THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Evaluation of Birmingham City Council Community Health Profiles

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Abbreviations

CHPs	Community Health Profiles
BCC	Birmingham City Council
LSE	London School of Economics
UoB	University of Birmingham
FGDs	Focus Group Discussion
CFIR	Consolidated Framework for Implementation Research

Definitions

Users	Have received and accessed the profiles for some form of purpose. This includes, but is not limited to, learning more about a community, using it in a document such as a strategy, and bid writing.
Non-users	Have not received the profiles and supporting documents or have received them but have chosen not to access them.
Engagement partners	Commissioned by Birmingham City Council Public Health Communities Team
Policy/decision-makers	Key stakeholders who influence health and wellbeing or the Health and Wellbeing Board throughout Birmingham and beyond
Authors/Writers	Have written at least one section of the profile, including multiple sections or the whole profile. This includes internal Birmingham City Council authors and commissioned external authors and editors.

Foreword

Birmingham stands as one of the United Kingdom's most culturally and ethnically diverse cities, characterised by a rich variety of identities, traditions, and lived experiences. Yet this diversity is often oversimplified by broad demographic classifications such as "BAME," which can obscure the specific and varied health inequalities experienced by different communities. The Community Health Profiles (CHPs) programme was established to address this critical gap, offering more granular, identity-specific insight to support community organisations, healthcare professionals, and policymakers in developing tailored, equitable health interventions.

The programme was shaped in part by the city's preparations for the Birmingham 2022 Commonwealth Games, a moment of civic pride that celebrated Birmingham's diversity and global visibility. Building on that legacy, the CHPs sought to produce data-driven public health intelligence on identities represented within the Commonwealth. This programme represents a significant and unprecedented public health initiative, uniquely developed and implemented at scale for the first time in the UK.

Since its launch, the CHPs programme has delivered over 20 bespoke profiles spanning ethnicity, religion, disability, gender identity, and sexual orientation. Their user-friendly design, including infographics and concise summaries, has empowered a wide range of users from community organisations and researchers to NHS professionals and local policymakers.

Feedback across stakeholders has been overwhelmingly positive, with many using the CHPs to inform grant applications, tailor health interventions, and strengthen strategic decision-making. This impact has been especially valuable in Birmingham, one of the UK's most diverse and complex urban environments, where understanding the unique health needs of communities is critical to driving equity and inclusive policy.

In recognition of the importance of co-production, the programme has expanded through the Deep Engagement Partner (DEP) programme, a three-year partnership with 17 communities of identity. This initiative fosters sustained engagement with community stakeholders, ensuring the continued relevance of the CHPs and supporting the creation of more responsive and equitable health strategies.

This initiative not only highlights Birmingham's leadership in inclusive public health practice but sets a national precedent. The CHPs, supported through the DEP programme, offer a blueprint for multi-agency, community-rooted health intelligence that truly reflects lived experience and local context.

Helen Harrison

Assistant Director of Public Health, Birmingham City Council

Executive summary

Birmingham City Council's (BCC) Community Health Profiles (CHPs) initiative aims to provide evidence-based insights into health inequalities across diverse communities, focusing on factors such as ethnicity, disability, gender identity, sexual orientation, and religion. There are now over 20 different CHPs for Birmingham. This evaluation assessed the design, implementation, dissemination, and overall perceived impact of the CHPs, identifying successes, challenges, and opportunities for improvement through interviews and focus group discussions with a diverse group of stakeholders, including users, non-users, writers, engagement partners, and policy-makers.

The CHPs have been particularly appreciated for their user-friendly design, with infographics and concise summaries making complex data more accessible and actionable for broad audiences. Engagement efforts, including the use of webinars and targeted dissemination strategies, have successfully raised awareness and supported community outreach. These approaches empowered engagement partners to organise activities within their communities and demonstrated the potential for wide-scale impact when supported effectively. Participants from across the stakeholder groups highlighted the CHPs' role as a trusted source of targeted data, particularly useful for grant writing and strategic planning.

Opportunities for the future include further enhancing the CHPs by integrating real-time data and creating an interactive, dynamic dashboard system that improves usability and relevance. The development of tailored profiles that reflect the specific needs of marginalised or cross-cutting communities, supported by proactive data collection strategies, would strengthen the profiles' inclusivity and precision. Strengthening and sustaining collaboration with community stakeholders, particularly through co-production and ongoing partnerships, presents a key opportunity to improve both the development and dissemination of the profiles. Additionally, embedding evaluation processes from the beginning offers the chance to ensure continuous learning and refinement, making CHPs more responsive and impactful over time.

Overall, BCC's CHPs were generally perceived to be a valuable source of information that can inform how to address health disparities and guide policy decisions across the city. Addressing opportunities related to design, dissemination, and implementation, while fostering stronger partnerships, would support the CHPs to evolve into a dynamic, inclusive resource that further informs policy and supports equitable health outcomes across Birmingham's diverse population.

1. INTRODUCTION

Community Health Profiles (CHPs) are evidence-based summaries that focus on specific communities of interest, such as religion, ethnicity, disability, sexual orientation, and gender identity. These profiles can provide valuable insights into the inequalities experienced by these communities, and can be an important tool for informing policy, engaging communities and creating targeted health interventions (Moran and Butler, 2001). Health profiles are used across the world to assess health trends, disparities, and determinants at local and national levels. In the US, for example, the County Health Rankings and Roadmaps initiative provides Community Health Profiles for every county, assessing health outcomes, clinical care, social determinants, and environmental factors, helping policymakers and communities improve health equity (Remington et al., 2015).

In the UK, Public Health England (now the Office for Health Improvement and Disparities), developed the Local Authority Health Profiles, which provide a summary of health indicators for each local authority in England (Public Health England, 2016). Birmingham City Council has uniquely created the Birmingham Community Health Profiles, which are evidence-based summaries that provide a more detailed focus on specific communities of interest within regions, such as religion, ethnicity, disability, sexual orientation, and gender identity in Birmingham. These profiles were developed through desktop analysis of published evidence, grey literature, and population survey data, and were developed in batches. In the first batch in 2021, the profiles included the Sikh and Bangladeshi communities, and there are now over 20 different profiles[1]. They complement the work of the public health division of the city council and the wider council to better understand the diverse communities in Birmingham. This evaluation was commissioned by Birmingham City Council to find out how they could continuously improve the profiles to make them more user friendly, more representative of local communities and to have a bigger impact on policy and practice.

The purpose of this project is to explore how various stakeholders perceive Birmingham City Council's (BCC) CHPs. Key objectives for the research were:

- Evaluating whether the profiles are appropriate in terms of language, length, and other aspects of accessibility.
- Assessing the informativeness and impact of webinars about the profiles.
- Identifying differences in how effectively the profiles serve various groups.
- Examining perceptions of the effectiveness of partnerships involved in the profiles' development and dissemination.
- Highlighting examples of good practices and innovative approaches.
- Drawing conclusions on whether the CHPs programme has been shared effectively amongst the community and influenced policy and decisions within Birmingham.

In what follows, the methodology section explains the research design, participant recruitment, data collection methods (e.g., interviews, focus groups), ethical considerations, and the data analysis process. The findings section presents key themes with participant quotes, followed by a discussion that interprets these findings, relates them to existing literature, and highlights implications. A conclusion summarises the study's contributions and offers recommendations, while a limitations section acknowledges constraints. Finally, the report includes a reference section for cited sources and appendices with the data collection tools as supplementary materials.

[1] https://www.birmingham.gov.uk/info/50305/community_health_profiles

2. METHODS

Study Design

A qualitative research approach was adopted to gain in-depth insights into participants' perspectives, experiences, and social contexts (Hennink et al., 2020). The study utilised semi-structured interviews and focus group discussions (FGDs) as primary data collection methods. This methodology ensured a comprehensive exploration capturing both individual and collective insights to address the research objectives. The consolidated criteria for evaluating qualitative research (COREQ) guided the project (Tong et al., 2007), which are quality criteria used to assess and evaluate qualitative research projects.

Participant Recruitment and Selection

Participants were recruited using purposive sampling. This ensures rich and relevant information that could address the research objectives. The study targeted specific groups to address the research questions effectively, enabling a thorough evaluation of the CHPs. To ensure diverse perspectives, participants were selected from the following groups [see 'Definitions' section early in this report]:

- **Users/non-users**: To explore their experiences with the profiles, identify challenges, and gather suggestions for improvement.
- **Writers/Authors/Reviewers**: To understand their views on the writing process and identify ways to enhance it for future iterations.
- **Engagement Partners**: To assess their role in disseminating the profiles within various communities and gather feedback on their experience.
- **Policy-makers**: To understand the initial objectives behind creating the profiles and evaluate their impact on public health policy and decision-making.

The recruitment process began with an introductory email sent by BCC to potential participants. This email was followed up by the research team from the London School of Economics (LSE) and the University of Birmingham (UoB). Interested individuals were provided with a participant information sheet and invited to schedule an interview at a convenient time. Additionally, snowball sampling was employed, where participants were asked to recommend others who could contribute valuable insights to the study. This multi-pronged approach ensured the inclusion of a wide range of stakeholders, fostering a comprehensive understanding of the CHPs' utility, challenges, and areas for improvement.

Sample Size

The sample size was determined based on thematic saturation, whereby data collection stopped when no new themes were identified (Braun and Clarke, 2021).

Participant Backgrounds

The participants in this evaluation represented a wide array of backgrounds, reflecting the diverse stakeholder groups engaged with the Community Health Profiles (CHPs).

- **Users**: This group included academics, researchers, health workers, members of community groups, and individuals from the creative industry.
- **Non-Users**: Comprising researchers, healthcare professionals, academics, and policy-makers.
- **Writers**: These participants were primarily from Birmingham City Council or academic and research institutions.
- **Policy-makers**: Representatives from Birmingham City Council and local community organisations provided perspectives on policy alignment and community-specific needs.

- **Engagement Partners**: Various community groups and organisations, all contracted to disseminate the profiles by Birmingham City Council.

This diversity aimed to ensure a comprehensive understanding of how CHPs are perceived and utilised across various stakeholder groups.

Data Collection

Data collection occurred between July and December 2024. Both interviews and FGDs were arranged to be in a private, comfortable setting to encourage open dialogue.

- ***Interviews***:
    - Conducted one-on-one, via virtual MS Teams.
    - Interviews followed a flexible guide (Annex I), covering key themes while allowing participants to explore issues of personal importance.
    - Duration: 25-30 minutes.
- ***Focus Group Discussions****:*
    - Facilitated by a moderator with experience in group dynamics.
    - A researcher taking field notes.
    - Conducted via MS Teams.
    - Discussions used a structured guide (Annex I) but encouraged interaction among participants to generate shared insights and debates.
    - Duration: 50–60 minutes.

Interviews and FGDs were live transcribed with participants' consent and supplemented by field notes.

Ethical Considerations

Ethical approval was obtained from the Science, Technology, Engineering and Mathematics Ethical Review Committee of the University of Birmingham (ERN_23-1144). Participants were provided a participation information sheet and consented before the interview. During the interview, they were assured of confidentiality. Pseudonyms were assigned to maintain anonymity. All participants were informed of their right to withdraw from the study without repercussions.

Data Analysis

The qualitative analysis was guided by the Consolidated Framework for Implementation Research (CFIR) (Damschroder et al., 2020), which encompasses over-arching five domains that affect the successful implementation of innovations like CHPs:

- **Innovation Characteristics**: Factors such as design quality and presentation that facilitate understanding and usability among diverse groups.
- **Outer Setting**: External influences, including political and economic contexts, which affect the implementation process.
- **Inner Setting**: Internal organisational factors at BCC such as culture, leadership, and resources that impact implementation.
- **Characteristics of Individuals**: Users' confidence, knowledge, and skills in using CHPs.
- **Process of Implementation**: The planning, judgment, and execution involved in adopting and integrating CHPs into practice.

Each CFIR domain has several constructs that were used in the deductive analysis of data about the use and implementation of the CHPs. New themes arose inductively, too, and were embedded within the constructs of the CFIR. This analytical approach enabled a deeper understanding of the challenges associated with the CHPs' use, identified areas for improvement, and explored the confidence of organisations and stakeholders in engaging with the profiles. The analysis process involved several steps to ensure rigour and relevance (Ritchie et al., 2013):

- **Reviewing Transcripts**: All transcripts were reviewed for accuracy and completeness before analysis.
- **Generating Initial Codes**: Manual coding was employed to identify key concepts and recurring patterns within the data based on CFIR constructs.
- **Grouping Codes into Themes**: Codes were clustered into themes and subthemes based on the CFIR constructs and observed patterns and relationships, ensuring alignment with the research objectives.
- **Interpreting Themes**: Themes/constructs were interpreted in light of the research objectives and existing literature to draw meaningful insights.

To enhance trustworthiness, the analysis incorporated data triangulation, comparing insights derived from interviews and focus group discussions (FGDs) (Carter et.al, 2014), and researcher triangulation, comparing multiple researchers' interpretations.

Methodological limitations

This qualitative evaluation focuses on perceptions of the effectiveness of the CHPs. This is different to knowing what would have happened in the absence of the CHPs (the counterfactual). Nevertheless, people's perceptions are important because these will affect the uptake and use of innovations. The results are limited to what participants felt comfortable disclosing to the interviewer and in groups. However, efforts were made to mitigate this by fostering an inclusive and supportive environment.

3. FINDINGS AND RESULTS

A total of 34 participants contributed to this evaluation (see Table 1). This comprised 13 participants in two FGDs and 21 participants in interviews. 6 participants took part in a focus group with Engagement Partners, whilst 7 participants took part in a focus group with Writers/Reviewers. The remaining 21 participants took part in 1-on-1 interviews (7 Users, 4 Non-users, 5 Policy-makers, and 5 External Writers/Reviewers).

Table 1: Participant Selection

Participants	Count
Users	**7**
Non-users	**4**
Writers/ Authors	**12**
Engagement Partners	**6**
Policy-makers	**5**
Total	**34**

Uses of the CHPs

Participants saw the CHPs as a valuable tool. The participants who used the CHPs were from a wide range of stakeholder backgrounds, including policymakers, researchers and healthcare professionals. One participant reported using the CHPs for policy development and decision-making. They provided evidence-based insights that helped to identify health inequalities to help design targeted public health interventions. Researchers and academics also used the CHPs for grant applications and research, as they offer structured data on community health trends. In healthcare planning and service delivery, CHPs were used to identify prevalent health issues within specific communities, ensuring that services were tailored to meet local needs effectively.

> *So that's why we wanted to use it in the handbook anyway, because we wanted to show that there's loads of different ways to engage with people. There's no one-size-fits-all and… the community profiles were demonstrating that actually sometimes what you need to do is break people into categories so that you can make sense of their lived experiences. Or you might be able to make sense of common themes within communities. And that was what we were trying to do, and we were also trying to define communities by saying that communities can be broken into, like different types. And this is what the Birmingham Community Council did with the profile. (User- to write a report, Academic)*

> *I used the profiles because I was looking particularly at inequalities and impact on diseases as a result of that…. we're looking at some solutions nationally, you know, in different areas and within Birmingham being one of the most deprived and diverse cities, we were looking at where we could potentially work alongside partners to improve outcomes. (User- to develop an intervention, Health Professional)*

Analysis using the CFIR

The analysis of the interviews and FGDs identified that the following CFIR constructs were most relevant for CHPs: the innovation characteristics (*source*, *evidence base*, *design*, *complexity adaptability, cost/time*, and *relative advantage*), the implementation processes (*teaming, assessing needs, engaging, and reflecting and evaluating*), individual characteristics (*knowledge* of the CHPs), and wider partnerships and connections. Below, the discussion of the findings as aligned with each of these constructs provides a comprehensive overview of the various perspectives and insights shared during the evaluation, as related to the key objectives.

Innovation characteristics

The innovation characteristics domain is about the CHPs themselves, such as how they are presented and the language used within them. Innovation characteristics are distinct from implementation processes and activities that affect their uptake, such as webinars or social media posts promoting their use.

Source

This CFIR construct relates to how the groups conducting the internal or external development of the CHPs innovation are perceived in terms of their credibility and trustworthiness. According to some of the policy-makers interviewed, the idea of developing the CHPs was conceived internally by BCC, and there were both internal and external experts commissioned to develop the profiles. The first CHPs lacked a clear structure for development, allowing flexibility among the groups developing the profiles, while later versions followed a stricter framework, leading to challenges by some groups in filling gaps in the framework. Collaboration among internal writers was perceived to facilitate brainstorming, and the use of the profiles themselves was perceived the help the council build trust, but the use of academic referees was perceived as less effective. Writers with deeper knowledge of specific communities would have improved the quality and relevance of the profiles by giving an insider perspective to profiles.

> *The officers working with the Council didn't have a very clear idea of what the CHPs would look like to start with, so we had a fairly free hand to get into the data, see what was there, and write it up according to what statistics and research data we could find. (Writer 7)*

> *We built up a very quick relationship of trust because... the actual health profiles were seen as an empowerment tool to say that if we didn't necessarily engage with community organisations, these are desktop exercises, peer review journals, etcetera. And we were saying this is what the healthcare system says of your community. (Writer 4)*

> *A lot of us definitely found issues with not being from the community we were writing about and finding a way to appropriately define and collect data on a specific community and potentially if we'd had that community buy-in at the start of presenting the options of this is the data we could get for this community what's appropriate. (Writer 3)*

Evidence Base

This CFIR construct is about whether there is robust evidence supporting the effectiveness of the CHPs. In this case, we looked specifically at what people said about the effectiveness of the data used to create the CHPs. The results showed that writers reported relying on generalisations, limited research, and diverse datasets, suggesting the need for more robust and locally relevant data to strengthen the evidence base of CHP data. According to the writers and reviewers, in some areas, where local data was unavailable, generalisations were made, which may have reduced the accuracy and relevance of the CHPs. There was limited research available for certain communities, which restricted the depth of insight and understanding in some of the profiles. The use of various datasets, while helpful, can lead to inconsistencies or challenges in ensuring the data aligns across the profiles. In the absence of direct data, proxy data was used, although this may not always accurately represent the specific health needs or conditions of the community. For example,

a writer described colleagues using data from South Africa to represent the South African population in Birmingham.

> *I think local data is really important in terms of health inequalities and if we can get more specific and say, you know, there's this data on black communities, what I would like to know is… nationally that prostate cancer largely impacts Black and African Caribbean men, it would be really useful if these community health profiles, had more specific data to tell me more about… the demographics, the black demographics in this area. What are their outcomes likely to be? What do we see? What are the patterns around prostate cancer, for example, around breast cancer? (User - for grant application, NHS Trust)*

> *Some writers had more difficulty even less data than what I had. E.g. They were using data from South Africa, for example, to talk about local South African population in Birmingham, and that's not really …I wonder the usefulness of a profile that doesn't have original data that's local in it. (Writer 1)*

Design

The design construct in CFIR is about how well-designed the CHP innovation is, including its presentation and packaging. The most salient finding within this construct was the importance of using clear, inclusive language that avoids stereotypes and generalisations, while also considering the need for more accessible formats such as infographics. Users valued the use of simpler language on the shorter versions of the profiles (infographics or executive summaries). They felt it made the information more accessible to a wider audience. They found the infographics effective in communicating key points, particularly for the wider public, making complex data easier to digest.

However, some users suggested that some language choices may inadvertently reinforce stereotypical views of certain communities, potentially misrepresenting their diverse realities. There was also a concern that generalisations in language used when writing about the available data could oversimplify the experiences of specific communities, leading to a lack of nuance in the profiles.

> *I found that it was very simple. It was very simple to navigate. As somebody who's a health professional. (User- to develop an intervention, Health Professional)*

> *I think the language could be changed and even our teachers will know that and would say most Sikhs will or Sikhs might……. I would be surprised if 100% of the Sikhs people in Birmingham do actually or believe or practice in the same way, so that the nuance is not there. And I think there's a real danger when we're centralising communities and actually that's the problem I have with the profiles. (User- to write a report, Academic)*

Complexity

This construct is about how complicated the CHPs are, which is important because it is often more straightforward to establish the effectiveness of simple innovations. The findings showed the importance of balancing the richness of information in the CHPs with accessibility to avoid overwhelming users, whilst ensuring the profiles remain specific and relevant to the unique needs of local communities. Participants generally agreed the CHPs were unique and tailored to reflect the specific characteristics and needs of communities within the West Midlands, providing a distinctive and relevant perspective. The profiles offer a clear depiction of the diversity within different communities, highlighting their specific health challenges and needs. However, some users suggested that the profiles could be lengthy and contain extensive information, which can be overwhelming, potentially deterring engagement due to the sheer volume of data.

> *They are quite huge, long documents and I think that might be a barrier to some people reading them or reading them comprehensively. I think [I'd] like some summaries for the community, they're easily*

accessible. I think the infographics is a good example of making sure that these are used in the future. (User, to gain knowledge, NHS)

It's allowed us to think more about the different communities in Birmingham and go beyond groupings of communities. So before maybe we might have looked at black or Asian communities without going into the detail of those communities and their differences. So, it's interesting going to the Nigerian versus the African Caribbean one. It's interesting going to something like Chinese Vietnamese. So rather than grouping communities actually finding out a little bit more detail about their specific issues, particularly where communities have come through. (User, for general work, NHS)

The only people who have used them directly within the organization is the research team and all they've said is just that they use them as background reading. What they did say was that they were useful for that. So they were, you know -accessible, easy to read, useful information. (Policy-maker 4)

***Differences**:* One of the specific aspects of complexity is 'difference', described here as the importance of defining and addressing diverse and different communities. Participants expressed that it is important for CHPs to account for communities that transcend geographic boundaries and encompass broader and cross-cutting identities. Some engagement partners and reviewers explained some challenges with the profiles. CHPs vary in terms of geography, but some communities cannot be solely defined by geographic boundaries. For example, groups like the LGBTQ+ community or individuals who are deaf/blind span across different geographic locations, making it challenging to categorise them based solely on geography.

Maybe doing a better job of capturing the super diversity of the city…. we've got a big wide amount of population and then we've got pockets of diversity but really going because some groups have been really underserved…So if you're looking at the LGBTQ plus experiences, I think there's one on this. I can't remember what it is. It's like where the intersectionality with faith and race and the issues will be so different from one group to another. So yeah, maybe it's about raising attention to the diversity. Having all in our city and how it's really important that we're listening to everyone's voices because we've not done that so far. We've missed that, haven't we? (User- to write a report, Academic)

Both users and engagement partners emphasised the need for CHPs to provide targeted insights, addressing diversity within communities. For instance, the Deaf/hearing loss CHP should distinguish between subgroups like the hard of hearing and the profoundly deaf, rather than generalising information. This approach ensures CHPs remain relevant, inclusive, and impactful.

A lot of it was aimed more at hard-of-hearing people, so it wasn't really recognised that there was a kind of a cultural and linguistic difference to people within the deaf community and people who perhaps lost their hearing through age or for some kind of accident or something over their lifetime. (Engagement partner 5)

Adaptability

The adaptability CFIR construct is about whether they can or are modified and tailored to suit local contexts. In the data, writers suggested the CHPs must be more dynamic to reflect current data to avoid becoming outdated.

A desire to keep them updated to put in the new set of data because I'm concerned that they do date. Quite quickly, we've had a new census since we did the first one. (Writer 2)

Cost/Time

Developing the CHPs posed challenges for writers relating to time and resource constraints. Participants noted that the process of writing is time-consuming, often leaving writers feeling unprepared and lacking clear direction. Additionally, the reliance on temporary project officers who oversaw the work of writers/authors

caused frequent changes in structure and ideas further complicating the process, impacting continuity and efficiency.

> *They're very lengthy documents. They take a lot of time to write. They also take a lot of time to be consistent across different profiles. (Writer 3)*

> *So, they've taken a lot longer than I think we initially anticipated and a lot of that has been going back and editing them as well…. took up the majority of the whole working week. (Writer 4)*

> *We had a project officer and that's another story about that because most of them were on temporary contracts, so they mostly didn't last the length of time we were working on the CHPs. And then we'd find ourselves with a new person who had maybe different ideas about what they wanted, so what we discovered was we would write a draft. And they'd have ideas about what, how it should be structured. And we'd have to go back and reorganize it. It was understandably fairly frustrating and time-consuming kind of process. (Writer 7)*

Relative Advantage

Are the CHPs better than other, competing innovations or current practice (their relative advantage)? CHPs were perceived to offer significant benefits over other data sources by being user-friendly and easy to understand. Features such as shorter versions and the inclusion of infographics made the profiles accessible to a wide audience. Additionally, CHPs serve as a convenient "one-stop shop" for comprehensive health information, streamlining access to key data and insights.

> *Compared to the census, I think the CHPs have summarised figures you don't have to go through a lot of materials to find statistics for specific communities. (User, public health consultant)*

> *So, the City Observatory - Birmingham City Observatory - has a dashboard where the census data you can manipulate it. It's still static in the sense that that census data, so it won't be updated until the next census. And the City Observatory is working towards having more dynamic data sets, which can be profiled. (User- to write a report, Academic)*

> *They're much more easy to read. They're much, much more enjoyable, much more colourful, they're much more... (User, for a report, arts & culture)*

Implementation processes

This aggregate domain of the CFIR highlights the activities that are used to encourage the uptake of the CHPs innovation, including the webinars and community conversations about their use. The constructs of teaming, accessing, engaging, and reflecting/evaluating were reflected by the data as important aspects of the successful implementation of CHPs.

Teaming

This construct highlights the importance of early collaboration, clear planning, and community engagement throughout the development of CHPs. The involvement of engagement partners is seen as highly beneficial in the development of CHPs. Engagement partners suggested that it is important that CHPs are co-created from the very beginning to ensure they meet the needs of all stakeholders. Writers also emphasised the importance of gaining buy-in from diverse stakeholders early in the process, ideally before the final draft of the profile.

> *I think what would have maybe helped our like dissemination and kind of the longevity and the quality is maybe having some of the co-production and the buy-in from different kind of stakeholders right from the start. So, for example working with the different data teams like the knowledge evidence and governance team within public health and the wider city observatory team. (Writer 3)*

Assessing needs

Users and writers explained that the development of the CHPs required a clear understanding of their target audience, purpose, and potential impact. Key questions such as "Who are the CHPs for?", "What are they used for?", and "How can their usefulness be maximised?" were essential to be asked at the beginning of development to ensure that the profiles address the right needs, were applied effectively, and provided meaningful value to the intended communities and stakeholders.

> *I think ask the people in the communities what they need, what information needs to be represented. With regards to health, there's some things that are very prevalent in some communities more than others. So, I think you know, if you're the black community versus the white communities, there's certain things that are in health can be very different. So, we know there's a higher risk of prostate cancer if you're from Black or Asian background versus white so going back to the community to say what is the statistics that we need to shout about in our health profiles that are in your community. And then secondly, to work closely with the voluntary sector in those communities to say what, because they're already working to improve. (User- to develop an intervention, Health Professional)*

Engaging

Engagement partners perceived it was important to use multiple channels and establish strong community networks to ensure effective engagement and dissemination of CHPs. From the perspective of the engagement partners and some users, webinars were seen as a valuable tool for engaging stakeholders and disseminating information about the CHPs. Building a network of engagement partners from diverse communities was perceived as a suggestion that would help foster broader involvement and ensure the profiles addressed the needs of various groups. Engagement partners preferred to have had continuous relationship with the city council.

> *I wish we had linked in a little more with the other delivery partners, you all have great ideas! (Engagement partner 2)*

> *They did have an impact, but it was lost and dissipated. We raised issues, there was excitement, but then it went flat when the contract ended (Engagement partner 4)*

Reflecting and Evaluating

This theme emphasises the importance of incorporating reflective practices and evaluation to refine CHPs and enhance their effectiveness over time. A policy-maker suggested embedding evaluation throughout the development of the CHPs to ensure continuous improvement and relevance. Regular reflection on the process allows stakeholders to assess what is working well and identify areas for enhancement. Evaluation helps identify lessons learned, which can inform adjustments to the profiles for greater impact in the future.

> *This evaluation should have been at the beginning of creating these profiles, if I could create these in the future that is one of the things I will ensure. (Policy-maker 3)*

Individual Characteristics

This construct is about individuals' needs, capabilities, opportunities, and motivations to use an innovation such as the CHPs (Michie et al., 2011).

Psychological capability - knowledge of the CHPs

A significant gap in awareness of the existence of the CHPs was identified by some participants, which could be attributed to limited dissemination channels to some potential users. Non-users, such as academics, researchers, and public health consultants, were among those who lacked sufficient knowledge of the CHPs. This highlights the potential need for enhanced dissemination strategies to ensure wider awareness and utilisation among potential stakeholders.

> *Yes, I think certainly because I have done a lot of work within Birmingham and the UK also looking at ethnic minority background and what influences their diet and physical activity. So, something like this would really come in handy. It gives us the evidence to know where to begin from. So yeah, certainly I will…….The other very good places they could use is to work through the universities to make it like an announcement/emails on it that they have this and they can because we do get regular announcements like this, that the City Council is doing this and they have this available click on this link to get more from it. (Non-user, researcher/academic)*

> *Yeah, we have more public health kind of information, but something like that. Might be useful for, well, probably more for research and needs assessment. (Non-user, medical practitioner)*

Wider Partnerships and Connections

Collaboration and bespoke, tailored engagement with NHS trusts and community groups (beyond the council and contracted engagement partners) provided stakeholders with the necessary knowledge and capacity to effectively utilise the CHPs. These partnerships facilitated the dissemination and practical application of the CHPs, underscoring the importance of strategic connections in maximising their impact.

> *Then we got in touch with the team and spoke with them because we've seen them on a public webinar where the council was showing one of their sessions to the public and inviting comments. So, we got in touch afterwards and said that we really like them and we thought we could use them more in our organisation. Understand some of the differences between communities. Understand how communities work and organise in Birmingham and learn a little bit of insight into some of the issues communities have faced him. So, we had a chat with the team at the City Council, and they agreed to create some bespoke sessions for us where we could have a little bit more emphasis on the healthcare of women and children being our sort of prime focus. (User, general work, NHS)*

4. DISCUSSION

This evaluation aimed to gather qualitative insights into the perceived effectiveness of Birmingham City Council's Community Health Profiles (CHPs), assessing the functioning of partnerships, and understanding stakeholder perspectives on what is working and what is not. The evaluation also sought to identify examples of good practice and innovative approaches. The findings aim to draw clear conclusions about whether the CHP program has been perceived as being effectively shared within the community and influencing policy and decision-making in Birmingham and beyond. Overall, the Community Health Profiles have been reported to be valuable tools for several groups, and there are opportunities to improve them.

Users' Perspectives

Participants learned about CHP's mainly through BCC (webinars and professional networks). However, some researchers and policy makers remained unaware, which suggests a more proactive and diversified strategy for dissemination is needed to spread awareness and promote uptake. Participants used CHPs in various ways depending on their professional roles. Researchers from academia, private practice and public health used it in their reports to identify health disparities among different communities, for funding request/ grant writing and in the development of targeted health interventions

From the users' perspective, the design and usability of the Community Health Profiles (CHPs) provide several benefits while also presenting some notable limitations that could be addressed to improve the CHPs in the future. The incorporation of infographics simplifies complex data, making the profiles accessible and easy to use for diverse audiences (Krum, 2013). Additionally, the availability of shorter versions further improves accessibility, allowing a wider range of users to quickly comprehend the content. The CHPs also act as a one-stop shop for data on specific communities, providing a centralised and valuable resource that supports tasks like grant writing through its targeted information (Wallerstein et al., 2017).

Despite these advantages, users highlighted several limitations. Outdated data from older surveys or studies leads to delays in reflecting emerging trends or health issues, diminishing the relevance of the profiles. The lack of detail for marginalised subgroups means that smaller or underrepresented communities are not adequately captured, potentially neglecting their unique health needs (Lorenc et.al, 2013). Furthermore, the absence of qualitative data hinders the understanding of community values, cultural practices, and health perceptions, which are vital for contextualising health outcomes (Greenhalgh et al., 2016).

The static nature of CHPs further limits their effectiveness, as rapidly changing health determinants (Braveman & Gottlieb, 2014). Finally, the generalisation of data often masks disparities within subgroups or neighbourhoods, overlooking the unique challenges faced by specific communities or cultural groups (Frohlich & Potvin, 2008). Addressing these limitations could enhance the usability and impact of CHPs as tools for improving community health. This perspective highlights the need for continuous updates, greater attention to subgroups, and the inclusion of qualitative data to improve the relevance and accuracy of CHPs.

Engagement Partners' Perspectives

Engagement partners found the provision of webinars by the BCC team to introduce CHPs and their uses to be beneficial. The knowledge gained through the webinars enabled them to organise activities within their communities, and they appreciated the support received from the BCC team in these efforts. Their main objective was to disseminate the profiles, employing methods like online workshops, WhatsApp groups, and focus groups.

However, engagement partners felt that their relationship with BCC was short-lived, expressing a desire for a more continuous partnership. They wished they had been involved earlier in the design process of the CHPs, rather than being presented with the finalised version. This involvement would have allowed them to provide input on aspects like language use and the classification of certain groups, which they felt could be improved. Research on co-creation highlights the value of involving stakeholders from the design phase to improve alignment with community needs and cultural contexts (Jagosh et al., 2012). The sometimes-limited degree of public involvement in shaping service delivery by UK local government has been recognised elsewhere, such as in evaluations of whole systems approaches to diet and healthy weight (Breslin et.al, 2024).

There was a consensus that the dissemination process should extend beyond engagement partners, targeting other groups that would likely use the profiles (e.g. other community groups stakeholders, researchers, healthcare consultants) – consistent with recommendations in public health dissemination frameworks (Damschroder et al., 2009). Partners also emphasised the importance of an ongoing relationship with BCC beyond the end of their contractual term in order to continue CHP activities and have updates on the future of the CHPs. They expressed a desire to continue promoting and contributing to the CHPs.

Finally, the engagement partners suggested the creation of a network of partners. They felt that the focus group discussions themselves, which brought them together to discuss shared experiences, were a valuable opportunity to exchange strategies and learn from each other. They believed that such networking could have further enhanced their effectiveness during their collaboration with BCC. This is aligned with findings from peer-network studies that underscore the role of collaborative learning environments in enhancing the effectiveness of community health initiatives (MacQueen et al., 2001)

Writer/authors' perspectives

Writers and authors of the CHPs emphasised the need for a well-defined structure to guide their work, including a streamlined approach to data search and analysis. They also highlighted the importance of improved synchronisation between external and internal writers to ensure consistency and efficiency in the development process. Furthermore, early stakeholder buy-in was identified as crucial to ensure the profiles are relevant, appropriate, and aligned with the needs of the intended audiences. This feedback underscores the importance of structured processes, collaborative alignment, and early engagement in enhancing the development and impact of CHPs (Damschroder et al., 2009, Greenhalgh et al., 2017).

In the absence of direct data, writers used proxy data, although this may not always accurately represent the specific health needs or conditions of the community. A writer described colleagues using data from South Africa to represent the South African population in Birmingham, which is a limitation of the CHPs because the health behaviours and health seeking behaviours of migrants may differ from those of their home countries as a result of the different environments (Alidu and Grunfeld, 2020),

Policy-makers' perspectives

Policy-makers emphasised the importance of enhancing the functionality and relevance of Community Health Profiles (CHPs) through several key strategies. They recommended the development of a dynamic dashboard system to facilitate easier access and interaction with data. Regular updates to the data were highlighted as essential to ensure the profiles remained current and actionable. This is critical for maintaining the profiles' usefulness, reflecting the necessity of real-time data in effective policymaking (Raghupathi & Raghupathi, 2014). Additionally, policy-makers suggested adopting a more proactive approach to data collection, moving beyond reliance solely on desktop research to address gaps and provide more comprehensive insights. This can be done by collecting primary data from communities to gain deeper insights. They also stressed the need for evaluation processes to be integrated from the start of the CHP development, enabling continuous assessment of their effectiveness and impact. This recommendation is supported by implementation science frameworks that prioritise iterative evaluation for sustaining health interventions (Proctor et al., 2011). Collectively, these strategies are aimed at improving the usability, accuracy, and overall value of CHPs for informed policy and decision-making.

5. CONCLUSION

The evaluation of Birmingham City Council's Community Health Profiles (CHPs) revealed important insights into their development, dissemination, and utilisation. Across themes about topics such as design, implementation, adaptability, and engagement, the findings highlight the value of CHPs as tools for addressing health inequalities and informing policy decisions. However, several areas for improvement were identified to enhance their perceived effectiveness. The design of the CHPs was positively recognised for its potential to simplify complex data through user-friendly formats like infographics and shorter versions, however, concerns about generalisations, outdated data, and lack of qualitative insights remain. Implementation challenges included limited initial structure, misalignment between external and internal writers, and the absence of stakeholder involvement from the start. Adaptability issues pointed to the risk of CHPs becoming static, with recommendations to include real-time updates and targeted data. Themes of engagement underscored the importance of webinars, targeted dissemination methods, sustained relationships with engagement partners, and wider connections across the city beyond the council to ensure the profiles are widely shared and utilised.

RECOMMENDATIONS

Co-production or co-creation, involving collaboration between community members, stakeholders, and researchers, is crucial for developing effective and meaningful Community Health Profiles. This participatory approach ensures that the profiles are not only data-driven but also grounded in the lived experiences, priorities, and insights of the community. Involving community members and other stakeholders at the development stage helps shape the profiles to better suit community needs, experiences and identify certain gaps in research or perhaps challenges with health within the particular community the profiles are meant for. By embedding co-production into the development of these Community Health Profiles, Birmingham City Council can create tools that are not only accurate and comprehensive but also empower communities to take proactive roles in improving their health and well-being (Slay & Stephens, 2013). Collaboration with local stakeholders ensures that profiles reflect real-world conditions and are actionable (Palumbo, 2016).

An interactive design is essential for maximising the utility and impact of Community Health Profiles. By incorporating interactive elements such as visualisations, customisable filters, and real-time data updates, these profiles can become dynamic tools for engagement, analysis, and decision-making (Vázquez-Ingelmo et.al, 2019). When integrated with live data sources, interactive profiles can provide up-to-date information, ensuring decisions are based on current trends and conditions. Develop Community Health Profiles using user-friendly platforms that incorporate interactive dashboards, responsive layouts, and multilingual support. Engage end-users in the design process to ensure the interface meets their needs and preferences (Norman, 2013). Regular updates and investments in data infrastructure are essential to maintain relevance.

A clear dissemination plan is essential for ensuring Community Health Profiles reach the right audiences and are effectively utilised (Brownson et al., 2018). Targeted dissemination helps deliver the profiles to key stakeholders, such as policy-makers, healthcare providers, and community members, enabling them to make informed decisions. It also ensures that Community Health Profiles are not only informative but also widely used, fostering collective action to improve health outcomes and equity. BCC can first identify who the target group for CHPs are, identify their regular communications pathways, such as Health Professionals through the Integrated Care Boards (ICBs), Primary Care leads through the local medical communities, Researchers/Academia- through platforms such as LinkedIn, X, and connections with public health-related research groups.

To fully harness the potential of Community Health Profiles, it is essential to move beyond descriptive data (statistics that summarises the characteristics of a dataset) and incorporate analytical and actionable insights. While descriptives provide a foundational understanding of health status, adding context, interpretations, and recommendations significantly enhances the profile's utility for decision-making and community impact (Moran and Butler, 2001). Combining quantitative data with qualitative insights from community engagement can provide a more comprehensive picture. It enables users to take targeted, evidence-driven actions to improve health outcomes and equity. NHS board reports provide this information with a narrative about why and how

these changes have or have not occurred, which is an approach that health profiles could consider (see Box A; Schmidtke et.al, 2024).

Box A: Example of data combined with narrative to explain why changes have or have not occurred. From Figure 1 in Schmidtke et al. (2024).

Inpatient Falls Total

High adverse event (signified in orange) possibly caused by a vacancy rate and absences where availability to provide specials and enhanced observation is reduced.

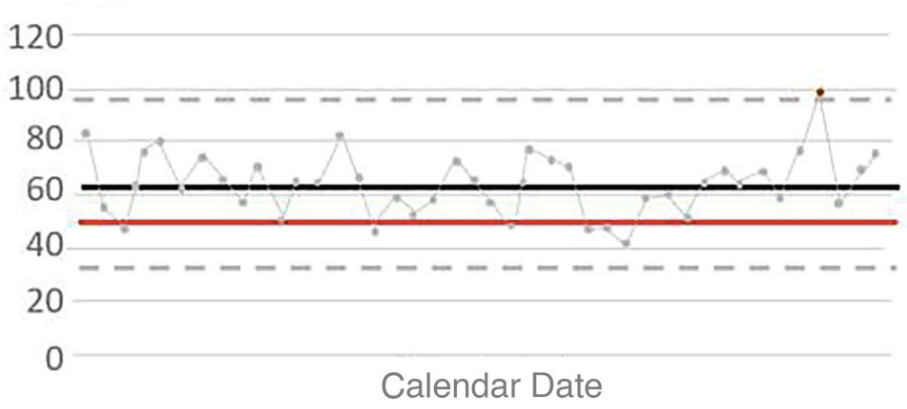

Chart description: An example control chart with supporting text remade from a hospital broad paper reviewed in this study. The black line represents the average fall rate, and the grey dashed lines represent the three-sigma variation around that average. The red line represents a desirable target. The grey data represents variations falling within the dashed lines (expected variation) and the orange datum represents variations falling outside the dashed lines (special cause).

If there is no local data on a community, instead of relying on proxy data of communities, there could be a statement about the absence of data, investment in collecting primary data from such communities, or a tailored approach be taken for each community depending on the availability of information/data/community needs.

Incorporating evaluation from the outset of developing Community Health Profiles is critical to ensuring their effectiveness, relevance, and long-term utility. Embedding evaluation from the start of developing the Community Health Profiles ensures they are relevant, high-quality, and actionable. Early evaluation helps align the profile with user needs, improves data accuracy, and fosters stakeholder buy-in. It supports efficient resource use by focusing efforts on valuable features and ensures the profile provides meaningful insights for health interventions. This can be achieved by setting clear objectives, engaging stakeholders, using iterative testing, and monitoring the profile's impact. Integrating evaluation early ensures the profile remains a robust and effective tool for driving improvements in community health. Rather than having a fixed structure for all profiles which might not be a good fit for the diverse profiles, the CHPs could be designed to evolve responding to constant evaluation and community feedback.

Maintaining continuous relationships with engagement partners is also vital for encouraging the sustained use of Community Health Profiles. Ongoing collaboration increases utilisation, enhances trust, and ensures the profile remains relevant and actionable. Partners provide valuable feedback, broaden the profiles' reach, and help adapt them to evolving community needs (Hebert-Beirne et.al, 2018). As suggested by the engagement partners, this can be achieved through formal partnerships, regular communication, training, continuous funding and recognising partner contributions. By fostering these relationships, the profile becomes a dynamic tool for collaborative, evidence-based decision-making and lasting community health improvements (Rong et.al, 2023).

In conclusion, while CHPs have demonstrated their value as an evidence-based resource, their potential can be more fully realised through improved processes, stronger partnerships, and innovative approaches. By

addressing these areas, CHPs can evolve into robust tools that effectively guide health interventions and foster equity in Birmingham's diverse communities. Find a summary of the recommendations in table 2.

Table 2: Table of Recommendations

Key Area	Recommendation	Justification
Co production and co-creation	Increase collaboration between community members, local government, researchers, and other stakeholders at all stages	This participatory approach ensures that the profiles are not only data-driven but also grounded in the lived experiences, priorities, and insights of the community
Interactive profile design	Incorporate interactive elements when presenting profiles such as visualisations, customisable filters, and real-time data updates	The profiles can become more dynamic tools for engagement, analysis, and decision-making
Dissemination plan	To promote dissemination, identify target groups for CHPs and their regular communications pathways. As examples: • Health Professionals through the Integrated Care Boards (ICBs). • Primary Care leads through the local medical communities, and • Researchers/Academia through platforms such as LinkedIn, X, and connections with public health-related research groups	Targeted dissemination helps deliver the profiles to key stakeholders, ensuring that Community Health Profiles are not only informative but also widely used, supporting collective action to improve health outcomes and equity
Actionable insights	Move beyond descriptive data (statistics that summarise the characteristics of a dataset) and incorporate analytical and actionable insights. Combining quantitative data with qualitative insights from community engagement can provide a more comprehensive picture.	While descriptive information provides a foundational understanding of health status, adding context, interpretations, and recommendations significantly enhances the profile's utility for decision-making and community impact It enables users to take targeted, evidence-driven actions to improve health outcomes and equity.

LIMITATIONS

The use of qualitative methodology such as focus group discussions and interviews are valuable ways of gathering data but are necessarily limited to the views of the people who took part. The research team worked closely with Birmingham City Council in recruiting potential participants, which provided a very specific target audience. This was of benefit for answering the research questions, however, a more inductive approach to identifying questions of interests and a broader recruitment strategy could have provided different perspectives. There was also the potential of a social desirability bias in the focus group discussions as writers and engagement partners may have felt the pressure to agree with the groups expectations rather expressing their true opinions. Future research could mitigate these issues by using a mix of methods, such as, surveys with larger samples and real-time user analytics of usage of CHPs online. This could help answer questions such as who benefits most from the CHPs, how the CHPs have influenced policy, and identifying cohorts of users who have not engaged with the CHPs to date.

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Annex I. Data collection tools

INTERVIEW GUIDE for Users and Non-users

Thank you for agreeing to have a chat with me, which should last no more than 30 minutes. The purpose of our chat is to help us understand how Community Health Profiles are being used/not used and what can be done to improve them. All your responses are confidential.

- Have you heard of the Birmingham Community Health Profiles? If not explore reasons they may not have heard of the profiles.
- Have you used the profiles in your work? If not, why
- Which profiles have you used and why?
- How many profiles did you read fully? Or did you just review certain sections relevant to your work/key findings?
- Which elements of the profiles have you used?
    - Full technical report
    - Infographic
    - PowerPoint slides
    - Webinar
    - Translated resources
- Do you feel the profiles were easy to read/understand and why did you feel this?
- How do you think we could improve the profiles?
- How have you used the information in the CHPs?
- What support, such as webinars or other resources, are available to help you use the CHPs? [probe – what else?]
- What did you find most useful about using the profiles? And would you encourage this in future profiles?
- Have the profiles informed your practice and how? If not yet, how do you plan to?
- How do the profiles compare to other sources of data or reports for communities that you may use in your work? What is better/worse about the CHPs?
- Do you feel more confident in your understanding of different communities having read the profile?
- What would you recommend the profiles to others and if not, why not?
- What did you learn after reading the profile?
- What do you see as the legacy of the profiles?

Thank you for your time answering these questions. Is there anything else I should know?

FOCUS GROUP DISCUSSION- for Engagement Partners

Thank you for agreeing to be part of this discussion, which should last no more than 45 minutes. The purpose of this discussion is to help us understand how Community Health Profiles are being used and what can be done to improve them. All your responses are confidential.

- How was your experience applying as an engagement partner?
- How was the experience working as an engagement partner?
- Different methods of dissemination - were some more useful than others?
- Did the community typically engage more with specific sections of the CHPs? Why?
- For each health inequality project, was your method of engagement successful? How do you know?
- What do you think would have helped communities to engage more with the profiles?
- How reflective do you feel the data in the CHPs was of the communities' lived experiences?
- How could the Council have worked with engagement partners more effectively to support change?
- Do you think the profiles will have an impact on the communities you work with?
- Have they had an impact on your organisation and its use of data and evidence?

- What do you see as the legacy of the profiles?
- Do you feel that the profiles have more potential to reach certain communities than others? If so, which ones and why?
- Are you aware of other people using the profiles in their work?

FOCUS GROUP DISCUSSION- for Writers

Thank you for agreeing to be part of this discussion, which should last no more than 45 minutes. The purpose of this discussion is to help us understand how Community Health Profiles are being used and what can be done to improve them. All your responses are confidential.

- Were the briefs useful for writing the profiles?
- Did you feel restricted by any elements?
    - *Prompt: For example, not including international research and evidence?*
- The profiles had a set structure following the themes from the Birmingham Health and Wellbeing board. Do you feel there were any topic or data gaps in the profiles?
- What would have helped guide you in writing the profiles?
    - *Prompt: Would it have helped to have provided a list of data sources we expected you to check under each section?*
- What other resource/guidance could have been provided to help support writing the profiles?
- *For external authors only* – how would you describe your support from Public Health when writing the profiles?
- What do you see as the legacy of the profiles?

INTERVIEW GUIDE for Policy-makers

Thank you for agreeing to be part of this discussion, which should last no more than 30 #minutes. The purpose of this discussion is to help us understand how Community Health Profiles are being used and what can be done to improve them. All your responses are confidential.

- What is the purpose of the Community Health Profiles?
- Why were specific communities chosen for profiles over others?
- What is your understanding of the limitations of the profiles?
- What would you change in the future for the profiles if they were to continue?
- What do you see as the legacy of the profiles?

How have you heard of the CHPs, have you used them in any form, what do you think is useful in your line of work? What can be done to improve it/usage?