Developing practice in breastfeeding

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Abstract

This paper reports on an approach to practice development in breastfeeding as part of a national programme of work to address inequalities in maternal and child nutrition. The production and dissemination of evidence and guidelines is necessary but not sufficient on its own to effect change in practice, particularly when dealing with complex public health issues. In the case of breastfeeding, review evidence and national guidance have shown that multifaceted changes are essential if policy aspirations are to be realized. The objectives of the programme described here were to (1) inform and enable practice development in breastfeeding in low-income areas; (2) evaluate the impact of approaches used; and (3) develop robust approaches and appropriate material for use nationally. A conceptual framework was established, and a six-stage process is outlined. The recruitment of four sentinel sites across whole health economies, involving professionals and the voluntary sector, was an essential component of the programme. The strength of the model is that it provides a structured, cross-sectoral approach to practice development in public health. A key challenge is to identify whose responsibility it is to resource practice development when a number of disciplines and sectors are involved. This question needs to be addressed if public health guidance is to be of sustained benefit.

Keywords: breastfeeding, practice development, evidence-based practice, public health guidance, multi-sectoral working, cross-sectoral working, service user involvement.

Introduction and context

Despite the proven public health benefits of breastfeeding (e.g. Howie *et al.* 1990; British Paediatric Association 1994; Wilson *et al.* 1998; Kramer *et al.* 2001; Quigley *et al.* 2006) and recent policy aspirations

(e.g. DH 2002a, 2004a; WHO 2003), breastfeeding is not a high priority for health service organizations in the UK, and many practitioners, even those in key roles, are ill-prepared to promote and support breastfeeding (Abbott *et al.* 2006; Dykes 2006; McFadden *et al.* 2006; Renfrew *et al.* 2006; Wallace & Kosmala-Anderson 2006; Wallace & Kosmala-Anderson in press). Published literature suggests that this not only is a problem for the UK, but reflects a wider international problem in developed countries (Dykes 2006).

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At the same time, evidence does exist that can inform practice and policy (e.g. Fairbank *et al.* 2000; Sikorski *et al.* 2004; Renfrew *et al.* 2005a), and national and international guidelines on public health interventions based on that evidence has been published (EU 2004; Dyson *et al.* 2006). Many of those interventions are not, however, in mainstream practice, and the lack of staff training and education suggests that it will be difficult to change that situation.

In late 2004, we were commissioned to conduct a national programme of practice development in breastfeeding. Our group involved a multidisciplinary, multi-sectoral consortium of academics, health professionals, practice developers, professional organizations, the voluntary sector, and representatives of service users. The main aim of the work was 'to address inequalities in health by improving maternal and child nutrition'. Breastfeeding was the first priority for what was seen as a 3-year programme of work. The first stage was the learning needs assessment programme described in the other papers in this journal issue (Renfrew *et al.* 2006), and the second stage was to conduct the practice development programme. Structural changes in the funding organization, however, resulted in practice development falling outside of their remit and support being withdrawn before the programme could be implemented.

In this paper, we describe what the national programme aimed to address and the approach developed to achieve practice change. We describe the conceptual framework, the planning and the early development stage to inform the work of others and encourage investment in such programmes in the future.

From evidence to practice and policy development

In the past two decades, there have been significant advances in the conduct of systematic reviews and development of evidence-based guidance (Chalmers & Altman 1995; Sackett *et al.* 1996; Gray *et al.* 1997; NICE 2004). Effective ways of moving beyond that stage to create real change, however, are less well

developed, and it is clear that traditional dissemination by publication in learned journals and formal guidance (NICE 2005) is far from being enough. Some of the stages needed to create practice and policy change have been examined in studies and reviews (e.g. Oxman *et al.* 1995; Moulding *et al.* 1999; NHS CRD 1999; Grimshaw *et al.* 2004; Greenhalgh *et al.* 2005). These include starting with an organizational 'diagnostic analysis' to identify the main barriers to adherence and developing a coherent theoretical base to make multifaceted interventions more effective. Widespread diffusion of innovations will then be needed to incorporate an understanding of current evidence and issues, to build on and move from that point to create change (Greenhalgh *et al.* 2005). Working with single staff groups is insufficient. An essential component has been shown to be a focus on a framework of organizational and inter-organizational systems and cultural change (Oxman *et al.* 1995; Moulding *et al.* 1999; NHS CRD 1999; Grimshaw *et al.* 2004).

Moving from studies of doing this to making it happen in practice in large-scale systems is a challenging process, which can be termed 'practice development'. Practice development should enable the introduction and diffusion of identified behaviours and activities that have been demonstrated to be beneficial or to achieve good outcomes; and it should challenge areas which are demonstrated by the evidence to be detrimental or harmful, ensuring that bad practice is eliminated and poor practice addressed. This will require the ability of practitioners to change how they provide care, commissioners to question their priorities, and managers to re-examine the systems for which they are responsible. Such action may require a reassessment of beliefs and attitudes, changes to communication and other systems, and a fundamental and planned restructuring of the way people and systems work. We argue that the identification of effective ways of encouraging this organizational change is as important as the review of existing practice in formal clinical activity. Without sustained change in the practices of clinical and managerial staff to improve outcomes and health, the evidence available, however strong, is impotent.

Practice development can have the added benefit of informing the research agenda by identifying questions which need investigation to inform the next stage of development. The iterative interdependence of testing and questioning different approaches can strengthen otherwise disconnected parts of the system, making much better links between research, practice and policy developments.

Practice development and public health

Relatively simple organizational change may be enough when creating some kinds of evidence-based practice change. For example, the introduction of a single new clinical treatment, or its withdrawal from practice, may require active dissemination of information to relevant staff groups, a monitoring system and support for staff through the period of transition.

In the field of public health, any changes are likely to be more complex. Sustained change may require the introduction of a new kind of practitioner; a shift in the balance of responsibilities between professional groups; increased cross-sectoral cooperation; development of completely new skills; changed organizational priorities; and intervention on an inter-agency basis across the health and social services, education, voluntary services and local political forums to influence the wider society's attitudes and behaviour. The learning of members of the public and their access to evidence-based is a vital aspect of public health. This may involve not only improvements in formal education of professionals, but use of accessible and user-friendly key messages to inform the population whose health, or whose children's health, can be affected. Use of social marketing and other media campaign methods, integration of positive images in popular press and entertainment, provision of learning opportunities and events, and other ways of influencing day-to-day learning by all those likely to be affected are just as important as changing the way in which professionals work. Such complex change may involve influencing aspects of public policy such as environmental and employment issues and require competition with market forces, changing what people buy, and the products they use.

Promoting and supporting breastfeeding is an excellent example of the challenges to be faced in this field. Systematic reviews (Fairbank *et al.* 2000; Sikorski *et al.* 2004; Renfrew *et al.* 2005a), national and international guidelines (EU 2004; Dyson *et al.* 2006), and our learning needs assessment, which is an example of high-level national 'diagnostic analysis' (Grimshaw *et al.* 2004; Renfrew *et al.* 2006), have all shown that multifaceted changes are needed if real change is to occur. There are parallels with public health interventions for tobacco control, and obesity prevention and treatment. If policy aspirations for public health are to be realized, practice development will be essential (WHO 2003; DH 2004b).

Practice development in reality

Regardless of what is known about the need for structured and sustained approaches to changing practice, organizational response to new evidence and guidance seems currently to rely more on individuals' interests and less on planned and structured change (Audit Commission 2000; Coote *et al.* 2004). Further, 'practice development' is a term that is interpreted inconsistently. In the past two decades or so, 'practice development' nurses and midwives have been involved in activities as disparate as audit, guideline development, training in specific clinical skills, or in more general organizational support in ensuring attendance at appropriate training events.

'Practice development' staff often find themselves working in isolation from colleagues in other disciplines, and indeed from senior colleagues in the organization who have control of some of the levers for change. While there are examples of positive practice development working between midwifery and health visiting colleagues (e.g. Dominey *et al.* 2002), such collaboration is more likely to be achieved through informal networking and shared commitment rather than the proactive whole systems approach needed. As a result, health service experience of 'practice development' is of a patchy, often unstructured approach led by one discipline, even by one individual, usually a nurse or midwife.

Unsworth (2000) suggests that the key characteristics of practice development in nursing include using

new approaches that lead to direct and quantifiable improvements in services; such changes occur as a response to problems or needs and contribute to the provision of effective services. However, there has been little systematic exploration of practice development within midwifery posts although individual maternity settings have been able to apply for accreditation as practice development units (McSherry & McFadden 2001).

In other fields, there are examples of practice development being led by task forces or development agencies linked to particular policy drivers, for example the Change Agents Team at the Department of Health in relation to Older Peoples' policies (DH 2002b), and the Adoption Taskforce (DfES 2000). While using existing evidence to inform practice change, such groups also use many different interventions and learning models to address major change. This approach can tackle the interdisciplinary and inter-agency agendas, which are needed in many areas of public health to achieve positive change.

Breastfeeding and practice development

A recent systematic review of interventions promoting the duration of breastfeeding revealed a dearth of literature in the fields of training and education of healthcare professionals and breastfeeding counselors, and of evidence-based practice or practice development initiatives (Renfrew *et al.* 2005a). This includes the absence of high-quality evidence about ways of preparing practitioners to deliver care to support health policy initiatives. Only one study of a relevant evidence-based practice initiative was identified (Grant *et al.* 2000).

Some 79 practice development initiatives in breastfeeding were funded by the Department of Health in England over the period 1999–2002 (Dykes 2003). These included establishing breastfeeding support centres, education for health professionals, development of the role of healthcare assistants in supporting breastfeeding, developing peer support, involving breastfeeding counsellors, and developing services for vulnerable groups, such as adolescent women. Although preliminary evaluation suggests that these were successful, formal evaluations were limited.

There is also no evidence of a coordinated strategy and funding to support mainstream implementation of practice change such as described above in other fields, so many of these initiatives have since been discontinued or have remained as isolated initiatives. Such use of short-term funding without clear strategies for creating sustainable change to mainstream practice or integrate learning into future service development seems to be reflected in other areas across the National Health Service (NHS) in England and Wales.

Like practice development posts more widely, infant feeding or breastfeeding development posts have a range of remits, including providing skilled expertise in addressing serious breastfeeding problems, developing guidelines, supporting work towards achieving accreditation with UNICEF UK Baby Friendly Initiative (BFI), providing educational support to colleagues in developing their breastfeeding expertise, educating mothers on techniques and developing positive attitudes to breastfeeding and other aspects of breast care. Many individuals in such posts work in relative isolation (Abbott *et al.* 2006) and are expected to fulfil their breastfeeding or infant feeding remit in addition to other midwifery or health visiting workload and responsibilities. This is true even of the national network of infant feeding coordinators in England, where coordinators often carry out the work in addition to their existing duties. Development posts are normally restricted to the maternity service that funds them, often not even having a remit outside of their own discipline. They are unlikely to be able to support breastfeeding across different sectors within the whole health economy in the way that we have identified as necessary (Renfrew *et al.* 2006; Wallace & Jardine 2006).

Unusually, three local authority health scrutinies have recently taken a multi-sectoral approach to examining how a range of agencies, not just local maternity and community health services, can remove barriers to breastfeeding and improve direct healthcare provision to support breastfeeding women (Richards 2003; Thomas 2006; Wallace & Jardine 2006). All of these contain recommendations for health services, education, the voluntary sector, trainers of healthcare staff, local employers

and 'owners' of public spaces, as well as the councils themselves. Inter-sectoral strategic planning led by public health, where there has also been a shared interest in seeking a health economy-wide approach to UNICEF UK BFI status, has resulted in more inter-sectoral practitioner learning networks and shared resources for training staff in breastfeeding support (Wallace & Jardine 2006). The extent to which this innovative approach is effective and sustainable in the longer term is unknown.

Breastfeeding development projects

Our approach to practice development drew on the lessons learned from much of the literature summarized above. Three previous evidence-based practice developments in breastfeeding also directly informed our thinking. The Breastfeeding in Leeds Consortium was a cross-sectoral partnership that aimed to increase breastfeeding rates by raising the profile of breastfeeding locally, providing educational events and bringing together those with shared interests in supporting breastfeeding women. As part of that work, a Department of Health-funded initiative supported a project (Spiby *et al.* 2002) in which two experienced lay breastfeeding counsellors worked to increase evidence-based support to breastfeeding. They contributed to education for undergraduate and registered healthcare practitioners from a range of disciplines, worked with practitioners providing direct care to women, and provided a range of community development activities. The model used in this project was one of providing evidence-based information for women and their families to use, rather than a traditional advice-based approach. Evaluation of this initiative was overwhelmingly positive. The lay role was considered compatible rather than conflicting with that of healthcare professionals. The psychosocial perspectives of breastfeeding used by the counsellors were adopted widely, replacing the traditional health 'benefits of breastfeeding approach'.

Two further developments arose from this successful preliminary work. One project worked to support breastfeeding across the health economy in Leeds, with a special emphasis on working with

women and families from low-income groups (Spiby *et al.* 2005). Using the combination of a lay counsellor with a midwife with a specialist breastfeeding background, the project delivered multidisciplinary and multi-sectoral training using both health and social perspectives. It supported the 'roll out' of the acute Trust's infant feeding policy and its adoption in the majority of local primary care services, and it demonstrated that collaborative working between healthcare professionals and breastfeeding counsellors can succeed. Problems were also identified: some groups of healthcare professionals are more difficult to engage than others; cross-boundary and inter-sectoral working was still relatively new for some health service staff, and protection of professional roles was clearly identified as a problem. While support for the initiative had been identified at a senior level within both the acute and primary care sectors, that support was not evident in practice, and senior-level project champions were not clearly identifiable.

A third project included work with local Sure Start partnerships in the Leeds and Bradford areas. This delivered staff training, helped to establish support groups for breastfeeding women, initiated changes that would reinforce positive messages about breastfeeding on Sure Start premises, advised on resources and policies, developed support mechanisms for women in disadvantaged communities, and developed, provided and evaluated a first cohort of peer support training for women from the Sure Start areas. The lessons learned from that work included the importance of early engagement across all relevant sectors and disciplines, finding out about local needs from local communities, the need to reduce organizational barriers, boundaries and tensions, and the opportunities that multidisciplinary education brings. This work has now been incorporated into mainstream practice in the city (Spiby *et al.* 2005).

All three developments were successful in increasing the number of practitioners, women and families receiving evidence-based support with breastfeeding (Spiby *et al.* 2005). All included trained breastfeeding counsellors as key sources of support and development work, and breastfeeding

rates in the city including the low-income communities served, on discharge from hospital, increased from around 45% in early 2002 to 51% in late 2004 (St James University Hospital Breastfeeding Statistics). All were influential in informing our thinking around the conceptual framework and in planning the structures for the national practice development work described here.

Aims and methods

The overall aim of our practice development work was to address inequalities in health by improving maternal and child nutrition. The objectives of the programme were to (1) inform and enable practice development in breastfeeding in a number of low-income areas; (2) evaluate the impact of approaches used; and (3) develop robust approaches and appropriate material for use across the country in future years.

Core team

A core team was formed to plan this work. The team included the following backgrounds: knowledge of the evidence base and relevant research methods and critique in general; the development of evidence-based guidance; the education of health professionals at pre- and post-registration levels; information technology (IT) and web-based communication skills; knowledge of breastfeeding from public health and clinical perspectives; senior NHS management; change management and practice development in the NHS and related sectors; and strategic planning and leadership.

National network

At a very early stage, a national network was established with the aim of informing and supporting the work. Partners in this network included:

- *academic partners*; to ensure that the evidence base was sound;
- *professional bodies*, including relevant Royal Colleges and professional organizations representing the wide range of practitioner groups likely to be

involved to inform the development plans; to support dissemination of information, to provide contacts and communication systems and to enhance the legitimacy of the work;

- *NHS partners*, including clinical practitioners with relevant clinical skills, representatives of a Strategic Health Authority, a Public Health Observatory (Public Health Observatories are funded by the Department of Health to strengthen the availability and use of health information at a local level in the UK), NHS Direct (NHS Direct is an online and telephone health information enquiry service for the public; <http://www.nhsdirect.nhs.uk/index.asp>), RDLearning (RDLearning is a web-based national resource of accredited health-related education courses; <http://www.rdlearning.org.uk/>), and primary care research networks; to inform practice development plans, to offer communication networks and skills in routine data collection and analysis, and to support the identification of key contacts; and
- *representatives of consumer groups, voluntary organizations and non-government organizations*; to ensure that we were able to benefit from their experience of providing services, and gaining user perspectives to inform the practice development plans, and offer communication networks.

Links were also made with relevant government departments, and professional advice was taken on communication strategies.

We developed the system to be flexible and responsive, with two-way communication systems and frequent dialogue with commissioners and partners, as we recognized that the source of funding for this work was a government agency and that government priorities can shift and change over time.

Conceptual framework and programme development

A conceptual framework for the project was established based on the literature and our practice development experience in breastfeeding (described above) and other fields, including developing learning networks in other areas of practice (e.g. Herbert & Lake 2005). It was finalized through discussions

among the core team and input from network partners. This framework then informed all decisions and plans. Key elements of the framework included an evidence-based approach; multi-sectoral and multi-disciplinary working; service user/consumer involvement; mainstreaming and sustainable systems; a participatory approach to consultation and communication; and embedded evaluation. Specific elements of this approach are shown in Box 1.

Based on the conceptual framework, a six-stage process was developed (Fig. 1). Following assessment of the literature on effective interventions, a diagnostic analysis of the field was planned, to include a learning needs assessment (as reported in this issue of the journal) and a general assessment of the readiness of the field to undertake this work (Stage 1). This was followed by a synthesis of those two stages, yielding an analysis of the problem and potential solutions

Box 1. Elements of conceptual framework

Evidence-based approach

All proposed interventions will be based on a rigorous assessment of the published literature, together with practitioner and user views of that evidence base

An eclectic mix of approaches and models will be drawn on, based on evidence of 'what works' in different communities

Multi-sectoral and multidisciplinary working, including service user/consumer perspectives

Health professionals, other relevant professionals from social and education sectors, community and lay workers, users/consumers and their families will all have a role in informing and delivering the ongoing programme of work

Mainstreaming and sustainable systems

The programme will work to mainstream maternal and child nutrition into all relevant work programmes of other agencies and organizations, to avoid a sense of being 'initiative-based' and to create sustainable change

Existing networks and resources will be used wherever possible to ensure an embedded approach to practice development, and to create new systems only when necessary

Solid foundations will be built for long-lasting change and to avoid a 'dash for growth'

Participatory approach to consultation and communication

All collaborative work will be based on a democratic and participative approach where all constituencies of interest have an equal voice at all stages, regardless of seniority or background

Work will address all levels of the organization, i.e. from senior-level policymakers, through regional and local levels, to practitioners in the field, and service users/consumers and their families, and will include approaches at the level of the individual, organization, service and community

Embedded evaluation

All approaches used will be evaluated, and findings from these evaluations will be synthesized and widely disseminated to stakeholders, including policymakers and professional leaders, and other appropriate audiences

Fig. 1. Practice development cycle. NHS, National Health Service; NGO, non-governmental organization.

(Stage 2). Stage 3 involved developing relevant networks, tools for education and training, evaluation methods and capacity building systems at individual, organizational, service and community levels. Following this, a plan to conduct the work would be finalized (Stage 4), implemented (Stage 5) and evaluated. The process was intended to be iterative, alternating between phases of information appraisal and planning to identify the next stages of development activity and evaluation of the impact to inform future planning. Stage 6 included finalization of qualitative and quantitative measurement and monitoring systems that would feedback through all stages of the process.

It was envisaged that this model would allow effective structures and processes to be identified for use in other aspects of public health practice.

Due to changes in funding, the programme was discontinued during Stage 3, although in fact some preliminary work had already been carried out on the plan.

Engagement with practitioners

Developing a national programme of change and development is an ambitious goal. A cost-effective approach to engagement had to be developed both to stay within budget and that could roll out across England and Wales. Learning from the successful Leeds partnership work described above, it was planned to recruit a series of sentinel sites, where we could test out a range of approaches to maximize learning and cost-effectiveness, as well as respond to ideas from the field. Work in those sites would become a model for national developments, informing material for education, training and assessment, supported by communications at different levels through our established national network. The use of sentinel sites also allowed for the development of approaches sensitive to varying local contexts, so providing alternatives and examples to inform national implementation.

The first stage in that process was to recruit relevant sentinel sites. Sites were conceived as including the whole health economy in a locality, and had to meet specific criteria. These are detailed in Box 2.

Four sites were identified and agreed to join the first wave of sentinel sites. Each site engaged and planned the programme of work differently. For example, one site had already worked with members of the core team, and were keen to take existing work further. In the few months in which we worked with them, they put into place a system for the accurate monitoring of breastfeeding rates, and created an extensive network of individuals at a range of senior levels from different sectors, including Primary Care Trusts (PCTs), Strategic Health Authority, the acute Trust, Sure Start and the local authority. Benefits the sites have seen even since the work stopped have included:

- improved communication across relevant disciplines and sectors;
- the observation that the practice development work 'kept breastfeeding on everyone's agenda';
- the work was used to support a business case for a coordinator for BFI planning;
- in one sentinel site, the primary care and acute maternity services have formed a health economy-wide breastfeeding strategy group;
- in another, a joint primary care and maternity services group has been established;
- two sites are taking forward systems for collecting breastfeeding data, which have been used to provide feedback to staff each month;
- a new approach to training all staff in one site included commissioning the local university to develop a self-study workbook and then to test its effectiveness using an objective skills assessment tool; and
- in one site, a successful peer support programme was rolled out throughout Sure Start programmes.

A key part of the work in the sentinel sites was to support the learning needs assessment (McFadden *et al.* 2006). Although the sites were at an early stage of engagement, this was conducted very successfully and rapidly, as sites supported the identification and involvement of practitioners. Many assisted with survey distribution and in return received a report of the training needs identified for their staff. The next test was the running of fieldwork meetings and

Box 2. Sentinel site criteria

Sentinel sites were expected to:

- Have a deprivation profile that demonstrated a substantial proportion of low-income groups, and a diverse ethnic profile, and serve contrasting areas (e.g. urban, rural)
- Offer a range of services for children and women with an interest in nutrition
- Be able to include the whole health economy in a locality (or at least agree to working across all relevant sectors)
- Provide a key contact person/people who would act to facilitate communication and broker agreements with different parts of the health economy; and managers who were supportive of the planned work, willing to support and enable staff participation
- In the first instance, sites would be those where contact already existed with members of our core team. Future sites would be brought in once any initial problems with the approach had been identified and addressed

In return for their involvement in the work, it was recognized that the sentinel sites would benefit in a range of ways, including:

- Support for staff development and learning through access to programme staff and expertise, involvement in and learning from a regular newsletter, and attendance at an annual, leading-edge conference on maternal and child nutrition
- Developing links with other sites and sharing good practice and problem solving
- The opportunity to help to develop national practice, resulting in a raised profile for their work and their staff
- Early access to emerging evidence in the field of maternal and child nutrition

workshops to finalize guidance based on research evidence, as part of a related programme of work. The aim of this work was to take the results of a series of systematic reviews (which gave information on 'what works from research evidence') and consult with practitioners, managers and users on 'what really works in practice' (Dyson *et al.* 2006). The newly established sentinel site system supported this work by offering venues for meetings, providing lists of eligible participants, and enabling and encouraging staff to attend (Renfrew *et al.* 2005b). The final stage of this guidance work was a series of major workshops with over 30 participants in each, representing a 'diagonal slice' through the whole health economy, from field-level practitioners including peer support workers, to managers and planners, and including the range of relevant disciplines, as well as

the voluntary sector. Concerns around the realities and influences on practice, and key issues for practitioners and managers in developing good practice were discussed, as well as organizational and structural barriers to change. Participants were encouraged to discuss not only practices that need to be introduced, but also those that need to be abandoned, thereby potentially saving time and resources and to identify actual or potential barriers to implementing change (Renfrew *et al.* 2005b). These facilitated groups examined the ability of the service to respond to identified gaps, and made recommendations for improvements to the system. They fed directly into the final stages of the development of National Institute for Health and Clinical Excellence (NICE) public health recommendations for breastfeeding, offering participants the satisfaction of

knowing that their input would make a difference (Dyson *et al.* 2006). These workshops also tested out the use of language, the conceptual understanding of participants in relation to the evidence reviews, and gathered intelligence on what approaches to implementation of practice development may be most effective. They also provided an opportunity for discussion, debate and deliberation about the meaning of the evidence. Participants reported this to be very useful in assisting their understanding of the evidence and in considering how best to change their own and their colleagues' practice in response to it, and as an important contribution to practice development in their own locality (McFadden *et al.* 2005). The input of representatives of service users was of critical importance.

It was planned that once the guidance was finalized, each participating site would be in a strong position to act on it. Not only would they feel some ownership, but they would also have staff from all levels and sectors in their health economy who had spent time discussing the issues with colleagues and with service user representatives. They would have access to specific local information about localities and groups that needed to be prioritized; creating change was therefore brought several stages closer. At the end of each workshop, email and telephone contact details were exchanged among the workshop participants, many of whom had never met before despite working in related parts of the same system, to support closer local networking. The opportunity to consult with national experts in the network also acted as a variant on educational outreach, which has been shown to be moderately successful in guideline implementation (NHS CRD 1999). The impact of such exchanges in increasing opportunities for network support is virtually impossible to evaluate formally, but there was confidence in those who participated at these events that positive change would result and that the evidence would be more effectively used in the future as a consequence.

Interactive conference

The other main activity was a conference on maternal and child nutrition, to which all partners – academic,

professional, NHS and user/consumer – and staff from sentinel sites were invited. Commissioners of the work were invited, as were staff from key government departments with an interest in nutrition, child health, Sure Start, nursing and midwifery, and inequalities in health. Around 90 participants took part in a day, which included presentations, participative working and active networking. A report of the day is available at <http://www.york.ac.uk/res/mcncc/conferenceReport.htm>. Feedback was strongly positive, and the impact of networking with others in similar situations, and between those working in local and national organizations, was especially valued. It was planned that this would be an annual event.

Had we been able to continue the practice development programme, we planned to use the following approaches:

Establishing learning networks

We planned to identify appropriate learning networks for different constituencies, which would enable communication among staff from different sectors, as well as communication with programme staff. Activities were planned to include:

- Staff working at strategic and senior management levels would be supported and appropriate information provided to allow them to create cross-system changes. Senior-level 'champions for change' would be identified. These would be used in a range of ways; those wishing to be involved in learning networks would be supported to do so.
- Learning sets would be established. This would enable focused exchange between stakeholders on how best to make use of the evidence in practice and how to influence mainstream practice across localities. Through feedback loops, we planned to develop learning/education material to be made available through web-based routes to wider constituencies.
- Peer supporters and trained breastfeeding counselors are key groups in regard to breastfeeding promotion and support. We planned to include them in learning sets. They have much to offer health professionals in coming to understand the needs of women and families, and indeed the evidence suggests that their involvement in advisory work and peer support

enhances and strengthens the impact of information and evidence-based guidance, possibly more than that of health professionals' practice. Our experience, described above, has identified a valuable contribution from lay breastfeeding counsellors into education and training provision.

Educational approaches

The breadth of constituencies that the programme needed to reach was to be reflected in the range of educational approaches required. For some professions, continuing professional development (CPD) time is factored in regularly to the job plan in a rolling programme of group education with routine sessional work suspended; for other groups, CPD is a self-verified individual activity that can be achieved through a range of methods, including distance learning. We hoped to reach directly a broad group of women as well as professionals through some of the routes developed. A range of materials was therefore planned to address all needs. Materials would be developed for web-based access, CD-ROM access and on paper. These were to include:

- Toolkits to promote and support breastfeeding, to monitor breastfeeding rates, and on practice development and change.
- Distance learning modules, providing accredited learning opportunities at a range of levels.
- An email and telephone-based service to put individuals and organizations in touch with others who can support and advise them, supported by RDLearning, a national web-based resource.
- Learning material that could be directly disseminated through the Internet to a wide audience.
- Buddy systems and mentoring for practice development and public health strategic development in breastfeeding, and use of cascade systems.
- Summaries of approaches to dissemination and promotion of information that have proved to be successful, and of practice change programmes that have been evaluated as having a positive impact on initiation and duration of breastfeeding.
- Through NHS Direct, we planned to reach the general public. Information could be provided to inform the development of new algorithms that could be

used by staff taking enquiries from breastfeeding women. We planned also to provide information that could be used on the NHS Direct website, which is accessed directly by women and families as well as health professionals.

- Other material to reach the general public would be developed. We aimed to have informative papers published in women's and families' magazines, and in the general media, on a regular basis. A professional writer was one of our partners; her role was to inform and advise us about reaching women directly.

Discussion

The work described in this paper was a structured, cross-sectoral approach to practice development in public health. As a result of funding problems, a full evaluation could not be conducted, and our contribution to the knowledge base on practice change in public health is limited. Lessons were learned, however, and feedback was gained from participants at different stages of the process. We received strong support for our approach, and the willingness of local and national partners to engage actively in the programme testifies to its potential.

Lessons learned

There is increasing emphasis in public health and health policy on the need for good partnership working and integration across disciplines, professions, organizations and localities as shown in the recent White Paper from the Department of Health (DH 2006) and in the Children Act (2004). Prevention of ill health and promotion of well-being feature strongly in these and other policy documents, with a recognition that this cannot be achieved without full engagement at strategic and operational levels with those who use or depend on public-sector services. It was clear at every stage of this process that engagement was needed across the whole health economy. It is only in working with all the relevant layers and partnerships of professionals that we can hope for the full impact of evidence to be realized. Traditional approaches, however, only disseminate evidence to interest groups in isolation. Our use of 'diagonal slice'

workshops, in which staff at all levels and across all sectors were engaged and including representatives of service users and the voluntary sector, enabled much greater understanding of the consequences of particular activity or behaviour in other parts of the system, and allowed creative and informed challenges to assumptions and prejudices. This laid good foundations for whole systems approaches to introducing, driving and implementing new approaches which could lead to positive health outcomes. It proved a very positive learning experience for all those involved.

Practice change needs to involve the whole range of health professionals involved in work directly with pregnant women and new mothers to ensure coordinated working and consistent messages. Despite active support from relevant Royal Colleges and several strongly supportive individuals, engagement by doctors was noticeably less compared with other health professions. This supports the findings of other work (e.g. Smale *et al.* 2006). This really matters in a field such as breastfeeding, where paediatricians, obstetricians, general practitioners and public health physicians have an important role to play. Future work will need to address this.

Key constituents in practice development in breastfeeding include mothers and potential mothers, grandmothers and men. We had strong support and involvement from service users and user groups, but engaging men proved to be difficult. To reach the public, good-quality, easily accessible information is needed; perhaps the developing DiPEX module on breastfeeding will contribute to this (<http://www.dipex.org/DesktopDefault.aspx>). Recent government policy directives acknowledge the potential contribution that incorporating patient and service user experience into service provision can bring (e.g. DH 2006). Recent developments in the approach to long-term conditions management have introduced the Expert Patient Programme, which enables people with disabilities to take much more effective control over the management and treatment of their disease (DH 2004c, 2006). There is perhaps potential for the parallel development of an 'Expert Mothers Programme' to have similar positive impact in relation to nutrition and health.

Service user involvement is actively encouraged in informing research and practice (Hanley *et al.* 2004). Breastfeeding, and maternity care as a whole, have a long-standing history of the active engagement of service users. Volunteer counsellors and supporters, trained and accredited by their own voluntary organizations, have filled the gap left by the health services. They have taken the initiative in setting up telephone support services, training and supervising peer supporters, and contributing to the education of health professionals (Smale *et al.* 2006). In our current and previous practice development work, the contribution of service users and voluntary groups went much further than simply offering advice and information. They took an active role in planning the work, and in some cases delivering education and services. Our experience was that lay workers have an essential role in developing services, and they are able to advise at a strategic level as well as participating in service delivery. They are able to see through the organizational barriers that often constrain professionals, and can see solutions that will work for mothers and families. From our experience, we would advise that others explore ways of actively engaging lay workers, adequately remunerated, in the delivery of health care and in the education of health professionals.

The fundamental importance of multidisciplinary and multi-professional working was also apparent in the way in which the core team worked, and in the support gained from the network of partners. At every stage, we had expertise and support available to us, as well as an effective communication system and network. Practice change in public health needs to be led and informed by those who know the topic area, and who have the wide range of skills needed to convince many different kinds of professionals that the work is worthwhile and achievable.

Another positive contribution was the synergy of this programme with the evidence base. The same team had also been responsible for systematic reviews of the field (e.g. Fairbank *et al.* 2000; Protheroe *et al.* 2003; Sikorski *et al.* 2004; Renfrew *et al.* 2005a), and the approach was grounded in this evidence, which was at the same time being developed into national guidance. The interaction between

these elements should not be underestimated; partners and sentinel sites were able to inform the guidance, and up-to-date knowledge of the evidence base helped strengthen the practice development work.

The sentinel site system was proving to be a successful, 'win-win' situation for all involved. It provided a test bed for ideas, it was a source of information and debate, and the programme gained a richness and diversity of input that would be hard to match. At the same time, it offered the sites engagement in leading-edge work, an increased profile and high-quality staff development. Although it was not formally evaluated, all involved were convinced that it was a very cost-effective system; the programme could conduct work at speed and to a high quality, and governance issues were streamlined. The system was very flexible, and could adapt to the different circumstances of each site. It would have been able to accommodate future service and education developments, such as Children's Centres, Trust reorganization and inter-professional education. Over time, we could have expanded to include other sectors and practitioners such as retailers, and child-minders. Had the programme continued, future sites would have been identified and material developed for national use based on our learning in the original four sites.

Major challenges

Throughout the programme, getting breastfeeding recognized as a priority was difficult. This has been the case for many years; despite its fundamental contribution to public health in the short and long term, it has only recently been included in national public health policy statements, PCT targets and monitoring. As we found in the learning needs assessment and other work, breastfeeding services are often seen as the remit of enthusiastic individuals, discussed in terms reminiscent of 'religious zealotry' (Smale *et al.* 2006), rather than as a part of the mainstream of health provision. Creating real change in the approach to breastfeeding in the health service will require it to be seen as a priority for senior managers and commissioners. Our experience has demonstrated that it is possible to engage such senior people

in this work and that discussion and debate with their own colleagues can have an impact on their thinking.

A key area of practice development that can impact on breastfeeding duration is working with mothers to sustain breastfeeding while going back to work, and the ways that public health strategy and practice can influence employers to provide breastfeeding-friendly maternity policies and facilities (Kosmala-Anderson & Wallace *in press*). We did not have an impact on this area, but it was clear that it was an area that needed to be addressed. One good place to start would be with the employment conditions for NHS employees themselves; this would have the dual advantage of improving conditions for the largest female workforce in the country, while also providing a model of good practice for others.

Although the aim of this work was to address inequalities in health, it is clear that reaching the hard-to-reach remains challenging. We did see signs of success; for example, Sure Start schemes were making a difference in some areas; but ensuring that all vulnerable women receive the support and care they need is still a distant goal, whether they are teenagers, asylum seekers, or simply women who live in areas where bottle feeding has been endemic for generations.

Finally, there is a debate to be had on whose responsibility it is to create such change. The work of researchers is seen to be complete when their study is finished and disseminated through publication and conference presentation. Systematic reviewers take on a responsibility to make the results of a wide range of studies available through publication, but not to engage with what services might do with those findings. Those responsible for guidance are responsible for developing and publishing that work, and some also take responsibility for 'implementation' (e.g. NICE 2005). But where does responsibility rest for practice development, which requires a deep engagement with the practice setting and with those affected by the issues raised by the evidence? Lack of investment at the national level in formal evaluation of programmes of change limits the available evidence base and detracts from our achieving a better understanding of what actually works in relation to these more complex health issues; funding for the 'R' aspects of research and development is more com-

mon than for the 'D' (NHS Executive 1997). The withdrawal of funding to this programme part way through its cycle was regretted by our commissioners; it was evident that practice development was no longer their remit given their changed circumstances. It is, however, not clear that responsibility now rests with any particular agency. Is development work for individual health service organizations themselves to take on? Is this work that should be led by national programmes supported by public-sector funding, or should it rely on other sources of support? If so, from where will it be resourced, and how will cross-sectoral and multidisciplinary developments be addressed? There are also questions about who will lead this work when a number of professional disciplines are involved and where the client interface spans both primary and acute care healthcare settings, social services and other development agencies. These questions will become more pressing as guidance continues to be produced, especially in public health.

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References

- Abbott S., Renfrew M.J. & McFadden A. (2006) 'Informal' learning to support breastfeeding: local problems and opportunities. *Maternal and Child Nutrition* **2**, 232–238.
- Audit Commission (2000) *United They Stand: Coordinating Care for Elderly Patients with Hip Fracture*. Audit Commission: London.
- British Paediatric Association (1994) Statement of the standing committee on nutrition: is breastfeeding beneficial in the UK? *Archive of Diseases in Childhood* **71**, 376–380.
- Chalmers I. & Altman D.G. (eds) (1995) *Systematic Reviews*. BMJ Publishing Group: London.
- Children Act (2004) Available at: <http://www.opsi.gov.uk/acts/acts2004/20040031.htm> (accessed 21 March 2006).
- Coote A., Allen J. & Woodhead D. (2004) *Finding out What Works: Building Knowledge about Complex, Community-Based Initiatives*. King's Fund: London.
- DfES (2000) *Adoption and Permanence Taskforce*. Available at: <http://www.dfes.gov.uk/adoption/adoptionreforms/taskforce.shtml> (accessed 29 March 2006).
- DH (2002a) *Improvement, Expansion and Reform: The Next 3 Years. Priorities and Planning Framework 2003–2006*. Department of Health: London.
- DH (2002b) *The Health and Social Care Change Agent Team*. Available at: <http://www.changeagentteam.org.uk/> (accessed 29 March 2006).
- DH (2004a) *National Service Framework for Children, Young People and Maternity Services*. Stationery Office: London.
- DH (2004b) *Choosing Health: Making Healthy Choices Easier*. Stationery Office: London.
- DH (2004c) *Self Care – A Real Choice: Self Care Support – A Practical Option*. Stationery Office: London.
- DH (2006) *Our Health, Our Care, Our Say: A New Direction for Community Services*. Stationery Office: London.
- Dominey M., Archibald A., Edgecombe D., Lawrence J. & Thomson L. (2002) Breastfeeding and drug misuse. Making an informed choice. Year 3, Practice project. In: *Infant Feeding Initiative: A Report Evaluating the Breastfeeding Practice Projects 1999–2002* (ed. F. Dykes, 2003), p 64. Department of Health: London.
- Dykes F. (2003) *Infant Feeding Initiative: A Report Evaluating the Breastfeeding Practice Projects 1999–2002*. Department of Health: London.
- Dykes F. (2006) The education of health practitioners supporting breastfeeding women: time for critical reflection. *Maternal and Child Nutrition* **2**, 204–216.
- Dyson L., Renfrew M.J., McFadden A., McCormick F., Herbert G. & Thomas J. (2006) *Promotion of Breastfeeding Initiation and Duration: Evidence into Practice Briefing*. National Institute for Health and Clinical Excellence: London. <http://www.nice.org.uk/download.aspx?o=346169> (accessed 26 July 2006).
- EU (2004) *Project on Promotion of Breastfeeding in Europe. Protection, Promotion and Support of Breastfeeding; A Blueprint for Action*. European Commission, Directorate Public Health and Risk Assessment: Luxembourg.
- Fairbank L., O'Meara S., Renfrew M.J., Woolridge M., Sowden A.J. & Lister-Sharp D. (2000) A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. *Health Technology Assessment* **4**, 1–171.
- Grant J., Fletcher M. & Warwick C. (2000) *The South Thames Evidence Based Practice (STEP) Project: Supporting Breastfeeding Women*. South Bank University: London.
- Greenhalgh T., Robert G., Bate P., Mcfarlane F. & Kyriakidou O. (2005) *Diffusion of Innovations in Health Service Organisations: A Systematic Literature Review*. Blackwell Publishing Limited: Oxford.

- Grimshaw J.M., Thomas R.E., MacLennan G., Fraser C., Ramsay C.R., Vale L. et al. (2004) Effectiveness and efficiency of guideline dissemination and implementation strategies. *Health Technology Assessment* **8**, i–xi, 1–72.
- Hanley B., Bradburn J., Barnes M., Evans C., Goodare H., Kelson M. et al. (2004) *Involving the Public in NHS, Public Health and Social Care Research: Briefing Notes for Researchers*. INVOLVE, Department of Health: London.
- Herbert G. & Lake G. (2005) Making connections. Effective development of the intermediate tier. *Journal of Integrated Care* **13**, 35–42.
- Howie P.W., Forsyth J.S., Ogston S.A., Clark A. & Florey C.D. (1990) Protective effect of breastfeeding against infection. *British Medical Journal* **300**, 11–16.
- Kosmala-Anderson J. & Wallace L.M. (in press) Breastfeeding works: the role of employers in supporting women who wish to breastfeed and work in four organizations in England. *Journal of Public Health* (in press).
- Kramer M., Chalmers B., Hodnett H., Sevonkaya Z., Dzikovich I., Shapiro S. et al. (2001) Promotion of breastfeeding intervention trial (PROBIT). *Journal of the American Medical Association* **285**, 413–420.
- McFadden A., Renfrew M.J., Dyson L., McCormick F., Herbert G. & Thomas J. (2005) *Effective Active Briefing on the Initiation and Duration of Breastfeeding. Fieldwork Report*. National Institute for Health and Clinical Excellence: London.
- McFadden A., Renfrew M.J., Dykes F. & Burt S. (2006) Assessing learning needs for breastfeeding: setting the scene. *Maternal and Child Nutrition* **2**, 196–203.
- McSherry R. & McFadden A. (2001) *Practice Development Accreditation Assessment*. Maternity Services, Darlington Memorial Hospital, South Durham Healthcare NHS Trust. Final Report. University of Teesside, Middlesbrough.
- Moulding N.T., Silagy C.A. & Weller D.P. (1999) A framework for effective management of change in clinical practice: dissemination and implementation of clinical practice guidelines. *Quality in Health Care* **8**, 177–183.
- Gray J.A., Haynes R.B., Sackett D.L., Cook D.J. & Guyatt G.H. (1997) Transferring evidence from research into practice: 3. Developing evidence-based clinical policy. *Evidence-Based Medicine* **2**, 36–38.
- NHS Centre for Reviews and Dissemination (CRD) (1999) Getting evidence into practice. *Effective Health Care* **5**, 1–16.
- NHS Executive (1997) *R&D in Primary Care. National Working Group Report* (Mant Report). Stationery Office: London.
- NICE (2004) *The Guideline Development Process*. National Institute for Health and Clinical Excellence: London.
- NICE (2005) *Putting NICE Guidance into Practice*. National Institute for Health and Clinical Excellence: London.
- Oxman A.D., Thomson M.A., Davis D.A. & Haynes R.B. (1995) No magic bullets: a systematic review of 102 trials of interventions to improve professional practice. *Canadian Medical Association Journal* **153**, 1423–1431.
- Protheroe L., Dyson L., Renfrew M.J., Bull J. & Mulvihill C. (2003) *The Effectiveness of Public Health Interventions to Promote the Initiation of Breastfeeding: Evidence Briefing*. Health Development Agency: London.
- Quigley M.A., Cumberland P., Cowden J.M. & Rodrigues L.C. (2006) How protective is breast feeding against diarrhoeal disease in infants in 1990s England? A case control study. *Archives of Disease in Childhood* **91**, 245–250.
- Renfrew M.J., Dyson L., Wallace L., D'Souza L., McCormick F.M. & Spiby H. (2005a) *The Effectiveness of Health Interventions to Promote the Duration of Breastfeeding: Systematic Review*, 1st edn. National Institute for Health and Clinical Excellence: London.
- Renfrew M.J., Dyson L., McFadden A., McCormick F., Herbert G. & Thomas J. (2005b) *Effective Active Briefing on the Initiation and Duration of Breastfeeding*. Technical Report. National Institute for Health and Clinical Excellence: London.
- Renfrew M.J., McFadden A., Dykes F., Wallace L., Abbott S., Burt S. et al. (2006) Addressing the learning deficit in breastfeeding: strategies for change. *Maternal and Child Nutrition* **2**, 239–244.
- Richards D. (2003) *Children's Nutrition – Mothers Who Wish to Breast-Feed*. Birmingham City Council. Available at: <http://www.birmingham.gov.uk/scrutiny> (accessed 27 July 2006).
- Sackett D.L., Rosenberg W.M.C., Gray J.A.M., Haynes R.B. & Richardson W.S. (1996) Evidence-based medicine: what it is and what it isn't. *British Medical Journal* **312**, 71–72.
- Sikorski J., Renfrew M.J., Pindoria S. & Wade A. (2004) Support for breastfeeding mothers (Cochrane Review). *The Cochrane Database of Systematic Reviews*, Issue 2. John Wiley & Sons Ltd: Chichester.
- Smale M., Renfrew M.J., Marshall J.L. & Spiby H. (2006) Turning policy into practice: more difficult than it seems. The case of breastfeeding education. *Maternal and Child Nutrition* **2**, 103–113.
- Spiby H., Ker R., D'Souza L. & Renfrew M.J. (2002) Introducing a Consumer-Practitioner into breastfeeding practice, Year 2. In: *Infant Feeding Initiative: A Report Evaluating the Breastfeeding Practice Projects 1999–2002* (ed. F. Dykes, 2003), p. 44. Department of Health: London.
- Spiby H., Wallis S., Stone C. & Renfrew M.J. (2005) *Supporting and Promoting Breastfeeding in Leeds. Final Report to December 2004*. Report to Leeds PCTs Children and Families Modernisation Team, Leeds.
- Thomas C. (2006) *Darlington – A Breastfeeding Friendly Town*. Darlington Borough Council: Darlington.

- Unsworth J. (2000) Practice development: a concept analysis. *Journal of Nursing Management* **8**, 317–326.
- Wallace L.M. & Jardine J. (2006) *A Health Scrutiny of Services to Support the Initiation and Duration of Breastfeeding in Coventry and Warwickshire*. Coventry and Warwickshire County Councils: Coventry.
- Wallace L. & Kosmala-Anderson J. (2006) A training needs survey of doctors' breastfeeding support skills in England. *Maternal and Child Nutrition* **2**, 217–231.
- Wallace L. & Kosmala-Anderson J. (in press) Training needs survey of midwives, health visitors and voluntary sector breastfeeding support staff in England. *Maternal and Child Nutrition* (in press).
- WHO (2003) *Global Strategy for Infant and Young Child Feeding*. World Health Organization: Geneva.
- Wilson A.C., Forsyth J.S., Green S.A., Irvine L., Hau C. & Howie P.W. (1998) Relation of infant diet to childhood health: seven year follow up of a cohort of children in Dundee infant feeding study. *British Medical Journal* **316**, 21–25.