Development and feasibility testing of an occupational advice intervention in total hip and knee replacement surgery: the OPAL Study

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Background

Although total hip and knee replacements are regularly performed for patients who work, there is a lack of structured advice around returning to work [1,2].

Aim

The aim of the OPAL study was to develop an occupational advice intervention for delivery in the NHS (**O**ccupational advice for **P**atients undergoing **A**rthroplasty of the **L**ower limb [3]).

Methods

A cohort study, stakeholder interviews, survey of practice, evidence synthesis and Delphi process informed the development of the intervention through a six-step Intervention Mapping process [4] (Figure 1). We wanted to test the feasibility of the intervention with 30 patients in orthopaedic departments across three hospital sites in England. Outcome measurements included fidelity of delivery, and patient and stakeholder perspectives of the intervention.

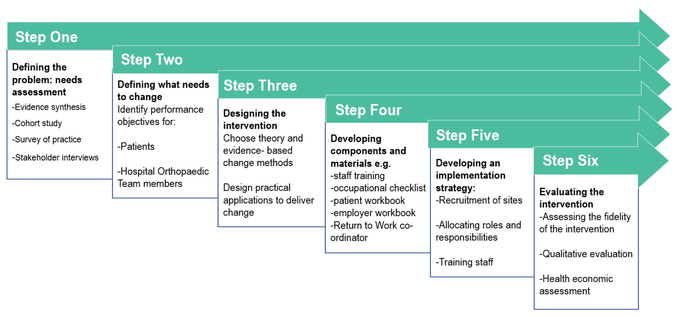


Figure 1: Steps 1-6 of the Intervention Mapping Process

Results 1: The intervention

The intervention, embedded within secondary care, comprised:

- 13 patient performance objectives (see examples in Table1)
- 20 staff performance objectives (see examples in Table 2)
- An identified Return to Work Co-ordinator (existing staff member)
- An occupational checklist for patients to complete in clinic
- A patient Return to Work workbook
- An employer handbook
- Examples of fit notes, discharge summaries and return to work plans
- Staff training in delivering the intervention

Table 1. Examples of patient performance objectives (POs)

PO.1 Patient completes occupational checklist in outpatient clinic prior to appointment with surgeon
PO.2 Patient makes informed decision about surgery with respect to work
PO.6 Patient uses information resources provided in workbook to identify and prioritise potential barriers and solutions to a safe and appropriate Return to Work (RTW), and to develop a RTW plan with employer as required
PO.11 Patient engages with RTW Coordinator if having problems related to RTW for up to 16 weeks post- surgery

Table 2. Examples of staff performance objectives (POs)

PO.3 Outpatient clinic team gives completed occupational checklist to surgeon prior to patient's appointment
PO.4. Surgeon discusses pros and cons of surgery with patient in relation to their work and occupational checklist
PO.6. Outpatient clinic team provides listed patients with RTW workbook and employer handbook
PO.9. RTW Coordinator contacts patient at least 4 weeks prior to surgery to discuss and review their RTW plan

Results 2: Feasibility testing

Twenty-six patient participants were recruited across the three hospital sites. Feasibility of the intervention was evaluated quantitatively through the following mechanisms:

- Occupational checklists
- Questionnaire data collected from 26 patient participants
- Completion of patient Return to Work workbooks

Analysis of intervention delivery against patient and staff performance objectives (POs) are shown in Tables 3 and 4. Around three-quarters of these performance objectives were met.

- **Green**: evidence from at least one source that the PO was delivered
- **Red**: No evidence that the PO was delivered
- **Orange**: PO not assessed
- **Grey:** Patient withdrawn or surgery delayed

Table 3. Analysis of intervention delivery against patient performance objectives

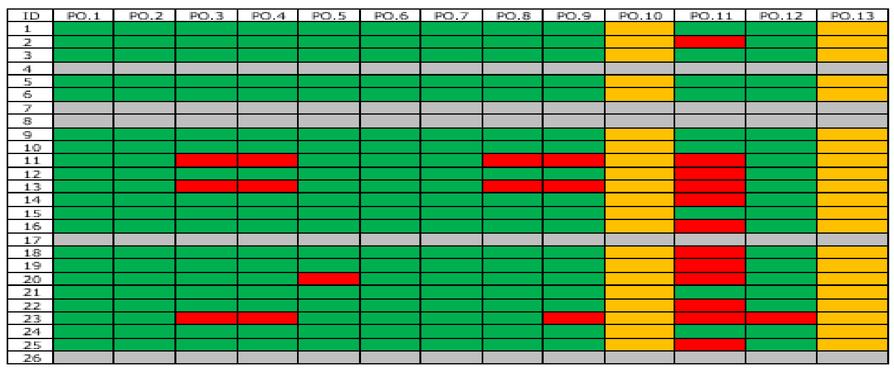
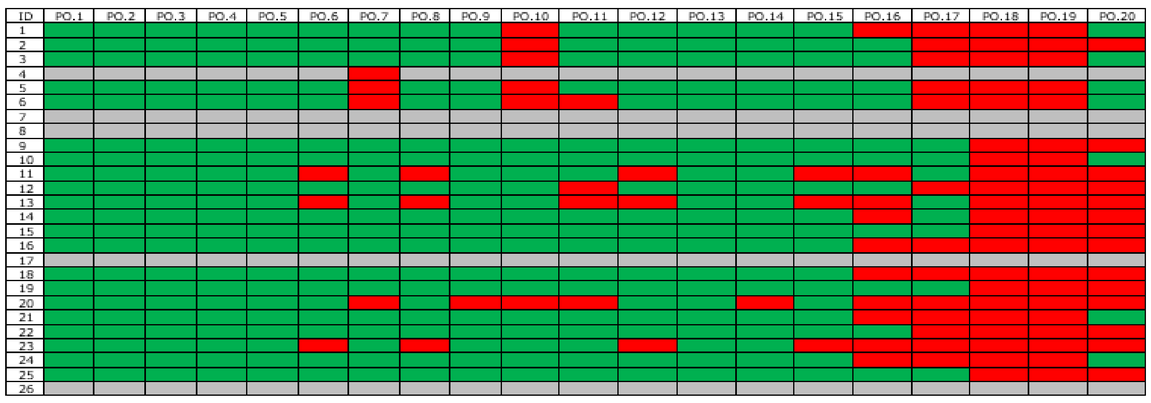


Table 4. Analysis of intervention delivery against staff performance objectives



Feasibility of the intervention was also evaluated qualitatively through individual interviews with 15 patients, three RTW Co-ordinators (a physiotherapist, a nurse and a surgical care practitioner), two surgeons, two nurses and two employers. The intervention was generally well-received although there was some confusion amongst patients and those delivering the intervention regarding its overall purpose and the roles and responsibilities of key staff:

..I think we did have a phase where patients weren't asked 'do you need a fit note?' So we've upped our game a little bit with that and we are more conscious of those patients that are working and need a fit note and then we put it on our handover and ask our doctors to do it (ward nurse)

..because I related it to my work situation rather than a general return to work, I thought it was absolutely helpful…. (patient)

…and it gave questions as well, so therefore it prompted us to actually talk to the staff member, because they also had a book, which was different to ours…it was also very useful to be able to see what would happen, the timeframes…(employer)

..the research nurse did all the work; I just identified the patients basically. And then obviously anecdotally when I was seeing them afterwards in clinic they'd mentions that it had been a good experience. But I don't know who the RTW Co-ordinator is, no (Surgeon)

…I've got a lot of booklets…but I didn't sit through a presentation or anything like that…I thought they were really self-explanatory…I just think overall it might be nice for the whole team to get together and talk about it (RTW Co-oordinator)

Discussion and Conclusions

Intervention Mapping supported the development of a comprehensive intervention in secondary care. However, sufficient time and resources are required to change the attitudes and behaviours necessary to embed NHS staff roles and responsibilities for occupational advice, and to prepare patients' expectations around the provision of RTW advice in routine healthcare. It was feasible to deliver the intervention with high levels of fidelity within current NHS care settings, although further preparatory research on implementation is still required. The effectiveness and cost-effectiveness of the intervention then needs to be formally tested in a definitive trial.

References:

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