Knowledge transfer in social care and social work: Where is the problem?

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Evidence based social care: introducing the territory

Evidence based practice and evidence based policy are terms which came to prominence in medicine (Sackett *et al*. 1997) to describe the 'conscientious, explicit, and judicious use of current best research evidence in making decisions about the care of individual patients'. Evidence-based practice requires clinicians to identify the best available evidence from systematic research when treating patients or patient groups. The simultaneous application of professional expertise and judgment to treatment decisions is often tacit rather than explicit in discussion papers concerning evidence based practice in health settings.

Findings from research should also help social care practitioners and commissioners choose interventions and ways of working by determining 'what works', what is valued, and how it can be implemented. However, in social care contexts, as is discussed in this paper and elsewhere (Matosevic *et al*. 2013), certainty around 'what works' may not be easily ascertainable, since research evidence for social care practice is far more limited in scope than it is for healthcare. However, interestingly, the application of professional judgment or experiential knowledge to practice problems is far more prominent and important in social care literature on evidence based practice than it is in the health setting.

> *The assumption ... is that utilisation of evaluation findings is a relatively straightforward matter. Where it is a problem, it is typically put down to a breakdown in communication or the self-interested resistance of professionals. To regard theory and practice problems in this way is to relegate 'practice' to the subordinate, the acted-upon…* (Shaw 1999, p.3).

This paper is about the interplay and influence of different types of evidence in social care practice, with particular reference to the way that research evidence makes its mark on practice and practitioners. This is often referred to by the shorthand term 'knowledge transfer'. A confounding factor is the sheer range of providers – potential users of research evidence – in social care. At an individual and organisational level, the sector relies on people with very different educational backgrounds, reading levels and interest in text-based materials; they are working in environments where there may be no library or internet access and no training budget. A social work academic delivering a degree course is not the same type of audience for research findings as the commissioning manager for a local authority, the manager of a domiciliary care service or the social care assistant working nights in a local care home. This paper cannot aim to reach all these diverse audiences, but may be a starting point for considering what is known about the dissemination and use of research evidence in social care. It remains, however, hampered by the shortage of good evaluations of activities designed to bring research evidence into social care practice.

Research evidence may be taken into account in a number of different ways. It may, for example, be written into policy and protocols, where it may not be identified as deriving

from research. Evidence may also be used by commissioners of services to draw up specifications shown by research to deliver good outcomes. Research findings may be integrated into practice – or dropped from practice – because stakeholders with some power to change their practice find evidence which persuades them to do so. Research evidence may be used selectively, to reinforce other motives; and it may certainly be used to maintain the status quo, in which case its use is less visible. However, the use of research evidence to support evidence based practice in any of these ways requires that it is 'transferred' or communicated to the end users. This paper is about the issue of 'knowledge transfer' between research providers and decision makers in social care.

Methods

This paper is based on work undertaken to map the literature on knowledge transfer in social care undertaken jointly with Personal Social Services Research Unit (PSSRU) at the London School of Economics and Political Science (LSE). It draws on resources gathered from: a hand search of key journals (*British Journal of Social Work*, *Journal of Social Work* and *Evidence and Policy*), and the presentations of leading proponents of knowledge transfer in human services which were commissioned as part of the project (AM to add weblink). This paper additionally draws on resources identified by the National Policing Improvement Agency (NPIA) to map the knowledge transfer territory. Searches of the NPIA database were conducted to identify topics of interest to this paper, including elderly care, care homes, social services, social work, co-production, and knowledge brokering. During the two years the project ran, additional references were harvested from journal articles, and experts in the field were identified (e.g. Boaz, Nutley, Davies, Walter, Lomas, Lavis, Landry). We paid particular attention to UK studies in social care settings: care homes, social work practice, and social services generally. Sections below on care homes and social work draw on searching, and on SCIE resources. Some practice relevant to knowledge transfer is not conceptualised as such – e.g. the training of staff in care home settings. The section below on care homes for older people also draws on systematic searching carried out in preparing work on end of life care in care home contexts.

This paper has not therefore followed the processes of systematic review, nor those of formal synthesis of the literature, but draws on sources determined by the authors, including the experience of the Social Care Institute for Excellence (SCIE). SCIE is a centrally placed knowledge brokerage organisation which *'improves the lives of people who use care services by sharing knowledge about what works ... We gather and analyse knowledge about what works and translate that knowledge into practical resources, learning materials and services'* (mission statement). SCIE works on particular project areas believed (from consultation) to be important to practice, identifying the best available research evidence,

and synthesising findings and repackaging them in various formats for use by social care workers, users, carers and commissioners. SCIE's preferred methods include those of systematic review, in which the findings of individual studies and existing reviews are appraised for their relevance and quality, in order to decide what credibility and generalisability the findings have for similar social care settings.

SCIE entered into a partnership with PSSRU at LSE to investigate knowledge transfer in social care services. This paper, drawing on the research literature explored for the project, and on SCIE practice, outlines what is known about the awareness and use of research-based knowledge by social care practitioners. It aims to provide a narrative account of issues in the use and dissemination of research evidence in evidence based social care practice, and is not at this stage formatted as a guide for practitioners.

This paper takes a critical approach to 'knowledge transfer' of research into social care practice settings, and examines some of the evidence for its conduct and efficacy. Suggestions to improve the take-up of research evidence are considered, including the greater involvement of practitioner/users in the development of research findings. Some of SCIE's strategies as a knowledge brokering organisation are also described. We conclude with some observations about the current context of the researcher/practitioner relationship, and some remarks about how they might work toward a better mutual understanding.

Problem areas in knowledge transfer

Scarcity of good quality evidence for social care practice: supply of evidence

Identifying rigorous research findings which merit awareness or adoption by practitioners and policymakers is a key task for SCIE. Our knowledge products begin with the searching and scoping of a range of databases for relevant research. The planning of products, including guidance for the social care sector, depends upon the nature of the evidence base, and whether it can support generalisable recommendations for the sector.

While some social care topics may concern the effectiveness of particular approaches or services, others may address rather broader or more qualitative questions, such as *'what do we know about the experience of Black and Minority Ethnic families trying to access dementia care for a family member?'* (Moriarty *et al*. 2011). The type of studies important to social care practice are not necessarily those of the 'what works' variety, and, in comparison to research on healthcare interventions, may addresses less clear-cut questions than those of effectiveness, which demand different methods. Evaluation, especially experimental

evaluation, of social work and social care practice in UK is under-developed for a number of reasons, including the complexity and variability of social work interventions. Much of the everyday practice of social care involves process as well as outcomes. Since social care is frequently an ongoing process, there can be difficulty both in defining immediate or medium-term outcomes, and also in identifying measurable outcomes with relevance to end users.

Fisher (2002) argues that process 'measures', such as measures of the involvement of users in planning their own care, may be as important to service users as are the outcomes of planning. Social care research may also concentrate on service outcomes, such as the minimisation of health service use, that are not overtly valued by service users. Some commentators (Yin-Bun 1998) have argued that randomised controlled trials (the gold standard of health technology research) are unsuited to human activities such as social care, because the association of inputs with outcomes cannot be assumed to be direct or causal. Pathways into services in social care may take greater account of service user preferences than is the case with health interventions, and both service users and staff may resist allocation to a particular social care intervention purely for reasons of experimental design. It is also proposed (see below) that controlled studies are a complex method which is not easily understood by people without a sophisticated understanding of research.

A further upstream difficulty to the production and use of research evidence in practice is the scarcity of designated funding streams for social work research in the UK context. Social services/care research has a tiny proportion of the government funding awarded to health technology research (Marsh and Fisher 2005), and experimental research is expensive and time-consuming to implement. The spread and variation of funding streams through the research councils means that much social care research in progress is invisible unless and until it generates publications.

Understanding of research evidence in social care workforce: demand for evidence

We have referred above to supply side deficiencies in social care research. Demand for social care research evidence is also problematic. SCIE commissioned (jointly with NICE) an internal investigation into health and social care practitioners' use of research knowledge (Dunn *et al*. 2011). The sample was opportunistic and therefore not necessarily representative, but included 84 in-depth interviewees, 39 diarists, and 384 respondents to the online survey. Practitioners in social care reported that they don't want *'research evidence'*, but do want to know what works, from accredited and/or authoritative sources. Underlying this apparent contradiction is limited understanding of research designs and methods among policymakers, providers and practitioners, and the need for research-based knowledge to compete with other types of knowledge and established practice, such as

experiential knowledge, and the organisational processes already in place. The application of knowledge is therefore highly contingent on context: and research knowledge competes with other, including powerful experiential, knowledge, as well as values, in guiding social care practice (Narhi 2002, Walter *et al*. 2003).

Research evidence is ranked according to the quality of design and methods used, with preference for controlled studies where the question is 'what works' and high quality qualitative or observational work where the research questions concern what people think, and how care processes are developed and implemented. Appropriate sampling techniques are a marker of quality in all empirical research. Research evidence for practice is developed by the academic sector, and much of the social care workforce, including those with social work degrees, have had little exposure to research methods and no reason to place confidence or value in them. The findings of experimental studies using quantitative measures may not be widely understood by people who are not researchers: few practitioners then are likely to understand differences in methodological quality, nor methods for summarising research into reviews (Lomas 2005). Practitioners in healthcare appear to 'like' or 'trust' action research, appreciative inquiry and qualitative research because they can understand it; and the credibility and weight of research evidence is constantly re-negotiated (Jacobson and Goering 2006) within an environment where different types of knowledge compete for precedence.

Even where individuals have a professional understanding of research, there may be perverse incentives to ignore some findings and promote others. (Gabbay *et al*. 2003) describe a fascinating case study of a multi-disciplinary, multi-agency community of practice, in which the interplay of personal knowledge and prejudice wrought havoc with research evidence, despite the inclusion of library and clinical staff whose education would certainly have encouraged a more structured critical appraisal of research evidence. Knowledge was used selectively and even haphazardly, and what was available at any one time was used as though it were both comprehensive and sufficient. New information that challenged the individual views of more forceful participants, or group consensus, was simply ignored.

Respondents to SCIE's survey (Dunn *et al*. 2011) said they sought a 'one-stop shop' for evidence for practice, which SCIE endeavours to be. However, respondents to this survey rated the relevance of 'local information' above that of research evidence. Although (as one shortcoming of survey research) 'local information' was ill-defined, the implication here is that knowledge produced locally, such as protocols and instructions produced by an employer, has more relevance, immediacy and authority over the practitioner than does that from research providers. It may also be that it is more easily accessible and fit for purpose than the messages from research. One aspect of the work of knowledge brokers such as SCIE is to filter and 'translate' research into bite-sized, attractive and relevant

messages for particular audiences. However, repackaging knowledge – knowledge translation as it is often referred to (Freeman 2009) – is clearly insufficient to stimulate initial demand for, or openness to, research findings.

Other factors which mitigate against the use of research evidence in practice include the time cost of seeking and engaging with research-based evidence (Moseley and Tierney 2005, Manuel *et al*. 2009) and this is highly relevant in a sector where staff, such as those working in domiciliary care (McWilliam *et al*. 2008), are often unqualified and paid at an hourly rate for client contact. Finally, we must ask whether researchers – given their limited funding options – are offering practitioners sufficient involvement in determining what is researched or evaluated. Research topics do not necessarily address that which is important to practice, and may be rather more closely linked to policymakers' and funders' requirements, including the aim to seek evaluation to support policy already implemented. Again, the '*hierarchy of evidence'* familiar from health services evaluations (Guyatt *et al*. 1995) may not deliver findings useful to social care practitioners, where context, implementation and sheer feasibility may be more important than technical methods employed to assess comparative outcomes (Qureshi 2004). The quality of reviews which purport to provide evidence for policy and practice focus on methods rather than utilisation, and on outcomes rather than how to achieve them. So do we need more formative evaluation, focusing on process, and less summative evaluation, focusing on outcomes but with little evidence about how to get there? Or do we need social care practitioners to pinpoint the research topics or 'wicked issues' they struggle with in their daily working lives?

Transferring knowledge in the social care sector

The aim of social care research is to influence practice by 'transferring knowledge' from research to practice contexts. Influencing policymakers and commissioners may be sufficient to do this – if they adopt research evidence for their policies and service agreements, this may provide sufficient motive for adoption within the sector. However, much of the social care sector, with the increasing number of older people, delivers daily living support to vulnerable social care clients. The way in which people with dementia, for example, are supported to eat well, is perhaps not provided for in the level of detail at which Service Level Agreements are set. The knowledge or good practice which we may wish to share is then potentially very broad and varied. The social care sector is also very diverse, including 152 Local Authorities with responsibility for providing social services, and over 18,000 care homes, many of which are privately run (but are subject to central regulation of a relatively light touch nature). Domiciliary workers, who practice in isolation from colleagues in clients' own home settings, are another challenge for a sector proposing to share the evidence base more widely, as are the increasing number of people employed through self-directed support through the personalisation agenda (Carr 2010).

Learning – the transfer of knowledge – within social care settings is often characterised as 'training', which we might hope would be informed by evidence. Yet, using dementia care training for nursing home staff as a relevant example, Kuske and colleagues (2007) found very little evidence for its efficacy and sustainability. Survival of learning depended upon reinforcing and enabling factors, such as provision for *'the continued transfer of new learning into practice, and methodology that demonstrated positive outcomes for service users'* (Aylward *et al*. 2003). In practice, much evaluation of training records only self-assessed and self-reported increase in knowledge and confidence of care staff during short timespans after the training has taken place.

Conceptualising knowledge transfer in social work and social care practice

Using knowledge for action – demand and utility

There is widespread agreement that knowledge transfer, implying the linear communication of a product recognised as knowledge to a passive audience, is an unhelpful term. 'Knowledge interaction' is suggested by Davies and colleagues (2008) as more useful, suggesting not only a two-way process rather than an event, but also the need for ongoing reinforcement and development of interaction. Much research is not thought by practitioners to be helpful, especially if it challenges practice and policy paradigms. For Davies and colleagues (2008), and arguably for the social care community, methodological quality cannot be the arbiter of what is evidence. The authority of research evidence over practitioner experience is also doubtful, yet there is relatively little discussion in the literature about power, authority and relevance to context. One exception is the contention (which is not apparently backed by empirical research) that *'Managerially driven EBP* [evidence based practice] *is likely to be viewed with suspicion by social workers because it undermines traditions of professional judgment'* (Webb 2002). In fields such as risk and safeguarding, given the potential blame attaching to individual social workers when vulnerable clients are harmed, he suggests that social work 'theorising' may not be regarded as useful. The limitations of social work evidence, and the need to draw on multiple methods to determine a plan of action, all emphasise the need for professional judgment, which Shaw and Shaw (1997) describe as *'the interplay of knowing and feeling'*. In this view, social work *'should avoid a decontextualised imposition'* of models of intervention and outcome imposed by experimental science.

Perceptions of the limited utility of research findings in social work are shared with other professionals, including those in clinical settings, although decisions in these settings may be

facilitated by hierarchical distinctions between professionals, allowing some views to dominate. Social work may also benefit from reference to the distinction of 'conceptual' and 'instrumental' use of research evidence (Nutley *et al*. 2003, after Weiss 1998). The use of research is not a simple adoption of findings and recommendations. In Weiss's conception, 'use' of research meant *'taking research into account in the work of one's office'*, and not necessarily direct implementation. Clearly, what is taken account of can be highly selective (Gabbay *et al*. 2003). Conceptual use of research applies where practitioners gain new insights and understanding from research, whether or not they can or do implement these in any observable way. Instrumental use of research applies when findings are seen to feed directly into policy and practice. The multiplicity of evidence and evidence sources social workers may refer to, or 'use', may mean that the progression from conceptual grasp of research evidence to using it to determine action is tentative. Writers in this field often prefer the use of 'evidence-informed' rather than 'evidence-based' practice, as this takes selectivity into account (Walter *et al*. 2004).

If research findings are felt to be relevant, they will almost always be applied selectively, partially and in adapted form. Martinez-Brawley, writing about innovation in the human services, expands on this point. *'Knowledge is not imposed from above, and the principle of adapting before adopting is in fact central to diffusion ... Compatibility between the new idea and the values and beliefs of the organisation is crucial to success – even the naming (of a new approach) can be crucial.'* Furthermore, *'no new knowledge is ever accepted without credible evidence that it works'* but this will *'rarely if ever prove that the particular model is superior to all other alternatives'* (Martinez-Brawley 1995, p.676). There remains then plenty of scope for practitioners to maintain confidence in their habitual practices.

Knowledge is always selected, transformed or adapted – subject to complex social processing, which may require *'significant unlearning'* of accepted practice (Davies *et al*. 2008).

The authority and utility of research evidence is judged by the recipient, and is influenced by their environment and agenda. In relation to social care, people will be mindful of the ability of research to support other agenda, such as the introduction of a service or promotion of a policy: the application of knowledge and evidence cannot be value free. Evidence is rarely assessed in a neutral environment; and the characteristics and views of the individual will also impact on how it is received. Weiss and Bukuvalas (1980) conducted a survey of potential users to consider the 'tests' people may use when weighing up research evidence. Foremost amongst these were:

- The 'truth' test: research conformity with prior knowledge and expectations;

- The utility test: whether it offered a feasible direction for action and /or challenge to current policy.

In her survey of mental health decision makers (federal, state and local), challenge to current policy was seen as a positive reason to pay attention to research evidence, although clearly this could in some circumstances reduce the adoption of findings (Weiss and Bucuvalas 1980).

Social workers are also charged with developing 'personalised' approaches to individual clients (Carr 2010), and it is not at all clear that research evidence based on aggregated average outcomes for large populations can deliver best practice. Webb (2002) dismisses this use of evidence from large scale controlled studies as *'actuarial practice* (in which) *direct and therapeutic involvement with service users becomes less significant'* (p.45).

Why should practitioners utilise research evidence? Landry and colleagues (2003) identify two perspectives on knowledge utilisation: engineering explanations and socio-organisational explanations. In the former, evidence supporting the production of a product or a service by a government agency is a solution to an 'engineering' problem. In contrast to the engineering explanation, socio-organisational explanations lay stress on organisational and social factors that hamper or facilitate the uptake of research. This appears to be more characteristic of the social care field. The authors conclude that the use of knowledge is increased when the researchers focus their projects on the needs of the users rather than on the advancement of scholarly knowledge. However, in commercial development settings (which our review did not investigate), there may well be good overlap between knowledge solutions to engineering and socio-organisational problems, as in the development of new commercial products.

Utility and credibility are related concepts within the practice context. Prior empirical studies regarding the organisational context of the users point to the following results: use of knowledge increases as users consider research pertinent, as research coincides with their needs, as users' attitudes give credibility to research, and as results reach users at the right time (Landry *et al*. 2003). Jacobson and Goering (2006) assert that *'in many ways the process of knowledge transfer can be framed as credibility work. That is, many best practices in knowledge transfer, such as steering committees and tailored messages, are strategies for promoting credibility'* (p.161). This observation would seem also to suggest that credibility in evidence *production* is as much an issue as it is in *utility* (see Co-production of knowledge, below), and a minimal requirement is the steering of research by end users (e.g. providers and service users).

Underlying the concept of 'knowledge' within 'knowledge transfer' is the assumption that there is agreement on promoting evidence as the 'best' knowledge on which to base practice. However, truth is invariably contested. Weiss's (1979) formulation of 'the four I's' is helpful here. She argued in a paper on school reform that four influences can usually be seen at play in decision making – interests, ideology, information (meaning evidence) and institutions. Each of these can be unpacked further, but this framework's simplicity (and

memorability) provides a valuable tool for putting the contribution of research evidence and evaluation in its relative place. Social workers may find that supervision promoting organisational goals competes with supervision concerning client-based goals and outcomes (SCIE 2013). Within the recent climate of recession and the pruning of expenditure by public services, the organisational goal of saving money is likely to take precedence over the introduction of innovation (which is very often, in social care studies, not costed). Qureshi (1998) makes a similar point on the diverse aims of evaluative research in social work organisations, comparing 'scientific' (efficacy), 'developmental' (process) and 'managerial' (organisational aims and competencies) evaluation of their activities. The outcomes of an evaluation of a single intervention or programme may well deliver conflicting findings when viewed from these different perspectives, creating another dilemma for implementation.

Provider-user relationships – setting up dissemination

Landry and colleagues (2003) highlight the relationship between academic producers of research, and practice-based end-users of research, as a key variable in knowledge transaction. As 'two communities', they may have varied, or even opposed, interests, but common ground may be fostered by 'interactive linkages'. However, as Weiss (1979) demonstrates, organisations have powerful interests, and organisational structures, size of agencies, types of policy domains, positions (professionals or managers), and the needs of organisations may combine to neutralise or marginalise university research. Others (McBride *et al*. 2008, Lavis *et al*. 2003) have emphasised both the contingent nature of the apparent traffic between researchers and potential users of research, and the need for relationships to involve transactions in both directions. This may entail consultation of end users on the topics and foci of research programmes, the co-production of knowledge, or ongoing relationships defined as 'communities of practice' (see Co-production of knowledge, below). While such relationships are not uncommon in the UK context (McEwen 2008), it is possible that the inability of evidence providers and producers to fund research identified as helpful to practice limits the effectiveness of partnerships. Landry *et al*. (2003) consider the 'intensity' of the relationship of producers and users to be an important predictor of research use, but the paper does not describe what is meant by 'intensity of linkages' nor the nature of linkages themselves.

Huberman (1990) used maps and charts to explain that good links, in type and amount, prior to a research study and during a study, had contributed towards more energetic approaches to dissemination of the findings. He focused on the role of reciprocally influential relationships in the process of knowledge utilization and identified five levels of linkage, which he defined as (from the weakest to the strongest): 'hello-goodbye', 'two planets', 'stand-off', 'reciprocal engagement', and 'synergy'. He claimed that the weakest linkage was characterised by there being no contact with target research users before the

study is completed, brief contact during the research and no contact after the research. The strongest linkage (synergy), he claimed, was characterised by well-established processes such as discussion, interim reports, presentations by researchers, meetings to discuss ultimate findings and plans for dissemination. However, this report, useful as modelling, falls short of demonstrating impact on policy and practice among end users.

Walter and colleagues (2005) identify key mechanisms underlying successful implementation of evidence based policy and practice. Strategies through which producers of research may increase use include dissemination; interaction; social influence; facilitation and reinforcement. In practice, these are used in combination, though they may derive from different models of learning. The most passive and most common form of dissemination is publication of findings in key journals. Targeting dissemination, and supporting it with regional seminars, may improve its chance of impact, as may the use of mass media. Interaction between researchers and practitioners has benefits for both parties, potentially making research and research questions more relevant to context and purposes of practitioners. Users of research have the opportunity to renegotiate and adapt findings, and researchers to test them in diverse contexts (see for example Huberman's 1990 model of 'sustained interactivity'). *'Our findings suggest that such partnerships can support both conceptual and instrumental research use, but also highlight the investment required by formal partnership approaches'* (Walter *et al.* 2005, p.344).

Social influence models include those described by Innvaer *et al.* (2002) for nurse managers. Evidence of effectiveness for this approach is variable in quality and findings. Social influence may be perceived as coercive rather than negotiated, and influence could be detrimental to, rather than supportive of, research use. Facilitation – tangible support for research use – may entail practical or environmental support, or professional development to equip people with the skills and expertise to use research, although a review of interventions to teach critical appraisal skills to healthcare practitioners (Shannon and Norman 1995) showed little effect. Enabling access to research databases would also be seen as facilitative. A common aspect of facilitation is the conversion of research evidence into guidelines, protocols, checklists and learning tools (the Embedded model, see Walter *et al.* 2004 and discussion below), in which end users are not necessarily aware of underlying research evidence. Typically such projects rely on staff training, financial resources and ongoing monitoring and supervision to support successful and sustainable use of these tools, approaches or development programmes.

Reinforcement is related to facilitation, and may, in the healthcare sector, be coercive rather than facilitative or rewarding. Evidence on the impact of audit and feedback is mixed, and we found no evidence on the use or impact of positive incentives. Multifaceted interventions simultaneously target multiple mechanisms to implement evidence-based practice, and cited evidence from the healthcare field shows more positive results.

However, it is unclear which approaches are critical to implementation, and whether there is incremental benefit in adding, or subtracting, specifics from the mix. In practice, multifaceted approaches arise when promoters try every possible avenue to influence practice, but this 'shotgun' approach may discourage researchable evaluation questions (Walter *et al*. 2005).

The influence of the organisation on the use of evidence in practice is clearly important, since all individual workers are socialized into organisational norms, and permitted or constrained in their application of individual judgment. Walter *et al*. (2004) have developed a typology of organisational models that describe how knowledge is related to practice. There may of course be pockets of different approaches within different teams within the organisation; and there are also no doubt contexts and organisations in which none of the models apply and research evidence carries very little weight in how things are done. The 'ideal types' are:

- ***The research-based practitioner model***, where the individual practitioner keeps up to date with practice, and is supported with continuing professional education, and has professional autonomy to change practice to reflect revised understanding;
- ***The embedded research model***, in which policy makers and service delivery managers take responsibility for embedding evidence in organisational systems, policies and protocols;
- ***The organisational excellence model***, in which research use is prominent in organisational culture, and there is constant local adaptation of new research and ongoing learning, often supported by partnerships with providers of research.

The third model encourages knowledge interaction, rather than the uptake of findings in relatively linear and uncritical fashion. In practice, these are not mutually exclusive models, and all will depend on the autonomy of individual workers to implement different ways of working. Nutley (2011) and colleagues have continued to promote this work, advocating for a whole systems approach which combines these approaches. It is also advocated that actors need to move away from the idea of 'packaging' chunks of knowledge, toward recognising:
- The importance of context;
- Interaction with other types of knowledge (tacit, experiential);
- Dialogue with a wide range of stakeholders;
- Use of knowledge as a process rather than a discreet event.

The importance of context: examples from the social care sector

Aged care homes

In the care home setting, research evidence is unlikely to permeate through to frontline staff unless it is in the form of training, or is embedded in protocols for standardising procedures. This section therefore discusses the impact of training and guidance in care homes.

Andrews and colleagues (2009) describe a small Australian project in which aged care staff worked on guidelines for palliative care for people with dementia dying in the care home setting. It was realised that there was a strong need for informal carers and relatives of residents to understand the content and reasoning behind the guidelines. Developing a 'product' which the staff agreed was already needed – information for family members – appears to have been important to active engagement with the guidelines, although this is a small study with only short-term follow-up. Arcand *et al*. (2009) describe a similar project, in which training in end of life care for people with dementia in the nursing home context was evaluated (using pre- and post- measures of carer satisfaction with care). Paid staff undergoing training had the option to involve family members by sharing course material (a booklet) with them. Despite some methodological difficulties within this study, it is conceivable that the impact of training – one common format for knowledge transfer – may be increased when there is a clear motive to support others, while the involvement of family carers in the training may also promote continuation of better practice by staff. *'In the social services, the value of the product to the adopter must be assessed. The new idea must not only satisfy existing needs in the organisation that adopts it but also produce other gains for the adopter and his or her organisation or community'* (Martinez-Brawley 1995, pp.673-4).

Kuske *et al*. (2007) found in a systematic review of training in the nursing home sector that sustaining change required additional components to predispose, enable and reinforce training. This is a complex and costly requirement for a workforce with a relatively high rate of turnover.

Richardson *et al*. (2001) carried out a survey of care homes for older people in Canada, to investigate the use of clinical guidelines, and the care problems thought to generate need for guidelines. They found that the non-government agencies (private and voluntary) surveyed were least likely to refer to guidelines, and that staff did want guidance on care issues – behavioural problems, continence, feeding problems and skin care. The paper describes concrete examples of the use of harmful skin and pressure sore care, where ample evidence of what is helpful, and what contra-indicated, has had no impact on these

dispersed settings. These areas are arguably those which sit within everyday social (as opposed to health) care. The artificial division of health and social care in such a setting was problematic in the context of elderly care. Care was often delivered by multi-disciplinary teams, who did not confer on evidence sources. Common barriers to the use of good evidence included *'the demands of practice settings, such as the increased complexity in treating patients with fewer resources in an uncertain working environment affected by hospital closures and staff layoffs'* (p.361).

In a small pilot study, McWilliam and colleagues (2008) considered the impact of setting up action groups among domiciliary home care workers. This is an important group, where staff work in isolated settings, with limited time for interaction either with other staff or with managers. The study concludes that *'investigators have directed less attention to identifying team-level facilitators of knowledge transfer'* (p.60), although this – rather than the individual or organisational level – may be the most productive level to facilitate knowledge use. The sharing of knowledge is primarily social, and the 'action groups' set up within the project to facilitate reflective practice were the first opportunity for many staff to interact with other staff. In addition to the difficulty of finding the time to attend meetings, home care workers described themselves as disempowered and outside the communication systems of their organisations.

One benefit of the team-based action groups brought together for this project was that the hierarchy of different functions had to be put aside. The role of power relations within knowledge use is often poorly described within studies of knowledge use and interaction – although it is widely expected (e.g. Innvaer *et al*. 2002) that more educated professionals, and those with a clinical qualification, will be more likely to appreciate the merits of research findings and discriminate between studies according to the soundness of methodology. Little is apparently known about who makes decisions within elderly care settings, especially in critical cases, such as end of life care. This is a startling omission in a policy climate that encourages investment in ascertaining the wishes of service users and carers in palliative care and resuscitation: all too often, such planning may be undermined by a locum GP or ambulance crew whose views may well carry more weight than those of a care assistant trying to promote the recorded preferences of the family (Stewart *et al*. 2011).

In contrast to the later pilot study, Health Canada funded a national knowledge transfer project which aimed *'to generate a new level of understanding and greater consensus on issues that affect the provision of cost-effective, efficient services, models of care and policies that meet the needs of seniors'* (McWilliam *et al*. 2003, p.416). Drawing on 14 research programmes providing evidence on the care of seniors in older people's services, the project infrastructure was designed to promote exchange between all interested stakeholders and the National Consensus Committee (NCC), under the Canadian National

Consensus Process (sic) or CNCP, including multiple feedback provision and cycles of consensus-building and implementation. Opinion leaders were identified to act as 'connectors' between NCC and the constituent knowledge and practice providers. A total of almost 64,000 people were thought to be contacted or involved (although this is likely to be an overestimate, since there would be some double-counting of 'influence' of the same participants through different means; and there is an assumption that those contacted read and disseminated information). Evaluative follow-up extended over 12 months, including 608 contacts (14% of whom were policymakers, 25% service providers, 10% health and social service planners, 21% researchers and 30% senior groups and individuals). This comprehensive project concluded that *'knowledge transfer is very difficult to measure … participants' baseline exposure to the knowledge to be transferred, social desirability* [of the knowledge], *interaction amongst participants, and the nature of the policy context itself all constitute confounding variables that preclude confident conclusions premised on hypothesis testing'* (p.427). Assessment of knowledge choice and uptake is artificial when stakeholders have restricted choice in action. Overall the focus of the project shifted from knowledge uptake to knowledge exchange – the process rather than the impact – and there was uncertainty whether process might be more important than outcomes. There was also uncertainty around the value of consensus-building, as this could effectively reduce individual or team engagement with findings, reduce choice and possibly uptake.

Consensus-building illustrates one of the potential shortcomings of the 'embedded' research model (Walter, Nutley et al, 2004) in which decision makers and managers translate research evidence into policy and protocols which do not explicitly refer to the underlying evidence base. No pattern or experience of research use is established. The research team also questioned whether they might have learnt more from developing and evaluating the potential of more permanent infrastructures for creating evidence-based health and social care policy for seniors. The three years' funding for the project was insufficient to evaluate the long-term outcomes of the project, or to disaggregate the impact of different approaches.

Social work education and community practice

In an environment in which social workers and social work may be the subject of intense public criticism, the promise of evidence based practice is one which could raise the status of social work action from the intuitive to the rational, with greater prospect of accountability. *'Social workers operating from an evidence-based perspective must integrate relevant scientific information with informed professional judgment and the personal preferences of service consumers if they hope to practice effectively and ethically'* (Howard *et al*. 2003, p.239). However, this paper also concludes that evidence based practice may

have limited appeal to social workers, who may have little interest in research methodology, and be resistant to incursions into professional values, ethics or judgment.

Others agree that social work values incorporate client perspectives and preferences, and these may carry at least as much weight as does research evidence (Mullen *et al*. 2005). LeCroy (2010) goes further to suggest that social work has no *'scientific tradition of criticism'* and that *'social work researchers* (perhaps in common with others) *often adopt a "justification approach", where the focus is on gathering support for or justifying their findings'* (p.321). This is complemented by a *'confirmation bias'* in which *'our mental habits consistently point us to gathering confirming data'* (p.322). For him, this is of particular relevance to social work practice, since social workers – researchers and practitioners – are often guided by *'a passionate commitment to social justice and social equality' which is inconsistent with 'the objective examination of evidence … necessary for knowledge building with real impact'* (p.323). These observations are reiterated in Collins and Daly's (2011) empirical account of decision making in social work, though they are not of course confined to social workers.

Narhi (2002) also found that social workers drew heavily on their own experience, and that of service users and colleagues. They may take decisions on the basis of values and moral constructions. The complexities of knowledge use in professional social work practice are further examined by Osmond (2006) and include awareness, prediction, alerting, comparison, generalisation, direction of practice behaviour, promoting an attitude and/or ethical stance, education, rapport development and problem solving – but the knowledge used in these activities may be from any number of sources other than research. Osmond and O'Connor (2004) argue that *'the inability of practitioners to explicitly articulate the basis of practice behavior'* (p.677) is a serious issue for the profession, which, if addressed, might highlight considerable flaws and gaps in 'tacit' understanding of complex and critical situations. We observe that retrospective reviews of critical events or 'near misses' within social work practice (e.g. Bostock *et al*. 2005) often highlight inconsistent or ill-advised processing and prioritisation of knowledge and perception – reflective analysis is therefore written into supervision, and might be more explicitly modelled in social work education.

Mullen and colleagues (2005) propose a model of evidence based social work in which client benefit is the outcome of interest, and advocate lifelong learning that involves continually posing specific questions of direct importance to clients, searching for the best evidence to respond to each question and taking action according to the evidence. The focus on client preference, information and participation arguably takes the model beyond that used in healthcare, where understandably the technical effectiveness and efficiency of procedures may be clear enough to steer both physician and patient toward the adoption of certain technologies. The authors rightly identify as specific to social work the individualised nature of assessment and provision: *'generalising research evidence to the individual has its pitfalls'*

and it is necessary to consider not only how the client 'matches up' to those in research studies, but also to integrate client values and preferences. In addition, the shortage of rigorous evidence, and the lack of authority and ability of social workers to identify and implement solutions to their practice problems, tend to suggest that this type of work needs to be 'embedded' in the policies and practices of the organisation (Walter, Nutley et al, 2004), with sufficient flexibilities to ensure that proposed solutions do take account of individual case characteristics.

There is very little literature which draws on instances of implementation of evidence based practice in social work rather than the discussion of frameworks, concepts and impediments. We therefore refer to the Crime Reduction Programme as an example of partial engagement with a range of public sector professionals.

Nutley and Homel (2006), in a paper based on the Crime Reduction Programme (CRP), a cross-government initiative, argue that the inherent tensions in implementing evidence-based policy and practice apply across organisations and systems delivering human-based services. These include fidelity to the evidence base vs innovation or adaptation to local circumstance; and short-term wins vs long-term learning. The CRP programme was implemented and evaluated: in relation to the evaluation of knowledge use, there were varying methodologies and outcomes identified, associated with different degrees of separation between those carrying out evaluation and those implementing changes. Many of the conclusions of the predominantly small studies in knowledge use call to mind this latter point: does internal evaluation or the methodology of action research and implementation offer benefits of enhanced ownership to staff – or do these methods confound the reliability of perceived outcomes and benefits? (see 'Collaboration in commissioning and conducting research' below). The means of evaluating knowledge use in practice contexts is important to this topic, as it is rarely clear from existing research evidence that interventions will 'work' – that is, generate clear evidence of benefit to stakeholders. Thus the CRP *'was attempting to implement and review a complex array of initiatives with varying levels of research evidence to support them'* (p.11), some of which will have been untested in particular settings.

The first challenge of the programme involved *'moving from a fragmented and often inconclusive research evidence base on what works to designing practical programmes and projects that would, when evaluated, extend that evidence base'* (Nutley and Homel 2006, p.15). Added to this were difficulties in identifying suitable outcome measures and the differing perspectives at various levels of the endeavour, from (say) the perspective of the Home Office right down to those of families engaged through small after-school clubs. Identifying achievable and worthwhile aims; achieving a balance between central direction and local discretion and innovation; and achieving outcomes within a relatively short period of funding, were all problems common to this type of work. They concluded that the most

concrete and favourable research evidence will be locally negotiated, adapted and changed and the impact of such change on effectiveness is always unknown. Furthermore, most services and service configurations depend on local availability, commissioning and planning processes, and the network of local services. As others have concluded, *'evidence is helpful, but rarely determines precisely what should be done to reach goals'* and 'the feedback loop' continues to be important to local adaptation of evidence (Qureshi 2004, p.20).

Setting up institutional links or knowledge transfer partnerships (see Knowledge partnerships, below) may support or educate social work practitioners in the use of evidence in practice. However, studies discussed below (Howard *et al*. 2003, Manuel *et al*. 2009), show that, in addition to the technical competencies involved, *'a necessary, but not sufficient, condition of EBP* [evidence based practice] *is that practitioners appreciate the key role that scientific findings should play in guiding the selection and application of practice interventions'* (Howard *et al*. 2003, p.238). This is a 'hearts and minds' aspiration, which is not (in their view) promoted by current social work education, and which knowledge transfer partnerships (see Knowledge Partnerships, below) struggle to overcome. Similarly, discussion in terms of 'practice interventions' is not necessarily helpful, as 'practice interventions' are rarely manualised or boundaried in the same way that a discreet healthcare technology may be encapsulated (Sackett *et al*. 1997).

Co-production of knowledge

Knowledge partnerships

Ongoing relationships between organisations carrying out research, and those expected to implement findings are described in the literature as knowledge partnerships. Randall (2002) reports on a small partnership between two children's Social Services teams and Dartington Social Research Unit (a partnership known as DATAR). The model behind this partnership is the teaching hospital or medical school environment, where teaching and supervised practical experience are available to students and staff, who simultaneously learn about the implementation of research evidence in an organisation actively involved in its generation. The DATAR partnership entailed some joint audit, drawing on documented need for and use of by looked after children; secondments between the organisations and observation of practice processes; lunchtime seminars focusing on practice issues, and (in part because the seminars were poorly attended) action learning groups. Library resources, and short accounts of practice dilemmas and how they were approached, were also shared between participants.

Objectives of the approach were rather ambitious and generalised: for example, to develop and disseminate existing research in a practice setting; develop an environment in which everyday practice and management issues can be treated as research problems; act as a centre of excellence. The service delivery end of the partnership found it difficult to engage with the project, being focused on '*the relentless pressure of the urgent*'. The researchers forged ahead with the audit study, but then struggled to move toward service development to address identified need, and to work with practice to identify resources to implement new approaches, given the requirement to disinvest from existing services. There were also difficulties around competing definitions of knowledge and research methods, with the researchers needing to insist on academic credibility of rigorous approaches, lack of commitment at senior management level, and inability to ensure that in-house training programmes took account of the academic partners' knowledge base. Commitment to the project relied on that of two key personnel, was not promoted by the adoption of evidence by senior management and dwindled over time. There were no incentives for hard-pressed social workers to equip themselves for evidence based practice. None of ideal types identified by (Walter, Nutley et al, 2004) (see Provider-user relationships – setting up dissemination, above) applied: these were not research-based practitioners, research evidence was not embedded in local policies and protocols, and the organisation was not led by people committed to organisational excellence, despite the short-term relationship with Dartington. Knowledge partnerships – commonly between academic and service delivery organisations – appear to be impeded by the different aims and objectives of the organisations in question, a problem which medical schools may in part overcome because 'leaders' are frequently clinicians with a foot in both service provision and research, and can pay attention to both roles.

Knowledge transfer partnerships (KTPs) have been tried elsewhere in England. (McEwen 2008) report on a partnership between a West Midlands Adults' and Children's Directorate and University of York, the aim of which was to embed research within Family Services' Performance Management Framework to ensure that service delivery was effective and efficient. In order to demonstrate the impact of the partnership (at the time of writing, 18 months in operation), a survey of practitioners' research activity was undertaken before and prior to writing. A separate 'benchmarking' survey was used to consider staff understanding of the Research Governance Framework, implying that practitioners involved in research (as many said, unknown to their employers, they had been) are more likely to use research findings. Having easy access to relevant research material was raised by practitioners as a need. Although many of the respondents rated themselves as research-aware, actual use of research materials was rare, with the internet used by 90% of respondents, but only 27% using it at least monthly to find relevant research. As part of the project, an intranet was developed to support research awareness, with resources highlighted by topic and currency, research bulletins and training opportunities. The project also put in place an annual conference and a number of training initiatives, but the evaluation was not at the time of

publication able to demonstrate that the influence of the two year project would be sustained.

Manuel and colleagues (2009) describe the BEST (bringing evidence for social work training) project between a team of researchers and three social work agency teams, delivered as a 10-module training course, covering the identification of a researchable question, through searching (to be carried out by the Columbia University, the academic research partner), to evaluation of evidence found, and drawing up of an action plan. The course was evaluated using before and after focus groups. This is a comprehensive account identifying themes from across three differently organised agencies, identifying all of the barriers and promoters seen in other accounts of similar initiatives. One less-commonly identified barrier to implementation is that social workers may also require training in delivering the interventions which the evidence base identifies as desirable. However, a consistent and familiar theme was the inability of research evidence to fit *'the complexities of agency practice, including the diversity of clients, situations and circumstances …* (requiring) *researchers and practitioners to work together to develop and implement approaches that are feasible, flexible, sustainable and relevant to agency practice contexts'* (p.11). There were also issues around the academic skills and competencies needed to appreciate and understand how evidence based practice is developed, and the apparent lack of ongoing engagement, including continuing professional education, of social work educators with evidence based practice.

Collaboration in commissioning and conducting research

Mullen (1998) has also addressed the difficulties and advantages of working with practitioners to design and implement knowledge production. His 1998 paper on collaborative research between his university and social agency concludes that this joint approach forges 'good evaluation practice', particularly in adapting interventions to meet contextual constraints (such as the changing functions, workloads, staff turnover). He stresses the need for proximity of the research team, and emphasises the liaison function *to 'mediate difficulties that arise during implementation ...* [and] *provide critical insights that may not be apparent to those locked into the research or the practice side of an issue'* (p.156). Some of the modifications introduced as a result concern timing (this was a cross-over study): essentially replacing set time periods with the numbers of cases that clinicians (sic) had assessed. However, although clearly consultation and engagement with the people supporting and hosting the study helped to increase awareness of the study, the recruitment of clients and presumably interest in the findings, it is not clear that participants played any role in defining the study questions or critiquing the methodology. Action research models – or research studies which involve some joint decision making and design with participants – may commonly be confined to evaluation of a well-defined model or

service, and do not necessarily follow a participatory approach in which end users define problem areas.

Early and comprehensive involvement of practitioners in evaluation implies involvement in design of methods: appreciative inquiry, action research and self-evaluation are all ways in which users of research can be involved or 'co-produce' research. However, when interventions are developed in conjunction with practitioners, they are not necessarily evaluated in an objective way, as participants will have vested interests in the findings and may influence them. *'In-house evaluation is particularly vulnerable to pressures to produce 'good' outcomes'* (Cheetham *et al*. 1998, p.22). Boaz and Hayden (2002), discussing the close relationship between evaluators and development staff in the implementation of the Better Government for Older People Programme, reiterate this point: *'Development staff … felt … their performance as individuals was being evaluated'* (p.446). On the other hand, *'involving stakeholders from an early stage in the process builds a powerful degree of ownership of the findings* [although] *the resource implications of adopting a pro-active developmental approach are considerable'* (p.451).

Partnerships between researchers and policymakers may be forged upstream to ensure that research questions are relevant to decision makers. (Lomas 2000) reports on the Canadian Health Services Research Foundation, which derived from a government initiative to support a medical research funding council to promote evidence-based practice. The relationship of research and implementation organisations is described as one of 'linkage and exchange'. *'Bringing decision makers who can use the results of a particular piece of research into its formulation and conduct is the best predictor for seeing the findings applied … Presumably, it is more difficult to reject, discount or ignore research results when one has contributed to them'* (Lomas 2000, p.237). However, the evidence base for this assertion is not particularly strong, and although interpretation of findings about any social situation is almost certainly improved by consultation with, and explanation from, participants, Lomas identified a range of challenges to the model, including changing personnel (in both camps), difficulty in identifying and rewarding decision makers, poor understanding of research processes among decision makers, resistance to changing practice and desire to repress findings that did not meet organisational or personal imperatives.

 A systematic review of interview studies concerning use of research evidence by health policymakers Innvaer and colleagues (2002) suggests that personal interaction between health policymakers and researchers may increase the prospect of research use, at the risk of contaminating research findings with political considerations. This hypothesis derives from the 'two communities' model, in which mutual antagonism is identified as a natural aspect of the relationship. Unless the policymaker has commissioned the research, it is unclear how practical this strategy may be.

There is also a literature on collaboration between researchers, providers or decision makers and communities. Community-based participatory research (CBPR) approaches to health and development have been widely implemented in the developing world (Tandon 1996) as a means of ensuring that the topic of the approach is relevant to the community, that heterogeneity within the community is accounted for, and that community members will support and motivate the adoption of findings and will hold decision makers to account. The model is closely associated with empowerment, social justice and reciprocal learning between researchers and lay participants. CBPR focuses on actionable knowledge. Lencucha *et al*. 2010) consider community partnership research related to population or public health. CBPR approaches are particularly relevant to research designed to encourage communities to adopt behaviour oriented toward improving public health, although the review authors wished to explore the internal workings of the model, rather than thematic content. The literature falls short of specifying values and principles to enable actors to work together, but is suggestive that community views are far more likely to influence decision makers than is the voice (or published paper) of a lone researcher. Communities then may be powerful allies and undoubtedly contribute to the contextual relevance and feasibility of social change – but the review does not comment on the 'cost' of involvement, in terms of time and resources, nor the credibility of evaluation, which has always represented a methodological challenge when researchers and research subjects cosy up (Cheetham *et al*. 1998).

Participatory research methods are expensive. Another approach is to consult with virtual 'communities' or research 'beneficiaries' on the focus and utility of different research topics. Stevens *et al*. (2009) consider the fit between what social care practitioners need from research to answer pertinent practice questions, and what funders fund. Conducted within children's services, the study underlines UK policy on the centrality of outcomes (2004 Children's Act; *Every Child Matters*). Systematic searching for UK-based studies revealed 1,005 research suggestions relevant to child and family services from 5 studies published in the 10 years to 2004, and 625 funded studies, mapping the funded studies onto the identified needs. A summary of findings showed that most practice questions concerned the effectiveness of work with children at risk or in care – such as how to work with substance-misusing or hard to reach families. Funded studies tended to look at the causes and nature of social problems, suggesting that research findings may not be delivering what social work practitioners need. Only 82 (13%) of the 625 funded studies considered directly the effectiveness of interventions in children's services: the methods employed to answer these questions were solely qualitative in 24 (29%) studies. Only four randomised controlled trials were found, comprising 5% of the effectiveness studies, with one additional systematic review (inclusion criteria unclear). This strongly suggests that the evidence base required by UK social care practitioners in the children and family field is not being supplied by UK funders of social care research. It also suggests that, despite ambivalence among providers

around controlled research designs, there is a continuing demand from practitioners to know 'what works'.

Knowledge brokering organisations: getting evidence into practice

Knowledge brokers

> *Knowledge brokers are people or organisations that move knowledge around and create connections between researchers and their various audiences ... knowledge brokers do not only move knowledge, but they also produce a new kind of knowledge: brokered knowledge* (Meyer 2010).

Finally, by way of introduction to SCIE, we consider the role of knowledge brokering organisations. Ward *et al*. (2009) suggest three models of knowledge brokerage: knowledge management (collation, possibly creation, translation and dissemination of evidence in different formats); linkage and exchange (which emphasises the utility of interpersonal partnerships, often of an ongoing nature), and capacity building, in which brokers take responsibility for enhancing knowledge recipients ability to understand and use research evidence. In practice, knowledge brokers may take on aspects of all these roles (as SCIE does, see below), and the evidence base for comparing the efficacy of these approaches is relatively slight. This is a challenging remit for any organisation, involving a complex range of skills, time and perseverance for uncertain benefit. Ward *et al*. (2009) accept that aspects of these models are commonly applied together, and that evaluation of such complex activities is hugely difficult. They propose a realist framework which may break down the 'theory of change' implicit in these (somewhat under-theorised) activities.

Nutley and colleagues (2003) remind us that the integration of research evidence into practice in the social sciences must take account of a range of problematic topics, such as:

- *Know-about problems:* the nature and formation of social problems.

- *Know-what works:* what policies, strategies of interventions will bring about desired outcomes.

- *Know-how (to put into practice):* e.g. knowledge about effective programme implementation.

- *Know-who (to involve):* e.g. getting stakeholder buy-in and building alliances for action.

- ***Know-why (requirements of action):*** relationship between values and policy/practice.

The 'industry' of evidence based practice in healthcare, spawning key providers of evidence such as the Cochrane (for healthcare) and Campbell (social welfare, education and crimes) Collaborations (http://www.cochrane.org/; http://www.campbellcollaboration.org/) has tended to prioritise effectiveness studies, answering the 'Know-what works' dimension. For social care users accounting to cash-strapped organisations, the feasibility and wider impact of implementation need to be evidenced if implementation really is an option. This account might also benefit from the addition of 'know-what it costs' dimension. It is the role of knowledge brokering organisations to take account of these complexities.

The act of passing knowledge to recipients is also complex.

> *In addition to spreading and supporting the use of research evidence, knowledge brokering can have a significant role to play in the creation of research evidence … Packaging, translating, spreading and commissioning research are brokering strategies that have been developed in response to the overwhelming quantity of research evidence and it lack of immediate relevance to decision makers* (Ward *et al*. 2009, p.270).

SCIE exemplifies this model, as it has always identified, systematised and synthesised available evidence about complex social care issues, producing and packaging original knowledge syntheses to disseminate. For this purpose, SCIE has teams of information scientists and research analysts. Knowledge creation is an essential component of knowledge brokering when, as is usually the case, the available evidence is not fit for the purpose of influencing a range of social care stakeholders. All knowledge brokering is characterised as expensive in time and resources: the knowledge management model, which most closely approximates to SCIE's strategy, is dependent on good access to research databases, information management software and skilled staff. SCIE's model also takes into account linkage and exchange, and capacity development of the social care workforce.

SCIE produces accessible materials for stakeholders in different formats, which may or may not acknowledge the underlying research evidence base. These are free to download from www.scie.org.uk. SCIE research briefings do identify research evidence sources for the conclusions drawn. On the other hand, our digital products and our guides, which are produced according to evidence-based processes recently scrutinised and accredited by NHS Evidence, may not refer directly to research studies as sources, as this can be seen as cumbersome by some of our end users.

Co-production of research knowledge at SCIE

SCIE has always promoted the involvement of service users, carers and practitioners in its work (Robson *et al.* 2008) as well as the application of a range of different types of knowledge to social care and social work practices (Pawson *et al.* 2003). Such involvement is not restricted to primary research (see Carr and Coren (2007) for examples of involvement of service users in systematic review processes). It is conceivable (though not well-researched) that co-production of knowledge – the greater involvement of practitioners and end-users of knowledge and of social work services – will inadvertently help us in our task of *'helping to improve the knowledge and skills of those working in care services'* (SCIE mission statement).

Fisher (2005) discusses the relevance, utility and acceptability of 'Mode 2' knowledge – knowledge which from the start is designed to be applied, and is developed through negotiation with a range of stakeholders bringing interdisciplinary insights. SCIE is experimenting with different models for engaging practitioners in knowledge production about what works and what is good practice – though we would not consider these approaches 'evaluative' or 'evaluation', we do consider them as ways in which we achieve traction and engagement with the social care sector. Our work has included a number of initiatives to include social care workers in development and evaluation, and to raise awareness of evidence-based practice in social services. Examples include the piloting and development of a new model of serious case reviews in children's services (go to http://www.scie.org.uk/children/learningtogether/index.asp), an example of Qureshi's 1998 developmental model). This model is under continuous development as it is applied and adapted within different UK and European agencies with responsibility for safeguarding children, so that development takes account of 'fit' and feasibility in varied practice contexts. This is a piece of work in which the perceptions and buy-in of staff are vital to outcomes, but proxy or short-medium term outcomes are difficult to identify. It is also uncertain whether there might ever be a 'final' model that could be subject to an external arm's-length evaluation, and uncertainty as to whether that matters.

The use of Practice Enquiries to enlarge our understanding of practice context is another means by which SCIE engages with its end users. This is an approach we are introducing to NICE to supplement our joint work (which otherwise depends on controlled effectiveness studies, supplemented by 'expert evidence'*). 'A practice enquiry is a "made to order" structured or semi-structured original enquiry into aspects of current practice in health and social care. It can address whatever themes and organisational levels (and types of knowledge) are the concern of the people paying for it – the commissioner(s). A practice enquiry may attempt universal coverage (e.g. by including all councils with social services responsibilities, or CSSRs), or target a sample of these to be investigated'* (Rutter 2009, p.8). A SCIE practice enquiry is usually commissioned alongside systematic or rapid reviews of

evidence, with a view to supporting practice guides which take account of both sources and engage better with practice contexts and staff.

From time to time, SCIE research staff may also carry out more 'ad hoc' activities with social care practitioners to support knowledge-based products. We investigated the practice of reablement (in which people are supported through short intensive therapy to recover or develop lost competence in activities of daily living). There was an emerging evidence base, but it was clear that implementation was proceeding more rapidly than publication. SCIE researchers undertook some short visits to services delivering reablement in five London Boroughs, all using different models and criteria. Such supplementary work with practitioners is always likely to be an invaluable complement to research evidence: finding the staff to do it can be difficult for a small organisation, but we suspect it has helped ensure relevance, timeliness and take up of our published work on reablement (for further information, see http://www.scie.org.uk/files/EmergingMessages.pdf).

The SCIE Good Practice Framework is another example of how we share practice ideas and outcomes with visitors to the SCIE website. Practitioners are asked to fill in a simple online framework which asks them to describe a practice (which may or may not be entirely innovative) in the context in which it has been applied, considering why they did it, what the outcomes were, implementation, cost and sustainability issues. These are not, it should be stressed, evaluated practices (though contributors are contacted for detail if this is lacking): they would not hold research credibility, but they could generate evaluation topics, and are drawn upon in other knowledge building activities at SCIE.

SCIE is also aware of the need for knowledge brokers to promote accessibility of findings and of research materials. We have always used standards of clear, accessible text (size, language, jargon-free wherever possible). With increased emphasis on web-based publishing, we are also aware that lack of hardware may account for poor dissemination in the sector. One practical initiative to bring evidence-based practice into more than 18,000 predominantly private social care homes, for example, was the Get Connected initiative, funded by UK Department of Health, in which SCIE distributed £12m to the independent care home and domiciliary care agencies to provide hardware and software to enable internet access. SCIE has also pioneered a range of e-learning materials and Social Care TV. These approaches are designed to improve our offer to the sector by using formats which we know people (including frontline care assistants) find less arduous to access than texts.

For those inclined to pursue their own research evidence, SCIE hosts and maintains Social Care Online, the largest database of research evidence relevant to social care practice, and has also been funded to extend the Athens pilot to the social care sector, enabling social care workers to access journal articles to the same extent as that enjoyed by their NHS counterparts through the acquisition of passwords. Rutledge and Donaldson (1995) found

that increased library access and/or computer resources and education, helped nurses cement research evidence into revised policies and protocols.

No single SCIE practice represents the holy grail of knowledge transfer. Knowledge brokers almost by definition try everything they can think of, and unsurprisingly find it very difficult to untangle which among these approaches offers the best outcomes.

Conclusions

'Knowledge transfer', implying a single event, is a misleading term for the complex processes through which research knowledge is perceived and applied. Knowledge interaction may be a better term to describe the processes by which social care practitioners engage with researchers and research evidence, with the caveat that research evidence is only one type of useful and usable knowledge for practice.

The use of research evidence in social care and social work practice is an essential aspect of evidence based practice. However, practitioners draw on a range of resources when determining what action to take. At the level of *individual* social work decision making and practice, reference to research evidence may conflict with professional judgment in the context of complex lives, and may devalue the 'personalisation' approach to care planning, which reflects traditional social work values.

Types of 'knowledge' valued by practitioners are highly variable, and research evidence must compete with local, organisational and experiential knowledge. Knowledge concerning innovation will need to fit with other organisational imperatives: the value of change may be disputed by different players. Organisations (rather than individuals, or teams) ultimately own responsibility for their practices, and should take account of research-based findings in their policies, practices and staff support. The autonomy of individual practitioners to change (and particularly desist from) established practice is often uncertain, although under-researched.

Social care research is rarely entirely fit for the purposes of application, either by individuals or by organisations. It is underfunded (in the UK) and may not address the most pressing practice issues. Findings may not appear, at least to practitioners, to be generalisable: local and organisational 'fit' and feasibility may be contested. What is clear is that evidence for practice is always adapted, or rejected, for application to any specific context, resource base, agency and other agenda. 'Research-informed' practitioners may take account of research without necessarily directly implementing findings, and this is a valid and valuable use of research evidence.

Research evidence will often need to be synthesised, translated and negotiated with end users if it is to have any influence. Researchers may not be very good at conceptualising, theorising and applying knowledge brokering, considering what is useful to practice and how demand from practitioners can be fostered. Knowledge brokering organisations may be better placed to do this, in effect creating new forms of knowledge.

The impact of knowledge transfer or interaction is notoriously difficult to evaluate in terms of its impact on knowledge users or end users. Intrinsic dilemmas are that such activities always employ a number of approaches and strategies, which cannot be clearly disaggregated or separately evaluated; and it is unclear whether knowledge is best 'imposed' on staff in the form of mandatory policies and protocols, or will have more impact if negotiated with staff in more discursive ways, which may leave a less forgettable legacy of reasoning and principles (such as dignity and personalisation in care). The limited scope of choice available to social care workers in their respective fields of action will also impede our grasp of the outcome of knowledge in practice.

Training is probably the most common mechanism by which knowledge is spread throughout the sector, particularly in elderly care home settings. Although the methodological quality of the studies concerned does not represent a proven case, it is possible that the outcomes of knowledge interaction – the spread of effective processes and interventions into frontline practice – may be enhanced if:

- Training is an ongoing process, frequently reinforced;

- Engagement includes the development of tools perceived as useful for practice and for other stakeholders, and so is more active than passive.

It is unclear whether research knowledge initiated or co-produced with end users of knowledge might be more readily implemented; or what type of relationship, supporting infrastructure, brokerage or lines of communication between researchers and practitioners might be most productive for both parties. Relationships forged around a single piece of research, or of an ongoing 'partnership' nature, may dispel some of the 'us' and 'them' suspicion, but our sources tend to confirm the inherent difficulties, and in particular, lack of shared goals and sustainability of such partnerships. For all the rhetoric, implementation of evidence-based practice is unlikely to be the primary goal of a practice organisation – were it to be so, it would surely conflict with the aim to deliver services within budget constraints. This is closely mirrored by the constraints placed upon policymakers, to promote policy acceptable to political masters within budget constraints.

Research may lack credibility in the eyes of practitioners. Best practice in knowledge transfer may require researchers to consider improving strategies to promote credibility and utility, including involvement of end users of knowledge in choosing research topics relevant to practice; promoting generalisability of findings by selecting representative or 'difficult'

contexts; involving knowledge users in knowledge production, and making findings more accessible and relevant.

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