Appendix B

Scoping project findings

a) Quantitative online staff survey

LARS online staff survey questions and responses
Thank you for agreeing to take part in this survey. We would like to understand more about your experience and understanding of research activities within Bradford Metropolitan District Council. Research evidence aims to generate new knowledge. It is undertaken and reported using clear documentation of methods, peer review and external scrutiny. Research is one just source of evidence and has the advantage of being rigourous, relevant and independent compared to most other types of evidence . When we use the term 'research evidence' in this survey we are referring to evidence from published research articles and papers, routinely reported statistics or unpublished sources such as internally conducted evaluations.
Read our data protection and privacy statements here:
https://www.bradfordhospitals.nhs.uk/privacy-statement/

1. In your role at BMDC, have you ever used any of the following sources of research evidence in your work? (select all that apply) (base=197)

    a. Peer reviewed journal papers (31.0%; n=61)

    b. National evidenced based standards or guidance e.g. NICE Public health Reviews (52.3%; n=103)

    c. National statistics e.g. ONS data or PHE fingertips Public Health Profiles (52.3%; n=103)

    d. Commissioned research reports and case studies (e.g. commissioned by BMDC or others) (48.2%; n=95)

    e. In house research (e.g. community surveys) (52.3%; n=103)

    f. Never used research/none of the above (21.3%; n=42)

    g. Other (please specify) (5.6%; n=11)

2. I can access peer reviewed journal articles online at BMDC (base=197)

    a. Yes (12.2%; n=24)

    b. No (20.8%; n=41)

    c. Don't know (67.0%; n=132)

3. Using research evidence is part of my role (base=197)

    a. Strongly agree (22.8%; n=45)

    b. Agree (49.7%; n=98)

    c. Disagree (15.2%; n=30)

    d. Strongly disagree (12.2%; n=24)

If strongly agree or agree at Q3, go to Q4.
4. How do you use research evidence? (select all that apply) (base=143)

a. Help prioritise (34.3%; n=49)

b. Help inform or develop a policy, project, intervention or service (81.8%; n=117)

c. Keep me up to date with current thinking (86.7%; n=124)

d. Inform budgeting and efficiency measures (21.7%; n=31)

e. Other ways (specify) (7.7%; n=11)

5. I know where to look to find research evidence to support my work (base=197)

   a. Strongly agree (12.2%; n=24)

   b. Agree (51.3%; n=101)

   c. Disagree (25.4%; n=50)

   d. Strongly disagree (11.2%; n=22)

6. Research evidence is identified and used in my service/department to inform or make decisions (base=197)

   a. Strongly agree (17.8%; n=35)

   b. Agree (53.3%; n=105)

   c. Disagree (23.4%; n=46)

   d. Strongly disagree (5.6%; n=11)

7. Research evidence is identified and used in my organisation to inform or make decisions (base=197)

   a. Strongly agree (11.2%; n=22)

   b. Agree (58.9%; n=116)

   c. Disagree (24.4%; n=48)

   d. Strongly disagree (5.6%; n=11)

8. As an organisation, BMDC values the use research evidence to inform or make decisions (base=197)

   a. Strongly agree (10.2%; n=20)

   b. Agree (61.4%; n=121)

   c. Disagree (23.9%; n=47)

   d. Strongly disagree (4.6%; n=9)

9. I would like to use research evidence more in my role (base=197)

   a. Strongly agree (22.8%; n=45)

   b. Agree (53.3%; n=105)

   c. Disagree (18.3%; n=36)

   d. Strongly disagree (5.6%; n=11)

NIHR PHR ref NIHR 131797

10. At BMDC, have you been involved in commissioning any research? (base=197)

    a. Yes (16.8%; n=33)

    b. No (83.3%; n=164)

If Yes at Q10:

11. Who did you commission? (select all that apply) (base=33)

    a. University (36.4%; n=12)

    b. Other research organisation (51.5%; n=17)

    c. Local voluntary or community sector organisations (24.2%; n=8)

    d. Other organisation (36.4%; n=12)

If Yes at Q10:

12. What was the research for? (specify) (base=33)

    a. (100%; n=33 open responses made)

13. Has your department/service been involved in doing any research? (base=197)

    a. Yes (45.2%; n=89)

    b. No (17.3%; n=34)

    c. Don't know (37.6%; n=74)

If Yes at Q13:

14. Was this research…(select all that apply)(base=89)

    a. In house research (55.1%; n=49)

    b. Research in collaboration with a university or other research organisation (51.7%; n=46)

    c. Commissioned research with an external agency (e.g. VCS, market research) (48.3%; n=43)

15. What do you think would need to change within BMDC in order to facilitate the utilisation of research? (base=197)

    a. (87.8%; n=173 open responses made)

16. Please use this space to tell us anything else you would like to mention that may be relevant to our project. (base=197)

    a. (31.0%; n=61 open responses made)

Background

To help us to analyse the results of this survey please tell us which department you work in and at what grade.

    17. What department do you work in?

        a. <drop down list of options reflecting council structure>

    18. What is your grade?

a. \<drop down list of options reflecting council occupational categories>

That is the end of the survey. Thank you for taking part. If you would like to receive the final report you can access results of the study via the following link: https://actearly.org.uk/

b) Qualitative focus group and individual interviews
We have full transcripts of the focus group and individual interviews and will be using these to develop an academic paper reporting our interview findings. So far, we have summarised the emerging themes in the scoping project report but will fully describe the findings from our thematic analyses in our planned paper which will be submitted for publication to an academic journal. A summary of the findings will be shared with BMDC and local partners.

c) Rapid Review of existing models
BACKGROUND
Local government occupies a potential key role in improving the wider conditions that improve population health. In comparison with health research systems, local authorities possess less well-developed infrastructures to plan, generate and interpret the evidence that is needed to determine interventions in preventive health, health promotion and public health more generally. Faced with a new landscape where public health functions have been incorporated within the political environment occupied by local government and where the wider perspective of health includes social care, local decision-makers need to be equipped with appropriately organized research capacity. However, relatively few models of local authority research systems are known to exist.
Objectives
To conduct a rapid review of potential and existing models of local authority-based research systems including cost, capacity, skills and support required.
METHODS
Eligibility criteria
Included studies were taken from UK and Ireland, Europe (High Income Countries only), Australia and New Zealand, Canada and USA, published between 1996-2020, and were focused on research systems with local government/local authority involvement. All included studies presented a model, framework or textual descriptive outline of a research system, either at a practical or conceptual level. Studies from Low- and Middle-Income countries were excluded as well as studies from High-Income countries considered to be of limited relevance to the UK (e.g. Japan, South Korea etc).
Information sources
We conducted a systematic mapping review of the literature, drawing upon six general health and social science databases: PubMed (MEDLINE); EMBASE; PsycInfo; Scopus; Social Science Premium Collection and Social Sciences Citation Index. We also searched six UK-based databases or library catalogues with a focus on health and/or social care (Applied Social Sciences Index and Abstracts (ASSIA); Health Management Information Consortium; Health Services Management Centre Online (University of Birmingham); Health Management Online; King's Fund Library Database and Social Care Online (Social Care Institute of Excellence)). We also undertook Google and Google Scholar searching (the latter using Publish or Perish software), follow-up of references and citation tracking.
Quality assessment
No appropriate evaluation criteria exist for the formal assessment of the quality of reports of research models or systems. Assessment of the included studies was based upon considerations of **relevance** (to a UK setting), **rigour** (quality of evaluation) and **richness** (level of detail of individual models or initiatives).

Synthesis of results

Studies were characterised as UK-based or Other Countries. Models of research systems were further assigned descriptors relating to whether they are considered instrumental (e.g. logic models), symbolic (e.g. conceptual models) or hybrid (combining both instrumental and symbolic elements). The descriptions of models were examined and characterised according to an emerging typology according to structural features and the relationship between the local government and academic partners.

RESULTS

Extensive searches confirmed that very few models of local authority research systems exist in the literature. The most recent and substantive UK work relates to the Local Authority Champions of Research (LACoR) project, funded by the Health Foundation. This includes a detailed logic model and attempts to explore the system within a complex systems context. Other promising research systems models relate to Academic Collaborative Centres (Netherlands) and Local and Regional R&D units in Sweden. Both of these models are characterised by integrated health and social care systems. Generic examples relate to the University-Community partnerships popularised within the United States. However, these may display wider ambitions to include research, teaching and service learning and often involve other community players, beyond local government. The literatures of Communities of Practice, Community Engagement, Knowledge Transfer Partnerships, Research Utilisation and the Engaged University may offer additional insights although only encountered serendipitously within the scope of this review project.

Included studies

From a total of 2,479 records (following removal of duplicates), 61 papers were assessed as eligible and were included for further data extraction. Nine models of research systems were prioritised for in-depth analysis in the rapid systematic review (Academic Collaborative Centre; Communities of Practice; Knowledge Transfer Partnership; Local Authority Champions of Research (LACoR) Logic Model; Local Government Knowledge Navigator. Locally based research and development (R&D) unit; Systems -focused research collaboration; University-Community Partnership; University-Local Government Research Collaboration).

Synthesis of results

The review team identified six types of research systems exemplified across the 37 examples (61 papers). These are:
1. The Centre-based system
2. The Partnership-based system
3. The Collaborative-based system
4. The Network-based system
5. The Community of Practice based system
6. The Whole System approach

These different models work from different assumptions relating to the power and governance structures within the system, the degree of location/co-location, physical presence and ownership of each system and the respective roles of academia and local government. The above systems can co-exist, can be evidenced at multiple levels within the participating organisations, and may even represent developmental stages in the evolution of a university-community collaboration. The Whole systems framework is depicted as the most appropriate response to the complex systems characteristics of both local government and research systems(1), compounded when both are combined.

DISCUSSION

Strengths and limitations of evidence

The review was conducted by an experienced team with access to specialist knowledge in, and experience of, the topic of research capacity development. Twelve database or library catalogue

sources were searched, supplemented by extensive follow up of references and citation searching. Full text searching, via Google Scholar, and follow up of references in context, means that retrieval of candidate items is unprecedented. However, the conversion rate of retrieved hits to actual includes and of actual includes to those optimally meeting the client requirements was comparatively poor.

This review question challenges existing rapid review methodologies due to variability of understanding of what constitutes a "research system", the specific UK conceptualisation and label of "local authority" and variability in the labelling and recognition of models and frameworks. Furthermore, local government involvement and the existence of a model are poorly documented at an abstract level and therefore require a high proportion of full text checks for inclusion. The relevance of documents from other countries to the Bradford, UK context is variable given different organisational structures and cultures. Transferability of findings works better at a conceptual/theoretical level than at an instrumental, operational level. Indeed, the literature betrays strong academic ownership with a greater focus on conceptual principles of knowledge translation and research utilisation compared with pragmatic concerns about organisation of R&D units. The review team did attempt to address this imbalance through domain searching of UK local government Internet domains but few descriptions of actual local authority systems were found to exist.

Interpretation

While many models of research systems exist, few are specifically designed for the requirements of local authority research activity. The Local Authority Champions of Research (LACoR) model offers a potential blueprint for further development for a Bradford LARS. Useful lessons beyond the scope of this review may be learned from the experience of health research systems, particularly CLAHRCS. This line of investigation is specifically indicated by the perceived success of Academic Collaborative Centres in the Netherlands that closely evoke the operating principles of the UK CLAHRCs. Further insights may be gained from the experience of locally focused R&D units in Sweden and from the general literature relating to University-Community partnerships.

Looking forward, whole systems approaches to local authority research systems (also explored in the Local Authority Champions of Research (LACoRS) review) seem to offer a realistic response to the requirements of the complex local authority and research systems. Commentators advocate complex adaptive systems-informed approaches and these may confirm a further interpretation of this report; namely that an optimal single research system may represent the simultaneous co-existence of different types of contributing research system including Centre, Partnership, Collaboration, Network and Community types.

OTHER

Model	Brief Description
1. Local Authority Champions of Research (LaCoR) (UK)	• Overarching aim of developing a proof of concept to embed research and evidence use in local government. • Researcher embedded within local government. • Identified the components, developments needed, challenges and facilitors to support choosing, using and producing research in a local government context.
2. Local Government Knowledge Navigator (UK)	• Overarching aim of building research and development capacity in local government. • Partnership between academia and local government. • Focussed on shared interest areas with two way conversations supporting choosing and using of research, research also produced by academic partners but shaped by local government.
3. Knowledge Transfer Partnership (UK)	• Overarching aim to develop a culture of evidence informed practice in local government. • Partnership between academia and local government. • Focussed primarily on understanding local government research needs and academia finding and making available relevant evidence which is then used to inform practice.
4. University-Local Government Research Collaboration (UK)	• Overarching to act as a brokering service between academia and local government. • Partnership between academia and local government. • Focussed on using research to support the needs of the local system with the research agenda and production of academic partners set by local government to address system needs.
5. Academic Collaborative Centres	• Overarching aim of improving knowledge transfer and exchange between academia and local government for mutual benefit. • Jointly appointed staff (by academia and local government) embedded across both organisations. • Focussed primarily on choosing and using research, elements of producing research also exist though tendency for this to be undertaken by academia in partnerships with local government.
6. Locally based research and development units	• Overarching aim to produce high quality research and build some elements of research capacity within local government staff. • Co-funded (by academia and local government) units which sit outside of both organisations. • Focussed primarily on producing research e.g. local evaluations.
7. System-focussed research collaboration	• Overarching aim to facilitate interaction of stakeholders with different perspectives and world views for a particular topic/area of interest. • Partnership including range of stakeholders including researchers and local government. • Focussed on shared interest areas with practitioners and researchers sitting alongside each other, supporting choosing and using of research, research also produced by academic partners but shaped by local government.
8. Communities of practice	• Overarching aim to facilitate interaction of stakeholders with different perspectives and world views for a particular topic/area of interest operating with a degree of independence.

	•	Focused on shared interest areas.
9. University-Community Partnerships	•	Overarching academic aim to increase civic engagement
	•	Partnership including range of stakeholders with a strong community focus and including researchers and local government
	•	Focussed on place based production of research.