
Introducing Virtual Triage into Clinical Practice: Capturing staff experience



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Introduction

In 2021 Buckinghamshire, Oxfordshire, and Berkshire West (BOB) Integrated Care System (ICS) and [Oxford Academic Health Science Network](#) (Oxford AHSN) led a successful [collaborative bid](#) for the NHSX Perioperative Adoption Fund. This fund supports innovation in the peri-operative care pathway and the [elective recovery plan](#) to boost capacity and deal with the back log of elective care ensued by the Covid-19 pandemic.

The programme is implementing four digital technologies in four sites. One of these technologies is [PRO-MAPP](#) which supports the triage of patients waiting for surgery. This is being introduced as part of the Preoperative Assessment Clinic Triage (PACT) service. The overall aim of this service is to reduce time spent in orthopaedic pre-assessment clinics (for patients and staff) and reduce geographical inequality in waiting times.

This report describes the views of staff within the Preoperative Assessment Clinic (POAC) based in an NHS Foundation Trust within the BOB ICS.

Background

Prior to the COVID pandemic, more than 1500 hip and knee replacements were performed annually at this Trust. As pressures of elective surgery increase throughout the ICS, there are regional differences in the elective capacity of different hospitals, highlighting the potential value for mutual aid. A common limiting factor within hospitals in increasing elective capacity and addressing the backlog, is capacity within the preoperative assessment process. The introduction of the digital platform PRO-MAPP aims to increase the efficiency of preoperative assessments within the Trust. This may enable the transfer of patients across the ICS, thus potentially reducing geographical inequality in waiting times.

A triage system was introduced at the point patients are listed for surgery (Appendix one). Patients attend a drop-in Preoperative Assessment Clinic Triage (PACT) booth prior to leaving clinic for the following investigations: height and weight, base-line observations, electrocardiogram, MRSA swab, and blood tests. Patients are also asked to complete questionnaires, either on an electronic tablet prior to leaving the clinic, or using their own electronic devices remotely (via a QR code). If a patient is unable to complete the digital questionnaire, they are given a paper version to complete in clinic, or to return by post. The questionnaires collect information on past medical history and medications (anaesthetic triage), social situation (occupational therapy triage), and frailty (orthogeriatrician triage).

Patients are contacted by telephone within a week of attending PACT and a specialist preoperative assessment nurse reviews the results of the PACT investigations and decides if a patient is fit for surgery or requires a face-to-face preoperative assessment clinic appointment.

Prior to the main project commencing, a small test of PRO-MAPP was undertaken in August 2021. The actual roll out was planned for early January 2022 but commenced end of March 2022 due to procurement and technical issues on site.

Methodology

A mix methodology approach of collecting staff views on the implementation PRO-MAPP was agreed by Oxford AHSN and the Trust

Understanding the views of staff

To understand the key elements facing staff and to develop questions for the survey, a small number of staff were interviewed using a semi-structured schedule. A survey was then undertaken to capture thoughts from staff within the clinic environment post innovation adoption.

Semi-structured interviews

All clinic staff were sent an email inviting them to take part in semi-structured interviews (Appendix two). To reduce bias and preserve anonymity they registered interest directly to the lead evaluator at Oxford AHSN. This was followed up with an email from Oxford AHSN introducing themselves to participants. Six members of staff were interviewed.

Online survey

Intelligence gathered from the initial semi-structured interviews helped design the questions used for the online survey that was sent to all clinic staff (Appendix three). This was tested by the interviewees, agreed, and circulated by the clinic manager. The survey was live for seven weeks and two follow up emails to encourage staff to complete it were requested.

Staff were interviewed pre-intervention in December 2021 and post intervention July 2022, with the survey released mid-June 2022. Fourteen staff completed the survey (no denominator of number of staff emailed was supplied).

Findings

Who took part?

Between December 2021 and July 2022, a total of six staff were interviewed and fourteen staff completed the online survey. There was a mix of staff who agreed to be interviewed from salary band three to seven. The online survey participants (Figure one) ranged from salary grade one to three (22%) to six to seven (64%).

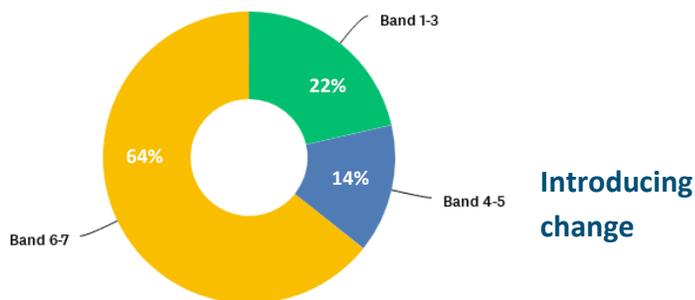


Figure One:
Salary grade of staff who completed the survey

When asked to describe their team, staff reported that they were passionate, happy, supportive, cohesive, hardworking, and willing to go above and beyond.

There was a diverse mix of feelings about the service changes. These ranged from open to trying something new, worried about how smoothly it would go, not knowing much about it, and keen to make it work. Concerns were raised about timelines (three weeks from communication to introduction), multiple changes happening at the same time and ensuring that all consultants were on board.

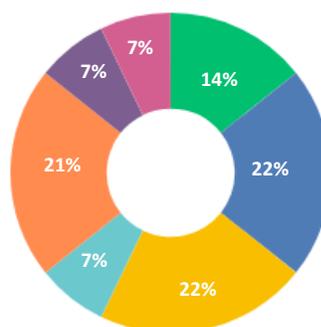
“A lot of change at the same time causes instability”

“If the change makes the patient journey better then great – hopefully won’t increase our workload”

“Things go wrong when one consultant does it one way and one another”

All staff who completed the survey said that they had heard about the planned changes. However, 21% had not been given any information prior to its introduction. There was a range of understanding among staff about the new service: one did not know anything and seven felt fully informed (Figure two). Out of the respondents 35% felt either fully or fairly well informed.

Figure Two:
Staff’s knowledge about the new process prior to starting



Whilst some shared that they “were not involved (in the design of the service) initially”, they were later included in regular meetings where suggestions and patient comments were taken on board. Some staff felt that some of the instructions in the new service went against the usual pathway POAC rather than supporting it.

“It would have been helpful to know what the new clinic entailed”

“A collaborative input in the build stage, rather than trial and changing all the time”

“Given 5 working days’ notice (of it going live) and we had to make it work”

Training and ongoing support

Half of the staff who responded to the survey, had received training on the system. Some staff talked to others to understand how they were using the system and one member of staff shared “I was told where to find the link and self-taught”. To understand what may have been more helpful, the majority of staff highlighted that a co-designed guideline about how to select and triage PACT patients would have supported the change.

At the time the survey was undertaken 14% of users felt totally confident triaging patient in the new system, 58% felt relatively confident and 7% not confident at all (21% marked NA). Staff within the outpatient’s clinic and pre-operative assessment clinic felt they had worked to understand the new system and resolve issues in a timely manner. A member of staff noted that “it has evolved as we have worked in it”, another noted “it can get quite confusing as different people are doing things differently”. The lack of consistency between users was a repeated theme and highlighted the need for clear processes to follow.

“I’m more confident as I use it”

“PRO-MAPP team have been responsive to change requests”

“I know where to get support now”

Patient impact

Whilst patients were not directly asked for feedback of the process, all staff who responded to the survey felt that patients would be affected. The patient benefits suggested by staff included reducing hospital visits, reducing travel time, early health promotion where medical issues are identified, reducing the risk of postponed surgery and the possibility of earlier surgery for some patients. Several staff identified that patients misinterpreted their PACT visit as their pre-assessment, thinking that surgery would be imminent

post triage. Some patients were reported as having difficulties using the electronic tablet to answer the relevant health questionnaires.

Staff suggested a variety of solutions to support patients. These include photographing medication lists (to save typing it in) and informing patients before they attend that they may have an extended wait to attend the PACT service.

Communication

From the staff interviewees and those who participated in the survey a key theme around communication was apparent. Most staff were not aware that a new change in service was going to happen until several weeks prior to the introduction. The importance of clear communication from the project team was highlighted specifically around being kept “in the loop” to reduce anxieties and promote team ownership. It was felt that large meetings were not conducive to introducing or adapting the process “nothing gets nailed down and they have no idea what we do”. One member of staff took the initiative to design and develop a patient flow chart post the commencement of the service which helped with consistency of practice. Staff had multiple ideas on how to improve the process but felt there were no clear communication channels to get them to the appropriate people. It was felt that things were “getting lost in translation and good ideas not getting through”. However, when the PRO-MAPP team did receive the feedback, it was stated by several that they were swift in making the changes and getting things integrated.

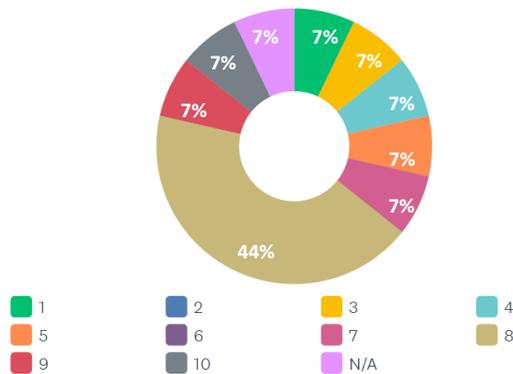
“When it went live it was like the blind leading the blind”

“We were told lots of different things. Didn’t know what stage we were at”

“Good ideas are getting lost along the way”

Overall Impression

When staff were asked ten questions of perceived usefulness (Davis, 1993), of PRO-MAPP (Appendix four), 40% felt it would not enhance the quality of the work they undertook and 40% felt that it would not enhance their effectiveness. However, 70% felt that it would be useful in their job. There was a wide range for how likely staff were to recommend PRO-MAPP. Over half, 65%, gave a high score for likelihood to recommend to a colleague (\geq a score of 7, where 10 is definitely recommend- Figure three).



*Figure Three:
How likely to recommend PRO-MAPP to a colleague?*

Conclusion

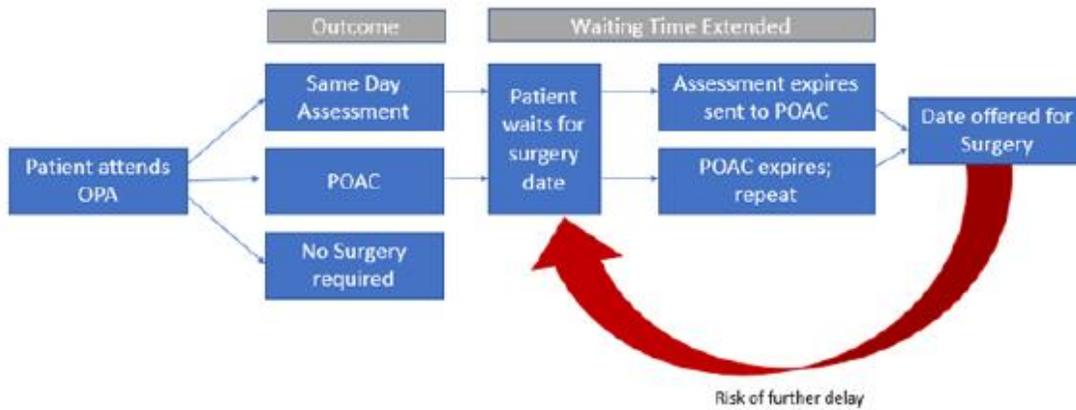
The clinic team described themselves as cohesive and a having desire to work together for the improved patient journey. However, staff stated frustration at way in which the change was implemented and communicated. At the beginning of any change process, it is paramount for all to understand the “why” (Sinek, 2009) or they may perceive it to be “just to be another hair brain scheme”. When change is introduced, common enablers may include clear objectives and incorporating the team in the planning and process (Borrill et al, 2000). For change to sustain, supporting staff over time is often beneficial (Penney and Ryan, 2018).

There was a sense that the concept of PRO-MAPP was “really good”, however a sizable minority would not recommend it. Also, implementation could have been improved. Team work and having a voice which counts may help clinical, managerial and project staff to work together to find the best fit solution for the service. These are priorities within the [NHS People Promise](#) which aims to grow a positive, compassionate and inclusive culture within the NHS.

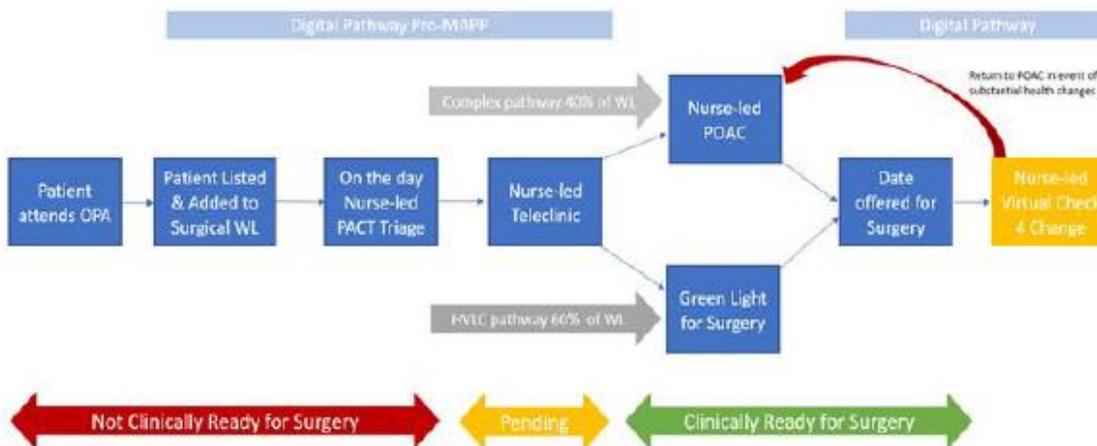
There are limitations to our understanding of staff experience of implementing PRO-MAPP, given the relatively small number of responses to the survey. However, what has been highlighted is that having a co-designed processes and clear communication is likely to support the introduction and sustainability of innovation.

Appendix One – POAC and PACT pathways

Current



Target



Appendix Two – Semi-structured questions for staff interviews

Introduction to interviews

Thank you for taking the time to talk to me about the new service pathway being introduced in your department. Your feedback is very valuable, and it will help us to understand how it affects you and the work you do. The Oxford AHSN team will review your feedback and use it towards a report that will inform the team implementing the new service.

There are a few things I would like to go over with you about the interview, final report, and confidentiality of your interview.

- Your response will be completely anonymous
- I would like to take notes during the interview to ensure accuracy, these will be deleted at completion of the evaluation
- The content of the interviews will only be seen anonymously by other members in the evaluation team
- Your feedback will be included in an evaluation report
- We will not name anyone in the report – we will just refer to the number of staff interviewed
- The report will describe the themes coming out of the interviews and we may use quotes from the interviews, but again these would remain anonymous.

Questions prior to the service pathway change

1. Describe/tell me a bit more about your role is?
2. Describe how things work currently [system/team]?
3. What do you think works well at the moment and why?
4. If you could change anything just now, what would it be and why?
5. Do you think the effects of Covid-19 has made your work more difficult?
6. What do you think the benefit of the new service is? [what does good look like]
7. Tell me a bit about the proposed new way of working that is being introduced?
8. How do you think it work? [what works/what doesn't, patients' feelings, staff feeling, training of staff]
9. Will your role change? [If so, have you had training, do you feel prepared]
10. How are you feeling about the new change?
11. Have you got any concerns/worries?
12. Is there anything else we haven't covered that you think is important?
13. If you had to describe your team now in 3 words or sentence, what would they be?
14. Follow up in early March to see how things are going – Can I contact you?

These were designed from the intelligence gathered from the first round of interviews.

Questions post the service pathway change

1. Describe/tell me a bit about how the new pathway is going?
2. What worked well
3. What would be better if
4. How do you feel it effects your role? [did you feel prepared for the change]
5. Were you aware of any difficulties [shortage of waiting area/equipment]?
6. What do you think the patient's feel about the new service?

Appendix Three – Survey questions for staff

Survey

Survey questions will be designed from the intelligence gathered from the first round of interviews. Testing of the survey will be undertaken with interviewees. PRO-MAPP if required will provide the technical support to gather survey data.

Introduction

[Oxford Academic Health Science Network](#) are working with your hospital to evaluate the implementation of the new Perioperative Assessment Clinic (POAC) approach that is using a digital product called [PRO-MAPP](#). We are keen to find out what staff think and feel about the changes and would really value your help with this by completing this short survey. It should take no more than 10 minutes of your time to complete. The deadline for the survey to be completed is Monday 28th February 2022.

This is an anonymous survey; we are only collecting personal information about your staff group. If you have any questions about this survey or evaluation, please email katie.lean@oxfordahsn.org. Once the survey has closed, the information will be aggregated into a report which will be shared with the Trust and Berkshire, Oxfordshire, and Buckinghamshire Integrated Care System (BOB ICS).

1. Did you hear about the planned changes to triage and the introduction of the POAC service prior to its introduction? Y/N
2. Were you given any information about the new triage system prior to its introduction? Y/N
If no, what type of information would you have found helpful?
3. Did you receive any training to support you to use the new triage system? Y/N
4. Did you have any input into the design of the new service? Y/N
If yes, please describe below
5. How much of the new process did you know about before it started?
(1 didn't know anything – 7 fully informed of process and timings)
Comments box
If you felt that additional information would have made it easier to use the new system, please describe below.
6. On a scale of 1-7 how confident are you in triaging patients in the new system?
(1 don't feel confident – 7 completely confident) NA (tick if you do not use the system)
Comments box
What would help to build your confidence in the system?
7. Do you think the new triage service has had/will have an impact on patient experience – Y/N
Comments box
Please describe what impact what you think it might have.
8. How likely are you to recommend PRO-MAPP to your colleagues? 1 = not at all likely 10 = likely
9. What is your current job grade?
Grade 1-3, Band 4-5, Band 6-7, Band >8, staff grade, consultant, other

The next 10 statements are specifically about the digital PRO-MAPP system. Please score each statement on a level of 1-7 (1 = strongly disagree and 7 = strongly agree)

1. Using PRO-MAPP will improve the quality of the work I do
2. Using PRO-MAPP will give me greater control over my work
3. Using PRO-MAPP will enable me to accomplish tasks more quickly
4. PRO-MAPP will support critical aspects of my job
5. PRO-MAPP will increase my productivity
6. PRO-MAPP will improve my job performance
7. PRO-MAPP will allow me to accomplish more work than would otherwise be possible
8. PRO-MAPP will enhance my effectiveness on the job
9. PRO-MAPP will make it easier to do my job
10. Overall, I think PRO-MAPP will be useful in my job.

Thank you for your time in this survey.

Appendix Four – Survey star Rating for PRO-MAPP

Question	Star rating (7 stars = strongly agree)	% of star rating
Using PRO-MAPP will improve the quality of the work I do	4.2★ average rating 	60%
Using PRO-MAPP will give me greater control over my work	4.1★ average rating 	59%
Using PRO-MAPP will enable me to accomplish tasks more quickly	4.4★ average rating 	63%
PRO-MAPP will support critical aspects of my job	3.9★ average rating 	56%
PRO-MAPP will increase my productivity	4.4★ average rating 	63%
PRO-MAPP will improve my job performance	4.6★ average rating 	66%
PRO-MAPP will allow me to accomplish more work than would otherwise be possible	4.3★ average rating 	61%
PRO-MAPP will enhance my effectiveness on the job	3.9★ average rating 	56%
PRO-MAPP will make it easier to do my job	4.1★ average rating 	59%
Overall, I think PRO-MAPP will be useful in my job.	4.9★ average rating 	70%

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