

Prevention: Implementation of Interventions for Underserved Populations

Dr Paul Doody Dr Lauren Bandy

NUFFIELD DEPARTMENT OF **PRIMARY CARE** HEALTH SCIENCES **NIHR** Applied Research Collaboration Oxford and Thames Valley



From the Department of Health to the Local Authority in Oxfordshire: Evaluating the impact of healthy eating interventions across the food system

Lauren Bandy, ARC Theme 1

Rachel Pechey, Pete Scarborough, Susan Jebb and Paul Aveyard

Our previous research has looked at evaluations of national policies

Soft Drink Industry Levy



Volume sales of sugar from soft drinks declined by 30% from 2015 to 2018¹

Sugar reduction targets



Volume sales of sugar from foods declined only by 5% over the same time period²

Salt reduction targets



Only 54% of menu items of the top 20 restaurants meet the current salt reduction targets³





What about small, independent businesses?

50% of revenue from eating out is from food bought from small restaurants

Link with inequalities:

- The most-deprived areas in England contain 5-times more fast food outlets compared to the most-affluent areas
- More frequent takeaway consumption during childhood and adolescence is associated with long-term adverse effects on obesity and cardiovascular disease

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Data source: Food Standards Agency, Food Hygiene Rating Scheme ONS mid-year population estimates 2016

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What about Oxford?

9 neighbourhoods are amongst 20% most deprived in England

25% adults suffer from hypertension and the under 75 mortality rate is higher then the regional average at 65 per 100,000

127 fast food outlets with 60% located in the east of the city where levels of deprivation are higher



Tackle inequalities

OXCC have committed to 'using research, best practice and local insight to work with local communities and target support to the areas of greatest need, including through shaping healthy places, prevention and early intervention actions'





Two areas of (potential) research

Stream 1: Salt reduction (PHIND application under review)

- OHID's salt reduction targets are applicable to all businesses but not monitored or communicated
- Co-development of a salt reduction intervention for small, fast food restaurants in Oxford

Stream 2: Outdoor advertising and school exclusion zones

- Prioritisation process for past 2 years
- Focus on two policies:
 - 1. Outdoor advertising restrictions
 - 2. School exclusion zones
- Collaboration for evaluation including funding application for latest NIHR PHR programme call



Prioritisation of actions

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Questions and opportunities

Systematic review into interventions to improve food purchasing behaviour carried out in small business settings

Out of home food sector working group (PH teams, planning, trading standards, environmental health)

- 1. How can we work together with PH teams in OxTV to improve their policy prioritisation process?
 - No review or repository of existing local authority policies to change the food environment
- 2. What data is available for evaluating the potential outdoor advertising ban and school exclusion zones and how can we work together to evaluate these policies?
- 3. What are the next steps to implementation?





References

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- 3. Research protocol: Assessing the healthiness of restaurant foods in the UK in 2022: A crosssectional study. Bandy 2022, <u>https://osf.io/a3jm5/</u>
- 4. Oxfordshire Strategic Plan 2022-2025. https://www.oxfordshire.gov.uk/sites/default/files/file/aboutcouncil/OCCStrategicPlan2022.pdf







Digital Health: The NHS app

Dr Claire Reidy









Patient and NHS staff perspectives of digital inequalities in the national rollout of the NHS App in general practice

Dr Claire Reidy, Health Services Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford, UK

Core Project team:

Qualitative lead: Dr Chrysanthi Papoutsi, Associate Professor (Oxford), Principal Investigators: Dr Felix Greaves (Imperial College London, NICE) and Professor John Powell (Oxford, NICE)

Lead PPI representative: Dr Bernard Gudgin

Quantitative team: Dr Céire Costelloe, Dr Anthony Laverty, Ms Sukriti KC (Imperial College London)

Wider research collaborators: Dr Nikki Patel (NHS England), Professors Ara Darzi and Azeem Majeed (Imperial), Professor Ian Maconochie (Imperial College Healthcare NHS Trust), Mr Joshua Symons (NHS Digital and Imperial) Funded by the National Institute for Health Research (NIHR) Health Services and Delivery Research (HSDR) programme





What is the NHS App?









NHS App features

- 1) Symptom checking
- 2) Patient record access
- 3) GP appointment booking
- 4) Repeat prescriptions online
 - 4a) and view, set or change nominated pharmacy,
- 5) Set **data sharing preferences** for the national data
- 6) Set organ donation preferences
- 7) Covid pass
- 8) Access the **Health A to Z** on the NHS website for health advice
- 9) Proxy access

Additional services...

1) Messaging the GP surgery

2) **Consulting** health professionals through an **online form (e.g. econsult) or video call**

3) **Viewing links** shared by a health professional

4) NHS **e-Referral** Service (e-RS) – to manage first hospital or clinic appointment

Access is now available for anyone **aged 13 or over** and registered with a GP practice **in England**





NHS App background

NHS England's **goals** for the App are to:

- 1) Improve **access** to primary care services
- 2) Improve patient experience
- 3) Save time in GP practices
- 4) Promote self-care



Secure access 24 hours a day

Access a range of NHS services anytime, anywhere Check your symptoms Search trusted information on conditions and get

instant advice



Book appointments Search for, book and cancel appointments at your GP surgery



View your medical record Get secure access to your GP medical record







Qualitative research questions

- 1. How and why do **patients and carers** use (or not use) the NHS App?
 - Experiences of healthcare staff
- 3. Background work and ongoing adaptations
- 4. Role of commissioning groups and National Health Service (NHS) delivery/ development iceans
- 5. Implications for access, efficiency, safety and overall experience
- 6. Transferable learning





Study design

- Formative to feed into development and integration efforts, followed by summative analysis.
- Comparative case study design 4
 GP practices across England.
- Patients (users and non-users), carers and members of the public, NHS staff, commissioners, NHS delivery teams, policy makers, industry

Data collection

- N=83 (June 2021 July 2022)
 - Semi-structured interviews (all participants n=59)
 - Think aloud interviews (NHS App users n=4)
 - Focus groups (patients, carers n=22)
- **53 hours of ethnographic observations** (in practices)
- Field notes (notes, photos, videos, screenshots)





Data analysis

Using the NASSS framework (non-adoption, abandonment, scale-up, spread, sustainability)

Greenhalgh et al. (2017)



Note: Adapted from Greenhalgh T, et al. 'Beyond adoption: a new framework for theorizing and evaluating nonadoption, abandonment, and challenges to the scale-up, spread, and sustainability of health and care technologies'.¹

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Case study site 4: Location: North

Urban/rural: Urban

groups



Case study sites

Case study site 1: Location: South East Region Urban/rural: Urban Population served: Mixed ethnic population Patient population size: 18,000

Level of depriva Case study site 2:

Location: East Midlands Urban/rural: Rural Population served: Mostly white British Patient population size: 13,000 Level of deprivation: Relatively deprived area

> Location: North West Urban/rural: Urban Population served: Majority south Asian Patient population size: 11,000 Level of deprivation: Very deprived area



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(3) Medicestay 13 October 2023 18 46 UK





Important cultural considerations

Language barriers

(Ir)relevant features – e.g. symptom checking - less relevant for nonwhite skin "one thing is, if you type something, can you get your feelings across...when **I'm thinking my feelings in Punjabi but I'm having to put them in [English]**... if you're face to face you can say that, something is going on, it's here [gesturing to chest]..." (P24, Site 4, Female, 65, British Indian)

"I had these big black marks that came up on my foot...they were all big and lumpy, and purple and they ask you questions and then they ask you what colour they look like, and the colours that they've got, I can't see that on my skin, it's just little things like that, that ...make you feel like you're 'other' and you're not involved, and they're not really taking your care and consideration into account." (P25, Site 4, Female, 52, Black Caribbean)





Important cultural considerations

Concern around moving away from face-to-face interactions

face-to-face interactions and engagement required to build trust

"I think culturally some of them [patients] are **older African or Caribbean or older Asian patients also prefer to come in and see someone...To discuss things** and I don't think they feel as comfortable with technology...[it's] undermining of that long term relationship [to] not support to try and build that... you know, NHS App and different ways to access are important and useful but we're **concerned that they've not considered the long terms implications of that...On that relationship,** yeah." (SS27, Site 4, Practice Manager)

...our patient population... patients ...who have darker skin and like skin conditions... the NHS information that was sent back to them said if your skin turns red or purple and stuff and they actually don't think it relates to them...So I then think they get less trustful of using the digital means because they want somebody to come in to see what it is that they've got... "you need to come and touch me, how can you make that decision". So I think it's changing that slowly ... because literally two years ago...[the technology] didn't exist." (SS30, Site 4, Salaried GP)

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Disparities around access

- Registering or access difficult for some
- Can create disparities where someone doesn't have the means to "beat/play the system"
- Social networks (e.g. family members, neighbours, community groups) can support access

"do I have to do that again, something new...For me, I am old school...Oh my god I have to go on this." (P24, Site 4, 62, Female, British Indian) "...a lot of people still don't realise that ...you can check for an appointment, check ten times a day if you want to...you get a cancellation... but it is a bit discriminating against people who could end up waiting a very long time." (R5, Long covid

"We got the app on... we've managed him to have an iPhone... we've shown him how he can order you know... you can hang on for half an hour in a queue and so he either sits there on the phone or he comes to the surgery and has to queue outside there or it's just easier for him to sit in his own living room and click a button and he can order his repeat prescription." (R6, Long covid focus group)

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Empowering patients

- Some patients consider the app as enabling them to;
 keep the health service "in check"
 - promoting selfmanagement and patient empowerment
 - empowering those who are unable to attend the GP surgery

"...if I hadn't had the access to see all of that I'd still be waiting for somebody to put in this referral and not knowing that it hadn't been done. Yeah so it definitely gives you a bit of ownership of, of what's going on and gives you sort of ammunition to say well I can see this so you can't just lie to me and say whatever. (R5, Long-covid FG)

"It sounds trivial, but being able to manage your own health, from an app like this, can help, and have really big consequences for your life and your life chances, and your opportunities...that's what I want to do with it, and get people to be self-helping, because you can't just wait for things to happen, you've got to be proactive." (P25, Site 4, Female, 52, Black Caribbean)







Conclusions...

- Can help empower patients to keep the health service "in check" and monitor their health
- Concerns over equitable use and access
 - Not just lack of access to digital technology or deprivation
 - cultural approaches to accessing/ managing health
- Is the app is for all?
- How can patients access the app equally?
 - Work needs to be undertaken with different community groups about whether and how the app could suit their needs



Family Solutions Plus

Dr Ruta Buivydaite





Family Solutions Plus Core evaluation

Presented by Dr Ruta Buivydaite 28th November 2022





Collaboration

- Investing in developing relationships between Local
 Authority and researchers.
- Prioritising the evaluation from the beginning.
- Working alongside each other.
- Significant engagement with other partners involved.





Safeguarding Context

Family oriented Prevention Early Help

Children Statutory Social Services

Child oriented Risk averse Adoption





Family Solutions Plus model





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Old vs new service – what is different for the family

Previous service

- $\,\circ\,$ Assessment and long term workers
- Concentrating on the children and assessment of risk/harm
- More direct, authoritative working style
- Prolonged access to partner services

New service (FSP)

- One worker throughout
- Concentrating on the family, working holistically
- Engaging and working alongside
 with the family
- Joint work of AFPs and social workers





Old vs new service – what is different for the staff

Previous service

- High caseload
- Staff burnout/disengagement
- High bureaucracy
- $\,\circ\,$ Less time to work with the family
- $\,\circ\,$ Difficulty in accessing external input

New service (FSP)

- \circ More teams/social workers, lower caseload
- Concentrating on staff retention
- $\circ~$ Increase in information sharing
- $\circ\,$ More time with the family
- Having the AFPs input/exchanging knowledge





How do you evaluate a complex system change?





Mixed-methods Evaluation

Understanding the Impact of a New Approach to the Safeguarding of Children at Risk: An Evaluation Protocol

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ABSTRACT

Introduction: Child Safeguarding Services intervene in situations where a child is at risk of serious emotional or physical harm. The response will vary according to the level of risk, but in serious cases, a child may need to be removed from danger and cared for by foster parents either temporarily or permanently. The number of children being taken into care has increased markedly in recent years in the United Kingdom. Oxfordshire County Council (OCC) is implementing a new approach to the welfare of children (Family Solutions Rus; FSP) in which the focus is to support the whole family and ideally reduce the need for foster care.

In this paper, we describe a proposed programme of evaluation to examine the impact of FSP on the time children are in contact with services, the nature of the support provided, experience of children and families, the experience of staff, and longer term outcomes for children, particularly whether they remain within the family or need to be crared for auxide the home. Nic International Journal of Integrated Care

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METHODOLOGY PAPER

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Rafael's surname is Perera-Salazar, can this be change please

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KEYWORDS:

change; complex intervention; evaluation protocol Evaluation protocol¹:

Staff Focus groups Parent's interviews Children's interviews Performance data from OCC Economic evaluation

¹ Buivydaite R, Tsiachristas A, Thomas S, Farncombe H, Pereira-Salazar R, Fitzpatrick R, Vincent C. Understanding the Impact of a New Approach to the Safeguarding of Children at Risk: An Evaluation Protocol. International Journal of Integrated Care, 2022; 22(4): 9, 1–10. DOI: https://doi. org/10.5334/ijic.598

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Key findings from staff focus group interviews

Strong support for the new model.

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- Very positive views of adult facing and children's practitioners.
- Challenging to acquire new skills.
- Challenges of caseloads from previous model.

"I've noticed that because of the support of our adult-facing practitioners, our social workers and children's practitioners have more time and more capacity to just focus on the direct work with our young people." [P4, F2]

"I feel we are really able to offer a better, more holistic service to families, and that, that certainly makes my job satisfaction higher." [P2, F1]

"And working, we, we all came into [the new model] with a much too high caseload which just escalated." [P1, F6]



Key findings from Parent's/Carer's interviews

Improved communication, families
 'feel listened to'.

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- They understand the reasons of involvement of social services.
- The interventions are perceived as purposeful and sensible.
- Families perceive the joint work (AFPs and social workers) positively.

"I am so grateful for X [social worker's name], and the way that we were able to talk. I've been completely honest with X all the way through this, and him the same with me". F1

> "social service, and domestic abuse working together closely. Uh, they are supporting me, and for my children, actually making difference uh, you know." F4

"... I guess make me a little bit more positive, and uhm, also taught me that if I need help that I can ask, and there are people out there who can help, and not to feel that I need to do everything on my own." F5



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Key findings from the data

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OCC routine data, that we reanalysed and found:

- Fewer care plans and shorter time in services.
- Lower intensity of intervention over the period being observed.
- However, there was no real reduction in the number being placed in looked after care.
- No differences in care arrangements after leaving care.





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Future studies

- Systematic review of existing models.
- Parent and children interviews (scaling up).
- Children's data (scaling up).
- Staff survey comparison of year 1 and 2.


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Thank you

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Questions for the audience

- Who would be interested in findings (dissemination)?
- How can the views of parents and children guide the services?
- How safeguarding varies across the country?



Tea break and poster viwing

3-3.15pm







NIHR Applied Research Collaboration Oxford and Thames Valley Showcase Event 2022 Saïd Business School, University of Oxford 28th November 2022

Implementing a Brief Refined Opportunistic Weight management intervention for people with serious mental illness

Paul Doody Ph.D.

Overview

- Background
- Intervention adaptation and trial development
- Feasibility trial
- Implications, timeline, and questions









- 28% of adults live with obesity; 40% of those with serious mental illness (SMI)
- 10–20 years lower life expectancy
- 4.5 times increased likelihood of premature death
- Predominantly from cardiovascular related conditions







 Mental health is often prioritized over physical health among people with SMI



- Complex relationship
- Weight management programmes (WMPs) recommended by NICE
- Often physical health checks remain incomplete





- NHS Obesity Plan 2021
- Financial incentive for GPs to refer people with obesity, and heart disease or diabetes to free WMPs
- Increased provision of WMPs
- Based on the BWeL trial 30 second brief opportunistic GP referral to WMP







- National Enhanced Service Incentive Evaluation (NESIE) project ongoing

- People with SMI, and MHPs have told us this referral would benefit from tailoring for SMI
- Adapt the brief opportunistic intervention to be delivered by MHPs, to people with SMI at routine appointments



- Intervention Mapping for Adaptation (IM Adapt) and Person Based Approach (PBA)
- Three main phases:
 - Exploration broadly understand perceptions
 - Preparation iterative refinement
 - Implementation feasibility testing of adapted trial procedures







Phase 1: Exploration

Focus groups and 1-1 meetings with people with SMI and MHPs

Broadly understand thoughts on the intervention and trial procedures and weight loss, WMPs and SMI generally.

Inform how we tailor our approach for the preparation phase





Phase 2: Preparation

Mock consultations: Think aloud approached – respond as if in the moment



Semi-structured interviews thereafter

Refine iteratively based on feedback

Similar approach with all other trial procedures e.g., our recruitment script



Phase 3: Implementation

Acceptability assessed on 5point Likert scale and openended questions

Overwhelming positive response

Implement in a feasibility trial





Feasibility study

- Two arm parallel group individually randomised feasibility trial
- Brief opportunistic WMP referral or usual care
- 4-week follow up





Feasibility study

- Outcomes:
 - Acceptability: recruitment rates, interviewing those who decline, 5point Likert scale rating)



- **Fidelity of delivery:** checklist assessed through recordings, semistructured interview with MHPs)
- Indicative effectiveness: attendance at weight management programme; weight change at four week follow up.



Feasibility study

- Red-green stop-go progression criteria
- Attendance determining criterion
- Sample: n=44 (33 intervention: 11 control)

| Recruitment | Red 0.3 | Amber 0.5 | Green 0.7 | Implied sample size 14 |
|-------------|------------|--------------|--------------|---------------------------|
| Fidelity | 0.3 | 0.5 | 0.7 | 25 |
| Follow-up | 0.5 | 0.65 | 0.8 | 23 |
| Attendance | 0.1 | 0.2 | 0.3 | 33 |



Implications

• Feasibility of a trial assessing effectiveness of the intervention



- Enhanced service incentive guidance is presently untailored
- Adapted intervention, if feasible and effective, is likely to better inform GPs, and MHPs, than existing guidance
- Could be implemented immediately



Timeline and next steps

- RGEA Sponsorship approval
- IRAS submission for initial adaptation phase
- Approximately 6 months each for:
 - Trial development;
 - feasibility trial and;
 - Analysis, dissemination and publication of results
- NIHR Research for Patient Benefit – will proceed independent of outcome





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- Ms. Charlotte Lee (Co-I)
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- Ms. Firoza Davies (PPI (Co-I)









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