Public Health and challenges to embedding research

Public Health has been function of local authorities (LAs) since 2013

LAs responsible for reducing health inequalities and improving determinants of health and well-being

LAs can engage with research/ers:

- Use of existing evidence to inform policy and practice
- Primary empirical work

Previous research with LA's has identified barriers engaging with researcher including:

- Differing timescales
- Limited budgets
- Difficulties identifying appropriate researchers

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Birmingham City Council (BCC)

- BCC serves largest population in Europe

- It is a young population, highly culturally and ethnically diverse

- High levels of inequalities underpinned by social and economic factors

- Priorities include childhood obesity, air quality and supporting vulnerable children

- BCC has collaborated on research with higher education institutions (HEIs) across the region

- This research aligns with BCC's insight programme which aims to 'achieve an information led, evidence based organisation working with sound and reliable data'

Study Aim

To understand better how Birmingham City Council (BCC) engages with the research community and explore how to develop mechanisms to enhance collaboration and embed a sustainable research system across the local authority

Objectives

- Map:
  - current and recent research activity
  - capacity and resources to support research activity
  - expertise,
- understand culture/opportunity for change in BCC
- Identify opportunity for change in way researchers work with BCC
- Identify barriers, potential facilitators and infrastructure needs to embed a sustainable research system

Methods

Design

Convergent parallel design mixed methods study

Two workpackages:

- Cross sectional survey (WP1)
- Qualitative interviews with stakeholders (WP2)

Theoretical framework

Capability, Opportunity, Motivation, Behaviour (COM-B) theoretical model was used to underpin question and analysis in WP1 and WP2, in order to understand behavioural influences on research activity

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Survey methods – Workpackage 1

- On-line survey across council

- Rapid analysis approach

- Key issues identified in the data were entered into 'summary templates', structured according to the study objectives, including COM-B domains (deductive), with space for additional findings (inductive) and key quotations.

Survey content:

- Current and recent research

- Retrieval and use of evidence to inform practice,

- Initiation of research internally or in collaboration with academic partners;

- Awareness of available infrastructure to support research;

- Time, environmental context, resources, cultural norms, for research within the authority.

Qualitative interview methods – Workpackage 2

- Individual semi-structured interviews with purposively selected LA officers and elected members, academics, local NIHR infrastructure and third sector providers of public health.

- Sample: 14 BCC staff, 14 staff outside BCC

- Interviews via videoconferencing or telephone, recorded and transcribed

- Content:
    - access/use of existing research
    - initiating/delivering new primary research
    - awareness of wider support for research
    - what infrastructure would be needed to enable BCC to become an active research system

Survey results

- Respondents n=26
- 23 BCC officers / 3 elected members

Main results – using evidence:

- Responders reported high levels of engagement with using research evidence
- There was a strong recognition for using local, national and international research findings as important to underpin changes in policy or practice at a local level
- Comparatively few BCC employees received training in how to use research evidence, or how to undertake research directly
- Those who received research training tended to have gained skills prior to employment at BCC

Quantitative results – Involvement in research

Barriers to research activity:

- obtaining research resources,
- having the right data/ information
- having time to deliver research
- internal research permissions,
- Lack of information governance system within BCC
- research skills gaps
- mismatched timeframes of academic partners.

Facilitators to research activity:

- Personal research skills
- Planning research before starting
- Support from academic colleagues

Qualitative results - Capability

- Variation across the workforce in the skills, knowledge, confidence and understanding required to use, initiate and deliver research; strongest in public health team

- Good knowledge about finding evidence and retrieving and using evidence-based guidelines

- Lack of common understanding of what constitutes 'research'

- Knowledge gaps regarding research ethics and governance processes, research funders (e.g. NIHR) and structure

- Loss of skills when people leave organisation/s - major challenge

Qualitative results - Opportunity

- Senior council buy-in, but need for central strategy

- Finance, budget and workforce constraints impact on BCC's research capacity

- Workforce discontinuity impacts on research activity

- Time to do research is a major constraint

- Huge untapped opportunity of datasets within the LA with barriers (e.g. system capability/age, linkage across datasets/directorates/LAs)

- Need for access to wider range of library resources than currently available

- Invisibility of NIHR infrastructure

Qualitative results - Motivation

- Culture change to valuing research outputs more, but still culture of local rapid evaluation being more relevant

- Collaborations with academics 'ad hoc'

- Both LA and HEIs struggle to make links within the other organisation/s

- Challenge of mismatch in timescales and expectations of collaborations between LAs and HEIs

- Commissioning could be more systematic and proportionate to project

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Recommendations – Strategy and culture

Optimal structure of research system	Current structure	Resource needs for operational research system
Corporate strategy for research	No current overarching research strategy	Facilitated development – allocated time and champion within the LA.
LA culture that expects evidence to inform policy and decision making	Mixed	Time to get commitment / explicit statements into Constitution of the Council
LA culture that acknowledges the importance of evaluation	Mixed – limited by time and resource constraints	Incorporating reflection on extent to which evidence informed decisions/ actions within audits/reviews
LA culture that acknowledges the importance of evaluation	Mixed – limited by time and resource constraints	Resource for embedded researchers or secondments with local universities

Recommendations – Infrastructure and processes

Optimal structure of research system	Current structure	Resource needs for operational research system
Functioning ethics and research governance system able to deliver proportionate review in timely manner	Not available, delayed due to COVID-19	Resource for person with appropriate skills to run this and for staff to support the activities within their job plans
Routinely collected data from LA activities and skills and resources to link these to monitor public health interventions, whilst ensuring data protection. Seeing data as an asset.	Rich data sources, but varied platforms Time poor	Dedicated time for linkage and analysis Ensuring data entry is high quality through training
Access to library services to a obtain literature on the wider public health	Access to medical literature via Athens	Funding for institutional access or links to HEI access
LA employees across LA directorates with skills to initiate or contribute to research activities	Clearly LA staff with appropriate skills, but training needs identified and insufficient time a barrier	

Recommendations - Infrastructure and processes

Optimal structure of research system	Current structure	Resource needs for operational research system
Research commissioning proportionate for the project and time frame	Commissioning processes in place, quite onerous	
Local research champions within the LA	No formal structure	Need for some protected time and formal link to HEIs
Awareness of opportunities to obtain external support for evaluation (PHIRST/SPHR) and NIHR infrastructure support – increased visibility	Minimal awareness	Formal links between NIHR infrastructure and council research lead/link
Resource for research	Limited, most available within public health	Ring fenced budgets for research Partnerships with HEIs.

Recommendations – Training and Development

Optimal structure of research system	Current structure	Resource needs for operational research system
LA employees across LA directorates with skills to access, appraise and use research evidence	Currently strong within public health, less available across all other directorates	Training opportunities, access to online courses/training materials
Academic skills in developing research questions, methods, analyses and write-up	Some skills in staff, not core to role, so reliant on individual rather than the post.	Training for range of skills: governance, technical, analytical skills. Embedded academics / joint appointments with HEIs / academic placements

Recommendations – links with universities

Optimal structure of research system	Current structure	Resource needs for operational research system
Ongoing close / embedded research relationships between LA and HEIs – formalised relationships	Some exemplars, but ad hoc and reliant on academic having funded opportunity	Joint appointments; Embedded academics; Student placement / projects Need funding
Corporate knowledge of skills and specialisms of academics across the local HEIs to enable efficient requests for support or commissioning of research	Currently ad hoc and within directorates	Online research register of projects, skills and links
HEI member on committees and boards to identify opportunities, question evidence etc	Some exemplars, but ad hoc	Funding for formal links with HEIs with academics allocating dedicated time to work with BCC.

Strengths and limitations

- Rapid piece of work (4 months), undertaken during challenging climate (COVID-19) - may explain low response rate to the survey

- Response bias likely due to low response to survey – findings not generalisable across BCC

- Successful recruitment of participants for interview from within BCC and Academics/charity/NIHR

- Interviewees covered a range of job grades and directorates

- Findings from WP1 and WP2 were broadly convergent

- High workload of LA public health in Jan 2021 limited their input to final report

Next steps

- Once BCC workload due to COVID-19 reduces to manageable levels:
  - Share findings with decision makers at BCC
  - Work with BCC to consider how the recommendations can be taken forward
  - Build on the successful models of collaboration already in place
  - Share the findings within the University of Birmingham to discuss how UoB can support the use of evidence and development of new research in BCC, particularly using systems approaches