

# Patient reported outcome and experience measures following periodontal surgery

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## Introduction

Patient-reported experience and outcome measures (PREMs and PROMs) are important tools in assessing the quality of a service and the care it provides. The three fundamental core components of quality in healthcare relate to clinical effectiveness, patient safety and patient experience. There is an increasing focus on patient reported measures (PRMs) in healthcare services as these can highlight significant areas for improvement in care. They can also help to optimise resource management and the delivery of care.

There is, however, limited literature on PRMs in periodontal surgery. Recent articles (Inglehart 2015, Baiju et al. 2017, Tan et al. 2014, Tonetti et al. 2018, McGuire et al. 2014) highlight the need for further development of appropriate PRM tools.

## Method

A PRM questionnaire has been constructed following a review of the literature and utilisation of a combination of the PRM questions described in the NHS Commissioning Guide (nationally published) and questions described in published literature (Tonetti et al. 2018, McGuire et al. 2014, Tan et al. 2014).

This questionnaire has been piloted with 15 patients at the suture removal and 3-month review timepoints following periodontal surgery with the aim to obtain feedback and facilitate ongoing development of the tool.

All patients underwent initial health education **advice** and non-surgical therapy. All cases also had plaque scores of less than 30% prior to surgical intervention was attempted. All cases received a standardised informed consent including a series of information leaflets on periodontal flap surgery, pre-surgical procedures and post-surgical recovery.

Surgical treatment involved periodontal regenerative procedures utilising contemporary flap techniques (simplified/modified papilla preservation flap, minimally invasive surgical technique or modified minimally invasive surgical technique) and enamel matrix derivative either in isolation or in combination with deproteinised bovine bone mineral. All cases were sutured with a non-resorbable monofilament polyamide thread.

Post-surgical follow-up involved suture removal and oral health education at two weeks post-surgery as well as 3 monthly recall for supportive care. A discussion at two-weeks following surgery was utilised to explore the patient experience and elucidate the recovery time, use of analgesia, and any post-surgical complications. Forms were completed independently and anonymously. All questions involved selection of the most appropriate checkbox from three-four options, with a free text area for elaboration.

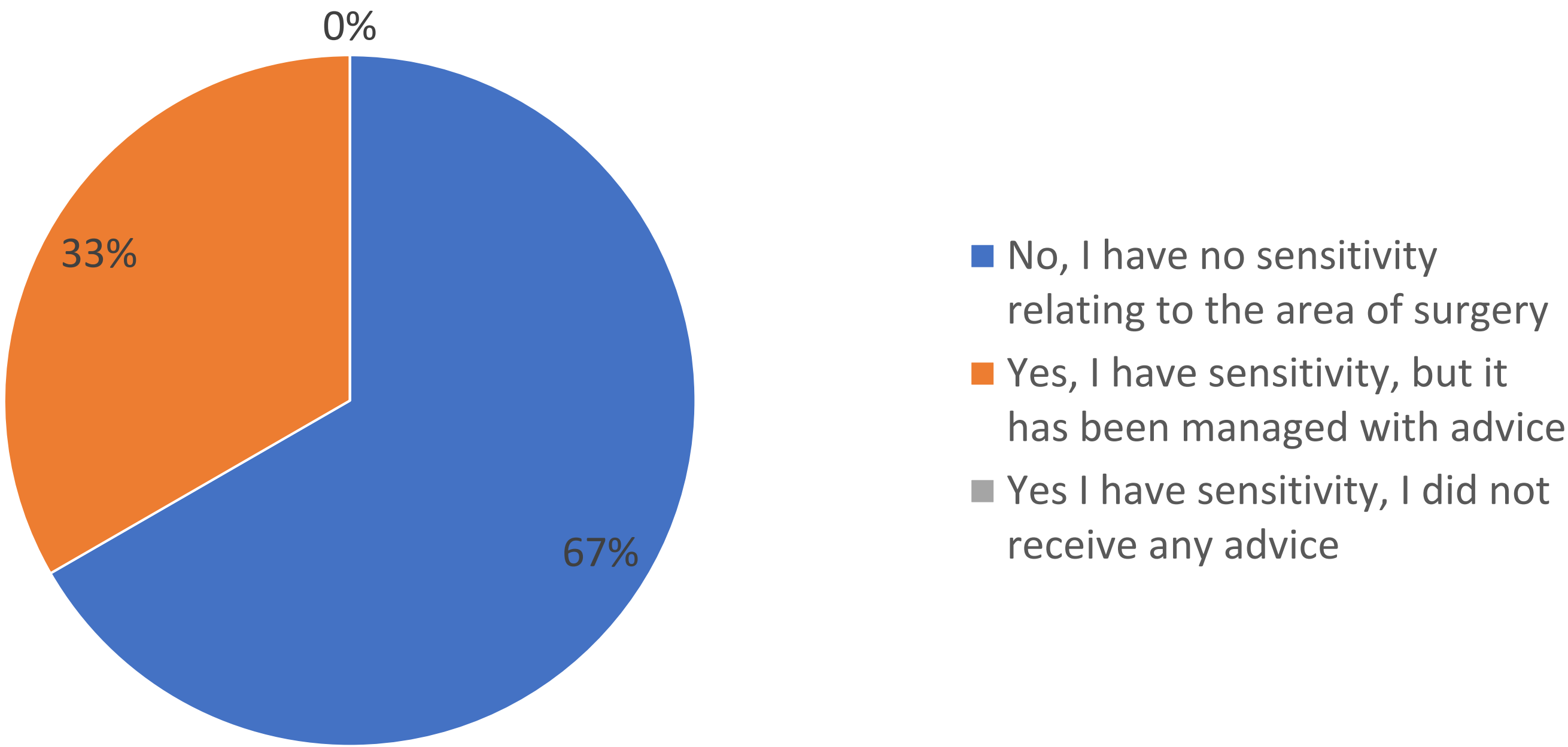
### Questions utilised in the data collection form:

1. Are you able to speak and eat comfortably?  
For how many days after treatment did you use painkillers?
2. Did you have any problems in the hours after the procedure was carried out? *Please elaborate problems.*
3. Are you still suffering ill effects from the procedure that you had?
4. Did you seek advice or assistance relating to the procedure and its effects in the days after the procedure?
5. Did you feel sufficiently involved in the decisions about your care?
6. How satisfied are you with the NHS dentistry received?
7. Do you experience sensitivity of the teeth that underwent surgery?
8. Have you any concerns with gum recession around the treated teeth?
9. How satisfied are you with the results of the treatment? *Please elaborate.*

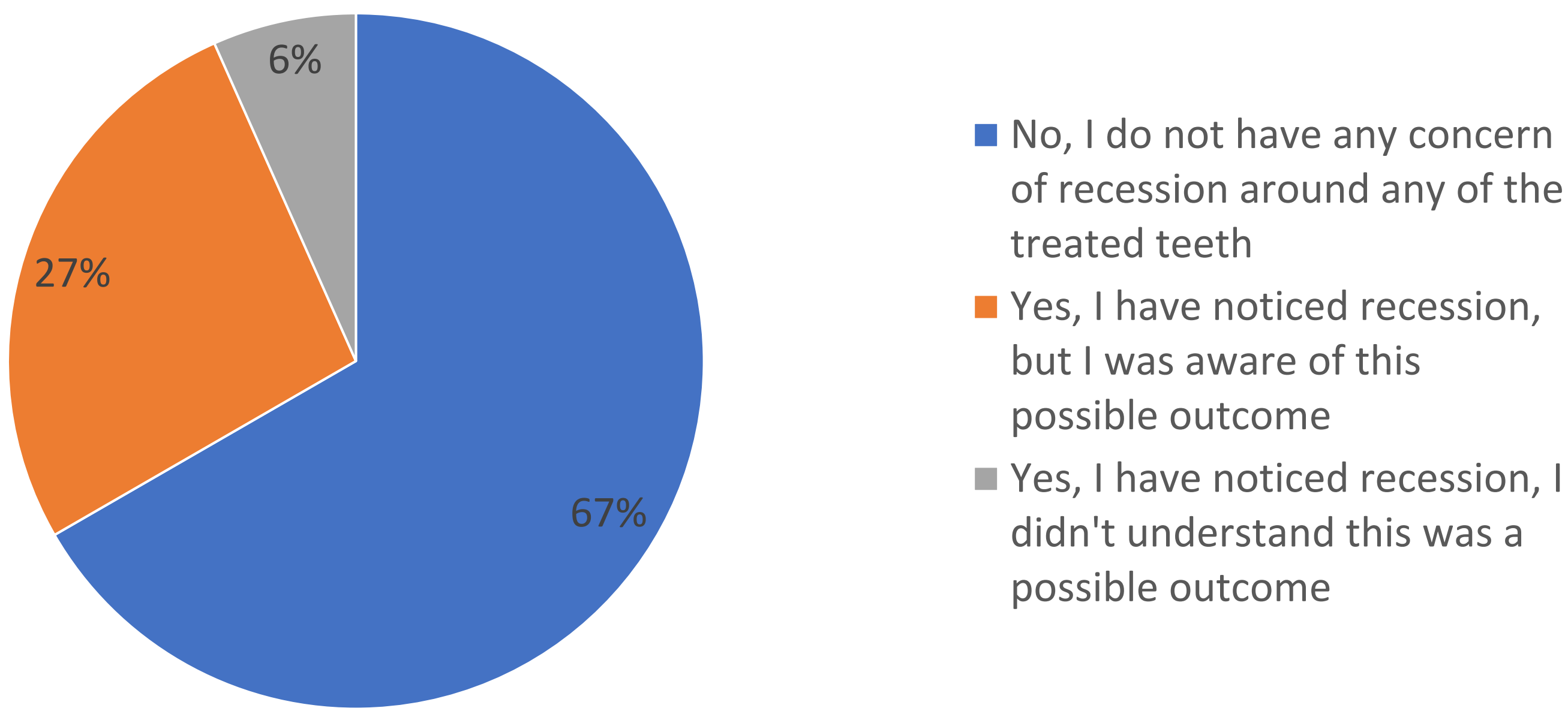
## Results

The results show a high satisfaction with the treatment provided and no overt complications. No modifications were made following this pilot. The data suggest a high level of satisfaction with treatment provided, with no swelling and minimal pain being reported during the recovery time period. Analgesics were reported to be effective in the first 24-48hours following surgery. Whilst recession is a commonly reported outcome of periodontal surgery, we identified no patient reported impact of this at suture removal and 3-month review. There were no persistent symptoms at the two-week review. All patients felt sufficiently involved in their care.

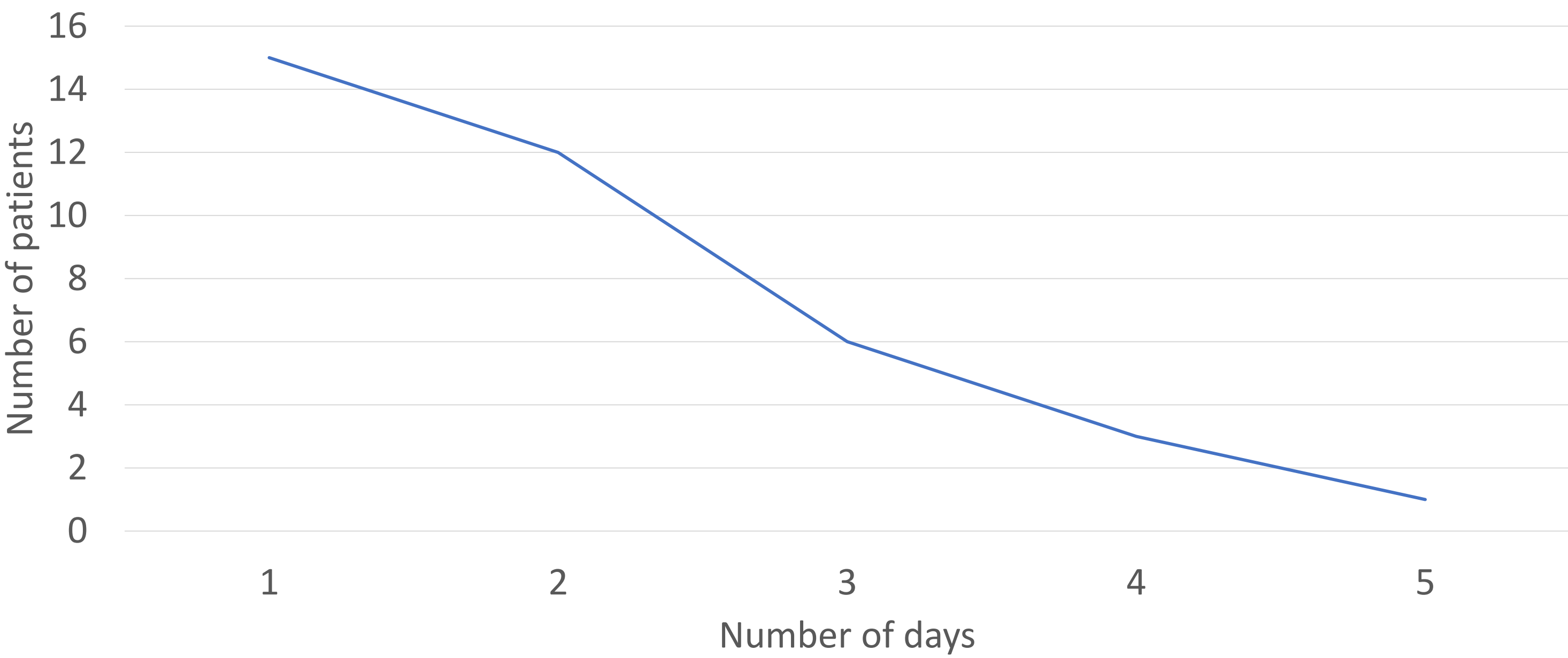
Patient awareness of tooth sensitivity following periodontal surgery



Patient awareness of gingival recession following periodontal surgery



A graph depicting the total number of patients who utilised analgesics in the days following periodontal surgery



## Conclusion

The described questionnaire and data presented suggest high satisfaction and limited complications following periodontal surgery. We aim to achieve further development of the PRM tool through additional collaborative discussion.**and a larger number of respondents? Use of patient experience team?**

## References

1 Inglehart M. Oral health related quality of life: An introduction. 2002.

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3 Tan WC, Krishnaswamy G, Ong MMA, Lang NP. Patient-reported outcome measures after routine periodontal and implant surgical procedures. *J Clin Periodontol* 2014; **41**: 618–624.

4 Tonetti MS, Cortellini P, Pellegrini G *et al*. Xenogenic collagen matrix or autologous connective tissue graft as adjunct to coronally advanced flaps for coverage of multiple adjacent gingival recession: Randomized trial assessing non-inferiority in root coverage and superiority in oral health-related quality of life. *J Clin Periodontol* 2018; **45**: 78–88.

5 McGuire MK, Scheyer ET, Gwaltney C. Commentary: Incorporating Patient-Reported Outcomes in Periodontal Clinical Trials. *J Periodontol* 2014; **85**: 1313–1319.