A one-year project, commissioned by the Royal College of Nursing Rheumatology Forum (RCNRF) to identify the true dimensions and value of the clinical nurse specialist role in rheumatology, has demonstrated that the rheumatology clinical specialist role is a cost-effective resource within the National Health Service.

The work of the clinical nurse specialist (CNS) in the UK is usually described using the four elements, clinical, education, research and consultation (Hamric and Spross, 1989). However, studies, including those of Leary et al. (2008), have demonstrated that this is an over-simplification and fails to demonstrate the complex dimensions of care and management that the clinical nurse undertakes (Leary et al., 2008). Much of the CNS role focuses on the coordination of care, and negotiating between different healthcare professionals or sectors of care, to ensure that the patient receives the care they need (brokering), as well as other aspects of care that show vigilance, such as preventing patients from developing serious issues or side effects that may necessitate inpatient admissions (rescue work) (Silber et al., 1992).

Evidence collected during the one-year period of this project (February 2009 to February 2010), from 99 clinical nurses, represented over 100 days of data of nursing activity. The project used the Pandora database system (Leary et al., 2008), which was developed to capture the activity of nurse specialist work and has been validated in a number of specialist areas of practice, including cancer care (Breast Cancer Care, 2008). Importantly, the evidence collected using the Pandora database was also strongly supported by evidence obtained from a recent survey of nurse activity and productivity (Royal College of Nursing, 2009).

A detailed explanation of how nurses input their work using the Pandora database is fully described by Leary et al. (2008) but, in basic terms, there are eight domains that have been generated from earlier verification studies. These eight domains form the initial sections for data input (based upon actual activity, not related to an individual patient episode). The domains can be seen in Figure 1.

This means that the nurse would input their activity by defining what they had been doing, starting with one of the eight domains, and then inputting into a range of sub-categories that provided greater information, to define the activity in more detail in terms of the date, the context, the level of temporal and emotional effort required for the activity, as well as the outcome. In addition, there was a free text box to record additional narrative, which helped to describe the event in more detail. The narratives were used for qualitative evaluation and added granularity to the overall information obtained.

The data generated also enabled the activity described to be modelled using an economic analysis based upon National Health Service (NHS) activity and Health Resource Group (HRG) codes. This economic modelling demonstrated that a whole-time equivalent (WTE) CNS over a one-year period provided:

- Outpatient appointments, which relieved the pressures on the consultant or senior doctors within the rheumatology team;
• Telephone advice line support, offering a cost-effective resource and high levels of vigilance in relation to patient outcomes, and a reduction in requests for a primary care team appointment or attendances at emergency services (economic modelling based upon principles outlined by Hughes et al., 2002)
• 6.25 hours per week of administrative work that required neither clinical nor specialist expertise and could therefore be provided by clerical support
• High levels of vigilance in relation to drug management. This included blood monitoring, proactive management of potential drug-related side effects or poor disease control and positive support for patients experiencing exacerbations of their condition.

The overall cost savings in relation to these activities was calculated based upon a WTE post over a one-year period demonstrated a cost saving to the NHS of £225,000 per annum.

Further financial benefits of the CNS role in rheumatology were reliant upon the nurses participating in this study inputting any additional targets that might have been part of their activity (for example, any measures related to Quality and Outcome Framework points or similar financial targets). However, although there are targets that have to be achieved for the CNS post in rheumatology, any additional activity currently undertaken is not subject to any income generation scheme. This is of particular relevance to measures such as those undertaken for disease assessments and treatment criteria related to adherence to National Institute of Health and Clinical Excellence guidance.

The Pandora project has demonstrated that the CNS in rheumatology provides a valuable resource for the organization and the patient, showing a positive return on investment. The CNS is a highly vigilant practitioner, using their expertise to ensure that they are available as the knowledgeable, accessible specialist that the patient can access.

There are important factors to consider when reviewing this evidence (further paper pending). In particular, these data were derived from 99 nurses working as clinical specialists in rheumatology. The National Audit Office report (National Audit Office, 2009) has identified 377 CNS posts in rheumatology. The data were input based upon a modelling process that has been verified by other CNS roles, and the specialist aspects of the database were generated from an expert panel, and then tested and refined. Nurses’ data inputting was also able to add additional categories or free text to qualify their input if needed.

This is the first study specifically exploring the activities of the CNS in rheumatology using an inter-relational database. Further studies would be welcomed to undertake more in-depth exploration of the clinical benefit to patient outcomes, based upon the key aspects of vigilance and the provision of the accessible knowledgeable specialist for patients and how this influences patients’ perceptions of self-efficacy, continuity of care and access to treatment.

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