

## Education Agreement

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### Details:

Title of project:	Scaling up the Dental RECUR Brief Negotiated Interview (DR-BNI) for improving oral health in children scheduled for extractions – delivering work package 1
Date:	01/02/2023
Location:	Queens University Belfast in collaboration with HEE
Project timeline/duration:	2 months
Rationale of project:	<p>Many children are now waiting for extractions; with many areas across England with lists that are over 12 months. For children waiting for extractions, 67% of parents report their child is in pain and 38% having sleepless nights. Repeated antibiotic prescriptions are being dispensed to children over months. Significant inequalities persist, with admission rates for tooth extraction four times greater in children from the most deprived communities than the most affluent.</p> <p>Once baby teeth are extracted, the disease continues with past disease the strongest predictor of future disease. Surgical removal of teeth does not remove the causative factors. These factors relate to day-to-day oral health-related behaviours, namely: the consumption of frequent sugary foods and drinks; and less than twice daily toothbrushing with fluoride toothpaste. In fact, many children will go on to have further episodes of decay and tooth</p>

	<p>Usual methods of imparting preventive advice to families tend to be health professional-led, very restrictive, and prescriptive, often with unattainable goals like restricting a child's drinks to only milk and water.</p> <p>The Dental Recur– Brief Negotiated Interview, DR-BNI is a structured therapeutic conversation between a DR-BNI trained nurse and parent. The intervention is motivational-interviewing informed with embedded behaviour change techniques. During the conversation, the evidence of what causes child tooth decay is presented, the nurse moves to support the parents to share how oral health behaviours are undertaken in that family and judges with the parents their stage of change to healthy behaviours. The aim is to support parents to develop one or two goals to change to orally healthy behaviours, that the parent feels they can achieve for their child. The goals are specific, measurable and parents are encouraged to consider likelihood of success and barriers to change, goals are refined and with trained nurse support, parents develop a written prescription for change.</p> <p>The DR-BNI has been evaluated in a 2-year NIHR-funded clinical trial conducted in 12 extraction centres across the UK. The results are published in the attached paper.</p> <p>A summary of the findings show that, two years after the single 30-minute DR-BNI was delivered by trained dental nurses to the parents of children aged 5-7 years needing extractions, the odds of new caries experience occurring two years later were reduced by 51% in the DR-BNI group as compared with control. There was a 29% decrease in the relative risk of new caries experience in the DR-BNI group as compared with control. This single low-cost, low-intensity intervention was successful in significantly reducing the risk of recurrence of dental caries in children.</p>
<p><a href="#">Overview. Brief descriptor:</a></p>	<p>Following this successful clinical trial, work was funded by Health Education England NW to move the research methodology to a written training manual and a Train the Trainers training manual was also developed. The training still requires face-to-face delivery.</p> <p>The next stage of development is to deliver 14 work packages to scale-up the training to an online e-learning platform enabling training to be accessed by dental nurses across the NHS. As there is skill development needed for newly trained nurses, a scaled-up Train the Trainers learning model that provides trained leaders/advocates/trainers in a region will provide a supportive, sustainable model for uptake and spread across NHS areas.</p> <p>After undertaking the training on the e-learning platform, a summative evaluation of skills is needed. Therefore, trainees will</p>

	attend for assessment in a regional centre with evaluation by their local Trainer. As part of roll-out, evaluation of the uptake and delivery is required to ensure modifications can be made to the new training packages. Once the DR-BNI training programme is established, periodic review and updating in relation to any guidance changes e.g. updated Delivering Better Oral Health, can be undertaken by an expert in paediatric dentistry, a health psychologist, and practical aspects of updating undertaken in partnership with community dental professionals.
Project outcome / impact:	Work package 1/14 - Review and add narration to Slides – DR-BNI Facilitators and DR-BNI Train the Trainers. Review and amend training manuals for learning platform delivery
Evaluation of Project:	A Quality Improvement project will be undertaken (dependent on funding) to examine the impact of the scaling up of the DR-BNI including reach, implementation and sustainability.
Sustainability:	<p>This first stage of investment in scaling-up training of dental nurses in the Dental Recur-Brief Negotiated Intervention, DR-BNI will provide resources for a skilled workforce to deliver effective prevention of tooth decay in many thousands of children and their families across the UK. It will support reduction in the need for future extractions of carious teeth and admission of children to hospital.</p> <p>This is a holistic, evidence-based low-cost, simple intervention supporting families and addressing inequalities in child dental health. The scaling-up onto an e-learning platform will allow the training to be available to the UK dental nurse workforce for children scheduled to undergo dental extractions.</p>

### **Progress Reporting:**

I can confirm that I will provide quarterly reports to HEE as a condition of securing funding. *Please tick box to confirm* ☒

### **Subcontracting:**

This allocated work will be delivered and supported by the named organisation and not be subject to subcontract unless specified in the agreement with HEE.

*Please tick box to confirm* ☒

**Finance:**

Lecture/Course/ Project Fee	£17,197
Organisation / Company finance contact name/email	████
Purchase order raised	
Purchase order Number	

**Conflict of interest Declaration:**

Are there any conflicts of interest that we need to be aware of to ensure transparency of this agreement?	Yes    No
If answered yes, please state:	
Will you be using sponsorship / promotion to support this project?	Yes    No
If answered yes, please state:	

Signature on behalf of the organisation: █████	Date: 23/02/2023
Signature on behalf of HEE: █████	Date: 23/02/2023