

Hypertension project

OneLondon Pathfinder programme

Evaluation

January 2023



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Background

OneLondon and Pathfinder programme

In February 2020, London's institutional health leaders - NHS England (London region), the Greater London Authority and the London Academic Health Science Networks - sponsored a regional consultation to explore ways in which London could develop as a city for data science for health and innovation.

This London Health Data Strategy was commissioned by NHS England and London's leading research universities and convened by Health Data Research UK. Implementation of the strategy followed extensive public engagement as part of a London-wide Citizens' Summit led by OneLondon - a collaborative of London's five Integrated Care Systems (ICSs) and the London Ambulance Service. Public involvement was essential for understanding Londoners' expectations of the use of health and care data, with plans for further deliberative engagement to shape ongoing policy and governance.

The strategic vision is to use the power of data to drive improvements in healthcare for Londoners, and to propel London as a global powerhouse for artificial intelligence (AI) and digital therapeutic innovation, and diagnostics development. Further to a delay due to the COVID-19 pandemic, (which inadvertently highlighted the importance of integrating health and care data), four pathfinder projects were awarded £1 million funding (£250,000 each) to demonstrate how the use of data at scale can improve health outcomes, supporting the delivery of the London Health Data Strategy.

These projects form part of a wider pan-London programme aiming to implement the London Health Data Strategy. This strategy presents a coordinated, partnership approach to safely link health and care data across the capital, to drive collaboration between existing initiatives to improve health outcomes, provide insights and intelligence, and connect research and clinical care to create a learning health system.

Hypertension

Hypertension (HTN), or raised blood pressure, is a major risk factor for heart disease, stroke, kidney disease, serious complications from COVID-19, and premature death. HTN affects between 18.8% and 31% of GP patients, with significantly higher rates observed in people from deprived communities (30% higher) and African and African-Caribbean groups (50% higher)¹. HTN is usually without symptoms and is detected and managed predominantly in general practice. Across London 50% of HTN is uncontrolled and 50% remains undiagnosed, with variation between both practices and different communities¹. Currently, diseases caused by HTN are estimated to cost the NHS more than £2.1 billion a year. Improving control for those with HTN in NEL and SEL, in one year, could save more than 700 strokes and 2500 deaths^{1,2}.

Primary care plays a crucial role in identifying and managing HTN, supporting a high value national priority for reducing cardiovascular disease (CVD) and death in London. Initiatives to detect and manage HTN have had variable success. This project looks to understand if a cross-London ICS collaboration using an aligned approach to data, implementation, and patient engagement could improve HTN detection and control, and contribute learning to the London Health Data Strategy.

This hypertension project was one of four projects funded by the OneLondon Pathfinder programme which involved a collaboration across South East London (SEL), North East London (NEL) and North West London (NWL) ICSs. In alignment with the London Health Data Strategy, the involvement of three ICSs provided the opportunity for learning, consistency and standardisation, and actioning data at scale, for improving HTN management.

Project Aims

- To improve HTN detection and management, and reduce inequalities using clinical effectiveness approaches and the Discovery Data Service in primary care/general practice
- Develop shared learning across ICSs to develop Health Data Infrastructure (HDI) to deliver the actionable data to drive health improvement across London
- To build patient trust through transparency and understand patient requirements to build into project deliverables and recommendations

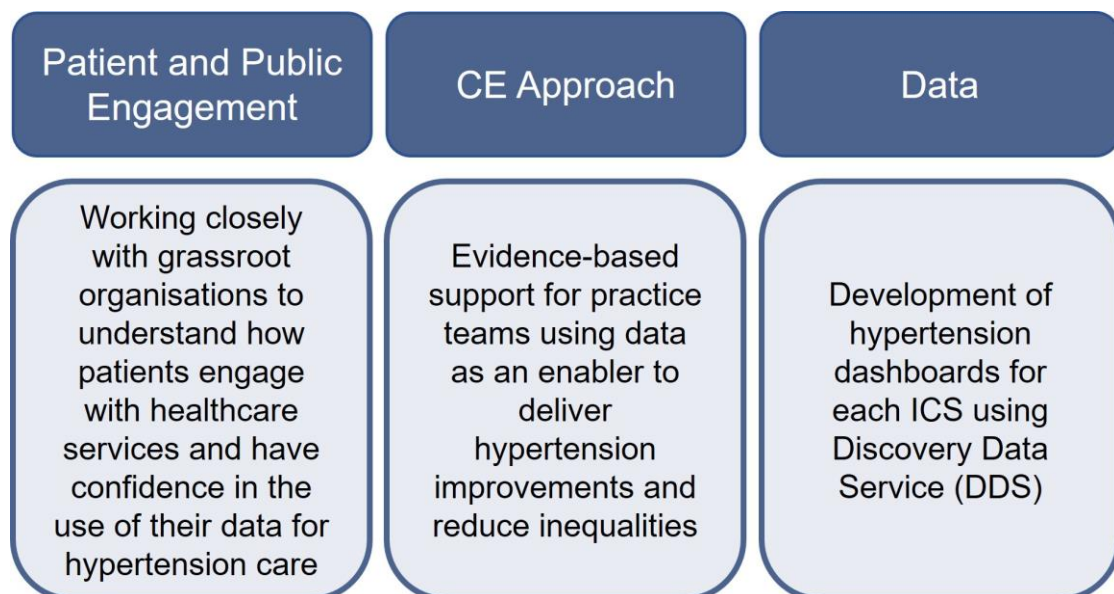
Project Workstreams

To achieve these aims, three workstreams were formed, on the basis that data alone cannot solve healthcare challenges as there is increasing recognition of the importance of human factors in healthcare improvement:

'Improvement in healthcare is 20% technical and 80% human' - Marjorie Godfrey³

These key interlinked workstreams were incorporated as part of this project, which spanned 12 months from January 2022:

1. Patient & public involvement and engagement (PPIE)
2. Clinical Effectiveness (CE) Approach
3. Data



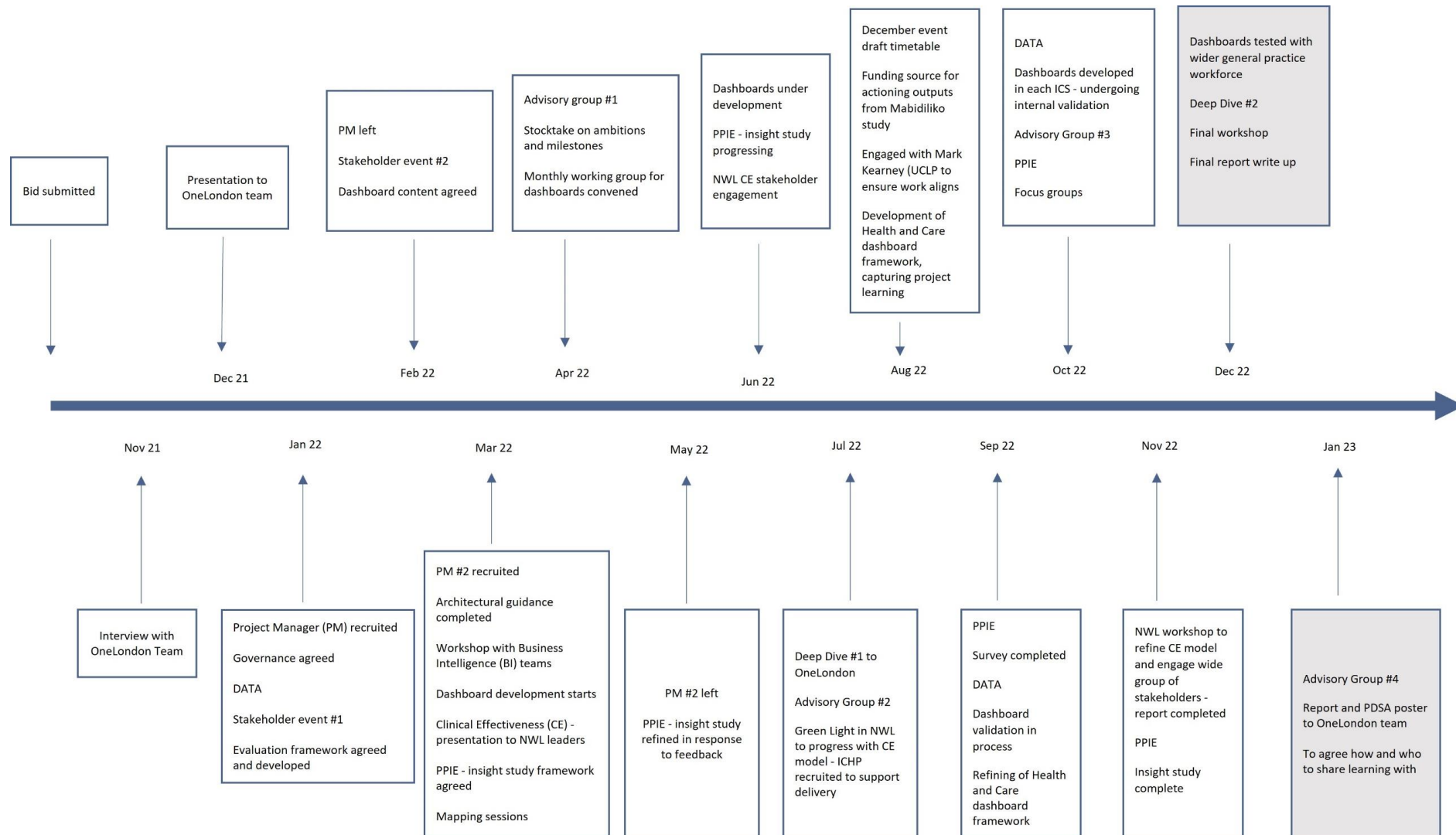
Project Evaluation

Imperial College Health Partners (ICHP) was asked to undertake an evaluation of the project and create a final report. The aim of the report is to capture the learning from the project to feedback to OneLondon and to the ICSs. This will ensure these learnings are drawn upon for future projects of this scale and to help inform service delivery and the London Health Data Strategy going forward.

The evaluation approach that informed this report involved three key steps. The first involved a learning event which took place on 5 December 2022. The learning event was well attended (32 people) and gave colleagues a chance to reflect on the programme and provide a number of

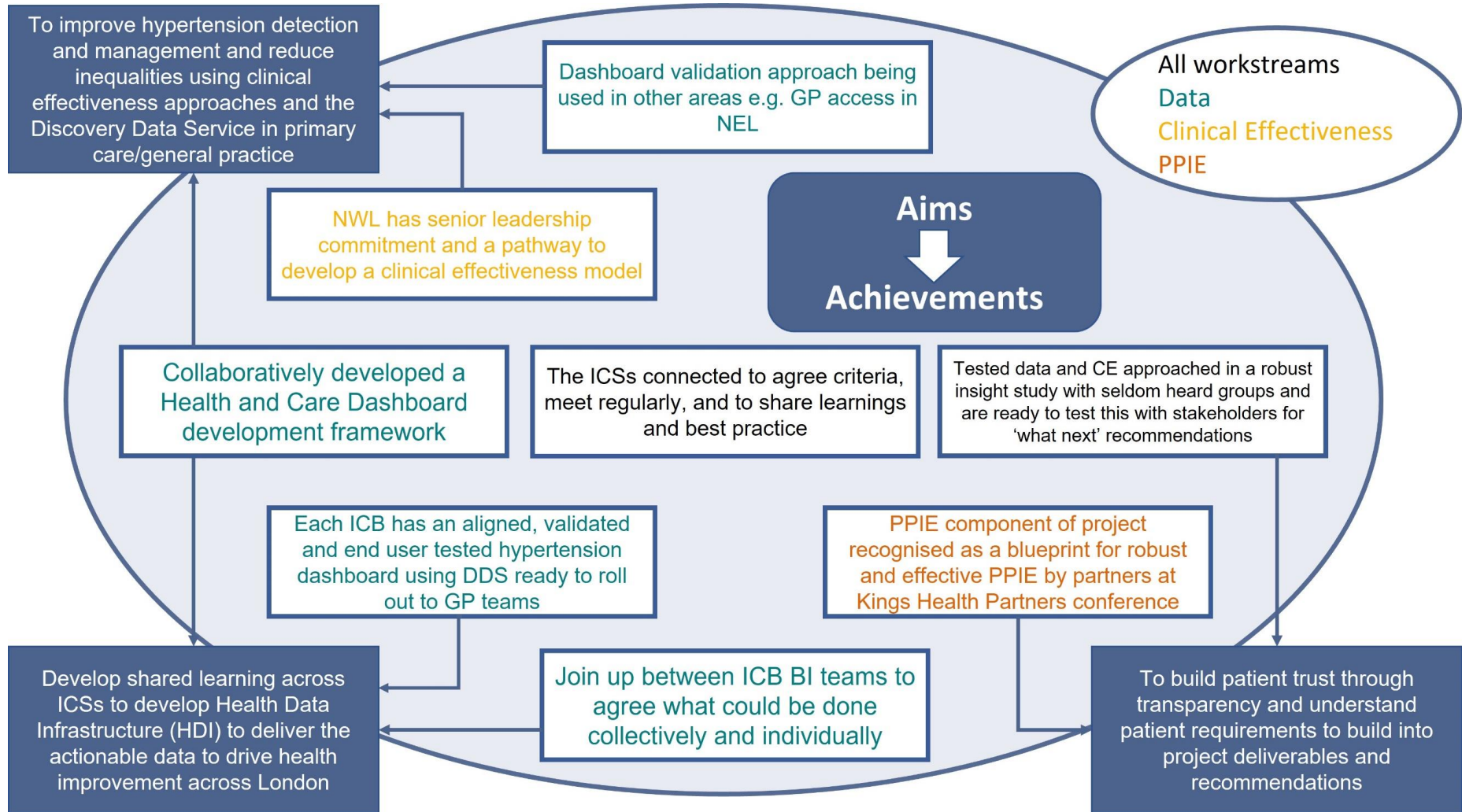
learnings and achievements. Secondly, a survey was circulated to key stakeholders for more in-depth feedback on the key outputs, barriers, learnings, and impact of the project so far. Lastly, we received access to relevant resources and materials created throughout the programme lifecycle to supplement the feedback from the learning event and survey.

Project timelines & milestones



Achievements

Development and progression of the three workstreams over the past year has yielded a range of project achievements. These achievements provide good evidence that this pathfinder project has made some important gains toward meeting the project aims. The next step is to capture learnings and recommendations as part of this report, and to ensure this is used effectively as a resource to improve hypertension detection and management, and to inform London-wide and ICS approaches to health and care data.



Learnings

Learning event

To capture the learnings from the hypertension pathfinder project, an in-person learning event took place on 5 December. This event provided the opportunity to present an overview of the project, an update on the three workstreams, as well as learnings and recommendations. The event was well attended by colleagues involved throughout the project, including strategic, digital, analytic, change management, project management, PPIE and community engagement, programming, cross-organisational working, and quality improvement leads. The outputs from the event helped to inform this final project report, which will provide both the OneLondon team, and our local systems, with lessons learned and future recommendations.

Learnings can be categorised as follows: data and dashboards, clinical effectiveness approach, identified risks to clinical effectiveness approach, and PPIE.

Data and dashboards

The purpose of the data and dashboards workstream was to develop a hypertension dashboard for each participating ICS using the Discovery Data Service. A key learning from this project was the disparate approach to health and care dashboard design. A key recommendation from the project team is for a London-wide, aligned and coordinated approach to health and care dashboard development.

Further key themes and reflections from the learning event on the data and dashboard workstream are captured below.

Framework

- The project team propose that, in addition to the technical and data infrastructure that provides the foundation of health and care dashboards, a systematic approach using an agreed framework, delivered collaboratively across key partners, is needed to develop the health and care dashboards that will drive transformation.
- The Quality Outcome Framework (QoF) logic for HTN was not coded and available in the data held in Discovery Data Service (DDS). This meant all three ICSs had to apply their algorithm in their ICS data held in their Compass Databases
- There is insufficient standardisation

Infrastructure

- Having one dashboard with agreed definitions to facilitate inter-ICS comparisons would have been helpful
- Dashboards should be accessible, so they have a common look and feel making it easier for users
- Would like data to be manipulated centrally at London level then shared out ideally to enable greater efficiencies
- We need to use IT at a population level
- Data cannot be generated at anything less than ICB level - needs to be actionable

Data and coding

- The metrics defined by the clinicians also needed to be coded individually by the ICSs and it would have been better to have this in DDS, i.e., housebound, homeless and clinical metrics like blood pressure
- The three ICS Business Intelligence (BI) teams identified some anomalies in the data related to slightly out of date practice grouping (following mergers/closures), coding mapping issues between SNOMED and Read, etc. There was a slight delay in getting the data from clinical system to DDS which made validation against clinical system difficult

albeit not impossible. This was fed back to DDS team (Voror), and this has resulted in the establishment of a 'user group' to deal with these issues.

- Data entry and coding is difficult - would like standardised templates used for data entry
- Explore the creation of a 'metadata library' or 'code library' to enable dashboard developers to use consistent coding - reducing duplication of work and allowing for comparison of 'apples with apples' and 'pears with pears' across different dashboards using the same code sets
- Data has helped to identify deprivation as one of the top predictors of 'did not attend' (DNA) appointments
- Consider coding standards at regional level to set precedence for ICS to follow

Testing and validation

- All three ICSs undertook validation of the data held in DDS specifically for the QoF register and achieved a success validation of within 1% comparison against clinical systems. There is a need for larger scale validation of all metrics for Hypertension between DDS and clinical system
- It would have been helpful to have agreed standards for dashboard development to enable similar look and feel despite the use of different visualisation platforms
- There was a consensus that drill-down capability to get to an identifiable patient list following a selection in the dashboard was required. This would enable frontline direct care staff to take action, to help these individuals

Clinical Effectiveness (CE) approach

The purpose of the CE approach workstream was to create an evidence-based approach to support teams using data for delivering hypertension improvements and reducing inequalities.

Key themes and reflections from the learning event for this workstream are outlined below.

General

- Things do not always work first time, therefore quality control groups are valuable - and it would be valuable to have a quality control group across all of London
- Trust with individual healthcare provider can significantly mitigate wider system mistrust
- Learn from other public sector organisations - avoid reinventing the wheel

Design

- Some voluntary, community, and social enterprise (VCSE) representatives do not always get an equal voice in groups and boards they have been invited to join.
- Actionable unit is a primary care network (PCN) - therefore anything produced has to work at PCN level

Data

- Centrally controlled value sets and standard definitions would be helpful
- Prioritise high-risk groups - APL Tool, UCLP searches
- Reduce variation - agree codes, check templates, view discovery dashboards

Clinical

- It was also voiced that incentives are not always aligned. One reflection was to consider the impact of giving hospital doctors the responsibility of patients across a population rather than just in their clinic
- Recognised the difficulty in measuring blood pressure and hypertension. One of the advantages of machines is that they are probably better than humans at taking blood pressure
- Look at quick wins - improve recording, optimise medications
- Upskill practice teams and pharmacists

The roundtable discussions also specifically highlighted some risks to developing and sustaining a clinical effectiveness approach.

Identified risks to CE approach

- Funding should be facilitative. Dashboards don't necessarily make things easier
- There is a balance in ensuring you meet what commissioners and end users want
- Ownership of tasks
- Integration with new structures
- Recruitment of facilitators - often people that are largely already working in primary care
- Is there opportunity for joined up facilitation training across the ICS?
- Need to understand the difference between clinical intelligence and business intelligence
- Ensuring a relatively holistic approach / ensure risk stratification - focus on those that are not controlled
- Being derailed: being realistic about what a Clinical Effectiveness Group (CEG) can do
- Losing clinical leadership and experience of a 'jobbing' clinician to provide a reality check on some of the asks or requests

Public & Patient Involvement and Engagement (PPIE)

The purpose was to understand how patients engage with healthcare services and have confidence in their use of data.

Learnings from the insight study and learning event are reflected below.

Trust

- Knowledge of discrimination within health system is limiting patient engagement
- People fear data will be mismanaged/exploited
- Not enough working with communities and citizens
- There is a need for greater understanding of behaviour change at an organisational level and individual level of patients and providers.

Treatment

- Resistance to medication, preference for short term use of medication combined with lifestyle changes
- Self-management tools - how can patients in the community be empowered to do things like blood pressure management?
- Patients have no idea something is wrong, what the symptoms of hypertension are, etc.
- Drop-ins would be well received
- Some people seek in-person human interaction, and don't like consultation over the phone

Perception/ beliefs

- Older generation reluctant to change ways
- Some patients have some lack of personal responsibility
- Perception of NHS being overwhelmed has led to some individuals reducing GP attendance

Survey feedback

As part of the evaluation, the following section captures colleague's thoughts and feedback on the hypertension project delivery to help shape how hypertension care is delivered and how data is captured moving forward.

The purpose of the survey was to provide an opportunity for individual feedback, reflection, and learning. A total of 21 stakeholders who had been involved in the project were approached. Of

these individuals, ten people completed the survey - a response rate of 48%. The questions to the survey were co-created with pathfinder leads.

What were your aims/motivations for getting involved?

- To create a standardised actionable data source – dashboard
- Personal interest in HTN
- Collaboration and shared learning approach

What key outputs have you seen as a result of being involved in the project?

- Development of HTN dashboards
- Development of a CE approach
- Successful community and PPIE
- Operational transparency and collaboration

What were the key benefits of your involvement in the project?

- Shared learning, resources and collaboration
- Shared ownership of dashboard development
- Improved appreciation of PPIE

What disadvantages or barriers did you come across?

- System infrastructure challenges and data complexity
- Time, capacity and engagement
- Lack of dashboard development guidelines
- Changes in project management

How has the project work impacted on a) you and b) your team?

- Time commitment greater than anticipated
- Springboard for further HTN management work
- Understand the need for collaboration, multidisciplinary approach
- Built better relationships

How do you think the project has impacted/supported the wider system (e.g., ICS and PCN development)?

- Developed relationships and highlighted importance of shared learning
- Provided momentum for embedding CE approach
- Clearly demonstrated robust value of PPIE
- Initial impact hard to measure, future impact could be significant

What impact has your involvement in the project had on patient care?

- Indirect through supporting project workstreams
- Too early to say, future impact could be significant
- Ability for patient identification through dashboard

What are key lessons that you feel would be beneficial to share, to help support pan-London data strategy?

- Need for a single, consistent, data service in a secure data environment

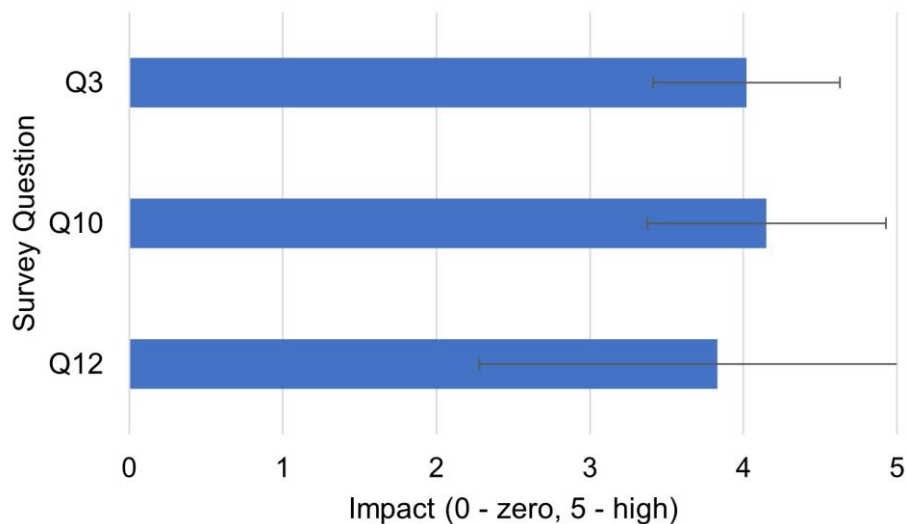
- Invest in time to collaborate and share learnings, barriers should not be underestimated
- Understand local context as well as London-wide
- Data useless without clinician engagement and CE approach

What (if anything) needs to happen next to progress this work, and what benefit do you expect this to have on local services/patients?

- Embed CE approach across London
- Build on workstream recommendations
- Act on PPIE study insights for care delivery
- Continue shared learning

Please let us know anything additional you would like to share.

- Enjoyable and challenging project with positive learning experiences,
- Learnings and recommendations must be built on
- Success based on trust



Survey responses to:

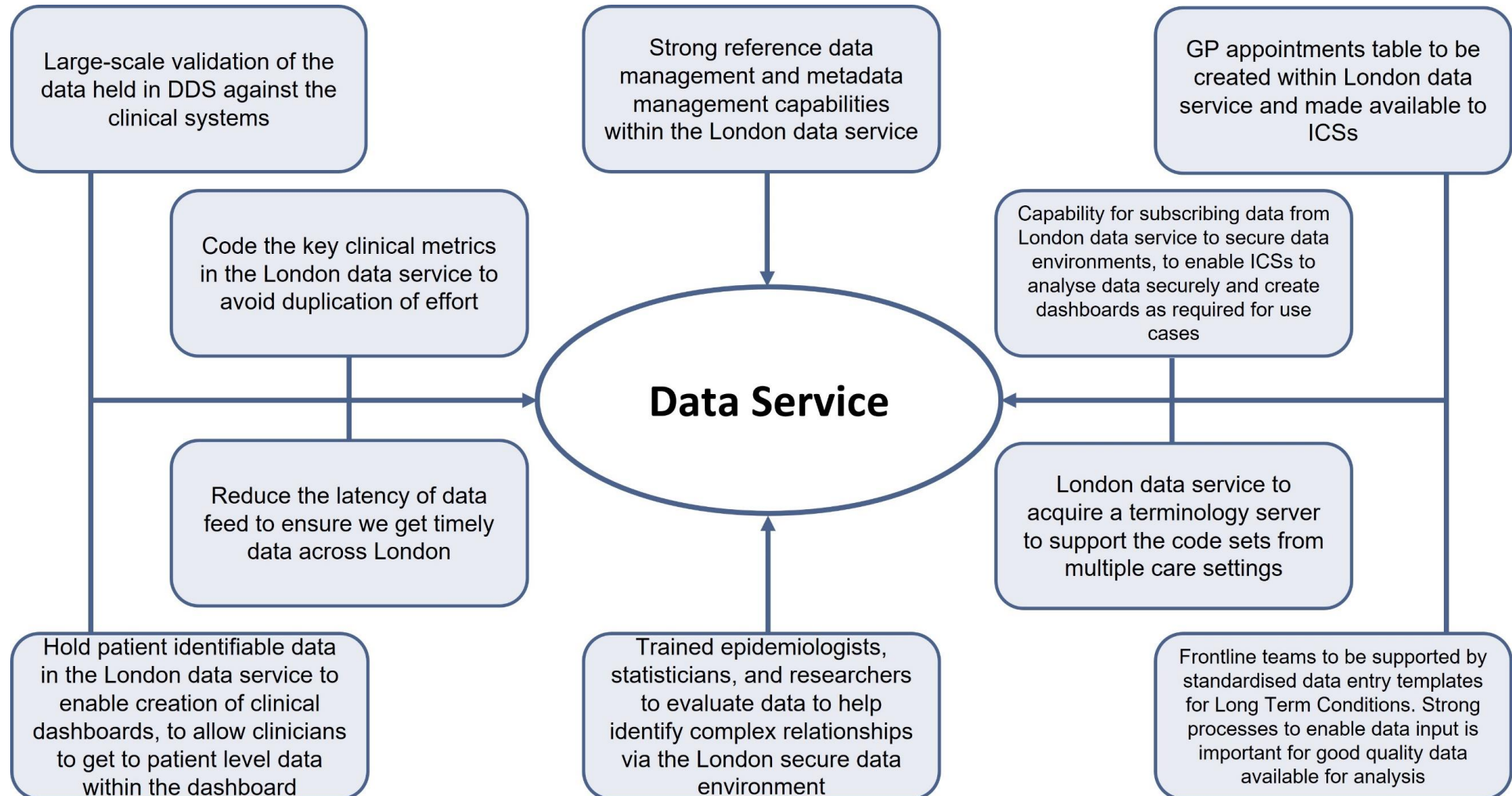
Question 3: On a scale of 0 (not at all) to 5 (completely) how well have your project aims/expectations been met?

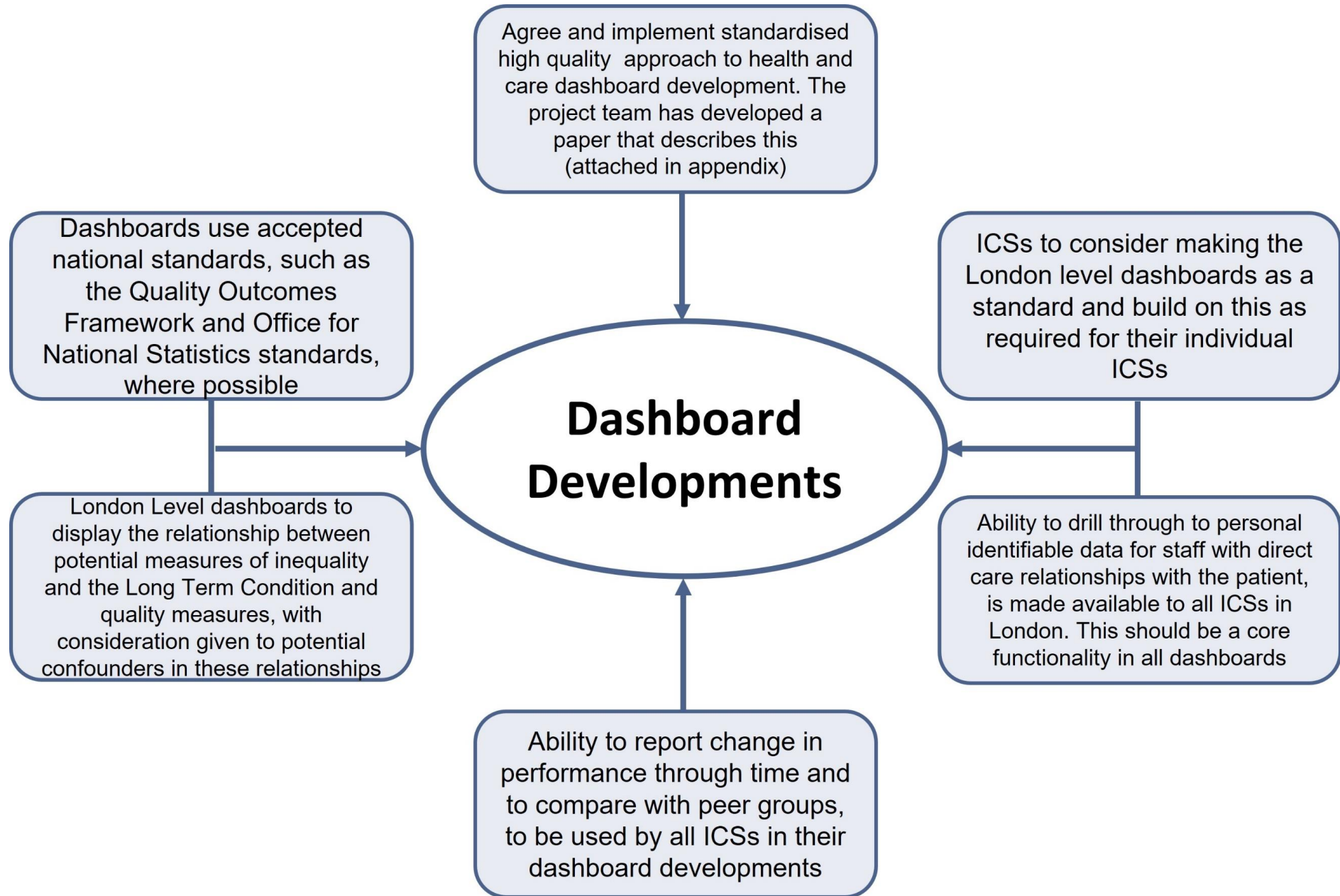
Question 10: On a scale of 0 (no impact) to 5 (highest impact) how would you score the impact of this project on the wider system (e.g., ICS and PCN development)?

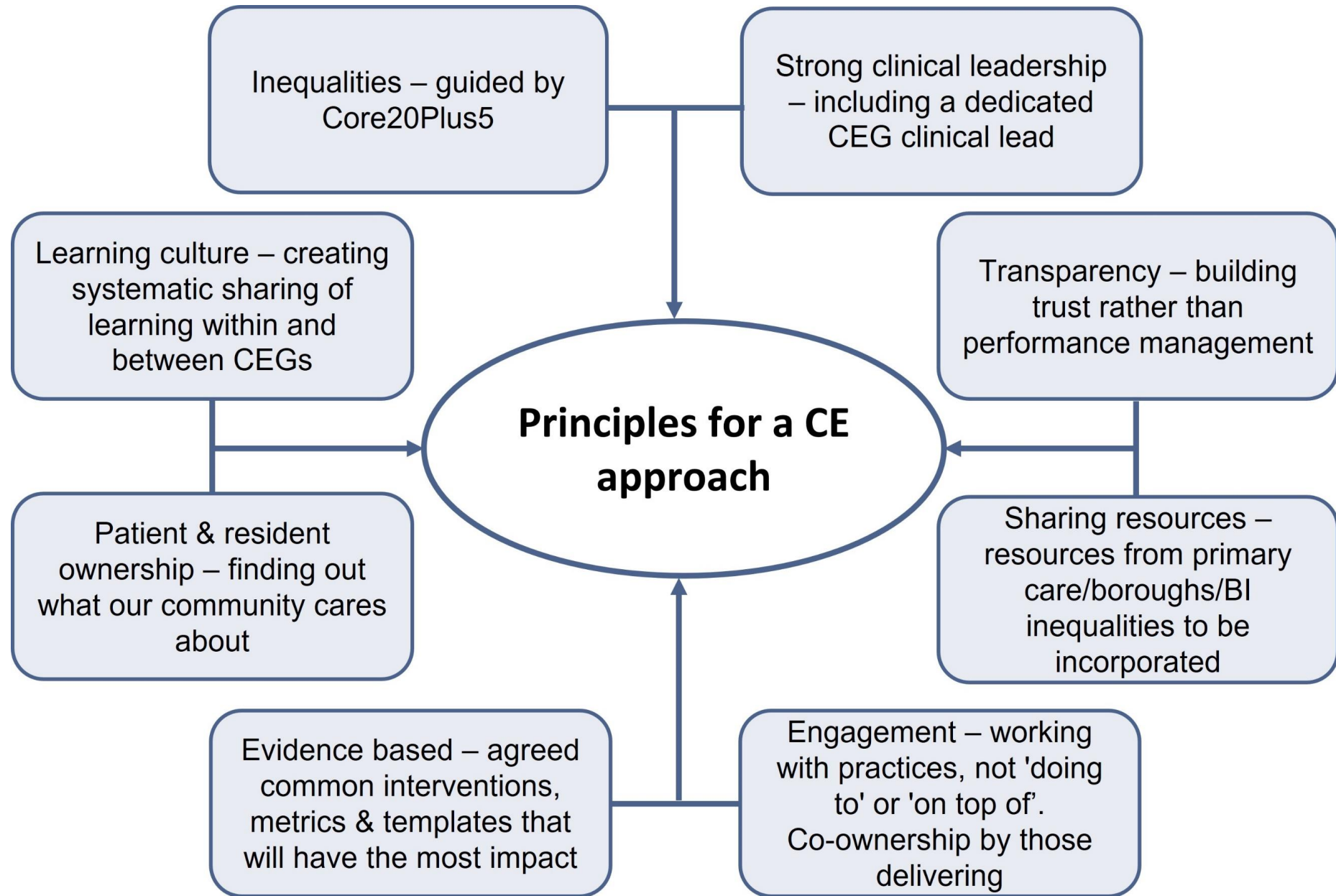
Question 12: On a scale of 0 (no impact) to 5 (highest impact) how would you rate the impact of this project on patient care?

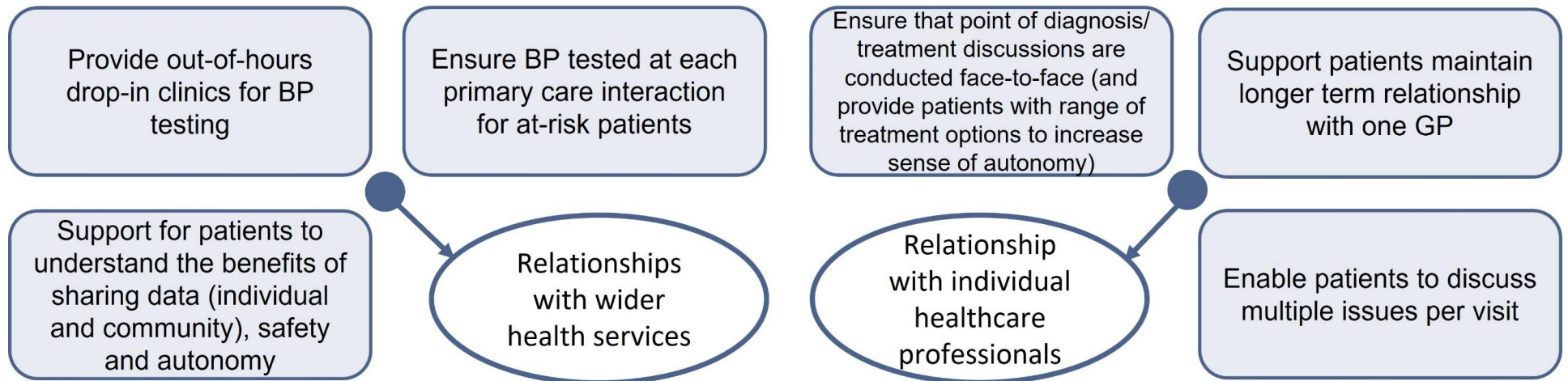
Recommendations

Recommendations captured as part of the learning event, survey, and this evaluation have been grouped by workstream and are outlined below:

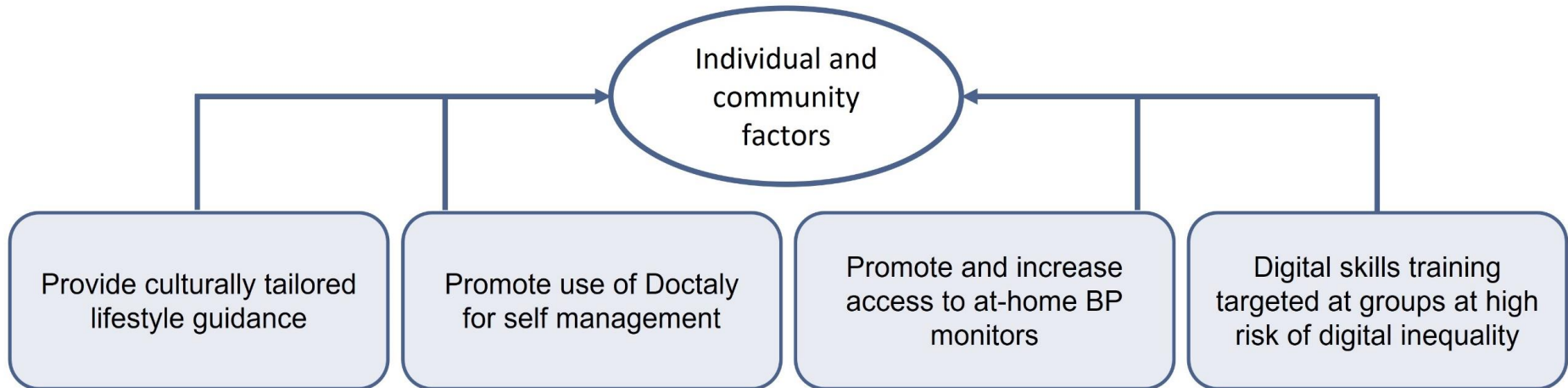








Patient Engagement



References

1. Hypertension prevalence estimates in England (2017). Accessed from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873605/Summary_of_hypertension_prevalence_estimates_in_England_1_.pdf
2. Wu R, Rison SCG, Raisi-Estabragh Z, et al. Gaps in antihypertensive and statin treatments and benefits of optimisation: a modelling study in a 1 million ethnically diverse urban population in UKBMJ Open 2021;11:e052884. doi: 10.1136/bmjopen-2021-052884
3. Marjorie Godfrey, MS, RN The Dartmouth Institute for Health Policy and Clinical Practice

Appendix

- [Full survey response](#)
- [Learning event slides / agenda / list of attendees and their roles](#)
- [Early pathfinder's feedback document](#) (Feb 22).
- [Paper on actionable health and care dashboard development](#)
- [Full PPIE report](#)