NIHR | Public Health Intervention Responsive Studies Teams

Quit rates associated with face-to-face versus telephone support in disadvantaged groups: a secondary analysis of Stop Smoking Service data

A PHIRST South Bank Evaluation

Professor Lynne Dawkins

The PHIRST Centres

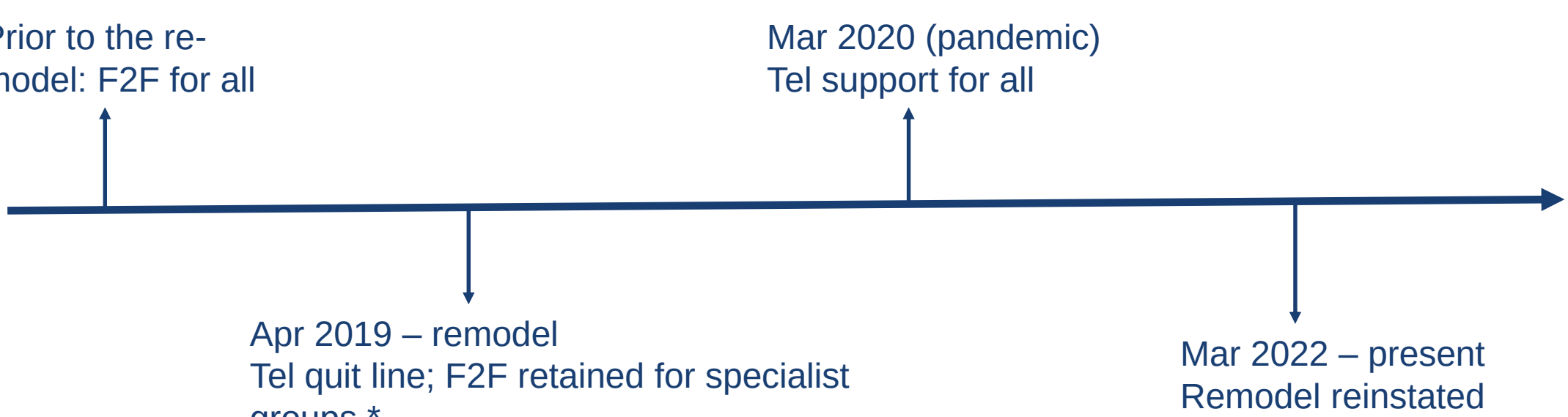
- **Public Health Intervention Responsive Studies Teams**
- **Purpose**: *“to co-produce and build capacity for public health research and evaluation at a local level as well as identifying intervention health impact and outcomes relevant locally and for learning across the public health profession"*

https://phirst.nihr.ac.uk

PHIRST South Bank

Background

Public Health:
Working together to improve the health and wellbeing of our communities



*Pregnant smokers, under 18s, those with a mental health condition, learning disability or long-term physical condition

Co-produced evaluation aims:

Overall evaluation question:

What is the effectiveness and acceptability of a telephone smoking cessation service compared with a face-to-face service?

Specific questions:

1. How effective is the telephone delivery compared to face-to-face delivery in terms of quit rates, uptake and reach?
2. Was the change to telephone delivery acceptable and accessible for service-users and providers; and what were their experiences?
3. How did the switch to telephone delivery affect specialist groups and those from the lowest quintiles of deprivation?
4. How can a smoking cessation service enhance engagement with underserved communities not routinely accessing the service?
5. Is the switch to a telephone delivery model cost-effective?

Co-produced evaluation aims:

Overall evaluation question:

What is the effectiveness and acceptability of a telephone smoking cessation service compared with a face-to-face service?

Specific questions:

1. **How effective is the telephone delivery compared to face-to-face delivery in terms of quit rates, uptake and reach?**
2. Was the change to telephone delivery acceptable and accessible for service-users and providers; and what were their experiences?
3. **How did the switch to telephone delivery affect specialist groups and those from the lowest quintiles of deprivation?**
4. How can a smoking cessation service enhance engagement with underserved communities not routinely accessing the service?
5. Is the switch to a telephone delivery model cost-effective?

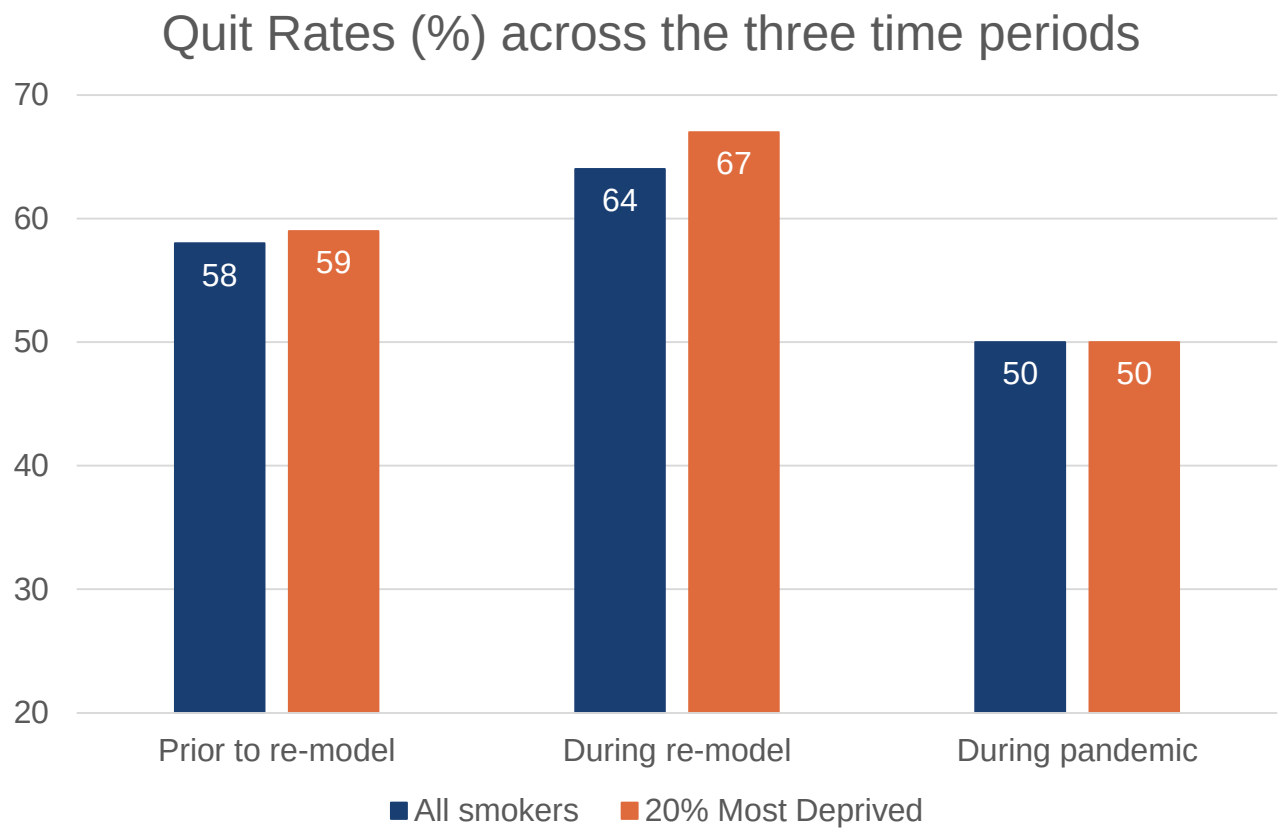
Work package 1 - Evaluation design:

Secondary analysis of SSS data from two sources:

- Quarterly return data (from 2017 to 2022)
- Individual level data (from Quit Manager) from Oct 2019 to Nov 2022

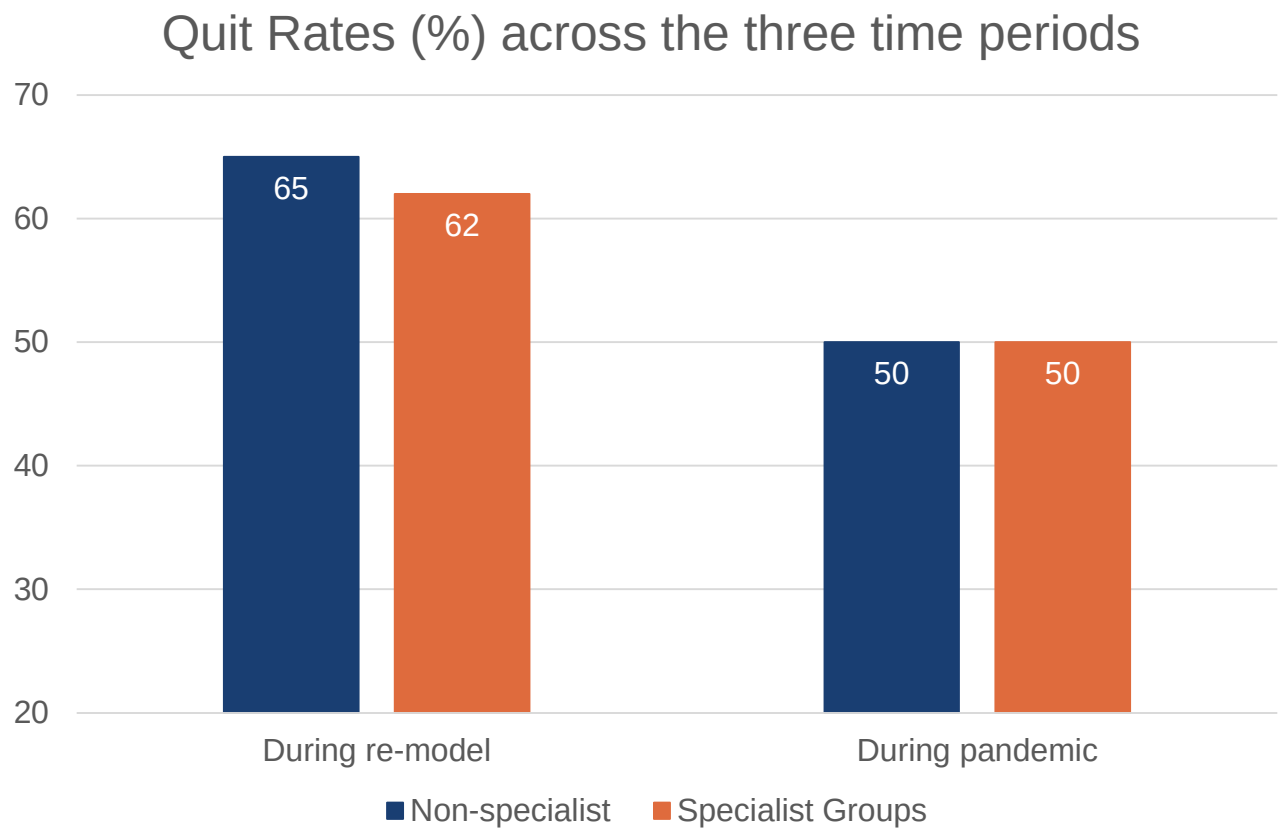
Quarterly Return Data - Findings

- Data covered three periods:
  - Prior to re-model (F2F for all; 2 yrs)
  - During the re-model (F2F – specialist groups, tel for all others; 1 yr)
  - During pandemic (tel for all; 2 yrs)
  - Total N=18,956



Quarterly Return Data - Findings

- Specialist vs. non-specialist groups
- Data available from 2019 – to date
- N = 9554



Conclusions:

- Quit rates were best during the re-model and worst during covid:
  - For all smokers
  - Specialist groups
  - 20% most deprived
- For non-specialist groups the reduction in quit rates cannot be explained by the switch to telephone support…

Challenges / Limitations:

- Confounds:
  - The pandemic!
  - No varenicline from 2021
  - Added incentives for providers to support long-term conditions during re-model.
- Imperfect alignment between three time periods and dates of quarterly report
- Changes in the way the quarterly return data are presented over the years

Individual Data - Findings

- Data from N = 8668 cases (registrations) receiving telephone support between Oct 2019 – Nov 2022
- 81% of registrations set at quit date
- Logistic mixed model to explore what factors predict odds of setting a quit date

Predictor	OR	CI	P value
MSOA quintile 2 vs 1	1.04	0.87-1.25	0.64
MSOA quintile 3 vs 1	**1.29**	**1.07-1.56**	**0.01**
MSOA quintile 4 vs 1	**1.27**	**1.04-1.55**	**0.02**
MSOA quintile 5 vs 1	1.09	0.89-1.33	0.40
Provider (Other vs. SSS)	**6.14**	**5.01-7.51**	**<0.001**
SIP	0.87	0.66-1.13	0.28
LT condition	**1.67**	**1.44-1.93**	**<0.001**
MH condition	1.06	0.84-1.33	0.64
Multiple conditions	0.85	0.62-1.16	0.31

MSOA quintile 1 = most deprived; quintile 5 – least deprived

Work done to date – WP1 Effectiveness - Findings

Analysis of individual data

- N = 6369 cases who set a quit date and had 4-wk quit status recorded
- LTFU = not quit
- Logistic mixed model to explore what factors predict quit success (@ 4-weeks)

Predictor	OR	CI	P value
MSOA quintile 2 vs 1	0.93	0.80-1.09	0.39
MSOA quintile 3 vs 1	1.02	0.87-1.20	0.78
MSOA quintile 4 vs 1	1.05	0.89-1.24	0.55
MSOA quintile 5 vs 1	**1.26**	**1.06-1.50**	**0.008**
Provider (Other vs. SSS)	**0.67**	**0.60-0.75**	**<0.001**
SIP	**0.68**	**0.52-0.91**	**0.008**
LT condition	1.07	0.95-1.21	0.26
MH condition	**0.75**	**0.62-0.92**	**0.006**
Multiple conditions	0.92	0.70-1.23	0.59

MSOA quintile 1 = most deprived; quintile 5 – least deprived

Conclusions:

For people receiving telephone support:

- Those with LT conditions, registering with GP/pharmacy and less deprived were more likely to set a quit date
- Pregnant smokers, those with a MH condition, registering with non-core SSS providers, and from the most deprived quintile were less likely to quit

Challenges / Limitations:

- Data only available since end of 2019 so focus only on telephone support
- Data quality:
  - Difficult to work out mode of delivery (F2F vs. tel support)
  - Many missing 4-wk quit status
  - Missing MSOA ranks
  - Inconsistencies between variables

NIHR | Public Health Intervention Responsive Studies Teams

Thank you from the PHIRST Team

https://phirst.nihr.ac.uk

Local Authorities can apply for PHIST support here:
https://www.nihr.ac.uk/funding/2361-phirst-la-evaluation-of-interventions-eoi/33115

Contributors: Claudia Civai, Thomas Mills, Elisa Lewis, Dan Frings, Susie Sykes, Ruth Dean

This evaluation was conducted by PHIRST South Bank and funded by the National Institute for Health and Care Research (NIHR; PHIRST South Bank Award ID NIHR131568 and Research Award ID NIHR135509). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.