

Brushing Up On Oral Health

Improving Oral Health Practices in Geriatric Inpatients

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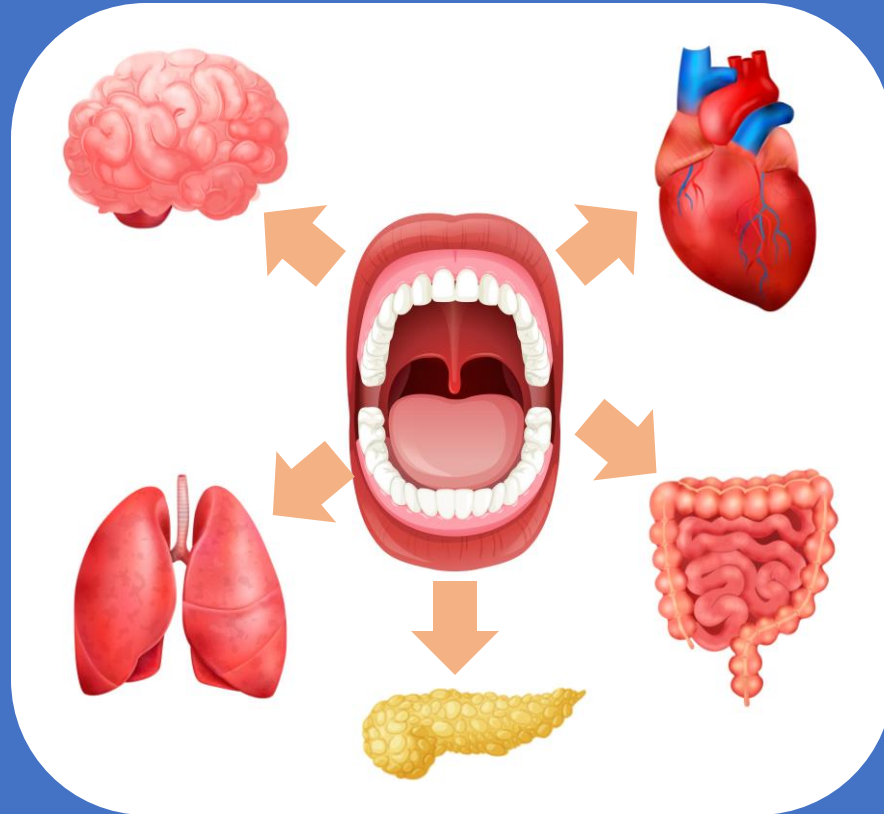
Background – The Root of it all

Oral health is fundamental to general health, and poor oral health is associated with poor general health in a bidirectional manner. Poor oral health (via increased oral pathogens, periodontal disease causing systemic inflammation) are associated with:

- Cardiovascular disease and stroke
- GI and oropharyngeal cancer
- Diabetes
- Respiratory tract infections
- Alzheimers/vascular dementia

Older people are particularly vulnerable to poor oral health and its consequences due to:

- More complicated dental history
- Impact of comorbidities on oral care
- Side effects of medications



Initial scoping audit

- We collected data from 100 inpatients aged >75 (excluding those with delirium/dementia) across 10 geriatric wards over a 2-week period.
- We evaluated the data based on
 - dental access
 - oral health history
 - oral health on the wards
 - medications that can affect dental health

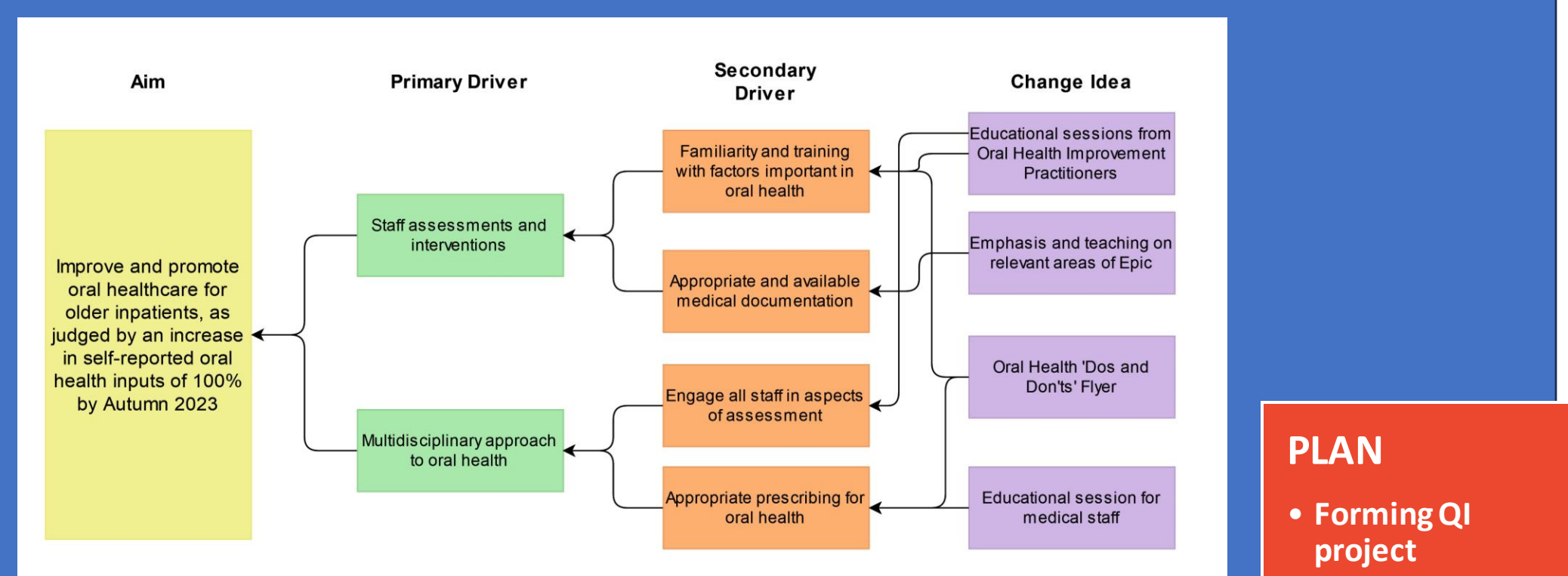
RESULTS

- Although surprisingly 82% patients reported being registered with a dentist, most saw a dentist >1yr ago
- For 24% this was due to reduced mobility
- Those with co-existing chronic health conditions had dental issues of loose teeth, pain, denture requirement and difficulty eating
- If patients had a dental emergency and no immediate dental access, 32% felt they wouldn't know what to do and 32% reported they would take painkillers and bear the pain.
- **Only 17% of inpatients reported any measures were taken by staff to ensure their oral hygiene.**

Aims & Planning

- To increase the proportion of older inpatients reporting receiving input for their oral health by 100% by Autumn 2023

Driver diagram



Interventions

Cycle 1 – Spring 2023

Presenting audit findings at HFOP Grand Round and teaching to medical staff from Oral Health Improvement Practitioners. Oral Health Do's and Don'ts Flyer prominently displayed on Geriatric wards.

Cycle 2 – Summer 2023

Staff Training Session – In collaboration with the RDUH Oral Health Education Team, a formal training on oral health assessment and treatment.

Tooth be told...

DO's	DON'T's
<ul style="list-style-type: none"> • Ask all patients about their dental hygiene and/or denture fit • Encourage patients to practise good dental care – brush teeth twice a day, including tongue <ul style="list-style-type: none"> • Check if they need assistance! • Encourage healthy food choices • If starting bisphosphonates review dental status • ACB drugs can reduce saliva - are they really needed? (ask your pharmacist!) • If issues accessing dentist in the community, offer details of home dentistry service • If active dental issues, consider max-fax referral 	<ul style="list-style-type: none"> • Don't prescribe medications that affect teeth/mouth without discussing relevant potential side effects with patients • Don't forget to ask if patients need assistance with their oral hygiene • Don't forget good dental hygiene after eating sweet foods/desserts/sugary drinks

ORAL HEALTHCARE AND NUTRITION IS ABOUT EDUCATION
The collaboration between patients, nurses, doctors, dieticians and dentists can prevent and alleviate a lot of common dental problems – and offer better health to boot!

DO

- First interventions

PLAN

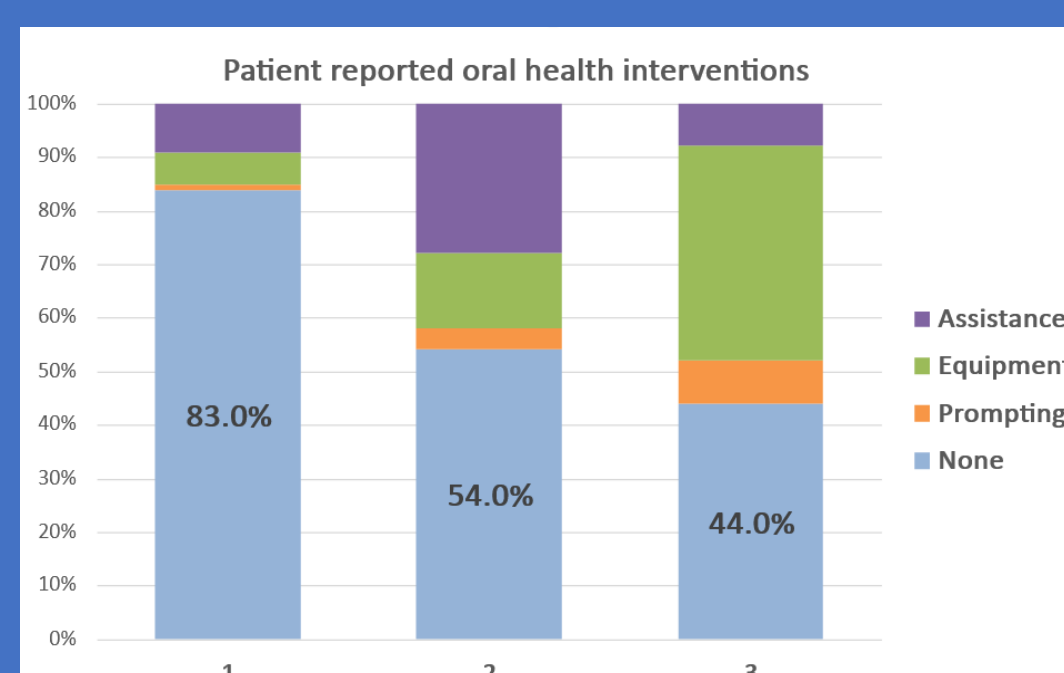
- Forming QI project

Results

- After implementation, a further concise reaudit focused on:
 - **inpatient questions** to survey patient experience
 - **Anonymised data from ward staff** re measures they undertake to promote oral hygiene

The proportion of inpatients reporting intervention for their oral health rose from 17% (17/100) in cycle 1, to 46% (23/50) in cycle 2, and 56% (28/50) in cycle 3

Awareness of documentation on EPR rose from 30% to 42%



STUDY

- Re-audit

ACT

- Next steps

Progress and reflection

- Initial audit findings of very low level of patient-reported interventions led us to survey staff and ensure their engagement in the QI process
- There are many ways to find measures on our electronic patient records system!
 - By cycle 3 – 42% of staff document oral health on EPR, but only 24% are using the Oral Health Score system we had found

Next steps

- Entrench these improvements in our hospital – regular teaching to relevant groups, expanding curriculums
- Improving access to dental services for patients with mobility issues by utilising at home dental services

REFERENCES

- Coll PP, Lindsay A, Meng J, Gopalakrishna A, Raghavendra S, Bysani P, O'Brien D. The Prevention of Infections in Older Adults: Oral Health. J Am Geriatric Soc. 2020 Feb;68(2):411-416. doi: 10.1111/jgs.16154. Epub 2019 Sep 3. PMID: 31479533.
- Gil-Montoya, J. et al. (2015) 'Oral Health in the elderly patient and its impact on general well-being: A nonsystematic review', Clinical Interventions in Aging, p. 461. doi:10.2147/cia.s54630.
- Hajishengallis, G. and Chavakis, T. (2021) 'Local and systemic mechanisms linking periodontal disease and inflammatory comorbidities', Nature Reviews Immunology, 21(7), pp. 426-440. doi:10.1038/s41577-020-00488-6.
- Sheiham, A. et al. (2001) 'Prevalence of impacts of dental and oral disorders and their effects on eating among older people; a national survey in Great Britain', Community Dentistry and Oral Epidemiology, 29(3), pp. 195-203. doi:10.1034/j.1600-0528.2001.290305.x.
- Sparks Stein, P. et al. (2012) 'Serum antibodies to periodontal pathogens are a risk factor for alzheimer's disease', Alzheimer's & Dementia, 8(3), pp. 196-203. doi:10.1016/j.jalz.2011.04.006.

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