

Occupational therapy for adults undergoing total hip replacement

Practice guideline

Second Edition

Royal College of Occupational Therapists



Quick Reference and
Implementation Guide



Royal College of
Occupational
Therapists



Specialist Section
Trauma and
Orthopaedics

Occupational therapy for adults undergoing total hip replacement

Quick Reference and Implementation Guide

This guide provides a summary of the recommendations in the Royal College of Occupational Therapists practice guideline ***Occupational therapy for adults undergoing total hip replacement*** and suggestions for implementing the recommendations.

It is intended to be used by practitioners as an easily accessible reminder of the recommendations for intervention and implementation. It should be used once the practitioner has read the full guideline document. This is important to ensure an appreciation and understanding of how the recommendations were developed and their context.

The full practice guideline together with implementation resources can be found on the Royal College of Occupational Therapists website:

<https://www.rcot.co.uk/practice-resources/rcot-practice-guidelines>

Introduction

The Royal College of Occupational Therapists (2017) practice guideline: ***Occupational therapy for adults undergoing total hip replacement (second edition)*** aims to provide specific recommendations that describe the most appropriate care or action to be taken by occupational therapists working with adults undergoing total hip replacement. The recommendations are intended to be used alongside the occupational therapist's clinical expertise and, as such, the clinician is ultimately responsible for the interpretation of this evidence-based guideline in the context of their specific circumstances, environment and service users' needs.

This quick reference guide provides selected extracts from the guideline document, a concise overview of the guideline recommendations and tables outlining the strength and quality grading categories used for the recommendations.

Additionally, this resource provides tips for implementing the guideline's recommendations, acting as an aid to occupational therapists wishing to incorporate the knowledge and evidence base contained in the guideline into their practice.

1. National context

The numbers of primary hip joint replacements completed have been increasing. In England and Wales, for example, an additional 9,338 procedures were reported in the 2016 National Joint Registry Report compared with the 2011 report (National Joint Registry 2011). Scotland has also seen an increase, with an additional 739 procedures recorded in the 2016 report compared with the 2010 report (NHS National Services Scotland 2010).

The statistics demonstrate that there is a high volume of service users in the UK undergoing primary total hip replacement, with these numbers continuing to rise on an annual basis.

2. Context of service delivery

Occupational therapists should be involved in active management within primary healthcare teams in the community, in musculoskeletal clinics and in hospital services. Key within this is the multi-professional pre-operative assessment with identification of potential post-operative service user concerns, the provision of adaptive equipment, and discharge planning to prevent discharge delays following surgery.

Multidisciplinary working and 'shared care' are seen as being fundamental to the approach, together with integrated care pathways based on the entire journey taken by a service user.

The importance of an agreed process for continued rehabilitation and evidence-based follow-up where indicated are also identified as part of the flow process. It is therefore important that total hip replacement elective surgery and the recommendations within the full guideline document are seen in the context of a wider clinical pathway.

3. Guideline recommendations and evidence overview

The guideline recommendations are presented under six categories. This section provides an evidence overview for each category, together with the recommendations:

4.1. Maximised functional independence

4.2. Reduced anxiety

4.3. Resumption of meaningful occupation

4.4. Hip precautions

4.5. Enhanced recovery

4.6. Reduced demand on support services

Please see the full guideline for further information relating to these recommendations and the supporting evidence (see Section 6, and the evidence tables in Appendix 7, of the full guideline).

The review of the literature (for first and second editions, combined) identified 82 items of evidence from which 26 recommendations were developed.

Recommendations are graded A (high) to D (very low) to indicate the quality of the evidence, and the scoring of 1 (strong) or 2 (conditional) indicates the strength of the recommendation – see full guideline for further details of the grading method. Sixteen of the 26 recommendations are graded as strong. A total of 6.1% of the evidence was assessed as being high quality (Grade A), 19.7% as moderate (Grade B), 61.7% as low (Grade C) and 13.5% as very low (Grade D).

4.1. Maximised functional independence

Evidence Overview:

The evidence identified that individual factors, such as co-morbidities and personal history, will affect individual needs and therefore assessments must be individualised and comprehensive. Additionally, the evidence supported taking into account depression, anxiety and cognitive status, as these may have an impact on recovery.

Clear communication by occupational therapists that is consistent with the wider multidisciplinary team can help ensure realistic expectations post-surgery.

To aid with recovery, studies have noted the importance of involving service users in equipment decisions and providing them with advice on pain management.

Maximised functional independence		
1.	<p>It is recommended that the occupational therapy assessment is comprehensive and considers factors which may affect individual needs, goals, recovery and rehabilitation, including co-morbidities, trauma history, personal circumstances, obesity and pre-operative function.</p> <p><i>(Johansson et al 2010 [C]; Lin and Kaplan 2004 [C]; Marks 2008 [C]; Naylor et al 2008 [C]; Ostendorf et al 2004 [C]; Vincent et al 2007 [C]; Vincent et al 2012 [B]; Wang et al 2010 [C])</i></p> <p>[New evidence 2017]</p>	1C
2.	<p>It is recommended that goal setting is individualised, enhances realistic expectations of functional independence, and commences at pre-operative assessment.</p> <p><i>(Hobbs et al 2011 [C]; Judge et al 2011 [C]; Mancuso et al 2003 [C])</i></p> <p>[New evidence 2017]</p>	1C
3.	<p>It is recommended that occupational therapists ensure that they provide clear communication and advice that is consistent with that of other members of the multidisciplinary team.</p> <p><i>(Drummond et al 2013 [C]; Fielden et al 2003 [C])</i></p> <p>[New evidence 2017]</p>	1C
4.	<p>It is recommended that depression and anxiety status are taken into account during pre-operative and post-operative intervention due to their potential for impact on recovery.</p> <p><i>(Caracciolo and Giaquinto 2005 [C]; Nickinson et al 2009 [C])</i></p>	1C
5.	<p>It is recommended that cognitive status is taken into account during preoperative and post-operative intervention due to its potential for impact on recovery.</p>	1C

	(Wang and Emery 2002 [C]; Wong et al 2002 [C])	
6.	It is recommended that service users are fully involved in decisions about the equipment required to enable them to carry out daily living activities and to comply with any hip precautions in their home environment postsurgery. (Thomas et al 2010 [D])	1D
7.	It is recommended that service users are given advice on effective pain management strategies, to decrease pre-operative pain experience and sleep disturbance, and enhance post-operative physical function. (Berge et al 2004 [B]; Montin et al 2007 [C]; Parsons et al 2009 [C])	1B
8.	It is suggested that standardised assessment and outcome measures are used, where appropriate, to determine functional outcomes and occupational performance in rehabilitation settings, either inpatient or community based. (Alviar et al 2011 [B]; Gillen et al 2007 [C]; Kiefer and Emery 2004 [C]; Oberg et al 2005 [D]) [New evidence 2017]	2C

4.2. Reduced anxiety

Evidence Overview:

The evidence highlights the anxiety service users may have about their hip operation and points to a number of practices that may help to reduce this, such as the preoperative provision of equipment. For most service users, pre-operative education given in a clinic setting is appropriate, but individual context needs to be considered. Studies also investigated the type and presentation of information that could be considered best practice. While these may be a useful reference point, they will need to be balanced against any occupational therapy service constraints.

Reduced anxiety		
9.	It is recommended that the pre-operative assessment undertaken by the occupational therapist allows adequate time for individualised questions and discussion of expectations and anxieties. (Fielden et al 2003 [C]; McDonald et al 2014 [A]; McDonald et al 2004 [A]; Montin et al 2007 [C]) [New evidence 2017]	1A
10.	It is suggested that occupational therapists offer support and advice to service users who may be anxious about an accelerated discharge home. (Heine et al 2004 [D]; Hunt et al 2009 [D]; Montin et al 2007 [C])	2C
11.	It is recommended that pre-operative assessment and education is carried out in the most appropriate environment for the service user. For the majority of service users a clinic environment is appropriate, but where needs are complex, a home assessment should be an available option. (Crowe and Henderson 2003 [B]; Drummond et al 2012 [C]; Orpen and Harris 2010 [C]; Rivard et al 2003 [B])	1B
12.	It is suggested that provision of equipment pre-operatively may facilitate familiarity and confidence in use.	2C

	<i>(Fielden et al 2003 [C]; Orpen and Harris 2010 [C])</i>	
13.	It is suggested that service users may value being treated by the same occupational therapist throughout the process, from pre-operative assessment/education to post-operative rehabilitation wherever possible. <i>(Spalding 2003 [C])</i>	2C
14.	It is suggested that occupational therapists should contribute to standardised pre-operative education interventions, providing information, advice and demonstrations where relevant (e.g. of joint protection principles, equipment). <i>(Coudeyre et al 2007 [B]; Johansson et al 2007 [B]; Spalding 2003 [C]; Spalding 2004 [C]; Soever et al 2010 [C])</i>	2B

4.3. Resumption of meaningful occupation

Evidence Overview:

The evidence shows that post-operative expectations often focus first on physical recovery, and as that progresses, the resumption of roles becomes important. However, resumption of these roles can be impeded by lack of confidence and unrealistic expectations.

As hip replacements are increasingly occurring in younger age groups, return to work can be a key goal of some service users. The evidence underlines that this can be a realistic goal for many, with studies showing most service users who want to return to work do, though the demands of the job and individual circumstances play a part. Another goal may be the return to sports or physical activities, although the evidence points to a very limited increase in physical activities post-operatively. Occupational therapists can help service users overcome barriers to resuming these types of roles.

Resumption of meaningful occupation		
15.	It is recommended that work roles are discussed at the earliest opportunity as part of a comprehensive assessment. <i>(Bohm 2010 [C]; Cowie et al 2013 [C]; Malviya et al 2014 [A]; Mobasheri et al 2006 [D]; Nunley et al 2011 [C]; Sankar et al 2013 [C])</i> [New evidence 2017]	1C
16.	It is suggested that for service users who are working, advice is provided relating to maintaining their work role pre-operatively, post-operative expectations and relevant information for employers. <i>(Bohm 2010 [C]; Cowie et al 2013 [C]; Malviya et al 2014 [A]; Mobasheri et al 2006 [D]; Nunley et al 2011 [C]; Parsons et al 2009 [D]; Sankar et al 2013 [C])</i> [New evidence 2017]	2C
17.	It is recommended that occupational therapists provide advice to facilitate service users to establish previous and new roles and relationships, and shift their focus from disability to ability. <i>(Grant et al 2009 [C]; McHugh and Luker 2012 [C])</i> [New evidence 2017]	1C
18.	It is recommended that occupational therapists encourage early discussion and goal setting for community reintegration.	1C

	(<i>de Groot et al 2008 [D]; Gillen et al 2007 [C]; Heiberg et al 2013 [D]; McHugh and Luker 2012 [C]; Smith et al 2015 [B]</i>) [Statement amended, new evidence 2017]	
19.	<i>It is suggested</i> that the return to physical and sporting activities is considered within an occupational therapy assessment and interventions. (<i>Abe et al 2014 [C]; Cowie et al 2013 [C]; Harding et al 2014 [C]; Ollivier et al 2014 [C]; Vissers et al 2013 [C]; Wagenmakers et al 2011 [C]; Williams et al 2012 [C]; Wilson and Villar 2011 [D]</i>) [New statement and evidence 2017]	2C
20.	<i>It is suggested</i> that where specific needs are identified, the occupational therapist refers the service user on to community rehabilitation, reablement or intermediate care services to enhance community reintegration. (<i>de Groot et al 2008 [D]; Gillen et al 2007 [C]</i>)	2C

4.4. Hip precautions

Evidence Overview:

The evidence is largely inconclusive on the benefits of implementing hip precautions or the risks of removing hip precautions. Many studies showed improved service user satisfaction, earlier functional independence and no higher risk of dislocation after the removal of hip precautions, but these studies did have considerable limitations. From a practitioner perspective, the evidence points to variation in practice when it comes to advising service users on hip precautions, with practitioners identifying a need for more high-quality research on the impact of relaxing or removing precautions on dislocations and rehabilitation outcomes.

Hip precautions		
21.	<i>It is recommended</i> that occupational therapists consult with the surgical team regarding any specific precautions to be followed post-operatively. (<i>Barnsley et al 2015 [B]; Hol et al 2010 [B]; McQuaid et al 2014 [C]; Peak et al 2005 [B]; Restrepo et al 2011 [B]; Smith et al 2016 [A]; Stewart and McMillan 2011 [C]; van der Weegen et al 2016 [B]; Ververeli et al 2009 [B]</i>) [New evidence 2017]	1B
22.	<i>It is recommended</i> that occupational therapists advise service users, where protocol includes precautions, on appropriate position behaviours for those daily activities applicable to the individual's needs, ranging from getting in/out of a car to answering the telephone. (<i>Coole et al 2013 [C]; Drummond et al 2012 [C]; Malik et al 2002 [D]; Peak et al 2005 [B]; Smith and Sackley 2016 [C]; Stewart and McMillan 2011 [C]; Ververeli et al 2009 [B]</i>) [New evidence 2017]	1B
23.	<i>It is suggested</i> that given the increase in evidence of improved service user satisfaction and earlier functional independence, without adverse effects on dislocation rates when hip precautions are relaxed or discontinued, occupational therapists engage in local discussion/review of hip precaution protocols with their surgical and multidisciplinary teams. (<i>Barnsley et al 2015 [B]; Coole et al 2013 [C]; Drummond et al 2012 [C]; McQuaid et al 2014 [C]; O'Donnell et al 2006 [D]; Peak et al 2005 [B]; Restrepo et al 2011</i>)	2B

	[B]; Smith and Sackley 2016 [C]; Smith et al 2016 [A]; van der Weegen et al 2016 [B]; Ververeli et al 2009 [B])	
		[Statement amended, new evidence 2017]

4.5. Enhanced recovery

Evidence Overview:

The evidence specifically for occupational therapy post-operatively is limited. More generally, the evidence shows that the implementation of clinical pathways and enhanced recovery programmes can make a difference to length of hospital stay. However, one study noted that post-discharge challenges can still occur. Additionally, the evidence supports home-based rehabilitation in terms of reducing length of hospital stay, and multidisciplinary rehabilitation in terms of positive outcomes for service users and institutions.

Enhanced recovery		
24.	It is recommended that occupational therapists optimise length of stay, with due reference to care pathways and enhanced recovery programme guidance. (Arshad et al 2014 [C]; Berend et al 2004 [C]; Bottros et al 2010 [C]; Brunenberg et al 2005 [C]; Husted et al 2008 [C]; Ibrahim et al 2013 [B]; Kim et al 2003 [B]) [New evidence 2017]	1B
25.	It is recommended that the occupational therapist is involved in early multidisciplinary post-operative intervention for service users following hip replacement, providing either inpatient or home-based rehabilitation. (Aasvang et al 2015 [D]; Ibrahim et al 2013 [B]; Iyengar et al 2007 [C]; Khan et al 2008 [A]; Pape et al 2013 [C]; Siggeirsdottir et al 2005 [C]) [New evidence 2017]	1A

4.6. Reduced demand on support services

Evidence Overview:

Research points to the presence of a level of stress experienced by carers of individuals awaiting total hip replacements, and while this did reduce post-surgery, it did not do so significantly. The evidence suggests carers should be considered when assessing service users, though occupational therapists will need to weigh this against the wishes of carers and service users.

Reduced demand on support services		
26.	It is suggested that there are potential benefits in including informal carers in pre-operative assessment/education, and post-operative intervention, to maximise service user independence and reduce carer stress. (Chow 2001 [C])	2C

It is additionally recommended that occupational therapists use the audit tool that is available to support this guideline (see section 8) to audit against the above recommendations

4. Guideline implementation

In addition to the full guideline document, there are a number of implementation resources available to aid translation into practice, including a CPD resource and an audit tool. Some key tips to consider are outlined in the table below.

Key tips	
1.	Use the evidence available to inform prioritisation where there are service capacity issues which might make translation into practice more challenging (RCOT 2017, section 8.2).
2.	Look for opportunities to promote the practice guideline with colleagues and multidisciplinary team members, include on the agenda of relevant meetings.
3.	Present and discuss the evidence-based recommendations with colleagues – preferably with the multidisciplinary team. A Professional Development Resource PowerPoint is available with information already prepared and can be tailored for your local use.
4.	Use the guideline audit tool to benchmark your service/practice and assist in identifying actions to progress implementation of recommendations. The audit tool is available to download and audit your service against the recommendations, and kick-start an action plan.
5.	Gather evidence of outcomes using standardised assessments and measures. Visit: https://www.rcot.co.uk/practice-resources/occupational-therapy-topics/outcomes-and-keeping-records
6.	Use the guideline evidence and recommendations to support the case for occupational therapy as part of your business planning and commissioning activities .
7.	Write an implementation case study to demonstrate how your service has translated the guideline recommendations into the workplace. Provide supporting performance/outcome data and service user feedback to demonstrate the difference you are making to service users, quality of services and cost-effectiveness. Visit: http://cotimprovinglives.com/
Visit: https://www.rcot.co.uk/practice-resources/rcot-practice-guidelines	

5. References

The full reference list for the evidence relating to the recommendations, together with the full evidence tables, is contained in the practice guideline document:

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