# Scottish Government Health Directorates Chief Scientist Office



# FOCUS ON RESEARCH

Understanding the systems, organisational, and patient barriers and facilitators to quality improvement in primary dental care: Prevention and management of dental caries in general practice

### Researchers

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### **Aim**

To identify patient, organisation, and system level factors influencing routine delivery of recommended care for the prevention and management of tooth decay.

# **Project Outline/Methodology**

This study used a mix of research methods to assess six quidance recommended dentist behaviours (recording risk, risk-based recall intervals, fluoride varnish, fissure sealants, demonstrating oral health maintenance, dental x-rays). A postal survey of current practice, beliefs, and practice characteristics was sent to a random sample of 651 dentists in NHS Scotland. Eight in-depth case studies comprising observation of routine dental visits and dental team member interviews were conducted. Practices following/not included dentists following recommendations, practices with early involvement in Childsmile, general and salaried services, and varying deprivation levels. Adult patients with routine visits at case study practices fed back by interview and group discussion. Interviews were conducted with key decision makers in policy, funding, education, and regulation. A theoretical framework helped identify practice, patient, and policy level barriers and facilitators. Findings were merged into a description of barriers and facilitators across the six behaviours. This was used to prioritise behaviours for change and plan related change strategies.

### **Key Results**

196/578 valid surveys were returned (33.9%). Factors associated with best practice were identified from the survey, case studies, and patient feedback. A range of 0-7 factors per behaviour were identified. Factors were prioritised by: frequency, respondent agreement/disagreement, and evidence of strong beliefs. On average, the number of behaviour associated factors was prioritised from 6 to 4. Factors were used to create a framework describing behaviour specific barriers and facilitators. Key stakeholders used this framework to identify priority behaviours for change (*key priority: use of* 

preventive fissure sealants among 6-12 year olds) and strategies for change (key strategies: audit and feedback; patient informational campaign). Proposed strategies were assessed as appropriate for immediate development and implementation.

### **Conclusions**

We successfully identified factors influencing behaviour and linked them to relevant strategies to support recommended care. Including practice, patient, and policy perspectives identified complementary strategies which are likely to be more comprehensive and effective than strategies targeting only one level.

### Additions to the field

Similar studies look at a single behaviour from a single perspective. This study demonstrates consideration of multiple behaviours is possible and can produce interrelated, multi-level strategies to address a broader range of factors influencing recommended care. This study also demonstrates the utility of a single theoretical framework in data collection, analysis, and merging findings of multiple research methods.

# Implications for practice/policy

Findings emphasise the role patients can play in promoting recommended care in dentists' routine practice. Change strategies identified can be delivered to coincide with the publication of updated national guidance on prevention of tooth decay among children.

# Next steps

Change strategies identified in this study will be evaluated for use in promoting guidance recommended fissure sealant practice. Interventions will be adapted and tested for other behaviours, particularly fluoride varnish application.

## Further details from:

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