

Are patients in a pilot practice receiving fissure sealants on permanent molars when recommended them on their care pathway?

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Introduction

In the Pilot Care Pathways, all patients receive a caries risk assessment, scored Red Amber or Green. Fissure sealants (FS) are recommended to all child patients who are assessed as being 'Amber' or 'Red' caries risk status.

Aims

- To look at the proportion of children receiving this preventive intervention as part of their care pathway.
- The standard: "100% of patients recommended fissure sealants on their care pathway receive FS on at least two molar teeth or have a clinical record explaining the deviation from the care pathway present in the patient notes"

Materials and methods

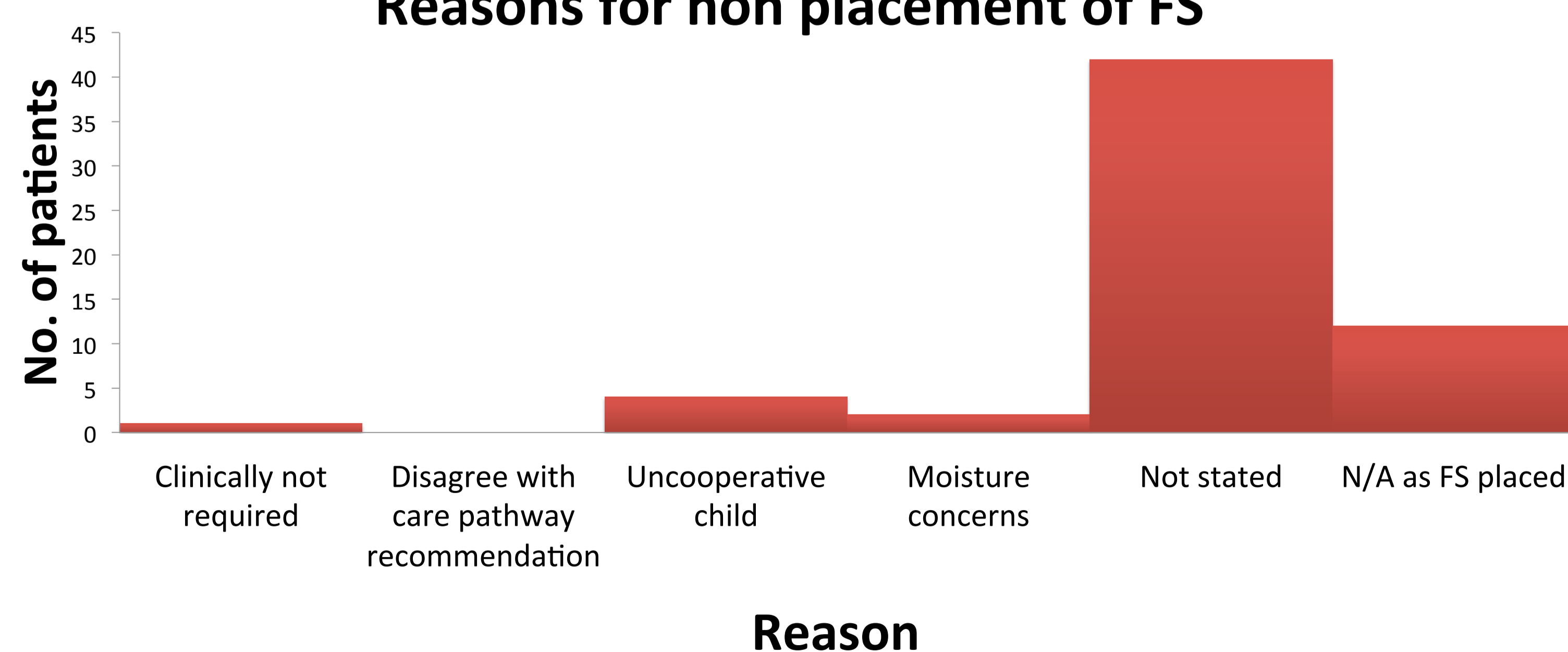
- SOEL search generated a list of 181 patients aged 6-18 recommended fissure sealants on their care pathway during the audit period
- 15 patients for each clinician were randomly selected for inclusion. Clinicians who treated less than 15 patients had all the patients identified included in the audit. 64 patients in total were included.
- Each patients' records were reviewed and information relating to, age, caries risk status, teeth present and fissure sealant placement and survival was recorded.

Results

- 64 patients sampled, 2 patients failed to return
- 62 Patients completed their treatment
- (19%) 12 had fissure sealants placed**
- (11%) 7 had reasons given for no FS**
- (31%) 19 had met the 'standard'**
- (8%) 6 recorded failures** of previous fissure sealants, (7%) 5 of these were as a result of subsequent caries.

| Clinician | %age meeting standard | Sample Size | No of pt's with FS | No. of pt's with reasons given for no FS |
|--------------|-----------------------|-------------|--------------------|--|
| 1 | 33% | 12 | 0 | 4 |
| 2 | 69% | 13 | 6 | 3 |
| 3 | 0 | 2 | 0 | 0 |
| 4 | 0 | 2 | 0 | 0 |
| 5 | 100% | 3 | 3 | n/a |
| 6 | 13% | 15 | 2 | 0 |
| 7 | 7% | 15 | 1 | 0 |
| Total | 31% | 62 | 12 | 7 |

Reasons for non placement of FS

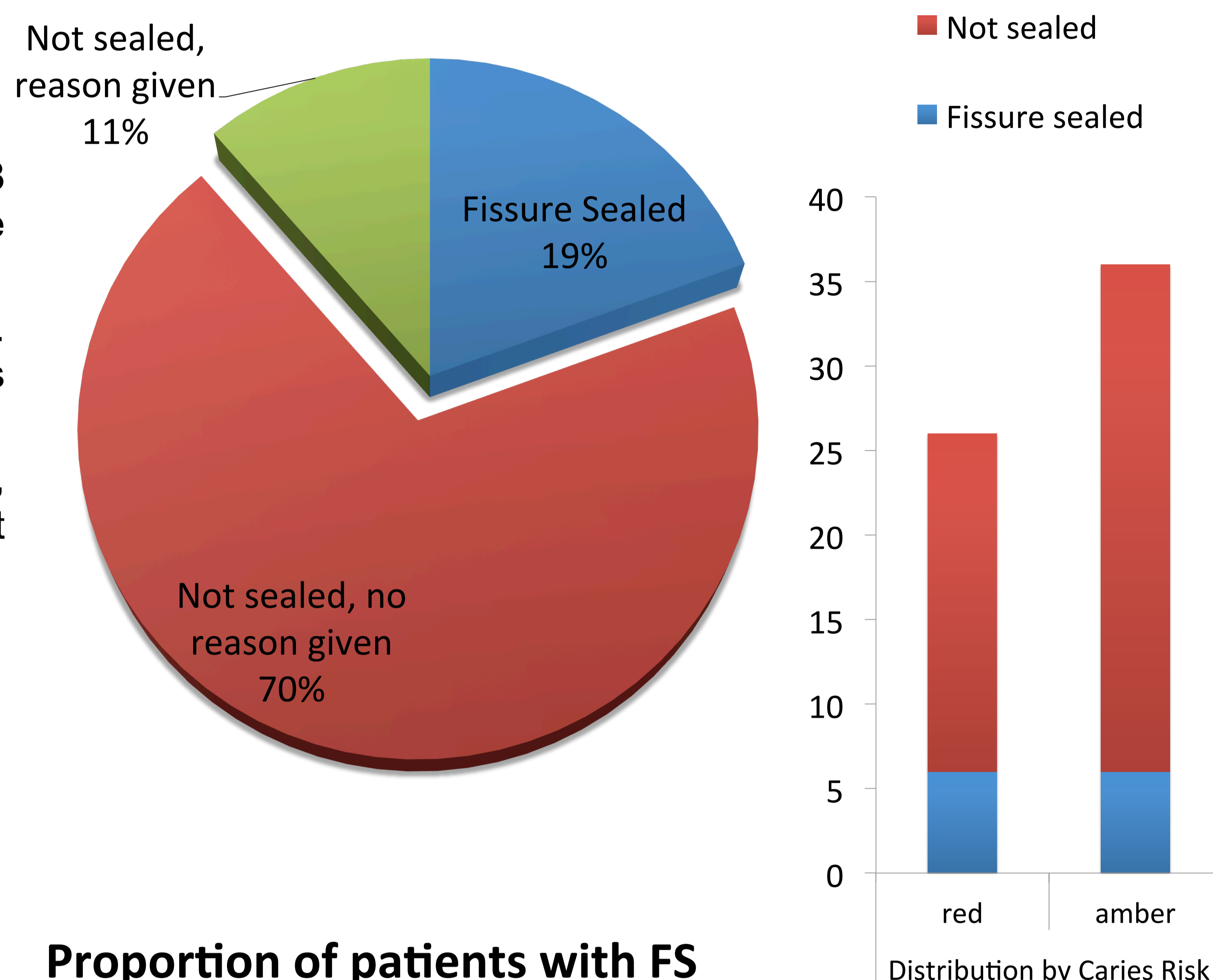


Summary

All of our paediatric patients who have red or amber caries risk should be receiving fissure sealants on permanent molars or have reasons explaining why they did not have these applied.

Our audit of 64 patients showed that only 31% of the patients selected had achieved the 'standard set'.

Further investigation was needed to determine the root causes for the low delivery. This was carried out through staff questionnaires based on the Theoretical domain framework research. ¹



Conclusions

- Large variation in FS delivery between clinicians.
- Small sample size for some clinicians
- The proportion of patients receiving fissure sealants was low, across both caries 'red' and 'amber' risk categories.
- The reasons for not placing FS were not being routinely recorded.
- Unable to draw conclusions about the root causes of the low delivery of fissure sealants.
- The failure rate of our fissure sealants appears to be much better than reported in other studies,² however this audit considered only written records with no clinical examination.

References

- Michie et al. Making psychological theory useful for implementing evidence based practice: a consensus approach. *Qual Saf Health Care* 2005;14:26-33. doi: 10.1136/qshc.2004.011155
- Oulis CJ1, Berdouses ED. Fissure sealant retention and caries development after resealing on first permanent molars of children with low, moderate and high caries risk. *Eur Arch Paediatr Dent*. 2009 Dec;10(4):211-7

Acknowledgements

Staff at Emerick House Dental Practice, Paul Ashley & Susan Parekh EDH