

## CASE REPORT

# Online follow-up after total hip replacement: a first case

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### SUMMARY

With the current challenging financial climate in the NHS there is an increasing drive to reduce the number of postoperative follow-up appointments. We report on a patient who has successfully used a new online platform, [www.myclinicaloutcomes.co.uk](http://www.myclinicaloutcomes.co.uk), to record condition-specific and generic wellbeing scores following total hip replacement. This case highlights the potential for remote follow-up of routine postoperative patients.

### BACKGROUND

The National Patient Reported Outcome Measures (PROMs) Programme (NPP) aims to assess patient outcomes following surgical interventions.<sup>1</sup> The NPP uses paper collection to gather condition-specific and generic-wellbeing PROM scores for four procedures (total hip replacement, total knee replacement, varicose vein repair and inguinal hernia surgery), once preoperatively and once at about 6 months following surgery. Currently, paper scores are aggregated centrally and reported back to provider hospitals some 6–9 months later. While the data is useful to retrospectively compare individual hospitals or surgeons, it is by this point not clinically useful. In the current challenging financial climate PROMs data offer the opportunity to enhance follow-up and potentially reduce healthcare costs by enabling remote postoperative follow-up.

The senior author, Dan Williams, is part of a group that has developed a web-based platform, [www.myclinicaloutcomes.co.uk](http://www.myclinicaloutcomes.co.uk), which collects and reports real time PROMs data that can be used by patients, general practitioners (GP) and hospital doctors in everyday clinical practice. The system prompts registered patients to complete online PROMs scores at set time points preoperatively and postoperatively in line with British Orthopaedic Association guidelines and is directly available to the operating surgeon and patients' GP.<sup>2,3</sup>

This case study follows the first patient to use the myClinicalOutcomes system to record PROMs scores following total hip replacement.

### CASE PRESENTATION

A 74-year-old gentleman presented with worsening left groin pain. The pain was start-up in nature limiting exercise tolerance to 200 yards on the flat with a single stick. There was a significant night time component and the patient required regular analgesia.

Examination revealed an antalgic gait with a negative Trendelenburg test. Thomas' test revealed a 10° fixed flexion deformity with further flexion



**Figure 1** Preoperative radiograph of the pelvis showing bilateral degenerate hips.

to just over 90°. Combined internal rotation and hip flexion consistently reproduced groin pain.

Radiographs revealed bilateral degenerate hips (figure 1).

Following a discussion about the risks and benefits of surgery the patient was listed for a left total hip replacement. The patient was asked to register with [www.myclinicaloutcomes.co.uk](http://www.myclinicaloutcomes.co.uk) at home and complete both the preoperative condition-specific and generic wellbeing scores. His Oxford Hip Score was 7/48.

### TREATMENT

The patient underwent a routine uncemented metal on cross-linked polyethylene total hip replacement (figure 2).

### OUTCOME AND FOLLOW-UP

An Oxford hip score of 17/48 was recorded on myClinicalOutcomes immediately postoperation. Routine face-to-face outpatient review at 6 weeks



**Figure 2** Radiograph of the pelvis following left total hip replacement.

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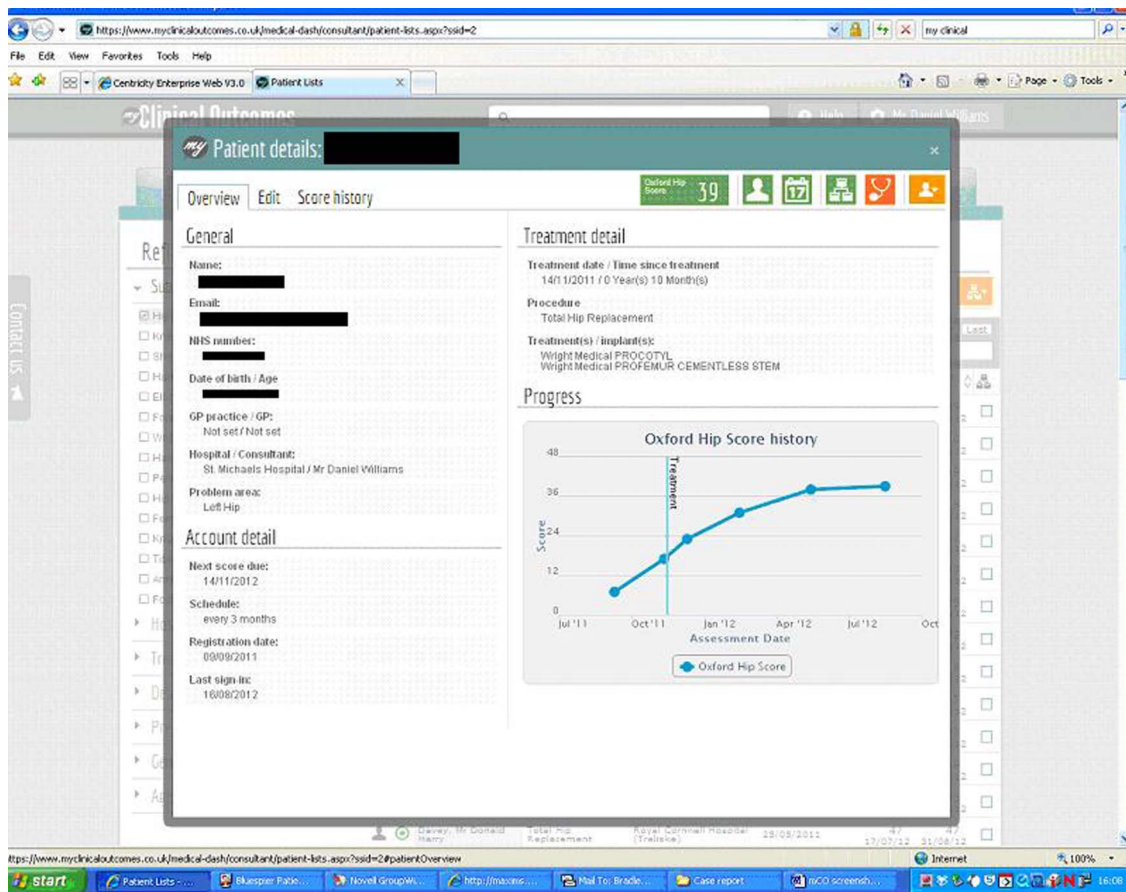


Figure 3 Graphical display of Patient Reported Outcome Measure (Oxford hip score) from www.myclinicaloutcomes.co.uk.

postoperation revealed a pain free left hip, a negative Trendelenburg test and a satisfactory x-ray film. PROMs data were recorded remotely by the patient on the website at 3, 6 and 9 months postprocedure.

We were able to monitor this patient's performance remotely through this web based platform. His Oxford hip score was 23/48 at 3 months and continued to improve to 38/48 at 6 months and 39/48 at 9 months.

## DISCUSSION

This case report highlights how the www.myclinicaloutcomes.co.uk website enables remote follow-up of patients, using self reported PROMs scores. Following early face-to-face postoperative review in the outpatient department it is possible to monitor the patient's symptomatic recovery. Patients are asked to register with the website when they receive their initial appointment letter. They are then asked to login and update their scores at regular intervals thereafter. This is done from home on their personal computers, if they have one. Otherwise a relative is enlisted to help. They complete online questionnaires to assess their selfreported health status. Preoperative, postoperative and further follow-up scores are compared, giving a measure of success. This information is then displayed graphically on their online profiles, which can be accessed by both the hospital doctor and GP, enabling them to follow the scores (figure 3). If there are any unexpectedly low scores, these are

immediately flagged for attention, and the patient can be called up and asked to come in and be seen in the clinic.

## Learning points

- ▶ This patient has successfully completed online condition specific and generic wellbeing PROMs scores.
- ▶ The potential exists for remote follow-up of routine postoperative patients.

**Competing interests** Mr DH Williams co-founded and partly owns myclinicaloutcomes Ltd.

**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

## REFERENCES

- 1 DOH. Guidance on the routine collection of Patient Reported Outcome Measures (PROMs), 2009. [http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_092647](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_092647)
- 2 Williams D. My Clinical Outcomes: providing real-time, patient-level PROMs data, *Annals of the Royal College of Surgeons*, 2012, 94.
- 3 <http://www.myclinicaloutcomes.co.uk>

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