

Provisional Monthly Patient Reported Outcome Measures (PROMs) in England – April 2009 to October 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
10/03/2011	'Provisional Monthly Patient Reported Outcome Measures (PROMs) in England – April 2009 to October 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 October 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 8 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 8 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
BMI - The Droitwich Spa Hospital	NT412	Apr - Oct	1,200
Cambridgeshire PCT	5PP	Apr - Oct	1,800
Care UK Head Office	NTPC1	Apr - Oct	24,000
Central Lancashire PCT	5NG	Sep - Oct	40
East Riding of Yorkshire PCT	5NW	Apr - Oct	560
Eccleshill NHS Treatment Centre	NTA01	Jul - Oct	1,200
Gainsborough NHS Treatment Centre	NVC26	Oct	40
Lincolnshire Teaching PCT	5N9	Sept - Oct	300
North East London NHS Treatment Centre	NTP15	Apr	500
Northamptonshire Teaching PCT	5PD	Apr - Oct	1,000
Nottinghamshire County Teaching PCT	5N8	Oct	80
Nuffield Health, Hereford Hospital	NT219	Apr - Oct	90
Nuffield Health, Wolverhampton Hospital	NT242	Sept - Oct	160
Nuffield Health, York Hospital	NT245	Aug - Oct	40
Rotherham, Doncaster and South Humber Mental Health NHS Foundation Trust	RXE	Oct	150
Royal United Hospital Bath NHS Trust	RD1	Apr - Oct	45,000
Southampton NHS Treatment Centre	NTP11	Apr – May	200
Sutton and Merton PCT	5M7	May - Oct	540
Woodlands Day Hospice	8E339	Sept - Oct	40

Known issues in PROMs: coverage issues

Due to the festive period and adverse weather in December 2010, the number of pre and post-operative questionnaires sent out and returned was affected. Initially, this has had the effect of reducing the pre-operative participation rate and increasing the post-operative return rate. The post-operative return rate has subsequently fallen as the backlog of post-operative questionnaire have been sent out but not yet returned. It is anticipated that the corrective impact will continue to be seen over the forthcoming months.

Due to an unforeseen delay in the tracing process there is currently a shortfall of pre-operative questionnaires which may impact upon provider participation rate calculations. In total there are 467 pre-operative questionnaires for August 2010, 1,283 for September 2010 and 1,702 for October that are still to be included in the participation rates. This issue is currently being addressed, the impact of which will be seen in subsequent publications.

Annex A - Data completeness tables

Eligible HES episodes ²																		
Period	May-09	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
May 09 - May 10	18,642	20,843	20,649	17,731	20,591	21,604	21,066	17,713	18,447	19,907	23,542	19,455	19,414	-	-	-	-	-
May 09 - June 10	18,642	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	-	-	-	-
May 09 - Jul 10	18,644	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	-	-	-
May 09 - Aug 10	18,644	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	-	-
May 09 - Sep 10	18,644	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	-
May 09 - Oct 10	18,644	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

Pre-operative questionnaires																		
Period	May-09	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
May 09 - May 10	9,512	11,452	10,919	9,396	11,696	13,556	12,585	11,141	12,386	12,933	15,266	12,755	11,707	-	-	-	-	-
May 09 - June 10	9,512	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	-	-	-	-
May 09 - Jul 10	9,512	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	-	-	-
May 09 - Aug 10	11,448	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	-	-
May 09 - Sep 10	11,448	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	-
May 09 - Oct 10	11,450	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

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	May-09	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
May 09 - May 10	7,419	8,566	8,167	6,852	8,586	9,922	8,964	8,094	8,960	9,253	10,552	7,972	4,405	-	-	-	-	-
May 09 - June 10	7,428	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	-	-	-	-
May 09 - Jul 10	7,425	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	-	-	-
May 09 - Aug 10	8,836	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	-	-
May 09 - Sep 10	8,837	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	-
May 09 - Oct 10	8,838	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

Post-operative questionnaires returned ⁴																		
Period	May-09	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
May 09 - May 10	7,150	8,611	8,214	6,968	8,676	9,339	7,315	5,432	4,100	2,221	1,501	7	6	-	-	-	-	-
May 09 - June 10	7,155	8,631	8,256	7,041	8,911	10,155	8,807	6,535	6,321	5,324	2,054	11	9	12	-	-	-	-
May 09 - Jul 10	7,164	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	-	-	-
May 09 - Aug 10	8,733	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	-	-
May 09 - Sep 10	8,737	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	-
May 09 - Oct 10	8,738	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

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.