

Summary of: Estimating the need for dental sedation. 4. Using IOSN as a referral tool

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Objective In this article we report on the use of the IOSN as a referral tool in primary care and the need for sedation in the referred patient population (as determined by the IOSN score). **Setting** Four centres in the North West of England (primary care) accepting referrals for treatment with the aid of sedation participated in this study. **Design** A service evaluation. **Subjects (materials) and methods** The four were provided with IOSN referral forms, operator and patient questionnaires. The centres distributed IOSN forms to referrers as a means of recommending patients for sedation. All patients receiving treatment under sedation (having been referred for treatment through the IOSN form) were asked to complete the patient questionnaire. The individual operator who undertook the treatment under sedation was asked to complete the operator questionnaire. Data were entered into SPSS and the IOSN score noted. Statistical analyses of the data utilised descriptives and comparisons between groups using the Chi Squared test. **Results** Seventy-eight percent of the patients (n = 140) in this study were receiving treatment with sedation appropriately according to the principals of the IOSN. Patients deemed by the IOSN tool to have a low need for sedation were less likely to cancel their appointment if sedation had not been given. The majority of patients were female (70%) and the majority of operators and patients reported the IOSN forms acceptable for use. **Conclusions** This study provides support for using the IOSN as a tool for organising sedation referral. The majority of operators and patients reported the IOSN forms acceptable for use.

EDITOR'S SUMMARY

This research paper is the fourth and final paper in a series that we have published in recent months on the background to the use and utilisation of sedation. We felt that this was a valuable subject area to feature since the availability of sedation as a service will always be required for certain patients irrespective of the system under which dental healthcare is provided, the remuneration method or indeed the patient view of the procedure.

Certain basic truths remain at the foundation of sedation and these recur with predictable familiarity in any literature or discussion on the subject. The service is required for those who have anxiety over the delivery of dental treatment and for those with other personal or special needs. There is always going to be a difficulty in assessing where the need for this service exists and where the

desire for it as expressed by the patient takes over. Pleas are invariably made for the improved and greater employment of behavioural and psychological techniques as having better long term outcomes for patients accepting routine oral care under local anaesthesia.

But these factors notwithstanding the need will remain for the administration and provision of sedation services to be organised in as efficient a way as possible both in terms of cost-control and also of patient experience. Hence the need for a tool such as the Index of Sedation Need (IOSN) to provide data against which need, demand and provision can be measured and compared. In this study the use of the IOSN as a tool for organising referral also helped to focus attention on how necessary sedation was in each case, highlighting that 78% of referrals were in fact appropriate. It

may be that the contemplation of questions posed in questionnaires/forms of this kind will prompt greater scrutiny of demand as opposed to need in the future. Added into this mix are the imminent new arrangements for commissioning of NHS services and it is feasible that these too will be better enabled by the analysis provided by IOSN.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 212 issue 5.

Stephen Hancocks
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IN BRIEF

- The IOSN tool has demonstrated utility as a means of assessing need within populations and this paper extends its use to an effective means of referring patients for sedation.
- IOSN provides important information on the treatment complexity, medical indications and patient anxiety scores.
- Patient clinical needs cannot be addressed by metrics alone and a clinician's input is always required to interpret the correct clinical pathway.

COMMENTARY

Conscious sedation is an invaluable pain and anxiety management tool but its availability to dental patients in primary care varies across the UK.^{1,2} While demand for treatment under conscious sedation is high, it is less clear if existing services are needs or demand led. This article is the last in a series of four papers describing the development, preliminary validation and piloting of the Index of Sedation Need (IOSN). The authors suggest that IOSN can support the future commissioning of dental sedation services by providing an objective assessment of sedation need on both a population and an individual basis. IOSN aims to reflect the multifaceted nature of clinical decision making in prescribing dental sedation by assessing not only dental anxiety but also treatment complexity, medical factors and behavioural factors.

This paper describes a pilot study using IOSN as a referral tool in four primary care sedation centres in the North West of England. Referrals ($n = 140$) were made using the IOSN form and the patients and treating dentists asked to complete a post treatment questionnaire. The results showed that only 70% of the patients would have been referred for sedation based on their IOSN score alone. The authors suggest that patients with high modified dental anxiety scale scores (indicative of dental phobia) who do not score highly across the other IOSN (8% of the pilot patients) domains also warrant referral for sedation. Interestingly, the majority of patients whose IOSN score deemed a

low need of sedation stated that they would have undergone the treatment with local anaesthesia alone.

The Index of Sedation Need will benefit commissioners and providers of primary care dental services in the development of local dental sedation care pathways. I would hope though that the tool is used as it was designed to support clinical decision making, not replace it. Future exploration of the use of IOSN in developing evidence based, non-pharmacological care pathways for patients with dental anxiety/phobia^{3,4} would benefit patients, clinicians and commissioners alike.

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AUTHOR QUESTIONS AND ANSWERS**1. Why did you undertake this research?**

Referral for treatment with the aid of sedation is a subjective process, some evidence suggests that patients in need of conscious sedation are not being offered this procedure, there is also a suggestion that some sedation services may be demand, rather than needs-led. One of the driving factors in the development of the IOSN was the need to make the referral process more objective and support clinicians to appropriately offer and utilise sedation services. The authors decided to investigate whether the IOSN would function as a referral tool in primary care and to explore patient and operator perspectives of sedation need in relation to the need as determined by the IOSN.

2. What would you like to do next in this area to follow on from this work?

The IOSN system is now being deployed in several PCTs in the North West. Currently data are being collected to determine how the IOSN tool works across a broader footprint and to determine any unintended consequences – for example does providing a sedation referral form drive demand for this service? There will also need to be consideration with respect to the new commissioning structures that are anticipated under the NHS commissioning board and these may differ depending on if the sedation service is located within primary or secondary care. The NHS commissioning board will need tools that can help manage demand but that can be easily, and universally applied.