This scoping study was commissioned to explore the potential use of action research and applied research to support evidence based practice, and improve public sector delivery. National Health Service Scotland was used as a pilot public sector organisation, and the study reports on the potential for the development of communities of inquiry within NHSS. It also provides eight case studies of action research and applied research drawn from health, social care and other public services. The study was carried out between January and July 2005.

Key Issues

- This study reviewed opportunities offered by action research and applied research approaches to supporting evidence based practice with a view to improving public sector delivery.

- The study suggests that evidence about good practice is often failing to become good practice in the public sector, and that as a result, some areas of the public sector are ‘data rich but knowledge poor’.

- Action research was identified as a positive response to the current challenges of moving research into practice. A distinguishing feature of action research is that it is a form of self-reflective inquiry undertaken by participants to improve their own practices, understanding of those practices, and of the wider context in which they are conducted.

- Case studies provide illustrations of the use of applied research and action research and the study reflects on key issues relating to using evidence to inform service delivery; the need for improved dissemination; and reconsideration of the types of evidence and knowledge used to inform service delivery. Issues relating to the importance of knowledge brokerage; capacity building; changing behaviours; and the potential for future collaboration on action research are also addressed.

- A range of new ways of working were identified, and there would appear to be distinct opportunities for National Health Service Scotland to develop communities of inquiry to share learning and knowledge within health systems. Partnership and collaborative working between the policy community, practitioners and the academic community would appear to be a realistic prospect in Scotland. Scottish Executive, National Health Service Scotland, and other public sector agencies and organisations will be invited to consider the implications of this study.
Main Findings

Background to the Study
The aim of this research was to explore how the Scottish Executive Health Department might begin to develop communities of practice by identifying individuals or ‘champions’ within the NHSS who may be in a position to promote service development and redesign through the use of action research and applied research. It was envisaged that this would be the first stage of a longer term process involving a larger number of people within the NHSS, academia and other agencies and organisations.

Research methods
This study is based on:
- A number of meetings and interviews with key individuals within the NHSS and academia, with interests in action research and applied research.
- Focus groups with clinical and managerial staff from two Health Boards.
- Eight case studies of action research and applied research approaches in public service contexts.

Wider relevance to evidence based policy and practice
The concept of evidence based policy making is now a standard of best practice in Government. Increased public scrutiny and accountability has created a heightened awareness of the need for politicians and decision makers to have a range of evidence to support policy development and decision making in the public sector. Much of the data for this study comes from a health and social care perspective, however, it is likely to be of interest to policy makers and practitioners in health, social care and other areas of public sector service delivery with an interest in integrating evidence into practice.

Applied and Action Research: Key Study Findings

Using evidence to inform service delivery
Evidence about good practice is failing to become good practice. Whilst there is much evidence of relevance to practice in health and social care settings, there remain a number of issues about access to that evidence, questions about quality, issues about the kind of evidence that is considered to be valid and the remaining problem of the implementation of evidence in practice.

Many public service systems are ‘data-rich, but knowledge poor’. There is a need for a more nuanced and broader understanding of what we mean by evidence to include the experience and wisdom of staff at all levels and patients. This presents many challenges to organisational and professional cultures. The emergence of action research can be seen as a response to this research-into-practice dilemma and growing dissatisfaction with traditional approaches to research.

Beyond ‘better dissemination’
There is still a need for better dissemination of good practice evidence, particularly for those working in clinical settings. Systematic reviews of evidence and better brokerage of evidence through signposting, sourcing, interpretation, distillation, commentary on quality, and dissemination are all required and would benefit from a more efficient, co-ordinated way of doing this at a national level.

Rethinking research and evaluation
There is a need for greater acceptance and understanding of the validity of qualitative research, particularly in generating data for improvement. Related to rethinking evidence is the need to develop a different understanding of the scope for evaluation to provide opportunities for learning and generating real-time feedback and to build individual and organisational evaluation capacity. Research funders need to underpin this by greater support for interdisciplinary research to promote understanding the dimensions of change and to redress the focus on the technological and scientific evidence.

The importance of knowledge brokerage and mentoring
Evidence ‘doesn't speak for itself’; it is clear that evidence take-up needs facilitation – it is this, not the strength of the evidence that affects implementation. Facilitation includes the brokerage of evidence at a strategic level and mentoring or support for individual learning and reflection. There are a number of examples of approaches and methods to facilitate take up of evidence into practice by using action research and applied research. There is a spectrum of approaches that cover a range of perspectives from the ‘evidence into practice’ or using evaluation evidence interests, to a variety of different approaches to action research.

Capacity Building
There is also a need for capacity building to make evidence more accessible, contextualized and implementable. There is also a need to build skills in data handling, analysis and interpretation and confidence in the validity of different approaches to evidence gathering.

Space for reflection
Where the organisational imperative is delivery, reflection on practice is often risk-management, audit or resource driven. To support the development of transformative, enduring learning amongst front-line staff there needs to be recognition of the value of reflection and the time, space and
resources to reflect on practice, review and evaluate evidence and revise actions.

**Changing behaviours**

Enabling staff to recognise incongruencies in their own behaviour is at the crux of the research-into-practice dilemma. Staff have the potential to realise for themselves how their attitudes, values and behaviours may be inhibiting change. Individual realisation and responsibility and ‘unlearning’ of past practice are essential for information about good practice to become good practice. Facilitating change in service delivery also depends on the values of the organisation. Action research, which focuses on transformational learning (or learning how to learn), rather than on more traditional ‘research’ skills such as data handling and interpretation, can itself facilitate the articulation of personal and organisational values. This is a key distinction between some of the applied research service redesign and improvement methodologies such as Collaboratives and action research.

**Existing NHSS action research and applied research activity**

A number of approaches on the continuum of evidence-into-practice/action research are being implemented in the NHSS, but are frequently isolated, not widely shared and their legitimacy is not always recognised; they can sometimes be dismissed as unscientific and anecdotal. There is interest in different approaches to research, amongst both clinicians and managers, that can be more immediate, practical and of support to evidence based practice. However, there is no overall framework to advocate and promote the value of the range of approaches required, which is essential to foster recognition, legitimacy and learning from research.

**The potential for future collaboration with academic and other partners on action research**

There are a number of academics and other interested individuals with an interest in greater joint working and with the skills to add to the evidence base itself and build the capacity of practitioners to use evidence. There is a wider pool of those able to facilitate action research inquiries of various kinds.

Collaboration with academics could assist in the development and dissemination of the evidence base. Academics should be valued because of their interest in theory. They are good at the development of models and frameworks and these are often very practical and can assist practitioners to review their behaviours and strategies for change.

A range of approaches to research and inquiry are needed; there is still a role for traditional research and for building traditional research skills. However, action research does challenge conventional ideas of what is meant by research. Since many academics do not work in the facilitative style of action researchers, there is limited capacity amongst academics in Scotland to provide mentoring support for individual learning and reflection. There are some active action researchers within and outwith the academic community in Scotland and further afield who work explicitly to promote participation and enhance the skills of practitioners as co-researchers.

**Developing communities of inquiry**

There is potential to develop communities of inquiry within communities of practice within the NHSS. This goes beyond the development of learning networks which tend to be time-limited projects which focus on information sharing and the replication of best practice. A possible way forward would be the reinvention and the local customisation of quality improvement approaches, to increase the absorptive capacity or receptivity within organisations to facilitate the integration and use of evidence in practice. The development of communities of inquiry within communities of practice, is an approach that can be used to foster this customisation and local collaborative working for quality improvement in public services.

A community of inquiry could use a variety of action research approaches to break down the division between the production and use of evidence. There is scope for a range of approaches to be used and for adaptation of approaches to suit the circumstances and the type of evidence required. Communities of inquiry may be fostered by providing opportunities for creativity, interaction, dialogue and exchange across professional and organisational boundaries and by valuing the perspective of service users. The sharing of descriptive, first person accounts or ‘stories’ is an important approach; they provide resonance, connection and insight into the realities of service delivery, particularly where they also involve service users. Sharing stories, narratives or ‘critical incidents’ through tools such as significant event analysis, action learning sets, appreciative inquiry or whole systems working can open-up inquiry and provide energy for collaboration and change.

Action research can promote collaborative approaches to learning from practice to enhance organisational learning as well as individual learning, when part of a deliberate organisational strategy to value and share knowledge, experience and wisdom of all kinds across whole systems.

**The improvement of public sector delivery**

The issue of using evidence in practice is not confined to the health sector. These debates cut across the public sector. Efforts to be better at dissemination, to distil and
communicate best practice and to issue good practice guidance, standards and protocols are a feature of public policy in whatever sphere. Policy administrators and practitioners in other areas of public sector service delivery with an interest in integrating evidence into practice may also be interested in the outcome of this study.

Conclusions

This study has provided a useful review of the opportunities offered by an action research and applied research approach to supporting evidence based practice with a view to improving public sector delivery. A range of options for future movement have been identified, and there would appear to be distinct opportunities for National Health Service Scotland to consider development of communities of practice to share and learn knowledge within health systems. Partnership and collaborative working between the policy community, practice community and academic community would appear to be a realistic prospect in Scotland. Scottish Executive Health Department and National Health Service Scotland will be invited to consider the implications of this study.

About the Project

This research was commissioned in January 2005 by the Scottish Executive Health Department and Scottish Executive Office of the Chief Researcher and concluding in Summer 2005. The research was carried out by Dr Cathy Sharp, Research for Real.