

Provisional Monthly Patient Reported Outcome Measures (PROMs) in England – April 2009 to August 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
13/01/2011	'Provisional Monthly Patient Reported Outcome Measures (PROMs) in England – April 2009 to August 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 August 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 questionnaires 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 dataset. As such an increase has been seen in the participation rate when compared to last month. Further details regarding the POIS Audit are included in the PROMs guide, which is available to download from [HESonline](http://www.hesonline.nhs.uk) [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			
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 6 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			
Organisation name	Organisation code	Months affected	Approx. total number of records missing
Avon and Wiltshire Mental Health Partnership NHS Trust	RVN	Jun - Aug	900
Berkshire West PCT	5QF	Apr	40
Cambridgeshire and Peterborough NHS Foundation Trust	RT1	Jul - Aug	360
Cambridgeshire PCT	5PP	Apr - Aug	1,500
East Riding of Yorkshire PCT	5NW	Aug	80
Ecclehill NHS Treatment Centre	NTA01	Jul - Aug	600
Greater Manchester Surgical Centre	NT714	May - Aug	600
Milton Keynes PCT	5CQ	Aug	60
New Hall Hospital	NVC09	Apr - Jul	720
Northamptonshire Teaching PCT	5PD	Apr - Aug	750
Somerset Partnership NHS Foundation Trust	RH5	Aug	130
Sutton and Merton PCT	5M7	May - Aug	360
The Berkshire Independent Hospital	NVC02	Apr - Jul	440

Known issues in PROMs: coverage issues

Due to a number of separate operational issues, the number of pre- and post-operative questionnaires included for analysis in previous months was reduced. These issues had the effect of reducing the participation rate for pre-operative questionnaires and return rates for post-operative questionnaires, and affected approximately 5,696 pre-operative and 1,891 post-operative questionnaires. These issues have now been addressed and the corrective impact will be seen over the forthcoming months.

Annex A - Data completeness tables

Eligible HES episodes ²																	
Period	Apr-09	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
April 09 – April 10	18,726	18,642	20,843	20,649	17,731	20,591	21,604	21,066	17,712	18,447	19,906	23,501	18,997	-	-	-	-
April 09 – May 10	18,726	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	-	-	-
April 09 – June 10	18,726	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	-	-
Apr 09 – Jul 10	18,726	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	-
Apr 09 – Aug 10	18,726	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

Pre-operative questionnaires																	
Period	Apr-09	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
April 09 – April 10	5,537	9,512	11,447	10,914	9,390	11,703	13,567	12,594	11,141	12,374	12,910	15,184	12,430	-	-	-	-
April 09 – May 10	5,537	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	-	-	-
April 09 – June 10	5,537	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	-	-
Apr 09 – Jul 10	5,538	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	-
Apr 09 – Aug 10	7,725	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

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	Apr-09	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
April 09 – April 10	4,314	7,418	8,565	8,164	6,849	8,589	9,876	8,904	8,086	8,739	8,751	9,281	4,547	-	-	-	-
April 09 – May 10	4,314	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	-	-	-
April 09 – June 10	4,322	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	-	-
Apr 09 – Jul 10	4,321	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	-
Apr 09 – Aug 10	5,921	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

Post-operative questionnaires returned ⁴																	
Period	Apr-09	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
April 09 – April 10	4,150	7,146	8,600	8,184	6,919	8,465	8,514	6,719	4,339	2,353	1,905	1,265	6	-	-	-	-
April 09 – May 10	4,157	7,150	8,611	8,214	6,968	8,676	9,339	7,315	5,432	4,100	2,221	1,501	7	6	-	-	-
April 09 – June 10	4,164	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	-	-
Apr 09 – Jul 10	4,169	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	-
Apr 09 – Aug 10	5,950	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

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.