HOPSCOTCH – feasibility study
HPV Oral Prevalence in Scotland

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Head and neck cancer / oropharyngeal (throat) cancer on the rise ++

Smoking, alcohol, low SES, diet

Oral HPV [and sexual history]
25% HNC; 80% OPC

HPV-16

Junor et al. BMJ 2010
Background

US Oral HPV prevalence

7% in population-based study, ages 14-69

Risk factors:
• Age: 2 peaks (25 and 55yrs)
• Gender: M>F
• Smoking and alcohol
• Number of sexual partners
• Oral sex
• Open mouth kissing

Gillison et al JAMA 2012
Study Plan

• Population-based epidemiological study (n=5000):
  – Oral HPV prevalence, incidence, natural history
  – Assess risk factors
  – Assess impact of HPV vaccine

• **Scotland** ideal setting:
  – HPV vaccination programme (2008; ~90%)
  – Data linkage potential

• **Dental practice** settings potentially ideal:
  – Pts healthy, attend regularly, representative of whole population
  – Oral gargle / rinse specimen collection fits with practise of dentistry
  – Dental team role in prevention and early detection of OCC / OPC

• But, first we need to **test feasibility**…
Expert Team and grant funding

- David I Conway - oral cancer epidemiology
- Jeremy Bagg - oral microbiology
- Heather Gray - research project management
- Lucy Dunbar - research administration
- Lisa McDaid - sexual health
- Andy Winter
- Christine Campbell
- Kate Cuschieri - Scottish HPV Reference Lab
- Heather Cubie
- Kevin Pollock - HPV vaccination / surveillance
- Jan Clarkson - dental practice based research
- Linda Young
- Chris Robertson - infectious diseases epidemiology / biostatistics
- Sharon Keane - IT systems, data management
- Jonathan Gibb
- Jamie Rae - patient and public perspective
- Ewan Lumsden

Scottish Government CSO funding
RQ1  Is it feasible to recruit dental patients?  
What is the best method to recruit and follow-up?  
Can their full data be obtained?

RQ2  How practical is it to take and transfer oral rinse / gargle samples to the Scottish HPV Laboratory?  
How suitable are the samples for HPV detection?

RQ3  Is it possible to recruit General Dental Practices and dental teaching / outreach centres to participate in full population study?
7 dental settings recruited in feasibility study
- 4 General Dental Practices
- 2 Outreach Centres
- 1 Dental Hospital

2 Research approaches
- Dental care team led
- Research nurse led
Recruitment

November 2013 – December 2014
Methods

Oral Gargle / Rinse & Questionnaire

www.glasgow.ac.uk/hopscotch
Aims

To establish:

1. The **willingness** of dental practitioners in Scotland to take part in a future population study investigating the prevalence of oral HPV in Scotland.

2. The **suitability** of their practices for participation.
Methods

- Contacted NHS Services Scotland to request permission for & obtain list / emails of NHS Dentists in Scotland
  - ‘Cleaned’ the list: removed duplicates / locums

- Accessed list of Rapid Evaluation Practitioners via Scottish Dental Practice Based Research Network
Electronic Questionnaire

- Developed electronic questionnaire using Smart Survey™ software

- 1st e-mail sent 14th November 2014
  - 2 reminder e-mails
  - Survey closed on 15th December 2014
  - Prize draw £100 Waterstone’s voucher
HOPSCOTCH Dentist Survey

Response

- **3618** dental register entries
- **2243** dentists e-mailed
- **242** responses
- **240** respondents (11%)

- 1375 excluded (duplicates/locum dentist/no e-mail address)
- 2 excluded (duplicates)
HOPSCOTCH Dentist Survey

Interested?

All Respondents (n=240)

- Yes: 56%
- No: 26%
- Maybe: 18%

Q. Do you think you might be interested in taking part in the future population wide study?
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n=116 answered yes/ maybe from 103 practices
Q. How would you describe your practice?
HOPSCOTCH Dental Survey

Practice SIMD

Most Deprived

Least Deprived
HOPSCOTCH Dentist Survey

Practice Size

- Large (≥ 10)
- Med (4-9)
- Small (1-3)

No.s of patients / day

- 101-400
- 40-100
- < 40

Q. How many dentists work in this practice?

Q. Approx how many patients attend per day?
Q. How likely would you be to take part in the future population wide study when you take into account the different study approaches?
Payment Acceptability for Dental Team Approach

- 38% Strongly agree/agree
- 58% Neither agree/disagree
- 4% Strongly disagree/disagree

£2,000 to cover all costs recruitment, training and admin

Payment Acceptability for Research Nurse Approach

- 41% Strongly agree/agree
- 55% Neither agree/disagree
- 4% Strongly disagree/disagree

£600 to cover training and admin
Q. What do you perceive to be the main difficulties to you taking part in this research study, if any?
Q. If you would prefer **not** to take part in this future study, please provide your reason(s) for this.
HOPSCOTCH Dentist Survey

Advantages of Participating

Q. Please rate the following potential advantages of taking part in this research study?
From 103 interested practices
Suitable Practices n=41:

Private space

Patient nos. >40

For 5000 - would need to recruit 100-120 each

No preferences for recruitment model
But Research Nurse model seems most effective
Next steps

- Analysis, dissemination

- Further feasibility and cohort building grant application – young people

- Future population study

- ? European collaboration
Thank You

Dental Teams / Patients and Participants:

Tayside
• Kings Cross Health and Community Care Centre, Dundee
• Broxden Dental Centre, Perth
• Dental Care, Perth
• West End Dental Practice, Dundee

Glasgow
• Glasgow Dental Hospital and School
• Possilpark Dental Practice, Glasgow
• Hampden Dental Care, Glasgow

Funding:
• Scottish Government Chief Scientist Office