Scottish School of Primary Care

GP Clusters

Briefing Paper 18

Advanced Nurse Practitioners

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Collaborative Quality Improvement in General Practice Clusters

This paper is in a series that relates to areas of quality and safety on which general practice clusters could usefully focus improvement activity. Each paper summarises research, guidelines and other evidence about areas of care which can be improved, and improvement methods and interventions.

Advanced Nurse Practitioners

Over recent years, the Scottish Government has progressed a raft of major new policy developments that aim to transform health and social care, with primary care being at the heart of these changes. Primary care is at the heart of this transformation. In 2015, the SG invested £60 million in a Primary Care Development Fund, which included £20.5 million to test new models of care through the Primary Care Transformation Fund (PCTF). The Scottish School of Primary Care (SSPC) was commissioned by the SG to carry out an independent evaluation of the new models of primary care being tested, including Advanced Nurse Practitioners. This report summarises the findings of the ANP case study, which was led by Stirling University (one of nine Universities that make up the SSPC).

Background

Primary Care in Scotland

Primary care is at the heart of the Scottish Government's (SG) policy' journey' aimed at enhancing the quality and integration of care[1,2]. Key changes include the integration of health and social care, the formation of 31 Integrated Joint Boards (IJBs) [3] and the introduction of a new General Medical Services (GMS) contract for general practitioners (GPs) in Scotland in 2018 [4]. This policy direction is underpinned by the vision of Scotland's Chief Medical Officer of 'Realistic Medicine'[5]which encourages improvement and innovation, and an approach to care that is centred around the patient. In 2015, the SG invested £60 million in a Primary Care Development Fund, which included £20.5 million to test new models of care through the Primary Care Transformation Fund (PCTF). The Scottish School of Primary Care (SSPC) was commissioned by the SG to carry out an independent evaluation of the new models of primary care being tested (tests of change throughout Scotland). The overall aim of the evaluation was to 'tell the story of primary care transformation in Scotland' over the period funded. Advanced Nurse Practitioners (ANPs) was one of six case studies chosen for investigation. In this briefing paper, we describe the results of international literature reviews on ANPs, and the findings of the evaluation carried out by a research team from the NMAHP-RU, University of Stirling.

Advanced Nurse Practitioners - international literature

Due to different definitions and terminologies in different countries, it is often hard to differentiate in the literature between ANPs, nurse practitioners, and practice nurses in primary care. A recent Cochrane review published in 2018 [6], explored the evidence to examine whether nurses could substitute for doctors in primary care. The review included only randomised trials evaluating the outcomes of nurses working as substitutes for doctors, excluding mental health problems. The authors included 18 randomised trials, of which all but one had been carried out in high-income countries. The nursing level was often unclear or varied between and even within studies. In many of the studies, nurses were able to get additional support or advice from a GP. The authors concluded that for some ongoing and urgent physical complaints and for chronic physical conditions, trained nurses, such as nurse practitioners, practice nurses, and registered nurses, probably provide equal or better quality of care compared to primary care doctors, and probably achieve equal or better health outcomes for patients. However, the studies on which these conclusions were based were generally of low to moderate quality. There was stronger evidence that nurses in primary care achieve slightly higher levels of patient satisfaction, but have longer, and more frequent consultations, compared with doctors. It was not possible to ascertain what level of nurse education leads to the best outcomes when nurses are substituted for doctors, nor the cost-effectiveness of nurses compared to doctors.

A systematic review of the safety and effectiveness of ANPs in primary care was published in 2015 [7], based on 10 articles (seven RCTs, plus two economic evaluations and one 2-year follow-up study of included RCTs) found that APNs demonstrated equal or better outcomes than GPs for physiological measures, patient satisfaction and cost. ANPs generally had longer consultations compared with physicians. Two studies reported that ANP patients required fewer consultations over time. The authors concluded that there were few differences in the primary care provided by ANPs and physicians, and that for some measures, APN care was superior. However, the need for further studies to assess longer-term outcomes was also stressed.

A systematic review conducted in 2002 [8], published in the British Medical Journal, included RCTs and prospective observational studies comparing nurse practitioners and doctors providing care at first point of contact for patients with undifferentiated health problems in a primary care setting. Again, patients were more satisfied with care by a nurse practitioner, but nurse practitioners had longer consultations and made more investigations than GPs. There were no differences in the health outcomes examined, prescriptions, return consultations, or referrals.

In summary, recent systematic reviews suggest that ANPs and other types of nurse practitioners can substitute for GPs for a range of acute and chronic conditions, with similar or better outcomes, and higher patient satisfaction. However, nurse consultations are generally longer than GPs. The cost-effectiveness of ANPs remains unclear. It is also noteworthy that in most studies included in these reviews, patients with mental health problems were usually excluded. This is of potential concern, given that mental-physical multimorbidity is highly prevalent in primary care, especially in areas of high deprivation [9].

A systematic scoping review of the barriers and facilitators to implementation of ANPs in primary care was conducted by the Stirling University team as part of the SSPC evaluation. In total, 76 relevant peer-reviewed research papers were identified reporting on 54 different studies, published between January 2002 and July 2017. Twenty-four were qualitative studies, 17 were quantitative non-randomised studies, seven were literature reviews, five were mixed methods studies and one was a quantitative descriptive study [10]. The key facilitators to implementing new ANP roles included:

- the ability to collaborate effectively, develop trust and have good relationships with doctors and other colleagues
- support of the role from doctors, nursing colleagues and other health professionals
- doctors' positive beliefs and attitudes about ANP competence and scope of practice.
- the skills and abilities which ANPs could bring to their role in primary care including their knowledge-base, adaptability, and previous experience of working with ANPs in primary care.
- continued funding of the role in terms of salaries and financial reimbursement
- forward planning for the role, integration and role negotiation based on the needs of patients, colleagues and organisations.

The key barriers to implementation of ANP roles included:

- team factors including a lack of awareness or acceptance of the role from doctors and other health professionals
- difficulties or tensions in the collaborative relationship and resistance to the implementation of the ANP role (which arose in both inter-professional and intra-professional groups)
- reluctance or refusal to work collaboratively with ANPs, for example, declining referrals or not sharing information
- Blurred lines of responsibility and lack of a clear understanding of the professional role and boundaries, and thus associated responsibilities and legal status of the ANP
- restrictions being placed on the ANPs scope of practice to work autonomously through a lack of awareness or confusion around the scope of practice uncertainty from the perspective of employers, doctors, nurse colleagues and other health professionals regarding the role in practice.

ANP Evaluation in Scotland conducted by SSPC

This evaluation, led by GH (Project Lead) and HS (Researcher), was done in two phases (March 2017 - May 2018); a national scoping phase to assess the number of tests of change in Scotland that involved ANPs, and a series of 'deep dives' in selected Health Boards to explore the development and implementation of ANPs in more detail. The main sources of data in both phases of the evaluation were (1) interviews with key informants involved in the planning, implementation of primary care tests of change across Scotland and (2) national and local documents relevant to primary care transformation. The full report can be accessed at www.SSPC.ac.uk/publications

National Scoping (Phase 1)

In total, **68 documents and websites** were reviewed; 20 national and 48 local, relevant to the implementation of ANPs in Scotland, and **44 key informants were interviewed** from all 14 territorial health boards and one special health board (NHS 24; Scotland's national telehealth and telecare organisation) in the national scoping of ANPs in Scotland. **The findings** indicated that the majority of territorial health boards in Scotland, and NHS 24, had one or more ANP 'tests of change' projects underway in general practice. The first ANP Academy, West of Scotland, was established, covering a number of territorial health boards, NHS24 and the Scottish Ambulance Service. The intention, at the time of scoping in early 2018, was to add a North and East Academy to cover all of NHS Scotland. Although NHS Lothian was not involved in the West of Scotland ANP Academy, it had collaborated with Edinburgh Napier University to extend an ANP Masters level programme to include primary care as a specialty.

The **national definition** of an ANP and criteria required has been defined in Scotland as:

> *'…. experienced and highly educated registered nurses who manage the complete clinical care of their patients, not focusing on any sole condition. ANPs have advanced-level capability across the four pillars of practice: clinical practice facilitating learning leadership and evidence, research and development.'*[11]

Criteria state that ANPs should be: educated to masters level (minimum Postgraduate diploma); aligned to level 7 of the NHS career framework and agenda for change band 7; non-medical prescribers; and assessed as competent in their area of practice [11].

ANPs work across a number of primary care settings including GP Practices, Out-of-Hours services, community services, prison services, care homes and community hospitals. It was not possible to quantify the exact number of ANPs in primary care settings in Scotland at the time of the evaluation. However, there were ANPs meeting the national criteria for this role in all but two of the 15 health boards, and these had test of change in progress or planned that involved nurses undertaking training to meet the national criteria for the ANP role. The range of activities undertaken by the ANPs was diverse and included telephone triage, diagnosis and treatment of minor illness, management of long-term conditions undertaking home visits and visits to care home in general practices. In general, ANPs were undertaking clinical tasks traditionally done by GPs.

ANP Deep Dives (Phase 2)

Five health boards were chosen as case sites for selection of the deep dives; Ayrshire and Arran, Greater Glasgow and Clyde, Highlands and Islands, Lothian, Shetland. The findings were based on **19 semi-structured interviews and 1 focus group discussion** (with 5 participants) with a wider range of stakeholders that included GPs, education staff, ANPs and ANP trainees and documentary analysis of two local evaluations. **The findings** indicated that, In general, interviewed ANPs and ANP trainees were highly motivated, self-directed, and self-aware. They viewed their professional identity in nursing and not as a substitute or 'mini-GP'. They wanted recognition for the unique contribution that the combination of nursing and advanced clinical decision-making competencies and experience brought to their role. They understood, however, that the new role needed to be developed with consideration of the primary care and community multi-disciplinary team (MDT) skill mix.

Results from four evaluations were described: **NHS GG&C** stated that two ANPs working in Inverclyde had taken on 32% of the home visits previously undertaken by GPs therefore releasing GP time and enabling increased availability and length of some GP appointments from 10 to 15 minutes. In **NHS Lothian,** ANPs were working as part of the Collaborative Working for Immediate Care (CWIC) which had been evaluated in a small survey and demonstrated enhanced service user journey, positive service user feedback, and appropriate onward referrals with improved timeliness of care. **NHS Shetland** had 3 ANPs and 5 ANP trainees in practice and reported improved access to primary care and positive service user feedback. **NHS Highland** reported that ANPs were undertaking 40% of the workload in OOHs urgent care services (60% by GPs). A case review audit concluded that ANPs had made appropriate clinical decisions, achieved clear criteria for hospital admission, provided excellent person-centred care, made purposeful attempts to keep people well in their own home, and had good standards of record keeping.

Changes over time – These related to education and governance arrangements. There was increasing acknowledgement of the need to ensure that ANP education and development reflected the 'specialty' of primary care in academic and work based learning. For example, additional education and development for those unfamiliar with the primary care context was introduced in NHS Lothian. There was also recognition of the need for dedicated ANP education leads, as well as for appropriate levels of study. Reported challenges of Continuing Professional Development (CPD) in some areas of Scotland suggested that greater peer support and more use of technology to support virtual networking is required. It was clear that there is a need for a structured approach to CPD and maintenance of competencies and a need to monitor this as part of governance frameworks.

Scaling up and Sustainability - With a limited number of suitably qualified and experienced ANPs available, scaling up ANP role implementation is challenging and dependent on;

- provision of suitable ANP education and development, which takes 2/3 years and significant effort from ANP trainees and GP supervisors. ANPs, once trained, can change practices (and health boards) readily.
- sustainability: the future pool of ANP trainee recruits is largely drawn from community and primary care nurses, many of whom are over 45 years of age.

- national leadership, clear definitions, and collaboration across primary care, communities and universities, to promote better understanding and more consistent education for ANP
- a lack of understanding of advanced nursing along with inconsistent standards of clinical supervision, study leave, and triaging of appointments were considered to be hampering development. Going forward, careful consideration is required in terms of governance and the maintenance of competencies.

Key Learning from the ANP study deep dives

- ANPs with appropriate competencies and confidence have the capability to help address current GP workforce and workload challenges by taking on elements of GP caseload.
- Where nursing experience as well as advanced clinical decision-making skills were fully utilised and integrated into the work of the MDTs, it was felt that ANPs added value to those elements of the GP role they undertook.
- ANP roles in primary care appeared well received by some patients, GPs and nurses.
- ANPs required considerable time in terms of training, support, study-leave and GP clinical supervision.
- The Academy model provided a platform for collaboration between health boards, general practices and higher education institutions.
- There are currently insufficient supervisors, both GP and ANP, to increase training significantly in the short to medium term.
- Due to recruitment concerns, training effort, capacity issues, scarcity of clinical supervisors, and the current workload in primary care, it remains unclear as to whether sufficient numbers of ANPs can or will be recruited and trained to significantly impact on the GP workforce crisis.
- There is a clear need for quantitative evaluation, possibly at a national level, of the developing roles, sustainability and impact of ANPs in primary care over the next five years.

Implication for collaborative quality improvement in GP clusters

Many ANPs are currently working effectively across Scotland in OOH, in general practice seeing a variety of patients in surgeries, carrying out home visits and working in community hospitals. It is clear that they are beginning to make a significant contribution to the multidisciplinary team envisaged in the new GP GMS contract (2018). However, there are also constraints on ANP training, education and clinical supervision, which may limit the growth in the number of ANPs in the future.

The variety of roles that ANPs are able to fill means that they have the potential to support GP clusters in several different ways, according to the local workforce situation, population and service needs. These could include:

- Small practices in clusters which could organise themselves to share an employed ANP. This could also allow sharing of local guidance for chronic disease management, audit and other quality improvement (QI) tools across the cluster.
- Adding additional capacity to see patients at home, including care homes, and in surgeries could release GP time to spend longer with patients with complex Multimorbidity, attend external meetings, and carry out QI work for the practice and the cluster.
- The perspective of an ANP view (which has both traditional nursing values and a senior decision making role) could add considerable value to the development of GP clusters over time.
- Local training could also enable an experienced ANP to undertake a QI role across a cluster, working with the lead GPs and other members of the MDT

ANP development across primary care in Scotland is still at an early stage, and it is likely that diverse approaches will evolve according to the local context. For future learning, it is important that wherever possible, these are captured and evaluated so that learning can be shared. Although primary care ANPs clearly have the capacity to work as independent practitioners, a ‘co-management’ approach, based on effective communication, mutual respect and trust, and clinical alignment/ shared philosophy of care may be the best model for continuity of care for the patients, and for reducing stress and burnout in the primary care workforce [12].

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