

University of Glasgow | College of Medical, Veterinary & Life Sciences



Next steps for Childsmile

David Conway

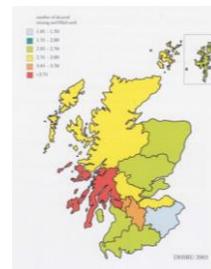
@davidconway @UoGChildsmile

Childsmile Symposium
January 2018



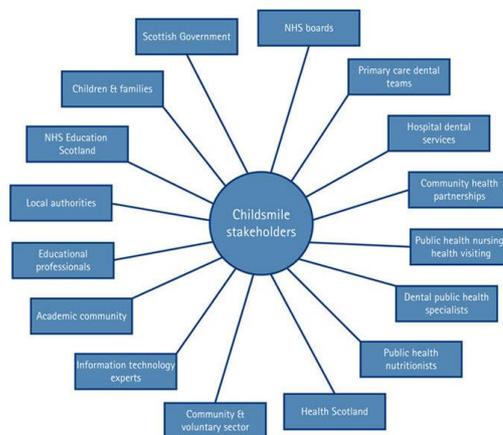
B.C. – Before Childsmile

- early 2000s
- Scotland had amongst the worst levels of child dental decay in Europe
- Nearly **60% of 5 year olds** with obvious decay experience



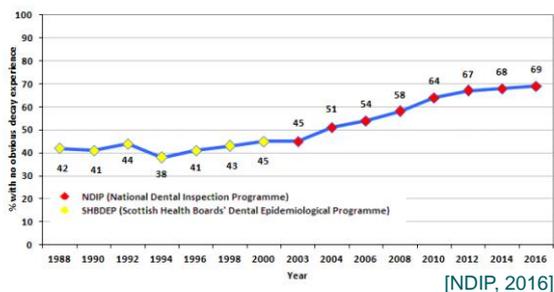
Achievements!

- **Childsmile**
 - Piloted / rolled out from 2006
 - Nationwide in 2011
- **Strong and successive government commitment / policy leadership**
- **Highly skilled and trained workforce**
 - EDDNs – DHSWs
- **Integrated to health visitor Early Years Pathway**
- **Prevention into the primary care dental contract**



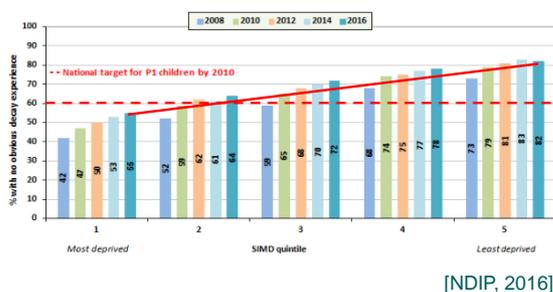
Achievements!

% 5 year olds with **no** obvious decay (dmft=0)

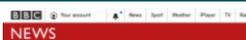


But ...

Inequalities remain



But ...



More children having teeth out in hospital in England

By Sara Thomas
Health reporter BBC News

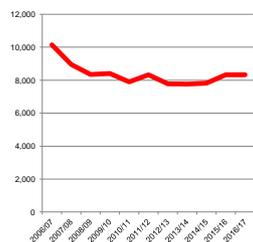
11 January 2017



Dentists have accused the government of having a "short-sighted" approach to tooth decay in England after "hospital operations to remove children's teeth increased by nearly 45,000."

69,575 ≤ 18year olds 16/17
560 / 100,000 [HRG, 2018]

Elective Hospital Dental GA Extractions in Scotland



8,261 ≤ 18year olds 16/17
756 / 100,000 [ISD, 2018]

Next steps ...

For the Childsmile Programme and Evaluation

- In a decade: taken first baby steps -> growing up
- Where do we go from here?
- Propose 4 Steps :

Upstream – Downstream Approach



Delivered via a proportionate-universal approach

Universal vs Targeted ->>> Combined



[Shaw et al *Bioethics* 2009]



“Proportionate universalism”
[Marmot Review 2010]

1. Optimise existing programme

Bolder proportionate universal approach:



- Early years pathway (HV referrals)
- Dental Health Support Worker (tailored home visits)
- Practice – implementation of prevention (PiP)
- Develop better evidence-based “advice”
eg. Sugar-reduction Brief Interventions
- Supervised Toothbrushing Programme
- Nursery & School Fluoride Varnish

Focus on vulnerable groups

Children:

- Looked After and Accommodated
- with Additional Support Needs (ASN)
- from Black and Minority Ethnic Groups
- with cleft-lip and palate
- with co-morbidities / multiple morbidities (inc. obesity)
- who have had dental extractions under GA
- from the most deprived communities (hotspots)

[McMahon et al 2017; PHE Vulnerable group inequalities strategy *In prep*]

Midstream – Community



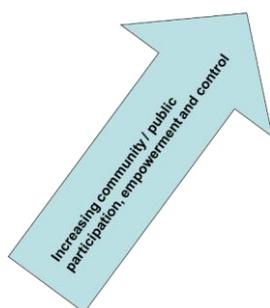
2. Refound community work

- Mitigate against impact of structural determinants
- Community-based approaches to influence:
 - living and working conditions
 - neighbourhoods
 - social capital
 - psychosocial factors



- **Community:**
 - Engagement
 - Development
 - -based Workforce
 - Third Sector Networks

Arnstein's Ladder of Citizen Participation



- Community control / leadership
- Delegated control
- Partnership / co-operation
- Participation
- Consultation
- Informed
- Placated / manipulated

[Arnstein, 1969]

Community Engagement

Meta-analysis: O'Mara-Eves et al (2013); and NICE (2016):

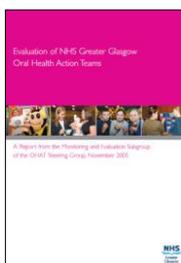
Community engagement interventions:

- **effective** across wide range of contexts & methods
- “important way to improve health, address social determinants of health and **reduce health inequalities**”
- ensuring local communities, community organisations and statutory services **work together** to design, deliver and evaluate initiatives considered good practice

Growing evidence base



Community Development



Possilpark Programme

- Level of participation:
 - Partnership and co-operation
- Multiple stakeholders across wide range of **community groups**
- **Co-production** of interventions across multiple community settings
- Associated with improvement in child oral health

[Blair et al, 2004]

Evidence Review of Interventions Implementation within community-based programmes

- At present, **evidence-base more difficult to generate** for public health interventions compared with clinical trials
- Many community interventions relating to child oral health are considered “**top down**”:
 - designed by health professionals
 - delivered by health professionals or in school setting
 - single activities
 - involve fluoride delivery
- Complex interventions and those involving community development / engagement approach:
 - **more limited evidence-base** / mostly demonstration projects / not recent

Community-based Support Workers

Evidence Reviews:

- Learning from our CS evaluation systematic reviews and NICE (2014) recommendations
- Features of 'peer' / lay health worker support associated with some level of effectiveness:
 - **targeting / tailoring**
 - **depth or "dose"** of support
 - a **"peer"** approach
 - **increasing empowerment, resilience, and self-efficacy**
 - **linking to community initiatives / services**
 - [eg food coops, parenting support groups, debt advice]

Third Sector

Utilise Existing Networks:

- **Charities** OSCR (charity regulator) [NGOs]

- **Voluntary**



- **Community groups / organisations**



- **Specific and local networks**
 - eg Everyone's Children

2. Next steps in the Community

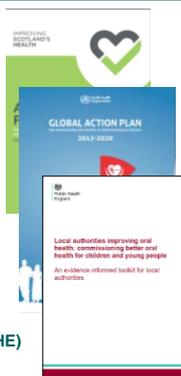
- **Integrate – community into OH; and OH into community**
- **Reach Out – to community-based staff / volunteers**
 - Provision of resources / evidence-based training / guidance
- **Tailor – interventions to sector, setting, age** 
- **Deliver multiple components**
 - **Local policy development**, fluoride delivery programmes, community / engagement development initiatives / **beyond OH**
- **Develop social prescribing** for community-based OH staff (inc. dental teams, DHSW) 
 - Trained to **assess needs** and circumstances
 - **Aware of local community** support services / groups / agencies
 - Enabled to **make links** to relevant programmes

Upstream – Policy



3. Influence policy, programmes

- **Scottish Government Obesity Strategy**
- UK SSB tax / other price policy
- **School Food / Snack Standards**
- **Sugar Reformulation (PHE)**
- Breastfeeding & Infant Feeding Programmes
- Eat Better, Start Better Programmes
- **NCD Agenda (WHO)**
- Healthy Start Programme
- Ante-natal Classes
- Universal Child Development Checks
- Early Years Settings
- **National Child Measurement / Surveillance**
- **OH programmes for vulnerable groups (PHE)**
- **Dental service policy / implementation**



4. Learning from elsewhere



Evaluation future direction

Childsmile Evaluation approach is a strength both in monitoring & developing programme and in assessing effectiveness

-> A case-study in preventive spend:

Next steps:

1. Big Data and Data Linkage
2. Economic evaluation
3. Community development and policy evaluation
4. Global collaborations



Opportunities



Conclusions

- In just over a decade:
- We* have gone from baby steps to taking strides in improving the oral health of children in Scotland
- We have begun to **move**:
from downstream -> midstream & upstream
- But, we now need to take **bolder steps** to reach the stepping stones to tackle health inequalities, via:
 - 1. optimise the existing programme
 - 2. refund community work
 - 3. influence policy
- And to succeed we'll need to go on this journey **in partnership** with many* locally, nationally, and internationally ...

* all of us involved in Childsmile



Team, collaborators, and funding

Childsmile Stakeholders:

- Scottish Government - Childsmile policy lead
- NHS Health Boards – public health / clinical teams
- Health Visitors
- Childsmile staff
- NHS Dental Services – practitioners and teams
- Local Authorities – nursery and school staff
- NHS Education for Scotland
- Families and children
- University of Glasgow



Childsmile Evaluation Research Team, Glasgow Dental School:
Lorna Macpherson, Alex McMahon, Yvonne Blair, Andrea Sherriff,
Wendy Gnich, Al Ross, Bill Wright, Steve Turner, Jess Brewster.
PG Students: Faith Hodgins, Mairi Young, Jacky Burns, Jamie Kidd,
Yulia Anopa, Ahmed Mahmood, Jenny Eaves.
[+Regional Researcher Team]



Collaborators:

University of Dundee, University of St Andrew's, UCL

Funding:

- Scottish Government



Panel Discussion

- Future Direction
- Comments?
- Thoughts?
- Questions?

