

Publication of provisional Patient Related Outcome Measures
(Oxford Hip and Oxford Knee Score) for the reporting period 1st
January 2018 to 31st December 2018

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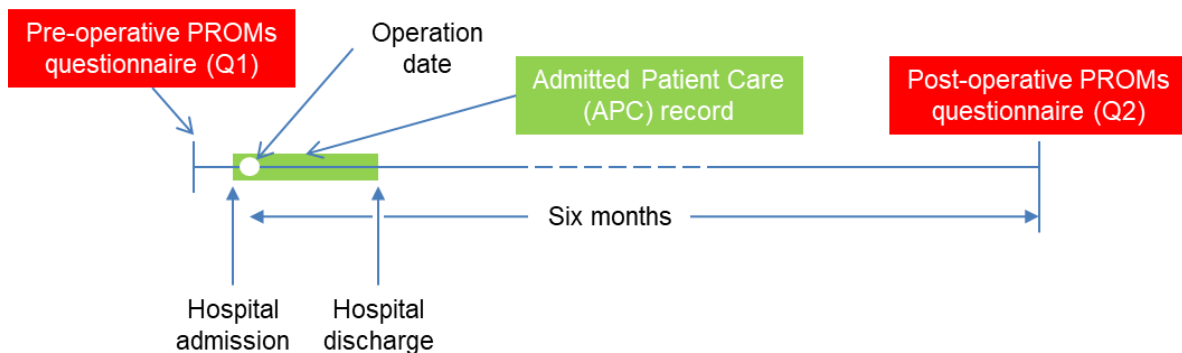
1 Executive Summary

PHIN is publishing information about Patient Reported Outcome Measures (PROMs) based on data received from UK private providers, as required by the Competition and Markets Authority Private Healthcare Market Investigation Order 2014 (*as amended*).

PROMs are a critical component of assessing whether healthcare services are improving the health of patients. Unlike process measures, which focus on issues such as productivity and adherence to standards, PROMs attempt to capture whether the services provided actually improve patients' sense of their own health and well-being in terms of their ability to complete various activities, mood, level of fatigue or pain.

PHIN's initial publication of PROMs measures is based on two instruments; Oxford Hip Score (for primary or revision hip replacement) and Oxford Knee Score (for primary or revision knee replacement). Each comprises a short 12-item patient-reported questionnaire used to assess function and pain. The questions relate to Activities of Daily Living and is completed by the patient once before their operation and, again, six months after. Both questions are scored¹ and the differences between the two forms the basis of PROMs measures (Figure 1).

Figure 1: Diagrammatic representation of the PROMs data collection process



The publication of this information represents only one dimension of the wider work of PHIN in reporting outcomes from UK private healthcare facilities² and is the first time such information has been published.

For the reporting period 1st January 2018 to 31st December 2018, out of 595³ individual private provider sites required to submit data to PHIN under the CMA Order, by the data

¹ Scoring is based on Oxford University Innovation's propriety methodology.

² Any facility providing privately-funded healthcare services on an inpatient, day-case and/or outpatient basis, and may include a NHS Private Patient Unit.

³ This represents the total number of sites that are active as of the produced date or had submitted data for the reporting period.



freeze date⁴ Table 1 details the number of these sites for whom PROMs measures could be published.

Table 1: Count of the number of provider sites for whom PROMs measures could be published for the period 1st January 2018 to 31st December 2018

Procedure	Publication status	Number of Sites
Hip replacement (primary)	Sites for which PROMS could be published	127 / 595
Hip replacement (revision)	Sites for which PROMS could be published	0 / 595
Knee replacement (primary)	Sites for which PROMS could be published	120 / 595
Knee replacement (revision)	Sites for which PROMS could be published	1 / 595

1.1 Hip Replacement

The submitted data comprised 15,703 primary and 647 revision hip placements. PROMs response rates were, respectively, 26.0% and 13.9%. Overall, 98.3% of primary hip patients reported an improvement in their health status (provider site range: 100% to 80.0%) and 89.9% for revision hip patients (No provider site metrics published due to suppression for disclosure control). Table 2

Table 2: Results for hip replacement

Procedure	Eligible Procedure	Total responses	Response rate	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved
Hip replacement (primary)	15,703	4,075	26.0%	1.3%	0.4%	98.3%
Hip replacement (revision)	647	90	13.9%	8.9%	2.2%	88.9%

⁴ For the current PROMs reporting period this was the 5th August 2020.



1.2 Knee Replacement

The submitted data comprised 13,174 primary and 513 revision knee placements. PROMs response rates were, respectively, 24.8% and 16.8%. Overall, 94.6% of primary knee patients reported an improvement in their health status (provider site range: 100% to 50.0%) and 88.4% for revision knee patients (provider site published for one site only) -

Table 3.

Procedure	Eligible Procedure	Total responses	Response rate	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved
Knee replacement (primary)	13,174	3,264	24.8%	4.4%	0.9%	94.6%
Knee replacement (revision)	513	86	16.8%	9.3%	2.3%	88.4%
Procedure	Eligible Procedure	Total responses	Response rate	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved
Knee replacement (primary)	13,174	3,264	24.8%	4.4%	0.9%	94.6%
Knee replacement (revision)	513	86	16.8%	9.3%	2.3%	88.4%

Table 3: Results for knee replacement



2 Introduction

All providers of admitted, privately-funded healthcare in the UK are required by the Competition and Markets Authority Private Healthcare Market Investigation Order 2014 (as amended) to submit data on activity, safety and quality to the Private Healthcare Information Network (PHIN).

The Order also requires PHIN to publish this data on a public web site in the form of performance measures. This report describes the publication for of these measures, referred to by the Order as “*procedure-specific measures of improvement in health outcomes*”.

The measure is based on Patient Reported Outcome Measures (PROMs) associated with hip and knee replacement surgery (both primary and revision) for patients who were discharged from hospital during the period **1st January 2018 to 31st December 2018**.

2.1 Background

For the purposes of measuring improvement in health outcome following hip and knee replacement surgery PHIN has chosen to use two procedure-specific PROMs instruments, the Oxford Hip Score (OHS) and the Oxford Knee Score (OKS)⁵. These PROMs are paired questionnaires which ask the patient about their symptoms, comorbidities and overall activities of daily living. One questionnaire is completed before surgery and the other one six months after surgery. Comparing the results of the two provides an indication of how health and well-being may have altered (improved, no change or worsened) as the result of the operation.

The OHS and OKS PROMs have been collected by all providers of NHS funded care (including where care was provided in a private hospital) since 2009 and published by NHS Digital⁶ biannually at national (England), provider (Trust) and Clinical Commissioning Group level. This is the first publication of PROMs related measures for privately funded care.

2.2 Case Mix Adjustment

Case mix adjustment aims to counteract some of the variabilities in the patient population treated by a surgeon or hospital which may impact on the degree of improvement that may be achieved by the treatment. The NHS’s publication of hip and knee PROMs uses an adjustment method which was developed based on an NHS patient population. Initial analysis to evaluate the suitability of this method for use with PHIN’s private patient population has indicated that the characteristics between the two may be sufficiently different such that the NHS model, in its current form, is unsuitable for use with a private patient cohort. As such, it is PHIN’s view that the risk of publishing potentially misleading information resulting from use of an unsuitable adjustment model outweighs the benefits. To avoid this risk the initial publication of PROMs measures at hospital level will be based on the Oxford

⁵ <https://innovation.ox.ac.uk/outcome-measures/oxford-hip-score-ohs/>

⁶ <https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/patient-reported-outcome-measures-proms>



Hip and Knee Scores and will simply show the percentage of patients who reported that their health had improved following treatment i.e. their post-operative score was greater than their pre-operative score.

2.3 Notes on the provisional nature of the data

The figures contained in this document are based on data submitted by private providers to PHIN on or before the 5th August 2020 (data freeze date). As additional data may subsequently be submitted by providers, all data must be considered provisional and subject to change.



3 PHIN’s ability to publish PROMs measures

For the purposes of measure publication each eligible procedure (as captured with the based on the Admitted Patient Care⁷ (APC) record and based on the list of eligible procedures published by NHS Digital) must be linkable to its corresponding pre and post-operative, procedure-specific questionnaire. This is necessary to confirm the procedure indicated on the questionnaires match the procedure recorded in the APC record.

Provider sites fall into one of six publication categories depending on the number of hip and knee operations they undertook during the reporting period and the completeness of their PROMs data (i.e. a Q1 questionnaire that a score can be calculated from, a Q2 questionnaire that is linked to the Q1 questionnaire for which a score can be calculated is designated a complete paired record) and the number of PROMs eligible procedure that the hospital has performed. This leads to the categories as described in Table 4.

Table 4: Publication status definitions for PROMs measures

Publication Status	Definition
Sites for which PROMS could be reported	<ol style="list-style-type: none"> 1) A minimum of six Admitted Patient Care (APC) records for each provider has been received, each of which: <ol style="list-style-type: none"> a. includes the procedure-relevant OPCS (operation) codes (based on the list published by NHS Digital); b. is a private admission; c. contains a discharge date falling within the relevant reporting period; and d. has passed all relevant standard PHIN data validation checks. 2) A sufficiently complete⁸ pre-operative (Q1) PROMs questionnaire that can be linked to the APC record⁹. 3) A sufficiently complete post-operative (Q2) PROMs questionnaire that can be linked to the same APC record as the Q1.

⁷ Admitted Patient Care is activity which takes place in a hospital setting where the admission is planned (elective) and the patient either spends at least one night in hospital (an inpatient) or is treated and discharged on the same day (a day case).

⁸ Each questionnaire contains twelve procedure-specific questions. As long as the patient has completed ten of these questions, the remaining two can be populated based on the average response score of the other ten.

⁹ Record linkage is based on matching the Provider, the Provider Spell Number and the Episode Order number.



Publication Status	Definition
Percentage suppressed for disclosure control as five or fewer responses	Where a provider has undertaken five or fewer operations in the reporting period its data is not published as this may be disclosive and breach patient confidentiality.
Number of procedures below current threshold for PROMS reporting.	These hospitals have undertaken fewer than 100 operations in this period and is below the current threshold for PROMs reporting
Insufficient data supplied	These hospitals have not provided sufficient data as required. Fewer than 5 responses have been submitted, and the hospital has greater than 100 eligible procedures within the reporting period
Required PROMs data not supplied	No complete questionnaires have been submitted, and these hospitals have greater than 100 eligible procedures within the reporting period
No <procedure type> procedures reported in the period	No hip or knee replacement procedures present within the APC data for the reporting period, therefore no measure publication required or possible

Table 5 describes the publication status of all 595¹⁰ hospital sites which currently submit data to PHIN under the CMA Order. As not all of these hospitals will undertake hip or knee replacement surgery or do so only in relatively small numbers (less than 100 cases annually), not all sites will have publishable PROMs measures.

Table 5: Ability to publish PROMs percentage of patients improved for hip and knee replacements data across the private sector (1st January 2018 to 31st December 2018).

Procedure	Publication status	Number of Sites
Hip replacement (primary)	Sites for which PROMS could be reported	128
Hip replacement (primary)	Percentage suppressed for disclosure control as 5 or fewer responses	26
Hip replacement (primary)	Number of procedures below current threshold for PROMS reporting	79

¹⁰ This represents the total number of sites that are active as of the produced date or had submitted data for the reporting period.



Procedure	Publication status	Number of Sites
Hip replacement (primary)	Insufficient data supplied	3
Hip replacement (primary)	Required PROMs data not supplied	6
Hip replacement (primary)	No hip replacement (primary) procedures reported in the period	353
Hip replacement (primary)	Total	595
Hip replacement (revision)	Sites for which PROMS could be reported	0
Hip replacement (revision)	Percentage suppressed for disclosure control as 5 or fewer responses	54
Hip replacement (revision)	Number of procedures below current threshold for PROMS reporting	95
Hip replacement (revision)	Insufficient data supplied	0
Hip replacement (revision)	Required PROMs data not supplied	0
Hip replacement (revision)	No hip replacement (revision) procedures reported in the period	434
Hip replacement (revision)	Total	595
Knee replacement (primary)	Sites for which PROMS could be reported	120
Knee replacement (primary)	Percentage suppressed for disclosure control as 5 or fewer responses	37
Knee replacement (primary)	Number of procedures below current threshold for PROMS reporting	71
Knee replacement (primary)	Insufficient data supplied	1
Knee replacement (primary)	No required PROMs data supplied	3
Knee replacement (primary)	No knee replacement (primary) procedures reported in the period	351
Knee replacement (primary)	Total	595



Procedure	Publication status	Number of Sites
Knee replacement (revision)	Sites for which PROMS could be reported	1
Knee replacement (revision)	Percentage suppressed for disclosure control as 5 or fewer responses	45
Knee replacement (revision)	Number of procedures below current threshold for PROMS reporting	97
Knee replacement (revision)	Insufficient data supplied	0
Knee replacement (revision)	Required PROMs data not supplied	0
Knee replacement (revision)	No knee replacement (revision) procedures reported in the period	440
Knee replacement (revision)	Total	595



4 Rules and caveats to the published measures

There are a number of rules and caveats associated with the data that PHIN uses for measure publication based on how the data are provided to PHIN. These must be considered when exploring the PROMs measures to ensure they are interpreted correctly.

Table 6: PROMs measures rules and caveats

Summary	Technical detail (where needed)				
General notes					
<p>Providers who have undertaken 100 or more of the specific eligible procedure type within the relevant publication period (see below) are above the current threshold for PROMs reporting and are required to submit PROMs for these patients to PHIN for publication.</p>	<p>Although providers who have undertaken fewer than 100 procedures within the publication period are not required to submit PROMs, they may choose to do so, in which case, subject to submission of a minimum of 6 cases, the data will be published.</p> <p>For providers who have undertaken fewer than 100 procedures within the publication period and are below the current threshold for PROMs reporting, this is reflected in the messaging published for this measure.</p> <p>If a provider does perform more than 100 procedures and does not submit data to PHIN this is reflected with different messaging to highlight that this provider should be submitting data to PHIN for the PROMs.</p>				
<p>PHIN will be publishing the percentage of patients improved, worsened and unchanged as well as the number of responses (matched Q1 and Q2 score) for Oxford Hip Score (OHS) and Oxford Knee Score (OKS). This approach is consistent with that already used by NHS Digital on behalf of NHS organisations.</p>					
<p>PHIN will be publishing PROMs data for hip and knee replacement procedures (primary and revision), defined as qualifying for a PROM based on NHS Digital's list of eligible OPCS (procedure) codes.</p>	<p>PROMs data will be published at hospital level and will only appear on the PHIN website where the user has selected one of the following qualifying procedure groups (shown together with the corresponding PROM).</p> <table border="1" data-bbox="783 2024 1374 2087"> <thead> <tr> <th data-bbox="783 2024 1182 2087">PHIN Procedure Group</th> <th data-bbox="1182 2024 1374 2087">PROM</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	PHIN Procedure Group	PROM		
PHIN Procedure Group	PROM				



	<p>Hip Replacement (primary) OHS</p> <p>Hip Replacement (revision) OHS</p> <p>Knee Replacement (primary) OKS</p> <p>Knee Replacement (primary – unicompartmental) OKS</p> <p>Knee Replacement (primary – patellofemoral) OKS</p> <p>Knee Replacement (revision) OKS</p> <p>N.B. User selection of any of the three primary knee replacement groups will result in the same data being shown.</p>
<p>Data published is not case-mix adjusted.</p>	<p>PHIN's publication of PROMs data based on a patient's health status as having improved, not changed or got worse is based on the NHS Digital methodology, which does not include any form of case mix adjustment.</p>
<p>Data publication considerations</p>	
<p>The OHS and OKS measures are based on data that has been submitted directly by private providers to PHIN. The CMA Order¹¹ places an obligation on the providers to provide PHIN with information that is "sufficiently detailed and complete" for PHIN to be able to publish accurate information.</p>	<p>PHIN publishes information on the assumption that providers have submitted records which are both complete and accurate.</p> <p>Publication of this PROMs measure requires PHIN being able to link together records for the same patient that relate to their stay in hospital (the Admitted Patient Care record), the results of their pre-operative questionnaire (Q1) and the results of their post-operative questionnaire (Q2). Deficiencies or inaccuracies in any of these data will prevent publication of data for this patient and may result in a partial view of a hospital's performance.</p>

¹¹ Private Healthcare Market Investigation Order 2014 (as amended)



<p>In order to account for the amount of time it takes to collect and process paired PROMs questionnaires, PHIN will publish PROMs measures twelve months in arrears of the most recent reporting period for its other measures.</p>	<p>For all OHS and OKS:</p> <ul style="list-style-type: none"> • The discharge date must occur within the published reporting period. • Because post-operative questionnaire data is collected no earlier than six months after surgery the published reporting period for PROMs is 12 months behind the latest reporting period. • Any data submitted after the appropriate PHIN data freeze will not appear (even if it relates to events or activity during the published reporting period).
<p>Data validations</p>	
<p>Both PROMs questionnaire records must link back to the PROMs Core record which also must link to a valid APC record.</p>	<p>Each PROMs Core, Pre-Operative, Post-Operative and APC record for the same patient should include matching values in the PROVIDER, PROVSPNUM and EPIORDER fields. This enables each record to be linked and the records validated with respect to each other. If it is not possible to link these records together the PROMs data is deemed to be invalid and is not published.</p>
<p>Only information relating to private patients is published. This comprises privately funded care in both independent sites and NHS PPU's and excludes NHS-funded care.</p>	<p>Only PROMs records that link to APC records where ADMINCAT = 2 (private) are included.</p> <p>PROMs data on NHS-funded care (including that delivered by independent organisations) is required for reporting directly to NHS Digital and is available to the public via the NHS Digital website.</p>
<p>PHIN does not currently publish any information based on APC records containing any of a list of proscribed procedures and diagnoses, which NHS Digital has deemed "sensitive". This is in line with NHS Digital policy and is something PHIN has currently decided to adhere to. This means that if an APC record associated with a PROM contains one of these codes the PROM information will not be included for publication.</p>	<p>NHS Digital 2016: Submitting Anonymous and Sensitive Records to SUS</p>
<p>PHIN does not publish information relating</p>	<p>Outpatient activity is excluded from the CMA</p>



to outpatient activity.	Order. Private providers do not send outpatient information to PHIN.
PHIN only publishes PROMs measures where the questionnaire completion dates are in line with standard methods published by NHS Digital .	For hip and knee PROMs this means only PROMs records with a valid Q1 completed date before the procedure date, AND a valid Q2 completed date which is at least 6 months after the procedure date will be included.
Disclosure control	
Small numbers of PROMs responses are published in line with NHS reporting standards for small number suppression.	PHIN will apply the same reporting standard.



5 Hip PROM: Oxford Hip Score

5.1 Definition

The Oxford Hip Score (OHS) is a short 12-item patient-reported PROMs used to assess function and pain with patients undergoing a total hip replacement (THR) – both primary replacement and revision surgery. The questions relate to Activities of Daily Living and are filled in by the patient to eliminate inter-observer bias. The questionnaire is carried out by the patient twice, pre- and post-operatively in order to calculate patient outcomes post-surgery.

The score was designed and developed by researchers within the Nuffield Department of Population Health at the University of Oxford in association with surgical colleagues at the Nuffield Orthopaedic Centre and has been well validated.

The score comprises of twelve multiple choice questions relating to the patient’s experience of pain, ease of joint movement and ease of undertaking normal domestic activities. Each question is scored with the score decreasing as the reported symptoms increase. Each of the 12 questions are scored in the same way with the score decreasing as the reported symptoms increase, i.e. become worse (from four least/no symptoms to zero representing the greatest severity). The individual scores are then added together to provide a single score with 0 indicating the worst possible and 48 indicating the highest possible score. This is undertaken pre- and post-operation and the score for each is calculated. This allows the improvement, or indeed worsening, of symptoms to be quantified.

5.2 PHIN Publication of PROMs

PHIN’s initial publication of the Oxford Knee Score will comprise of the number of responses and the percentage improvement in the score.

5.3 Results

Table 7 and Table 8

Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged
Benenden Hospital Trust	Benenden Hospital	IND	119	6	0.0%	0.0%
BMI Healthcare	BMI Bath Clinic	IND	42	15	0.0%	0.0%
BMI Healthcare	BMI Bishops Wood Hospital	IND	72	13	0.0%	0.0%
BMI Healthcare	BMI Chelsfield Park Hospital	IND	83	13	0.0%	0.0%
BMI Healthcare	BMI Fawkham Manor Hospital	IND	20	7	0.0%	0.0%
BMI Healthcare	BMI Goring Hall Hospital	IND	167	53	3.8%	0.0%
BMI Healthcare	BMI Mount Alvernia Hospital	IND	154	37	0.0%	0.0%
BMI Healthcare	BMI St Edmunds Hospital	IND	73	42	2.4%	0.0%
BMI Healthcare	BMI The Alexandra Hospital	IND	233	82	0.0%	0.0%



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged
BMI Healthcare	BMI The Beaumont Hospital	IND	27	10	0.0%	0.0%
BMI Healthcare	BMI The Blackheath Hospital	IND	72	16	0.0%	0.0%
BMI Healthcare	BMI The Chaucer Hospital	IND	64	21	0.0%	4.0%
BMI Healthcare	BMI The Chiltern Hospital	IND	186	79	0.0%	0.0%
BMI Healthcare	BMI The Droitwich Spa Hospital	IND	75	17	0.0%	0.0%
BMI Healthcare	BMI The Duchy Hospital	IND	52	18	0.0%	0.0%
BMI Healthcare	BMI The Edgbaston Hospital	IND	91	29	0.0%	0.0%
BMI Healthcare	BMI The Esperance Hospital	IND	26	11	0.0%	0.0%
BMI Healthcare	BMI The Hampshire Clinic	IND	77	32	0.0%	0.0%
BMI Healthcare	BMI The Harbour Hospital	IND	61	10	0.0%	0.0%
BMI Healthcare	BMI The Lancaster Hospital	IND	28	13	0.0%	0.0%
BMI Healthcare	BMI The Lincoln Hospital	IND	58	14	0.0%	7.0%
BMI Healthcare	BMI The Manor Hospital	IND	59	13	0.0%	0.0%
BMI Healthcare	BMI The Meriden Hospital	IND	146	55	0.0%	0.0%
BMI Healthcare	BMI The Park Hospital	IND	139	20	0.0%	0.0%
BMI Healthcare	BMI The Princess Margaret Hospital	IND	85	27	7.4%	0.0%
BMI Healthcare	BMI The Priory Hospital	IND	58	8	0.0%	0.0%
BMI Healthcare	BMI The Ridgeway Hospital	IND	102	53	1.9%	0.0%
BMI Healthcare	BMI The Runnymede Hospital	IND	92	36	2.8%	5.0%
BMI Healthcare	BMI The Sandringham Hospital	IND	28	8	0.0%	0.0%
BMI Healthcare	BMI The Saxon Clinic	IND	84	32	6.3%	3.0%
BMI Healthcare	BMI The Sloane Hospital	IND	40	21	0.0%	0.0%
BMI Healthcare	BMI The South Cheshire Private Hospital	IND	29	13	0.0%	0.0%
BMI Healthcare	BMI The Winterbourne Hospital	IND	105	37	2.7%	0.0%
BMI Healthcare	BMI Thornbury Hospital	IND	63	22	0.0%	0.0%
BMI Healthcare	BMI Three Shires Hospital	IND	126	36	2.8%	0.0%
BMI Healthcare	BMI Woodlands Hospital	IND	96	11	0.0%	0.0%
Circle Health	Circle Bath	IND	112	14	0.0%	0.0%
Circle Health	Circle Reading Hospital	IND	125	12	0.0%	0.0%
Great Western Hospitals NHS Foundation Trust	The Great Western Hospital	NHS PPU	28	6	0.0%	0.0%
HCA International	Lister Hospital	IND	91	32	0.0%	0.0%
HCA International	London Bridge Hospital	IND	145	21	4.8%	0.0%
HCA International	Princess Grace Hospital	IND	195	48	2.1%	0.0%



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged
HCA International	The Wellington Hospital	IND	92	9	0.0%	0.0%
Horder Healthcare	The Horder Centre	IND	155	78	0.0%	0.0%
Hospital Of St John And St Elizabeth	Hospital of St John & St Elizabeth	IND	80	9	11.1%	0.0%
KIMS Hospital	KIMS Hospital	IND	119	68	1.5%	2.5%
King Edward VII's Hospital	King Edward VII's Hospital	IND	262	15	13.3%	6.1%
New Victoria Hospital	New Victoria Hospital	IND	81	7	0.0%	0.0%
Nuffield Health	Nuffield Health Bournemouth Hospital	IND	204	76	2.6%	0.0%
Nuffield Health	Nuffield Health Brentwood Hospital	IND	57	11	0.0%	0.0%
Nuffield Health	Nuffield Health Bristol, The Chesterfield Hospital	IND	41	16	0.0%	0.0%
Nuffield Health	Nuffield Health Cardiff Bay & Vale Hospitals	IND	233	56	3.6%	0.0%
Nuffield Health	Nuffield Health Cheltenham Hospital	IND	119	39	0.0%	0.0%
Nuffield Health	Nuffield Health Chester, The Grosvenor Hospital	IND	67	20	0.0%	0.0%
Nuffield Health	Nuffield Health Derby Hospital	IND	101	45	0.0%	0.0%
Nuffield Health	Nuffield Health Exeter Hospital	IND	247	85	2.4%	1.6%
Nuffield Health	Nuffield Health Glasgow Hospital	IND	174	28	3.6%	0.0%
Nuffield Health	Nuffield Health Guildford Hospital	IND	87	34	2.9%	0.0%
Nuffield Health	Nuffield Health Haywards Heath Hospital	IND	58	14	7.1%	0.0%
Nuffield Health	Nuffield Health Hereford Hospital	IND	105	56	0.0%	0.0%
Nuffield Health	Nuffield Health Ipswich Hospital	IND	155	54	0.0%	0.0%
Nuffield Health	Nuffield Health Leeds Hospital	IND	124	30	0.0%	0.0%
Nuffield Health	Nuffield Health Leicester Hospital	IND	97	22	0.0%	4.1%
Nuffield Health	Nuffield Health Newcastle Upon Tyne Hospital	IND	135	44	2.3%	0.0%
Nuffield Health	Nuffield Health North Staffordshire Hospital	IND	63	18	0.0%	0.0%
Nuffield Health	Nuffield Health Oxford, The Manor Hospital	IND	268	92	2.2%	0.0%
Nuffield Health	Nuffield Health Plymouth Hospital	IND	88	42	2.4%	0.0%
Nuffield Health	Nuffield Health Shrewsbury Hospital	IND	27	6	0.0%	0.0%
Nuffield Health	Nuffield Health Taunton Hospital	IND	72	11	0.0%	0.0%
Nuffield Health	Nuffield Health Tees Hospital	IND	54	16	0.0%	0.0%

Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged
Nuffield Health	Nuffield Health Tunbridge Wells Hospital	IND	61	9	0.0%	0.0%
Nuffield Health	Nuffield Health Warwickshire Hospital	IND	164	47	2.1%	0.0%
Nuffield Health	Nuffield Health Wessex Hospital	IND	157	54	3.7%	0.0%
Nuffield Health	Nuffield Health Wolverhampton Hospital	IND	50	6	0.0%	0.0%
Nuffield Health	Nuffield Health York Hospital	IND	68	25	0.0%	4.0%
One Healthcare Group Ltd	One Ashford Hospital	IND	90	55	0.0%	0.0%
One Healthcare Group Ltd	One Hatfield Hospital	IND	50	19	0.0%	0.0%
Ramsay Health Care UK	Ashtead Hospital	IND	59	25	0.0%	0.0%
Ramsay Health Care UK	Clifton Park Hospital	IND	22	11	0.0%	0.0%
Ramsay Health Care UK	Duchy Hospital	IND	85	44	0.0%	0.0%
Ramsay Health Care UK	Fitzwilliam Hospital	IND	71	43	7.0%	0.0%
Ramsay Health Care UK	Fulwood Hall Hospital	IND	25	6	0.0%	0.0%
Ramsay Health Care UK	Mount Stuart Hospital	IND	75	41	0.0%	0.0%
Ramsay Health Care UK	New Hall Hospital	IND	61	33	0.0%	0.0%
Ramsay Health Care UK	North Downs Hospital	IND	16	9	11.1%	0.0%
Ramsay Health Care UK	Oaks Hospital	IND	111	51	0.0%	2.0%
Ramsay Health Care UK	Pinehill Hospital	IND	78	35	0.0%	0.0%
Ramsay Health Care UK	Renacres Hospital	IND	14	6	0.0%	0.0%
Ramsay Health Care UK	Rivers Hospital	IND	97	25	0.0%	0.0%
Ramsay Health Care UK	Springfield Hospital	IND	110	62	1.6%	0.0%
Ramsay Health Care UK	Winfield Hospital	IND	83	48	0.0%	0.0%
Ramsay Health Care UK	Woodland Hospital	IND	53	13	0.0%	7.0%
Ramsay Health Care UK	Yorkshire Clinic	IND	50	25	0.0%	0.0%
Spire Healthcare	Spire Alexandra Hospital	IND	35	14	0.0%	0.0%
Spire Healthcare	Spire Bristol Hospital	IND	164	36	0.0%	0.0%
Spire Healthcare	Spire Bushey Hospital	IND	151	64	0.0%	0.0%
Spire Healthcare	Spire Cambridge Lea Hospital	IND	153	55	0.0%	0.0%
Spire Healthcare	Spire Cardiff Hospital	IND	138	52	1.9%	0.0%
Spire Healthcare	Spire Cheshire Hospital	IND	70	18	5.6%	0.0%
Spire Healthcare	Spire Clare Park Hospital	IND	117	48	4.2%	0.0%
Spire Healthcare	Spire Gatwick Park Hospital	IND	75	19	0.0%	0.0%
Spire Healthcare	Spire Harpenden Hospital	IND	107	45	0.0%	0.0%
Spire Healthcare	Spire Hartswood Hospital	IND	84	7	0.0%	0.0%



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged
Spire Healthcare	Spire Hull & East Riding Hospital	IND	75	22	0.0%	0.0%
Spire Healthcare	Spire Leeds Hospital	IND	89	12	0.0%	0.0%
Spire Healthcare	Spire Leicester Hospital	IND	99	42	0.0%	0.0%
Spire Healthcare	Spire Little Aston Hospital	IND	110	28	3.6%	0.0%
Spire Healthcare	Spire Manchester Hospital	IND	51	25	4.0%	0.0%
Spire Healthcare	Spire Methley Park Hospital	IND	30	8	0.0%	0.0%
Spire Healthcare	Spire Montefiore Hospital	IND	56	18	0.0%	0.0%
Spire Healthcare	Spire Murrayfield Hospital Edinburgh	IND	419	112	0.0%	0.0%
Spire Healthcare	Spire Murrayfield Hospital Wirral	IND	63	15	0.0%	0.0%
Spire Healthcare	Spire Norwich Hospital	IND	218	91	0.0%	0.0%
Spire Healthcare	Spire Nottingham Hospital	IND	38	12	0.0%	0.0%
Spire Healthcare	Spire Parkway Hospital	IND	75	7	0.0%	0.0%
Spire Healthcare	Spire Portsmouth Hospital	IND	125	41	2.4%	0.0%
Spire Healthcare	Spire Regency Hospital	IND	34	10	0.0%	0.0%
Spire Healthcare	Spire South Bank Hospital	IND	151	38	0.0%	0.0%
Spire Healthcare	Spire Southampton Hospital	IND	145	44	0.0%	0.0%
Spire Healthcare	Spire St Anthony's Hospital	IND	128	39	2.6%	2.6%
Spire Healthcare	Spire Sussex Hospital	IND	61	20	5.0%	0.0%
Spire Healthcare	Spire Thames Valley Hospital	IND	53	11	0.0%	0.0%
Spire Healthcare	Spire Washington Hospital	IND	50	23	0.0%	0.0%
Spire Healthcare	Spire Wellesley Hospital	IND	97	23	4.3%	0.0%
Spire Healthcare	Spire Yale Hospital	IND	228	62	4.8%	0.0%
The London Clinic	The London Clinic	IND	181	60	1.7%	0.0%
The Robert Jones And Agnes Hunt Orthopaedic Hospital NHS Foundation Trust	Robert Jones and Agnes Hunt Orthopaedic Hospital	NHS PPU	226	110	0.0%	0.0%
University Hospitals of Derby and Burton NHS Foundation Trust	Royal Derby Hospital	NHS PPU	26	15	0.0%	0.0%



Table 9 only contain information for provider sites where a percentage change in patient reported outcome could be calculated.

Table 7: UK rates for privately funded hip replacements – only sites who have submitted complete PROMs and APC data are included (1st January 2018 to 31st December 2018)

Procedure	Eligible Procedure	Total responses	Response rate	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved
Hip replacement (primary)	15,703	4,075	26.0%	1.3%	0.4%	98.3%
Hip replacement (revision)	647	90	13.9%	8.9%	2.2%	88.9%



Table 8: Hip replacement (primary) patient reported changes in health status by provider site (1st January 2018 to 31st December 2018)

Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
Benenden Hospital Trust	Benenden Hospital	IND	119	6	0.0%	0.0%	100.0%	0	0	6
BMI Healthcare	BMI Bath Clinic	IND	42	15	0.0%	0.0%	100.0%	0	0	15
BMI Healthcare	BMI Bishops Wood Hospital	IND	72	13	0.0%	0.0%	100.0%	0	0	13
BMI Healthcare	BMI Chelsfield Park Hospital	IND	83	13	0.0%	0.0%	100.0%	0	0	13
BMI Healthcare	BMI Fawkham Manor Hospital	IND	20	7	0.0%	0.0%	100.0%	0	0	7
BMI Healthcare	BMI Goring Hall Hospital	IND	167	53	3.8%	0.0%	96.2%	2	0	51
BMI Healthcare	BMI Mount Alvernia Hospital	IND	154	37	0.0%	0.0%	100.0%	0	0	37
BMI Healthcare	BMI St Edmunds Hospital	IND	73	42	2.4%	0.0%	97.6%	1	0	41
BMI Healthcare	BMI The Alexandra Hospital	IND	233	82	0.0%	0.0%	100.0%	0	0	82
BMI Healthcare	BMI The Beaumont Hospital	IND	27	10	0.0%	0.0%	100.0%	0	0	10
BMI Healthcare	BMI The Blackheath Hospital	IND	72	16	0.0%	0.0%	100.0%	0	0	16
BMI Healthcare	BMI The Chaucer Hospital	IND	64	21	0.0%	4.8%	95.2%	0	1	20
BMI Healthcare	BMI The Chiltern Hospital	IND	186	79	0.0%	0.0%	100.0%	0	0	79
BMI Healthcare	BMI The Droitwich Spa Hospital	IND	75	17	0.0%	0.0%	100.0%	0	0	17
BMI Healthcare	BMI The Duchy Hospital	IND	52	18	0.0%	0.0%	100.0%	0	0	18
BMI Healthcare	BMI The Edgbaston Hospital	IND	91	29	0.0%	0.0%	100.0%	0	0	29
BMI Healthcare	BMI The Esperance Hospital	IND	26	11	0.0%	0.0%	100.0%	0	0	11
BMI Healthcare	BMI The Hampshire Clinic	IND	77	32	0.0%	0.0%	100.0%	0	0	32
BMI Healthcare	BMI The Harbour Hospital	IND	61	10	0.0%	0.0%	100.0%	0	0	10



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
BMI Healthcare	BMI The Lancaster Hospital	IND	28	13	0.0%	0.0%	100.0%	0	0	13
BMI Healthcare	BMI The Lincoln Hospital	IND	58	14	0.0%	7.1%	92.9%	0	1	13
BMI Healthcare	BMI The Manor Hospital	IND	59	13	0.0%	0.0%	100.0%	0	0	13
BMI Healthcare	BMI The Meriden Hospital	IND	146	55	0.0%	0.0%	100.0%	0	0	55
BMI Healthcare	BMI The Park Hospital	IND	139	20	0.0%	0.0%	100.0%	0	0	20
BMI Healthcare	BMI The Princess Margaret Hospital	IND	85	27	7.4%	0.0%	92.6%	2	0	25
BMI Healthcare	BMI The Priory Hospital	IND	58	8	0.0%	0.0%	100.0%	0	0	8
BMI Healthcare	BMI The Ridgeway Hospital	IND	102	53	1.9%	0.0%	98.1%	1	0	52
BMI Healthcare	BMI The Runnymede Hospital	IND	92	36	2.8%	5.6%	91.7%	1	2	33
BMI Healthcare	BMI The Sandringham Hospital	IND	28	8	0.0%	0.0%	100.0%	0	0	8
BMI Healthcare	BMI The Saxon Clinic	IND	84	32	6.3%	3.1%	90.6%	2	1	29
BMI Healthcare	BMI The Sloane Hospital	IND	40	21	0.0%	0.0%	100.0%	0	0	21
BMI Healthcare	BMI The South Cheshire Private Hospital	IND	29	13	0.0%	0.0%	100.0%	0	0	13
BMI Healthcare	BMI The Winterbourne Hospital	IND	105	37	2.7%	0.0%	97.3%	1	0	36
BMI Healthcare	BMI Thornbury Hospital	IND	63	22	0.0%	0.0%	100.0%	0	0	22
BMI Healthcare	BMI Three Shires Hospital	IND	126	36	2.8%	0.0%	97.2%	1	0	35
BMI Healthcare	BMI Woodlands Hospital	IND	96	11	0.0%	0.0%	100.0%	0	0	11
Circle Health	Circle Bath	IND	112	14	0.0%	0.0%	100.0%	0	0	14
Circle Health	Circle Reading Hospital	IND	125	12	0.0%	0.0%	100.0%	0	0	12
Great Western Hospitals NHS Foundation Trust	The Great Western Hospital	NHS PPU	28	6	0.0%	0.0%	100.0%	0	0	6



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
HCA International	Lister Hospital	IND	91	32	0.0%	0.0%	100.0%	0	0	32
HCA International	London Bridge Hospital	IND	145	21	4.8%	0.0%	95.2%	1	0	20
HCA International	Princess Grace Hospital	IND	195	48	2.1%	0.0%	97.9%	1	0	47
HCA International	The Wellington Hospital	IND	92	9	0.0%	0.0%	100.0%	0	0	9
Horder Healthcare	The Horder Centre	IND	155	78	0.0%	0.0%	100.0%	0	0	78
Hospital Of St John And St Elizabeth	Hospital of St John & St Elizabeth	IND	80	9	11.1%	0.0%	88.9%	1	0	8
KIMS Hospital	KIMS Hospital	IND	119	68	1.5%	2.9%	95.6%	1	2	65
King Edward VII's Hospital	King Edward VII's Hospital	IND	262	15	13.3%	6.7%	80.0%	2	1	12
New Victoria Hospital	New Victoria Hospital	IND	81	7	0.0%	0.0%	100.0%	0	0	7
Nuffield Health	Nuffield Health Bournemouth Hospital	IND	204	76	2.6%	0.0%	97.4%	2	0	74
Nuffield Health	Nuffield Health Brentwood Hospital	IND	57	11	0.0%	0.0%	100.0%	0	0	11
Nuffield Health	Nuffield Health Bristol, The Chesterfield Hospital	IND	41	16	0.0%	0.0%	100.0%	0	0	16
Nuffield Health	Nuffield Health Cardiff Bay & Vale Hospitals	IND	233	56	3.6%	0.0%	96.4%	2	0	54
Nuffield Health	Nuffield Health Cheltenham Hospital	IND	119	39	0.0%	0.0%	100.0%	0	0	39
Nuffield Health	Nuffield Health Chester, The Grosvenor Hospital	IND	67	20	0.0%	0.0%	100.0%	0	0	20
Nuffield Health	Nuffield Health Derby Hospital	IND	101	45	0.0%	0.0%	100.0%	0	0	45
Nuffield Health	Nuffield Health Exeter Hospital	IND	247	85	2.4%	1.2%	96.5%	2	1	82
Nuffield Health	Nuffield Health Glasgow Hospital	IND	174	28	3.6%	0.0%	96.4%	1	0	27



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
Nuffield Health	Nuffield Health Guildford Hospital	IND	87	34	2.9%	0.0%	97.1%	1	0	33
Nuffield Health	Nuffield Health Haywards Heath Hospital	IND	58	14	7.1%	0.0%	92.9%	1	0	13
Nuffield Health	Nuffield Health Hereford Hospital	IND	105	56	0.0%	0.0%	100.0%	0	0	56
Nuffield Health	Nuffield Health Ipswich Hospital	IND	155	54	0.0%	0.0%	100.0%	0	0	54
Nuffield Health	Nuffield Health Leeds Hospital	IND	124	30	0.0%	0.0%	100.0%	0	0	30
Nuffield Health	Nuffield Health Leicester Hospital	IND	97	22	0.0%	4.5%	95.5%	0	1	21
Nuffield Health	Nuffield Health Newcastle Upon Tyne Hospital	IND	135	44	2.3%	0.0%	97.7%	1	0	43
Nuffield Health	Nuffield Health North Staffordshire Hospital	IND	63	18	0.0%	0.0%	100.0%	0	0	18
Nuffield Health	Nuffield Health Oxford, The Manor Hospital	IND	268	92	2.2%	0.0%	97.8%	2	0	90
Nuffield Health	Nuffield Health Plymouth Hospital	IND	88	42	2.4%	0.0%	97.6%	1	0	41
Nuffield Health	Nuffield Health Shrewsbury Hospital	IND	27	6	0.0%	0.0%	100.0%	0	0	6
Nuffield Health	Nuffield Health Taunton Hospital	IND	72	11	0.0%	0.0%	100.0%	0	0	11
Nuffield Health	Nuffield Health Tees Hospital	IND	54	16	0.0%	0.0%	100.0%	0	0	16
Nuffield Health	Nuffield Health Tunbridge Wells Hospital	IND	61	9	0.0%	0.0%	100.0%	0	0	9
Nuffield Health	Nuffield Health Warwickshire Hospital	IND	164	47	2.1%	0.0%	97.9%	1	0	46
Nuffield Health	Nuffield Health Wessex	IND	157	54	3.7%	0.0%	96.3%	2	0	52



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
	Hospital									
Nuffield Health	Nuffield Health Wolverhampton Hospital	IND	50	6	0.0%	0.0%	100.0%	0	0	6
Nuffield Health	Nuffield Health York Hospital	IND	68	25	0.0%	4.0%	96.0%	0	1	24
One Healthcare Group Ltd	One Ashford Hospital	IND	90	55	0.0%	0.0%	100.0%	0	0	55
One Healthcare Group Ltd	One Hatfield Hospital	IND	50	19	0.0%	0.0%	100.0%	0	0	19
Ramsay Health Care UK	Ashtead Hospital	IND	59	25	0.0%	0.0%	100.0%	0	0	25
Ramsay Health Care UK	Clifton Park Hospital	IND	22	11	0.0%	0.0%	100.0%	0	0	11
Ramsay Health Care UK	Duchy Hospital	IND	85	44	0.0%	0.0%	100.0%	0	0	44
Ramsay Health Care UK	Fitzwilliam Hospital	IND	71	43	7.0%	0.0%	93.0%	3	0	40
Ramsay Health Care UK	Fulwood Hall Hospital	IND	25	6	0.0%	0.0%	100.0%	0	0	6
Ramsay Health Care UK	Mount Stuart Hospital	IND	75	41	0.0%	0.0%	100.0%	0	0	41
Ramsay Health Care UK	New Hall Hospital	IND	61	33	0.0%	0.0%	100.0%	0	0	33
Ramsay Health Care UK	North Downs Hospital	IND	16	9	11.1%	0.0%	88.9%	1	0	8
Ramsay Health Care UK	Oaks Hospital	IND	111	51	0.0%	2.0%	98.0%	0	1	50
Ramsay Health Care UK	Pinehill Hospital	IND	78	35	0.0%	0.0%	100.0%	0	0	35
Ramsay Health Care UK	Renacres Hospital	IND	14	6	0.0%	0.0%	100.0%	0	0	6
Ramsay Health Care UK	Rivers Hospital	IND	97	25	0.0%	0.0%	100.0%	0	0	25
Ramsay Health Care UK	Springfield Hospital	IND	110	62	1.6%	0.0%	98.4%	1	0	61
Ramsay Health Care UK	Winfield Hospital	IND	83	48	0.0%	0.0%	100.0%	0	0	48
Ramsay Health Care UK	Woodland Hospital	IND	53	13	0.0%	7.7%	92.3%	0	1	12
Ramsay Health Care UK	Yorkshire Clinic	IND	50	25	0.0%	0.0%	100.0%	0	0	25



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
Spire Healthcare	Spire Alexandra Hospital	IND	35	14	0.0%	0.0%	100.0%	0	0	14
Spire Healthcare	Spire Bristol Hospital	IND	164	36	0.0%	0.0%	100.0%	0	0	36
Spire Healthcare	Spire Bushey Hospital	IND	151	64	0.0%	0.0%	100.0%	0	0	64
Spire Healthcare	Spire Cambridge Lea Hospital	IND	153	55	0.0%	0.0%	100.0%	0	0	55
Spire Healthcare	Spire Cardiff Hospital	IND	138	52	1.9%	0.0%	98.1%	1	0	51
Spire Healthcare	Spire Cheshire Hospital	IND	70	18	5.6%	0.0%	94.4%	1	0	17
Spire Healthcare	Spire Clare Park Hospital	IND	117	48	4.2%	0.0%	95.8%	2	0	46
Spire Healthcare	Spire Gatwick Park Hospital	IND	75	19	0.0%	0.0%	100.0%	0	0	19
Spire Healthcare	Spire Harpenden Hospital	IND	107	45	0.0%	0.0%	100.0%	0	0	45
Spire Healthcare	Spire Hartswood Hospital	IND	84	7	0.0%	0.0%	100.0%	0	0	7
Spire Healthcare	Spire Hull & East Riding Hospital	IND	75	22	0.0%	0.0%	100.0%	0	0	22
Spire Healthcare	Spire Leeds Hospital	IND	89	12	0.0%	0.0%	100.0%	0	0	12
Spire Healthcare	Spire Leicester Hospital	IND	99	42	0.0%	0.0%	100.0%	0	0	42
Spire Healthcare	Spire Little Aston Hospital	IND	110	28	3.6%	0.0%	96.4%	1	0	27
Spire Healthcare	Spire Manchester Hospital	IND	51	25	4.0%	0.0%	96.0%	1	0	24
Spire Healthcare	Spire Methley Park Hospital	IND	30	8	0.0%	0.0%	100.0%	0	0	8
Spire Healthcare	Spire Montefiore Hospital	IND	56	18	0.0%	0.0%	100.0%	0	0	18
Spire Healthcare	Spire Murrayfield Hospital Edinburgh	IND	419	112	0.0%	0.9%	99.1%	0	1	111
Spire Healthcare	Spire Murrayfield Hospital Wirral	IND	63	15	0.0%	0.0%	100.0%	0	0	15
Spire Healthcare	Spire Norwich Hospital	IND	218	91	0.0%	0.0%	100.0%	0	0	91
Spire Healthcare	Spire Nottingham Hospital	IND	38	12	0.0%	0.0%	100.0%	0	0	12



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
Spire Healthcare	Spire Parkway Hospital	IND	75	7	0.0%	0.0%	100.0%	0	0	7
Spire Healthcare	Spire Portsmouth Hospital	IND	125	41	2.4%	0.0%	97.6%	1	0	40
Spire Healthcare	Spire Regency Hospital	IND	34	10	0.0%	0.0%	100.0%	0	0	10
Spire Healthcare	Spire South Bank Hospital	IND	151	38	0.0%	0.0%	100.0%	0	0	38
Spire Healthcare	Spire Southampton Hospital	IND	145	44	0.0%	0.0%	100.0%	0	0	44
Spire Healthcare	Spire St Anthony's Hospital	IND	128	39	2.6%	2.6%	94.9%	1	1	37
Spire Healthcare	Spire Sussex Hospital	IND	61	20	5.0%	0.0%	95.0%	1	0	19
Spire Healthcare	Spire Thames Valley Hospital	IND	53	11	0.0%	0.0%	100.0%	0	0	11
Spire Healthcare	Spire Washington Hospital	IND	50	23	0.0%	0.0%	100.0%	0	0	23
Spire Healthcare	Spire Wellesley Hospital	IND	97	23	4.3%	0.0%	95.7%	1	0	22
Spire Healthcare	Spire Yale Hospital	IND	228	62	4.8%	0.0%	95.2%	3	0	59
The London Clinic	The London Clinic	IND	181	60	1.7%	0.0%	98.3%	1	0	59
The Robert Jones And Agnes Hunt Orthopaedic Hospital NHS Foundation Trust	Robert Jones and Agnes Hunt Orthopaedic Hospital	NHS PPU	226	110	0.0%	0.0%	100.0%	0	0	110
University Hospitals of Derby and Burton NHS Foundation Trust	Royal Derby Hospital	NHS PPU	26	15	0.0%	0.0%	100.0%	0	0	15



Table 9: Hip replacement (revision) patient reported changes in health status by provider site (1st January 2018 to 31st December 2018)

Note: Table 9 is omitted as there are no data available in this publication period.



6 Knee PROM: Oxford Knee Score

6.1 Definition

The Oxford Knee Score (OKS) is a short 12-item patient-reported PROMs used to assess function and pain with patients undergoing a total knee replacement (TKR) – both primary replacement and revision surgery. The questions relate to Activities of Daily Living and are filled in by the patient to eliminate inter-observer bias. The questionnaire is carried out by the patient twice, pre- and post-operatively in order to calculate patient outcomes post-surgery.

The score was designed and developed by researchers within the Nuffield Department of Population Health at the University of Oxford in association with surgical colleagues at the Nuffield Orthopaedic Centre and has been well validated.

The score comprises of twelve multiple choice questions relating to the patient’s experience of pain, ease of joint movement and ease of undertaking normal domestic activities. Each question is scored with the score decreasing as the reported symptoms increase. Each of the 12 questions are scored in the same way with the score decreasing as the reported symptoms increase, i.e. become worse (from four least/no symptoms to zero representing the greatest severity). The individual scores are then added together to provide a single score with 0 indicating the worst possible and 48 indicating the highest possible score. This is undertaken pre- and post-operation and the score for each is calculated. This allows the improvement, or indeed worsening, of symptoms to be quantified.

6.2 PHIN Publication of PROMs

PHIN’s initial publication of the Oxford Knee Score will comprise of the number of responses and the percentage improvement in the score.

6.3 Results

Table 11 and Table 12 only contain information for provider sites where a percentage change in patient reported outcome could be calculated.

Table 10: UK rates for privately funded knee replacements – only sites who have submitted complete PROMs and APC data are included (1st January 2018 to 31st December 2018)

Procedure	Eligible Procedure	Total responses	Response rate	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved
Knee replacement (primary)	13,174	3,264	24.8	4.4%	0.9%	94.6%
Knee replacement (revision)	513	86	16.8%	9.3%	2.3%	88.4%



Table 11: Knee replacement (primary) patient reported changes in health status by provider site (1st January 2018 to 31st December 2018)

Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
Aspen Healthcare	Aspen - The Holly Private Hospital	IND	48	8	0.0%	12.5%	87.5%	0	1	7
Benenden Hospital Trust	Benenden Hospital	IND	107	9	0.0%	0.0%	100.0%	0	0	9
BMI Healthcare	BMI Bath Clinic	IND	27	12	0.0%	0.0%	100.0%	0	0	12
BMI Healthcare	BMI Bishops Wood Hospital	IND	48	8	12.5%	0.0%	87.5%	1	0	7
BMI Healthcare	BMI Chelsfield Park Hospital	IND	68	9	0.0%	0.0%	100.0%	0	0	9
BMI Healthcare	BMI Goring Hall Hospital	IND	90	36	11.1%	2.8%	86.1%	4	1	31
BMI Healthcare	BMI Mount Alvernia Hospital	IND	51	8	0.0%	0.0%	100.0%	0	0	8
BMI Healthcare	BMI St Edmunds Hospital	IND	55	19	5.3%	0.0%	94.7%	1	0	18
BMI Healthcare	BMI The Alexandra Hospital	IND	171	71	5.6%	1.4%	93.0%	4	1	66
BMI Healthcare	BMI The Beaumont Hospital	IND	23	8	12.5%	0.0%	87.5%	1	0	7
BMI Healthcare	BMI The Blackheath Hospital	IND	45	9	0.0%	0.0%	100.0%	0	0	9
BMI Healthcare	BMI The Chaucer Hospital	IND	37	14	0.0%	0.0%	100.0%	0	0	14
BMI Healthcare	BMI The Chiltern Hospital	IND	160	60	1.7%	1.7%	96.7%	1	1	58
BMI Healthcare	BMI The Droitwich Spa Hospital	IND	62	19	10.5%	0.0%	89.5%	2	0	17
BMI Healthcare	BMI The Duchy Hospital	IND	102	20	0.0%	5.0%	95.0%	0	1	19
BMI Healthcare	BMI The Edgbaston Hospital	IND	31	14	0.0%	0.0%	100.0%	0	0	14
BMI Healthcare	BMI The Esperance Hospital	IND	25	8	0.0%	0.0%	100.0%	0	0	8
BMI Healthcare	BMI The Hampshire Clinic	IND	45	13	0.0%	0.0%	100.0%	0	0	13
BMI Healthcare	BMI The Harbour Hospital	IND	67	13	0.0%	0.0%	100.0%	0	0	13



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
BMI Healthcare	BMI The Lancaster Hospital	IND	62	22	9.1%	0.0%	90.9%	2	0	20
BMI Healthcare	BMI The Lincoln Hospital	IND	51	19	10.5%	0.0%	89.5%	2	0	17
BMI Healthcare	BMI The Manor Hospital	IND	37	8	0.0%	0.0%	100.0%	0	0	8
BMI Healthcare	BMI The Meriden Hospital	IND	53	19	0.0%	0.0%	100.0%	0	0	19
BMI Healthcare	BMI The Park Hospital	IND	118	20	5.0%	0.0%	95.0%	1	0	19
BMI Healthcare	BMI The Princess Margaret Hospital	IND	99	35	0.0%	5.7%	94.3%	0	2	33
BMI Healthcare	BMI The Priory Hospital	IND	141	16	12.5%	0.0%	87.5%	2	0	14
BMI Healthcare	BMI The Ridgeway Hospital	IND	96	32	0.0%	0.0%	100.0%	0	0	32
BMI Healthcare	BMI The Runnymede Hospital	IND	130	55	7.3%	0.0%	92.7%	4	0	51
BMI Healthcare	BMI The Saxon Clinic	IND	91	42	0.0%	0.0%	100.0%	0	0	42
BMI Healthcare	BMI The Sloane Hospital	IND	28	15	6.7%	0.0%	93.3%	1	0	14
BMI Healthcare	BMI The South Cheshire Private Hospital	IND	23	15	0.0%	0.0%	100.0%	0	0	15
BMI Healthcare	BMI The Winterbourne Hospital	IND	61	26	7.7%	0.0%	92.3%	2	0	24
BMI Healthcare	BMI Thornbury Hospital	IND	50	18	0.0%	0.0%	100.0%	0	0	18
BMI Healthcare	BMI Three Shires Hospital	IND	87	23	0.0%	4.3%	95.7%	0	1	22
BMI Healthcare	BMI Woodlands Hospital	IND	63	9	0.0%	0.0%	100.0%	0	0	9
Bupa Cromwell Hospital	Bupa Cromwell Hospital	IND	127	7	0.0%	14.3%	85.7%	0	1	6
Circle Health	Circle Bath	IND	159	16	0.0%	0.0%	100.0%	0	0	16
Circle Health	Circle Reading Hospital	IND	90	9	0.0%	0.0%	100.0%	0	0	9
HCA International	Lister Hospital	IND	48	17	5.9%	5.9%	88.2%	1	1	15
HCA International	London Bridge Hospital	IND	178	21	4.8%	0.0%	95.2%	1	0	20



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
HCA International	Princess Grace Hospital	IND	148	41	2.4%	0.0%	97.6%	1	0	40
KIMS Hospital	KIMS Hospital	IND	91	40	2.5%	5.0%	92.5%	1	2	37
Nuffield Health	Nuffield Health Bournemouth Hospital	IND	134	57	5.3%	3.5%	91.2%	3	2	52
Nuffield Health	Nuffield Health Brentwood Hospital	IND	67	13	15.4%	15.4%	69.2%	2	2	9
Nuffield Health	Nuffield Health Bristol, The Chesterfield Hospital	IND	58	19	5.3%	0.0%	94.7%	1	0	18
Nuffield Health	Nuffield Health Cambridge Hospital	IND	68	12	0.0%	0.0%	100.0%	0	0	12
Nuffield Health	Nuffield Health Cardiff Bay & Vale Hospitals	IND	263	46	2.2%	0.0%	97.8%	1	0	45
Nuffield Health	Nuffield Health Cheltenham Hospital	IND	126	40	5.0%	2.5%	92.5%	2	1	37
Nuffield Health	Nuffield Health Chester, The Grosvenor Hospital	IND	44	9	0.0%	0.0%	100.0%	0	0	9
Nuffield Health	Nuffield Health Chichester Hospital	IND	105	10	10.0%	0.0%	90.0%	1	0	9
Nuffield Health	Nuffield Health Derby Hospital	IND	138	45	4.4%	0.0%	95.6%	2	0	43
Nuffield Health	Nuffield Health Exeter Hospital	IND	235	94	2.1%	1.1%	96.8%	2	1	91
Nuffield Health	Nuffield Health Glasgow Hospital	IND	91	23	0.0%	0.0%	100.0%	0	0	23
Nuffield Health	Nuffield Health Guildford Hospital	IND	70	29	3.4%	3.4%	93.1%	1	1	27
Nuffield Health	Nuffield Health Haywards Heath Hospital	IND	30	6	16.7%	0.0%	83.3%	1	0	5
Nuffield Health	Nuffield Health Hereford Hospital	IND	79	42	4.8%	0.0%	95.2%	2	0	40
Nuffield Health	Nuffield Health Ipswich	IND	123	38	0.0%	2.6%	97.4%	0	1	37



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
	Hospital									
Nuffield Health	Nuffield Health Leeds Hospital	IND	92	27	7.4%	0.0%	92.6%	2	0	25
Nuffield Health	Nuffield Health Leicester Hospital	IND	54	15	6.7%	0.0%	93.3%	1	0	14
Nuffield Health	Nuffield Health Newcastle Upon Tyne Hospital	IND	121	36	11.1%	0.0%	88.9%	4	0	32
Nuffield Health	Nuffield Health Oxford, The Manor Hospital	IND	287	79	0.0%	0.0%	100.0%	0	0	79
Nuffield Health	Nuffield Health Plymouth Hospital	IND	69	31	6.5%	3.2%	90.3%	2	1	28
Nuffield Health	Nuffield Health Shrewsbury Hospital	IND	53	24	8.3%	0.0%	91.7%	2	0	22
Nuffield Health	Nuffield Health Tees Hospital	IND	67	19	10.5%	0.0%	89.5%	2	0	17
Nuffield Health	Nuffield Health Tunbridge Wells Hospital	IND	104	24	4.2%	0.0%	95.8%	1	0	23
Nuffield Health	Nuffield Health Warwickshire Hospital	IND	160	48	2.1%	0.0%	97.9%	1	0	47
Nuffield Health	Nuffield Health Wessex Hospital	IND	106	27	3.7%	0.0%	96.3%	1	0	26
Nuffield Health	Nuffield Health Woking Hospital	IND	77	27	3.7%	0.0%	96.3%	1	0	26
Nuffield Health	Nuffield Health York Hospital	IND	61	24	0.0%	0.0%	100.0%	0	0	24
One Healthcare Group Ltd	One Ashford Hospital	IND	98	51	5.9%	0.0%	94.1%	3	0	48
Ramsay Health Care UK	Ashtead Hospital	IND	52	18	0.0%	0.0%	100.0%	0	0	18
Ramsay Health Care UK	Clifton Park Hospital	IND	27	11	9.1%	0.0%	90.9%	1	0	10
Ramsay Health Care UK	Duchy Hospital	IND	72	38	2.6%	0.0%	97.4%	1	0	37
Ramsay Health Care UK	Fitzwilliam Hospital	IND	82	33	12.1%	0.0%	87.9%	4	0	29



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
Ramsay Health Care UK	Mount Stuart Hospital	IND	47	25	4.0%	0.0%	96.0%	1	0	24
Ramsay Health Care UK	New Hall Hospital	IND	35	20	0.0%	0.0%	100.0%	0	0	20
Ramsay Health Care UK	North Downs Hospital	IND	28	9	0.0%	0.0%	100.0%	0	0	9
Ramsay Health Care UK	Oaks Hospital	IND	93	56	1.8%	3.6%	94.6%	1	2	53
Ramsay Health Care UK	Pinehill Hospital	IND	41	23	0.0%	0.0%	100.0%	0	0	23
Ramsay Health Care UK	Renacres Hospital	IND	26	12	0.0%	0.0%	100.0%	0	0	12
Ramsay Health Care UK	Rivers Hospital	IND	92	21	0.0%	0.0%	100.0%	0	0	21
Ramsay Health Care UK	Springfield Hospital	IND	140	77	2.6%	0.0%	97.4%	2	0	75
Ramsay Health Care UK	Winfield Hospital	IND	88	52	3.8%	0.0%	96.2%	2	0	50
Ramsay Health Care UK	Woodland Hospital	IND	58	8	0.0%	0.0%	100.0%	0	0	8
Ramsay Health Care UK	Yorkshire Clinic	IND	46	29	3.4%	0.0%	96.6%	1	0	28
Spire Healthcare	Spire Alexandra Hospital	IND	41	10	10.0%	0.0%	90.0%	1	0	9
Spire Healthcare	Spire Bristol Hospital	IND	194	44	2.3%	2.3%	95.5%	1	1	42
Spire Healthcare	Spire Bushey Hospital	IND	178	57	12.3%	0.0%	87.7%	7	0	50
Spire Healthcare	Spire Cambridge Lea Hospital	IND	85	24	8.3%	0.0%	91.7%	2	0	22
Spire Healthcare	Spire Cardiff Hospital	IND	102	28	3.6%	0.0%	96.4%	1	0	27
Spire Healthcare	Spire Cheshire Hospital	IND	80	20	5.0%	0.0%	95.0%	1	0	19
Spire Healthcare	Spire Clare Park Hospital	IND	96	49	8.2%	0.0%	91.8%	4	0	45
Spire Healthcare	Spire Fylde Coast Hospital	IND	49	7	0.0%	0.0%	100.0%	0	0	7
Spire Healthcare	Spire Gatwick Park Hospital	IND	71	17	0.0%	0.0%	100.0%	0	0	17
Spire Healthcare	Spire Harpenden Hospital	IND	79	21	14.3%	4.8%	81.0%	3	1	17
Spire Healthcare	Spire Hartwood Hospital	IND	106	8	0.0%	0.0%	100.0%	0	0	8



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
Spire Healthcare	Spire Hull & East Riding Hospital	IND	90	24	12.5%	0.0%	87.5%	3	0	21
Spire Healthcare	Spire Leicester Hospital	IND	111	47	0.0%	0.0%	100.0%	0	0	47
Spire Healthcare	Spire Little Aston Hospital	IND	76	26	0.0%	0.0%	100.0%	0	0	26
Spire Healthcare	Spire London East	IND	35	6	50.0%	0.0%	50.0%	3	0	3
Spire Healthcare	Spire Manchester Hospital	IND	49	23	0.0%	0.0%	100.0%	0	0	23
Spire Healthcare	Spire Methley Park Hospital	IND	45	10	0.0%	0.0%	100.0%	0	0	10
Spire Healthcare	Spire Montefiore Hospital	IND	66	20	5.0%	0.0%	95.0%	1	0	19
Spire Healthcare	Spire Murrayfield Hospital Edinburgh	IND	259	73	5.5%	0.0%	94.5%	4	0	69
Spire Healthcare	Spire Murrayfield Hospital Wirral	IND	63	9	0.0%	0.0%	100.0%	0	0	9
Spire Healthcare	Spire Norwich Hospital	IND	142	72	6.9%	0.0%	93.1%	5	0	67
Spire Healthcare	Spire Nottingham Hospital	IND	37	12	8.3%	0.0%	91.7%	1	0	11
Spire Healthcare	Spire Portsmouth Hospital	IND	122	36	5.6%	2.8%	91.7%	2	1	33
Spire Healthcare	Spire Regency Hospital	IND	44	9	11.1%	0.0%	88.9%	1	0	8
Spire Healthcare	Spire South Bank Hospital	IND	101	22	0.0%	4.5%	95.5%	0	1	21
Spire Healthcare	Spire Southampton Hospital	IND	343	44	6.8%	2.3%	90.9%	3	1	40
Spire Healthcare	Spire St Anthony's Hospital	IND	74	18	5.6%	0.0%	94.4%	1	0	17
Spire Healthcare	Spire Sussex Hospital	IND	53	14	0.0%	7.1%	92.9%	0	1	13
Spire Healthcare	Spire Washington Hospital	IND	58	15	6.7%	0.0%	93.3%	1	0	14
Spire Healthcare	Spire Wellesley Hospital	IND	86	28	7.1%	0.0%	92.9%	2	0	26
Spire Healthcare	Spire Yale Hospital	IND	119	34	5.9%	0.0%	94.1%	2	0	32
The London Clinic	The London Clinic	IND	58	15	6.7%	0.0%	93.3%	1	0	14



Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
The New Foscote Private Hospital	The New Foscote Hospital	IND	18	12	8.3%	0.0%	91.7%	1	0	11
The Robert Jones And Agnes Hunt Orthopaedic Hospital NHS Foundation Trust	Robert Jones and Agnes Hunt Orthopaedic Hospital	NHS PPU	120	56	3.6%	0.0%	96.4%	2	0	54
University Hospitals of Derby and Burton NHS Foundation Trust	Royal Derby Hospital	NHS PPU	35	19	5.3%	0.0%	94.7%	1	0	18

Table 12: Knee replacement (revision) patient reported changes in health status by provider site (1st January 2018 to 31st December 2018)

Provider	Site	Sector	Eligible Procedure	Total responses	% of patients reported worsened	% of patients reported unchanged	% of patients reported improved	Patients reported worsened	Patients reported unchanged	Patients reported improved
Nuffield Health	Nuffield Health Oxford, The Manor Hospital	IND	23	7	14.3%	0.0%	85.7%	1	0	6



7 Appendix A – Procedure Specific PROMs Questions

7.1 Oxford Hip Score¹²

Table 8: List of questions in Oxford Hip Score with responses that can be selected by patients

During the past 4 weeks	
How would you describe the pain you usually have in your hip?	None Very mild Mild Moderate Severe
Have you been trouble by pain from your hip in bed at night?	No nights Only 1 or 2 nights Some nights Most nights Every night
Have you had any sudden, severe pain (shooting, stabbing, or spasms) from your affected hip?	No nights Only 1 or 2 nights Some nights Most nights Every night
For how long have you been able to walk before the pain in your hip becomes severe (with or without a walking aid)?	No pain for 30 minutes or more 16 to 30 minutes 5-10 minutes Around the house only Not at all

¹² The Oxford Hip Score questions are the intellectual property of Oxford University Innovation (<https://innovation.ox.ac.uk/outcome-measures/oxford-hip-score-ohs/>)



During the past 4 weeks	
Have you been able to climb a flight of stairs?	Yes, easily With little difficulty With moderate difficulty With extreme difficulty No, impossible
Have you been able to put on a pair of socks, stocking or tights?	Yes, easily With little difficulty With moderate difficulty With extreme difficulty No, impossible
After a meal (sat at a table), how painful has it been for you to stand up from a chair because of your hip?	Not at all painful Slightly painful Moderately painful Very painful Unbearable
Have you had any trouble getting in and out of a care or using public transportation because of your hip?	No trouble at all Very little trouble Moderate trouble Extreme difficulty Impossible to do
Have you had any trouble with washing and drying yourself (all over) because of your hip?	No trouble at all Very little trouble Moderate trouble Extreme difficulty Impossible to do



During the past 4 weeks	
Could you do the household shopping on your own?	Yes, easily With little difficulty With moderate difficulty With extreme difficulty No, impossible
How much has pain from your hip interfered with your usual work, including housework?	Not at all A little bit Moderately Greatly Totally



7.2 Oxford Knee Score¹³

Table 9: List of questions in Oxford Knee Score with responses that can be selected by patients

During the past 4 weeks	
How would you describe the pain you usually have in your knee?	None Very mild Mild Moderate Severe
Have you had any trouble with washing and drying yourself (all over) because of your knee?	No trouble at all Very little trouble Moderate trouble Extreme difficulty Impossible to do
Have you had any trouble getting in and out of a car or using public transportation because of your knee (with or without a stick)?	No trouble at all Very little trouble Moderate trouble Extreme difficulty Impossible to do
For how long have you been able to walk before the pain in your knee becomes severe (with or without a walking aid)?	No pain for 60 minutes or more 16 to 60 minutes 5-15 minutes Around the house only Not at all

¹³ The Oxford Knee Score questions are the intellectual property of Oxford University Innovation (<https://innovation.ox.ac.uk/outcome-measures/oxford-knee-score-oks/>)



During the past 4 weeks	
After a meal (sat at a table), how painful has it been for you to stand up from a chair because of your hip?	Not at all painful Slightly painful Moderately painful Very painful Unbearable
Have you been limping when walking, because of your knee?	Rarely/never Sometimes or just at first Often, not at first Most of the time All of the time
Could you kneel down and get up again afterwards?	Yes, easily With a little difficulty With moderate difficulty With extreme difficult No, impossible
Are you troubled by pain in your knee at night in bed?	Not at all Only one or two nights Some nights Most nights Every night
How much has pain from your hip interfered with your usual work, including housework?	Not at all A little bit Moderately Greatly Totally



During the past 4 weeks	
<p>Have you felt that your knee might suddenly “give way” or let you down?</p>	<p>Rarely/never Sometimes or just at first Often, not at first Most of the time All of the time</p>
<p>Could you do the household shopping on your own?</p>	<p>Yes, easily With little difficulty With moderate difficulty With extreme difficulty No, impossible</p>
<p>Could you walk down a flight of stairs?</p>	<p>Yes, easily With little difficulty With moderate difficulty With extreme difficulty No, impossible</p>

