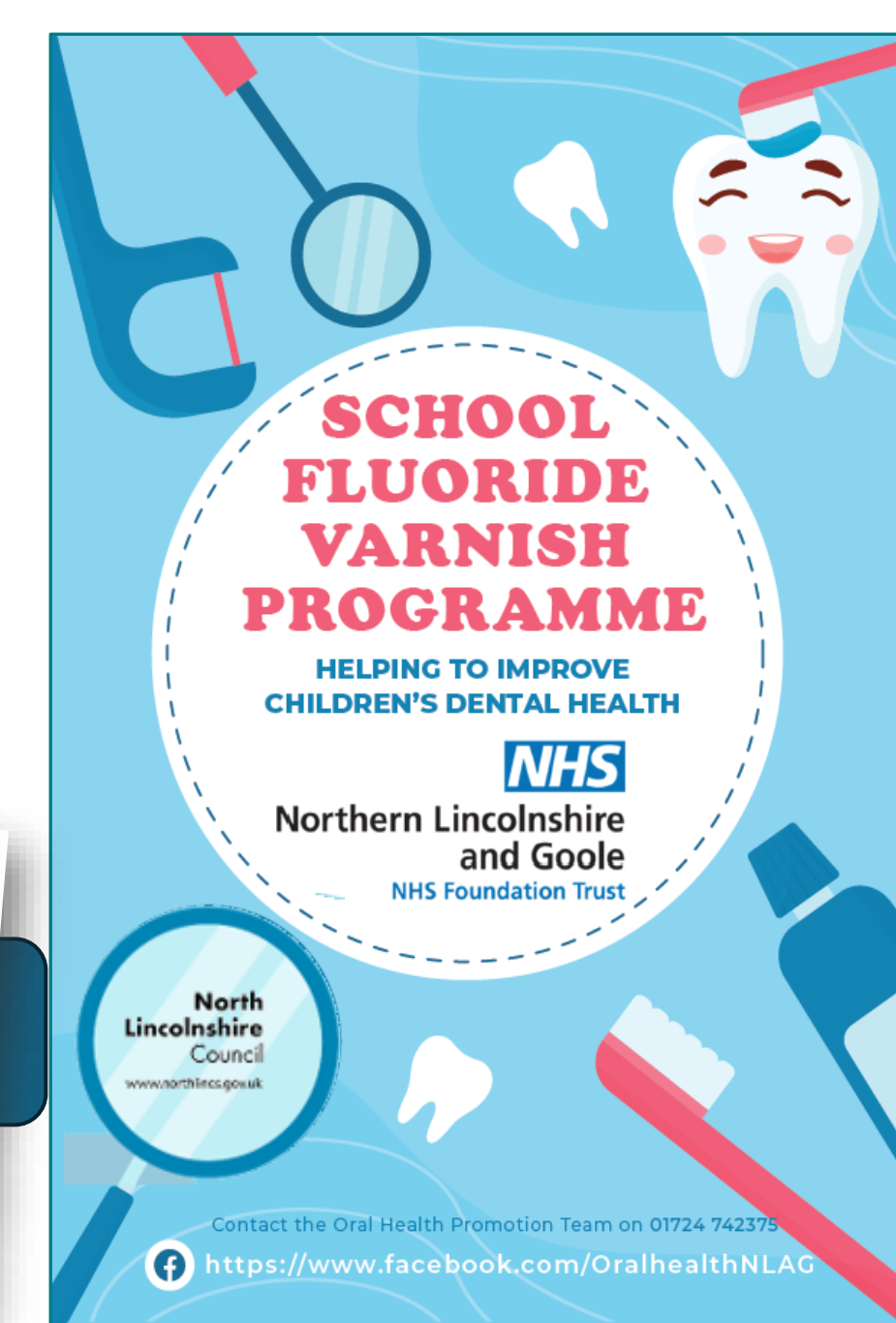


Design, implementation and outcome of a pilot fluoride varnish (FV) intervention in a Scunthorpe Primary School (End of project evaluation)

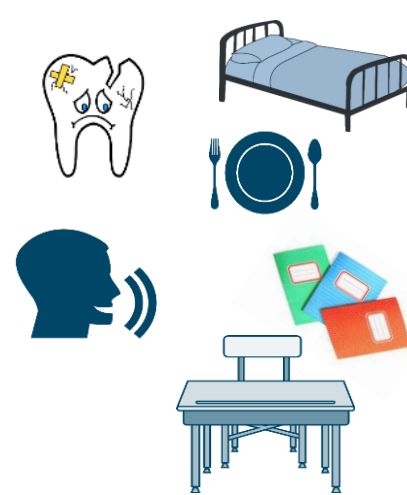


Poster created by: Helen Whitelam, Public Health Coordinator (North Lincolnshire Council), Pat Melillo, Community Oral Health Promoter (NHS Humber Health Partnership), Patricia Rea-Ritchie, Community Dental Therapist and Oral Health Promoter (NHS Humber Health Partnership)

This poster display provides insight into a pilot fluoride varnish (FV) intervention aimed at tackling severe oral health inequalities in Scunthorpe North, North Lincolnshire.

Why it matters...

- Good oral health is important across the full life-course – However, impacts of poor oral health are felt acutely in early childhood.
- Oral health diseases such as tooth decay can impact on school readiness, cause pain, discomfort and issues with eating, sleeping, speech and communication development



Oral health diseases contribute to up to **60,000** lost school days annually due to tooth extractions alone.

9 out of 10 hospital tooth extractions are due to preventable tooth decay.

Significant inequalities persist, with children in the most deprived areas twice as likely to experience dental decay at **32.2% vs 13.6%** (least deprived) (2024 data).

Results from the most recent dental epidemiology study of 5yr-old highlighted that:

Almost 1/4 of 5yr olds!!! 22.4% in England (2024) had experience of dental decay to Primary dentition

Prevalence of experience of dental decay % 2024	Y&H	North Lincolnshire
	27.5%	25.4%

Oral Health: A need for local action

Neighbourhood level comparison (Taken from 2022 profile)

Neighbourhood	Prevalence of experience of dental decay %
Neighbourhood 1.	14.8%
Neighbourhood 2.	10%
Neighbourhood 3.	14.9%
Neighbourhood 4.	50%
Neighbourhood 5.	31.4%

- Highest prevalence in most deprived Neighbourhoods of 4. & 5.
- Clear need for targeted preventative action in areas of greatest deprivation

Existing Oral Health Provision...

Commissioned Oral Health Promotion Service – delivers a range of evidence-based oral health improvement interventions e.g. Targeted supervised tooth brushing, Key Stage appropriate resource boxes, Oral Health pack issue, Workforce development

Until pilot mobilisation did not include the application of fluoride varnish in primary school settings.

Strong working partnerships exist for Oral Health improvement to review data, assess performance of existing workstreams and review potential areas to develop future practice.

What else can we do?

We have an idea! A school fluoride varnish programme?

- ✓ Fluoride varnish can help prevent or reduce caries in the primary teeth of young children.
- ✓ Safe, easy to apply, accepted by children
- ✓ Studies continue to show fluoride varnish is efficacious in reducing decay in the primary teeth of high-risk children.

Pat Melillo
Oral Health Promoter, Extended Duties Dental Nurse (North Lincolnshire Oral Health Promotion Service)

Patricia Rea-Ritchie
Oral Health Promoter, Dental Therapist (North Lincolnshire Oral Health Promotion Service)

Helen Whitelam
Public Health Coordinator (North Lincolnshire Council)

Good suggestion!

- Intervention would look to support
- More robust business proposal required for decision-making

What happened next...

- Robust business proposal received and reviewed by Public Health
- Funding source identified - Health Inequalities Funding (specifically to address health inequalities experienced within populations in Neighbourhood 4.)
- Funding secured - June (2023)
- Neighbourhood 4. - area experiencing some of greatest health disparities with almost half of residents living in England's 20% most deprived areas.
- Chosen school for pilot FV programme – deprivation indicators (i.e. FSM % / School IDACI)
- School experiencing intake from areas of greatest prevalence of tooth decay in 5yr old children - Fits suggested criteria and guidance for FV programme implementation.

Pilot aims:

- To improve oral health and reduce oral health inequalities in children in North Lincolnshire, by increasing access to fluoride, dental services, and oral health promotion.
- It will seek to measure the impact on oral health from fluoride varnishing in an area facing significant health inequalities.
- Recognise the efficacy of fluoride varnishing - outlined in best-practice documentation and guidance

What else will it add?

- Develop / test models of engagement with parents/carers and educational settings in areas with intake from diverse communities and experiencing health inequalities, to optimise uptake and therefore overall effectiveness.

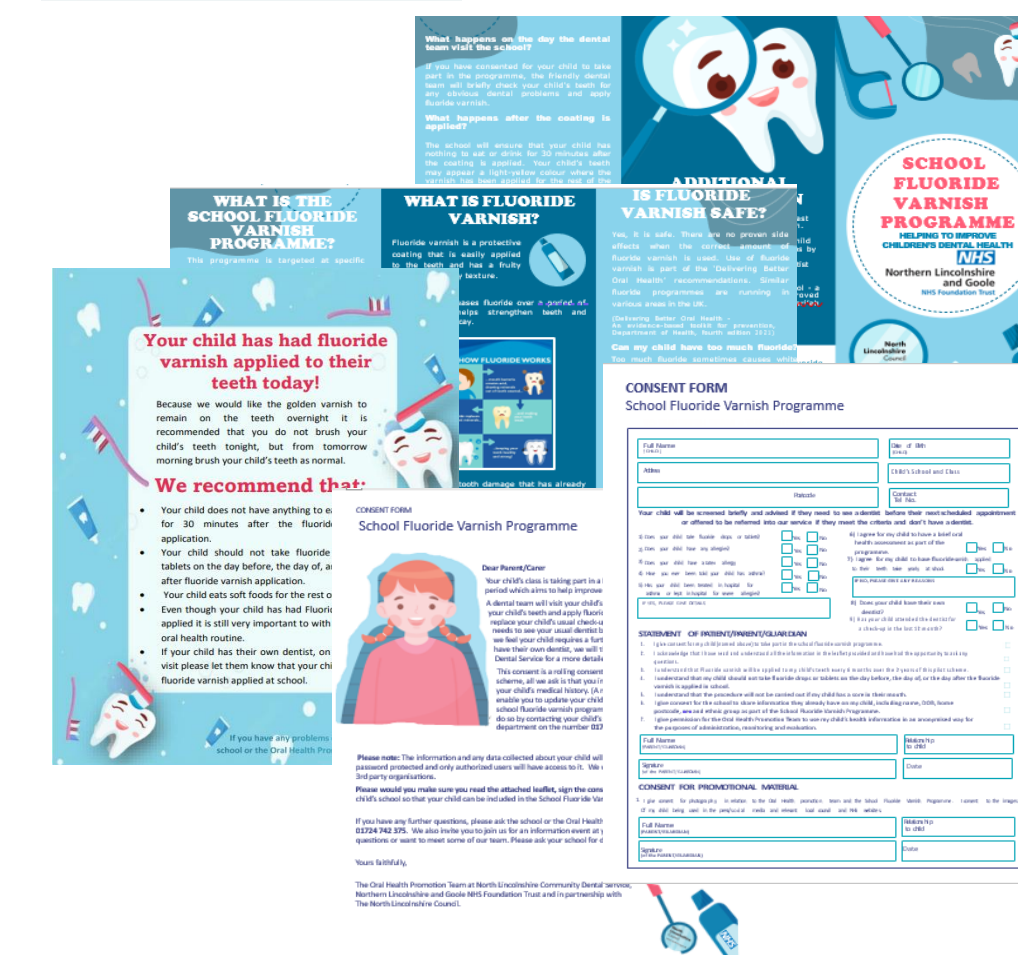
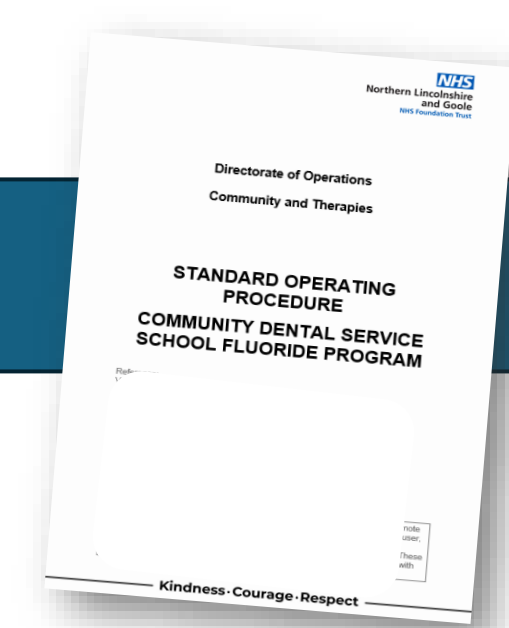
Deliverables

- 2-year pilot programme (2-year optimum exposure time).
- x2 fluoride varnishing applications in each academic year of the pilot

Mobilisation period...

Lots to think about...

- ✓ Guidance from Scotland's leading Childsmile Programme
- ✓ Standard Operating Procedure Development
- ✓ Review clinical governance - (PGD or PSD?)
- ✓ Information leaflets / Consent forms
- ✓ KPIs and evaluation mapping - Lincoln Academic support / NHS-E Dental Consultant in PH
- ✓ Translated consent forms / leaflets into key main languages
- ✓ To maximise uptake: promo campaign / roadshow
- ✓ Presentation parents/carers - refresh interest after long school summer holidays
- ✓ Advertisement and reward (leaflets, posters, presentations, stickers)
- ✓ Data evaluation / recording forms



First Year - Outcomes...

2 X2 FV Applications and general Oral Health Assessment completed for cohort children YR-R within Academic Year

100% Parents / Carers given information to inform participation

47% Consent rate achieved

Very limited refusal on the day

63% Of those seen referred for follow-up at NHS dental care / support (e.g. FC/CDS)

1 For many - offered 1st interaction with dental care professionals in a safe, friendly and familiar environment

HELP Interactions enabling identification for early help / support - avoiding escalating issues Re: Oral Health (those not registered with dentist with severe Oral Health issues referred to urgent support)

School absence reports – early noted reduction in time off for tooth-ache / pain

First Year Reflections and Lessons Learnt...

Ofsted Impacted optimal engagement and consent levels for first applications, Engagement events for Parents, Carers, Children cancelled, limited staff time to support consent follow-up

Wider community engagement planned to gain acceptability of FV application e.g. Contact made with local Imam – respecting forthcoming Ramadan dates and information Re: products used.

Coffee morning planning to engage parents / carers Presentation developed with Q&A session – uptake increased in 2nd application

Some confusion over completion of consent forms Worked to cement relationships with school staff to support completion

Second Year - Outcomes...

2 X2 FV Applications and general Oral Health Assessment completed for cohort children YR-1 within Academic Year

100% Parents / Carers given information to inform participation

65% Consent rate achieved

Very limited refusal on the day

24% Of those seen referred for follow-up at NHS dental care / support (e.g. FC/CDS)

Second Year Reflections and Lessons Learnt...

Planned community and school engagement activities = increased consent levels

Strong working relationships built with school staff assisted engagement and maximised consent levels achieved

Programme shows improving consent rates achieved

Referrals to NHS FC dental practices for those children not presently registered with a dentist, or those requiring treatment, or into CDS depending on criteria

Recommendations...

- ✓ Programme evaluation - positive findings to support initiatives of this kind
- ✓ Next steps: support wider system partners (HNY ICB) roll-out of PAT Scheme (Prevention, Access and Treatment) - targeted implementation to schools / settings with intake from areas of greatest deprivation.
- ✓ Whilst avoiding duplication – Observe any opportunities for additional programmes where funding allows.