth solutions will allow for increased patient contact and rehabilitation intensity across the state, and greater opportunity for consultancy and partnering with local clinicians in country and outer metropolitan locations.

6. Ambulatory Rehabilitation – Model of Care Enablers

Further Integration of Ambulatory Services

Further integration of ambulatory services means flexible access to the right mix of ambulatory services, at the right place and time so that it delivers seamless transitions and a patient centred and equitable service at any point in the patient journey.

Integration can occur at various levels including specialist skill sharing, shared processes, sharing of resources, equipment and accommodation.

Integrated Services in CARS Ambulatory Services (DRS and RITH)

Improving the connection, alignment and flexibility of RITH and DRS services will increase their accessibility, support early discharge from the inpatient sector and reduce the need for inpatient rehabilitation.

RITH will continue to focus on short term home based rehabilitation programs to support discharge from inpatient services. DRS will focus on providing rehabilitation programs and functions to facilitate the transition of patients out of RITH and support hospital avoidance. Integration of these programs places the patient at the centre of care by reducing assessment duplication, increasing access to services and facilitating seamless transition between service elements.

Similarly patients from SORT, BIRCH and DRS will be able to access required services across the programs where appropriate. The exclusion to this is referral into RITH which can only be accessed from inpatient services.

This integration will be achieved with a collaborative model of practice where teams and services simultaneously provide specialist input and work together keeping the patient at the centre of care. ,

Enablers of an integrated ambulatory model include:

- Use of one goal document and careplan which follows the patient
- Shared ICT systems for access to clinical information further to EPAS
- Shared processes, clinical protocols and pathways
- Shared core documentation with additions for specialist services
- Transparent and accountable protocols for admission and eligibility criteria
- Improved networking and peer support
- Dual roles across teams, sharing of specialist skills and staff rotations for skill building
- Shared resources in particular rehabilitation infrastructure and equipment
- Systems to support the integration of services such as between RITH and DRS which eliminate funding as a barrier to patient access.

The diagram below illustrates the current and proposed pathway for patients through the ambulatory services with efficiencies gained in the elimination of duplicate assessments and improved entry and exit processes for each program.

**Diagram 1: Integrated Service Model**

**Example of Current Practice**

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<th>RITH</th>
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<td>Gaps</td>
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ESD → Centre Based Rehab → Life Role Rehab

‘Gaps’ may refer to time, efficiency, duplication, processes, capacity & resources

**Example of an Integrated Model**

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<thead>
<tr>
<th>ESD</th>
<th>Home based Rehab</th>
<th>Centre Based Rehab</th>
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Stratified documentation, assessments, shared protocols & pathways

Service Admission  Service Discharge
Further consideration of the integration of ambulatory services with the acute and subacute inpatient sectors is also necessary to similarly minimise duplication and create a more seamless experience for the patient.

Integration of rehabilitation services needs to be cross sector and multi-directional with shared condition specific protocols and pathways that address the patient journey from admission to acute care, to transition to the community and re-entry where necessary. Pathways to community and PHC services are an important element in these pathways.

**Workforce**

Rehabilitation is a complex, specialist area of practice that requires dedicated medical, nursing and allied health staff with rehabilitation expertise. All ambulatory rehabilitation services require access to rehabilitation trained allied health assistants.

The CALHN Ambulatory Rehabilitation Services Proposed Model requires inter and multidisciplinary teams sufficient for optimal intensity of input. Allied health professions need to include but are not limited to: occupational therapy, physiotherapy, exercise physiology, social work, speech pathology, nutrition and dietetics, orthotics and prosthetics, clinical psychology, neuropsychology, and podiatry. Teams require the support of skilled technical and operational staff, with some specialist areas also requiring vocational, educational and recreational staff.

An appropriately resourced workforce supports ambulatory services to align service delivery models to inpatient objectives i.e. to reduce LOS, reduce the rate of unplanned hospital admissions and divert patients into appropriate ambulatory services from the community thereby negating the need for an inpatient admission.

**Workforce within CARS Ambulatory Rehabilitation Services**

It is recognised that CARS ambulatory services in their current form and capacity are unable to fully deliver the service elements described in this document and will not provide the responsive and intensive ambulatory rehabilitation service that is needed to support new subacute models of care for inpatient rehabilitation.

A more comprehensive and evidence based ambulatory rehabilitation service can only be provided with an enhanced workforce of specialist clinicians. This includes investment in both team size and structure to enable delivery of the service elements and exploration of interdisciplinary practice models and specialist skill building through advanced or extended practices roles across the teams to facilitate evidence based practice and support a culture of innovation and improvement.
Each service requires an investment in workforce numbers which should also factor in the ability to maintain appropriate levels of service provision when staffing levels fluctuate (e.g. due to planned or unplanned leave or staff turnover), and should incorporate succession planning into workforce planning processes.

Standards for workforce allocation to ambulatory rehabilitation have been formulated by the Australian Faculty of Rehabilitation Medicine (AFRM) and should be followed in the implementation phase.

Rehabilitation Intensity & 6/7 Day Services
In line with the Transforming Health Standards of Care and the Allied Health 7 Day Services Project; improved access to allied health professionals across the week and weekend enhances recovery programs, reduces the risk of deterioration, and allows for increased intensity resulting in improved flow of patients through a service. Increasing evidence shows that higher levels of rehabilitation intensity results in improved outcomes for patients with the potential to reduce LOS.

Rehabilitation Intensity in CARS Ambulatory Rehabilitation Services
Ambulatory rehabilitation services need to be comprehensive, flexible and responsive, and delivered at the required rehabilitation intensity, to facilitate seamless transitions from inpatient facilities. Services will be available on 5, 6 or 7 days depending on the client group, and direct task specific therapy of 3 hours per day per patient will be available in line with Transforming Health recommendations. Comprehensive group programs and home exercise programs with remote monitoring through telehealth capabilities will provide additional opportunities for rehabilitation.

In line with Transforming Health, centre based services will offer flexible programs outside of usual business hours with addition of late afternoon and weekend sessions allowing a larger patient cohort to be accommodated.

Location & Accessibility of Services
Transforming Health promotes the delivery of rehabilitation services either in a patient’s home or as close to their home as possible. The need to ensure that services are delivered in the most appropriate setting to achieve the best outcomes for the patient is also paramount.

Location & accessibility of Services in CARS Ambulatory Rehabilitation Services
While the majority of CARS ambulatory services will occur at the CARS hub, which is currently proposed as The Queen Elizabeth Hospital, development of satellite sites for some services should be considered to ensure ambulatory rehabilitation is accessible to patients across the region. The ‘hub and spoke model’
refers to the establishment of a ‘hub’ where the rehabilitation services are centralised. ‘Spokes’ or satellite sites provide components of the rehabilitation services in accessible areas in the region.

With TQEH as the proposed hub, access to services could be potentially challenging for Eastern and Central Suburb patients. The establishment of a satellite site would provide improved access by DRS to ambulatory services for this population, and would also facilitate improved access to statewide services for outer metropolitan patients.

With the addition of a southern site for SABIRS, (with capacity for SASCIS co-location) these programs will deliver a more comprehensive statewide service.

Technology (Telehealth)

Telehealth technologies in daily practice across clinical services will reduce the number of home visits required, increase therapeutic intensity and dosage and provide improved access to patients from regional and remote areas for the statewide services³. Investment in Telehealth technologies will lead to an increase in the capacity, responsiveness and intensity of CARS ambulatory rehabilitation services and thereby deliver a key objective of Transforming Health Rehabilitation Services Development Project, which anticipates “reduced hospital days, reduced travel costs, reduced re-admissions, a higher volume of appointments per staff member and per episode, and sustainability of services”².

Technology & Telehealth in CARS Ambulatory Rehabilitation Services

As recommended by Transforming Health all ambulatory rehabilitation services should be telehealth enabled. The addition of tablets with therapy applications and patient monitoring capacity, home and centre based telehealth will assist in ensuring the patient journey is as efficient as possible. It will allow rehabilitation to be offered through a number of pathways with increased intensity and efficiency, leading to reduced LOS, reduced waiting times to access services and improved outcomes. Investment in equipment and training will be required to support telehealth development and uptake across the ambulatory rehabilitation services.

Referral & Triage Processes

In line with Transforming Health recommendations², entry to rehabilitation services is led by an expert team in rehabilitation triage with access to multidisciplinary input as required. Standardised processes and transparency in service admission criteria support critical decision making and optimise patient flow.

Future Direction for Referral & Triage Processes in CARS Ambulatory Rehabilitation Services
Expert triage teams need to have an understanding of all of the rehabilitation services available to facilitate appropriate use of home and ambulatory services, bypassing inpatient episodes when appropriate. This will ensure the right services are engaged at the right time, first time. The addition of multidisciplinary expertise in to triage processes is critical to provide a full picture and provide a vehicle to seek out further specialised allied health or medical assessment should it be required to guide the assessment outcome.

Multidisciplinary expertise and system transparency will enable CARS ambulatory services to operate under a no waitlist policy; knowing that the referrer and triage team will flow patients into the most appropriate setting.

Patients and families will be engaged in the triage assessment process, educated about the options and actively participate in decision making about their rehabilitation journey. The enhanced triage process may facilitate a flow of referrals to DRS, potentially redirect some referrals from RITH to DRS that may not require this service and identify patients on discharge from the acute sector who are not currently being identified for rehabilitation.

Statewide services have their own internal referral and triage processes with varied entry points, however work will be undertaken to deliver consistency in the referral processes to these services also. Standards will be set around referral to triage assessment time frames across all patient pathways in line with Transforming Health recommendations.

Performance Monitoring

In line with Transforming Health recommendations, a consistent suite of KPIs is required for monitoring and reporting against SA Rehabilitation Service Standards. Adoption of these recommendations will facilitate statewide standardisation and enable national benchmarking of services.

The 7 Core Quality KPIs are:

1. Rehabilitation Care - 90% of patients admitted to a rehabilitation bed are receiving rehabilitation 6 days a week (with a view to 7 days within 3 years).
2. Rehabilitation Access - 40% of stroke rehabilitation patients access ESD/RITH rehabilitation (7 days a week).
3. Proportion of hip fracture patients accessing ESD within 7 days (target 30%).
4. Time from acceptance to commencement of rehabilitation program (target 48 hours).
5. 90% of rehabilitation patients achieving target length of stay for relevant casemix group.
6. Proportion of rural patients with stroke, lower limb amputation and hip fracture accessing rehabilitation.
7. 70% of stroke rehabilitation inpatients with admission FIM 40-80 (AROC).
8. Evidence of use of Patient Reported Outcome Measures at 12 months.

Evaluation of service changes is imperative to ensure sustainability and growth. Patient satisfaction measures and appraisal of services from a patient’s perspective via Patient Reported Outcome Measures (PROMS) must be included in the evaluation to facilitate patient centred care.

Partnering with Universities

As recommended by Transforming Health, active involvement in the education of students is vital to propagate the value and benefits of interdisciplinary service models, meet the growing demands for rehabilitation in the community and lead the education of students in the ambulatory rehabilitation specialism\(^2\). Innovative workforce models that incorporate student led services and interprofessional learning offer valuable experiences for students and increase service delivery capacity \(^{12}\).

Inter- and multidisciplinary team environments offer a rich education experience to ensure that students graduate with the necessary clinical and professional skills required to work in a contemporary health system. The students benefits from increased responsibility, ownership and integration into a team. They are exposed to real life clinical situations and immersed in the clinical and professional environment.

Opportunities exist for CALHN Ambulatory Rehabilitation Services to offer placements in student led clinics and across teams. Collaboration between the services and sectors is vital to facilitate this.
7. References


2) MCAG Rehabilitation Services Development Project, Service Components for Optimum Rehabilitation Care in South Australia Report 2016


4) Australian Faculty of Rehabilitation Medicine 2014, Standards for the Provision of Rehabilitation Medicine Services in the Ambulatory Setting


7) There’s No Place Like Home An Evaluation of Early Supported Discharge for Stroke, Nancy E. Mayo, PhD; Sharon Wood-Dauphinee, PhD; Robert Côté, MD, FRCP; David Gayton, MD, FRCP; Joseph Carlton, MD, FRCP; Joanne Buttery, MNSc; Robyn Tamblyn, PhD. Stroke. 2000; 31: 1016-1023 doi: 10.1161/01.STR.31.5.1016


8. Feedback

This paper outlines the Central Adelaide Rehabilitation Service (CARS) Ambulatory Services - Proposed Model of Care. There are still details that need to be determined and your feedback, suggestions and questions will assist in further refining the model.

Targeted discussions with stakeholders who have significant shared patient cohorts will be undertaken (e.g. geriatrics, orthopaedics and trauma / spinal injuries service, acute stroke service, neurology and neurosurgery, vascular).

Feedback can be provided via survey monkey [https://www.surveymonkey.com/r/JQQN7F5](https://www.surveymonkey.com/r/JQQN7F5)

Feedback is due by 13th March 2017. In particular we are seeking responses to the following questions:

1. Do you have any feedback in relation to the CARS Ambulatory Services Consultation Paper?
2. Do you have any specific feedback in relation to the CARS Ambulatory Services Proposed Model of Care as described in the Consultation Paper?
3. What else would you like to know about the CARS Ambulatory Services?