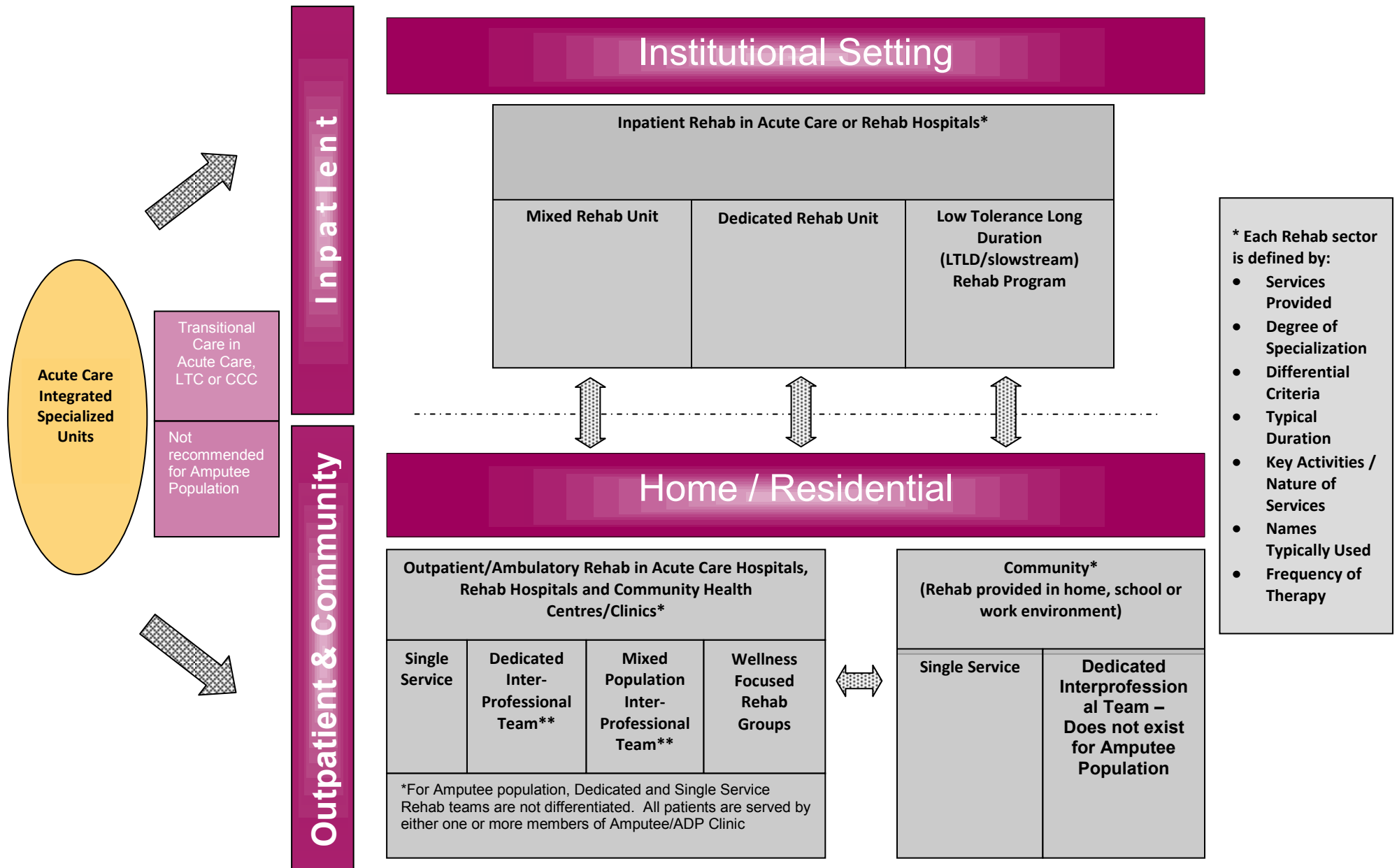


Amputee Rehab Definition Framework



GUIDING PRINCIPLES

Objective:

I. Increase clarity and consistency in the forms of cognitive and physical rehab across the continuum by:

1. Clarifying the distinctions between and across institutional and community-based rehab programs.
2. Classifying programs with consistent terminology.
3. Describing the key features of institutional and community-based rehabilitation programs based on the services provided, the degree of specialization, differential/critical criteria, duration, and the primary focus of the rehab program/service.

II. Inform planning and performance measurement through the development of standards for rehab program components against which rehab programs can be benchmarked.

Guiding Principles:

1. The Rehab Definitions Conceptual Framework presupposes the World Health Organization's definition of "rehabilitation" as "*a progressive, dynamic, goal-oriented and often time-limited process, which enables an individual with an impairment to identify and reach his/her optimal mental, physical, cognitive and/or social functional level. Rehabilitation provides opportunities for the individual, the family and the community to accommodate a limitation or loss of function and aims to facilitate social integration and independence.*"
2. The Rehab Definitions Conceptual Framework refers to cognitive and physical forms of rehabilitation. This includes Acquired Brain Injury behavioural programs and geriatric psychiatry. The rehab conceptual diagram refers to acute care, inpatient rehab programs within institutional settings and outpatient and community-based rehab for clients residing at home or in a residential setting. The use of bi-directional arrows in the schematic reflects the flow of patients and continuity of care across these settings.
3. The framework identifies key features of rehab programs based on evidence-based practices where available (e.g. rehab beds are clustered together). In most instances these key features reflect current practices; however, some organizations may be required to implement changes within their organizations to achieve consistency with the criteria set out in the framework.
4. The term "patient" is used for individuals receiving rehabilitation in a hospital setting. The term "client" is used to refer to individuals receiving community rehab services.
5. The Rehab Definitions Conceptual Framework uses categories that have been defined based on the rehab needs of the patient and the typical services provided. Length of stay or the type of facility in which the rehab is provided is not considered essential to defining rehab sectors.

Amputee Rehab Definition Framework

6. The Rehab Definitions Conceptual Framework is based on the assumption that clients participating in the programs described have rehab potential and rehab goals. For criteria regarding rehab potential, medical stability and rehab readiness for inpatient rehab, refer to the GTA Rehab Network's Inpatient Rehab Referral Guidelines (www.gtarehabnetwork.ca).
7. The framework uses terminology that is consistent with the MOHTLC guidelines for inpatient rehabilitation beds and can be applied to community and ambulatory service delivery.
8. While it is appreciated that much of rehabilitation occurs in third-party payer assessment centres or private clinics, the framework refers to publicly-funded rehabilitation. However, it is hoped that the framework will promote consistency in standards of care and equitable access across all rehab programs.
9. Input from healthcare providers representing acute care, regional rehab centres and community-based organizations that provide adult (including geriatric) and paediatric rehab has been obtained to validate the Rehab Definitions Conceptual Framework.

Amputee Rehab Definition Framework

GLOSSARY OF REHAB COMPONENT TERMS

Core Team: Refers to the team members who are essential, actively involved in the assessment and treatment of amputee patients on the unit, and participate regularly in team rounds.

Dedicated Interprofessional Team (Community): Rehab provided in the home, school or work environment by an interdisciplinary team using a coordinated, integrated approach for specific rehab populations or to reduce the impact of a particular disability.

Dedicated Interprofessional Team (Outpatient/Ambulatory Rehab): Outpatient rehab provided by an interdisciplinary team with expertise in the treatment and assessment of a particular patient population. Outpatient/Ambulatory dedicated interprofessional teams are located in acute care hospitals, rehab hospitals and community health centres/clinics. They provide rehab to patients who require more than one rehab service and a coordinated rehab approach.

Dedicated Rehab Unit: An inpatient rehab unit located in acute care and rehab hospitals that serves a single patient population group and provides intensive rehabilitation. Some units may specialize in more than one diagnosis in related populations (e.g. Cardio/Respiratory, Orthopaedic/Amputation, etc.). A dedicated rehab unit is suitable for individuals who require 24-hour hospital care and who are in need of an interdisciplinary rehab program using a coordinated rehab approach.

Low Tolerance Long Duration (LTLD/slowstream) Rehab Program: Suitable for individuals in need of an interprofessional rehab approach to address specific rehab goals who also have chronic/complex conditions requiring 24-hour hospital care and who are expected to benefit from a slower-paced rehab program for a longer duration than is offered in dedicated or mixed rehab programs. LTLD rehab is most commonly delivered in a complex continuing care bed but may also be provided in a designated rehab bed. LTLD rehab programs may be located in acute care, rehab or complex continuing care hospitals.

Mixed Population Interprofessional Team (Outpatient/Ambulatory Rehab): Outpatient rehab that is provided by an interdisciplinary team, which typically assesses and treats patients from a variety of patient population groups. Outpatient/Ambulatory mixed population interprofessional teams are located in acute care hospitals, rehab hospitals and community health centres/clinics. They provide rehab to patients who require more than one rehab service and a coordinated rehab approach.

Mixed Rehab Unit: Formerly referred to as a General inpatient rehab unit, this type of unit is located in acute care and rehab hospitals, provides intensive rehabilitation and serves a variety of patient population groups. The mixed rehab unit is suitable for individuals who require 24-hour hospital care and are in need of an interdisciplinary rehab program using a coordinated approach.

Amputee Rehab Definition Framework

Single Service (Community): Individual rehab services that are usually provided through Community Care Access Centres. Single rehab services are suitable for individuals who are in need of one or more rehabilitation services in single specialty area(s)/profession(s) provided in the home, school or work environment. Although clients may receive more than one service, a coordinated approach is not used as rehab providers typically work as individual providers. However, some communication with other health providers may occur on an as-needed basis.

Single Service (Outpatient/Ambulatory Rehab): An outpatient rehab service located in acute care hospitals, rehab hospitals and community health centres/clinics that is suitable for individuals who are in need of an outpatient rehabilitation service in a single specialty area/profession. Clients may receive more than one rehab service; however, the services are not provided by way of a coordinated rehab approach. Services may include assessment only or assessment and treatment. Services may be provided during a one-time visit or multiple visits.

Wellness Focused Rehab Groups: These groups are provided in an outpatient/ambulatory setting and led by an individual rehab provider or team or rehab specialists to enhance an individual's ability to cope with a particular disability or impairment. These time-limited groups are publicly-funded although a small fee may be charged for materials.

Amputee Rehab Definition Framework

ACUTE CARE	
Integrated Specialized Units	
Names Typically Used	<ul style="list-style-type: none"> • Surgical Unit or Orthopedic Unit or Vascular Unit • Patients may also be on the Trauma Unit
Services Provided	<ul style="list-style-type: none"> • Medical team includes: surgery (Vascular or Orthopaedic), nursing, physiotherapy, occupational therapy, social work, nutrition • The following disciplines should be available on a consultative/case by case basis, depending on individual patient's needs: Physiatry, prosthetist, pain service, nephrology, pharmacy, chaplaincy, psychiatry, psychology, neuropsychology and trained peer visitor¹ • Physiotherapy and Occupational Therapy should assess for rehab potential (rehab readiness should include an expressed desire by the patient to maximize independence) • OT and PT should occur daily
Specialization vs. Non-Specialization	<ul style="list-style-type: none"> • Patients are often on a general surgical/orthopaedic/vascular unit
Differential Criteria	<ul style="list-style-type: none"> • Patient shows some level of rehabilitation potential or requires rehabilitative assessment
Typical Duration	<ul style="list-style-type: none"> • Generally patients are on surgical unit for pre-operative assessment and for acute post-operative stage; once stabilized post-operatively, patient is transferred to inpatient rehabilitation or home to the community, depending on level of functioning and complexity of rehabilitation needs <ul style="list-style-type: none"> ▶ Patients are generally deemed rehab ready once they are: medically stable (as determined by physician); able to transfer (with assistance), have established sitting balance and bed mobility (as assessed by physiotherapist or occupational therapist) ▶ Patients should have the ability to follow simple directions and expressed interest to maximize independence.
Key Activities/Nature of Service	<ul style="list-style-type: none"> • For those with elective amputation, rehab services include: <ul style="list-style-type: none"> ▶ Multidisciplinary team (MDT) assessment should occur pre-operatively for elective patients to establish level of functioning ▶ Transfers and bed mobility teaching to begin pre-operatively whenever possible ▶ Caregivers to be a part of all pre-operative teaching for elective amputation patients ▶ When applicable, wheelchair use should be taught pre-operatively² ▶ Psychosocial assessment to begin pre-operatively and continue throughout rehab process³ ▶ Discharge Planning to commence pre-operatively • For all patients, daily rehab should include: <ul style="list-style-type: none"> ▶ Post-op assessment and rehabilitation should begin on Day 1 post op whenever possible⁴ ▶ Respiratory therapy to begin post-operatively where appropriate ▶ ADL assessment and treatment to begin ASAP ▶ Use of compression device as appropriate post-operatively⁵ ▶ Bed mobility to be taught 1 day post op ▶ Sitting and standing balance to be taught as early as possible ▶ Positioning and ROM to prevent contractures & pressure sores

Amputee Rehab Definition Framework

ACUTE CARE

- ▶ Exercise for strength and cardio-vascular training to begin ASAP to maximize gait efficiency
- ▶ Education on self-management of phantom limb pain/sensation taught
- ▶ Education about rehabilitation process by members of the MDT
- A policy exists for the prevention of pressure sores

TRANSITIONAL CARE

TRANSITIONAL CARE IS NOT APPROPRIATE FOR PATIENTS WITH AMPUTATION. IN THE IMMEDIATE POST ACUTE PHASE, PATIENTS SHOULD BE TRANSFERRED TO INPATIENT REHAB OR HOME TO THE COMMUNITY WITH APPROPRIATE RESOURCES.

- Patients who are prosthetic candidates requiring prosthetic fitting, gait training and intensive rehab to maximize independence and return home to the community should be referred to an active inpatient rehab program (see definitions for inpatient amputee rehab)
- Patients who are not prosthetic candidates who also have multiple medical and rehab needs necessitating a slower paced rehab program should be referred to LTLD/slowstream rehab (see definitions for inpatient LTLD Rehab)

Amputee Rehab Definition Framework

AMPUTEE REHABILITATION PROGRAM

An Amputee Rehab Program is an integrated system of care for patients with amputations that includes Inpatient care, Outpatient care and an ADP Clinic. The program operates in the same way for every patient, regardless of funding source. The program does not necessarily need to be contained in the same facility or organization, but needs to be formed from partnerships that ensure efficient patient flow and communication across teams.

ADP CLINIC

Integral in all amputee rehabilitation, both inpatient and outpatient, is the necessity of linking with an Assistive Devices Program (ADP) Clinic. The ADP clinic must have an ADP clinic number and have the required team composition as outlined by the Ministry of Health and Long Term Care/ADP⁶.

INPATIENT REHAB

INPATIENT REHAB			
Dedicated Team on a Mixed Rehab Units in Acute Care and Rehab Hospitals Inpatient Rehab	Dedicated Rehab Program in Acute Care and Rehab Hospitals Inpatient Rehab	Low Tolerance Long Duration (LTLD/Slowstream) Rehab Program in CCC and Rehab Hospitals	
<p>Suitable for individuals in need of an interdisciplinary rehab program who also require 24-hour hospital care.</p>	<p>Suitable for individuals in need of an interdisciplinary rehab program and who also require 24-hour hospital care.</p>	<p>Suitable for individuals in need of an interdisciplinary rehab program who may also have a chronic/complex condition requiring 24-hour hospital care over an extended period of time and who are expected to benefit from low intensity, long duration rehab.</p>	
Names Typically Used	<ul style="list-style-type: none"> • General Rehabilitation or Medical Rehabilitation 	<ul style="list-style-type: none"> • Specialized Amputee Rehabilitation Program 	<ul style="list-style-type: none"> • LTLD rehab; Slow-Stream
Services Provided	<ul style="list-style-type: none"> • Intensive rehab program of a minimum of 1 to 2 hours of therapy per day, 5-7 days/week, as tolerated by the patient. • Some patients may not tolerate the full recommended amount of therapy upon admission, but should work up to that level of therapy prior to discharge • Staffing ratios should support, at a minimum, the amount of therapy recommended • Patients have the opportunity to participate in as much therapy/therapeutic activity as they are able and willing to participate in 	<ul style="list-style-type: none"> • Both Hemodialysis and Peritoneal dialysis provided on site • Intensive rehab program of a minimum of 1 to 2 hours of therapy per day, 5-7 days/week, as tolerated by the patient. • Some patients may not tolerate the full recommended amount of therapy upon admission, but should work up to that level of therapy prior to discharge • Staffing ratios should support, at a minimum, the amount of therapy recommended • Patients have the opportunity to participate in as 	<ul style="list-style-type: none"> • Low to moderately intensive rehab program • Slower paced rehab program of a minimum of 30 mins of therapy per day, 5-7 days/week, as tolerated by the patient. • Staffing ratios should support, at a minimum, the amount of therapy recommended • An interdisciplinary team provides rehab. • Core team* typically includes: Physician, Nursing, Physiotherapy, Occupational Therapy, Social Work, Clinical Dietitian, Therapeutic Recreation, Chaplaincy/Pastoral Care

Amputee Rehab Definition Framework

INPATIENT REHAB		
Dedicated Team on a Mixed Rehab Units in Acute Care and Rehab Hospitals Inpatient Rehab	Dedicated Rehab Program in Acute Care and Rehab Hospitals Inpatient Rehab	Low Tolerance Long Duration (LTLTD/Slowstream) Rehab Program in CCC and Rehab Hospitals
<ul style="list-style-type: none"> ● An interdisciplinary team provides rehab. ● Core team* typically includes: <ul style="list-style-type: none"> ○ Physician ○ Nursing ○ Physiotherapy ○ Occupational Therapy ○ Prosthetics ○ Social Work ○ Pharmacy ● Consultation from Chiropody, Therapeutic Recreation and Chaplaincy/ Pastoral Care, Clinical Dietitian, Psychology/Psychiatry, Trained Peer Visitor ● Services may be supplemented by OTA/PTA/PSW[±] under the direct supervision of respective health care professionals (e.g. OT directing OTA, PT directing PTA, etc.) as legislated by their respective colleges. Assistants can provide support to the therapists, but the overall care is directed by the regulated health professional ● Mechanism exists for re-assessment and transfer to an LTLTD program if patient's status changes during course of therapy ● Where a client has more than one rehab need (e.g. Trauma & amputation) there is a mechanism in place to cross consult to another rehab service to acquire expertise in other rehab areas 	<p>much therapy/therapeutic activity as they are able and willing to participate in</p> <ul style="list-style-type: none"> ● An interdisciplinary team, specialized in rehabilitation of patients with amputation, provides care⁷. ● Core team* typically includes: <ul style="list-style-type: none"> ○ Physician ○ Nursing ○ Physiotherapy ○ Occupational Therapy ○ Prosthetics ○ Social Work ○ Pharmacy ● Consultation from Chiropody, Therapeutic Recreation and Chaplaincy/ Pastoral Care, Clinical Dietitian, Psychology/Psychiatry, Trained Peer Visitor ● Services may be supplemented by OTA/PTA/PSW under the direct supervision of respective health care professionals (e.g. OT directing OTA, PT directing PTA, etc.) as legislated by their respective colleges. Assistants can provide support to the therapists, but the overall care is directed by the regulated health professional ● Mechanism exists for re-assessment and transfer to an LTLTD program if patient's status changes during course of therapy ● Where a client has more than one rehab needs (e.g. Trauma & amputation) there is a mechanism in 	<ul style="list-style-type: none"> ● Consultation from Prosthetist and Pharmacist as needed ● Services may be supplemented by OTA/PTA/PSW under the direct supervision of respective health care professionals (e.g., OT directing OTA, PT directing PTA, etc.) as legislated by their respective colleges. Assistants can provide support to the therapists, but the overall care is directed by the regulated health professional ● Mechanism exists for re-assessment and transfer to an active rehab program if the patient's status changes ● Where a client has more than one rehab needs (e.g. Trauma & amputation) there is a mechanism in place to cross consult to another rehab service to acquire expertise in other rehab areas ● Comprehensive discharge planning is provided to transition patients to specialized services and community support programs as needed.

* Core team refers to team members who are essential, actively involved in the assessment and treatment of amputee patients and who participate regularly in team rounds

[±] OTA= Occupational Therapy Assistant; PTA=Physiotherapy Assistant; CDA=Communication Disorders Assistant; PSW= Personal Support Worker

Amputee Rehab Definition Framework

INPATIENT REHAB					
Dedicated Team on a Mixed Rehab Units in Acute Care and Rehab Hospitals Inpatient Rehab		Dedicated Rehab Program in Acute Care and Rehab Hospitals Inpatient Rehab		Low Tolerance Long Duration (LTLT/Slowstream) Rehab Program in CCC and Rehab Hospitals	
		place to cross consult to another rehab service to acquire expertise in other rehab areas			
Specialization vs. Non-Specialization		<ul style="list-style-type: none"> Rehab providers assess/ treat a variety of diagnostic/rehab population groups. On a mixed unit, there is a critical mass of 50 new cases⁸ per year, to support the development and maintenance of clinical expertise among nursing, allied health and medical staff and the acquisition of special equipment and other resources required to treat amputee patients. Amputee beds on a mixed rehab unit should be geographically clustered Amputee rehab team has an ADP Clinic number and at least one member of the team is an ADP assessor. 		<ul style="list-style-type: none"> Programs are specialized to treat patients with amputations Designated interdisciplinary team, including physician, with expertise in amputee rehab⁹; the team has access to education/training to develop and maintain necessary skills and knowledge base Amputee rehab team has an ADP Clinic number and at least one member of the team is an ADP assessor. 	
Differential Criteria		<ul style="list-style-type: none"> Programs serve a variety of diagnostic population groups. Designated interdisciplinary team, including physician with established competency in amputee rehab Mechanisms for communication of goals and plans to patients and families/caregivers are established. Coordinated team approach with regular team meetings/conferences On a mixed rehab unit, Amputee patients should be in geographically clustered beds Expectation is that patients will either be discharged home or to their preferred accommodation in the community or to 		<ul style="list-style-type: none"> Typically specialized in persons with severe disability arising from co-morbid conditions, such as amputation and Stroke, etc All rehab providers, including physician, have demonstrated competency in assessing and treating patients with amputations. Amputee rehab team has an ADP Clinic number and at least one member of the team is an ADP assessor. If these are not available, a partnership is established with an ADP clinic. 	
		<ul style="list-style-type: none"> Mechanisms for communication of goals and plans to patients and families/caregivers are established. Expectation is that patients will either be discharged home or to their preferred accommodation in the community or to another specialized rehabilitation program. Coordinated team approach with regular team meetings/conferences 		<ul style="list-style-type: none"> Patients require a slower-paced rehab program for a longer duration to maximize rehab potential Dedicated interdisciplinary team, including physiatrist Mechanism exists for communication of goals and plans between patient/family and medical team Geographically clustered beds The expectation is that patients will return to home or a community residential setting following LTLT rehab. Patients are exempt from co-payment when located in CCC while the realistic goal for them remains returning to the community. 	

Amputee Rehab Definition Framework

INPATIENT REHAB							
Dedicated Team on a Mixed Rehab Units in Acute Care and Rehab Hospitals Inpatient Rehab		Dedicated Rehab Program in Acute Care and Rehab Hospitals Inpatient Rehab		Low Tolerance Long Duration (LTLD/Slowstream) Rehab Program in CCC and Rehab Hospitals			
		another specialized rehabilitation program.		<ul style="list-style-type: none"> Coordinated team approach with regular team meetings/conferences 			
Typical Duration		<ul style="list-style-type: none"> As strong evidence regarding LOS does not currently exist, benchmarks for duration are not being included in this framework. Ideally, the length of stay is not constrained by a maximum duration, but is linked to the patient's needs and goals. 		<ul style="list-style-type: none"> As strong evidence regarding LOS does not currently exist, benchmarks for duration are not being included in this framework. Ideally, the length of stay is not constrained by a maximum duration, but is linked to the patient's needs and goals. 		<ul style="list-style-type: none"> Typical duration is usually 3-6 months; however, the length of stay is not constrained by a maximum duration, but is linked to the patient's needs and goals. 	
Key Activities/Nature of Service		<ul style="list-style-type: none"> Rehabilitation programs are suitable for individuals requiring an intensive interdisciplinary rehab program Review of rehabilitation plan, including prosthetic potential where appropriate¹⁰ Program provides health education, goal setting, behaviour change principles and practices to promote health and wellbeing of the individual; secondary prevention is offered. Inpatient rehab program should include complete assessment of physical/mobility ability and needs, ADLs and IADL performance, psychological issues, sexuality, complex pain management, prosthetic prescription, self management of residuum, management of co-morbid conditions, nutritional needs and discharge planning¹¹ Where appropriate, self management program should include end of life decision making Rehab is focussed on achievement of stated goals Validated outcome measures must be used to 		<ul style="list-style-type: none"> The dedicated Amputee Rehab program is suitable for individuals requiring an intensive interdisciplinary rehab program. Review of rehabilitation plan, including prosthetic potential where appropriate^{13, 14} Program should provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing of the individual Inpatient rehab program should include complete assessment of physical/mobility ability and needs, ADLs and IADL performance, psychological issues, sexuality, complex pain management, prosthetic prescription, self management of residuum, management of co-morbid conditions, nutritional needs and discharge planning Where appropriate, self management program should include end of life decision making Rehab is focussed on achievement of stated goals Validated outcome measures must be used to measure progress Family/significant others are recognized as key to enabling client function and attainment of rehab goals and are involved throughout the rehab process: 		<ul style="list-style-type: none"> LTLD rehab is typically offered in complex continuing care; however, it may also be available in rehab hospitals LTLD rehab is suitable for individuals in need of an interdisciplinary rehab program, who require an extended period of rehab to maximize recovery. Review of rehabilitation plan, including prosthetic potential where appropriate¹⁵ Patients may also have a chronic and a complex condition that requires care over an extended period of time and who are expected to benefit from low intensity, long duration rehabilitation Inpatient rehab program should include complete assessment of physical/mobility ability and needs, ADLs and IADL performance, psychological issues, sexuality, complex pain management, prosthetic prescription, self management of residuum, management of co-morbid conditions, nutritional needs and discharge planning Program should provide health education, goal setting, behaviour change principles and practices to promote health and wellbeing of 	

Amputee Rehab Definition Framework

INPATIENT REHAB		
Dedicated Team on a Mixed Rehab Units in Acute Care and Rehab Hospitals Inpatient Rehab	Dedicated Rehab Program in Acute Care and Rehab Hospitals Inpatient Rehab	Low Tolerance Long Duration (LTLD/Slowstream) Rehab Program in CCC and Rehab Hospitals
	<p>measure progress</p> <ul style="list-style-type: none"> ● Family/significant others are recognized as key to enabling client function and attainment of rehab goals and are involved throughout the rehab process¹²: <ul style="list-style-type: none"> ▶ Families/caregivers, with patient consent, are included in discussions around key treatment decisions ▶ Families (and patients) are encouraged to participate in interdisciplinary family meetings 	<ul style="list-style-type: none"> ▶ Families/caregivers, with patient consent, are included in discussions around key treatment decisions ▶ Families (and patients) are encouraged to participate in interdisciplinary family meetings
		<p>the individual; secondary prevention is offered.</p> <ul style="list-style-type: none"> ● Where appropriate, self management program should include end of life decision making ● Rehab is focussed on achievement of stated goals ● Validated outcome measures must be used to measure progress ● Family/significant others are recognized as key to enabling client function and attainment of rehab goals and are involved throughout the rehab process: <ul style="list-style-type: none"> ▶ Families/caregivers, with patient consent, are included in discussions around key treatment decisions ▶ Families (and patients) are encouraged to participate in interdisciplinary family meetings

Amputee Rehab Definition Framework

OUTPATIENT/AMBULATORY REHAB PROGRAMS	
Traditional Dedicated Interprofessional team, mixed population interprofessional team or Wellness Focused Rehab groups do not exist in the model of care for Amputees	
Rehab Service in Acute Care Hospitals, Rehab Hospitals and Community Health Centres/Clinics	
Suitable for individuals who are in need of an outpatient rehabilitation service in a multidisciplinary team or a single specialty area. Services may include assessment only or assessment and treatment. Services may be provided during a one-time visit or multiple visits. Over the course of a patient's stay in an outpatient rehab program, he/she will see most members of the team. However, one member of the team will normally act as the primary care provider, with other team members acting as consultants.	
Names Typically Used	<ul style="list-style-type: none"> ● Outpatient Amputee Program ● ADP Amputee Clinic
Services Provided	<ul style="list-style-type: none"> ● Specialized focused assessment and/or treatment to resolve a functional or psychological issue and to promote re-integration to normal living or to maximize functional level. ● Core Team consists of: Physician, PT, OT, Prosthetist, Nurse^{1*} ● Rehab program involves: <ul style="list-style-type: none"> ○ Prosthetic fitting, if not completed in an inpatient program ○ Gait training ○ Assessment and treatment of seating issues ○ Provision of ADP equipment, as needed ● Consulting Service available from Social Worker¹⁶ ● Consultation is available from an ADP authorizer ● Outpatient rehabilitation should begin within 1 week from referral from inpatient rehab/acute care or ADP Clinic
Specialization vs. Non-Specialization	<ul style="list-style-type: none"> ● Some services serve a particular specialty area (e.g. Gait Clinic, ADP Clinic) ● Other services are profession specific (e.g. Outpatient Physiotherapy) ● One member of the team should be an ADP Rehab Assessor¹⁷ ● Amputee Rehab programs must have an ADP clinic number ● Dedicated team should treat patients during inpatient and outpatient phases of rehabilitation

* Nursing is regularly available to clients to address issues related to medical management of amputation and co-morbidities such as: wound care, foot care, diabetic management, medication management and secondary prevention and wellness

Amputee Rehab Definition Framework

OUTPATIENT/AMBULATORY REHAB PROGRAMS Traditional Dedicated Interprofessional team, mixed population interprofessional team or Wellness Focused Rehab groups do not exist in the model of care for Amputees	
Differential Criteria	<ul style="list-style-type: none"> • Patients are residing in the community with a specific rehab need which may be an impairment, performance, activity or participation issue that requires assessment and/or treatment by a health professional. • Patients may not have required an inpatient rehab program or other outpatient rehab programs. • Some patients may be discharged from an inpatient rehab program or from acute care and require ongoing rehab to achieve higher functional goals. • Patients may be referred from acute care, rehabilitation, or family physicians or other health professionals working in the community. • Typically, these are community patients who are responsible for arranging their own transportation to and from their outpatient appointments
Typical Duration	<ul style="list-style-type: none"> • Length of stay is determined by patient's ongoing needs; Patient may leave and return to the program over months or years as new issues need to be addressed¹⁸ • Specialty clinics may provide one or a few visits until the problem is resolved or managed.
Key Activities/Nature of Service	<ul style="list-style-type: none"> • Specialized focused assessment and/or treatment to resolve a functional or psychological issue and to promote re-integration to normal living or to maximize functional level. • These services/programs may be publicly funded or privately funded.

Amputee Rehab Definition Framework

COMMUNITY (Rehab is provided to client in home, school or work environment) *Community Based Dedicated Interprofessional Team does not exist for the Amputee Population	
Community – Single Service	
Names Typically Used	<ul style="list-style-type: none"> • Community Care Access Centre (CCAC)
Services Provided	<ul style="list-style-type: none"> • May include OT, PT, SW, Nursing, Case Management. • Clients may receive more than one service. • Rehab providers typically work as individual providers; however, communication with other health providers occurs on an as-needed basis. • CCACs provide in-home rehab services through contracts with Provider Agencies and manage clients through a Case Management collaborative model • Community based rehab team has contact with the Amputee Rehab team to establish goals and provide continuity of care • For clients who are deconditioned and waiting for outpatient rehab program
Specialization vs. Non-Specialization	<ul style="list-style-type: none"> • Health professionals should have experience in treating individuals with amputation
Differential Criteria	<ul style="list-style-type: none"> • Service is provided in the environment that is most appropriate (e.g. services are focused on community re-integration). • Community based services are put in place when patient’s goals are related to home/community function and are best addressed in the home setting
Typical Duration	<ul style="list-style-type: none"> • Service is in place until identified goals have been met or declared unachievable
Key Activities/Nature of Service	<ul style="list-style-type: none"> • Assessments, treatment of home/community based rehab needs • Referral to appropriate community services may be offered.

APPENDIX A:

EVIDENCE GRADING SYSTEM OF THE BRITISH ASSOCIATION OF CHARTERED PHYSIOTHERAPISTS IN AMPUTEE REHAB

Grade	Evidence
A	At least one randomized control trial (RCT) as part of a body of literature of overall good quality and consistency addressing the specific recommendation
B	Well conducted clinical studies but no RCTs on the topic of the recommendation.
C	Expert committee reports or opinions and/or clinical experience of respected authorities. This grading indicates that directly applicable clinical studies of good quality are absent.
D	Recommended good practice based on the clinical experience of the Guidelines Development Group.

APPENDIX B:

EVIDENCE GRADING SYSTEM OF THE VETERANS AFFAIRS/DEPARTMENT OF DEFENCE CLINICAL PRACTICE GUIDELINES FOR REHABILITATION OF LOWER LIMB AMPUTATION

Strength of Recommendation Rating System	
A	A strong recommendation that the clinicians provide the intervention to eligible patients. <i>Good evidence was found that the intervention improves important health outcomes and concludes that benefits substantially outweigh harm.</i>
B	A recommendation that clinicians provide (the service) to eligible patients. <i>At least fair evidence was found that the intervention improves health outcomes and concludes that benefits outweigh harm.</i>
C	No recommendation for or against the routine provision of the intervention is made. <i>At least fair evidence was found that the intervention can improve health outcomes, but concludes that the balance of benefits and harms is too close to justify a general recommendation.</i>
D	Recommendation is made against routinely providing the intervention to asymptomatic patients. <i>At least fair evidence was found that the intervention is ineffective or that harms outweigh benefits.</i>
I	The conclusion is that the evidence is insufficient to recommend for or against routinely providing the intervention. <i>Evidence that the intervention is effective is lacking, or poor quality, or conflicting, and the balance of benefits and harms cannot be determined.</i>

Amputee Rehab Definition Framework

The GTA Rehab Network would like to acknowledge the members of the Amputee Rehab Definitions Task Group for their contribution to the development of the Amputee Rehab Definitions Conceptual Framework:

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ENDNOTES

Amputee Rehab Definition Framework

Some of the references below have a level of evidence associated with them based on the published guidelines the reference pertains to. Where applicable, the level of evidence is stated and an appendix is provided to explain the grading

- ¹ “Peer visitation volunteers should receive structured training prior to performing peer visitation services”. [Level C - see Appendix B]
Department of Veterans Affairs, Department of Defense. *VA/DoD clinical practice guideline for rehabilitation of lower amputation*. Washington (DC): Department of Veterans Affairs, Department of Defense; 2007. From, http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=11758&nbr=6060
- ² “Where appropriate and possible, the patient should be instructed in wheelchair use pre-operatively” [Level C - see Appendix A]
The Clinical guidelines for pre and post operative physiotherapy for adults with lower limb amputation. Published by the Chartered Society of Physiotherapy (Britain)
http://www.csp.org.uk/uploads/documents/BACPAR_guidelines_2006.pdf
- ³ “Psychosocial functioning should be assessed at each phase of amputation management and rehabilitation. Assessment should focus on current and past symptoms of psychopathology, particularly depression, anxiety, and posttraumatic stress symptoms.” [Level B - see Appendix B]
VA/DoD Clinical practice guideline for rehabilitation of lower limb amputation. Department of Veterans Affairs, Department of Defense. *VA/DoD clinical practice guideline for rehabilitation of lower amputation*. Washington (DC): Department of Veterans Affairs, Department of Defense; 2007. From, http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=11758&nbr=6060
- ⁴ “Post operative rehab should start the first day post operation where possible” [Level C - see Appendix A]
The Clinical guidelines for pre and post operative physiotherapy for adults with lower limb amputation. Published by the Chartered Society of Physiotherapy (Britain)
http://www.csp.org.uk/uploads/documents/BACPAR_guidelines_2006.pdf
- ⁵ “A compression sock should be used in preference to elastic bandages for reducing limb volume” [Level B - see Appendix A]
The Clinical guidelines for pre and post operative physiotherapy for adults with lower limb amputation. Published by the Chartered Society of Physiotherapy (Britain)
http://www.csp.org.uk/uploads/documents/BACPAR_guidelines_2006.pdf
- ⁶ “Amputee Team registered with ADP...includes a physician, a prosthetist and a physiotherapist or occupational therapist.”
Assistive Devices Program of the Ministry of Health and Long Term Care. From, <http://www.health.gov.on.ca/english/public/pub/adp/artiflimb.html>.
- ⁷ “Providing patients with an artificial limb, the appropriate physiotherapy and a coordinated team approach to their rehab, reduces hospital stay and outpatient re-attendance, increases functional use of the prosthesis and is a cost saving exercise”
Ham, R., Regan, J.M., and Roberts, V. Evaluation of Introducing the team approach to the Care of the Amputee: The Dulwich Study. *Prosthetics and Orthotics International*.1987; 11: 25-30.
- ⁸ “New cases” are defined as either a new patient, an existing patient with a new amputation, or an existing patient undergoing a significant revision of an amputation or a surgical intervention that alters their ability to use their prosthesis or causes a changed in medical status requiring an assessment/treatment by the rehab team; The established critical mass of 50 new cases can be across both inpatient and outpatient units within an organization’s Amputee Rehab Program
- ⁹ Clinical expertise is defined as “the proficiency and judgment that clinicians acquire through clinical experience and clinical practice.” (*British Medical Journal* 1996; 312:71-2)
Clinicians rely on their expertise to balance the patient’s clinical state and circumstances, evidence-based research and patient preferences in their clinical decision-making and provision

of treatment. (*Evidence-Based Medicine* 2002; 7:36-38). Rehab providers must carry a caseload of amputee patients on a regular basis to develop/maintain clinical skills to address physical and psychosocial problems associated with amputation.

¹⁰ "...there appeared to be no provision for reviewing the limb-wearing status of non-limb wearers...This put the patients classified as non-limb wearers at a disadvantage, with no opportunity for review...review of those seen as non-limb wearers, needs to be [provided] to enable an equitable service to be offered to this patient group" Evans, S. Buttenshaw, P., Bineham, G. (2003). Do rehabilitation and intermediate care services fail patients with primary lower limb amputation? *Physiotherapy*; 89 (1): 30-38

¹¹ "Psychosocial functioning should be assessed at each phase of amputation management and rehabilitation. Assessment should focus on current and past symptoms of psychopathology, particularly depression, anxiety, and posttraumatic stress symptoms." Department of Veterans Affairs, Department of Defense. *VA/DoD clinical practice guideline for rehabilitation of lower amputation*. Washington (DC): Department of Veterans Affairs, Department of Defense; 2007. From, http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=11758&nbr=6060

¹² "The patient and family members (or other caregivers) should be an integral part of the interdisciplinary rehabilitation team." Department of Veterans Affairs, Department of Defense. *VA/DoD clinical practice guideline for rehabilitation of lower amputation*. Washington (DC): Department of Veterans Affairs, Department of Defense; 2007. From, http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=11758&nbr=6060

¹³ "...there appeared to be no provision for reviewing the limb-wearing status of non-limb wearers...This put the patients classified as non-limb wearers at a disadvantage, with no opportunity for review...review of those seen as non-limb wearers, needs to be [provided] to enable an equitable service to be offered to this patient group" Evans, S. Buttenshaw, P., Bineham, G. (2003). Do rehabilitation and intermediate care services fail patients with primary lower limb amputation? *Physiotherapy*; 89 (1): 30-38

¹⁴ "Patient's candidacy for a prosthesis should be determined by the rehabilitation team based on the patient's characteristics, goals, and an objective evaluation of their functional status. Some areas to be considered:

- a. Patient is willing and motivated to move forward for prosthetic rehabilitation.
- b. Patient has the ability to understand and apply knowledge to the fitting and use of a prosthesis.
- c. Contralateral limb will tolerate weight bearing.
- d. Patient is in adequate physical condition to tolerate walking with a prosthesis.
- e. Prosthesis contributes to quality of life or self image"

Department of Veterans Affairs, Department of Defense. *VA/DoD clinical practice guideline for rehabilitation of lower amputation*. Washington (DC): Department of Veterans Affairs, Department of Defense; 2007. From, http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=11758&nbr=6060

¹⁵ "...there appeared to be no provision for reviewing the limb-wearing status of non-limb wearers...This put the patients classified as non-limb wearers at a disadvantage, with no opportunity for review...review of those seen as non-limb wearers, needs to be [provided] to enable an equitable service to be offered to this patient group" Evans, S. Buttenshaw, P., Bineham, G. (2003). Do rehabilitation and intermediate care services fail patients with primary lower limb amputation? *Physiotherapy*; 89 (1): 30-38

¹⁶ "There should be access to an appropriate range of specialized health care services..." Amp and Pros Rehab; Oct 2003, Evidence Based Clinical Guidelines for the Physiotherapy Management of Adults with Lower Limb Prostheses

Amputee Rehab Definition Framework

¹⁷ "ADP-Registered Rehabilitation Assessor: an occupational therapist or physiotherapist who is a member in good standing with their regulatory college, and is registered with ADP to provide assessments for clients who have a chronic physical disability requiring specified ADP funded prostheses." Assistive Devices Program, Ministry of Health and Long-Term Care. *Conventional Limb Prostheses: Administration Manual; Policies and Procedures*. August 2005.

¹⁸ "Outpatient amputation clinics should have interdisciplinary team participation for the periodic assessment of patients to ensure appropriate life-long care in order to preserve the quality of life, achievement of maximum function, and reduction of secondary complications."
Department of Veterans Affairs, Department of Defense. *VA/DoD clinical practice guideline for rehabilitation of lower amputation*. Washington (DC): Department of Veterans Affairs, Department of Defense; 2007. From, http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=11758&nbr=6060