



**Scotland's
health**

Health inequalities and healthy living programmes

Matt Lowther



Overview



A commentary on how healthy living programmes can effectively reach out to those most vulnerable and help (potentially) reduce health inequalities

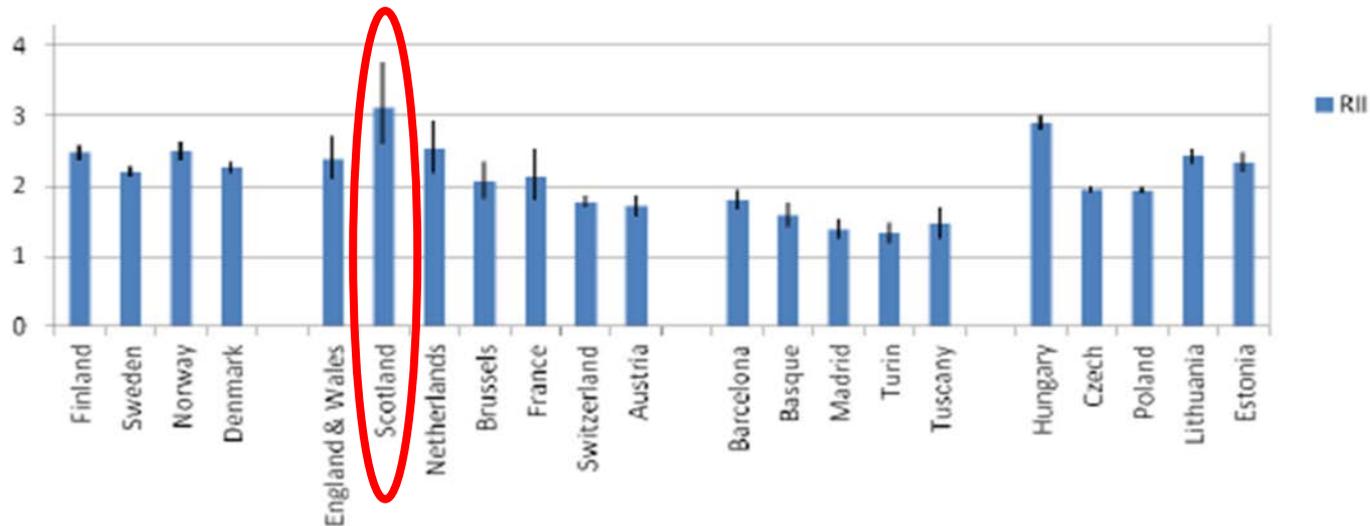


It isn't a review of their impact or effectiveness per se



Health Inequality

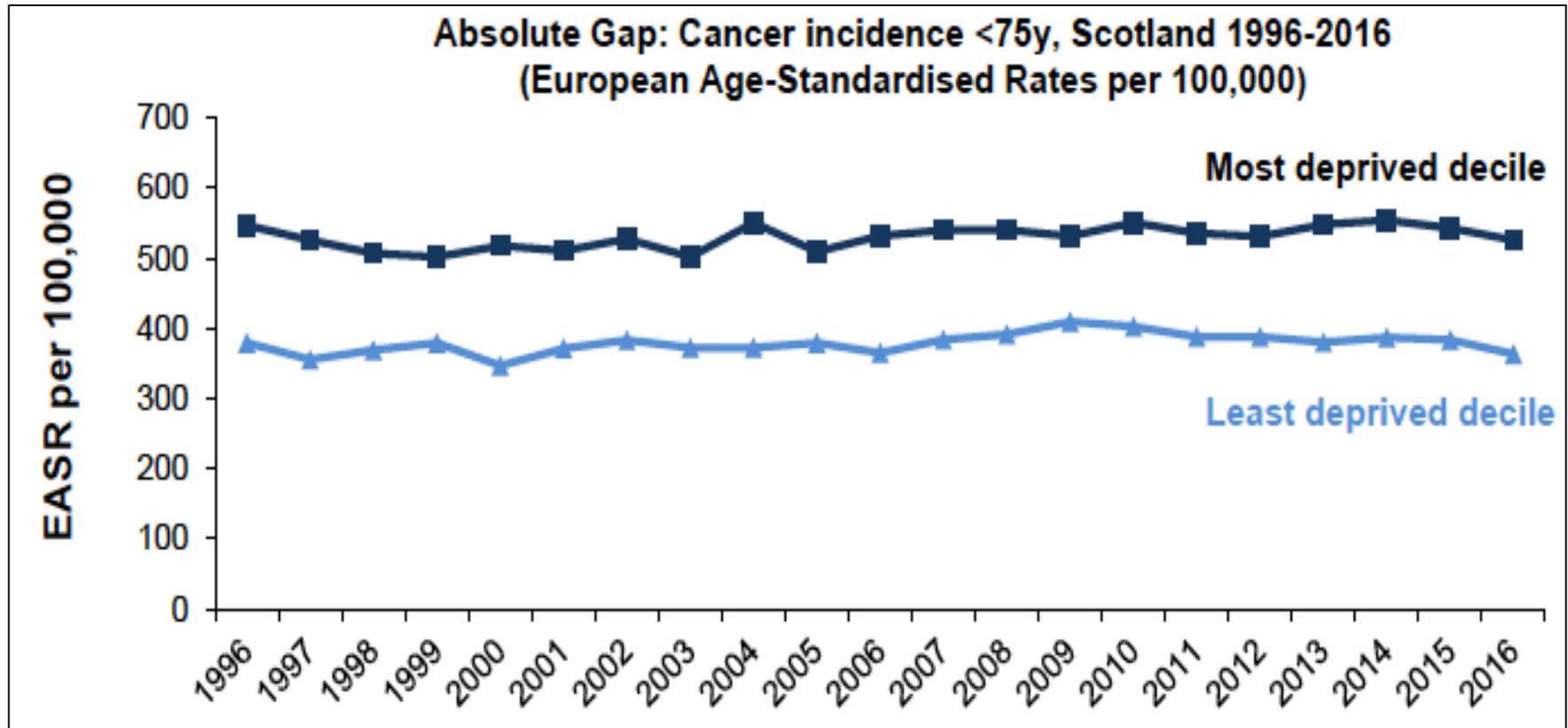
Education based Relative Index of Inequality (RII) for all-cause mortality, females 30-74 years, early to mid 2000s



Source: Eikemo T.A. & Mackenbach J.P. (Eds). EURO GBD SE: the potential for reduction of health inequalities in Europe. Final Report. University Medical Center Rotterdam, 2012



Cancer Inequality



Scottish Government Long-term Monitoring of Health Inequalities, December 2018 report



Reducing health inequality

More likely to be effective

- ✓ Structural changes in the environment
- ✓ Legislative and regulatory controls
- ✓ Fiscal policies
- ✓ Income support
- ✓ Reducing price barriers
- ✓ Improving accessibility of services
- ✓ Prioritising disadvantaged groups
- ✓ Offering intensive support
- ✓ Starting young

Less likely to be effective (and potentially widen)

- ✗ Information based campaigns
- ✗ Written materials
- ✗ Campaigns reliant on people taking the initiative to opt in
- ✗ Campaigns/messages designed for the whole population
- ✗ Whole school health education approaches
- ✗ Approaches which involve significant price or other barriers
- ✗ Housing or regeneration programmes that raise housing costs

Macintyre S 2007; Inequalities in Health in Scotland. MRC Social and Public Health Sciences Unit Glasgow



Risk of HLP widening inequality

A dental health education project in Scotland widened health inequalities in dental health because it was more successful among higher SES groups.

(Schou L, Wight C. Mothers' educational level, dental health behaviours and response to a dental health campaign in relation to their 5 year old children's caries experience. Health Bulletin 1994;52:232-239)

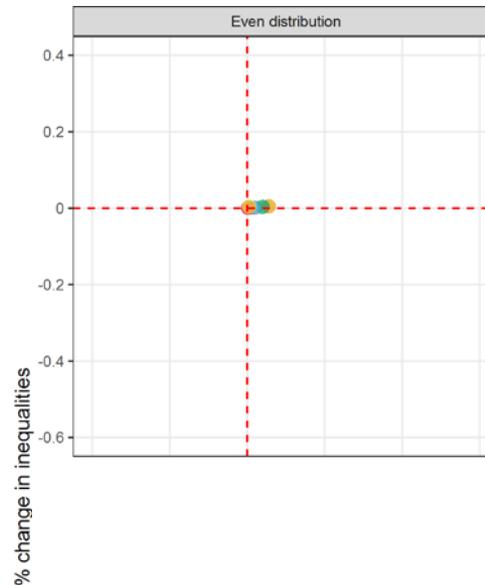
A mass media campaign intended to reduce socio-economic differences in women's use of folic acid to prevent neural defects resulted in more marked social class differences in use than before the campaign.

(de Walle H, van der Pal K, de Jong-van den Berg L, Jeeninga W, Schouten J, de Rover C, et al. Effect of mass media campaign to reduce socioeconomic differences in women's awareness and behaviour concerning use of folic acid: cross sectional study. British Medical Journal 1999;319:291-29)



Proportionate Universalism (targeting)

Modelling the impact of different targeting strategies for health improvement interventions on hospitalisations over five years; £1m investment



- Alcohol Brief Intervention
- Computerised CBT for depression
- Group physical activity for depression
- Individual guided self-help for depression
- Lifestyle weight management services
- Smoking cessation services

% hospitalisations prevented



Have a Heart Paisley and Keep Well:

- both very effective at engaging with key audiences (those at risk of preventable disease)
- however both reported higher *rates* of engagement amongst the least deprived
- so if your population at risk is equally spread across the deprivation categories HI will increase because the least deprived will respond better

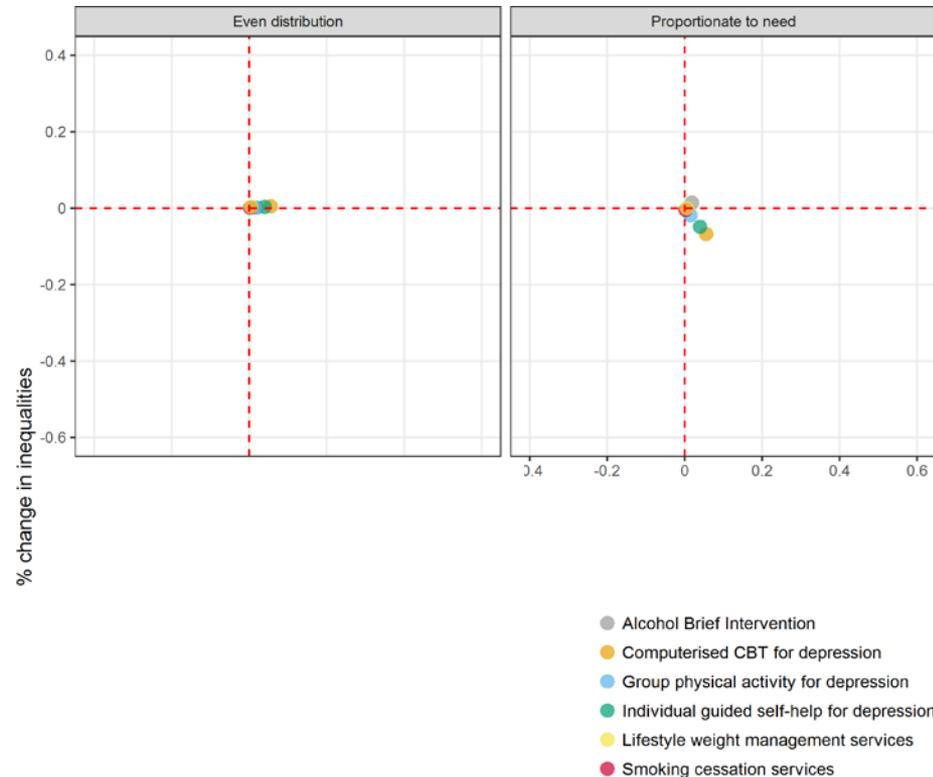
Sridharan S et al 2008. Learning from the independent evaluation of HAHP Phase 2. University of Edinburgh:

Mackenzie M et al 2011. National Evaluation of Keep Well. The University of Glasgow, University of Edinburgh



Proportionate Universalism (targeting)

Modelling the impact of different targeting strategies for health improvement interventions on hospitalisations over five years; £1m investment



% hospitalisations prevented

Facilitating engagement and uptake



Public Health England

Protecting and improving the nation's health

Top tips for increasing the uptake of NHS Health Checks



1. Use the national template invitation
Increase uptake using this behaviourally informed (download here). In Medway and Southwark community health centres, the template is simplified and uses a tear off slip (commitment) relative 13 to 27 per cent.



2. Text message primers and reminders
Use primers and reminder text messages (prior to an appointment for their NHS Health Check). *In* by 12 percentage points, and cost £3.70 per appointment and at no extra cost where providers are using their own system.



3. Computer prompts to clinical staff
Prompts on GP IT systems increased uptake by 12%. Prompts remind clinical staff to invite eligible patients for a Health Check in a timely manner. Since many GPs add prompts, no/minimal additional costs are required.



4. Behaviourally informed messaging
Behaviourally informed messaging increased uptake in Northamptonshire by a relative 12 to 15% compared to the national template letter (simplification). These had no extra costs; however, if used in conjunction with leaflets or inserts alongside the invitation for effectiveness.

Myth Busting: Letters which address excuses for not attending the NHS' and offer counter arguments 'Your GP is busy' or 'You're too busy' for NHS Health Check, as it can help prevent you from making excuses which will take up more NHS resources.



5. Targeted telephone outreach

Telephone outreach is both labour and time intensive. It is targeted at groups at high risk of cardiovascular disease. The patient is contacted over the phone, the patient is invited to a GP surgery (commitment). It is completed part of their check over the phone.

Costs: Letters that highlighted the cost already set aside funding to pay for your outreach.



6. Using GP TV

While using promotional videos can be effective, evidence on their impact on Salford, a promotional video, which content of the NHS Health Check and its benefits, surgery waiting rooms did not change their behaviour.



7. Evaluate and adapt

Make the most of your resources by using new ideas, and evaluating programmes to find out what works and what doesn't.



8. Network

Join PHE's webinars to share and learn from others. Connecting with local academics will help you to improve your practice.

Evidence roundup: applying behavioural science to NHS Health Check take up

This document suggests innovative approaches to increasing uptake. Some of these techniques have been previously trialled. Some suggestions for innovative ways to improve program effectiveness are important to identify best practices.

Prompts

Prompt people when they are likely to be most receptive to clinical staff at a GP surgery. Behavioural literature suggests that people are influenced by the context they are in, so they may be more likely to attend when they already have their physical well-being on their mind. Notifying individuals of the arrival of a letter can help them remember to attend. Events, such as an invitation to an NHS Health Check, can be used to prompt intentions and behaviour, a solution is to help people

Salience

Salient, attractive, and novel place these behaviours. We unconsciously draw our attention.² These are the behaviours that are recommended that these signs are more salient. However, a lesson learned is that even if it is salient, it may not be evaluated.

Default

Research has shown that we have a tendency to go with the default. For example, most mobile phone numbers are 11 digits long, and newsletter subscriptions are often pre-ticked. A body of literature demonstrates that when default enrolment in retirement savings is high, retirement rates are high.^{4,5} Defaults could be applied to NHS Health Checks.

Simplification

Clear, simple messages often very useful to identify how complex a task is. A trial in Northamptonshire demonstrated that a Health Check, such as NHS Health Check, can do about their family history of cardiovascular disease.

Commitment

We have a powerful desire to maintain consistency with their public commitments. Participants to publically sign control group to 81% in the intervention group. A slip on the bottom of the NHS Health Check, write down the date and time of the check, or another form of commitment, as well as a reminder on the phone, they are more likely to continue the check at the GP surgery.

Social norms

Using feedback messages about social norms. Using an RCT, PHE's Behavioural Science team provided feedback (80% of practices in [NHS Area]) about the number of eligible patients that 'people like you' had attended.

Ease access

Most individuals want to adhere to a desired behaviour (eg attending an NHS Health Check) but don't want to put effort into achieving it.¹¹ Making it simple for people to comply can help to increase action. For example, Pharmacies, which have more flexible opening times and more convenient locations, could reduce obstacles to attending appointments during standard work hours.

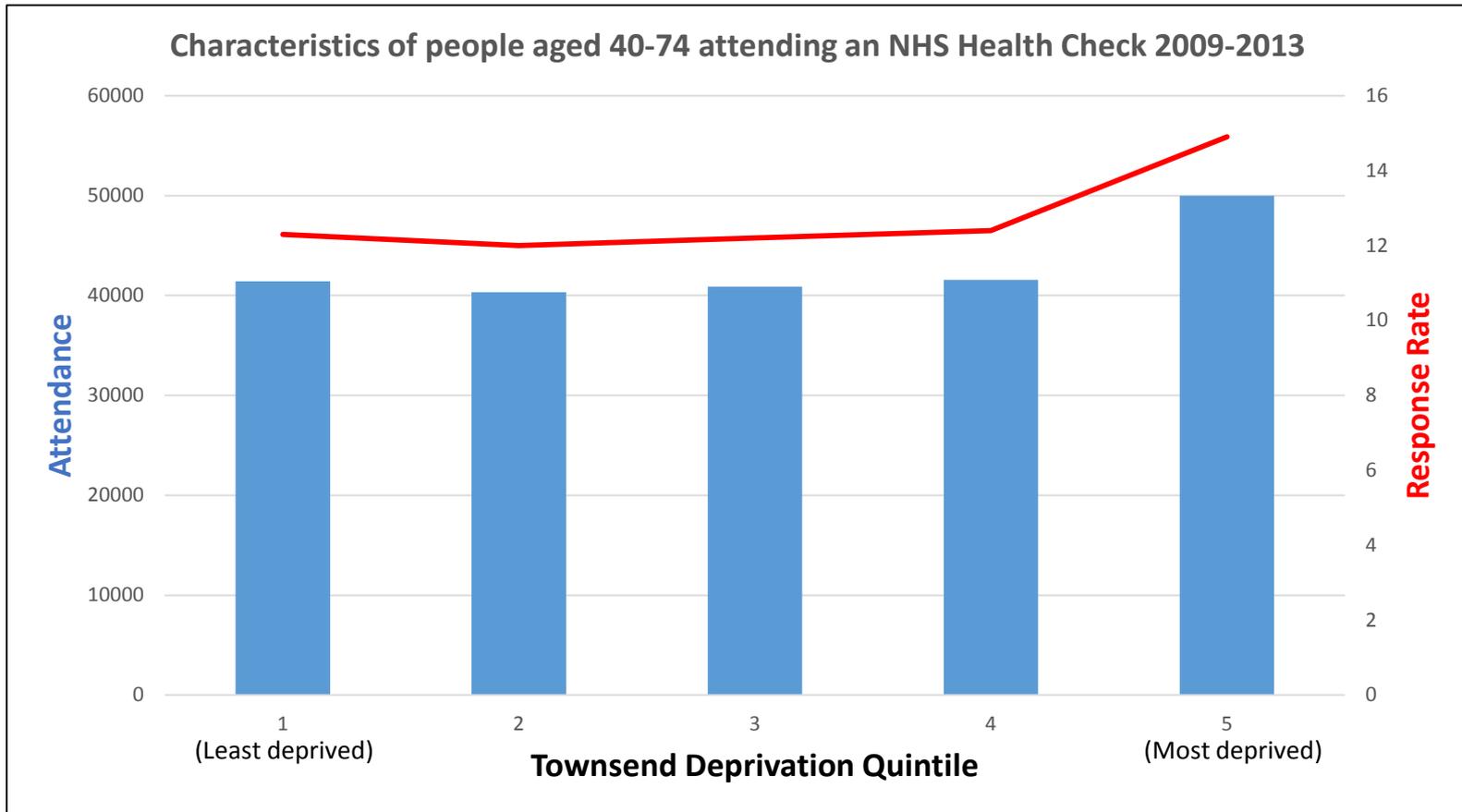
References

- ¹ The Behavioural Insights Team (2014). EAST: Four Simple Ways to Apply Behavioural Insights. London: Behavioural Insights.
- ² Kahneman and Thaler (2008) Anomalies: Utility Maximisation and Experienced Utility. *Journal of Economic Perspectives* 20(1):221-234.
- ³ The Behavioural Insights Team (2014). EAST: Four Simple Ways to Apply Behavioural Insights. London: Behavioural Insights.
- ⁴ Choi JJ, D Laibson, B Madrian, A Metrick (2004). "For better or for worse: default effects and 401(k) savings behaviour", in *Perspectives in the Economics of Aging* (ed. David Wise), University of Chicago Press.
- ⁵ Benartzi S, RH Thaler (2004). "Save more tomorrow: using behavioural economics to increase employee saving", *Journal of Political Economy*. 112(1):S164-S187.
- ⁶ The Behavioural Insights Team (2014). EAST: Four Simple Ways to Apply Behavioural Insights. London: Behavioural Insights.
- ⁷ The Behavioural Insights Team (2014). EAST: Four Simple Ways to Apply Behavioural Insights. London: Behavioural Insights.
- ⁸ Williams, B.R., Bezner, J., Chesbro, S.B. and Leavitt, R., 2005. The effect of a behavioral contract on adherence to a walking program in postmenopausal African American women. *Topics in Geriatric Rehabilitation*, 21(4), pp.332-342.
- ⁹ The Behavioural Insights Team (2014). EAST: Four Simple Ways to Apply Behavioural Insights. London: Behavioural Insights.
- ¹⁰ Hallsworth, M., Chaborn, T., Sallis, A., Sanders, M., Berry, D., Greaves, F., Clements, L. and Davies, S.C., 2016. Provision of social norm feedback to high prescribers of antibiotics in general practice: a pragmatic national randomised controlled trial. *The Lancet*.
- ¹¹ Gilson, N., Straker, L., & Parry, S. (2012). Occupational sitting: practitioner perceptions of health risks, intervention strategies and influences. *Health Promotion Journal of Australia*, 23(3), 208-212.

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NHS Health Checks (England)



(Robson J, Dostal I, Sheikh A, et al. The NHS Health Check in England: an evaluation of the first 4 years. BMJ Open 2016;6: e008840. oi:10.1136/bmjopen-2015-008840)



Some Scottish examples of effective engagement strategies

1. Invest in specially trained staff/services tailored to the needs of most deprived
2. Targeting through institutions
3. Work with the voluntary sector



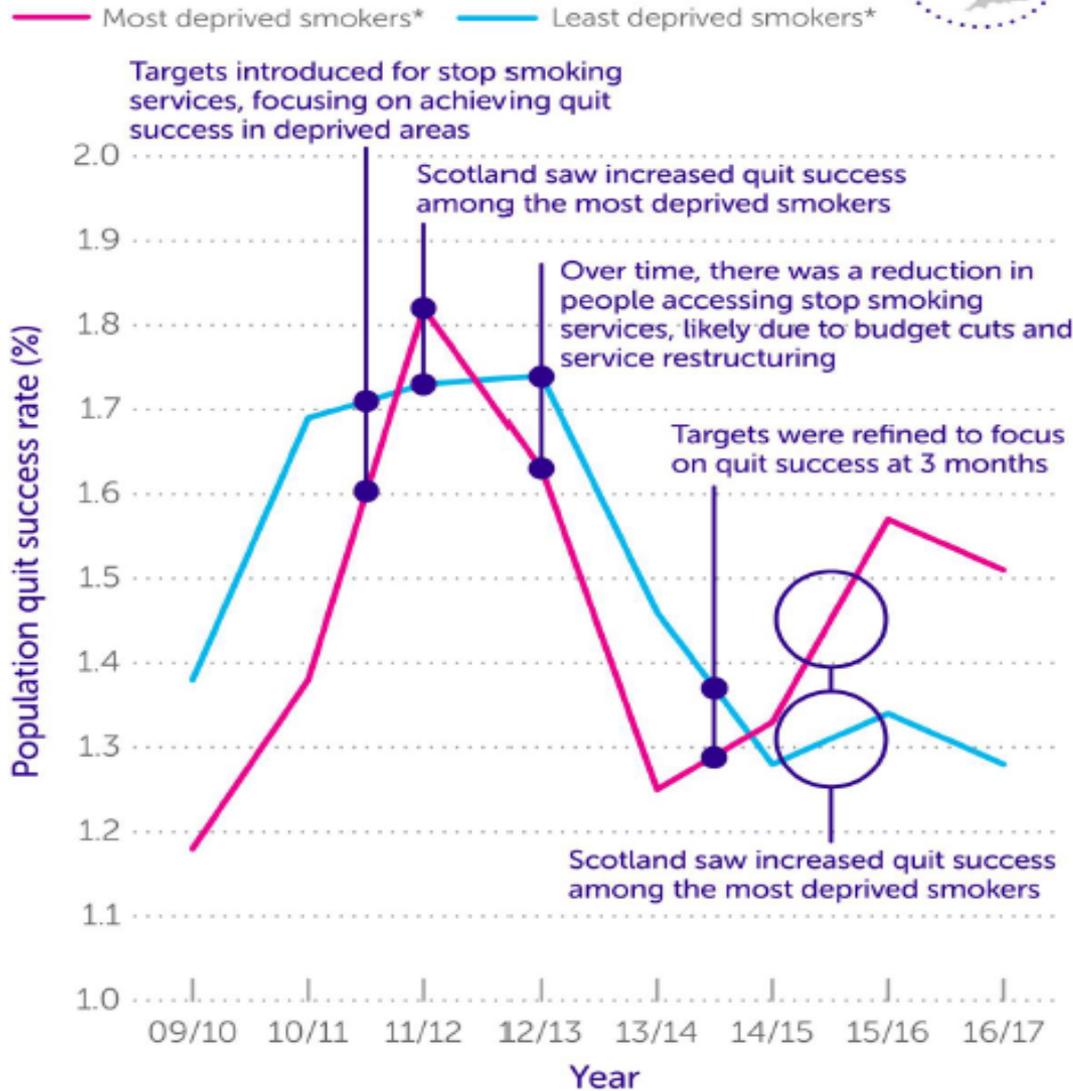


1. Invest in specially trained staff/services tailored to the needs of most deprived

- Tailored GP invitation letter
- Use of outreach workers and mobile cessation services delivering services in communities
- Provide tailored service provision in order to achieve same outcomes as more advantaged smokers (e.g. incentives, tailored support matched to literacy levels)

(Caroline Smith, Sarah Hill, and Amanda Amos (2018) Stop Smoking Inequalities: A systematic review of socioeconomic inequalities in experiences of smoking cessation interventions in the UK. Cancer Research UK.)

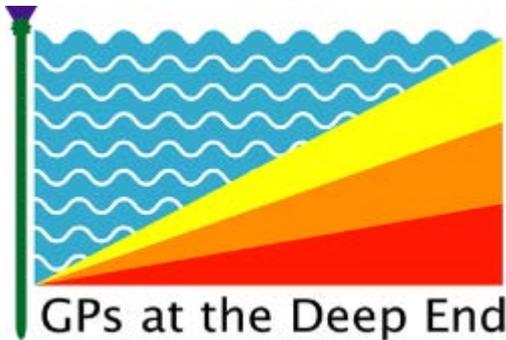
SCOTLAND HAS HAD SUCCESS IN REDUCING INEQUALITIES IN SMOKING



Population quit success rate at 3 months for least deprived and most deprived groups

*Deprivation defined using Indices of Multiple Deprivation quintiles.

Caroline Smith, Sarah Hill, and Amanda Amos (2018)
Stop Smoking Inequalities: A systematic review of socioeconomic inequalities in experiences of smoking cessation interventions in the UK.
 Cancer Research UK.

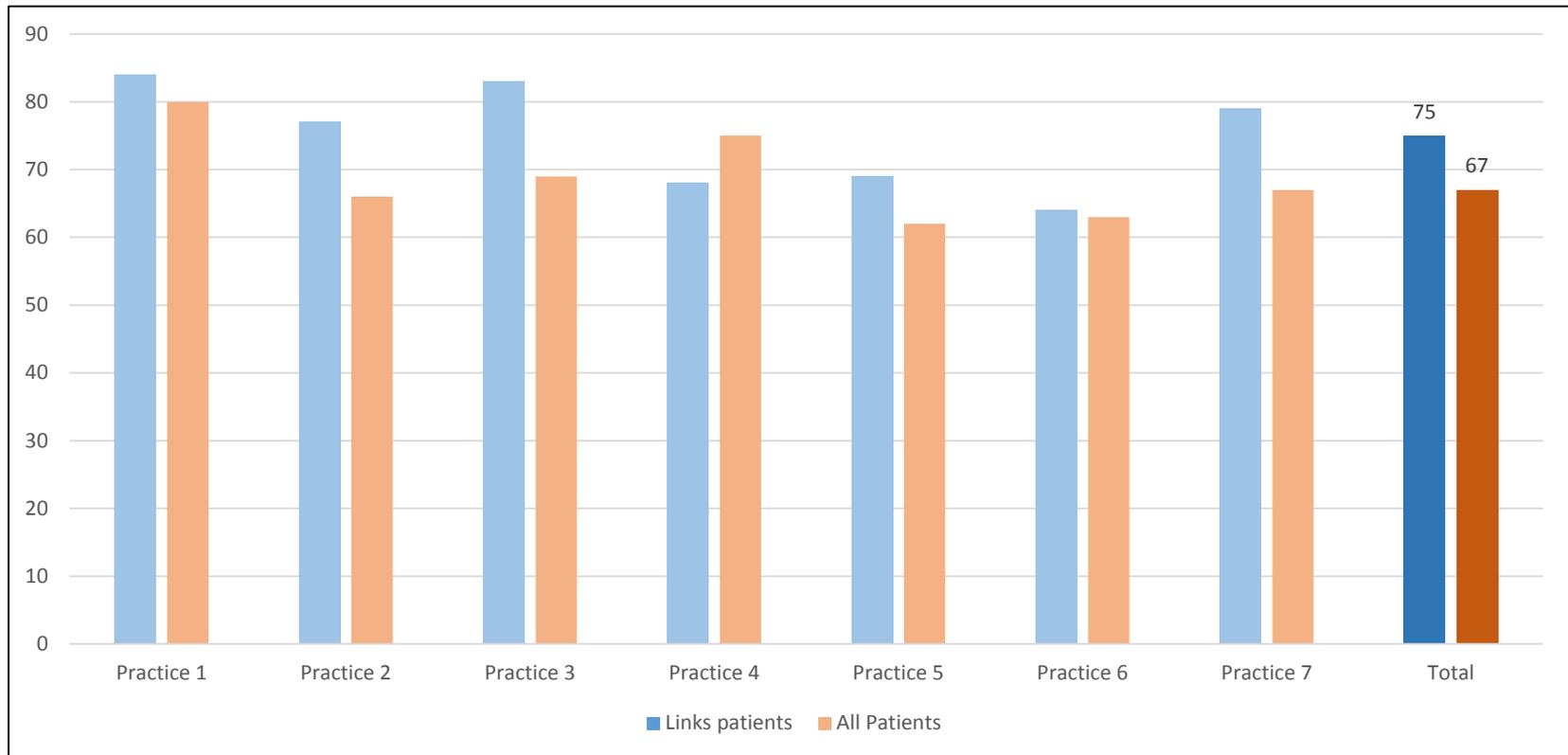


Community Link Practitioners (CLPs) in 'Deep End' Practices

- Partnership between the H+SC Alliance and GP Deep End Practices
- GPs use specially trained staff to link patients with very complex needs to local community resources to help them live well in their communities
- Programme evaluated in 2017 (7 intervention practices, 8 control practices)



Comparison of Deprivation Level of Patients Referred to a CLP with All Registered Patients by Practice (% of patients living in the 15% most deprived areas of Scotland)



(Mercer S et al 2017. Evaluation of the Glasgow 'Deep End' Links Worker Programme. NHS Health Scotland)



Physical Activity

- Trained clinical staff to improve recruitment to an exercise intervention during breast cancer treatment
- Reported successful recruitment of harder to reach



(Anna M. Campbell, Fiona Whyte, Nanette Mutrie. Clinical Effectiveness in Nursing (2005) 9, 211–213)



2. Targeted programmes (institutions)





- Smoking rates in prisons are much higher than they are outside
- The imprisoned population of Scotland comes disproportionately from the most deprived communities
(Houchin et al, 2005. Social exclusion and imprisonment in Scotland. Glasgow Caledonian University)
- Good way to target by condition and by deprivation
- Smoke free prisons came into force in November 2018

Smoke-free prisons pathway:

A service specification supporting people in our care

November 2018





- A national programme to improve oral health and reduce inequalities
- Combines universal and targeted approaches through 4 programmes (Core, Practice, Nursery and School)
- Carried out through a network of primary care dental service providers, health visitors and dental health support workers
- Additional support is given to children and families most in need through home visits, community initiatives and primary care dental services





Childsmile national headline data (2017/2018)

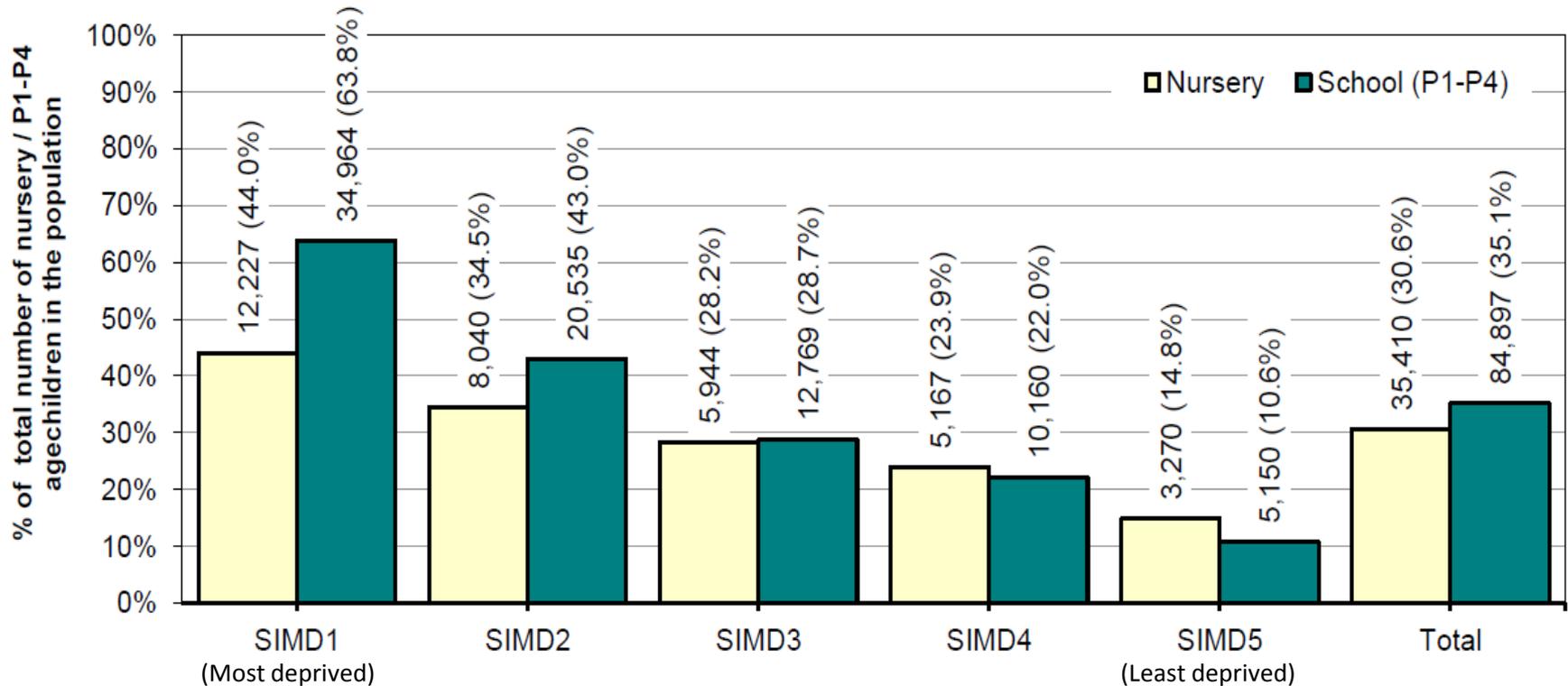
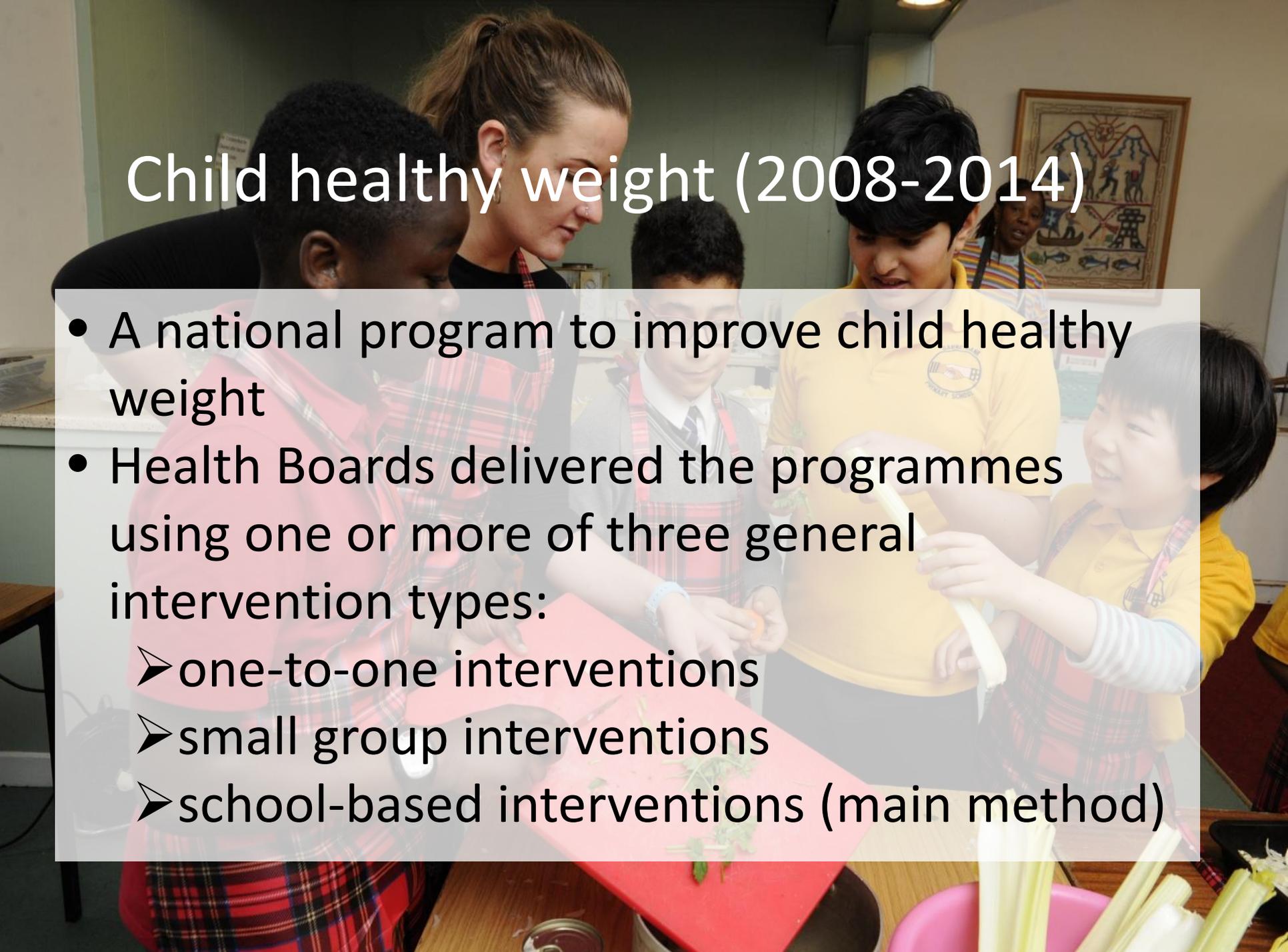


Figure 12: Proportion of population of nursery (3-4 year olds) and P1-P4 children receiving at least one FVA, by national SIMD – Scotland, 2017/2018 academic year

(Childsmile National Headline Data 2018. University of Glasgow, University of Dundee)

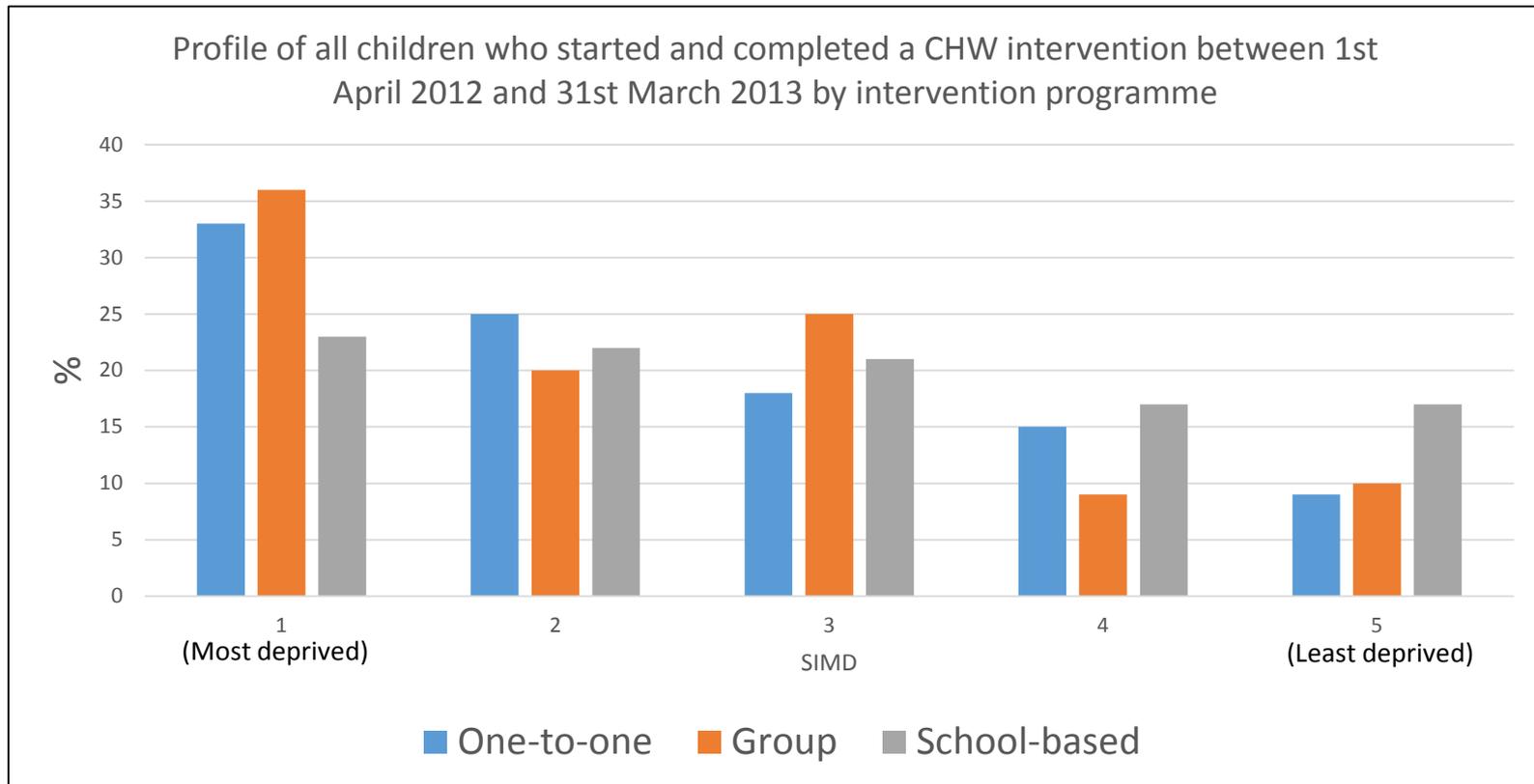
Child healthy weight (2008-2014)



- A national program to improve child healthy weight
- Health Boards delivered the programmes using one or more of three general intervention types:
 - one-to-one interventions
 - small group interventions
 - school-based interventions (main method)



Evaluation of the CHW programme



Evaluation of the Child Healthy Weight Programme: Final Report October 2013, 1ScotCen Social Research 2 Centre for Research in Primary and Community Care, University of Hertfordshire



3. Work with the third sector

- Link worker programme
- Move More Scotland is part of Macmillan Cancer Support's national campaign to ensure that people living with cancer are supported to become physically active, both before, during and after their treatment
- Provides tailored, one-to-one behaviour change support
- Very successful way of engaging with target group

(Moreton R et al, 2018. Evaluation of the Macmillan Physical Activity Behaviour Change Care Pathway. CFE Research)



Conclusions

- Reducing health inequality is a national priority
- Front line NHS staff and HLP can engage effectively with ‘hard to reach’ populations and therefore can help in the efforts to reduce health inequalities
- Effective targeting is critical
- However just targeting those at risk won’t necessarily reduce health inequalities and may actually increase them because the least deprived respond better
- So we need to target those at risk but ensure we do so in a way that has equal outcomes for all



Thank you

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