

Third Edition 2020

## Audit & Implementation Guide

Evidence based clinical guidelines for the physiotherapy management of adults with lower limb prostheses

British Association of Chartered  
Physiotherapists in Amputee Rehabilitation



# Evidence based clinical guidelines for the physiotherapy management of adults with lower limb prostheses

**About this document:** This document summarises the audit tools developed to monitor the compliance of services and individual practitioners to the ‘Evidence based clinical guidelines for the physiotherapy management of adults with lower limb prostheses’ as described in the literature and expert opinion. Please refer to the guideline document for full details of all methodology and processes undertaken in the development of these recommendations.

**Citing the full guideline document:** British Association of Chartered Physiotherapists in Amputee Rehabilitation (2020) *Evidence based clinical guidelines for the physiotherapy management of adults with lower limb prostheses*. 3rd Edition. Available at <http://bacpar.csp.org.uk/>

**About BACPAR:** The British Association of Chartered Physiotherapists in Amputee Rehabilitation (BACPAR) is a professional network recognised by the Chartered Society of Physiotherapy (CSP). BACPAR aims to promote best practice in the field of amputee and prosthetic rehabilitation, through evidence and education, for the benefit of patients and the profession.

**Comments on these guidelines should be sent to:**

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## Introduction

The previous editions of this guideline were published in 2003 and 2012<sup>(1)</sup>. This third edition seeks to integrate new scientific evidence and current best practice into the original recommendations using similar methodology.

Feedback from the consensus panel<sup>(2)</sup> on the use of the previous version of the guidelines and audit tool, has been incorporated into this version of the audit & implementation guide. It aims to provide more information to assist clinicians and stakeholders in implementing the recommendations into their clinic environment and clinical practice.

### What is audit?

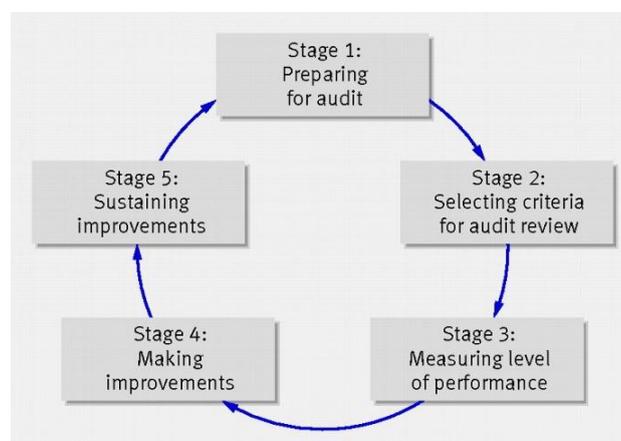
*Audit is a process in which to assess, evaluate and improve care of patients in a systematic way. It measures current practice against a standard. It forms part of clinical governance, which aims to safeguard a high quality of clinical care for patients. The aim is to find out how the present provision compares with the desired standard. This information can then be used to plan improvements in the service. It is not intended to cause confrontation or blame. It should be transparent and non-judgemental.*<sup>(3)</sup>

### The need to audit:

Evaluating practice, engaging in evidence-based practice, and participating in audit procedures are part of the Health & Care Professions Council (HCPC) standards of proficiency for physiotherapists<sup>(4)</sup>.

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.

Clinical audit is an opportunity to find out if your local service is “being provided in line with standards” to see where your service is running well, “and where there could be improvements. The aim is to allow quality improvement to take place where it will be most helpful and will improve outcomes for patients”<sup>(6)</sup>.



**Figure 1 – the audit cycle**<sup>(5)</sup>

### Using the audit tools:

The revised audit tool has been split into distinct tools:

- Service led recommendations
- Achievement of good practice point’s (GPPs)
- Patient notes audit form

It is hoped that these stand-alone audit tools will assist 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 for use where no workplace specific forms are available. This is one of the most important parts of an audit. A date for re-audit should also be set as part of the action plan. Audit is about implementing

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change. Involving staff about service concerns they have, and feeding back about outcomes, will facilitate meaningful change towards improving and maintaining best practice.

## Application of the audit tools:

Locally agreed standards need to be set regarding:

- timings of audits/re-audits
- compliance targets.

It is reasonable to expect that any clinician providing physiotherapy treatment to adults using a lower limb prosthesis, should aim to follow the recommendations and GPP's presented in this document. However, it is clear that in different clinical environments (for example outside of the regional prosthetic limb centres) it is not possible to follow them all. Rather than ignoring the relevant section of the audit, it should be acknowledged why this is not relevant to the service with clinically justified reasons.

For example:

- GPP IX – Where Integrated Care pathways are in use it may not be necessary for the physiotherapist to duplicate this information.
- GPP X – Outside of the prosthetic centre setting there may be limited scope for physiotherapists to come into contact with patients who have been provided with a prosthetic limb for transfer use only.

These guidelines are not mandatory and BACPAR recognise that local resources and the rehabilitation environment in which the clinician works, will influence the ability to implement recommendations into clinical practice.

Examples of the use of both the audit tool and the guidelines, were received during the Delphi consensus <sup>(2)</sup> and included:

- Reviewing the services provided and ensuring standardisation e.g. the use of outcome measures.
- Providing evidence to justify service delivery
- Enables benchmarking local services against national, evidence-based recommendations and use findings as drivers in the development of local service provision and local protocols.
- Support making a 'checklist' document to use for patient notes.
- Support rotational staff/new starters/student placements - to aid identification of personal and team learning needs specific to physiotherapy treatment of adults with lower limb prostheses.

Completing each of the audit tools regularly can allow the clinician to implement changes locally to their service, and if shared regionally, it may allow benchmarking of similar services to take place. It is helpful to disseminate audit stories and the changes in

service/practice as a result of the audit. This may also support other services with changes they wish to make.

There are opportunities to share examples of local/regional impact of audits, through the BACPAR regional networks and the journal. Audit stories may also help to identify specific learning needs of the membership and which can be used to influence the agenda of future regional and national CPD events.

## CPD activities:

The HCPC "*Continuing Professional Development and your registration document*" <sup>(7)</sup> shares many varied examples of CPD activities and evidence. In addition to carrying out audit, the guidelines can be used in the following ways to provide CPD:

1. To review/discuss all of the documents specified in the 'Local Implementation' points. To promote the range of documents endorsed by BACPAR and other professional guidelines which impact upon prosthetic physiotherapy services. All BACPAR guidelines accessible via: <http://bacpar.csp.org.uk/publications>
2. To look at the new recommendations and discuss their impact on practice/possible barriers to their implementation. No cost analysis is undertaken as part of the guideline update and important that clinicians identify (and possibly resolve) issues that may prevent them implementing.
3. Reviewing of the local standards that have been written or the general service development work undertaken. Successful work may inspire and support other clinicians. The guidelines are seeking to minimise regional variations in practice.
4. Literature review (e.g. a journal club) reviewing a recent piece of evidence utilised within the guideline update. Improves familiarity of clinicians with well recognised, validated appraisal tools, such as CASP tools (accessed at: [www.caspinternational.org](http://www.caspinternational.org)). Practicing literature appraisal skills and enhances BACPAR members confidence. Improves awareness and understand of the grades of evidence and levels of recommendations applied.
5. Using the AGREE II tool to evaluate the quality of a guideline (accessed at: [www.agreetrust.org](http://www.agreetrust.org)). To introduce and improve familiarity of clinicians with well recognised, validated appraisal tools. Members could start off by reviewing the smaller guidelines (falls, oedema, contralateral foot).
6. Promote future opportunities. Practice and/ or audit may indicate the need for guidelines/ guidance development in other areas of practice.

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Audit Tool 1: Service Evaluation					
Date Audit data collected:		Name of Auditor:			
Recommendation		Yes	No	n/a	Comments/Evidence:
2.1-2.5	There is documented evidence of on-going formal and informal training and CPD in prosthetics and prosthetic rehabilitation and reflective practise by the physiotherapist.				
2.7, 2.8	There is a local protocol for checking the prosthesis and residual limb before, during and after treatment.				
2.9	There is a local procedure in place which allows the physiotherapist to contribute to the decision making process regarding prosthetic prescription.				
3.1-3.5	A locally agreed physiotherapy assessment form is in clinical use which should include: <ul style="list-style-type: none"> <li>- Previous and present function</li> <li>- Assessment of falls risk</li> <li>- Psychosocial status</li> <li>- Goals and expectations</li> <li>- Relevant pathologies</li> <li>- A problem list</li> <li>- A treatment plan, including agreed goals, is formulated in partnership with the patient</li> </ul>				
3.6	Locally agreed, amputee specific Outcome measures are utilised, within agreed timeframes, by the Physiotherapy team.				
4.1	There is a local protocol in place for commencing prosthetic rehab.				
4.1-4.22	There are local protocols and competencies exist to cover specific treatment modalities and ensure that the physiotherapy team are working within appropriate scope of practice.				
5.1-5.5	Information is provided on: <ul style="list-style-type: none"> <li>- Use of the Prosthesis</li> <li>- Care of residual limb</li> <li>- Care of remaining limb</li> <li>- Informed goal setting</li> <li>- Coping strategies following falls</li> </ul>				
5.6	Information is available on the following: <ul style="list-style-type: none"> <li>- National and local amputee support and user groups</li> <li>- Health promotion</li> <li>- Sporting and leisure activities</li> <li>- Driving after amputation</li> <li>- Employment/training Benefits</li> <li>- Social Services</li> </ul>				
6.1-6.3, 6.5	There are local protocols for: <ul style="list-style-type: none"> <li>- The review of patients after discharge from regular physiotherapy</li> <li>- The patient to self-refer to physiotherapy after initial rehabilitation</li> <li>- Accessing rehabilitation if an individual's circumstances change</li> </ul>				

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Audit Tool 2: Personal Achievement of GPP's				
Date Audit data collected:	Name of Auditor:			
GPP	Yes	No	n/a	Comments/Evidence:
<b>GPP I:</b> The physiotherapist should encourage and facilitate the patient to take a self-management approach throughout their rehabilitation.				
<b>GPP II:</b> The physiotherapist should be aware of the referral pathways to the wider MDT/Stakeholders relevant to the holistic care of an amputee.				
<b>GPP III:</b> The physiotherapist should contribute to MDT audit, research and education.				
<b>GPP IV:</b> The physiotherapist should understand the different methods of donning and doffing prostheses.				
<b>GPP V:</b> The prosthetic centre should be contacted if there is a malfunction of any componentry.				
<b>GPP VI:</b> The prosthetic centre should be contacted if the socket requires adjustment in order to achieve a correct and comfortable fit.				
<b>GPP VII:</b> The physiotherapist should be involved in the assessment and decision-making process around the provision of a prosthesis.				
<b>GPP VIII:</b> The rationale and clinical reasoning for prosthetic provision should be documented.				
<b>GPP IX:</b> The physiotherapist should be aware of the prosthetic componentry, type of socket and method of suspension being utilised and this information documented within the patient's notes.				
<b>GPP X:</b> Where a prosthesis is provided for transfers only (or to assist with nursing care) instruction and advice on its safe use should be given by the physiotherapist.				
<b>GPP XI:</b> Physiotherapists should establish links with their local diabetic foot/podiatry/chiropractic services to ensure that information and education given to patients and carers is accurate and consistent.				
<b>GPP XII:</b> Where the patient has received education/information, the physiotherapist should check that they can demonstrate the recommendation correctly.				
<b>GPP XIII:</b> Patient information should be available in a format suitable to that individual.				
<b>GPP XIV:</b> All advice/information given to the patient should be recorded.				
<b>GPP XV:</b> A summary of the patient's function and mobility at transfer or discharge from active rehabilitation should be documented in the treatment notes.				
<b>GPP XVI:</b> A record of the patient's outcomes should be kept and compared on assessment and regular review.				
<b>GPP XVII:</b> The prosthetic user should be provided with the necessary contact details to seek help and advice when required.				
<b>GPP XVIII:</b> If prosthetic use is discontinued during the rehabilitation program the reasons should be documented by the MDT.				
<b>GPP XIX:</b> If a prosthetic user requires further specialist assessment then onwards referral should be made in a timely fashion.				

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Audit Tool 3: Audit of Patient Notes			
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			
Date:		Name of Auditor:	
Recommendation		Patient:	Comments/Evidence:
3.1- 3.4	<ul style="list-style-type: none"> <li>- A physical examination and assessment of previous and present function</li> <li>- Falls risk</li> <li>- Social situation</li> <li>- Psychological status</li> <li>- Patient goals and expectations</li> <li>- Relevant pathology including diabetic status</li> <li>- Present and past prosthetic componentry, type of socket and method of suspension</li> </ul>		
3.5	A problem list, treatment plan and goals have been formulated in partnership with the patient.		
4.1.2	Prosthetic physiotherapy began within a maximum of 5 working days after receipt of the prosthesis.		
4.5	There is evidence of a personalised exercise programme being devised for the patient.		
4.10	Gait re-education was commenced within the parallel bars (if not, a reason for the variance should be documented).		
4.12	Walking aids are provided to ensure, where possible, that prosthetic users progress to being fully weight bearing through their prosthesis.		
4.7-4.17	There is written evidence of prosthetic rehabilitation based on the treatment plan that includes: <ul style="list-style-type: none"> <li>- Increasing time of prosthetic use</li> <li>- Functional tasks relevant to the goals set with the patient</li> <li>- Progression from walking within the hospital environment to walking within the home environment</li> <li>- Hobbies</li> <li>- Sport</li> <li>- Social activities</li> <li>- Driving</li> </ul>		
4.18	There is evidence of the patient's progress being measured throughout their prosthetic rehabilitation programme with validated amputee/prosthetic specific outcome measure(s).		
4.19-4.22	There is written evidence of the contribution of the physiotherapist to the management of: <ul style="list-style-type: none"> <li>- Wounds</li> <li>- Scars</li> <li>- Residual limb pain</li> <li>- Phantom limb sensation/ pain</li> </ul>		

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5.1.2-5.1.8	<p>There is written evidence of information being given to the patient/carer in regard to:</p> <ul style="list-style-type: none"> <li>- Care of the prosthesis</li> <li>- Achieving correct socket fit/ use of prosthetic socks &amp; liners</li> <li>- Management of volume fluctuations of the residual limb</li> <li>- The length of time the prosthesis should be worn and how this should be increased</li> <li>- Changing footwear and alignment</li> <li>- Use and care of prosthetic socks &amp; liner</li> <li>- Correct use of suspension</li> </ul>		
5.2.1-5.2.5	<p>There is written evidence of information being given to the patient/carer with regard to the following:</p> <ul style="list-style-type: none"> <li>- Techniques for the self-management of phantom pain/sensation</li> <li>- Factors influencing wound healing</li> <li>- Methods to prevent and treat adhesion of scars</li> <li>- Residual limb skin care, including sweat management</li> <li>- The potential for skin problems caused by incorrect socket fit</li> </ul>		
5.3.1-5.3.2	<p>There is evidence that the patient/carer is taught to monitor the condition of the remaining limb and reducing the risks to their remaining foot.</p>		
5.4.1-5.4.4	<p>There is written evidence of information being given to the patient/carer with regard to:</p> <ul style="list-style-type: none"> <li>- The effect of concurrent pathologies and previous mobility on realistic goal setting and final outcome of rehabilitation</li> <li>- Expected levels of function and mobility in relation to different levels of amputation</li> <li>- The reduction in levels of function compared to bipedal subjects</li> <li>- The energy cost of prosthetic walking in relation to different levels of amputation</li> </ul>		
5.5.2-5.5.6	<p>There is evidence of falls coping strategies being discussed/taught:</p> <ul style="list-style-type: none"> <li>- Advice given in the event the patient is unable to rise from the floor</li> </ul>		
5.6.1-5.6.2	<p>There is written evidence of advice to the patient/carer on:</p> <ul style="list-style-type: none"> <li>- How and where to seek psychological advice and support</li> <li>- Prevention of secondary disabilities that may occur as a result of prosthetic use</li> </ul>		
6.1	<p>There should be evidence of the patient being reviewed after discharge from regular physiotherapy intervention.</p>		
GPP XIV	<p>A summary of patient function &amp; mobility at transfer or discharge is documented in the treatment notes.</p>		

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## Audit tool 4: Audit action plan

Name of Auditor:	Date completed:
Name of person completing audit action plan:	Signature:

### Analysis/summary of audit findings:

## Action plan

Action required	By whom	Timescale for work

Planned re-audit date:

To be led by:

## References:

1. Broomhead P., Clark, K., Dawes D, Hale C., Lambert A, Quinlivan D, Randell, T., Shepherd R., Withpetersen, J. (2012) *Evidence Based Guidelines for the Management of Adults with Lower Limb Prostheses, 2<sup>nd</sup> Edition*. Chartered Society of Physiotherapy. London. Available from <https://bacpar.csp.org.uk/publications>
2. Consensus opinion gained by the Delphi process of the BACPAR membership for the 2020 update (3<sup>rd</sup> edition) of *Evidence based clinical guidelines for the physiotherapy management of adults with lower limb prostheses*.
3. Harding M. (2019), *Audit and the audit cycle*, Patient platform Limited, accessed 01/12/20, <https://patient.info/doctor/audit-and-audit-cycle>
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5. Benjamin A. Audit: how to do it in practice. *BMJ*. 2008 May 31;336(7655):1241-5.
6. NHS England, n.d., *Clinical Audit*, Accessed 01/12/20. <https://www.england.nhs.uk/clinaudit/>.
7. Health & Care Professions Council (2017) *Continuing Professional Development and your registration*, accessed 01/12/20, available from: <https://www.hcpc-uk.org/globalassets/resources/guidance/continuing-professional-development-and-your-registration.pdf>

## NOTES

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