



Evaluation of patient satisfaction using innovative PROMS 2.0 System to assist follow up of Arthroscopic Subacromial Decompression

Dr Adele Whiteman, Mr James Wilson and Mr B.Roy.

Trafford Hospital, CMFT
Department of Trauma and Orthopaedics
www.Proms2.org



Background

- **ASAD**
 - Over 21,370 performed in 09-10 nationally¹
 - Surgery rapidly increasing in frequency (746% in past decade)¹
- **Traditional FU and outcome**
 - 2 weeks, 3 months and 12 months
 - Oxford shoulder score
 - MCID >5 points
- **PROMS 2.0**
 - Innovative web based system

1. R J Murphy, R Maxwell, R Kulkarni, D J Beard, **A J Carr**. Rates of Arthroscopic Subacromial Decompression and rotator cuff repair in the NHS in England from 2000 to 2010. BESS 2011.



PROMS 2.0

- Semi automated
- PROMs completed online remotely
 - OSS
 - PPE
 - EQ-5D
- The system was funded by Regional Innovation Funds (RIF)
- Collects, analyses and publishes real-time outcome data



Aims and Objectives

- To evaluate if condition specific PROMS, in the context of a basket of measures, could replace follow up of ASADs using the minimum clinically important difference (MCID)



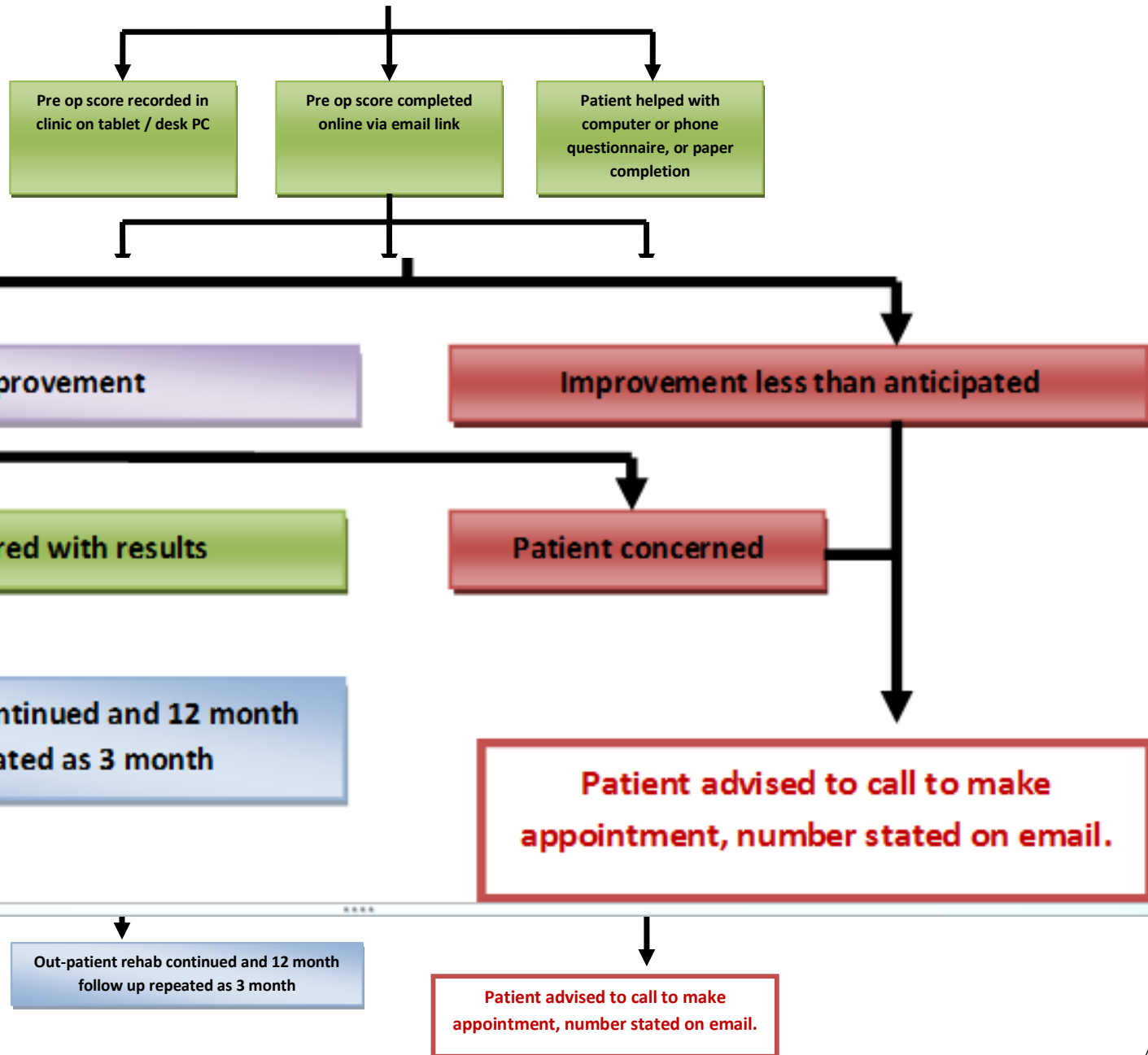
Aims and Objectives

- 1. To evaluate the acceptability of remote follow-up via the PROMS 2.0 system beyond 2 weeks
- 2. To evaluate inpatient experience following ASAD



Method

- Functional outcome measure
 - OSS pre-op, 3 months, 12 months post-op
 - MCID²
- Patient experience to evaluate remote follow-up
 - PPE-15
 - Recommend the system to a friend?





E-mail to patient

Dear Mr Demo Demo

Thank you for taking the time to respond to this.

You will remember, prior to your surgery, we discussed a system of collecting some data about your surgery which will enable us to measure the benefit that you have had from the procedure. We send you the appropriate questions at predetermined intervals. These are using defined and validated questions that enable you to understand the outcome of your surgery by comparing this score to your pre operative score. These are known as PROMs (Patient Reported Outcome Measures)

You will also be able to compare your outcome with other patients who have had the same procedure.

If you are doing well and have had the expected benefit from the surgery, you may choose not to come back to clinic, we will continue to communicate with you through email.

We would also request you to complete a few questions about this process of keeping in touch which may enable you to avoid a clinic appointment. We hope this will save you time, and allow us to see patients who need to be seen.

Kind regards
Bibhas Roy

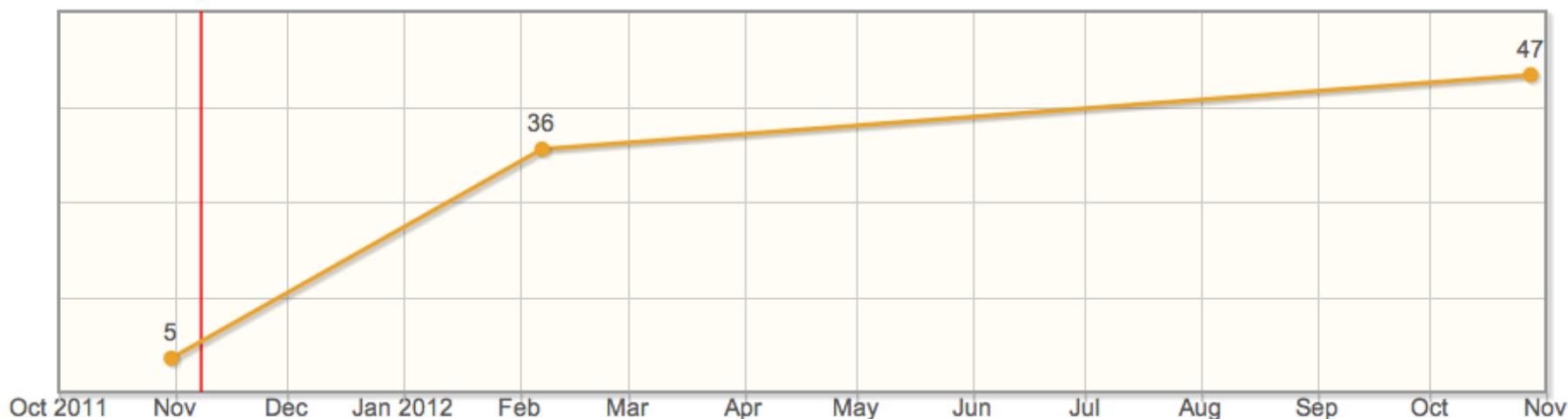
Please complete the following assessment [Oxford Shoulder Score](#)

Welcome Mr Jim PROMS

CLOSE ✕

Oxford Shoulder Score

Your post operative score shows good improvement. We are happy with your progress. We do not think you need to come for another clinic appointment. Alternatively, if you have concerns, another visit to clinic can be arranged.



DONE





PPE15 – Patient Experience

Table 1 Examples of questions from the Picker PPE-15 survey showing derivation of problem scores¹

When you had important questions to ask a doctor, did you get answers you could understand?

1. Yes, always
2. Yes, sometimes
3. No
4. I had no need to ask

Sometimes in hospital one doctor or nurse will say one thing and another will say something quite different.

Did this happen to you?

1. Yes, often
2. Yes, sometimes
3. No

Did doctors talk in front of you as if you weren't there?

1. Yes, often
2. Yes, sometimes
3. No

- The results were classified as a **‘Problem’** reflecting a negative result or **‘No Problem’** reflecting a positive result.³

3. Crispin Jenkins et al, The Picker Patient Experience Questionnaire: Development and validation using data from in-patient surveys from five countries. International Journal for Quality in Health Care 2002; Volume 14 Number 5; 353-358



Results

- 112 consecutive patient identified
 - **106 responses.**
- 64 had a pre-op score OSS
 - 54 achieved MCID
 - 10 did not achieve MCID
- 42 did not have a pre-op score OSS
 - 38 had a post op score
- 102 completed PPE



Results

- Happy for discharge at 2 weeks?

| | All patients excluding MCID (96) | Patients with all data that achieved MCID (54) |
|-----|----------------------------------|--|
| YES | 90 (94%) | 51 (94%) |
| NO | 6 (6%) | 3 (6%) |

- 100% said they would recommend the system to a friend
- 102 patients completed the PPE
 - Mean score of 14.4 out of 15



Results

- MeanAge

- All - 57
- post op only - 62 years (57.1 to 66.8)
- Pre and post op - 54 years (51.1 to 56.9)
- Independent samples T test **P=0.01**

- Gender

- only post op 15:17 (female:male)
- pre and post op 27:32
- No difference in gender ratio: **Chi² P=0.919**

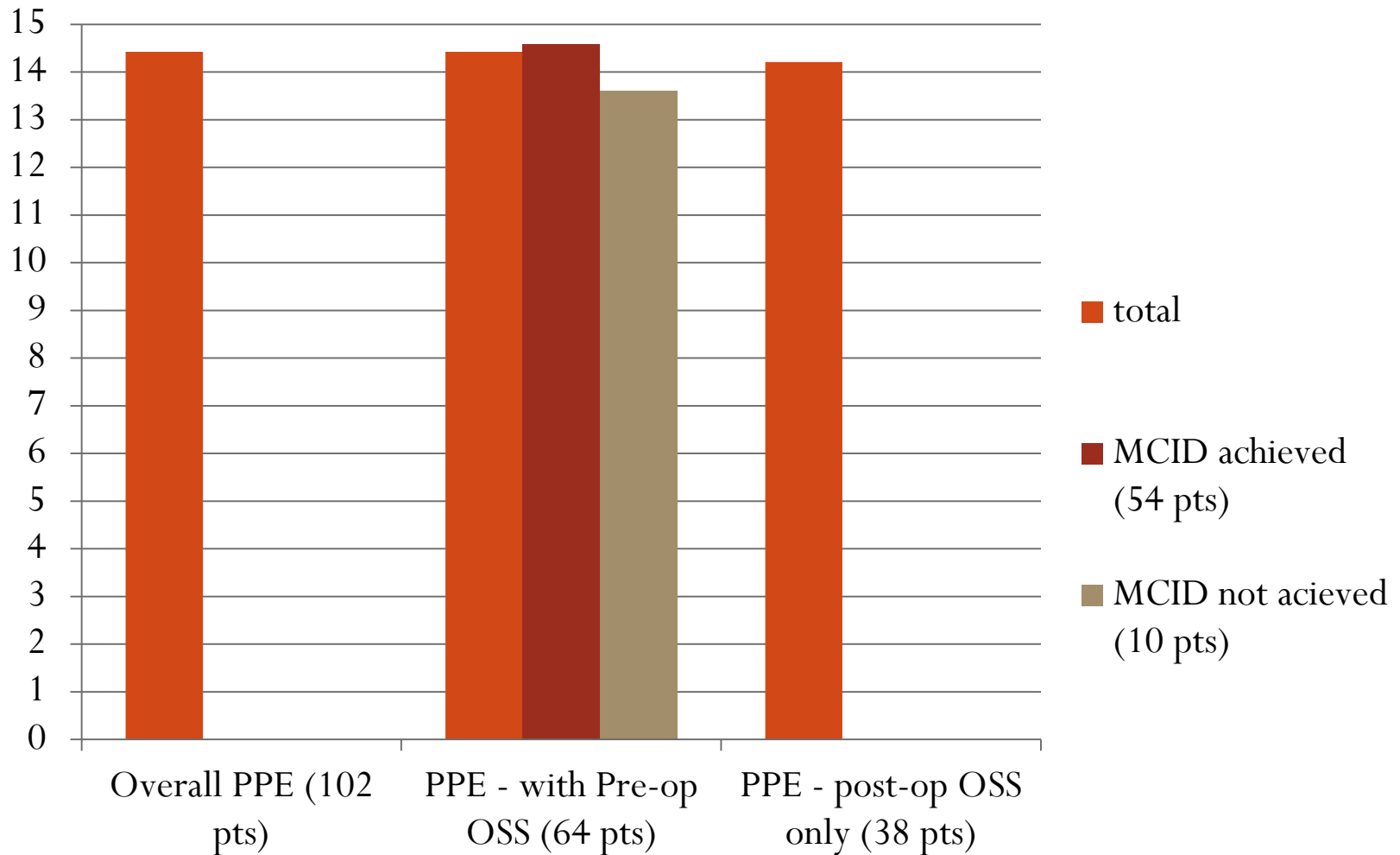


Results

- Mean Post-op OSS
 - Pre and post-op (64 pts)
 - Post-op OSS 41.2
 - pre-op OSS 26.2
 - post-op only (38 pts)
 - OSS 43.3
- Mann Whitney U test **P=0.27**



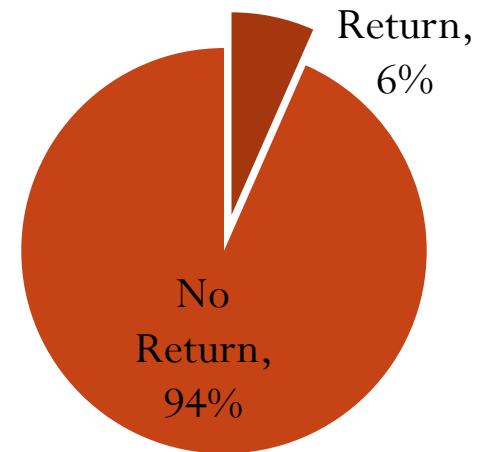
PPE results.





Discussion

- 94% (90 patients) would be happy to be discharged at 2 weeks
- Outpatient appointment costs £88
- 21,370 ASAD 2009-10 nationally



▶ $0.94(21,370 \times 88 \times 2) = \text{£}3,535,452.80$



Take home message

- PROMS 2.0 allows fewer unnecessary review clinic appointments, whilst maintaining patient satisfaction and substantially reducing costs.
- The system can be applied to other common procedures across a range of specialities; saving NHS resources whilst preserving high patient satisfaction and safety levels.



Looking to the future

- Planning a bigger study
 - Multi-centre
 - Larger patient numbers
 - Measure MCID in OSS
 - Experience and outcome correlation.



Thank you