

A systems approach to the exploration of research activity and relationships within a local authority:

A report to the National Institute for Health Research

Judith Fynn¹, Andy Jones¹, John Jones²

¹ Norwich Medical School, University of East Anglia, Norwich, Norfolk, NR4 7TJ

² Directorate of Environment and Public Protection, Norfolk County Council, Norwich, Norfolk, NR1 2DH.

Acknowledgements

This research was undertaken with funding gratefully received from the National Institute for Health Research Public Health Research (PHR) Programme, Award Number NIHR132640.

We thank Mr Martin Talbot at Norfolk County Council for his invaluable assistance with project management.

We also thank all the participants at Norfolk County Council and partner organisations who generously gave their time to take part in and support this project. They are too many to mention by name, but their input has fundamentally shaped this research.



1. Preamble

This study was funded by the National Institute for Health Research (NIHR) and was developed and conducted as a collaboration between the University of East Anglia (UEA) and Norfolk County Council (NCC). The lead researcher (JF) was embedded within the Council on a temporary contract to conduct the research. The project came about because of an existing relationship, from previous collaborative projects, without which the initial conversations would likely not have taken place. The project itself demonstrates the value of partnerships and networks to enable opportunities for research to be taken, to facilitate accessing grant funding, and to support research. It also shows benefits of embedding research expertise and collaborative research within the council to challenge and raise questions, explore good practice, and stimulate conversations and further research.

2. Executive Summary

Norfolk County Council (NCC) has collaborated with research partners to jointly undertake many research projects. Joint working has tested and challenged accepted thinking and used proof of concept approaches to identify ways to develop and improve the services delivered to the population of Norfolk. Through these projects the council has increased awareness of challenges in evidence generation and dissemination that a local authority might face.

Taking a systems perspective, this study explored current research activity, existing research relationships, and stakeholders' experiences of being involved in research at, or with, the Council. The purpose was to develop a better understanding of the organisational structures, processes and practices that support a local authority to become research-active, to identify where improvements may be needed, and to explore how learning may be shared across other local authorities and organisations facing similar challenges.

In the first stage of the research a survey was sent to all NCC staff to identify individuals engaged in research activity at the Council, and who they collaborated with for the purposes of research. This information was used to create a network map to show the extent of research activity across departments and the links between people that collaborate. A series of focus groups and interviews were then undertaken with internal and external stakeholders that had been identified through the first stage of the research. These explored their experiences and perceptions of conducting and using research within a local authority context.

A wide range of research activity is undertaken at NCC, with an emphasis on applied work to improve services and benefit the people of Norfolk. There are pockets of excellence, good practice, and strong collaborations in some departments, with evidence of inter-departmental collaborations as well as partnerships with various external organisations, including several universities. There is an enthusiasm and readiness amongst key stakeholders to investigate opportunities, and to develop and implement interventions that may better support the authority to become more research active. These include finding ways to strengthen partnerships and networks, to move from informal connections and isolated projects to systemised and enduring partnerships and research activities, and to develop a framework to facilitate research, collaborations, and capacity building across the Council. There is an enthusiasm and readiness to understand the value of research to the Council, and how it can be used to inform service development and improvement. Going forward, there would be clear benefit for further scoping, design, implementation, and evaluation of interventions to capitalise on existing resources and good practice, and to further improve the capacity for research.

3. Background

Within local authorities and other similar organisations, the use of evidence-based practice to make sure that policy and practice are based on sound evidence is critical to ensure that resources are focused on actions and interventions that have a good prospect of being effective. Whilst research and evaluation are essential activities to facilitate evidence-based practice, we know that there are many challenges related to the generation of this evidence, and with its dissemination and use to guide decision making (1-4). Some of key ones include (i) to ensure evidence is practice-relevant; (ii) to ensure evidence generated is relevant to supporting future funding and evolving strategies; (iii) to report in a time-frame, style and language that is appropriate for stakeholders to make use of the evidence; (iv) to generate evidence from practice-based projects that is robust and publishable within the scientific literature to facilitate wider sharing of insights and implementation of good practice (v) to be aware of alternative approaches to evidence production and use, and (vi) to produce and use research evidence with limited financial resources and methodological skills.

Research-practice partnerships can improve the quality of research and evaluation and increase adoption of evidence-based practices (5, 6). Previous studies have shown that such partnerships can also facilitate learning and the embedding of research within organisational practices, but that the degree to which collaborative practices are embedded within organisations and the nature of relationships influences partnership effectiveness (5).

Over the last decade, Norfolk County Council (NCC) has collaborated with research partners, including the University of East Anglia (UEA), to jointly deliver and evaluate many projects. Joint working has tested and challenged accepted thinking and used proof of concept approaches to identify ways to develop and improve the services delivered to the population of Norfolk. Through these projects the council has increased awareness of challenges in evidence generation and dissemination that a local authority might face. In particular, questions have arisen around the extent to which examples of good practice in research are localised within individual relationships or departments or are institutionalised and shared across departments within or across local authorities. There is a need to more fully understand relationships between organisational structures and processes, and internal and external influences on organisational culture and practices related to research and evaluation (6).

Through the lens of a systems approach, this study explored current research activity, existing research relationships, and stakeholders' experiences of being involved in research at, or with, the Council. We aimed to develop a better understanding of the organisational structures, processes and practices that support a local authority to become research-active. The application of insights gained is intended to address gaps within the local network, and to explore how our learning may be shared across other local authorities and organisations facing similar challenges. To help address this aim we identified four primary research questions.

4. Research Questions

- 1) Who are the individuals, groups, departments, and partnerships that are engaged in, or have oversight of, research activities within NCC?
- 2) What processes and practices currently operate within the organisational structures and systems within NCC that facilitate research activities and use of research evidence? What are examples of good practice?
- 3) By taking a system perspective, what are the gaps in current processes and practices, and what may be needed to address them?
- 4) How can we use examples of good practice and insights from the research to develop recommendations for action to address the gaps, build on the strengths, and to identify how lessons from individual projects and partnerships may be implemented and embedded across the institution?

Box 1. What do we mean by “research”?

Research is the systematic inquiry for the generation of knowledge and understanding. This can include applied research which seeks to find solutions to everyday problems. An example might be, "What are the factors that influence uptake of means-tested benefits?" We do not include market research within our definition of research for this study.

Evaluation is included in our definition of research. Evaluation is the systematic examination of an intervention and its effects to produce information that can be used by those interested in its improvement or effectiveness. An example would be "Has the construction of cycle lanes across Norfolk increased the numbers of people cycling to work?"

Research activities include both conducting research and using evidence from research

5. Method

The approach was informed by a recognition of the need for a breadth of enquiry beyond the strict boundaries of the Local Authority and internal departments and teams, that reflected the overall context of the study and wider system in which the local authority operates, and research activities take place. This context is depicted in the logic model we developed to guide the research (Figure 1). Firstly, we applied network analysis (7) to understand how NCC and partner organisations may be viewed as a system in which research activity sits. Network analysis is a way of mapping and developing a visual representation of the key players (often termed ‘actors’) and relationships. It is a method that can be used as a descriptive and diagnostic tool. Secondly, we applied participatory approaches that involve the input of those key players (8) to allow us to engage and work collaboratively with stakeholders from NCC and related organisations, and to adapt our methodologies in response to emerging stakeholder requirements and priorities.

To explore the breadth of research activities and how they may be used, it was important to ensure stakeholders had a shared understanding of what we meant by research activities. The definitions shared with participants are shown in Box 1. The research was conducted in two stages, as shown in Figure 2, and explained below.

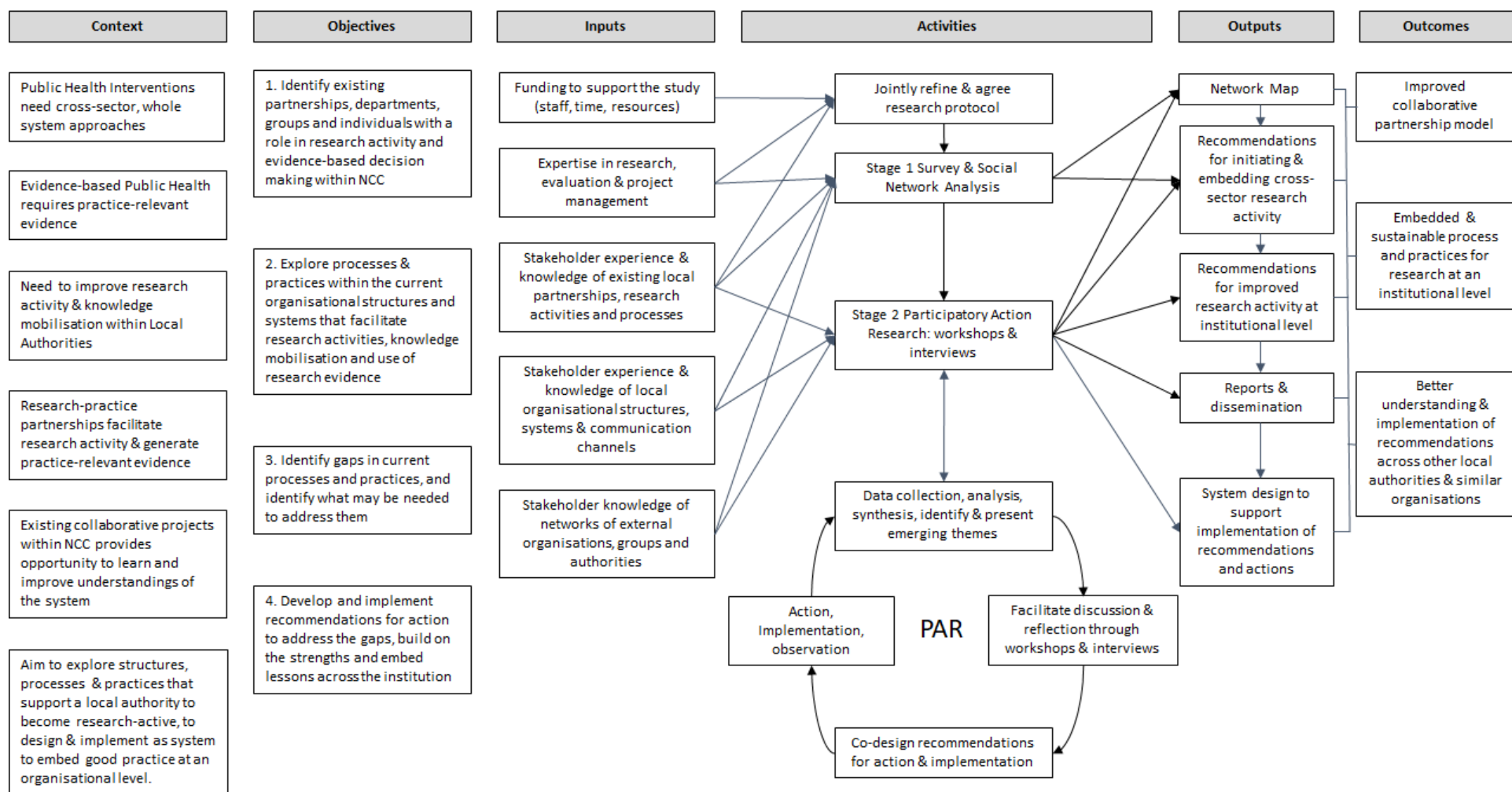


Figure 1. The research system logic model developed to guide the work.

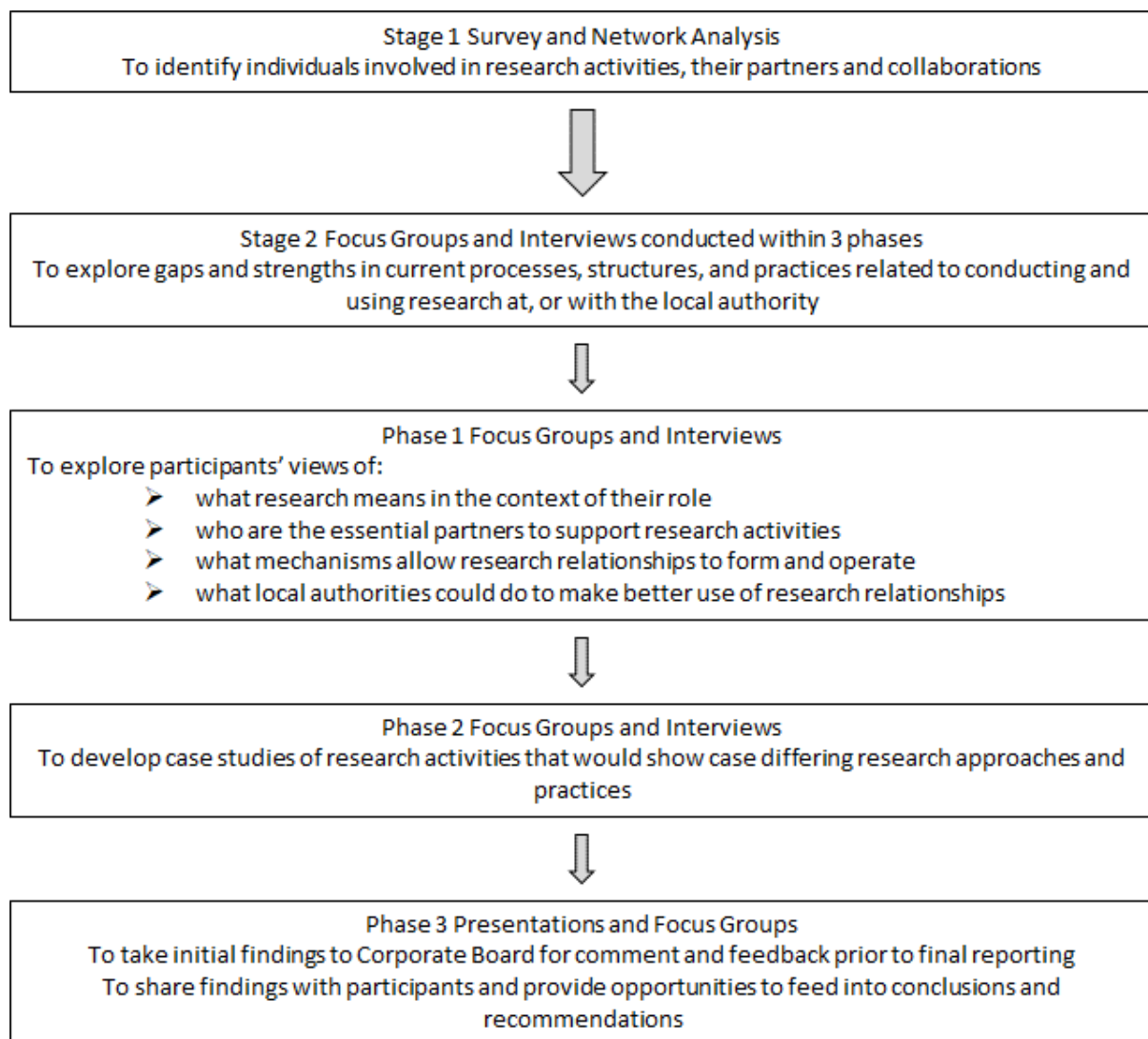


Figure 2. The flow diagram of the study

5.1.1. Stage 1

We surveyed staff across the organisation to identify individuals and groups that are engaged in research activities at NCC. We contacted the directors of departments, heads of services and internal communication teams to provide them with the details and link for the survey and to ask them to share this with the staff in their teams and to encourage all staff to complete the survey. The survey (Appendix 1) asked respondents to answer 15 questions about their involvement, or interest, in undertaking or using research as part of their role in the local authority. This included asking them to identify up to ten people that they currently collaborate with or have collaborated with in the past two years for research purposes, and to state if they were NCC colleagues or from an external organisation. We included two questions to help understand the nature of the relationship and communication with each identified partner.

The survey remained open for the duration of the study, although no responses were received after 2nd December 2020. Survey outputs were exported into a Microsoft Excel file for cleaning and data management. Each respondent and named partner were given a unique code to de-identify them and thus everyone was anonymised. Each respondent was also coded with attributes based on the

survey responses, including their organisation, team or department, engagement with or interest in research activities. The coded data was then imported into the Ucinet software package (9) where it was used to generate network maps to describe the connections between stakeholders.

5.2. Stage 2 Focus groups and semi-structured interviews

Survey responses were used to identify potential participants for the second stage of the research. All NCC staff that indicated their willingness to participate, and that had shared their email address with us via the survey, were contacted and to invite them to participate in a focus group or interview. We also identified individuals mentioned as external partners from the survey results. Where these people had their contact details readily available on organisational websites, for example university partners, we contacted them to provide details of the study and to invite them to participate. This stage was conducted over three phases of data collection, each with a differing purpose (as shown in Table 1, and Figure 2).

Table 1. Description of each phase of the Stage 2 data collection

Phase	Purpose	Participants (total number)
1	To explore internal stakeholders' experiences of research relationships and research activities	3 focus groups (n = 10) 4 interviews (n = 4)
	To explore external stakeholders' experiences of research relationships and research activities	2 focus group (n = 7) 4 interviews (n = 4)
2	To develop some brief case studies to explore how stakeholders from NCC teams engage in research activities and partnerships	3 focus groups (n = 9) 5 interviews (n = 5)
3	To explore preliminary findings and provide opportunities to feed into the study conclusions	2 focus groups (n = 12) Presentation and discussion with NCC Corporate Board

Supporting material and a topic guide with indicative questions was developed for each of the data collection phases (Appendix 2), and sent to participants in advance, with a participant information sheet and consent form. Focus groups lasted approximately 60 minutes and had between 3 and 4 participants in each, whilst interviews lasted between 26 and 50 minutes. Focus groups and interviews were recorded, and transcribed.

6. Results

The findings are presented linked to the stages of the research. By referring to Table 1, this also helps to make clear the sample on which the findings in each of the following sections are based.

6.1. Stage 1: Survey and Network Analysis

After removal of eight incomplete responses, the survey sample consisted of 104 participants. Of these 54 (52%) stated they were either currently engaged in doing research or had been in the last two years, and a further 43 (41%) respondents stated they were not engaged in research but were interested in doing so. Some 68 (65%) were currently engaged in using research evidence or had been in the last two years. Respondents identified 174 partners that they collaborated with for the purposes of research; this included 69 internal partners that had not completed the survey and 105 external partners.

Respondents described the nature of collaborations and communication with partners variably. In total, 217 relationships were identified, with just 2% being by chance, 19% being based on formal communication, and 25% ad-hoc as required. As may be expected, the most common categorisation was a mixture of ad-hoc and formal, which was used to describe 54% of contacts. Frequency of contact within relationships was generally high; 56% were described as involving frequent or very frequent contact, whilst just 12% of relationships were based on rare contact.

6.1.1. The network of research relationships

Figure 2 shows the network map of individuals, and their connections to internal and external partners. Internal partners are colour coded by department or team (e.g., Public Health, Insight and Analytics etc), although these teams are not labelled to preserve anonymity. External partners are coded as “university” or “other.”

The map shows that stakeholders from a wide range of departments are involved in research activities. It also shows clusters of research relationships, with several clusters around individuals who connect groups and may hence act as important links within the network. The map also shows several examples of inter-departmental research collaborations along with isolated stakeholders who have not described themselves as connected to others through research.

There are several relationships between the local authority and university partners, primarily the local university (UEA), but also other universities in England and across Europe where there are connections through specific research projects. Stakeholders also identified research partnerships with other local authorities, government departments, quasi-governmental organisations, research networks, associations, the public, and charitable and voluntary organisations.

Given the short duration of the study, and context (i.e., the middle of a pandemic), we are cognisant that the survey likely underrepresents the extent of stakeholders engaged in research and the breadth of research activity. The findings should therefore be viewed as a sample of the population only, and as a snapshot at a given time. Nevertheless, the map serves as a starting point for discussions around how the network may be shaped to capitalise on existing research relationships and resources, and further developed to facilitate knowledge exchange and capacity building to conduct and use research.

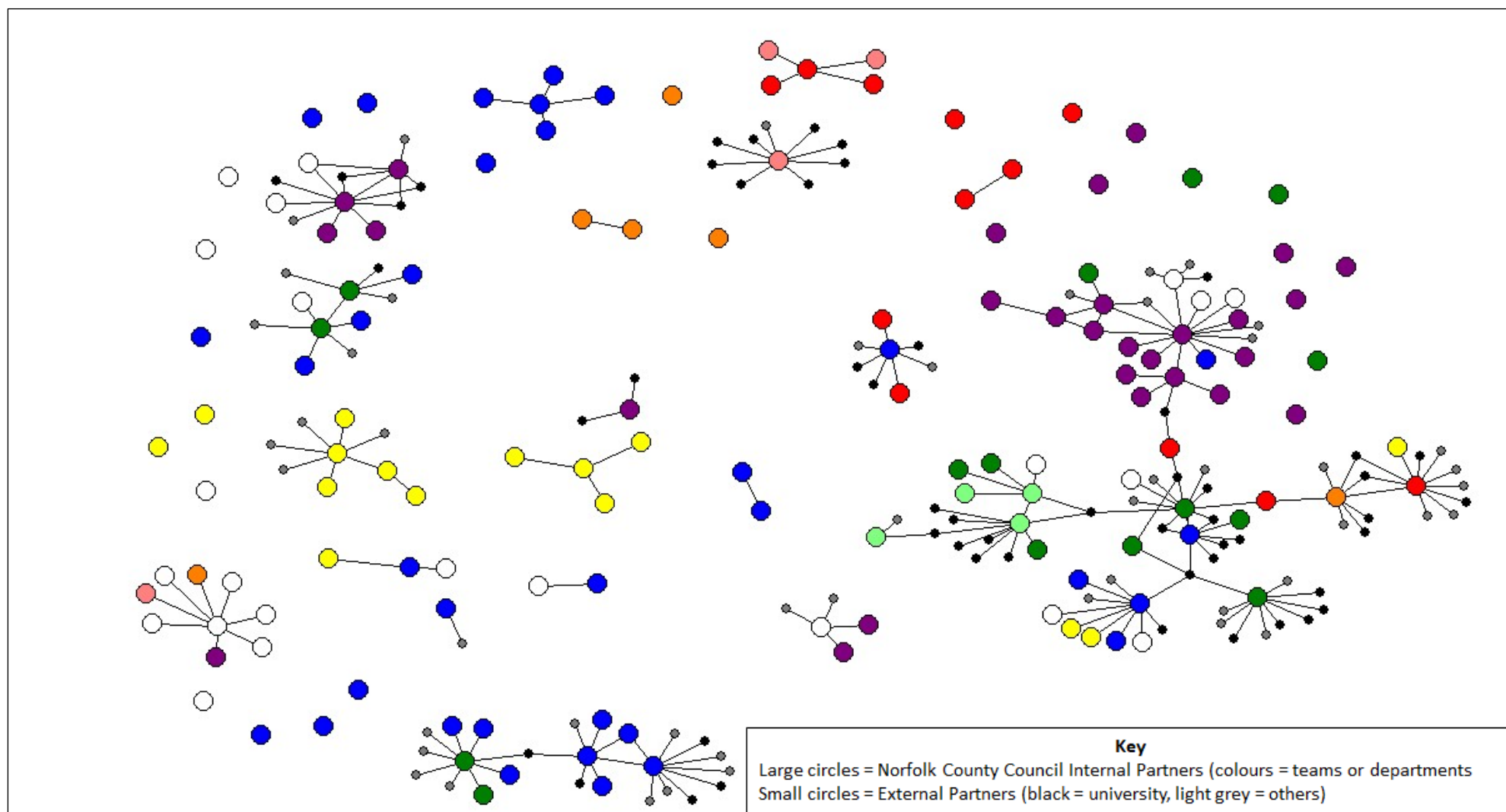


Figure 2. Network map of research partnerships at Norfolk County Council.

Stage 2: Focus Groups and Interviews

The three phases of the qualitative component of this research are described below.

Phase one: What are the types of research activity that stakeholders are engaged in, and what are their experiences and perceptions of research activity?

Stakeholders described various examples of research activities. These included: ongoing use of evidence in service improvement and development plans; public consultations; drawing on evidence from other local authorities informally and formally; devising tools, methods, and interventions, testing implementation, and evaluation. Some stakeholders thought there were differences in how people across NCC would interpret research; for example, things like quality assurance and evaluation may be considered as “business as usual” and not categorised as research if they do not have wider applicability.

Stakeholders emphasised the importance of research being applied, and outputs need to focus on service development and improvement for the people of Norfolk. One stakeholder commented:

“We are very evidence based, and feel we shouldn’t be making decisions unless it is evidence-based ... It is public money, so we should be squeezing every drop of value out of it, and for me that is what research is about, to understand things and to make things better. We need to use research to inform the things we do.”

Benefits of bringing grant funding for projects and learning from other departments and projects were also highlighted. Participants acknowledged that project work is time limited, and once a project is completed, the knowledge gained is not always retained. It was felt that within departments there are people with transferrable research skills that could be used across the service and in other departments with wider sharing, and that there are missed opportunities for learning and knowledge from the practices of research to be shared across the Council. As one participant commented:

“Working at NCC has been a great experience for me, and it has given me time to do research, but maybe fewer opportunities to say what we have done. I think we need to celebrate it a bit more.”

We identified several key themes related to participants experiences of research activities and research relationships (Table 2).

Table 2 Themes related to stakeholders' experiences of research activities

Key themes	Examples of challenges and facilitators
Research activities	
Limited awareness and knowledge of what others are doing	<ul style="list-style-type: none"> • Challenges are associated with being a large organisation that fulfils many functions • Duplication of efforts and missed opportunities for greater efficiency • Fluidity of roles across different departments • Communication is important to help people know what questions to ask, how to find answers, and who to ask
Limitations in resources	<ul style="list-style-type: none"> • Limited financial, analytical and time resources • No specific people managing research • Lack of resilience and fragile staff teams
Alignment of research with long term strategy	<ul style="list-style-type: none"> • Importance of applied research that will develop and improve service is recognised • Challenges of knowing how outputs will be used • Limitations in the capacity to align research to longer term strategic needs • Longitudinal studies are difficult within an applied context, and traditionally not done • The balance between time spent now for better working in the future needs to be improved
Research relationships	
Openness to collaborating with external partners	<ul style="list-style-type: none"> • Range of projects with internal and external partners • Good relations with universities, particularly local ones and those with relevant expertise • Existing and new networks e.g. UEA Health and Care Partnership, NODA, Local practice networks • Partnering with external companies and consultants is a newer way of working and needs developing • Challenges of working with dispersed groups and timelines for feedback • Benefits of access to research expertise, tools, external funds and improved capacity to do research
Collaboration, networks and knowledge sharing	<ul style="list-style-type: none"> • Based on relationships built over time, informal, personal connections • New links remain based on existing relationships where there is trust • Networks may not be accessible to all staff (e.g. mainly limited to directors of teams) • Balance between naturally forming relationships and putting a structure on that (potential resistance) • Trade-offs between collaborative approaches and time spent learning on the job doesn't always favour networks of learning
Suggested developments	<ul style="list-style-type: none"> • Knowledge hub • Engagement of staff with responsibility for liaison and facilitating research • Framework for collaborations and capacity building, training element, working across departments and opening minds • Moving from informal connections to systemise and enduring partnerships

Phase two: Case studies as examples of research activities

The three case studies on the following pages are provided as examples of research activities and research approaches undertaken at NCC. These demonstrate collaborative research, internal and external partnerships, innovative approaches, and good practice. They are intended to share and celebrate effective activities, and to highlight what is possible within a local authority context.

Case Study 1: Norfolk Office of Data and Analytics “Reasonable Worst-Case Scenario Planning” – Mutually beneficial joint working

This work is part of the Council’s ongoing response to the Covid-19 pandemic. The research group formed in Spring 2020 and brought together analysts from NCC, UEA, and specialists from the Norfolk Hospital Trusts, Social Care, Mortality Group and Districts to model likely numbers of cases of Covid-19, what that would mean for hospital admissions and the number of deaths in the system, and the impact on other care and services. Effective modelling was facilitated by early data sharing by the Sustainability and Transformation Partnership. The group met every week.

In Autumn 2020 the group were asked to support winter planning for NCC, Social Care services, and hospitals to understand their required capacity. Working with researchers from UEA to look at the association between the number of expected cases and the number of hospital admissions, the group modelled a “Reasonable Worst-Case Scenario”. Critically, they were able to apply national research to translate into the local scenario.

This example of partnership working came about because stakeholders from the NCC Intelligence and Analytics Teams reached out to Norwich Medical School, leveraging existing connections, and established working relationships with UEA. Conversations with existing internal and external partners, including the Insight and Analytics Lead for the STP, and an understanding of the shared concerns was key. A member of the group reflected:

“A degree of coincidence, but it was useful, and we have kept it going. Out of it we got the initial wave model, we were able to look at the Covid-19 Protect Model, we were also able to start sharing data and information across the system, so partners could look at what was going on and provide their expertise to understand it better. We were also able to start discussions about the Social Care and infections in Care Homes, it just facilitated a good discussion.”

The impacts of this work are ongoing; for example, it is being used by the Strategic Coordination Group (SCG), and Adult Social Care to plan their hospital discharges. Members of the group also recognised the importance of mutual benefits in partnership working; and identified the value to research partners of the Council sharing data and information, and their knowledge of systems where you can access information and data. In discussions it was concluded:

“The work has just strengthened those relationships, and so I think we will continue to work closely with partners across the system. That long-term relationship between the team and the University through professional work needs to be there all the time. You need to have that relationship up and running and investment in that relationship before you can really draw on it in earnest like we have done.”

Key strengths of this approach were seen as:

- Mutually beneficial research collaboration in which all partners, services and wider stakeholders gain.
- Established connections key to reaching out and initiating new collaborative projects, and to being able to do that in a timely manner to respond rapidly to emerging needs.
- Engagement in collaborative work strengthens relationships and brings additional opportunities for ongoing and further collaborations.

Case Study 2: Active Norfolk - A journey to embed research within the organisation's culture and practices.

Active Norfolk established good relationships with UEA that enabled them to develop an evolving model of collaborative working. They have been involved in several projects with differing models to support research and evaluation. These include projects where a university researcher was jointly funded through Active Norfolk, interventions where the university has been commissioned to conduct an evaluation, projects where they have been approached to deliver an intervention for university-led research, and collaborative and co-developed projects. It was stated:

"The opportunities are not always the same, but it has demonstrated the ways we can work together."

The team recognise benefits of working with academics, such as having external and independent input and credibility, as well as the value of engaging with subject experts in research to grow the organisations understanding of research. A significant focus of the organisation has been building capacity in the wider team to embed a research culture. From those initial research relationships and their understanding of insight and research, their approach evolved into having a dedicated internal Evaluation and Insight Officer. A member of the Active Norfolk management stated:

"I think the most significant step for us as an organisation was building capacity in our own organisation to fulfil some of that research function; to build our own approach to research and establish approaches to collaborating with academic partners."

The approach has evolved further by developing formal and informal arrangements to work with other local authority departments, such as the Environment Team and Public Health. Having fixed shared posts or resource has helped build relationships, and to share insights and learning through meeting with senior level colleagues regularly.

"It is about having gatekeepers and a willingness to work across departments. Being networked internally within our organisation, with the team, with the senior team, and also more recently within the County Council and the Intelligence Network, it helps people know what is possible so they enhance their skills but also what others are doing."

Key strengths of this approach:

- Central support and facilitation for the organisation which helps secure buy-in and a culture of valuing and using insight and evaluation across the team.
- Having that central role integrated within the organisation's leadership team and attending senior management meetings helps to understand the direction of the organisation and the work of other departments, as well as advocating research practices at a senior level.
- Being part of a wider intelligence network within the Council facilitates learning from others, shared resources, making contacts and finding out about tools and training.
- Having someone with research skills inside the organisation to facilitate research relationships and to ensure collaborative work is practical and meaningful for the Council, Active Norfolk, and research partners.

Case Study 3: The Environment Team - Embedded approaches to support research activities within the organisational structure and culture

The Environment Team are involved in various research activities and partnerships, including large externally funded projects, providing services and data to support external research, and engaging partners to conduct research related to Council activities. Examples of collaborative projects include: **Intereg European Regions and Intereg North Sea Region projects**; **EXPERIENCE** in which NCC is working with the University of Surrey and European partners to understand opportunities for sustainable 'out of season' tourism across Norfolk; **Staying Active and Independent Longer (SAIL)** which is about linking the value of the environment to clinical benefits for older people; and **Pushing Ahead** which is a collaboration between the Environment, Public Health, and Active Norfolk teams, and UEA to develop and evaluate interventions to encourage active travel.

The approach to research in the Environment team focuses on: developing mutually beneficial research relationships; integrating projects so that they are not considered in isolation, but in relation to the wider programme of work; and ensuring that research outputs can be used in a way that is beneficial to the work of the Council and the people of Norfolk. As members of the team stated:

"We support all sorts of research by providing information and contacts with other experts, but if we are going to invest time and money into a project, we do it if we can see there would be a benefit for the people of Norfolk."

"... You are constantly thinking about what next, so projects can be an inspiration but also produce evidence which can inform later projects."

Staff recognise that the team's approach to research is innovative for a County Council. For example, bringing money in from external funding or commercial services has enabled innovation and engagement with novel projects that benefit the service and people of Norfolk. Members of the team described several benefits of research collaborations that they felt extended beyond the research outputs, as well as reflecting on some of the challenges, and approaches that have been key to the success of the work they do, and to expanding their partnerships:

- Working with universities brings access to academic expertise and advice; exposure to new ways of working that supports skills development and capacity-building; and credibility that helps to create momentum and buy in from other internal and external stakeholders. However, it can mean partners have slightly different objectives. Good communication is vital to ensure everyone is clear about objectives and expectations and how those will be managed. Researchers need to understand local government processes and limitations for collaboration to be effective.
- Project work can make long-term planning difficult; a core team is needed to initiate and develop projects.
- Research relationships and activities are dependent on the project, how it is set up, and its purpose. Challenges can stem from differing collaboration arrangements; for example whether universities are a project partner or contracted for aspects of the research.
- Development and implementation of a platform for collaboration has made the process easier and audit-proof.
- Internal engagement with other departments has built confidence around drawing other parts of the organisation into projects.
- Embedding staff with academic backgrounds has brought a skill set and connections for a research culture.
- Proactivity of staff in looking for opportunities to do research, to bring in external funding, and to develop partnerships has been important.

Phase 3: Key themes identified from the final workshops and next steps

Presenting the initial findings to the Council's Corporate Board and to some of the participants in the study stimulated further discussion around the findings, and what the next steps might be.

The study was thought to have been a good starting point to bring stakeholders together and to start conversations about what more could be done. The mapping was seen to have been useful to stimulate discussion around how the networks may be developed and shaped going forward. Bringing people together in the focus groups and showcasing research activity through the case studies was thought to have helped develop a better understanding of the breadth of on-going research activity and opportunities for future collaboration. Stakeholders expressed a desire to engage in further discussion around how best to build on the study and its findings. Some of the key points that stakeholders raised included:

1. Building on strengths and existing resources:

- Work is already being undertaken to develop collaborative research practices e.g., Norfolk Office of Data Analytics (NODA), UEA Health and Social Care Partnership, the Environment Services Collaboration Platform.
- Some of the recent COVID-19 work has helped unlock and realise the benefits of sharing knowledge and skillsets across organisations.
- The focus should be to explore how best to draw on existing resources and good practice, link all those internally that want to do research, and move from more ad hoc relationships and arrangements to something that is more systematic and embedded.

2. Building capacity and training for research:

- Finding ways of working across departments at NCC and with universities to support training and capacity building is important, e.g., secondments, internships, apprenticeships, research champions or mentors, staff accessing higher qualifications.
- Examples within departments could serve as models elsewhere e.g., Adult Social Care where NCC staff are doing PhDs and external students are accessing NCC data; Public Health where there are established professional development and quality assurance processes; NCC Coaching Programme.
- Balancing Council needs for knowledge that cannot be met internally with what works for a university in terms of finding common ground educationally, professionally, and financially.

3. Alignment of research activities with the strategic short, medium, and longer-term needs:

- There is interest in thinking about some of the issues the County is going to be facing, e.g., the economic situation and health issues such as 'Long Covid' and mental health concerns. This brings potential for innovative projects and joined-up thinking that could draw on non-typical resources to find interventions to address these needs (e.g., looking at the potential role for Library and Museums Services to improve health and well-being).
- Increasing requirements for universities to show impact offers opportunities for applied research and for mutual benefit.
- Identifying a handful of long-term projects that can be used to help formulate a structured approach to short, medium, and longer-term research priorities into which the Council could attract funding.
- Coproduction with beneficiaries is now increasingly a requirement and needs to be kept in mind in developing any systems or processes.

7. Concluding comments and reflection

From a local authority perspective, it is critical to understand the benefits of research, how it can be used to improve services, productivity and provide public benefits. It is also important to explore and consider how the organisation may best invest in research, how return on investment is measured, and how research could inform a framework for short, medium, and long-term goals. The Council have a strong focus on research that is applicable and will improve the service and outcomes for the people of Norfolk, although there are challenges to alignment of research activities with longer-term strategic need. There are pockets of excellence and embedded good practice in some teams in relation to conducting research and using associated evidence, and strong collaborations within sections of the organisation. There are however challenges in how capacity for research is built and shared across the organisation, and limitations in awareness of what research others are doing. This work suggests there remain several key questions to be answered, in particular:

- What model is appropriate in the organisation to support collaborative research?
- How does the organisation, and individual staff, get more involved in research activities?
- How does the organisation ensure that research activities are used to drive decisions that facilitate continuous service improvement, and are effective and transparent?

The collaborative approach, with the researcher embedded in the Council was a strength of the study. However, the short time frame and the complexity of the organisation and its communication channels impacted our ability to rapidly reach the target population for the survey. Survey responses therefore represent a select sample of individuals from a very large and complex organisation, and the results likely underrepresent the full extent of research activities taking place and stakeholders engaged. It should also be noted that departments are likely to be differentially represented; for example, it is likely that the most research active individuals responded, and those in departments at the heart of the response to Covid-19, such as Public Health, are underrepresented. Nevertheless, collaborating with key stakeholders using our methodological approach allowed us to capture data from a wide range of departments and activities to provide an overview of the diversity of research practices and experiences.

It is of note that there is considerable enthusiasm to investigate opportunities, and to develop and implement interventions that may better support the authority to become more research active. We identified recommendations for potential next steps including:

- Strengthening networks across departments and with external partners
- Moving from informal connections and isolated projects to systemised and enduring partnerships and research activities
- Developing of a framework to facilitate research, collaborations and capacity-building
- Developing a knowledge hub to facilitate sharing resources, knowledge exchange, and training
- Engaging staff with responsibilities for promoting and facilitating research, and liaising with partners
- Celebrating research activities and successes

Going forward, there would be clear benefit for further scoping, design, implementation, and evaluation of interventions to capitalise on existing resources and good practice, and to further improve the capacity for research.

8. References

1. Datta J, Petticrew M. Challenges to evaluating complex interventions: a content analysis of published papers. *BMC public health*. 2013;13(1):568.
2. Craig P, Cooper C, Gunnell D, Haw S, Lawson K, Macintyre S, et al. Using natural experiments to evaluate population health interventions: guidance for producers and users of evidence. London: Medical Research Council; 2012. Available from: <https://mrc.ukri.org/documents/pdf/natural-experiments-guidance/>.
3. Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M. Developing and evaluating complex interventions: new guidance. Medical Research Council; 2008.
4. Schneider CH, Milat AJ, Moore G. Barriers and facilitators to evaluation of health policies and programs: Policymaker and researcher perspectives. *Evaluation and Program Planning*. 2016;58:208-15.
5. Harden SM, Johnson SB, Almeida FA, Estabrooks PA. Improving physical activity program adoption using integrated research-practice partnerships: an effectiveness-implementation trial. *Translational Behavioral Medicine*. 2017;7(1):28-38.
6. Schwarzman J, Bauman A, Gabbe B, Rissel C, Shilton T, Smith B. Organizational determinants of evaluation practice in Australian prevention agencies. *Health Education Research*. 2018;33(3):243-55.
7. Chambers D, Wilson P, Thompson C, Harden M. Social network analysis in healthcare settings: a systematic scoping review. *PloS one*. 2012;7(8).
8. MacDonald C. Understanding participatory action research: A qualitative research methodology option. *The Canadian Journal of Action Research*. 2012;13(2):34-50.
9. Borgatti SP, Everett MG, Freeman LC. UCINET for Windows: Software for Social Network Analysis Version 6.705. 2020.

9. Appendices

Appendix 1: The Staff Survey used for this research

Research Activity within Norfolk County Council

1. Introduction

Norfolk County Council (NCC) and the University of East Anglia (UEA) have received funding from the National Institute of Health Research (NIHR) to help them understand how to support local authorities to become more research-active. As part of this work, you are invited to take part in this on-line survey. This should take no more than 15 minutes of your time. We are interested in your perspectives even if you don't feel your work is health related. Your views are important to this study and we would like to invite you to take part, if you:

Are involved in any research activities at or with NCC as part of your work

Or

Are interested in potential opportunities to be involved in research activities at or with NCC as part of your work

Or

Are using, or are interested in the potential to use, evidence/findings from research activities undertaken at or with NCC to help inform the work you do

This includes anyone who has a role within NCC or who may collaborate with NCC as part of their role in another organisation.

What do we mean by research?

Research is the systematic inquiry for the generation of knowledge and understanding. This can include applied research which seeks to find solutions to everyday problems. An example might be, "What are the factors that influence uptake of means-tested benefits?" We do not include market research within our definition of research for this study.

Evaluation is included in our definition of research. Evaluation is the systematic examination of an intervention and its effects to produce information that can be used by those interested in its improvement or effectiveness. An example would be "Has the construction of cycle lanes across Norfolk increased the numbers of people cycling to work?"

What is the purpose of this survey?

This survey forms the first stage of the study. The aim is to help us identify who is involved in research activities and who may be wanting to be more involved in research activity as part of their work. We will use this information to create a network map of individuals, departments and organisations involved in research at NCC and who collaborated with whom. For that reason, you will be asked to give your name and the names of others you collaborate with. In the maps all names will be replaced with a unique code to de-identify them.

You do not have to take part in the survey. By choosing to complete the survey you are giving your consent to participate in this part of the research. For more information, including who to contact if you have questions before completing the survey please see the **Participant Information Sheet**.

1. Do you want to read the Participant Information Sheet now?

☐ Yes

☐ No

2. Participant Information Sheet

Participant Information Sheet: Exploring structures, processes and practices that support a local authority to become research-active

You are being invited to take part in a research study which is a collaboration between Norfolk County Council (NCC) and the University of East Anglia (UEA). Before you decide, it is important you understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear, or you would like more information. If you have questions, contact details are at the end of this information sheet.

What is the purpose of the study?

The National Institute for Health Research (NIHR) has funded a series of research projects to help them understand how to support local authorities to become more research-active, so that local authorities are better able to generate evidence about their activities and to use evidence to inform their policies and practices. NCC has an existing relationship with the UEA. The purpose of this study is to explore who is currently involved in research at NCC, the strengths and gaps in the current systems, processes and practices, and to apply the insights gained to design and implement a system allowing lessons from individual projects to be embedded into good practice at the organisational level.

Why have I been chosen?

We are interested in the perspectives of different people involved in, or with oversight of, research activities at NCC. As a person involved in or with an interest in research activities within the local authority your views are important to this study and we would like to invite you to take part.

Do I have to take part?

You do not have to take part if you do not want to. By choosing to complete the survey you are giving your consent to participate in this research. If you decide to take part, you are free to withdraw from the study at any time up to the point of analysis without giving a reason. If you decide to withdraw after participation in the survey, the process for withdrawal will be explained on the survey. A decision to withdraw at any time, or a decision not to take part, will not affect you in any way.

What does taking part involve?

If you agree to take part, you will be asked to complete a short online survey. It should take no more than 15 minutes to complete. At the end of the survey you will be asked if you would also like to participate in any follow up workshops or interviews. If you indicate that you are happy to participate in the study further we will contact you again with more details.

What are the possible disadvantages and benefits of taking part?

We do not believe there are any disadvantages or risks in taking part in the study other than your time to take part. In terms of benefits, by taking part you will be sharing information that will contribute to our understanding of research activity within the local authority, the strengths and weaknesses in the current processes and practices and influences on these, and to contribute to possible solutions or actions to help the council become more research-active. We are interested

in your experiences and views, and by taking part you will be contributing to our understanding of good practice, and facilitators and barriers to this. Understanding gained from the study is intended to help develop recommendations for best practice.

Will my taking part be kept confidential?

All information collected during the research, including information relating to specific research projects, and individual's opinions or comments will be kept confidential so that only the researcher(s) carrying out the research will have access to such information.

Your name will never be used in any outputs from this research. By agreeing to participate in this study, you are consenting to the retention and publication of information gathered.

What will happen to the results?

Understandings gained will be shared with the NIHR and the Department for Health and Social Care through a final report and presentation. Findings will also be shared with stakeholders at NCC and may also be shared with a wider audience through publication in academic journals and by presenting at conferences.

Who is organising the research?

The research is being conducted by Judith Fynn as the lead researcher employed through NCC and in collaboration with a team at the Norwich Medical School at the UEA. The research is funded by NIHR.

Has the study been approved on ethical grounds?

This study has been reviewed and approved by an independent group of people as part of the Faculty of Medicine and Health Sciences Research Ethics Committee at the UEA, which protects your safety, rights, wellbeing and dignity. The design and management of the research has taken account of GDPR requirements to ensure compliance.

Complaints procedure

If you have any complaints about the study please contact: John Jones, Head of Environment, Culture and Environmental Services, Norfolk County Council, john.jones@norfolk.gov.uk
Telephone: +441603222774

Who may I contact for further information?

If you would like more information about the research before deciding whether to take part, please email Judith Fynn:
judith.fynn@norfolk.gov.uk
j.fynn@uea.ac.uk

2. What is your full name? *

3. Do you work for Norfolk County Council? *

☐ Yes

☐ No

4. Approximately how long have you worked for Norfolk County Council?

☐ Less than 6 months

☐ 6-12 months

☐ 1-2 years

☐ More than 2 years

5. What department at Norfolk County Council do you currently work within?

6. What is your job title?

7. What organisation do you currently work for?

8. What is your current job title?

9. Approximately how long have you worked in your current role?

☐ Less than 6 months

☐ 6-12 months

☐ 1-2 years

☐ More than 2 years

10. Which of the following statements best applies to you? *

- ☐ I am currently involved in undertaking research activities at or with Norfolk County Council as part of my work
- ☐ I am currently not involved in undertaking research activities at or with Norfolk County Council but have been in the last 2 years
- ☐ I have not been involved in undertaking research activities at or with Norfolk County Council in the last 2 years but am interested in the potential to do this as part of my work
- ☐ I have not been involved in undertaking research activities at or with Norfolk County Council in the last 2 years and am not interested in doing this

11. Which of the following statements best applies to you? *

- ☐ I am currently involved in using evidence from research activities at or with Norfolk County Council
- ☐ I am currently not involved in using evidence from research activities at or with Norfolk County Council but have been in the last 2 years
- ☐ I have not been involved in using evidence from research activities at or with Norfolk County Council in the last 2 years but am interested in the potential to do this
- ☐ I have not been involved in using evidence from research activities at or with Norfolk County Council within the last 2 years and am not interested in doing this

12. Thinking about your involvement in undertaking research or using evidence from research activities at or with NCC in the last 2 years (or since joining your current organisation if this is shorter), please give the names of any individuals you have collaborated with for research purposes. Please include collaborators that are employed at NCC and any that are employed elsewhere. If you have collaborated with more than 10 people, please just name the first 10 that come to mind. If you have not collaborated with any other person, please leave blank.

Name	Department or Organisation	Is this within NCC? (please enter yes or no)
------	----------------------------	--

13. For each person you have identified please indicate which of the following best describes the communication between you. If you have not collaborated with any other person in relation to research activities or using evidence from research please leave blank.

	Formal (e.g. scheduled steering group meetings)	Ad-hoc as required (e.g. to ask a specific question or respond to a specific question)	Mixture of ad-hoc and formal	By-chance (e.g. only when your paths cross)
Person 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. For each person you have identified please indicate which of the following best describes how frequently you are or were in contact when working together.

If you have not collaborated with any other person in relation to research activities or using evidence from research, please leave blank.

	Rarely (e.g. We hardly ever communicate unless we need a specific piece of information or other input)	Occasionally (e.g. There may be long periods when we are not in contact during a project, but we will be in contact at key milestones)	Frequently (e.g. We are in regular contact throughout our collaboration)	Very Frequently (e.g. We are in contact at least weekly when we are working together, we always know what is happening in relation to each others work)
Person 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Would you potentially like to participate in one or more follow up workshops and/or focus groups or interviews as part of the second stage in this study?

If yes, please provide your email address so we can send you more details. This does not commit you to participating or mean that you are consenting to participate at this stage, it simply means we will send you more information so you can then choose if you want to participate. We will be facilitating workshops in November and December to work collaboratively with people across NCC to share experiences and learning, and to explore how together we can help shape research activity. We are keen to get as many of you involved as possible. We need your help to do this.

Appendix 2 Indicative questions for interviews and focus groups

Phase 1

Indicative Questions for Focus Groups and Interviews with NCC staff

1. What do we all understand by “doing or using research activities” at or with a LA?
2. What are the main types of research activities that a local authority does?

Thinking about the research relationships you have:

3. How important are these relationships to NCC being an effective organisation? Why do you feel that?
4. In your experience what happens to allow those relationships to form? (e.g. ad-hoc meetings, established collaborations, contractual obligations)
5. What mechanisms are used to share information via these relationships?
6. What are the key facilitators and barriers to the relationships forming and then working effectively?
7. What do you think local authorities such as NCC could do differently to make better use of research focussed relationships?
8. “What is the biggest issue that needs to be tackled with respect to research participation at local authorities such as NCC”?

Indicative Questions for Focus Groups and Interviews with External Partners

1. Please introduce yourself and the research partnerships you have had or currently have with the Council.

What area of research do you work in? In what way do you collaborate with the Council? Is your involvement with specific projects, departments or individuals? What role(s) do you play in those collaborations?

Thinking about the research relationships you have with the local authority:

2. How important are these relationships to your organisation? Why do you feel that?
3. In your experience what happens to allow those relationships to form? (e.g. ad-hoc meetings, established collaborations, contractual obligations)
4. What are the key facilitators and barriers to the relationships forming and then working effectively?
5. What mechanisms are used to share information via these relationships?
6. What do you think your organisation and local authorities such as Norfolk County Council could do differently to make better use of research focussed relationships, and to align research better?
7. In your view what is the biggest issue that needs to be tackled in working with the local authority with respect to research participation?

Phase 2

Thinking about the specific research activities that you are involved in, or your ongoing practice with regards to research activity if that is more appropriate.

1. Please can you briefly describe the research or types of research you do.

prompts: How did this come about? Who is involved (partners, departments etc)? How did you initiate and develop those connections and involvement? Who performs what roles in the research relationships? Is this project based, or an ongoing relationship?

2. What does doing or using research mean to you in the context of your role in the local authority, or how would you describe your research practice and experience?

3. Please can you describe how your research practices have evolved, and how this evolution has been shaped by the constraints of the local authority.

4. What do you feel are the benefits of adopting the approach and practices you have described?

5. What do you feel are the challenges of adopting the approach and practices you have described?

6. What are the things you would like to do differently but can't?

What are the reasons for that?

7. To what extent do you feel your approaches and practices might fit across other departments and teams within the local authority? What might the challenges of implementing them more widely be?