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Improving health and care in Bristol, North Somerset and South Gloucestershire

Maximising COVID-19 Vaccinations in Ethnic Minority Groups

Using a Quality Improvement Approach

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Background

The Healthier Together COVID-19 Mass Vaccination Programme covers the geographical area of Bristol, North Somerset and South Gloucestershire (BNSSG) population of almost 1 million, and whilst the area is relatively affluent there are significant pockets of deprivation, with about 1 in 10 people living in a deprived location (Figure 1). Some people in the area experience high levels of ill health related to low income, poor housing or disability. Average life expectancy varies between those living in the most and least deprived areas by around 6 years with some areas seeing up to 15 years difference. **The vision of the Mass Vaccination Programme is to vaccinate all eligible people in BNSSG, particularly those at higher risk of severe illness and death from COVID-19 and to leave no-one behind.**

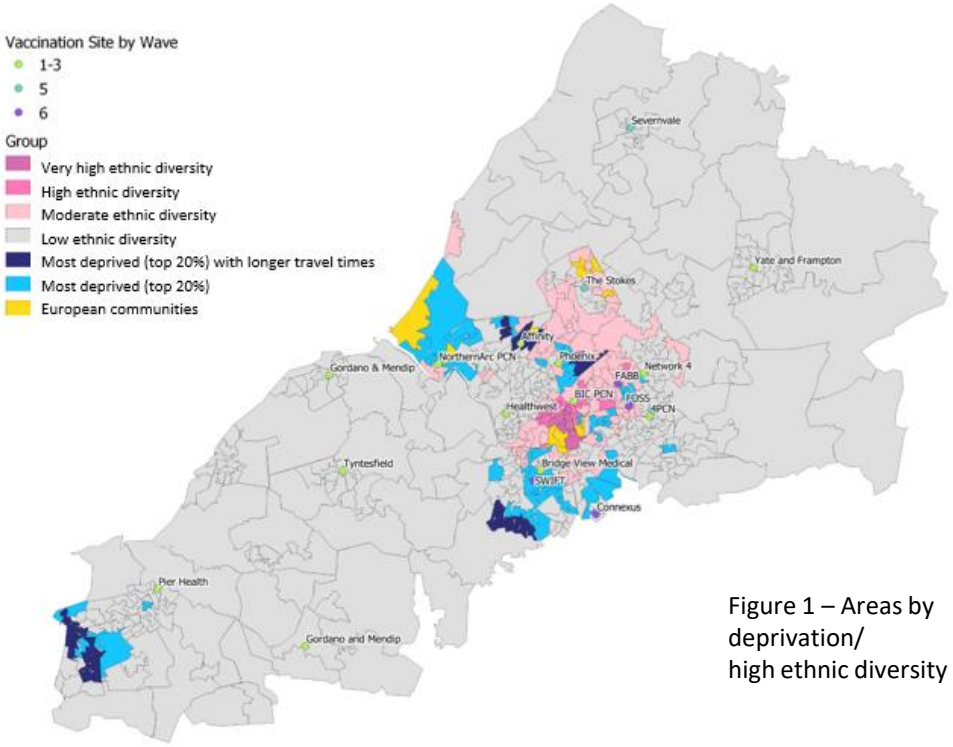

Figure 1 – Areas by deprivation/ high ethnic diversity

On January 11th 2021 the Large Scale COVID-19 Vaccination Centre at Ashton Gate in Bristol opened, enabling thousands of vaccinations to be administered each week. In addition to this many of the Primary Care Network (PCN) site were already up and running, delivering vaccinations closer to people's homes. Although vaccination numbers were high as a result of these planned delivery sites, it became clear from our data that the uptake of vaccination was not equal, particularly in people from ethnic minority backgrounds and in areas of deprivation. There were reports of misinformation about vaccine safety . Our networks and community groups alerted us to some of the issues behind this difference in uptake so that we could urgently set up a series of activities to improve this.

Quality Improvement

The BNSSG Health and Care system has a strong background in Quality Improvement (QI) as an approach to creating and sustaining positive change for its people. We used QI methods to address this urgent problem of vaccination uptake amongst people from ethnic minority groups following the principles below in Figure 2.

Figure 2 – our QI approach

This short report is intended to describe the QI approach we used to increase the uptake of COVID-19 vaccinations, specifically for ethnic minority communities, where there may be different needs.

Identification of the issue

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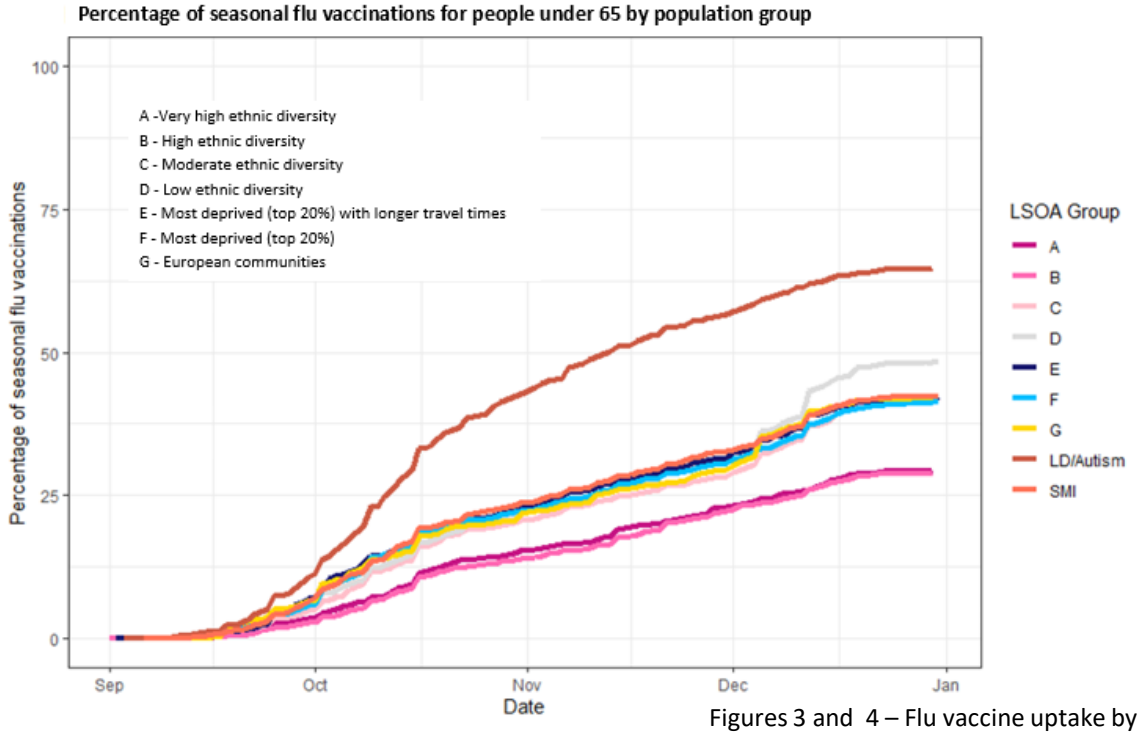
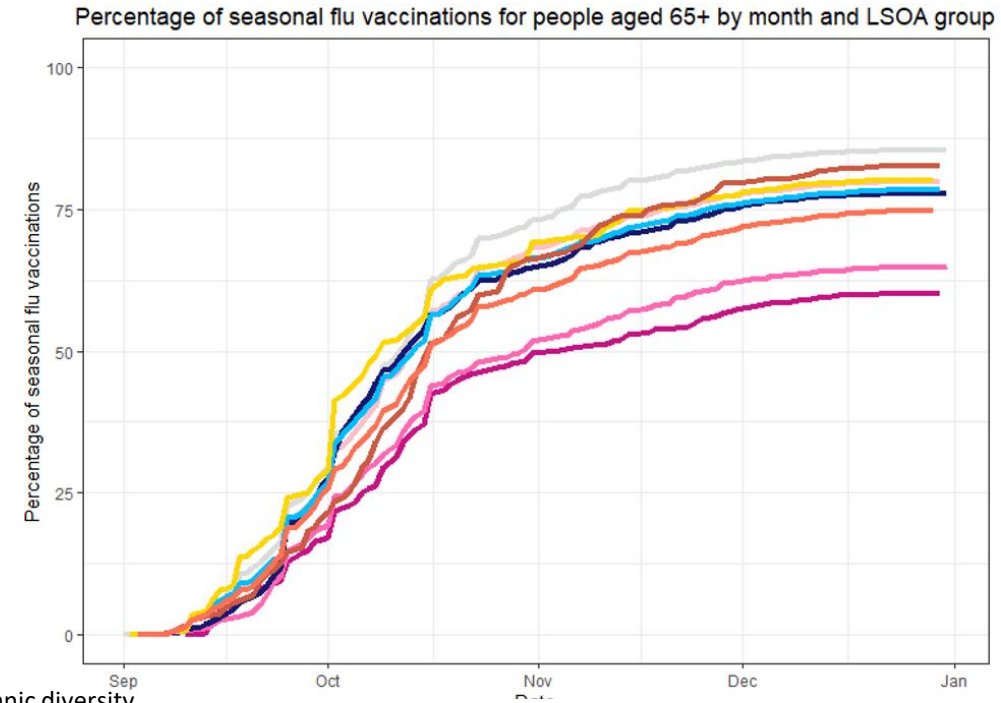
What we did to identify the issue

In December 2020, the vaccination programme team approached colleagues in the Clinical Commissioning Group to understand flu vaccination uptake across BNSSG and how that would translate to COVID vaccination. They used Population Health Management (PHM) tools to identify where uptake was low and in which specific population groups. The data showed lower uptake in areas of social deprivation and those with high ethnic diversity (see Figures 3 and 4). Using this data a group of healthcare and council leaders in the Inner City and East (ICE) Bristol Group created a subgroup to address these differences in Flu vaccine immunisation uptake across their locality. The team used findings from research on vaccine uptake* and local feedback to address this gap by piloting two "mobile" flu vaccine clinics in these areas, set up in a community centre and a mosque as a 'test of change'. As well as increasing flu vaccine uptake, this pilot enabled key voluntary, community and social enterprise groups, public health, local authorities, acute, primary and community NHS care providers and commissioners to work together to deliver a "proof of concept" for the potential of future COVID-19 "mobile" vaccination clinics.

Flu vaccine clinic leads January 2021





Figures 3 and 4 – Flu vaccine uptake by ethnic diversity

Reference

* MacDonald NE; SAGE Working Group on Vaccine Hesitancy. Vaccine hesitancy: Definition, scope and determinants. Vaccine. 2015 Aug 14;33(34):4161-4.

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Often translating improvement interventions from one setting or context into another does not guarantee the same success *

The success of the Flu “mobile” clinic in creating a local vaccination offer for under-served communities, provided a potential theory of change for COVID-19 “mobile” clinics. Before we designed a strategy it was important to understand specific concerns in our populations about having the vaccine.

What we did to understand the problem

Key people who had been involved in the Flu clinic work were asked to support work to maximise the uptake of COVID vaccination, to explore why certain groups were not coming forward for their vaccine.
A range of activities enabled the group to gain insights:

- Local communication though social media networks
- Tackling Myths and Misinformation Webinars hosted by council with clinical leads from acute hospital, primary care, community leads (Figure 5)
- Small focus group community sessions led by clinical staff with community influence (Figure 6)

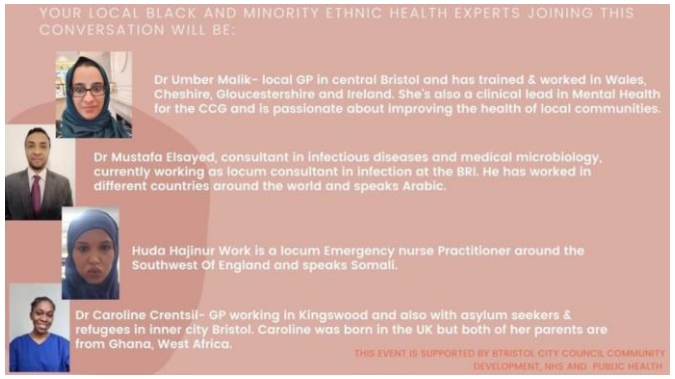


Figure 6 - Bristol City Council webinar

Figure 5 - Bristol City Council webinar

Themes

Themes from these activities were shared through the ICE Group, MUG and a WhatsApp group with several health, care, council and Public Health colleagues.

Factors which influenced reduced uptake:

· Mistrust in vaccine safety
· Mistrust in Health System
· Cultural beliefs
· Misinformation
· Poor access/travel distance

Factors which influenced increased uptake:

· Wanting to keep themselves safe and family safe
· Wanting to get back to normal
· Vaccination in trusted venues with trusted people

Reference
* Horton T, Illingworth J, Warburton W, 'The spread challenge'. Health Foundation;2018 https://www.health.org.uk/publications/the-spread-challenge

What we did to develop a strategy and change ideas

A Maximising Uptake Group (MUG) was set up with people of influence, many from the ICE Group; from public health, local authorities, acute, primary care providers, Sirona (community provider) and data and research commissioning colleagues. A dedicated MUG programme manager from Public Health was appointed enabling leadership, coordination and engagement from a wide range of stakeholders. The mission of the group was to maximise vaccine uptake in groups of people in our population who may not be able to access COVID-19 vaccinations easily or may need support to make their decision in taking the vaccine. MUG focused initially on 5 groups (Figure 7) where one workgroup focused on Black, Asian, Minority Ethnic and non-English speaking communities. The workgroup were able to generate a number of change ideas and had the capacity and capability to test and rapidly implemented changes if successful. These were shared in the WhatsApp group and a Google Jamboard (Appendix 1) so that we could be nimble. In later stages we developed a Driver Diagram (Appendix 2) to describe our theory of change and plans .

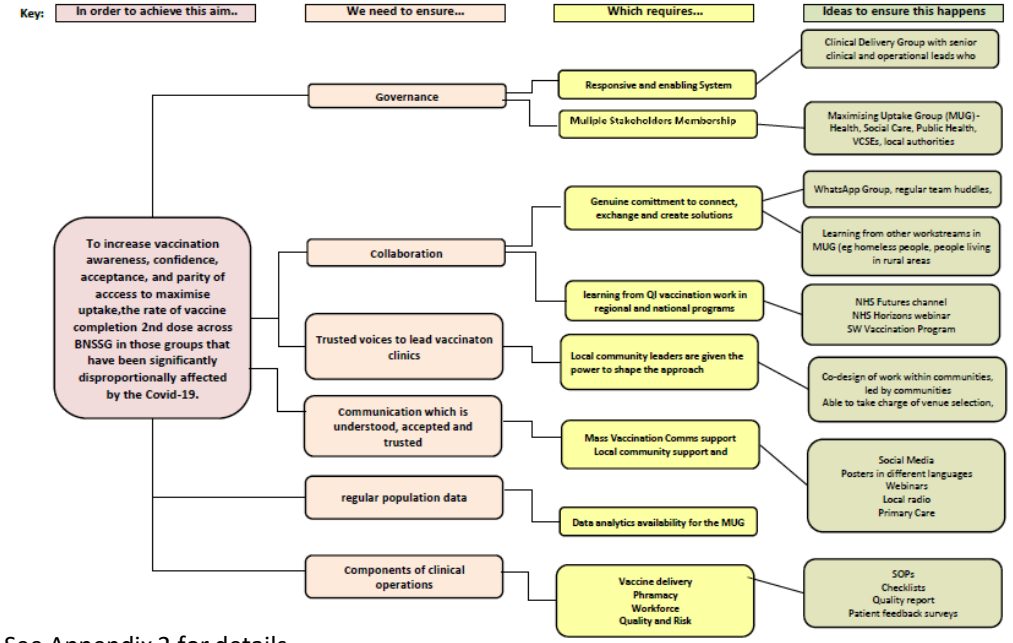
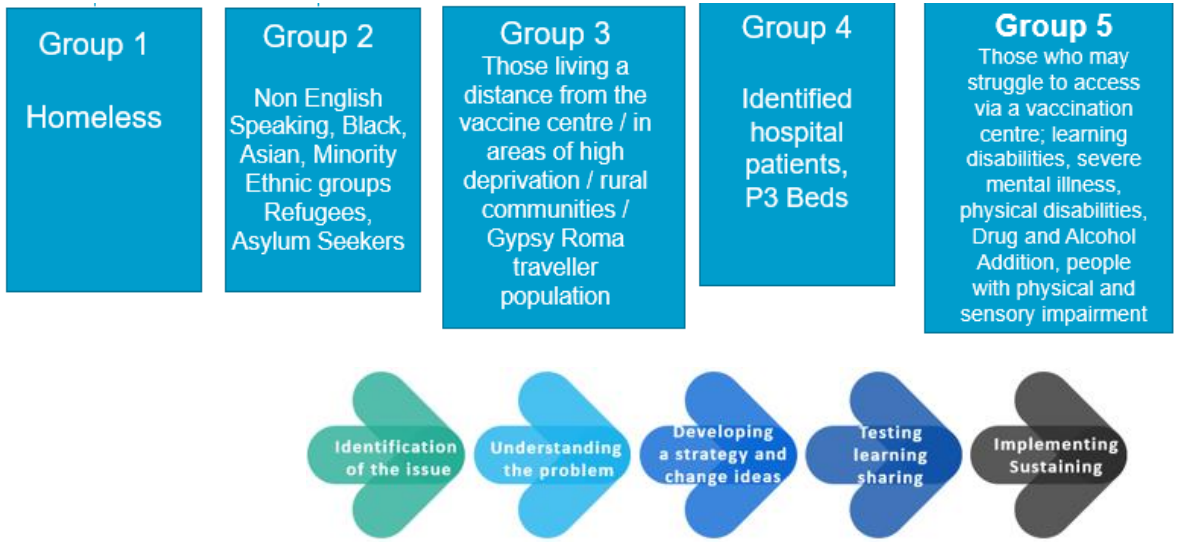


Figure 8 - See Appendix 2 for details

Testing and Learning

Ideas for increasing uptake were generated through a number of activities included in the Driver Diagram (Appendix 2). The success of the Flu “mobile” vaccination clinics encouraged our teams to test a similar clinic for COVID-19 vaccinations, bringing the vaccine closer to people’s communities, hosted by trusted community leads and supported by the Mass Vaccination program. The learning and success from these small “mobile” clinics enabled teams to plan and deliver larger community vaccination clinics, maximising the impact for communities. We also looked at other areas in the country, particularly the work in Bradford and connected with their teams to learn from their experiences and adapting their approaches to our context in BNSSG. An example of one of the Plan, Do, Study, Act (PDSA) cycles can be viewed in Appendix 3.

Figure 7



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Testing learning sharing

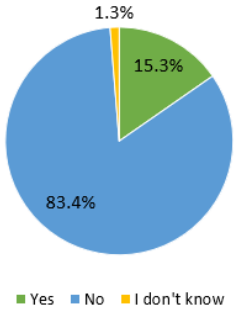
What we did

- Community leads designed focus groups and informal conversations led by trusted healthcare colleagues, to encourage uptake.
- The Bristol Council Community Development manager, who had existing strong relationships within local communities, built trust to reduce misinformation and encourage people to attend for vaccination.
- His depth of knowledge about networks and community champions enabled us to plan the local vaccination clinics and involve several community members in the running of clinics and communications.
- Co-designed with Community Champions (local leaders and influencers) several COVID-19 vaccine "mobile" clinics in community centres, local mosques and gurdwaras with the capacity to vaccinate up to 500 people per session.
- Enabled Community Champions to manage clinics, for example by creating a simple booking system.
- Supported diverse communities using Sirona Health Links workers to help overcome cultural and language barriers and improve trust in COVID vaccination within migrant communities including black and ethnic minority communities. Also, through inequality funding the Mass Vaccination Programme was able to build and amplify this work through additional resources of Vaccination Coaches.
- Co-designed information in multiple languages in different media (text message, leaflets, videos, posters).
- Used council personnel to plan sessions and manage traffic, security at clinics.
- Used Link workers who spoke different languages to support people arriving to the clinics.
- Set up rooms and screens to enable women to be vaccinated in a private area for specific clinics.
- Used a wellbeing, safety and quality team briefing approach developed in North Bristol NHS Trust called "Start Well End Well".
- Encouraged those attending for vaccination to tell their friends and family using their social media channels and conversations.
- Encouraged local TV coverage from popular ethnic minority channels to encourage uptake.
- Did a post-vaccination survey in multiple languages to invite feedback from people to make future clinics better and to understand better what their concerns were about vaccination and why they had chosen to come to this new service.
- Created SOPs and Checklists and iterated them according to the Jamboard feedback from community vaccine clinic leads and surveys from attendees.
- Used relationships through WhatsAPP to celebrate the work of local leaders and vaccine programme leads.

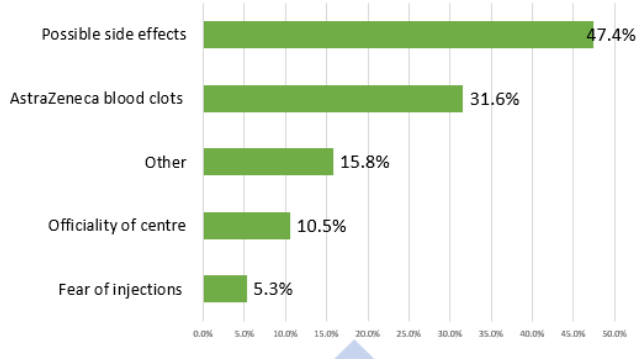
Survey results showing concerns about vaccination and what influenced them to come to one of the clinics

Were attendees concerned about the vaccine prior to vaccination ?

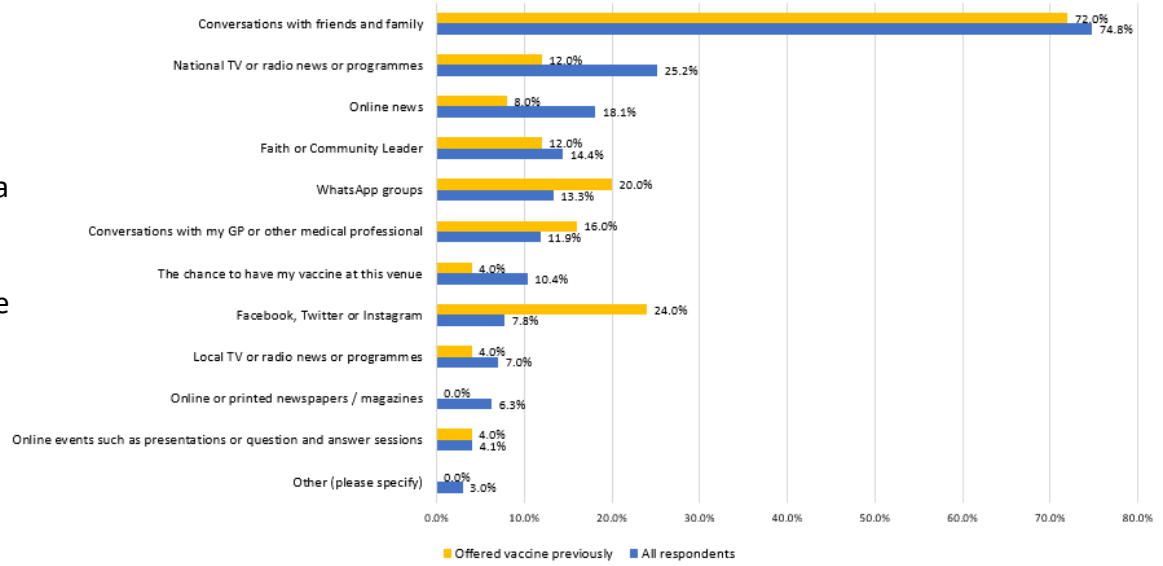
Respondents with concerns regarding the vaccine (n=313)



Concerns mentioned (n=38)



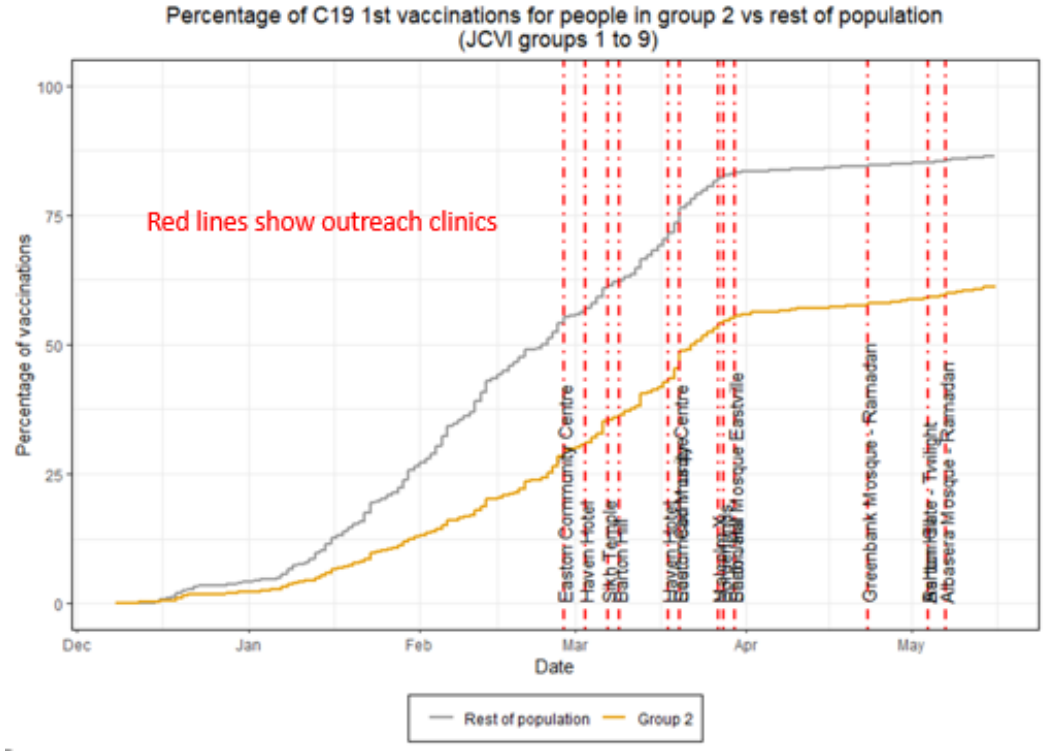
What helped people decide to get vaccinated at the Southmead outreach vaccination centre?

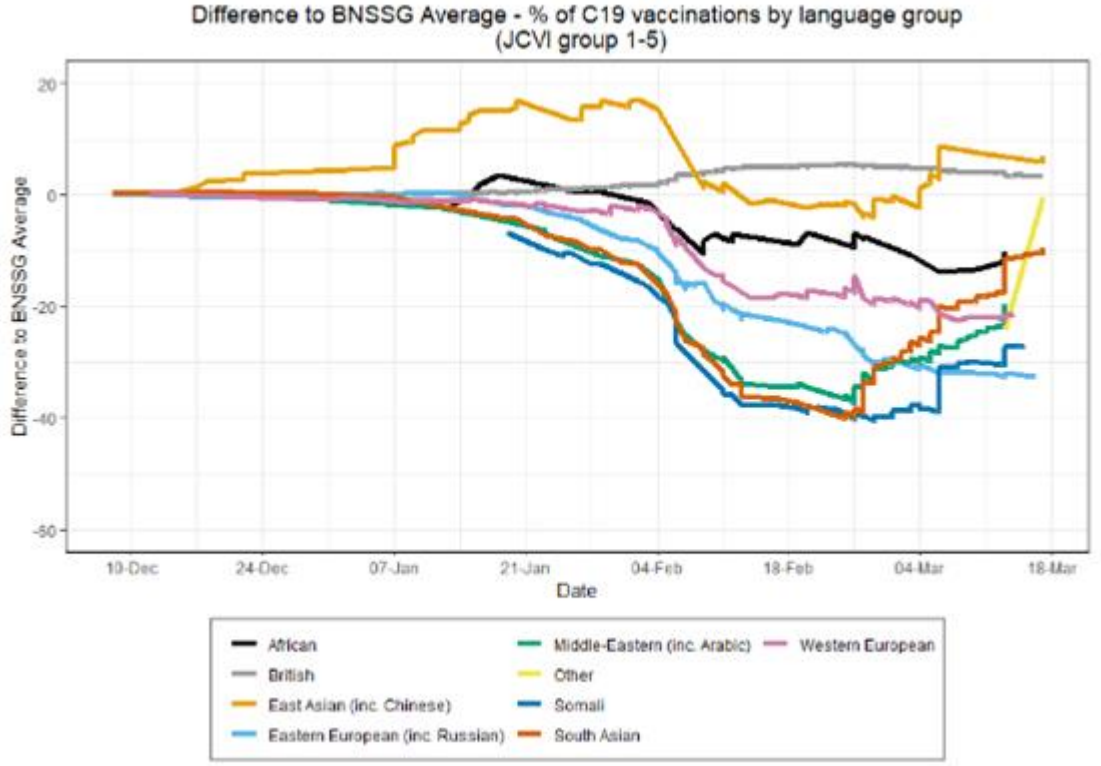


Testing learning sharing

What we learned

- By creating an approach where Community Champions, were given the opportunity and support to design and lead community-based clinics, we enabled an increase uptake of COVID vaccination in a trusted, safe and convenient environment with the support of staff who were sensitive to the population's needs, had the ability to answer questions, speak their language and support their decisions without judgement.
- By using an inter-agency, inter-community partnership approach, we could learn from each other quickly and share ideas using non-traditional methods of WhatsApp, breaking down hierarchy.
- By having a passionate and well-networked full-time programme lead from Public Health, this enabled the MUG to confidently test new ideas, capture benefits and learning and maximise benefits quickly in a context where vaccinating high risks groups quickly would save lives.
- Clinics could be set up in a variety of different environments relatively easily and could be scaled down and up in numbers of attendees.
- Conversations with friends and family and information on social media were much more influential than we assumed in influencing decisions people made about taking the vaccine.
- Sirona Health Link Workers and the Mass Vaccination Vaccine Coaches are helping to reduce inequality in vaccination uptake as trusted figures in the community.
- Having a method like Jamboard to capture feedback and ideas after each "mobile" clinic enabled much richer, visible information to be shared, which could be viewed and used by clinic leads and Community Champions to improve future clinics.
- It was challenging to capture all the PDSAs that took place given the nature of the pace of the vaccination programme.





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Implementing
Sustaining

Implementing and sustaining

- By using a QI approach to maximising uptake of COVID-19 vaccinations, we have been able to:
  - identify the issues by using population data and insights from previous QI work in Flu vaccination.
  - understand the problems by engaging Community Champions in insight work.
  - develop a strategy of change by bringing together people from diverse health, care, local authority and community backgrounds who are all passionate about vaccinating our population and leaving no-one behind.
  - rapidly test and learn using non-traditional methods such as WhatsApp and Jamboard.
- This QI approach to maximising COVID-19 vaccination uptake has been applied to the other MUG groups (for example homeless people, traveller community, people with Learning Disability) and an additional group added at a later stage, focusing on young people, with similar success.
- In some groups we have needed to go back to the start in identifying the issue and strategy for change. This was particularly relevant in the Eastern European population who needed a different approach to “mobile” clinics.
- The community-based vaccination clinics have enabled over 5000 people to be vaccinated who, from our data insights, were likely to be the most at risk of severe illness or death from COVID-19, or would not have accessed clinics in Large Scale Vaccination Centres or PCN clinics.
- The learning from and success of these clinics has increased our confidence in what is possible, leading to further testing of innovative approaches, most recently a walk-in vaccination clinic in a community park space and a clothing store.
- We are now fully evaluating the Maximising Uptake work to enable us to consider the effectiveness of the programme and the impact we have made.
- We have narrowed the gap in vaccine uptake in ethnic minority groups but there is much more work to do.
- This work has given us the foundations for collaboration with community champions and providers of healthcare, councils, public health to support improvements in the health of our ethnic minority populations on future health-related issues in Bristol, North Somerset and South Gloucestershire.

Communicating with people honesty and openly
Being prepared to acknowledge your personal fears
Highlighting reasons why people not taking up the vaccine offer
“We have brought down those barriers”
True iteration to the approach, continually learning and adapting
"People buy people, you need people with constituency"
“Ask yourself - do people understand, are they empowered and who do they turn to for validation?”
"I saw my community suffering, and I thought, I need to do something"

Quotes from key people involved in the outreach clinics – Evaluation interviews

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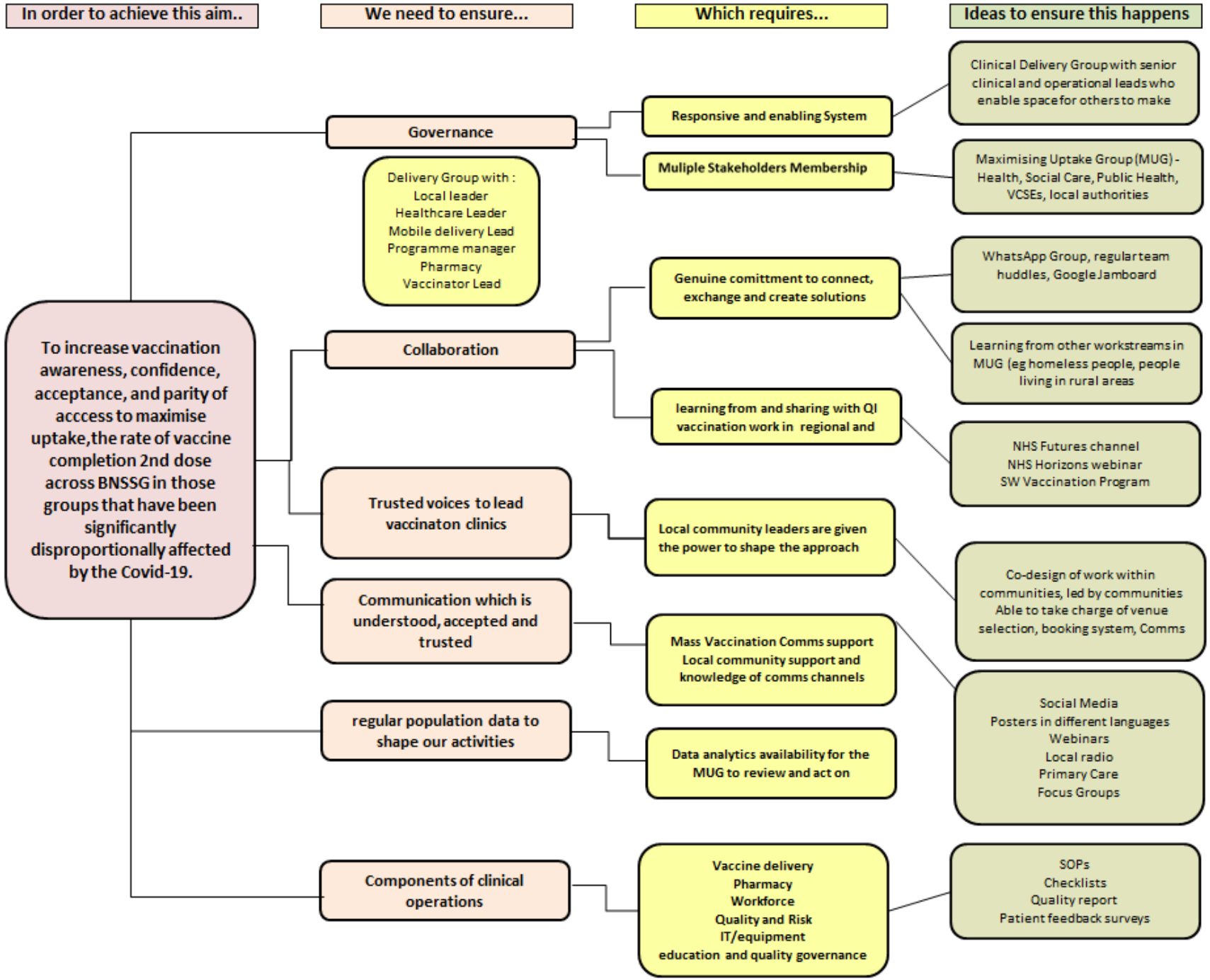
Southmead Mosque 20.3.21 and 21.3.21

Appendix 1 - Jamboard for one clinic



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Appendix 2 – Driver Diagram MUG

PDSA Cycle 1 for COVID-19 vaccination booking at the mosque

Step 4 : Act – Adopt, Adapt, Abandon

Adopt

- All slots were filled
- Very minimal DNAs on the day which were replaced quickly by walk-ins.
- Survey results showed that people felt confident in the vaccine and the clinic.
- Booking the slots was quite time-consuming and was done largely in clinical leaders' own time.
- Finding NHS numbers was slow. Sometimes when calling people to make new bookings or check existing bookings, the caller did not speak the same language as the attendee.

Adapt

- Use an administrator who is culturally sensitive to support bookings
- Use telephone line interpreters
- Use the 'Find your NHS Number' function to help with booking

Step 3 : Study

- **Observe the result. Analyse the data. Compare to predictions. Summarise learning**

A "wash up" meeting was convened to review the feedback, data from attendance and survey from users

Step 1 : Plan

- **Describe the issue?**
- We want people to sign up and attend for their vaccine appointment at the local mosque
- **What outcome do you want?**
- We want to fill all our booking slots, minimise DO Not Attends (DNAs) and enable people to feel they have the information they need and to ask any questions before they arrive.
- **How will you measure any improvement?**
- We will measure success by number of DNAs and number of unfilled slots as well as an after-vaccination survey
- **Plan what you are going to do differently 'who, what, where, when and how'**
- Enable Community Champions to be in control
- Use telephone line interpreters
- Use an administrator to support who is culturally sensitive
- Use an informal WhatsApp group where the operational lead and Community Champions could resolve problems rapidly
- Use Community leaders who know their congregations and their fears and concerns so they can be relayed quickly and reassure

Step 2 : Do

- **Carry out the plan and collect information on what worked well and what issues need tackling**

The booking for the clinic took place 4 weeks prior to the clinic. The medical lead collected information on 'What Worked Well' and 'Even Better If' for the process

"We worked on the principle "IF ANYONE SAVED A LIFE IT WOULD BE AS IF HE SAVED THE LIFE OF THE WHOLE HUMANITY." QURAN 5:32 This has been the guiding principle for the campaign and has reinforced our commitment to the process. "

Quote Medical Lead Mosque Vaccine Clinic