# Clinical nurse specialists: essential resource for an effective NHS

### Cheryl Vidall, Helen Barlow, Maggie Crowe, Isabel Harrison and Annie Young

he concept of the clinical nurse specialist (CNS) is over 100 years old, but the role has seen rapid development in recent decades (Trevatt and Leary, 2010). There is a lack of clarity in the UK about the definition of these nurses. However, there is growing evidence that CNS' make a considerable difference to patient care, and that investment in the role can generate efficiencies and even cost savings for the health service. For example, in oncology alone, it has been estimated that the provision of one-to-one specialist care, as exemplified by the cancer CNS model, could cut the net cost of cancer care in England by around £19 million per year (Frontier Economics, 2010).

Unfortunately, these benefits are seriously undermined if CNS' are deployed in routine, non-specialist nursing work, or elected for roles that lack a leadership component, as we are becoming aware is increasingly the case.

Many of the recent national initiatives focusing on the CNS role have been in the oncology arena; and as UKONS members, we are able to bring insight into these developments. However, most of the issues facing the oncology CNS workforce have equal relevance to CNS' in other disciplines, and there is evidence for the efficacy of the CNS role outside of oncology.

In this article, we consider the scope and impact of the CNS role, the data available on UK CNS provision, and the need for some CNS' to work differently.

#### What is a CNS?

There is no clear definition for a CNS (Farrell et al, 2011), and there is wide variation between individual CNS' in the type of work they undertake. However, there are certain core features (National Cancer Action Team (NCAT), 2010a), and these are summarized in *Table 1*.

The focus of a CNS' speciality may be a specific disease area, or it can be another aspect of patient care; for example, a particular population group (e.g. children), a care arena (e.g. palliative care), or a treatment category (e.g. chemotherapy) (NCAT, 2010a). Many CNS' apply their specialist expertise to leadership and managing a patient caseload, where they provide a patient-focused approach to diagnosis, care planning, treatment provision, follow up, ongoing management and continuity of care. In many instances, this role is enhanced by the CNS' role as a non-medical prescriber (Stenner et al, 2011). The CNS role also embraces education and leadership of other health professionals including junior doctors, as well as nursing staff. *Table 2* shows some current examples of CNS roles and provides an idea of their wide diversity.

#### **Abstract**

Despite emerging evidence for the clinical and financial efficacy of the clinical nurse specialist (CNS), the provision of this role is patchy across the country. There is also a risk that incumbent CNS' may be redirected to less specialist work in trusts that do not appreciate the full value of the service that these nurses provide. Optimal and equitable patient access to CNS care will require the development of a strong evidence base showing that specialist nurses not only deliver patient-focused care, but that they can also help to meet healthcare managers' objectives of streamlined, cost-effective clinical services.

**Key words:** Clinical nurse specialist ■ CNS ■ Key worker ■ Holistic care ■ Leadership ■ Efficiencies

At the same time, CNS' maintain traditional nursing roles, such as patient advocacy within the multidisciplinary team, assessment and care planning, high-level communication skills and provision of information and support for patients and their families and carers.

Unfortunately, the benefits of individual CNS' are not always realized to the full. Anecdotally, some trusts are asking incumbent CNS' to engage in fundamental care as part of the ward rota. Indeed, we fear that some trust managers may regard the one-to-one, holistic care that forms the core of the CNS service as a luxury they can ill afford in the current economic climate, whereas the value of general nursing duties is easy to comprehend when attempting to fill a duty roster.

#### The CNS in today's NHS

There are many challenges facing CNS' working within the NHS under current economic constraints. The NHS is looking to make cost savings and some trusts and senior managers see the CNS role as an unaffordable luxury. Role erosion, mergers and cuts are being implemented in a move to recoup staffing costs and reconcile the budgetary deficit.

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#### Table 1. CNS background and role (NCAT, 2010a)

- · Nursing education at graduate level, and usually also at masters level
- Detailed, regularly updated knowledge and expertise within a specialist clinical area
- · Ability to work autonomously within the specialist area
- · Delivery of high-level patient care, including:
  - o Detailed, holistic needs assessment
  - o Individualized care planning
  - Provision of individualized information and advice to patients and their families/carers including, where needed, direct phone contact outside of scheduled appointments
  - Minimization of both the clinical and the psychosocial effects of the patient's condition and/or its treatment
  - o Referral to other services as appropriate
  - Empathy and responsiveness to the wishes and concerns of patients and their families/carers
  - o Continuity of care over time and between different services
- Active participation in the appropriate multidisciplinary team, as the patient's advocate
- · Leadership of clinical governance and audit
- Leadership of service innovation and redesign in response to audit findings, ongoing clinical developments and evolving patient needs
- Provision of information, education and resources to nurses and junior doctors involved in the care of patients within the specialist area
- · Acting as a role model for autonomous, specialist nursing

# Table 2. CNS roles in the UK: examples in recent literature

#### **Patient care**

- ullet Information provision on breast reconstruction (Osborne et al, 2010)
- Telephone follow up after cancer treatment (Beaver et al, 2010; Beaver et al, 2011)
- Minor ophthalmic surgery (Dunlop, 2010)
- Facilitation of same-day discharge after surgery (Graham et al, 2010)
- · Combined renal and palliative care clinic (Harrison and Watson, 2011)
- Detection and management of emotional distress in people with cancer (Absolom et al, 2011)
- Inpatient pain management (Stenner et al, 2011)
- Management of patients with epilepsy (Bingham, 2011)
- Management of children with attention-deficit hyperactivity disorder (Foreman and Morton, 2011)
- Rapid-access triage, assessment and treatment for patients with transient loss of consciousness (Petkar et al, 2011)
- Support for patient decision-making on treatment for advanced lung cancer (Thornton et al, 2011)

#### **Education and service development**

- Improvement to cannulation practice at an NHS trust, through audit of outcomes and evaluation of a new cannula stabilisation device (Bolton, 2010)
- Development, implementation and evaluation of a multidisciplinary training programme to improve practice in dementia care (Crabtree and Mack, 2010)
- Mentoring and support of preregistration nurses on practice placements (Susie and Kane, 2010)
- Team co-ordination/training/education in management of childhood sleep disorders (Caulfield, 2011)
- · Identification and referral of potential organ donors (Garside et al, 2011)

#### Local and national influence

At a local level, CNS expertise is essential to the functioning of multidisciplinary teams and other key professional groups. For example, the CNS may provide effective liaison between the different professionals involved, as well as continuity for the patient along the care pathway. Furthermore, the CNS is frequently nominated as the 'key worker' and 'navigator' within the cancer multidisciplinary team. On a wider scale, the CNS role has underpinned many key changes in the NHS, such as the Quality, Innovation, Productivity and Prevention (QIPP) agenda (NHS Institute for Innovation and Improvement, 2008; NCAT, 2010a), increased reliance on day-case care, shortened (or avoidance of) hospital stays, access to 24-hour surgery, personalized care planning, effective discharge planning and handover, rapid-access diagnostics, specialist care, and provision of advice and education tailored to the individual patient's needs. One-to-one CNS care is central to the patient-focused 'no decision about me without me' principle set out by the Department of Health (DH) in Liberating the NHS: Legislative framework and next steps (DH, 2010a).

The development of the CNS role has included many aspects of care that were traditionally the domain of the medical profession. CNS' in cancer care have led and delivered patient alert systems designed to detect and manage life-threatening complications that patients may develop while at home between treatment cycles (Weaver et al, 2007). They are also in the driving seat of the ongoing initiative to address the lifelong needs of cancer survivors (Torjesen, 2011), taking the concept of continuity of care beyond the confines of ongoing clinical management.

#### Patient outcomes and satisfaction

The value of the cancer CNS was highlighted in 2007 by the DH in the Cancer Reform Strategy (DH, 2007) which stated that they had a 'critical role in cancer care'. It was evident however, that many of the CNS benefits cited by the DH had relevance for other specialities, as well as oncology (Keenan et al, 2010). The challenge facing CNS' in non-cancer specialities, therefore, was how to demonstrate the scope and complexity of their role. In response to this need, a cancer CNS, Alison Leary, University College London Hospitals Foundation Trust, developed a database tool called Pandora, designed to record CNS work both qualitatively and quantitatively (Leary et al, 2008). Pandora has recently been used to demonstrate the contribution made by CNS' to patient care in surgery (Keenan et al, 2010) and rheumatology (Oliver and Leary, 2010).

There are many other recent examples in the literature of local, outcomes-based studies that demonstrate the efficacy of the CNS role. For example, a group at Leicester Royal Infirmary has found that patients receiving laparoscopic interventions are more likely to go home on the day of surgery if their discharge is managed by a CNS rather than a doctor, with no difference between the groups in readmission rates or need for primary care attention (Graham et al, 2010). Similarly, research in Greater Manchester has shown that rapid CNS-led assessment of patients who experience blackouts provides effective triage and reduces the likelihood of readmission (Petkar et al, 2011).

In oncology, an England-wide picture of the impact of the CNS is beginning to emerge. The *National Cancer Patient Experience Survey* conducted in England in 2010 found that of more than 67 000 respondents, 84% had been given the name of a CNS (DH, 2010b). Of these, over 90% said that their CNS had listened to them carefully and provided understandable answers all or most of the time (DH, 2010b). Commenting on the findings, the National Cancer Director, Professor Sir Mike Richards (2010) said: 'One of the most positive aspects of this survey relates to the care given by CNS'. Patients with a CNS reported much more favourably than those without on a range of items related to information, choice and care.'

#### Costs and savings

In our value-driven NHS, it is imperative to highlight the financial benefits, as well as the quality-of-care justifications for investment in a CNS.

In the simplest terms, a CNS-run clinic can save consultant time, a key consideration given junior doctors' working hours are curtailed by European law. However, the cost benefits can go much further. The holistic care and timely interventions provided by a CNS not only help to reduce patient morbidity, they also potentially prevent costly care episodes (e.g. unplanned hospital admissions) (Baxter and Leary, 2011). Returning to the examples of CNS practice previously cited, prevention of unnecessary inpatient stay (Graham et al, 2010) and reduction in readmission rates (Petkar et al, 2011) have clear ramifications for the NHS purse.

Similarly in oncology, patients receiving certain myelosuppressive chemotherapy regimens may develop neutropenic sepsis, a potentially fatal adverse effect requiring high-cost, emergency, inpatient assessment and care (National Confidential Enquiry into Patient Outcome and Death (NCEPOD), 2008). Less life-threatening side effects, such as nausea and vomiting, and severe diarrhoea, can make significant demands on primary care services (North of England Cancer Network (NECN) Chemo Group, 2011). Stringent application of core CNS skills, such as patient and professional education, development and enforcement of care protocols, development and implementation of patient alert systems, patient advocacy and regular audit, can minimize both the human and financial burden imposed by these side effects (Young et al, 2009a; NCAT 2010a; Absolom et al, 2011; Thornton et al, 2011). Of note, effective management of serious side effects can help to avoid chemotherapy dose reductions, delays and omissions and thereby improve the likely efficacy of treatment (Bonadonna et al, 1995; Young et al, 2009b).

The value for money of the CNS workforce can be maximized by ensuring that these specialists do not spend time on activities that can be performed equally well by lower-band staff. For example, the Royal College of Nursing (RCN) (2010) has reported that administrative tasks account for 21% of rheumatology CNS hours, suggesting that a substantial proportion of time could be redirected to more appropriate, specialist work. Similarly, a workload analysis conducted at one London hospital found that lung cancer CNS' spent 38% of their time on administrative tasks, including provision of secretarial support for the cardiothoracic unit (Baxter and

Table 3. Variation in cancer specialist nurse provision at cancer network level (NCAT, 2010b)

Tumour type	New cases/y cancer speci Mean	ear per 1 whole-time e alist nurse in English ca Lowest	quivalent (WTE) ncer networks Highest
Head and neck	61	29	131
Sarcoma	79	11	151
Dermatological	79	21	237
Breast	83	51	135
Colorectal	84	48	137
Haematological	87	27	171
Gynaecological	90	35	135
Brain/central	97	35	370
nervous system			
Upper	97	35	370
gastrointestinal	97	35	370
Lung	128	76	207
Urological	159	83	373

Leary, 2011). We are also aware that some CNS' continue to attend consultants' clinics in a traditional 'handmaid' role; a regrettable and unjustified misuse of the CNS resource, in our opinion, and a role that should be transferred to appropriately trained healthcare assistants.

In an independent report commissioned by the DH and published in December 2010, it was estimated that, taking account of various potential savings, including the avoidance of emergency inpatient care and GP appointments, and assuming delegation of non-specialist tasks, the provision of one-to-one specialist care could cut the net cost of cancer care in England by around £19 million per year (Frontier Economics, 2010).

#### **CNS** provision

There is a lack of clear CNS workforce data across the UK, but there are 'snapshots' available within certain regions and specialities. For example, in September 2010, the number of CNS' in Scotland was reported to be 2006.9 whole-time equivalents (WTEs) (NHS Scotland, 2010). The CNS workforce in England has been explored by census in 2007, 2008 and most recently, 2010. At the latest count, those giving CNS as their job title accounted for 2164.2 WTEs (NCAT, 2010b). (These figures exclude palliative care, community and paediatric nurse specialists, who are surveyed separately.)

Data from the three English census years are difficult to compare directly, since the response rates varied (100% in 2007; 89% in 2008; 100% in 2010), and there were differences in the inclusion criteria as well as in the definitions of CNS groupings (NCAT, 2010b). Nevertheless, the authors note a small increase in CNS posts since 2007 in brain/central nervous system, lung, upper gastrointestinal and haematological cancers, but warn that the expansion is insufficient to keep pace with the current growth in cancer prevalence (estimated at 3.2% per year).

#### **Moving forward**

It is essential that CNS' gather evidence to show, clearly and robustly, just how important their contribution is to the overall



picture of health care, particularly in terms of measuring and costing their activities (and demonstrating their potential for income generation for trusts and other service providers) (Fletcher, 2011; Smy et al, 2011). Such evidence, we believe, will highlight the pressing need to properly harness and further develop the specialist skills, expertise and quality that CNS' bring to the clinical arena. We urge CNS' to regard such evidence collection as a key aspect of their role. Meanwhile, however, we call on all trusts to examine the evidence that has emerged so far demonstrating that holistic, autonomous CNS care can improve both the quality and the value for money of patient care. For example, the lung cancer nursing service in a London hospital has reported that the rate of lung cancer admissions for non-acute problems fell from 4 per month to 0.3 per month after the adoption of a proactive case management approach to patient care, with the CNS' as the key workers or key accessible professionals, (Baxter and Leary, 2011). Before the study, the lung cancer CNS' had spent a considerable proportion of their time on non-specialist work. The authors comment that CNS', working in an appropriate specialist capacity, represent a good return on investment.

CNS' may also benefit from having a higher profile across the hospital setting. Diversion of costly specialists into routine ward work is a waste of money. However, an active, but clearly specialist, presence on wards will help not only to demonstrate the value of the role, but also to bring specialist knowledge and expertise to ward staff. It is essential to ensure that CNS' do not lose the essence of nursing as they take on an increasing and highly specialist workload.

Lastly, in light of the changing face of the NHS under current reforms (notably the move towards GP-led commissioning and a greater emphasis on community-based care), it is crucial to highlight the ongoing need for the one-to-one care that a CNS can provide, whatever the setting.

#### **Conclusion**

The NHS needs to adapt and prepare for the challenges of modernization and financial constraint. The CNS role will need to deliver patient-focused care in a cost-effective way and help to meet many of the current demands for increasingly streamlined, but high-quality and safe, services.

The CNS role is crucial to patient outcomes, but it is apparent that the CNS resource is not being developed or used in a consistent way across the country. National bodies, such as the UK Oncology Nursing Society (UKONS), need to offer a competency framework and national standards to harness CNS skills to the full and further develop them, as well as making sure their numbers are adequate across clinical areas and across the population. CNS' need to be able to defend their services through the production of robust business plans demonstrating the benefits of their role in terms of national policy and NHS outcomes (Fletcher, 2011). We also need a coherent evidence base demonstrating the impact that CNS' have at the clinical coal face (Ream et al, 2009), particularly in

these times of increasing patient demand, the ageing demographic and organizational change.

Conflict of Interest: none

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#### **KEY POINTS**

- Provision of one-to-one specialist care, as exemplified by the cancer CNS model, could cut the net cost of cancer care in England by around £19 million per year
- CNS expertise is essential to the functioning of multidisciplinary teams and other key professional groups
- The benefits are seriously undermined if CNS' are deployed in routine, nonspecialist nursing work, or elected for roles that lack a leadership component
- The holistic care and timely interventions provided by a CNS not only help to reduce patient morbidity, they also potentially prevent costly care episodes
- With about 0.38 whole-time-equivalent (WTE) cancer CNS' per 100 000 population in Scotland, versus about 0.04 per 100 000 in England, it appears that the chance of seeing a CNS is considerably higher north of the border
- CNS', like all healthcare staff, should rise to the challenge of the changing NHS by being business minded as well as patient centred

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