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Evaluation of three West Midlands local authority COVID-19 Community Champions programmes

Public Health Intervention

Responsive Studies Team (PHIRST) - Fusion

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Background

- Vaccines were an important part of the government strategy to tackle the Covid-19 pandemic- Vaccine hesitancy a challenge
- Significant disparities in vaccine uptake: ethnic minority communities, deprived areas and lower socio-economic groups (Dolby et al, 2022; Gaughan et al, 2022)
- Government made substantial investment to support the Covid Community Champions programme

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CCC programme

- Tailored, community-based approach
- Programme was reoriented toward addressing vaccine hesitancy during Covid-19

"Community champions are typically volunteers from a local area who act as a bridge between people and health and care services, signposting community members to services, communicating health messages or running outreach sessions"

https://www.kingsfund.org.uk/blog/2023/07/community-champions-thriving-beyond-covid

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PHIRST CCC evaluation

- Our team: PHIRST Fusion team consisting of members from the University of Edinburgh, Glasgow and Newcastle

- Evaluate the Covid Community Champions programme in three West Midlands Local Authority:
  - Sandwell Metropolitan Borough Council
  - Birmingham City Council
  - Walsall Council

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Review

Benefits of Community Champions programmes:

- Strengthen social connections
- Increase access to services
- Address vaccine concerns among ethnic minorities
- Build trust
- Address disinformation

Essential components for success:

- Autonomy
- Sustained resources
- Practical support

Areas for improvement:

- Inclusivity
- Acknowledgement of champions
- Clear guidelines
- Information verification
- Balancing demands

Sources

- South et al. (2021)
- Hussain, Latif, Timmons, Nkhoma, & Nellums (2022)
- Kamal, Hodson, & Pearce (2021)
- Evaluation of Newham's COVID-19 Health Champions programme
- Evaluation of the Lewisham COVID-19 Community Champions programme

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Evaluability assessment

- An evaluability assessment was conducted with the three local authorities to understand the priorities for evaluation and develop the evaluation plan
- Three online evaluability assessment workshops conducted with stakeholders from Birmingham, Sandwell and Walsall Local Authorities (February and May 2022)

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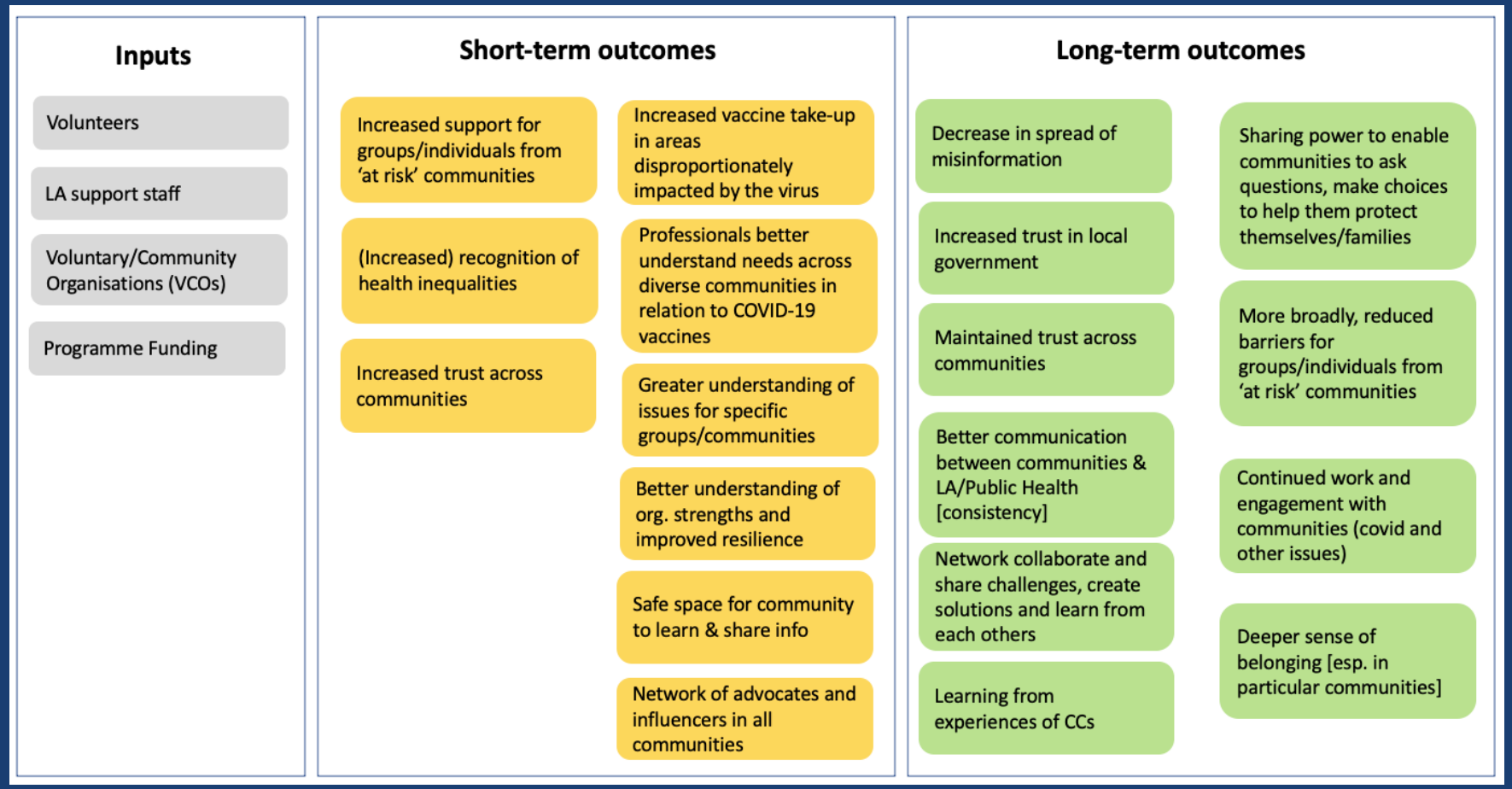
Agreed outcomes



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Aim and objectives

Aim: To evaluate, through assessing community trust and communication, whether the COVID-19 Community Champion scheme activities in the three local authority areas are transferable to other topics or communities.

Objectives

1. To describe the activities delivered in three local authority area sites in terms of: what, when, where, duration, reach.
2. To evaluate whether there is:
   - increased trust across communities
   - increased community trust in local government
   - sustained work & engagement with communities
   - better communication between communities & LA/Public Health
3. To ascertain whether the activities can be linked to a change in vaccine status

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Project plan

Phase 1: Quantitative analysis to understand the relationship between CCC activities and vaccine uptake across the 3 LAs

Phase 2: Qualitative interviews with programme coordinators and community champions.

Phase 3: Detailed community surveys with selected communities conducted within two of the three LAs, adding a quantitative depth to our evaluation.

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Quantitative exploratory analyses

Aims

1. To determine whether vaccine uptake rates can be estimated using administrative data – during and prior to the CCC activity
2. To determine whether GP registration rates can be estimated using administrative data – during and prior to the CCC activity
3. To create basic visualizations of the CCC activity per Local Authority and of vaccine uptake and GP registrations.

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Key data sources

1. UKHSA (UK Health Security Agency): Vaccine uptake data: This data is provided by MSOA by day per LA. The target population for the "before CCC period" for each MSOA is taken as the total population aged 12+ for a given MSOA on 29 May 2022. England residents only, unique individuals. Of these, the numerators are the number of unique individuals that have received 1,2,3 doses by the date of extraction. The target population is adjusted for the period during the CCC.
2. Public Health England (?): GP registration data: data was provided as the number of GP registrations up to the extraction date per MSOA. GP surgeries of interest, i.e. those located within the boundaries of the three local authorities of interest, with registration data reported monthly for the study period December 2020 to April 2022
3. Councils (Birmingham, Sandwell, Walsall) - Covid Champion Activities

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Methods

1. Visualization (maps, graphs)
2. Vaccine uptake rates:
3. For the Vaccine uptake rates, the formulae employed as described below:

   Vaccine uptake rate = $a/b \cdot 10000$ where a denotes the number of events, and b the population-time at risk. We have used the multiplier 10000.

   For the population-time at risk we used the target population multiplied by the length (in days) for the period under investigation.
4. GP registration rates

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Methods

1. Visualization (maps, graphs)
2. Vaccine uptake rates:
3. GP registration rates: we have used the following approach to obtain a daily percentage rate.

   GP daily registration rate = 100 * ((d-c))/((c·e))where d denotes the total number of GP registrations at the end of a given timeframe, c, the total number of GP registrations at the beginning of a given timeframe, and e, the length of the given timeframe in days. The population size was not used in this formula due to the fact that we were not able to confirm whether the GP registrations included individuals less than 12 years old.

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Results

1. CCC Activity
2. GP registration
3. Vaccine uptake

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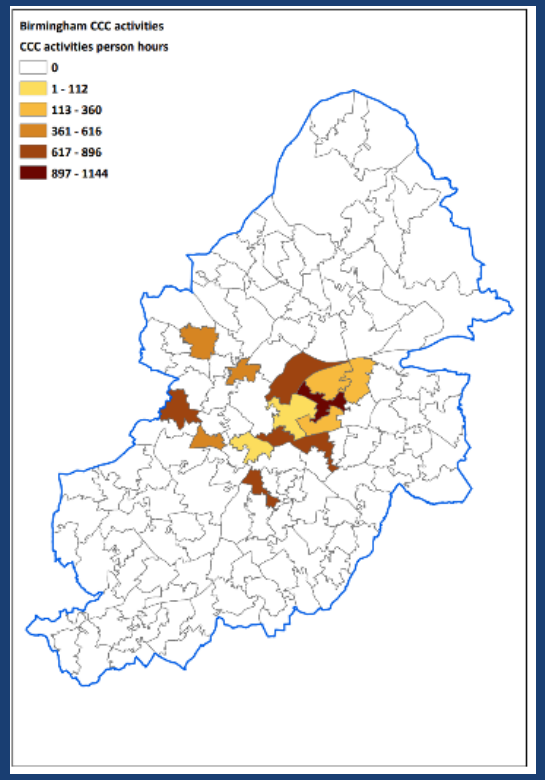
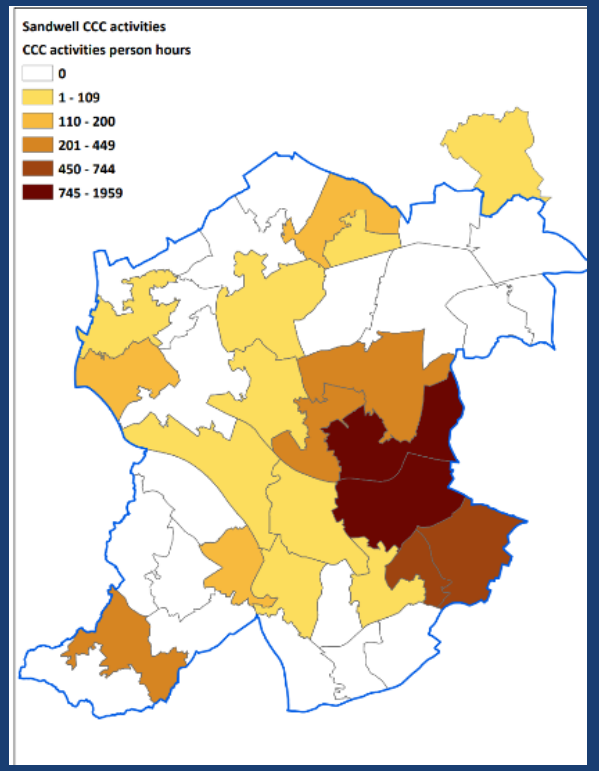
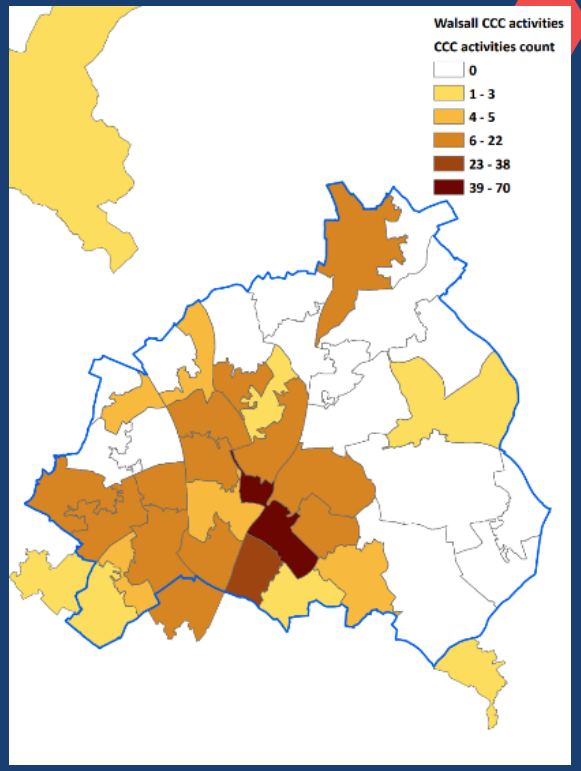
Results

CCC Activity







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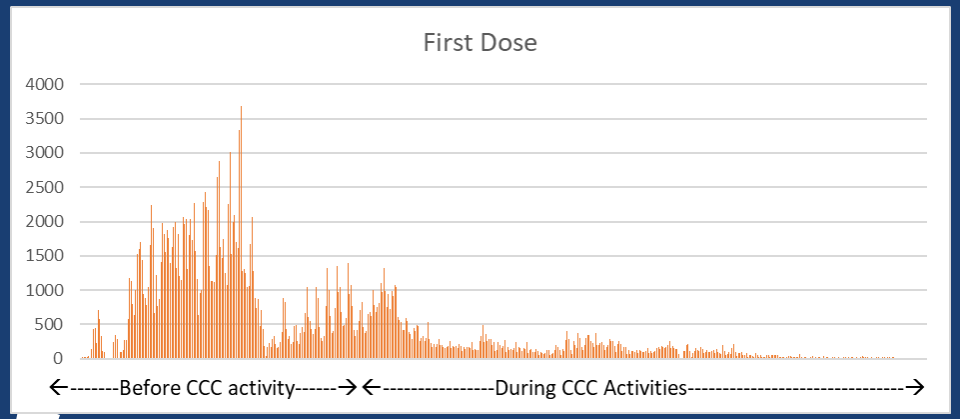
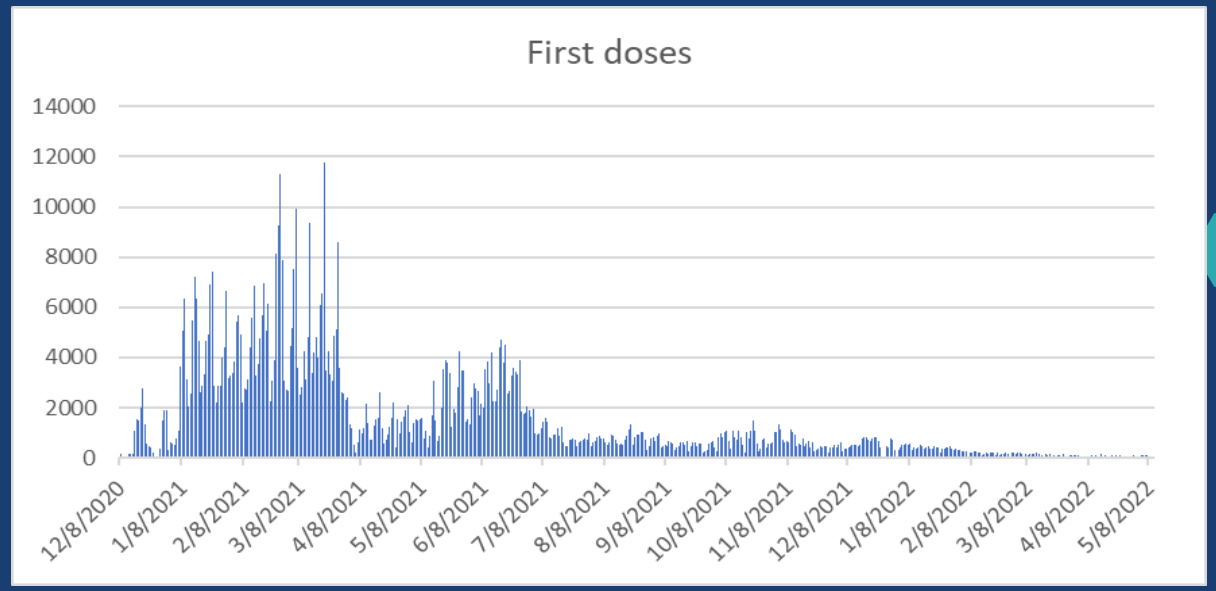
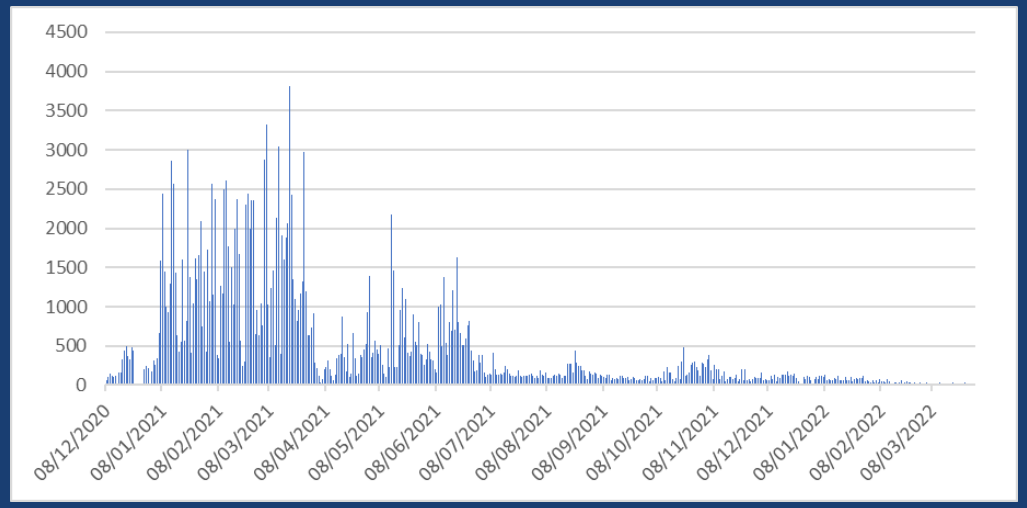
Results

Vaccine uptake





Sandwell<-
Walsall ->
Birmingham ^



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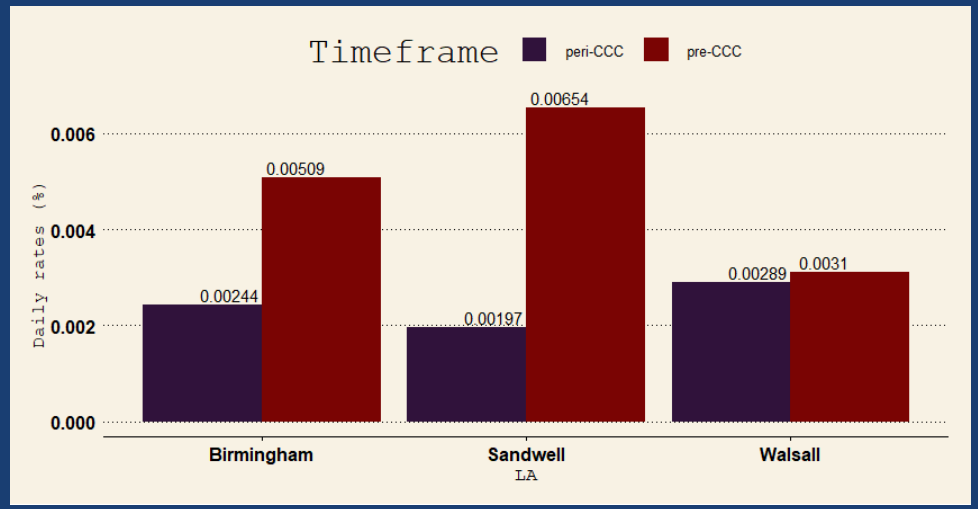
Results

GP registration



LA	Pre-CCC	Peri-CCC
Birmingham (n=9)	0.00509 (-0.00101,0.01119)	0.00244 (-0.00476,0.00964)
Sandwell (n=15)	0.00654 (-0.00323,0.01631)	0.00197 (-0.00265,0.00658)
Walsall (n=21)	0.00310 (0.00100,0.00519)	0.00289 (0.00029,0.00550)

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Results

Vaccine uptake

Table 4: Average rates per Local Authority (Pre- and During- CCC Activity)

Local Authority	Pre-CCC	During-CCC	Absolute Diff	% Diff
Birmingham MSOAs with CCC (n=13)	21.29 (19.36,23.31)	13.99(12.68,15.29)	7.3 (5.08, 9.52)	-34.39
Birmingham MSOAs without CCC (n=119)	41.10(38.45, 43.76)	18.36(17.48, 19.24)	22.74 (19.96, 25.54)	-55.33
Sandwell MSOAs with CCC (n=19)	39.46(35.33,43.59)	19.59 (18.21,20.98)	19.87(15.57,24.17)	-50.35
Sandwell MSOAs without CCC (n=19)	48.89(46.31,51.47)	22.01(20.77,23.26)	26.88(24.08,29.68)	-54.98
Walsall MSOAs with CCC (n=23)	46.61(41.79,51.42)	23.16(21.18,25.15)	23.45(18.31,28.58)	-50.31
Walsall MSOAs without CCC (n=16)	64.28(60.89,67.66)	30.55(28.59,32.51)	33.73(29.94,37.51)	-52.47

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Results

Vaccine uptake

Table 5: Difference in rates within each Local Authority. The difference in rates across timeframes between MSOAs with and without CCC activity was calculated.

Local Authority	Difference	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Birmingham	-15.44	-18.97110	-11.92407
Sandwell	-7.01	10.443621	-3.579537
Walsall	-10.28	-13.894917	-6.663017

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Qualitative interviews with programme coordinators and community champions

- April to June 2023
- Three researchers – including the embedded researcher from Sandwell council
- 10 coordinators and 5 COVID-19 community champions across the three LAs were interviewed.
- A thematic analysis of the interviews was carried out

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Themes

- **Barriers and Facilitators to engage with CCC activities**
  - *'Vaccine Toolkit translated into many languages would have been a helpful move .... with lack of trust in the council or in the NHS'*
  - *'..the networks we've built over all these years finally helped out, and I must say the faith leaders went all out for us'*

- **Sustainability**
  - *'They are not supported by anybody...if it needs to work, they need better funding, more resources and continued attention'*

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Themes

- **Trust and Distrust**
  - Effective communication and open dialogue, built trust.
  - Cooperative engagement within the CCC programme fostered trust.
  - Trust also increased due to successful programme delivery and being seen as a resource of high integrity.
  - Leveraging trust within voluntary organisations boosted vaccine trust.

- Lived experiences of champions relating to vaccine-related side effects contributed to a culture of mistrust.
- Historical research exploitation deepened medical mistrust.
- Lack of responsiveness from local government and local MPs contributed to distrust.

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'I think the messaging that we were getting from the public health and how we relayed it to people built the trust.'

'The people had more trust with us face to face because it's almost like if you want to trust somebody, you've got to look them in the eye'

'The trust was gone once, after the first scandal, that was it, because it was almost like no. It couldn't be done.'

'It does because it's coming from a trusted voice isn't it? It's coming from a trusted voice so they do trust what we have to say. '

'trust, because I come from a background of where things are done to ethnic minorities where it wasn't justified...'

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Themes

- **Transferability**
  - COVID-19 Community champions find value in collaborative communication with various sectors.
  - Comprehensive training is essential, and meetings need improvement.
    - *'Feedback about the meetings...felt they could be much shorter'*
  - CCC's collaborative model can be transferred to other public health projects.
    - *'Consider expanding its project portfolio...we could take this learning into everything, from cancer to smoking. I say why not.'*
  - Addressing rumours/misbeliefs among ethnic communities is crucial
    - *'It should be the priority to include ethnic minority populations...try resolve their doubts and help remove rumours'*

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Community Surveys

- Onsite community surveys were conducted in Sandwell (ASDA superstore) and Smethwick (Guru Nanak Gurudwara) - July 2023.
- A total of 221 valid responses were gathered.
- 112 Female, 102 Male, 7 Not Reported
- 49.3% Asians, 32.2% White, 10% Black, 8.5% Others

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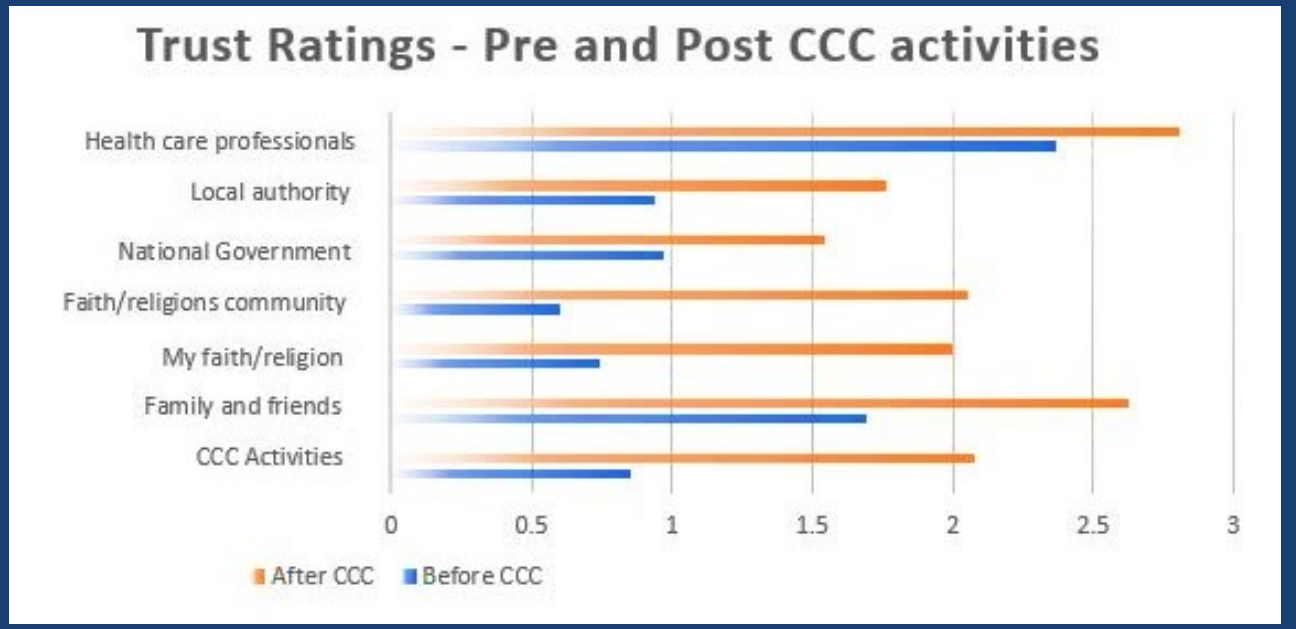
Trust Before and After CCC



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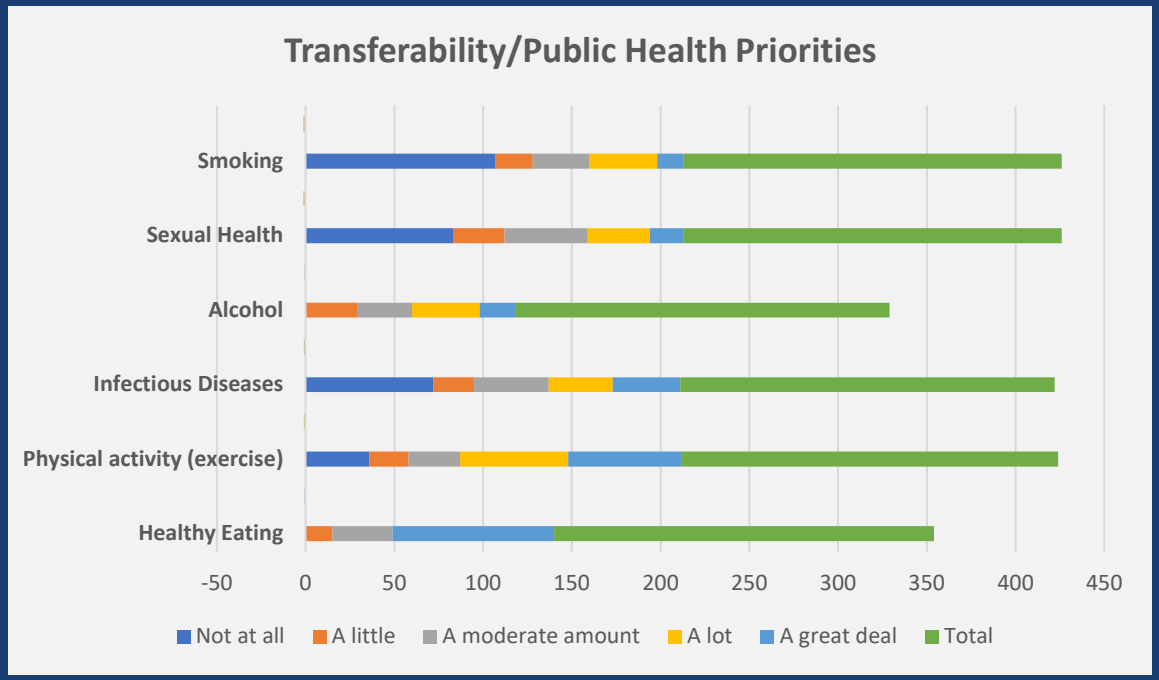
Transferability/Public Health priorities



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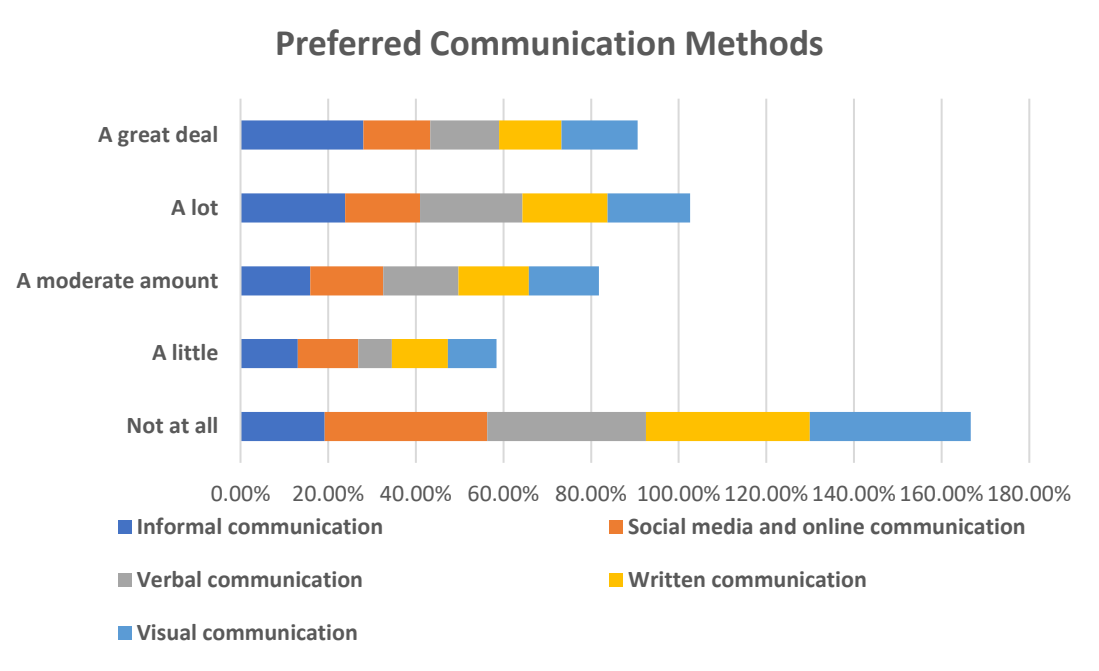
Preferred Communication Methods



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