

Constructing a New Approach to Developing Evidence-Based Practice with Nurses and Older People

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ABSTRACT

Purpose: Providing evidence-based nursing care to older people is central to the international development agenda. This paper is a report on the first 5 years (2000–2005) of a participatory research project, the purpose of which was to collaborate with practitioners and older people to develop approaches to promote the attainment of evidence-based nursing care across Scotland.

Design: Many theoretical influences shaped the design of this action research study including realistic evaluation, participatory social learning theory, and descriptions of communities of practice. Multiple methods of data collection were used during four action cycles. The inaugural community of practice comprised 30 nurses, a second group of 30 nurses joined midway, followed by a third group of 15 nurses, and finally, an older person-carer community of 21 members was established.

Findings: Project outputs included the construction of an internet-based, practice-development college. A procedural model for developing and demonstrating care guidance drawn from a diversity of evidence and reflective of an agreed set of principles was piloted and endorsed by the national standard setting agency. A preliminary version of a promising approach to practice development, “the Caledonian Model,” was delineated for future testing and refinement.

Conclusion: This work indicates the merits of using participatory research to find solutions to the challenge of promoting evidence-based practice. Evaluation data suggest that in combination, the approaches developed in this project empower nurses to work with older people to champion developments even in seemingly unfavorable conditions.

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The quest for evidence-based practice underpins the international practice-development agenda. While the nature of evidence is the subject of debate, the consensus is that continuing professional development is a prerequisite for change (Mallet et al. 1997; Straus & Sackett 1998). Professional development occurs at the individual

practitioner level, and is arguably integral to, but subordinate to, the advancement of patient care as enabled by practice development (McCormack et al. 2004). Mindful of the known challenges associated with practice development, the *Strategy for Nursing and Midwifery in Scotland* (Scottish Executive Health Department (SEHD) 2001) called for networking approaches to promote best practices and attainment of evidence-based practice. In this paper, the first phase (spanning 5 years) of a longitudinal action research study designed to meet this imperative is reported and the emergent Caledonian Model pioneered and tested in the context of nursing older people described.

Definitions of Practice Development

Since the early 1990s, the term “practice development” has become popular in the discourse of UK professionals.

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Definitions have been influenced by studies including conceptual analyses (Unsworth 2000; Garbett & McCormack 2001, 2002; McCormack & Garbett 2003), survey attempts to describe and categorize activities believed to be examples of practice development (Kitson & Currie 1996), explorations typifying the work of practice-development nurses (Mallet et al. 1997; McCormack et al. 1999; Garbett & McCormack 2001), and considerations of practitioner knowledge (Clarke & Procter 1999; Clarke & Wilcockson 2002). Internationally, the profession has been less preoccupied with practice development *per se*, but equally determined to achieve evidence-based care through a range of strategies and interventions (Beason 2000; Hilz 2000; Stetler 2001; Lopez et al. 2002).

Contemporary definitions reflect the balance and interplay among evidence, context, and facilitation (Kitson et al. 1998). Examination of these constructs has generated insight into the barriers which impede practice development and to some extent, actions which promote progress (Harvey et al. 2002; Stetler 2003; Rycroft-Malone 2004). Practice development is most likely to occur when the evidence is believable, the context is receptive to change, and appropriate facilitation mechanisms exist.

In 2003, the English Department of Health defined practice development as the systematic process of implementing change (Department of Health 2003). This definition belies the complexity of developing practice. In contrast, Garbett and McCormack (2002) define it as a continuous process of improvement toward increased effectiveness in person-centered care, made possible through enabling strategies which support health care teams to develop their knowledge and skills to change the culture and context of care. Embedding person-centered care within the definition assumes that all subscribe to this conceptual framework. Dewing's (2004) analysis indicates that this may be premature, given the lack of clarity about personhood, and that while person-centered care "may feel right" intuitively, we need to consider relational elements. Nolan and colleagues (2004) concur suggesting that therapeutic nursing involves a network of relationships. The link to person-centeredness in their definition may partly explain why Garbett and McCormack (2002) concede that demonstrating the benefits of practice development in terms of measurable outcomes is problematic. In comparison, Unsworth (2000) emphasizes the need for an explicit client focus and the identification of empirical indicators to confirm changes in service delivery.

Current Perspectives

Manley and McCormack (2003) identify two world views underpinning descriptions of practice development. The emancipatory model is said to achieve lasting change

through practitioner enlightenment, empowerment, and emancipation strategies for creating an enabling culture within the practice context. In contrast, the technical model is typified by a top-down approach to change, such as that associated with clinical effectiveness, and which may side-step issues of context and culture.

Two assumptions characterize the emancipatory model: reflective practice effects change and that practitioners share and value aspirations for autonomy and empowerment. However, the evidence base on the effectiveness of reflection on practice is relatively weak despite its popularity (Carroll et al. 2002). Glaze (2002) reports that many practitioners claim to be reflective in practice, but that little evidence exists that they know reflective techniques. This may be because reflection demands high level skills including critical analysis, synthesis, and evaluation, which Burton (2000) believes only few possess. Despite these concerns, reflection is frequently associated with the development of practice (Burnard 1995). Reflection has also been linked with a divergent learning style which some claim typifies nurses (Kolb 1984), but others challenge (Stutsky & Spence-Laschinger 1995). Similarly, research into preferred cognitive styles of nurses in terms of responding to new evidence is inconclusive. Nortridge and Bell (1996) suggest that some nurses may prefer problem-solving with an authority figure rather than making their own enlightened decisions. Another consideration when adopting a purely emancipatory model is that it requires organizational buy-in and a positive learning environment (Nolan et al. 2002). The effort and resources required to achieve these conditions can be deterrents and delay progress.

Systematic reviews also show a weak evidence base for changing professional behavior to promote clinical effectiveness (technical model). Reminders appear consistently effective, dissemination of educational materials may lead to modest effects, impact of audit with feedback varies, and limited evidence exists concerning the value of intensive multifaceted approaches (Grimshaw 2004). A marked international trend to producing evidence-based guidelines (Grilli et al. 1999; Tiemeier et al. 2002) has occurred, but the effect is questionable (McKenna et al. 2004; Tolson et al. 2005).

Set against this backdrop, it was recognized that responding to the call to promote best practices and evidence-based nursing care across Scotland required innovative thinking. The intention of this project was for academics, practitioners, and older people to work collaboratively to interpret existing knowledge, and explore the potential for creative and affordable solutions to advance the scholarship of practice and practice development.

METHODS

Aims and Objectives

The long-term, and ongoing aim, is to use participatory research to develop a sustainable approach to enable the attainment of evidence-based nursing care for older people across the spectrum of care environments within Scotland. The aim included working in partnership, involving users, in our case older people (SEHD 2003), and a strategic commitment to make research work for practice.

Following the action research tradition, the work has been undertaken in cycles. Phase 1 (completed during 2000–2005) comprised four action cycles which have sought to develop:

- a Practice-Development College with an agreed development agenda;
- an understanding of the principles underpinning evidence-based nursing care of older people (Gerontological Nursing);
- a methodology to construct legitimate, believable, and achievable care guidance for nursing (best practice statements—BPSs);
- a practice-development model with demonstrable impact;
- systems to involve older people.

Design

An enhancement approach was adopted (Holter & Schwartz-Barcott 1993), because this encourages practitioners to use theory to enhance practice and raise awareness of underlying values and beliefs that relate to individual and collective responses to change. We believe this approach to be compatible with the tenets of emancipatory practice development. Authenticity was promoted through involvement of participants who were considered partners and critical companions in the interpretive community (Guba & Lincoln 1994). Methods and procedures were not predetermined or taken without participant involvement, with one exception. The fundamental decision to use information technology (IT) and work toward developing a virtual practice-development college was generated by the project team as part of its strategic vision.

Ethical Issues

Ethical approval was obtained from the university research ethics committee for activities involving practitioners and older people. Separate approvals were sought and obtained for work within practice areas in accord with local and national protocols. The provisions of data protection legislation were observed. All participants were asked to agree to an ethical code of membership of the virtual college that promoted mutual respect, confidentiality, and nondisclo-

sure of sensitive information about practice, organizations, or individuals shared during collaborative activities.

Participants

Work began with recruitment, via advertising, of 30 nurses considered representative of nurses supporting older people across Scotland, including remote and rural locations. This inaugural group (Group 1), who became known as the Core Group, met with the project team at the university to begin agreement and action concerning the Phase 1 Objectives. A Communities of Practice Framework was adopted to nurture a sense of togetherness and shared learning believed to be critical to the action research design. Wenger et al. (2002) identify three distinctive features of communities of practice:

- A purpose or enterprise brings the members of the community together.
- Members possess relevant knowledge and bond together to become a social entity.
- The community builds its capability in practice by developing a shared repertoire and resources that embody the accumulated knowledge of the community.

After 2 years, it was agreed that the work was beyond the scope of one group and a new community of practice (Group 2) was recruited to work semiautonomously in the virtual college alongside the core group. Over time, additional communities were formed, each with a specific and defined purpose. Older people were involved to varying degrees in the work of all groups, and an extension project included resources for 21 older people and family carers to form their own community. For clarity, the following account shows the cycles as discrete—in reality, cycles two through four overlapped.

CYCLE 1

The first action cycle was concerned with laying foundations and articulating a shared vision. Two strands of work were completed: (1) building the college and agreeing on the project-specific, practice-development agenda and (2) explicating the practice model and value base underpinning work within the college and its outputs.

Building the College and Agreeing on the Development Agenda

Work to build the virtual college began before recruitment of the core group and was led by computing professionals. Because of budget restrictions, the prototype college was built using freely available software. The group was introduced to the system and was involved in a series of real-time and virtual workshops to articulate what they wanted from

the virtual college (Buggy et al. 2004). Initially, the collaborative workplace was designed using a building metaphor based on the rooms found in a real college (e.g., common rooms, laboratories, and classrooms). However, with our increasing demands on the technology, the system became unstable and was replaced with an electronic learning system known as Blackboard. This change necessitated some compromises and a move away from the concept of a building to a managed learning environment.

Although the technology and its accessibility were and continue to be fundamental, the true heart of the project was the development agenda. A template agenda was refined through small working groups. Cross-group consensus was achieved quickly within the first 2 study days. The agreed-upon project-development agenda was to identify selected aspects of nursing care and to develop guidance to describe "best nursing practice" and how to recognize it. The achievability of draft guidance would be tested and refined in practice to ensure that it was realistic, not idealistic. The guidance would reflect a practice model and philosophy of care acceptable to both nurses and older people.

Understanding Gerontological Nursing

Group 1 met within the university for 2 days during the first study month. Nominal group techniques (Carney et al. 1996) were used to explore the rationale for defining gerontological nursing and the core elements that they would expect to see in a definition. Over the next 9 months, participants were encouraged to locate and discuss during virtual workshops, and with colleagues at work, descriptions of gerontological nursing located within the literature. However, they concurred that no completely satisfactory description existed and that they would draft their own, mindful that it would become the description through which they would later shape evidence-based care guidance. The initial definition and its underpinning principles were collaboratively revisited each time a new community of practice was established.

Not unexpectedly, identifying key elements of gerontological nursing was complex. Much debate surrounded the concept of person-centeredness and while some doubts were expressed, this term was incorporated into their first version. Gerontological nursing was thus described as:

a person-centered approach to promoting healthy ageing and the achievement of well being, enabling the person and their carers to adapt to health and life changes and to face ongoing health challenges.

This was accepted as an operational definition that would be refined over time (Kelly et al. 2005). Ten principles underpinning its practice were also agreed upon and included commitments to person-centered care, enabling approaches, interdisciplinary working, promotion of dig-

nity, respect for an individual's rights and choice, and equity. The utility of the emerging model was tested in the development of the first two BPSs described under Cycle 2. Although the exercise confirmed that an explicit value base could provide the language and description for the statements, the conceptual basis warranted attention.

Reconsideration and redrafting was led by Group 3, formed to work on a BPS concerned with age-related hearing disability. Their suggestions were placed within an open access area of the college and all participants were asked to contribute feedback. The college members also requested that the new draft be placed on the public Website to seek critical feedback from interested parties. Project staff assisted in collating the comments and preparing the second version.

The second version of the definition encompassed the concept of relationship-centered care, and the modified principles included commitment to relationship-centered care, negotiating care decisions, maximizing potential and enabling approaches, value of reciprocity, promoting dignity and equity. Further elaboration is available in Kelly et al. (2005) and at the project Website (<http://www.geronurse.com>).

CYCLE 2

The focus of Cycle 2 was to develop a procedural model for the evidence-based descriptions of best practice.

Constructing Legitimate Care Guidance for Nursing

The core group, in collaboration with project staff and steering group, drafted a procedural model to develop an approach to prepare evidence-based care guidance that is nursing-focused and involves older people (Booth et al. in press). They worked from the premise that nursing practice is informed by a diverse evidence base. Furthermore, they agreed that a description of best practice must be demonstrably achievable in practice. In summary, an expert advisor was identified to lead a review of the evidence working collaboratively with the community of practice to identify the nursing contribution, and align descriptions of best practice with the agreed-upon principles of gerontological nursing. A practice site was identified to allow for fast-track implementation and problem-solving challenges, interacting with the development community via the virtual college. Older people within the demonstration site were involved on an individual basis and through patient/resident groups, and participated in local steering groups. Baseline and outcome audits were undertaken to monitor progress toward implementation of best practice and identify problems. Feedback from demonstration site staff, and case studies summarizing the influence on practice and care

experiences were prepared by nurses, care assistants, and older people. All of these sources contributed to the refinement of the statement before an external consultation exercise. Final statements were published by National Health Service Quality Improvement Scotland (NHSQIS) (<http://www.nhshealthquality.org>) to be updated on a 3-year cycle.

The utility of the procedural model was assessed by developing a statement about promoting nutrition with physically frail older people, working with a demonstration site located in a small NHS community hospital. From start to finish, the entire process took 18 months. A major difficulty arose in linking the demonstration site to the virtual college for technical reasons including security systems. Hence, the direct online dialog between the staff on site with the core group was restricted during the initial months and consisted of messages relayed via the project team. Outcome audits showed that 95% of the statement guidance had been implemented and sustained at a 1-year follow-up (Booth et al. 2005a). Case studies indicated benefits to the older person (Booth et al. 2005a,b). The procedural model was considered to be appropriate by all those involved, and the first BPS was published in 2002 (Nursing, Midwifery Practice Development Unit (NMPDU) 2002).

The second application of the procedural model was to test its use to develop care related to prevention and early detection of depression. Drafting of this statement was swifter, and no difficulties were experienced in linking the demonstration site, an independent sector care home, to the virtual college. The initial care home audit revealed an absence of focus on depression. Laying the foundations of implementation involved awareness-raising with all staff members within the home, through onsite outreach and online tutorial activities. Once an understanding of how staff behavior can affect an older person's well-being had been raised, progress became rapid. Overall, the process took 17 months to complete, although the initial drafting of the BPS had been quicker. The second BPS was published in 2004 (NHSQIS 2004).

CYCLE 3

The Practice-Development Model

As the practice-development model evolved, it was important to retrospectively establish what was working and extract the conceptual model, so that it could be scrutinized, refined, and replicated. Attempts to explore the conceptual aspects during the first year was abandoned as the consensus view was that this was "academic meddling." However, in the second year, practitioners were beginning to find it difficult to succinctly describe to colleagues how they were approaching practice development within the virtual college. Mindful of earlier reticence, telephone interviews

were completed with a subset of volunteer participants. In the third year, a retrospective analysis of archived online sessions was undertaken. Drawing on this evidence and researchers' field notes, representations of the practice-development model were drafted and refined until participants confirmed that an accurate description had been produced.

Telephone Interviews

Semistructured interviews were designed to explore and describe nurses' experiences of working within the virtual college and the extent to which activities had influenced local practice (Tolson et al. 2005). An independent research assistant conducted interviews with 15 volunteers. Cognitive mapping was used to analyze data (Northcott 1996). Findings showed that the sample of nurses likened the experience to a journey in which they were traveling as an individual from their current practice position, negotiating hurdles with the support of the community of practice to arrive at, or at least move closer to best practice (Tolson et al. 2005). Five major facilitation factors were identified:

- Being a member of a community of practice.
- Understanding gerontological nursing.
- Sharing innovation aims.
- Understanding best practice.
- Creating resources for practice development.

Although a linear scheme was not intended, the first three factors consistently appeared to be foundational.

Analysis of Online Archives

Transcripts of 27 online group sessions which took place during years 2–3 were analyzed in terms of group work theory (Garland et al. 1965; Tuckman 1965; Berman-Rossi 1993; Shulman 1999) to determine the merits of using the community of practice framework. The qualitative analysis software NVivo was used. All sampled sessions were facilitated by the same practice development fellow. In total, 39 nurses participated in the sessions, with an average of 9 nurses per session (range 3–16).

Findings revealed that although the group did not conform to the dominant linear paradigm of group development (Garland et al. 1965; Tuckman 1965) in that no stage of power and control was present, it was consistently productive and focused on the project's development agenda. Displays of mutual aid (support, shared problem-solving) and group cohesion (Shulman 1999) were particularly strong and indicative that the group was functioning as a community of practice, as described by Wenger (2003). An interesting discovery was that even when a member could not attend a session, reading the archive allowed them to feel that they had participated and resume without

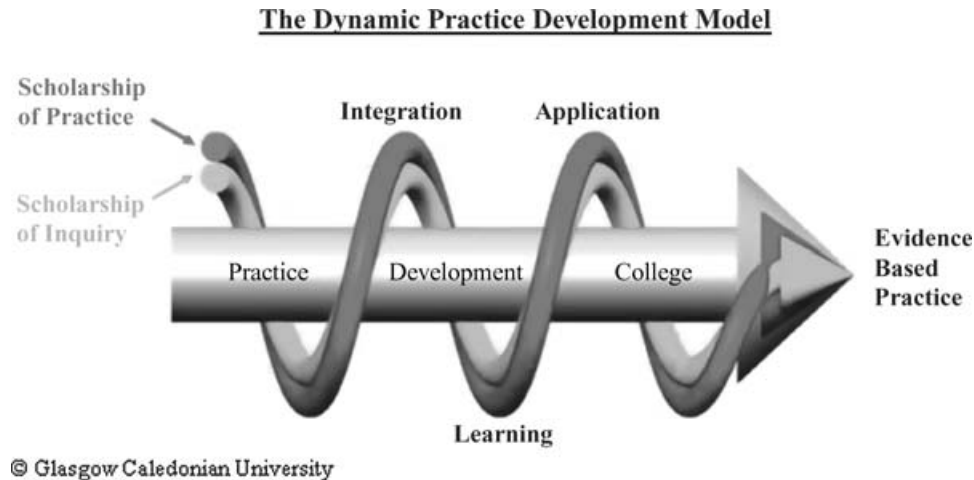


Figure 1. The dynamic practice-development model.

disruption. There was no evidence that the group regressed throughout the year or lost productivity when new members joined, which was unexpected. Overall, it was concluded that the community of practice framework was an essential element within the model (Kelly et al. 2005) and in becoming a member of an effective group that the practitioner engaged in a transformational learning process.

Field Notes

During years 1–3, detailed field notes were made during and immediately after all real-time group sessions held within the university. Pawson and Tilley's (1997) description of realistic evaluation was a major influence in shaping the notes and in question-driven analysis to identify what was working best for whom and under what circumstances.

Describing the Practice-Development Model

Drawing on the above data, Figure 1 shows the overarching model which shows a driving force moving current practice toward evidence-based practice described within the BPSs. Through a range of integrated and systematic facilitation and knowledge sharing activities, the scholarship of practice is fused with the scholarship of inquiry. Intertwining scholarship in this way drives practice forward, enabling integration of the diverse evidence base, related learning, and application to practice. The process is developmental and perpetuated through the momentum generated by each community of practice.

Figure 2 shows key elements within the practitioner's journey. All activities within the college are framed within a social-participatory model of learning. Members journey together through a transformational learning experience that is focused on pooling and creating knowledge to solve

practice-based problems directly relevant to the agreed-on purpose of each community of practice.

CYCLE 4

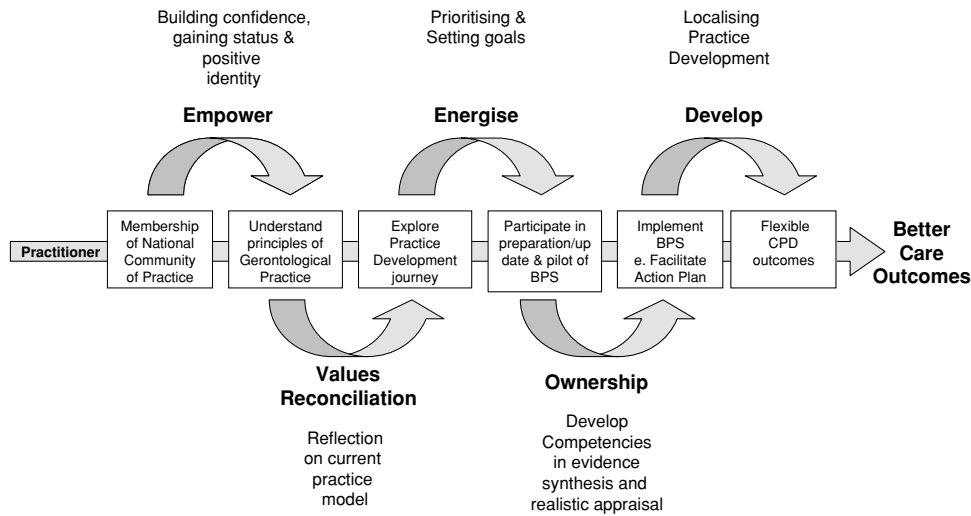
Involving Older People

The Involving Older People work tested the feasibility of creating an online community of older people and carers to collaborate on the development of resources for older people linked to the BPSs. Initially, 21 older people and carers were recruited with an average age of 68.8 years (56–94 years). Three participants withdrew for reasons including moving to another care home, anxiety about computer use, to finding no interest in computers. This part of the project included three processes:

- Development of an accessible and interactive Website for older people and carers with a range of abilities and limited computer experience.
- Age-appropriate teaching to foster interactive computer technology skills.
- Development of meaningful involvement strategies and processes.

Development of the accessible Website was accomplished through collaborating with IT professionals utilizing a user-centered design. Computer training was provided in the participants' homes by a research assistant, who was a retired computing professional. Training was focused on skill building in tasks that were required for the project (e-mail, surfing the internet, and asynchronous online discussions), as well as skills required to meet individual participant needs and interests (e.g., making greeting cards, online gaming, online shopping).

The process for involving participants in developing user resources began with an orientation to the project and



The Practitioner's journey through the Virtual Practice Development College

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Figure 2. The practitioner's journey through the virtual practice-development college.

Website. Initial real-time discussions on the nutrition and depression BPSs continued online and included sharing of care experiences. A member of the research team summarized key points, which the group verified and used as a basis to develop the companion resources. A group of four participants agreed to design the layout of the care guidance resources and were taught to use desktop publishing software, resulting in the production of two resources: *Care Guidance for Older People—Prevention and Early Detection of Depression* and *Care Guidance for Older People—Getting Sufficient Nourishment when Going Into A Hospital or Care Home* (www.geronurse.com). Both resources are designed to be used by older people and their carers, to make their expectations and aspirations known when care is required.

Evaluation included semi-structured interviews, analysis of online interaction and training field notes, completion of several instruments measuring attitudes and knowledge of computers, quality of life, mental status, and social networks. Preliminary analysis suggests that participants have integrated computer use into their daily lives and valued the process used in the project.

DISCUSSION

Participatory Research

This project allows researchers to understand practice development and ways to work with nurses and older people. Key to working with people has been the adoption of a participatory research design. We concur with proponents of action research, Reason and Bradbury (2001), who suggest

that a major strength is the potential to develop knowing in practice. However, critics reasonably raise concerns about rigor, replication, and small samples. Longitudinal and large group action research studies are not common, and most large group work has been undertaken within single organizations (Martin 2001). We did not know whether the distributed large group model would be effective, but our analysis of group dynamics (Kelly et al. in press) coupled with the stability and productivity within groups suggests that adoption of the community of practice framework is appropriate and viable for a distributed group of practitioners. Action scientists observe that communities of practice readily transform into communities of inquiry (Freidman 2001); and our work supports their contention that redefining roles of practitioners as critics of their own practice lays essential foundations for transformational learning that enables action for change.

A potential concern for the action researcher is the blurring of boundaries between practice and “practice-development research.” As Clarke and Procter (1999) explain, the actual development and generated knowledge belong to and within the collaborative partnership. We have partly negotiated this challenge through publication of the BPSs and resources for older people. In addition, the national dissemination strategy and virtual college offer implementation support. Thus, we have offset the potential for an inward-looking stance by distributing new knowledge to the wider nursing community who can use the virtual college for support or visit actual demonstration sites.

In judging authenticity, it is helpful to refer to Nolan and colleagues' (2003) reinterpretation of Guba and Lincoln's (1989) criteria. Equality of access was achieved at all stages for nurse participants, but older people were not equally engaged until Cycle 4 although effort was made to be inclusive throughout. In Phase 2 of the project, we aim to achieve stronger partnerships with older people.

The Practice-Development Model

Earlier, the emancipatory and technical models of practice development were critically considered. Users of the Caledonian model go some way to blend the most effective elements of both approaches and overcome the limitations of taking a purely emancipatory or purely technical approach. The social-participatory model of practitioner learning is emancipatory and central to patient-focused developments in care. Audits of current practice, action planning, and follow-up audits form the more technical aspects of the model. Importantly, the two elements occur in tandem throughout, although at certain stages through the journey one aspect may dominate.

Vicarious learning from demonstration sites and the collaborative approach to finding implementation solutions were important in empowering nurses to champion practice development in sometimes unfavorable contexts and cultures. These characteristics align with the emancipatory model (Manley & McCormack 2003). In the emancipatory model, organizational buy-in is seen as an essential precursor. In contrast, the Caledonian model provides all practitioners with an alternative "virtual supportive organization," and this appears to strengthen isolated practitioner's resolve and resources to advance care, and accelerates progress for those already working in more receptive environments. Furthermore, practitioners experience the rewards associated with fast-tracking best practice in the demonstration sites and this reinforces the belief that best practice is possible where they work. Interestingly, the development of care guidance in the form of BPSs aligns more with the technical model (Grimshaw 2004) than with an emancipatory stance. In particular, it is difficult to describe the implementation strategy aspect of the model as anything but technical. However, a distinguishing feature for participants is their perception of statement ownership and the credibility and realism within the evidence base. Thus, they value and sense the fusion between the scholarship of practice, experiences, and preferences of older people with more conventional research evidence. As Rycroft-Malone et al. (2004) acknowledge, such frameworks do not conform to traditional notions of robust evidence; however, the testing within demonstration sites and the pooling of the communities' collective knowledge go some way to promoting credibility. Work is in progress to examine in more

detail the practice impact of statements in terms of care outcome.

Reflection on practice, integral to the emancipatory approach, is also a feature in our model and is undertaken at two levels. Initially, the exercise is depersonalized and introduced as part of the group process where shared ideals for better care are rehearsed. At the individual level, reflection is combined with critique of the value base for practice, and this seems to help reduce the anxiety associated with recognizing issues related to one's own practice (Arygris 1991). All of the nurse participants engaged in reflection and ably rose to the intellectual demands. The consensus was that membership of the community of practice strengthened commitment to the process of reflection, because collectively, the group could see possibilities and solutions to most problems, whereas individually, the operational burden of changing something might overwhelm.

CONCLUSION

The emerging Caledonian practice-development model has attributes of both the technical and emancipatory models described earlier in this article. Most importantly, the model is based on an agreed and explicit value base and on a practitioner-driven reconceptualization of evidence for practice through the intertwining of the scholarship of practice with the scholarship of inquiry in a way that permits outcome measures. Demonstrable impact is essential if we are to compare the cost benefit of different approaches used in the pursuit of evidence-based practice. In Phase 2 of this longitudinal study, we will seek to further enhance the model and increase involvement of older people. It is recognized that our study is far from complete, but believe that participatory research has already proved its worth in our quest to promote evidence-based nursing care with older people in Scotland. A major strength in advancing models of practice development using informatics to share and disseminate best practice means, this can be done on a regional, national, or international basis, which opens up new collaborative opportunities for nurses and dialogue for older people.

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References

- Arygris C. (1991). Teaching smart people to learn. *Harvard Business Review*, 69(3), 99–109.
- Beason C.F. (2000). Advancing innovative nursing practice. *Nursing Clinics of North America*, 35(2), 569–577.
- Berman-Rossi T. (1993). Tasks and skills of the social worker across stages of group development. In S. Wenocur, P.H. Ephross, T.V. Vassill & R.K. Varghese (Eds.), *Social work with groups: Expanding horizons* (pp. 69–81). New York: Haworth Press.
- Booth J., Leadbetter A., Francis M. & Tolson D. (2005a). Implementing a best practice statement in nutrition for frail older people: Part 1. *Nursing Older People*, 16(10), 26–28.
- Booth J., Leadbetter A., Francis M. & Tolson D. (2005b). Implementing a best practice statement in nutrition for frail older people: Part 2. *Nursing Older People*, 17(1), 22–24.
- Booth J., Tolson D., Hotchkiss R. & Schofield I. (in press). Using action research to construct national evidence-based nursing care guidance for gerontological nursing. *Journal of Clinical Nursing*.
- Buggy T., Andrew N., Tolson D. & McGee M. (2004). Evolution of a virtual practice development college for nurses. *ITIN: The Official Journal of the BSC Nursing Specialist Group*, 16(3), 4–11.
- Burnard P. (1995). Nurse educator's perceptions of reflection and reflective practice: A report of a descriptive study. *Journal of Advanced Nursing*, 21(6), 1167–1174.
- Burton A.J. (2000). Reflection: Nursing's practice and education panacea. *Journal of Advanced Nursing*, 31(5), 1–14.
- Carroll M., Curtis A., Higgins H., Nicholl R., Redmond R. & Timmins F. (2002). Is there a place for reflective practice in the nursing curriculum? *Clinical Effectiveness in Nursing*, 6(1), 36–41.
- Carney O., McIntosh J. & Worth A. (1996). The use of the nominal group technique in research with community nurses. *Journal of Advanced Nursing*, 23, 1024–1029.
- Clarke C.L. & Procter S. (1999). Practice development: Ambiguity in research and practice. *Journal of Advanced Nursing*, 30(4), 975–982.
- Clarke C.L. & Wilcockson J. (2002). Seeing need and developing care: Exploring knowledge for and from practice. *International Journal of Nursing Studies*, 39(4), 397–406.
- Department of Health. (2003). *Report of the taskforce on the strategy for research in nursing, midwifery and health visiting*. London: Her Majesties Stationery Office.
- Dewing J. (2004). Concerns relating to the application of frameworks to promote person-centredness in nursing with older people. *International Journal of Older People Nursing*, 13(3a), 39–44.
- Freidman V.J. (2001). Action science: Creating communities of inquiry in communities of practice. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 159–170). London: Sage Publications.
- Garbett R. & McCormack, B. (2001). The experience of practice development: An exploratory telephone interview study. *Journal of Clinical Nursing*, 10, 94–102.
- Garbett R. & McCormack, B. (2002). A concept analysis of practice development. *NT Research*, 7(2), 87–99.
- Garland J., Jones H. & Kolodny R. (1965). A model for stages of development in social work groups. In S. Bernstein (Ed.), *Explorations in group work: Essays in theory and practice* (pp. 12–53). Boston: Boston University School of Social Work.
- Glaze J.E. (2002). Reflection as a transforming process: Student advance nurse practitioner's perceptions of their reflective journeys. *Journal of Advanced Nursing*, 37(3), 265–272.
- Grilli R., Trisolini R., Labianca R. & Zola P. (1999). Evolution of physician's attitudes towards practice guidelines. *Journal of Health Services Research and Policy*, 4(4), 215–219.
- Grimshaw J. (2004). *Improving professional practice: Methods & findings of implementation research. The Al-Hammadi Lecture. Changing professional practice symposium*. Royal College of Physicians, Edinburgh, Scotland.
- Guba E.G. & Lincoln Y.S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage.
- Guba E.G. & Lincoln Y.S. (1994). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Beverly Hills, CA: Sage.
- Harvey G., Loftus-Hills A., Rycroft-Malone J., Titchen A., Kitson A., McCormack B. & Seers K. (2002). Getting evidence into practice: The role and function of facilitation. *Journal of Advanced Nursing*, 37(6), 577–588.
- Hilz L.M. (2000). The informatics nurse specialist as change agent: Application of innovation-diffusion theory. *Computers in Nursing*, 18(6), 272–281.
- Holter I.M. & Schwartz-Barcott D. (1993). Action research: What is it? How has it been used and can it be used in nursing. *Journal of Advanced Nursing*, 18, 298–304.
- Kelly T.B., Lowndes A. & Tolson D. (2005). Advancing stages of group development: The case of virtual nursing community of practice groups. *Groupwork*, 15(92), 17–38.

- Kelly T.B., Tolson D., Schofield I. & Booth J. (2005). Describing gerontological nursing: An academic exercise or prerequisite for progress? *International Journal of Nursing Older People*, 14(3a), 13–23.
- Kitson A. & Currie L. (1996). Clinical practice development and research activities in four district health authorities. *Journal of Clinical Nursing*, 5(1), 41–51.
- Kitson A., Harvey G. & McCormack B. (1998). Enabling the implementation of evidence based practice: A conceptual framework. *Quality in Health Care*, 7, 149–151.
- Kolb D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Lopez M., Delmore B., Ake J., Kim Y.R., Golden G., Bier J. & Fulmer T. (2002). Implementing a geriatric resource nurse model. *Journal of Nursing Administration*, 32, 577–585.
- McCormack B. & Garbett R. (2003). The characteristics, qualities and skills of practice developers. *Journal of Clinical Nursing*, 12(3), 317–325.
- McCormack B., Manley K. & Garbett R. (2004). *Practice development in nursing*. Oxford: Blackwell.
- McCormack B., Manley K., Kitson A., Titchen A. & Harvey G. (1999). Towards practice development: A vision in reality or a reality without vision? *Journal of Nursing Management*, 7(5), 255–264.
- McKenna H.P., Ashton S. & Keeney S. (2004). Barriers to evidence-based practice in primary care. *Journal of Advanced Nursing*, 45(2), 178–189.
- Mallet J., Cathmore D., Hughes P. & Whitby E. (1997). Forging new roles: Professional and practice development. *Nursing Times*, 93(18), 38–39.
- Manley K. & McCormack, B. (2003). Practice development: Purpose, methodology, facilitation and evaluation. *Nursing in Critical Care*, 8(1), 22–29.
- Martin A.W. (2001). Large-group processes as action research. In P. Reason & H. Bradbury, (Eds.), *Handbook of action research. Participative inquiry and practice* (pp. 200–208). London: Sage.
- NHS Quality Improvement Scotland (NHSQIS). (2004). *Working with older people towards prevention and early detection of depression*. Edinburgh: National Health Service Quality Improvement Scotland.
- Nolan M., Hanson E., Magnusson L. & Anderson B.A. (2003). Gauging quality in constructivist research. *Quality in Ageing—Policy practice and research*, 4(2), 22–27.
- Nolan M.R., Davies S., Brown J., Keady J. & Nolan J. (2002). *Longitudinal study of the effectiveness of educational preparation to meet the needs of older people and carers*. London: English National Board for Nursing, Midwifery and Health Visiting.
- Nolan M.R., Davies S., Brown J., Keady J. & Nolan J. (2004). Beyond ‘person-centred’ care: A new vision for gerontological nursing’. *International Journal of Older People Nursing*, 13(3a), 39–44.
- Northcott N. (1996). Cognitive mapping: An approach to qualitative data analysis. *NTRResearch*, 1(6), 456–463.
- Nortridge J.A. & Bell M.L. (1996). Recognizing RNs’ cognitive style preferences. *Nursing Management*, 27(8), 40–44.
- Nursing, Midwifery Practice Development Unit (NMPDU). (2002). *Nutrition for physically frail older people*. Edinburgh, Scotland: Nursing, Midwifery Practice Development Unit.
- Pawson R. & Tilley N. (1997). *Realistic Evaluation*. London: Sage.
- Reason P. & Bradbury H. (2001). Introduction: Inquiry and participation in search of a world worthy of human aspiration. In P. Reason & H. Bradbury (Eds.), *Handbook of action research. Participative inquiry and practice* (pp. 1–14). London: Sage.
- Rycroft-Malone J. (2004). Research implementation evidence, context and facilitation—The PARIHS framework. In B. McCormack, K. Manley & R. Garbett (Eds.), *Practice development in nursing* (pp. 118–147). Oxford: Blackwell.
- Rycroft-Malone J., Seers K., Titchen A., Harvey G., Kitson A. & McCormack B. (2004). What counts as evidence in evidence-based practice. *Journal of Advanced Nursing*, 47(1), 81–90.
- Scottish Executive Health Department (SEHD). (2001). *Caring for Scotland: The strategy for nursing and midwifery in Scotland*. Edinburgh: The Stationery Office.
- Scottish Executive Health Department (SEHD). (2003). *Partnerships for care*. Edinburgh, Scotland: The Stationery Office.
- Shulman L. (1999). *The skills of helping individuals, families, groups, and communities* (4th Ed.) Itasca, IL: Peacock.
- Stetler C.B. (2001). Updating the Stetler model of research utilization to facilitate evidence-based practice. *Nursing Outlook*, 49(6), 272–279.
- Stetler C.B. (2003). Role of the organisation in translating research into evidence-based practice. *Outcomes Management*, 7(3), 97–105.
- Straus E. & Sackett D.L. (1998). Using research findings in clinical practice. *British Medical Journal*, 317(7154), 339–342.
- Stutsky B. & Spence-Laschinger H. (1995). Changes in student learning styles and adaptive learning competencies following a senior preceptorship experience. *Journal of Advanced Nursing*, 21(1), 143–153.
- Tiemeier H., de Vries W.J., van het Loo M., Kahan J.P., Klazinga N., Grol R. & Rigter H. (2002). Guideline adherence rates and interprofessional variation in a

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- vignette study of depression. *Quality and Safety in Health Care*, 11(3), 214–218.
- Tolson D., McAloon M., Hotchkiss R. & Schofield I. (2005). Progressing evidenced-based practice: An effective nursing model? *Journal of Advanced Nursing*, 50(2), 124–133.
- Tolson D., Maclaren W., Kiely S. & Lowndes A. (2005). Influence of policies on nursing practice in long-term care environments for older people. *Journal of Advanced Nursing*, 50(6), 661–671.
- Tuckman B. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63, 384–399.
- Unsworth J. (2000). Practice development: A concept analysis. *Journal of Nursing Management*, 8(6), 317–326.
- Wenger E. (2003). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wenger E., McDermott R. & Snyder W.M. (2002). *Cultivating communities of practice*. Boston: Harvard Business School Press.