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Delivery of a fluoride varnish programme in care homes

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Objectives and Context

- Discuss a fluoride intervention programme in care homes
- Undertaken as part of a larger programme embedded in routine care practices

- Location:

- Undertaken in 3 medium size (60 and 62 beds) care homes in Kensington and Chelsea in London (affluence)
- All homes included were mixed dementia, old age nursing and residential
- Mixed local authority, NHS and private beds

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Background

- Programme was a collaboration between Public Health England, Kings College London, Central London Community Healthcare dental services, Westminster Council and the participating care homes.
- Discussions commenced September 2013 between partners
- Intervention arm was undertaken between May 2014- May 2015
- 3 months prior, oral care training was provided to the homes by the OHP team.

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Programme Structure

The aim:

To develop, pilot and evaluate a comprehensive oral health prevention programme to improve the oral health status of residents in care homes.

Key objectives:

1. Oral care survey: A baseline survey of homes to collect data on their oral health policy and care plans, access to dental services, training gaps and barriers to oral care

2. Preventative Programme:

- Coproduce a training package for care home staff

- Implement a fluoride delivery programme for residents assessed as elevated risk of dental diseases

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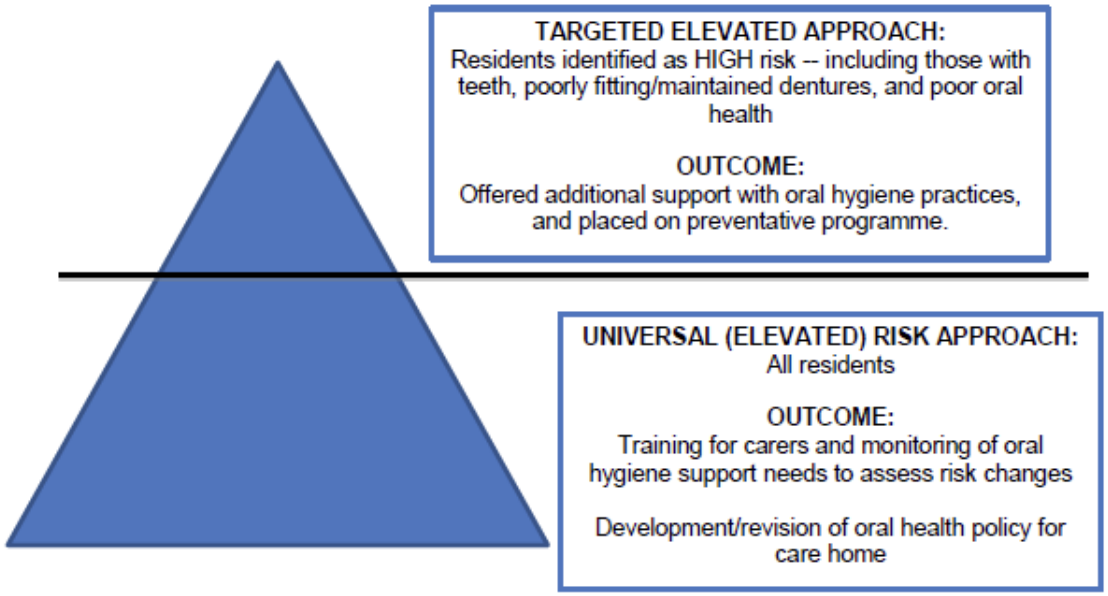
Preventative Approach

1. Universal: Oral Care Training

2. Targeted: For High risk residents- Fluoride programme



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Universal: Oral Care Training

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Oral Care Training

- **Aim:**

To coproduce, implement and evaluate a fit for purpose oral care training programme for care home staff

- **Methods:**

1. Identify key stakeholders and set up working group
2. Identify key features of a programme with care teams
3. Co-produce programme structure and resources
4. Evaluation and cost considerations

Centred around principles of Coproductio

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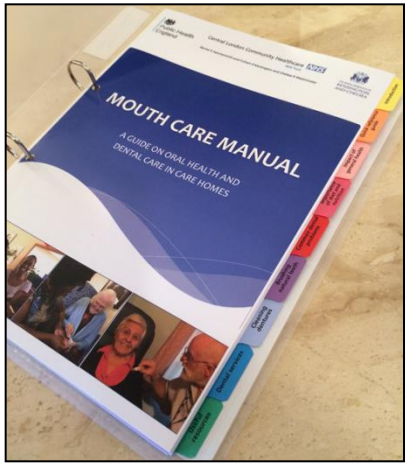
Oral Care Training

- Learning from coproduction discussions
- Need to be time efficient and attend at opportune time as not to disturb staff
- Maximum 30 minutes and at handover
- Need for hands on support
- Product
- BSG video followed by discussion around oral health delivery
- Manuals on each floor
- Key cards to each staff member
- **Key feature 3 monthly hands on hygienist support**



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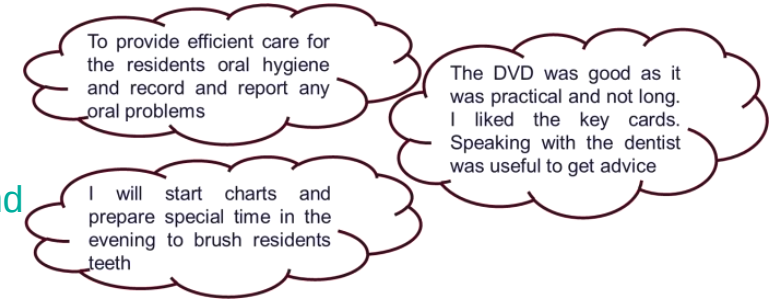
Oral Care Training

- **Key Results**

✓ Increase in knowledge at 3 months

✓ Change in attitudes and confidence

✓ Positive feedback on programme structure and resources



- **Conclusions**

✓ Importance and value in coproduction

✓ Implementation by homes with dental support offered flexibility and enhanced efficacy

✓ However

- Not all carers trained despite day and night sessions
- Long term retention and change in carers practices not evaluated
- Face to face training and hands on support time intensive and costly
- Need for tailored training to meet needs of home- feasible?

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Targeted: Fluoride programme

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Fluoride Programme

- Delivered from May 2014-May 2015
- CDS prescribed 2800ppm toothpaste to be used twice daily, and 3 monthly FV application by hygienist as all patients in this environment deemed high risk
- Decided to use 2800ppm rather than 5000ppm due to potential toxicity risk in this patient group
- Included as part of routine care practice- ethical approval not required
- Data governance- CDS collected data, anonymised and shared with PHE colleagues for analysis
- Used the ICDAS coding system for teeth and root surfaces

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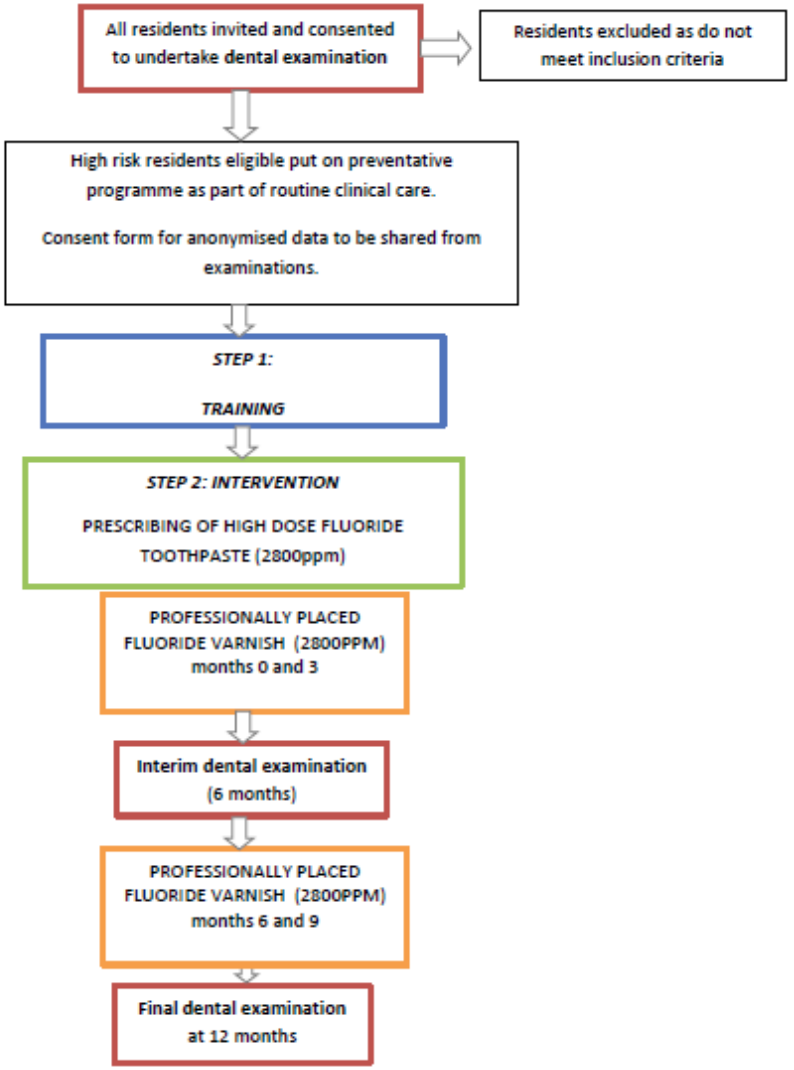
Fluoride Programme

Included as part of routine care practice in keeping with messages in Delivering Better Oral Health for high risk individuals

Reality: All residents were deemed high risk



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Fluoride Programme

Exclusion Criteria:

Residents who are unable to consent and have no registered power of attorney will be deemed to have not consented

Edentulous residents

Residents whose medical history precludes application of fluoride products. This will include those with hypersensitivity to colophony and/or any other constituents within the fluoride varnish, a history of ulcerative gingivitis, stomatitis and bronchial asthma will be excluded from the having any fluoride interventions placed.

Residents with facial or oral infections e.g. Cold sores or draining sinus will be excluded from having the preventative varnish intervention placed.

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Fluoride Programme

Baseline Data:

- 124 patients underwent baseline examination
- 18 patients were edentulous, 9 did not consent, 4 unable to co-op, and 15 were partially examined(withdrew consent or co-operation)
- 84 patients given full exams (consequent data presented on this group)

Caries:

- 37.2% (n=29) of patients had active caries in at least one tooth with a mean caries experience among all patients of 1.21 carious teeth
- Of those that had carious teeth, the average number of carious teeth was 3.24

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Fluoride Programme

Retained Roots

- 52.6% (n=41) had at least one retained root
- Of those, the average number of retained roots was 4.22
- 26.8% of patients with RRs had at least one carious retained root
- Of those with carious RRs, the average no. of carious RRs was 3.36

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Fluoride Programme

- Attrition rate over the 12 months was high

Care Home	Baseline	6 months	12 months	% loss
Care Home 1	41	30	16	61%
Care Home 2	43	43	15	65%

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Fluoride Programme

- Few complete examinations undertaken
- 13 participants (out of 78) completed the fluoride intervention programme

	Care Home	Full exam	12 months			
			Partial Exam	Lack of consent	Lack of cooperation	Edentulous
Baseline	1	20	5	3	2	11
	2	23	0	0	0	20
6 months	1	17	3	1	0	9
	2	14	0	0	0	18
12 months	1	9	4		1	2
	2	4	0		0	11

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Fluoride Programme

- All data will be presented on these 13 residents
- 48 active carious lesions we recorded at baseline (31 root lesions and 17 teeth lesions)
- 12 months:
- Teeth: of the 17 active lesions: 8 (47%) arrested, 5 (29%) restored, 4 extracted (24%)
- Roots: of the 31 root lesions: 23 (74%) arrested and 8 (26%) were extracted
- No active lesion at baseline stayed active
- But there were 3 new active root lesions recorded at 12 months in other sites

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Fluoride Programme

- Limitations:

- Small number of residents in specific part of London
- Data only available on 13 participants
- Delivery of intervention: were the teeth brushed effectively or even daily?
- CDS team commented on complexities of delivery and reliable data collection
- Demonstrates the challenges of intervention delivery and data collection when delivering interventions to this group

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Conclusions

- Need to work collaboratively with homes in design and delivery of programmes
- The value of partnership working and coproduction
- Although a complex environment with difficulties in delivery, with high caries rates, preliminary data supports fluoride interventions in this group
- Need to explore feasibility of delivery and data collection to explore true efficacy

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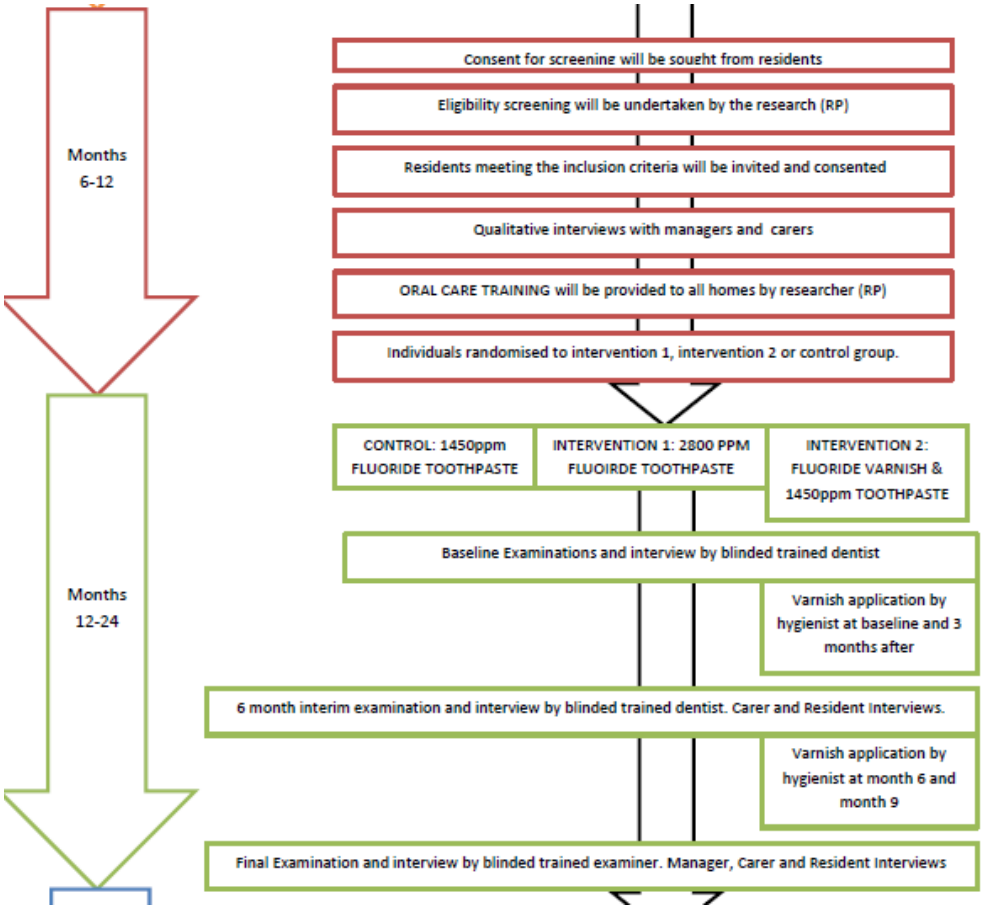
Next Steps

NIHR Doctoral Research Fellowship:

Fluoride interventions to prevent dental decay in care homes: A randomised feasibility study



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Thank you

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