The AHSN Network

Health Innovation North East and North Cumbria Innovation for Health Inequalities Programme

Impact Report

May 2024

Background

North East and North Cumbria (NENC) has the lowest healthy life expectancy and highest health inequalities of any region in England. Men and women not only have lower life expectancy than the national average but, they spend a larger proportion of their shorter lives in poor health.

Nationally, the conventional model, whereby individuals are expected to be motivated to attend a "health care setting to undergo CVD risk assessment (health checks and annual CVD reviews)" has high levels of attrition, with populations most at risk frequently failing to engage with these pathways and attend appointments.

A cross-sectional study in the BMJ in 2020 by Patel et al amongst others, have shown variable uptake of CVD health check interventions amongst the general population. Furthermore, concerns have been raised amongst commissioners and providers of these health checks relating to how the delivery and practical implementation of these programme presents a perverse risk of increasing health inequality if implemented in a way which does not systematically prioritise equity of access, outputs and outcomes, especially amongst underserved population groups.

Middlesbrough has the highest rate of years of life lost for males and female in NENC. CVD contributes to 10.5% of the 3.9 year gap in life expectancy between Middlesbrough and England in 2020/21. For females this is 15.7% of the 3.8 year gap. The life expectancy gap within Middlesbrough between the most and least deprived areas, CVD contributes towards 20.4% of the 11.1 year age gap for males and 14.9% of the 8.8 year age gap for females.

As an example, when we consider the mandated NHS health check programme, during the 5-year health check invitation cycle between 2012 and 2017, there were 9 694 979 individuals nationally offered an NHSHC and only 5 102 758 (52.6%) took up the offer. There were considerable geographical variations in uptake between local authorities across England ranging from 25.1% to 84.7%. For Middlesbrough, the average uptake of this programme over a ten year period was 53.1% whilst Hampshire, an affluent county in the South East of England had the highest uptake at 84.7%.

With higher levels of inequalities in this region, access to health care and prevention services for underserved population groups historically has been poor, with CVD health check not an exception. Although invitation methods have changed over time to incorporate greater digitalisation, opportunistic delivery and delivery by third-party providers, ethnic minorities continue to have poor uptake of CVD health checks in this region.

Through the secured Innovation for Health Inequalities Programme (INHIP) funding, the Health Innovation NENC, and ICS NENC in partnership with NIHR ARC NENC aimed to co-develop innovative access strategies that will enhance CORE20PLUS5 communities' engagement with CVD risk assessment within Middlesbrough, as a blueprint developed, that can be replicated nationally.

The aim of the behavioural insights exploratory phenomenological study was to explore experiences of impacting on ethnic minorities and underserved groups of CVD health checks as in intervention to prevent CVD mortality and risk factors in Middlesbrough.

The targeted focus group interviews engaged local underserved communities to:

- Gather behavioural insights into the barriers/challenges that limit engagement with the current 'biomedical' CVD Risk Assessment model,
- Co-design potential solutions to facilitate greater engagement with CVD Risk Assessment,
- Pilot co-designed solutions by the three targeted CORE20PLUS5 communities in Middlesbrough, and
- Share learnings to accelerate uptake of CVD Risk Assessments locally, regionally, and nationally, for underserved groups.

A qualitative behavioural insights inductive thematic approach using focus group interviews, was employed engaging 45 participants (27 women and 18 men) recruited in Middlesbrough from various African, South Asian and underserved white British population groups. Participants were from a range of backgrounds including economic migrants, asylum seekers, taxi drivers, professionally qualified migrant doctors - REPOD (Resettlement Program for Overseas Doctors and other health professionals), South Asian women and underserved white British groups.

Access to these community groups was facilitated through community leaders, who have worked collaboratively over the years with Middlesbrough Council's Public Health team, to deliver against innovative programmes to improve the health and wellbeing of underserved groups.

The EAST framework developed by the Behavioural Insights Team, which is an easy-to-follow outline for using Behavioural Insights when exploring service user experiences of interventions, was used for this project. The EAST framework acronym stands for Easy, Attractive, Social and Timely. Qualitative narrative from seven focus group interviews conducted were recorded and then transcribed. Ethics approval was applied for and granted through our academic fellows at the ARC Newcastle University.

The EAST framework as a tool to explore participants' lived experiences of accessing CVD health checks, was at the heart of this project's methodology. However, this framework could not be applied in isolation from a good understanding of the nature and context of the research problem under investigation. Therefore, the following four key stages were developed and followed:

A. Define the intended outcome

The intended behaviour outcome was an increased uptake of CVD health checks for underserved and marginalised groups. This would include better knowledge from participants of what CVD is as a condition, what are the risk factors, knowledge of the actual types of CVD health checks available, who delivers them, where to access these services and most importantly what are the barriers for engagement.

B. Understand the context

To understand the context of the phenomenon under investigation, six out of the seven focus groups delivered were face to face and within the settings that participants are familiar with, i.e. at community hubs, two mosques. One focus group was delivered through Microsoft Teams for REPOD health professionals out of convenience.

The target communities are part of the CORE20PLUS5 group who need tailored and proportionate support to reduce health inequalities at both national and system level. In Middlesbrough, these communities are also known to be the least engaged with our healthcare systems and at the highest risk of developing CVD that goes untreated.

C. Building the intervention

The EAST framework was used to generate the project's behavioural insights through engagement with these target communities. The process was iterative process repeated within all the seven focus groups with a set of standard open ended eight questions exploring participants' experiences of CVD health checks and health care services.

The interventions to increase uptake of CVD health checks were not pre-defined before the research – but rather developed and co-designed with the participants based on their views, experiences and perceptions of what will work for them to improve access. Metaphorically the interventions are designed by them for them.

D. Test, Learn, Adapt

The co-designed intervention(s) will be put into practice and tested by the communities who developed them in order for their effects to be reliably measured.

EAST Framework

The project team, in conjunction with the Clinical Research Network adopted the EAST framework as a research tool. This enabled the following themes to be investigated through behavioural insight focus group interviews conducted. The framework enabled themes to be grouped under each framework component, to utilise a framework analytical approach, which then paved the way for further synthesise into emerging themes.

Table 1. EAST Framework brief summary and factors explored in focus groups

EAST Framework Component	Framework Narrative	Factors assessed in Focus Groups interviews
Easy	How easy is it to access CVD health checks or understand the condition and its risk factors?	- Interactions with health services - Ease of these interactions - What would make them attend health checks - How people are invited - Where is it ideal for health checks to be conducted and best way to be invited
Attractive	How attractive is it preventing CVD?	- Is CVD prevention important? - Would you take up health checks? - How can CVD prevention be marketed?
Social	What are the positive or negative views of participants and their communities to take up CVD health checks?	- What support is needed for communities to access health checks? - What kind of invitations would work for your communities? - What information is helpful for communities to share about CVD? - How can CVD Health Check services suite or improve your lifestyle
Timely	How can health seeking behaviour change to improve uptake? When is the best time to intervene?	- Which behavioural change models can increase uptake? - How can behaviour change be sustained? - What costs are involved in accessing services? - Any windows of opportunity (tagging on family CVD history) to influence health seeking behaviour? Nudge?

The table below outlines the themes that have emerged from the focus group from the community leaders in Middlesbrough:

Global Cross Cutting Themes				
	EASE	**ATTRACTIVE**	**SOCIAL**	**TIME**
1.	GP access, wait times, Walk In appointments	Gender appropriate services	Community development approaches	Cost of accessing free healthcare
2.	Language barriers / health literacy	Staff attitudes and receptionists' gatekeeping	Tokenistic engagement	Voices not heard
3.	Translation services	Staff cultural competence	Over researched, underserved	Amend health check inclusion criteria
4.	What is a health check?	Parity of esteem	Proportionate universalism	Proud to volunteer
5.	Health champions	CVD social marketing / COVID style	Social norms	Large GP patient lists
6.		Shared Decision Making	BAME health professionals underused as health champions	Health ownership
7.		Prognostication		Nudge approach / behaviour change
8.		Health discrimination		

A debriefing session was held with local community leaders and commissioners who had facilitated access to focus groups participants, to share the findings and start co-designing interventions aimed at improved CVD health check uptake. Four community leaders and a commissioner at the session reflected on the key findings. Key barriers and enablers that emerged from the focus group interviews provided a platform to "mind map" bespoke intervention options to improve health check uptake.

Key barriers discussed at length by community leaders were unavailability of GP appointments, long wait times, staff attitudes towards patients, language barriers including what is termed "doctor speak", and cultural incompetence of service staff. Other prominent barriers included the need for clarifying what a health check is, tackling health literacy and also the need to deal with what was labelled health discrimination for minority groups accessing health services.

Key enablers which community leaders felt will resolve the highlighted barriers and form part of a better more inclusive health check offer to complement the medical model, included better use of community assets such as mosques and community hubs for outreach. Better and accurate translation services are needed, and so are targeted and appropriately designed social marketing campaigns, cultural competency training, behaviour change activities within community settings such as healthy cooking classes or exercise classes, targeted social prescribing interventions which aim to utilise community resources, such as health champions identified from Middlesbrough Council's Health Champions Network.

Recommended co-designed interventions from community leaders include the following:

	Remedial Action	Co-designed Interventions
1.	Social marketing approach	• Community leaders Talking Heads promotional videos • Health Innovation NENC InHIP programme debrief video • Community Radio Voice FM • InHIP Podcast produced based on project findings • Novartis MFC Foundation campaign
2.	Health Check Programme resources	• Adoption of a Middlesbrough Healthy Hearts type resources, translated into various languages • Translated Shared Decision-Making guides for CVD • Review inclusion criteria for the community Healthy Heart Check Offer
3.	Staff training	Cultural competency training delivered by BAME Community Interest Companies, IPC, Nur Fitness to mainstream health services providers
4.	Community capacity	• Community health champions as part of the community outreach offer • Middlesbrough Council targeted Health Inequalities Community Grants projects • Bespoke translation services
5.	Community outreach	Community outreach offer to include community hub use and mobile delivery such as • Health Buses • Utilising "Walk In" style community centre assets such as The International Centre, prayer Mosques, Nur Fitness and Thorntree Community Hub for monthly CVD health checks • Middlesbrough Council Community Health inequalities grants project • Teesside University Sports Science Health Checks Clinics
6.	Social prescription	• Gender specific lifestyle classes at community venues e.g. at Nur Fitness, International Centre, Thorntree Hub
7.	Data capture of community activity into GP systems	Clinically delivered elements of health checks that include taking BP, cholesterol or height and weight will need to be captured and securely shared with GPs and can include • Use of PocDoC lateral flow-based Point of Care Testing for cholesterol • MFC Foundation Bus and trained staff to have access to Social RX software for transferring data to GP system securely. • Outreach NEAS services • Outreach pharmacy service / within Health Bus

Delivery

A total of 29 heart health check outreach sessions have been delivered to these underserved communities. We have collaborated with Teesside University to deliver 3 sessions; Middlesbrough FC Foundation have delivered 17 sessions and HI NENC have delivered 7 women's only sessions to South Asian women.

On 26th March 2024 the project team held a post-intervention focus group with community leaders to obtain their reflections on the impact of the delivery of the healthy heart checks in their communities. This session was recorded for transcription and the community leaders were happy to provide their reflections in the form of 'talking heads' videos.

Local impact

Although a number of interventions were co-designed, due to the short timeframe of the programme the project team focused on the delivery of heart health checks in the community. The programme has delivered a significant impact to the communities in Middlesbrough.

One of the core themes from the behavioural insights research involved making heart health checks easy to access. This was achieved through delivering the sessions at the community hubs that these underserved communities' access regularly, such as Community centres, Mosques and Fitness Centres.

Many of the individuals who had a heart health check commented on the ease of accessing the service:

"It has been a success because, the women that would not have normally accessed health checks through going to their GP have been able to access a health check here. It has had an impact beyond the women, to the whole family unit"
Shazia Noor- Nur Fitness

"I had very easy session because of very professional lee and he explained everything like without any issues."
Anonymous, Middlesbrough Central Mosque

To be able to access healthcare within the community centres that were regularly attended by members of these underserved communities made it easier and more attractive. In addition, one of the themes of the focus group following the delivery of the heart health checks was the positive peer-pressure from the social environment for each individual to take ownership of their health. Many individuals said the community was a positive driver in them accessing their heart health check:

"This is a excellent service that my community should all get behind. Lee was very informative, polite and educational in his approach a true professional. Thank you for offering this service and please make this happen longer."
Anonymous, Newport International Centre.

"Very useful as learnt more from this than I did from my GP surgery"
Anonymous, Al-Mustafa centre

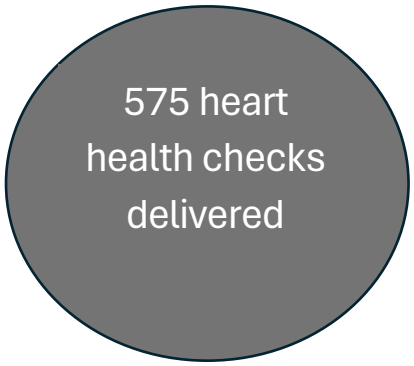
Some of the feedback from individuals in their experience report that they have previously felt overlooked in regard to healthcare and that having the heart health checks within their community centre was attractive to them:

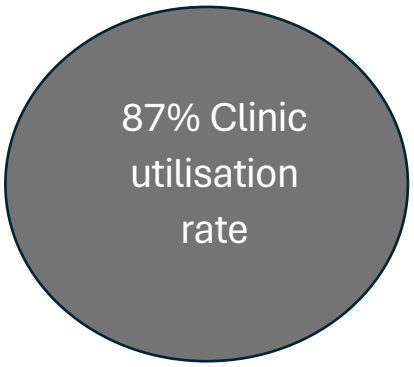
"Really appreciate the opportunity to have a health check, as I feel that people my age are often overlooked unless they have a major health problem or have been through pregnancy. I fully recommend the assistant who worked with me. He is very knowledgeable, and I took a great deal away with me today. Amazing job. Thank you"
Anonymous, Thorntree Community Centre

One of the core aspects of the programme of work from the beginning has been to engage community leaders in the codesign and delivery of the heart health checks. This has enabled community leaders to take ownership of the programme to make it a success:

"Codesigning the initiative and understanding what the community needs are, and then implementing the initiatives in partnerships with the Mosques and community centres enabled it to be successful because people had ownership and buy in from the onset."
Idrees Rashid- Community Leader

This engagement has been crucial in improving uptake of the heart health checks. This is reflected in the number of heart health checks that have been delivered and the high utilisation rates achieved.





The programme focused on supporting the adoption of NICE Guidance 238 (formerly CG181) which focuses on risk assessment and reduction, including lipid modification in Cardiovascular Disease. The programme focused on an upstream approach with the focus of improving uptake of Ezetimibe with Bempedoic Acid and Inclisiran.

Of the 575 heart health checks delivered, 330 were referred to their GP which is a referral rate of 57%. This is higher than the national average, whereby 25% of people are referred with a QRisk score of over 10%.

At the beginning of the programme in February 2023 we took baseline measurements of Inclisiran and Ezetimibe/Bempedoic Acid orders from open prescribing. This data is specific to the Tees Valley region where the programme was implemented and was taken from openprescribing.net. The table below demonstrates the impact over the 12 months to February 2024:

Ezetimibe with Bempedoic Acid (TA694)

Feb 23	Feb 24	Total Number prescribed over 12 months	% Increase Over 12 months
66	280	1,586	425%

Inclisiran (TA733)

Feb 23 (orders per month)	Feb 24 (orders per month)	Total Number prescribed over 12 months	% Increase Over 12 months
17	26	239	53%

There has been a considerable impact of the programme, and this has been recognised by our regional North East and North Cumbria Integrated Care Board. We have developed relationships with Jon Quine and Claire Mills who lead the health inequalities projects across the region and the project has gained recognition from the Chief Executive- Samantha Allen through her weekly newsletter on 10th November 2023.

The commissioners for public health in Middlesbrough have been involved throughout the process and were involved in the codesign of the heart health check model implemented in the delivery of the project. One of the outcomes of the project has been the development of community leaders who champion CVD prevention for their communities. Health Innovation NENC have been involved in scoping the training packages that could be provided to community leaders, and commissioners are reviewing how to build upon the success of the heart health checks pilot.

Learning and Spread of Best Practice

The project team worked hard in the planning phase of the project to understand the stakeholders who would be crucial to its success. These included community leaders, academics and commissioners. The enablers for the project have been listed below:

- Engagement with community leaders and commissioners to understand the barriers to accessing health checks and codesign of an intervention.

- Working with Academics in the region using a behavioural insights approach deployed in focus groups (EAST framework).
- Implementation of a point of care, 5-point lipid panel which provides a result within 7-minutes during the heart health check.
- Developing relationships with delivery partners to provide the heart health check, including Teesside University and Middlesbrough FC Foundation.
- Delivering the heart health checks within community centres, fitness centres and religious centres at the heart of the community. This made it easy to access, attractive and social.

Stakeholders

Early identification and engagement with key stakeholders in Middlesbrough was key to the success of the programme. A communication plan was developed with the stakeholders to ensure engagement was maintained throughout the course of the programme. Many of the stakeholders in the list below have become champions of health inequalities for cardiovascular disease within the Middlesbrough region.

The stakeholders involved in the project included:

- NIHR Applied Research Collaboration
- Middlesbrough Public Health
- Community Leaders from underserved South Asian, African and underserved white British population groups.
- NENC Integrated Care Board
- Teesside University
- Middlesbrough FC Foundation

Barriers

The programme focused on community outreach to deliver the heart health checks. This model was key to the high utilisation rate of clinics and the referral of patients back to their GP for lipid optimisation. However, the programme did experience some barriers, and these are listed below:

- Data transfer from community settings to related GP practices.
- Buy-in from GP practices that more community sessions will not create more work for them- Throughout the project we engaged with GP practices and Primary Care Networks in Middlesbrough to reassure them of the benefits of the outreach sessions for these population groups. The themes of the behavioural insights research were shared with them, and many discussions focused on other ways to improve access to healthcare for these underserved groups.

Key Learning points

- Engaging with community leaders and undertaking focus groups that delve into behavioural insights is fundamental to gaining an understanding of the difficulties these communities face in accessing health care. In addition, they are best placed to codesign interventions that affect their communities, and this is best done in conjunction with local public health commissioners.
- Engaging community leaders in the delivery of the project enabled them to take ownership and accountability which can improve the uptake of the intervention.
- Ensure the intervention is Easy, Attractive, Social and Timely to improve uptake.
- Ensure that your project is designed with sustainability in mind.

Sustainability

In order to continue the momentum of delivering the heart health checks within community hubs the service will need to be commissioned by public health in Middlesbrough to ensure there is sufficient resource to reach these underserved populations. During the post-intervention focus group the community leaders stated they are keen to continue to offer their centres to be hubs for the heart health checks.

A clinical team will be required to continue deployment of the heart health checks. They would also need to purchase a 5-point lipid panel cholesterol test which provides a result within 10 minutes. The project team have been using Pocdoc. We will continue working with the Public Health team and communities in Middlesbrough in order to maintain the momentum and relationships established and to create a lasting legacy.

Benefits Realisation

The benefits realisation for the programme comes from the reduction in cardiovascular disease including the number of cardiac events including heart attacks and strokes which cost the NHS millions each year. In order to build the case for future investment a health economic evaluation could be undertaken.

Value Added

The Middlesbrough FC Foundation have recruited additional members of their Health Bus team highlighting the economic benefits for this project. It has been difficult to quantify whether the programme has had any consequences for primary care. We have had no negative feedback from colleagues in primary care or issues raised.

Informing the National Evaluation

The programme has deployed an innovative approach using behavioural insights with underserved population groups in Middlesbrough. It has utilised an innovation called Pocdoc which is a point of care lipid test to help deliver heart health checks in an easy, attractive and timely manner. Deploying heart health checks within community centres has enabled high utilisation of the service and used an upstream approach to improve uptake of Ezetimibe, Bempedoic Acid and Inclisiran. This has had a positive effect within the Tees Valley sub-locality of the NENC Integrated Care System through reducing health inequalities and ensuring that underserved populations can access the lipid optimisation pathway.

The programme has proven that using a behavioural insight approach is key to understanding underserved communities, and community leaders are core stakeholders in the codesign of interventions affecting their communities. The use of a 5-point lipid point of care test (Pocdoc) was vital in ensuring that patients received their results quickly and enabled the referral to GPs if required.

Developing strong links with our NENC ICB Health Inequalities team was a significant output of the programme as the team provided key inputs and were able to unblock a number of barriers that had surfaced during the programme.

The model of delivering heart health checks using community hubs leads to high utilisation as it is easy to access, attractive, social and timely for underserved communities.

Future interventions

The project had a short timeframe of 12 months, which meant that the project team could only focus on one of the codesigned interventions- heart health checks in the community. There were a number of other interventions such as cultural competency training, social marketing and health literacy and translation that could have been explored in more depth if the timeframe of the programme was extended to 24 or 36 months.

Working with the national team

The Health Innovation Network national team outlined the programme with clarity, including the metrics that were to be captured. There was significant support provided through the community of practice meetings, regular one to ones and the reporting requirements.