Third Edition 2025 - Audit and Implementation Guide

Clinical guidelines for the pre and post-operative physiotherapy management of adults with lower limb amputations

British
Association of
Chartered
Physiotherapists in limb
Absence
Rehabilitation

Clinical guidelines for the pre and post operative physiotherapy management of adults with lower limb amputations

About this document: This document summarises the audit tools developed to monitor the compliance of services and individual practitioners to clinical guidelines for the pre and post operative physiotherapy management of adults with lower limb amputations as described in the literature and expert opinion.

Please refer to the guideline process document for full details of all methodology and processes undertaken in the development of these recommendations.

This document will update: Smith S, Pursey H, Jones A, Baker H, Springate G, Randell T, Moloney C, Hancock A, Newcombe L, Shaw C, Rose A, Slack H, Norman C. (2016). '*Clinical guidelines for the pre and post-operative physiotherapy management of adults with lower limb amputations'*. 2nd Edition. Available at http://bacpar.csp.org.uk/ [1]

Citing this document: British Association of Chartered Physiotherapists in limb Absence Rehabilitation (BACPAR) (2025) '*Clinical guidelines for the pre and post-operative physiotherapy management of adults with lower limb amputations*' 3rd Edition. Available at https://www.bacpar.org/

Comments on these guidelines and the additional documents should be sent to:

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Introduction

The previous editions of this guideline were published in 2006 and 2016. This third edition seeks to integrate new scientific evidence and current best practice into the original recommendations and create additional recommendations where new evidence has emerged.

This audit and implementation guide has been developed to assist clinicians and stakeholders in implementing the recommendations into their clinical environment and clinical practice.

The need to audit:

It is recognised by validated guideline appraisal tools that a guideline should present key review criteria for monitoring and audit. The previously developed audit tool was reviewed as part of the updating process; comments were sought via the consensus panel and users of iCSP website.

Using the audit tools:

The revised audit tool has been split into three parts, giving three distinct tools:

- Service evaluation
- Personal achievement of good practice points (GPPs)
- Patient notes audit form

It is hoped that these standalone audit tools will decrease some of the time burden on the auditor as they can be completed at separate times and could be utilised as evidence of continued professional development (CPD).

An action plan proforma has also been provided as 'Audit tool 4' for use where no workplace-specific forms are available.

Application of the audit tools:

Locally agreed standards need to be set regarding:

The timings of audits/re-audits using these audit tools. The compliance targets.

It is BACPAR's belief that it is reasonable to expect that any clinician providing pre and post operative physiotherapy management to adults with lower limb amputation should adhere to 100% of the GPP's presented in this document as a minimum for safe practice.

These guidelines are not mandatory and BACPAR recognises that local resources, clinician enthusiasm and effort, support from higher management, as well as the rehabilitation environment in which the practitioner works, will influence the ability to implement recommendations into clinical practice.

CPD activities:

Examples of CPD activities and evidence can be found on the Health & Care Professions Council website: https://www.hcpc-uk.org/cpd/carrying-out-and-recording-cpd/what-activities-count-as-cpd/

Audit Tool 1: Service Evaluation						
Date Audit data collected:		Name of Auditor:				
Recommendation		**Yes**	**No**	**N/A**	**Comments / Evidence**	**Actions**
1.1-1.10	The role of the physiotherapist within the multi-disciplinary team adheres to the recommendations of the guidelines.	☐	☐			
3.1.8-3.1.9 5.5.1-5.5.2, 5.7.3, 5.7.4, 5.8.1, 5.8.2, 5.8.5, 5.12.3, 6.9, 7.1-7.9	There is documented evidence of on-going formal and informal training and CPD in the pre and post-operative management and rehabilitation of adults with lower limb amputations and of reflective practice by the physiotherapist.	☐	☐			
3.1.6	All verbal information/advice given should be supplemented in an accessible form to meet patients' needs and health literacy e.g. written - font size, language, different media.	☐	☐			
1.4, 3.2.4	Locally agreed, amputee-specific outcome measures are utilised, within agreed timeframes, by the physiotherapy team.	☐	☐			
5.3.6	The physiotherapy team has established links with their local podiatry/chiropody services.	☐	☐			
5.3.7	Physiotherapists can refer patients to a specialist multi-disciplinary team, including a diabetic specialist, podiatrist and foot care specialist as appropriate.	☐	☐			
1.6, 4.13, 5.8.2, 5.8.4, 5.12.5, 5.12.7,	Local protocols and competencies exist to cover specific treatment modalities and ensure that the physiotherapy team is working within appropriate scope of practice, or appropriate supervision is available.	☐	☐			

Planned Re-audit date:

Audit Tool 2: Achievement of Good Practice Points (GPPs)						
Date Audit data collected:		Name of Auditor:				
Details of the GPP		**Yes**	**No**	**N/A**	**Supporting evidence**	**Actions**
Section 1	**GPP 1:** Patient and public involvement should underpin service delivery and development.	☐	☐			
	GPP 2: Channels of communication should be established between the MDT, stakeholders, commissioners, professional networks.	☐	☐			
	GPP 3: The physiotherapist should contribute to MDT audit, research and/or education on a regular basis, where possible.	☐	☐			
	GPP 4: Documented pathways of care should be used.	☐	☐			
	GPP 5: Contact details of the MDT should be readily available to the patient and carers.	☐	☐			
	GPP 6: Access to other stakeholder agencies should be understood and agreed to facilitate discharge planning and transfer of care e.g. Intermediate Care Teams, Social Services etc.	☐	☐			
	GPP 7: A summary of the patient's treatment and status at transfer or discharge should be documented in the patient's record, with details of future management plan e.g. details of package of care, community therapy, prosthetic referral.	☐	☐			
	GPP 8: Physiotherapists should be aware of referral criteria for local prosthetic services, and the mechanism of locally agreed referral pathways.	☐	☐			
Section 2	**GPP 9:** locally agreed amputee specific physiotherapy assessment should be used.	☐	☐			
	GPP 10: The physiotherapist should be aware of generalised anxiety/depression scales and consider their use, and an onwards referral if indicated.	☐	☐			
	GPP 11: Where possible, a multidisciplinary assessment should be considered to improve MDT communication and reduce duplication of assessments from multiple healthcare professionals.	☐	☐			
	GPP 12: Names and contact details of the patient's immediate support system, i,e. next of kin/carers should be recorded to facilitate communication and discharge planning.	☐	☐			
	GPP 13: Names and team contact details of the MDT involved in the patient's care should be recorded to facilitate communication.	☐	☐			
Section 3	**GPP 14:** Names and contact details of the MDT members involved in the patient's care should be given to patients and carers.	☐	☐			
	GPP 15: Information leaflets/booklets should be developed locally for patients and carers to supplement information given verbally.	☐	☐			
	GPP 16: Physiotherapists should be aware of the BACPAR Guidelines entitled "Risks to the contra-lateral foot of unilateral lower limb amputees" and "Guidance for the multi-disciplinary team on the management of post-operative residuum oedema in lower limb amputees".	☐	☐			
Section 4	**GPP 17:** Following a pre-op assessment, the physiotherapist should identify the need and make onward referrals in a locally agreed time frame.	☐	☐			

Details of the GPP		Yes	No	N/A	Supporting evidence	Actions
Section 5	**GPP 18:** Physiotherapist should be aware of the Audit tool for personal knowledge linked to these guidelines and utilise them in reflective practice as part of their CPD.	☐	☐			
	GPP 19: All decisions on the application of oedema control modalities should be made jointly by the MDT, where available.	☐	☐			
	GPP 20: The residuum should also be regularly reassessed, and measurements documented.	☐	☐			
	GPP 21: The physiotherapist should be aware of who to contact in local manual handling teams, and seek any support required for patients who may need more specialist equipment or training than they have access to.	☐	☐			
	GPP 22: A thorough local risk assessment for each individual should be completed and documented for any equipment considered that is not safety approved for those with limb loss (according to manufacturer's guidance) e.g. standing transfer aids. This should be passed on for review, once patient moves onto next part of pathway e.g. community therapy/prosthetic clinic.	☐	☐			
	GPP 23: The use of standing transfer aids, such as the Sara steady/RotaStand, are not advised for use with lower limb amputees without a prosthesis (as described by the manufacturers guidance). Where the decision to use a standing transfer aid, instead of standard amputee transfer techniques (slide board/pivot transfer) is made, an individualised risk assessment should be carried out, and the reasoning for use over other standard transfers/ transfer aids should be clearly documented in the patient's clinical record. The risks should be discussed with the patient, and this decision should be handed over to other healthcare providers when the patient moves into a different episode of care, so that they can review the ongoing risk.	☐	☐			
	GPP 24: If alternative mobility has been provided/taught e.g. with elbow crutches/knee scooters, the risks should be discussed with the patient and clearly documented in their medical notes.	☐	☐			
	GPP 25: If using a seated method to ascend and descend the stairs, consideration should be paid to how the patient gets up from the floor at the top of the stairs.	☐	☐			
	GPP 26: The physiotherapist should discuss potential long-term usefulness of a wheelchair, even if a patient is likely to receive a prosthetic limb.	☐	☐			
	GPP 27: The physiotherapist should be aware of the SPARG PPAM aid guidelines and ensure/maintain appropriate competence.	☐	☐			
	GPP 28: Within the MDT, the physiotherapist may contribute to the assessment of home hazards as part of discharge planning.	☐	☐			
	GPP 29: Physiotherapists should be aware of the well-established Physiotherapy Inter Regional Prosthetic Audit Group (P.I.R.P.A.G.) exercise program.	☐	☐			
	GPP 30: Information on self-management/home exercise following discharge should be provided to the patient.	☐	☐			

Details of the GPP		Yes	No	N/A	Supporting evidence	Actions
	GPP 31: Where possible all verbal information/advice given should be supplemented in an accessible form to meet patients' needs and level of health literacy e.g. written - font size, language, different media.	☐	☐			
	GPP 32: Patients requiring ongoing outpatient/community referral should have this arranged prior to discharge.	☐	☐			
	GPP 33: Patients requiring ongoing outpatient/community treatment should have this arranged prior to discharge.	☐	☐			
Section 6	**GPP 34:** The physiotherapist should be able to refer directly to a clinical psychologist/ counsellor if appropriate.	☐	☐			
	GPP 35: Patients should be treated as individuals, considering their socio-economic status, size and protected characteristics.	☐	☐			
	GPP 36: Patients requiring ongoing outpatient/community treatment should have this arranged prior to discharge.	☐	☐			
	GPP 37: A summary of the patient's treatment and status at transfer should be sent to the physiotherapist providing on-going treatment.	☐	☐			
	GPP 38: Prior to discharge, patients/carers should be provided with relevant contact details for any ongoing referrals i.e. prosthetic limb centre, community therapy, wheelchair services.	☐	☐			

It is acknowledged that some patients will receive pre and post operative care in more than one service setting as part of an agreed pathway. In these circumstances the physiotherapist will only be expected to achieve the good practice points appropriate to their service.

Audit Tool 3: Audit of Patient Notes			
Date:	**Name of auditor**		
There should be documentation found within the patient notes to support the recommendations. Where this information is found a tick (√) should be inserted; where the information is absent a cross (X) should be inserted.			
Recommendation		**Patient**	**Action**
2.4-2.7	There is documented evidence of: •A full physical examination and assessment of previous and present function. •The patient's social situation, psychological status, goals and expectations. •Relevant pathology including diabetes, previous arterial reconstruction, impaired cognition and skin condition. •A problem list and treatment plan, including agreed goals, formulated in partnership with the patient.		
3.1.1, 3.1.2, 3.1.4, 3.1.5, 3.1.7	There is documented evidence of: •Information provided to the patient about the expected stages and location of the rehabilitation programme suited to their individual circumstances. •Information provided to the carers, with the patient's consent, about the expected stages and location of the rehabilitation programme suited to the patient's individual circumstances. •The physiotherapist offering patients the opportunity to meet other adults with lower limb amputations, if appropriate. •The physiotherapist providing information about the prosthetic process if the patient was likely to be referred for a prosthesis, or the rehabilitation process if they are not likely to be referred for a prosthesis.		
3.1.6	There is evidence that verbal information/advice given is supplemented in an accessible form to meet patients' needs and health literacy e.g. written - font size, language, different media.		
3.2.1-3.2.3	There is evidence of appropriate goal setting, including: •Patients/carers have been made aware of any concurrent pathologies or previous mobility issues that may affect the outcomes of rehabilitation. •Patients/carers have been made aware that the level of amputation may affect the level of function and mobility. •Patients/carers have been made aware that they may experience lower levels of function than bipedal subjects.		
3.2.4	There is evidence of appropriate outcome measures used for rehabilitation goals.		
3.2.5	There is evidence that goal setting considers the impact of cognitive impairment.		
5.3.4, 5.3.5	There is written evidence that: •Vascular and diabetic patients and their carers have been made aware of the risks to their remaining foot and educated in how they can reduce them. •The patient/carer has been taught how to monitor the condition of the remaining limb.		

Recommendation		Patient	Action
5.4.5, 5.4.9-5.4.11	There is written evidence that: •Advice has been given to the patient/carer on the factors affecting wound healing. •Advice has been given to the patient/carer on the use of compression socks. •Instruction has been given to the patient/carer on methods to prevent and treat adhesions of scars. •The physiotherapist is giving on-going advice about residual limb care, as appropriate.		
4.4-4.15	There is written evidence of: •A preoperative physiotherapy assessment or appropriate documentation if not possible. •Rehabilitation/discharge commenced pre-operatively. •If appropriate and possible the patient was instructed in wheelchair use pre-operatively. •Assessment of joint range of movement and muscle strength should be assessed • A structured exercise regime commenced at an appropriate time. • Bed mobility and transfers taught pre-operatively. • Appropriate assessment and treatment for physiotherapy respiratory care, if indicated. •Pain control optimisation prior to physiotherapy treatment pre-operatively. •If appropriate, and with the patient's consent, carers were involved in pre-operative treatment and exercise programmes.		
5.2.1 , 5.2.3-5.2.5	There is written evidence that: •Physiotherapy assessment and rehabilitation commenced on the first day post-operatively. •Pain was considered and adequately controlled prior to every treatment. •Respiratory care was given if appropriate. •Assessments informed the MDT regarding interventions and discharge planning.		
5.5.3	There is evidence that the physiotherapist was involved in home visits where necessary.		
5.4.1, 5.4.6, 5.4.7	There is evidence that a compression sock was supplied for reducing limb volume, in an appropriate and timely manner.		
5.6.2-5.6.6	There is written evidence that: •Bed mobility was taught on the first day post-operatively. •Sitting balance was re-educated if needed. •Standing balance was re-educated if needed. •Safe transfers should be taught as early as possible. •Mobility post-operatively was in a wheelchair unless specified reasons were documented to teach a patient to use crutches/zimmer frame/ rollator.		

Recommendation		Patient	Action
5.6.7	There is evidence that the potential maximum post-operative mobility has been considered.		
5.8.2	There is evidence that EWAs have been considered as part of the rehabilitation programme for all lower limb amputation patients as both an assessment and treatment tool.		
5.9.1 -5.9.6	There is evidence that: •A falls risk assessment has been completed •The patient, carers and the multi-disciplinary team have been made aware that the risk of falling is increased following lower limb amputation. •Rehabilitation programmes included improving strength and balance, as well as education on preventing falls. •Patients and carers have been given instructions on how to get up from the floor in the event of the patient falling. •Advice was given in the event that the patient is unable to rise from the floor.		
5.7.2, 5.7.4, 5.7.5	There is evidence that the patient was provided with a wheelchair and appropriate accessories to include residual limb support (as appropriate) footplates, anti-tips and appropriate pressure management devices, and was taught how to safely use the wheelchair, including all accessories. The patient should also be educated on participating in physical activity while using a wheelchair.		
5.10.2, 5.10.3, 5.10.4, 5.10.6	There is evidence of contracture management through: •Education of appropriate positioning. •Education of stretching exercises. •Appropriate treatment plans where formed.		
5.11.2, 5.11.3	There is evidence that following on from the initial assessment, an exercise program was provided to address the problems identified, was relevant to the patient's goals, and was reviewed and progressed as appropriate.		
5.12.4-5.12.8	There is evidence that: •The patient was made aware they may experience phantom limb sensation or pain post-operatively. •Information and treatment regarding phantom limb sensation and pain was given as appropriate. •Techniques for the self-management of phantom sensation and/or pain was taught as appropriate. •Appropriate information and treatment were given for residual limb pain.		

Audit Tool 4: Audit Action Plan	
Name of audit:	**Date completed:**
Name of person completing audit action plan	**Signature**
Analysis summary of audit findings:	

Action plan		
Action required	**By whom**	**Timescale for work**