

Provisional Monthly Patient Reported Outcome Measures (PROMs) in England – April 2009 to November 2010. Post-operative Data: Experimental Statistics Data Quality Note

The data quality note will be updated in the event of issues arising post-publication. A summary of changes made will appear in the table below. For the most recent version of this data quality note, please refer to [HESonline](http://www.hesonline.nhs.uk) [http://www.hesonline.nhs.uk].

Version control	
Date	Summary of update
14/04/2011	'Provisional Monthly Patient Reported Outcome Measures (PROMs) in England – April 2009 to November 2010. Post-operative Data: Experimental Statistics Data Quality Note' published

Please note this data is provisional and subject to changes and revisions each month. It should be treated as an estimate until the final annual publication.

PROMs publication

Following the first publication of post-operative scores in September 2010, this is the latest monthly update from the Patient Reported Outcome Measures (PROMs) programme. This publication builds upon the published pre-operative data and considers the change in patients' self-reported health status for the four common elective surgical procedures in the PROMs programme: groin hernia surgery, hip replacement, knee replacement and varicose vein surgery. Analysis covers the period from April 2009 to the end of November 2010 and includes pre-operative questionnaires that all English providers treating NHS patients have been asked to collect from patients who wish to participate and post-operative questionnaires returned by patients following their surgery. Not all patients undergoing the relevant operations returned questionnaires for a variety of reasons.

Experimental dataset

The report is classed as experimental statistics as it contains new official statistics that are undergoing evaluation. Its aim is to provide an overall summary and presentation of the key findings based on the data available rather than to provide a detailed interpretive analysis. Detailed analysis of the data has been commissioned by the Department of Health from the London School of Hygiene and Tropical Medicine.

Publishing the post-operative PROMs questionnaire data as experimental statistics enables:

- initial findings to be presented for discussion and further investigation;
- information on data coverage and quality to be made available to encourage local action to improve these areas;
- users to comment on methodology and their needs for analysis. Statistical and casemix adjustments to the PROMs data, developed by contractors¹ on behalf of the Department of Health, are being applied in this publication in advance of a planned cycle of further refinement to the methodology.

¹ CHKS Ltd in conjunction with Northgate Information Solutions Ltd.

Data quality considerations

A full list of data quality considerations including coverage, missing values, ambiguous values and demographics is contained within the PROMs guide, which is available to download from [HESonline](http://www.hesonline.nhs.uk) [www.hesonline.nhs.uk].

Data completeness

Monthly provisional data may be incomplete or contain errors which have not been investigated or adjusted yet. **The number of eligible episodes and questionnaires received may change for previous months due to updated clinical coding and delayed submission of questionnaires.** In general, counts from the monthly provisional data are likely to be lower than those generated for the same period in the final annual dataset. The tables in Annex 1 display the most recent counts. Over time these will be updated to show the month-on-month change.

As part of the continued verification of questionnaires, it is possible for questionnaires to be identified as ineligible. Ineligible questionnaire are those which should not have been administered. This may be because the recipient of the questionnaire is not due to have/has had a procedure, or, that they have previously completed a questionnaire. These questionnaires have therefore not been included within any counts and any responses from these questionnaires have not been included within any analysis. As such, a decrease in the number of pre-operative questionnaires may be seen in some months.

POIS audit

Approximately 80 providers were involved from April 2009 to September 2009 in the Patient Outcomes in Surgery (POIS) audit for orthopaedic procedures. Data from the POIS Audit is now included within the PROMs data set. As such, an increase has been seen in the participation rate when compared to those in publications prior to January 2011. Further details around the POIS audit are included in the PROMs guide, which is available to download from [HESonline](http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1295) [http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1295].

Known provider issues in HES: coverage issues

PROMs data is linked to HES inpatient data. HES inpatient data in the PROMs dataset is cumulative and includes all finalised linked episodes from 2009-10 and provisional linked episodes from 2010-11. The HES 2009-10 Month 14 Inpatient Data Quality Note noted that the following organisations have been identified as having shortfalls/missing data or specific data quality issues with their HES inpatient data. Their data should be interpreted with caution.

Organisations with HES inpatient shortfalls/missing data in the HES 2009-10 Month 14 Inpatient Data Quality

Organisation name	Organisation code	Months affected	Approx. total number of records missing
Bournemouth and Poole Teaching Hospital	5QN	Jan - Mar	120
Nuffield Health	NT2	Apr - Mar	6,000
Spire Healthcare	NT3	Apr - Mar	29,000

The HES 2010–11 Month 9 Inpatient Data Quality Note noted that the following organisations have been identified as having shortfalls/missing data or specific data quality issues with their HES inpatient data. Their data should be interpreted with caution.

Organisations with HES inpatient shortfalls/missing data in the HES 2010–11 Month 9 Inpatient Data Quality Note

Organisation name	Organisation code	Months affected	Approx. total number of records missing
Birmingham and Solihull Mental Health NHS Foundation Trust	RXT	Oct	200
Cambridgeshire PCT	5PP	Apr - Nov	1,800
Care UK Head Office	NTPC1	Apr - Nov	28,000
Doncaster PCT	5N5	Nov	50
East Riding of Yorkshire PCT	5NW	Apr - Nov	620
Eccleshill NHS Treatment Centre	NTA01	Jul - Nov	1,500
Lincolnshire Teaching PCT	5N9	Sept - Nov	480
North East London NHS Treatment Centre	NTP15	Apr - Jun	1,200
Northamptonshire Teaching PCT	5PD	Apr - Nov	1,200
Nuffield Health, Hereford Hospital	NT219	Apr - Nov	120
Nuffield Health, Leicester Hospital	NT226	Nov	50
Nuffield Health, Wolverhampton Hospital	NT242	Sept - Nov	240
Nuffield Health, York Hospital	NT245	Aug - Nov	50
Rotherham PCT	5H8	Oct - Nov	150
Rotherham, Doncaster and South Humber Mental Health NHS Foundation Trust	RXE	Oct - Nov	300
Southampton NHS Treatment Centre	NTP11	Apr – May	200
St George's healthcare NHT Trust	RJ7	Jul - Nov	34,000
Tower Hamlets PCT	5C4	Nov	150
Woodlands Day Hospice	8E339	Sept - Nov	60

Known issues in PROMs: coverage issues

Previous data quality notes have recorded coverage issues relating to both pre and post-operative questionnaires due to the festive period, adverse weather and tracing process. These issues have now been addressed and the corrective impact can now be seen in the participation and return rates for this month.

Annex A - Data completeness tables

Eligible HES episodes ²																		
Period	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10
Jun 09 - Jun 10	20,844	20,649	17,731	20,591	21,604	21,066	17,712	18,447	19,910	23,531	19,327	19,441	21,595	-	-	-	-	-
Jun 09 - Jul 10	20,838	20,646	17,743	20,758	21,605	21,068	17,714	18,448	19,913	23,616	19,454	19,580	21,788	20,684	-	-	-	-
Jun 09 - Aug 10	0,837	20,646	17,743	20,756	21,605	21,068	17,714	18,447	19,912	23,553	19,529	19,661	21,935	20,859	18,701	-	-	-
Jun 09 - Sep 10	20,838	20,647	17,745	20,759	21,613	21,079	17,733	18,492	19,995	23,707	19,603	19,824	22,084	20,994	18,827	20,865	-	-
Jun 09 - Oct 10	20,838	20,647	17,745	20,759	21,613	21,079	17,734	18,503	20,007	23,715	19,572	19,749	21,989	20,916	18,774	20,812	20,513	-
Jun 09 - Nov 10	20,837	20,646	17,743	20,756	21,606	21,069	17,714	18,449	19,912	23,547	19,432	19,515	21,859	20,755	18,717	20,833	20,652	21,685

Pre-operative questionnaires																		
Period	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10
Jun 09 - Jun 10	11,457	10,920	9,398	11,703	13,558	12,568	11,138	12,417	12,961	15,346	12,938	12,527	11,782	-	-	-	-	-
Jun 09 - Jul 10	11,460	10,921	9,400	11,723	13,820	13,522	11,126	12,422	12,968	15,359	12,963	12,597	12,454	10,600	-	-	-	-
Jun 09 - Aug 10	13,622	13,236	11,294	14,009	14,530	13,856	11,128	12,436	12,996	15,448	13,153	12,856	13,167	12,080	10,721	-	-	-
Jun 09 - Sep 10	13,623	13,236	11,294	14,008	14,530	13,863	11,133	12,432	12,987	15,461	13,168	12,904	13,400	12,295	11,450	9,402	-	-
Jun 09 - Oct 10	13,623	13,238	11,295	14,012	14,532	13,864	11,138	12,451	12,995	15,454	13,173	12,982	13,553	12,444	11,788	12,490	9,290	-
Jun 09 - Nov 10	13,624	13,241	11,296	14,021	14,639	14,031	11,141	12,496	13,020	15,491	13,250	13,218	14,490	13,798	13,100	14,360	13,703	8,379

² These figures are based upon episode start date. The majority of data from April 2009 to March 2010 has been finalised and will not change. HES episodes ending from April 2010 onwards are currently provisional and are subject to change.

Questionnaires linked to episodes ³																		
Period	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10
Jun 09 - Jun 10	8,571	8,196	6,889	8,619	9,947	8,994	8,110	8,993	9,479	11,219	9,102	7,955	4,767	-	-	-	-	-
Jun 09 - Jul 10	8,576	8,209	6,932	8,669	10,152	9,813	8,146	9,027	9,499	11,495	9,634	9,021	8,057	4,156	-	-	-	-
Jun 09 - Aug 10	10,144	9,920	8,303	10,215	10,611	10,081	8,146	9,035	9,531	11,559	9,970	9,660	9,479	7,578	3,932	-	-	-
Jun 09 - Sep 10	10,145	9,920	8,303	10,215	10,613	10,081	8,147	9,035	9,526	11,565	10,021	9,953	10,258	8,898	7,216	3,867	-	-
Jun 09 - Oct 10	10,145	9,921	8,304	10,215	10,613	10,082	8,150	9,051	9,544	11,619	10,138	10,040	10,665	9,598	8,497	7,997	3,962	-
Jun 09 - Nov 10	10,145	9,922	8,304	10,218	10,670	10,186	8,151	9,049	9,540	11,619	10,104	10,104	11,133	10,509	9,807	10,122	8,595	3,627

Post-operative questionnaires returned ⁴																		
Period	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10
Jun 09 - Jun 10	8,631	8,256	7,041	8,911	10,155	8,807	6,535	6,321	5,324	2,054	11	9	12	-	-	-	-	-
Jun 09 - Jul 10	8,737	8,360	7,149	9,015	10,552	9,475	7,638	7,584	7,165	5,837	1,188	35	24	26	-	-	-	-
Jun 09 - Aug 10	10,491	10,189	8,596	10,617	10,888	10,008	8,261	8,665	7,852	7,842	3,248	936	1,520	991	199	-	-	-
Jun 09 - Sep 10	10,493	10,190	8,599	10,656	11,026	10,239	8,427	9,078	8,591	8,345	3,933	2,283	1,892	1,259	597	55	-	-
Jun 09 - Oct 10	10,496	10,191	8,601	10,685	11,198	10,524	8,504	9,332	9,388	9,517	5,046	5,024	4,623	1,966	1,337	692	142	-
Jun 09 - Nov 10	10,499	10,194	8,603	10,685	11,298	10,654	8,615	9,569	9,855	11,272	7,904	6,569	7,467	5,206	2,111	1,515	1,104	263

³ These figures are based on questionnaires linked to HES episodes using an algorithm that compares a number of different combinations of patient identifiers. This methodology may be revised or enhanced for future publications. The counts are based upon the pre-operative questionnaire completion date.

⁴ The counts are based upon the pre-operative questionnaire completion date.