

Summary of: Continuing development of an oral health score for clinical audit

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VERIFIABLE CPD PAPER

FULL PAPER DETAILS

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Aim To compare the outcomes of a contemporary oral health status (OHS) scoring system with national oral health data from the 2009 Adult Dental Health Survey, and to explore the utility of the OHS in audit and service development. **Methods** An OHS scoring system was developed as part of a previously reported comprehensive on-line patient assessment tool. The assessment tool also measured future disease risk and indicative capitation fee grading. The modified OHS score component was developed over 20 years of research and experience from the original Oral Health Index (Burke and Wilson 1995). The online tool was piloted by 25 volunteer dentists on 640 recall patients and qualitative and quantitative feedback provided. Anonymised data from the inputs and scores generated were collected centrally and analysed using descriptive statistics. **Results** The modified OHS was reported to have good validity by the pilot group. Submitted data confirmed a mean age for the recall patients examined as 53 ± 15.8 years and an average oral health status score of 79.5 ± 10.8 where a score of 100 equates to perfect oral health. A breakdown of the scores into the eight principal components provided evidence of cross validation with the Adult Dental Health Survey (2009). **Conclusions** Scoring oral health status electronically offers valuable opportunities for clinical audit. The reported benchmark oral health score of 79.5 for recall patients can be updated as increased numbers of patients enter the centralised data recording system. Audit can be facilitated by this move from a paper-based system to an on-line tool with central data collection.

EDITOR'S SUMMARY

This paper and the assessment tool it utilises is a wonderful example in practice of the fundamental changes that have been overtaking the profession of dentistry since the 1960s. These represent a series of developments which are founded on the fundamental shift in emphasis from the treatment of disease to its prevention.

Although espoused over many decades, especially in relation to dental caries but latterly also to periodontal diseases, one cannot help but express the opinion that while the words have been spoken in belief they have been mouthed somewhat in rote rather than being backed up by active conviction. Trained to treat, we still have the ingrained propensity to do so first and act preventively second. It is, admittedly, a very difficult habit to break.

In tandem with this change has also been a grudging reluctance to admit that

the relationship between dentist in particular but dental professional in general has had to change too. No longer is the 'you will do as I say because I have been to dental school and know best' attitude towards the patient tenable, acceptable or realistically beneficial to their oral health, if indeed it ever was. Instead there is a still slow to catch-on but dawning realisation that what happens for the (roughly) 363 days of the year that the average patient does not attend our surgeries is of far greater importance than the two days on which they do. Oral hygiene, diet, lifestyle if you will, have a far greater impact on their oral health, albeit hopefully putting our advice into action, than our physical actions on them.

All of which brings me back to the significance of this work and the development with which it presents us in the form of a measure not only of professional

assessment of disease status (that with which we are traditionally most comfortable) but also with patient perceptions (with which we are arguably less familiar and less at ease). But in terms of securing improved health, crucially through behaviour change, this oral health status scoring measure provides us with a tool not only to use in a daily, pragmatic and systematic way but also now with a centralised data recording system and cross validation against the most recent Adult Dental Health Survey.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 216 issue 9.

Stephen Hancocks
Editor-in-Chief

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IN BRIEF

- Provides a composite measurement of oral health status.
- Suggests the online audit facility in DEPPA allows the average oral health status to be reported to dental teams periodically so that they can benchmark their outcomes against the average.
- These audits can help to inform required staffing levels, the balance of skills needed in the team, and the oral health policy for a practice.

COMMENTARY

This is an extremely well written and comprehensive paper. I think it addresses a very interesting area for future research and provides for the development of an oral health score for the purposes of clinical audit. The future NHS is going to be arguably more patient-centred and patient-focused than ever before. As a profession we will be required to communicate, interact and relate to patients in a different way than we have ever had to do previously. I think this paper is very useful and couldn't come along at a better time as it focuses on the patient and provides an oral health score for them. I believe that an oral health score is a very effective way of communicating to patients regarding their oral health status as it is a numerical score that the patients can see improving or decreasing and this is something in my opinion they can easily relate to.

The authors eloquently outline the significant process of developing the oral health score and how it fits into previous initiatives in this area. What the authors describe, in my view is very easy to use and would appear to have very good utility. This paper is also timely for two other reasons: in the modern NHS we are talking increasingly now about the patient's ownership of their disease and the transfer of responsibility to the patient in that we in partnership with the patient assist patients with the management of their disease. An oral health score such as this will facilitate these processes.

Consequently we now need to communicate more effectively to patients in relation to risk and risk assessment and giving a numerical oral health score can only assist with the transparency and clarity of the process. As we move towards a situation where increasingly

practitioners and clinicians will have to comment and be able to prove they have improved the outcomes for their patients, the use of the oral health score on an individual patient basis will allow a clinical team to establish whether a care plan for a patient is particularly effective.

Another bonus of such a system is that the patients who have declined oral health scores can be prioritised and arguably that is where resource and clinical activity should be focused. The value of the oral health score can only increase as further data are added to the system. This will allow for more accurate service planning and population health monitoring within that recorded population.

Paul Brunton

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

Because we think that the measurement of oral health is fundamental if we are to manage the oral health of our patients effectively. This 'management' is on two levels. Firstly we are interested in measuring oral health, because this can support the clinical management of individual patients. The scoring on the individual aspects of oral health: patient perceptions, tooth health, periodontal health, tooth wear, soft tissue health and occlusal adequacy help to direct both parties to focus on where improvements could be made. This 'biofeedback' can support behaviour change when needed. Secondly we are interested in the measurement of oral health collectively, so that practice population outcomes can be audited. This can then be used to inform the development of oral health policy for practices.

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

We want to investigate patient perceptions of DEPPA to shed more light on the value that patients might attach to being engaged in this manner. We suspect that the future disease risk element of DEPPA might be the most important element in supporting patient behaviour change, when that is required. The oral health score element is probably most valuable in informing patients where they are currently with their oral health. We also want to investigate the value of the audit element of DEPPA to dental teams. We are interested to see whether their results do actually inform any changes to the way they manage the oral health of their patients. It would also be interesting, as the anonymous patient data base grows, to investigate the effect of ageing on oral health status.