Nursing Practice

Innovation

Community nursing

Safe staffing levels are vital to high-quality care so a community nursing service developed a tool to align anticipated patients’ care needs and staff availability.

Developing a dependency and capacity staffing tool

In this article...

- The importance of aligning staff allocation and patient need
- How the dependency and capacity tool was developed
- Service improvements resulting from use of the tool

Keywords: Community nursing/District nursing/Safe staffing/Patients’ needs

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Abstract

Policy drivers to move care out of hospital and into the community also emphasise the need to ensure resources are used effectively. However, there is a paucity of information and processes to support successful management of demand and capacity in community nursing services.

With the current emphasis on achieving safe staffing, a solution had to be developed in Solihull that can assess the anticipated demand in terms of individual patient needs, to inform the required nursing capacity on a day-to-day basis.

This article describes how involving staff helped create an effective dependency and capacity tool operated through the clinical recording system.

In Solihull the majority of adult community pathways rely on the skills, competency and capacity available in community nursing. There are five teams based in separate locations across the borough. Until 2013 it had not been possible to establish an effective methodology to support safe staffing requirements within the context of variable and changing caseloads.

The introduction of an adapted quality-monitoring process, called nursing metrics, into community nursing highlighted the need to address emerging issues regarding the service’s ability to deliver care that consistently achieved the required quality standards. On discussion with staff, one element stood out that related to their ability to deliver safe, effective, quality care within the staffing resources available to them. There was a requirement to establish real-time information that would determine whether appropriate resources were in place to meet the growing needs of patients, and whether those resources were allocated fairly and appropriately to meet those identified needs.

Review of the literature
A literature review was undertaken and confirmed there is a very limited evidence base relevant to this particular subject area. However, the literature that is available falls into two main categories:

- Strategic policy documents pertinent to community nursing and the need to establish effective capacity management processes;
- Peer review articles relating to the development and evaluation of specific capacity management tools.

The chief nursing officer for England’s strategy document, Compassion in Practice (Department of Health, 2012), identifies the 6Cs that nurses should be striving to achieve, which includes the need for safe, high-quality care and emphasises the connection with an effective use of resources. The emphasis on the need to facilitate the delivery of safe, high-quality services within the context of cost efficiency is increasingly being recognised (Royal College of Nursing, 2011). However, the RCN (2011) highlighted that the focus of work has been on the acute setting, with very little attention paid to

5 key points

1. The national policy drive is for the delivery of more care in the community.
2. There is an emphasis nationwide on the effective use of resources.
3. An evidence base to support safe staffing in the community is lacking.
4. Assessing the capacity and demand of community caseloads is vital to safe staffing.
5. Staff must be involved in developing an effective demand and capacity tool.

To provide high-quality community, enough staff must be on duty when needed.
the community in terms of safe, effective staffing requirements.

The Audit Commission’s document First Assessment: A Review of District Nursing Services in England and Wales (Audit Commission, 1999) was published more than 15 years ago but the findings are relevant in the context of current-day provision. The report states:

“District nursing is an essential ingredient in the complex pattern of support that is needed to sustain people in their own home.”

Local review of the literature identified only seven specific pieces of work undertaken in relation to community nursing that attempted to establish mechanisms for measuring and monitoring caseload commitments as a way of informing staffing requirements. The majority of these projects took place more than 10 years ago and have not resulted in systematic adoption of the developed tools within community nursing.

All the tools reviewed recognise that the capacity calculation for community nurses cannot be determined purely by the number of visits undertaken by staff. The tools varied in terms of the method used to determine levels of dependency or the intensity of care needed, and no two tools used the same formula. Of particular note was the repeated emphasis on trying to quantify the frequency and length of time of interventions for patients on the caseloads. There was also repeated reference to professional judgement being part of the process for establishing levels of care required. It was evident that the level of engagement and subsequent adoption of some of the tools were hampered by the perceived additional workload associated with the tools. In summary, the tools reviewed all attempted to quantify the care required by patients on community caseloads by using processes that incorporated frequency and intensity of care required.

Developing a dependency and capacity tool
In Solihull the community nursing service incorporates a skill mix of healthcare assistants, staff nurses, district nurses and community matrons. As a service, community nursing operates around defined caseloads aligned to individual GP practice populations. The service had previously introduced a dependency tool that was being used to varying degrees but this was not being used systematically to inform patient allocations. A visit to another provider had highlighted the use of a manual tool to identify staffing and patient profiles for the coming week, with a view to informing effective deployment of available resources. This initiated discussion locally on the potential to develop an electronic process using similar principles.

The Solihull tool evolved following use of a daily dependency scoring framework loosely based on the Warrington Workload Tool (Frame and O’Donnell, 1996). The impact of professional judgement, when developing the tool was – and continues to be – of particular relevance.

A custom-built data capture system was developed to allocate patients to one of five categories of dependency, subject to the intensity of care they require:

» Dependency levels 1 to 4 – allocated time values that increase by 15-minute intervals, with an allocation of 15 minutes (dependency level 1) increasing to an allocation of 60 minutes (dependency level 4).

» Dependency level 6 – a time allocation of 90 minutes, which is used, for example, when conducting new patient assessments.

Dependency level 5 was omitted as our work highlighted that other than assessment visits which take an average of 90 minutes no care intervention went beyond an average of 60 minutes (level 4).

Diabetes care can be used as an example to highlight the differences in dependency allocations; for example, a routine visit for a daily insulin injection would be allocated a dependency 1 (15 minutes), whereas a visit for full review of diabetic care may be allocated as a dependency 3 (45 minutes).

The process aims to give an idea of how much time staff are expected to spend with a patient to meet their identified care needs.

Having allocated patients to the categories, the data capture system was then able to profile the anticipated workload for the coming week, overlaid with anticipated available staffing hours. The tool
dependency for the nurse visit would be identified as category 2 (30 minutes).

Overall the focus group confirmed that, although there were occasional discrepancies in the allocation of dependency levels, this was more reflective of patient-specific information that informs professional judgement, rather than inaccuracy with the application of the dependency tool itself.

While the development of the processes using the data capture system were taking place, parallel work was being undertaken within the organisation to develop the use of the clinical recording system (SystemOne). The intention was to facilitate electronic allocation of nursing visits, using individual patient care plans set up within the system.

All community nursing in Solihull is based on allocations to meet specified need within individual care plans, such as wound care and the administration of intravenous antibiotics. The ability to use an electronic allocation system facilitated the move away from a paper-based, team-specific “T-Card” system, which uses individual cards for each patient visit slotted into a seven-day wall-mounted visit planner in each team base, to processes that provided oversight of all community nursing activity. However, feedback from staff highlighted that work needed to be duplicated to populate information for the dependency and capacity tool as well as the electronic depending level is affected by patient-specific detail. For example, if a patient requires a dressing change for a sacral pressure ulcer and the nurse is required to hoist and position the patient before and after the dressing change, the allocation would potentially need to be longer than if the patient was relatively mobile and able to position themselves. It is therefore not possible or appropriate to exclude professional judgement. This is reflective of the literature, which indicates that, despite the risk Goldstone et al (2000) highlighted in terms of professional judgement potentially manipulating a tool, it has not been possible to develop a community-based procedure for managing patient demand that excludes elements of professional judgement.

Patients with multiple nursing needs

Patients having multiple nursing needs results in different dependency levels, subject to which nursing tasks need to be undertaken at any specific visit. Patients, therefore, potentially need more than one dependency score. For example, a patient with diabetes requiring daily visits for routine insulin administration (allocated as dependency 1–15 minutes), who also requires a dressing change three times a week for a foot ulcer, would also have this care activity allocated (also dependency 1). On the visits when the patient requires insulin and a dressing change, the dependency for the nurse visit would be identified as category 2 (30 minutes).

Overall the focus group confirmed that the teams were comfortable that, although there were occasional discrepancies in the allocation of dependency levels, this was more reflective of patient-specific information that informs professional judgement, rather than inaccuracy with the application of the dependency tool itself.

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The staff attributed the improvement in nursing metrics to an improved workload that allowed appropriate time to assess individual patient's need and plan care effectively.

**Conclusion**
Although policy drivers focus on the need to shift care from the acute settings and cost-effective alternatives to traditional models of care must be developed (Ham et al, 2012), there is a lack of evidence to support the practicalities of how this can be achieved. It is more than 15 years since the Audit Commission (1999) highlighted the need to establish mechanisms that could effectively support the anticipated change in the requirements for district nursing. While there are isolated pieces of work, there continues to be an absence of work regarding safe staffing requirements for community nursing, as highlighted by the RCN in 2011. In addition, there remains a paucity of systematic approaches dealing with the critical issue of understanding the capacity management approaches that are required to support the effective management of community caseloads. In this context, the work that has taken place in Solihull is of significance.

**Outcomes of the work**
From the data collated during the initial dependency and capacity tool roll-out, there was evidence of sufficient staffing hours available to meet patient demand. However, the profiling of staff hours did not align with the anticipated level of patient need. As the work progressed, the alignment of capacity and demand improved. Fig 1 shows the initial staffing versus the identified patient care profiles from the pilot team; it demonstrates that on Thursdays and Fridays the demand for care is predicted to be greater than the staffing hours available. Fig 2, showing the staffing and care profiles three months after implementation of the tool, indicates that alignment between the staffing hours available and the anticipated demand for care had improved.

Discussion with the community nursing teams identified there were two key elements that supported this shift:

- Review of planned care activities to align with available capacity, for example, moving patients who require only a weekly visit to days when it is anticipated demands on caseloads will be lower;
- Review of staff rosters to improve alignment to expected demand.

Thomas et al (2006) observed that case-load planning within the community is often erratic – a situation that is compounded by the increasing complexity of care delivered in such a setting. In Solihull, use of the tool has significantly improved the correlation between demand for service, based on individualised patient care plans and the nursing resources that are available to meet that demand.

One of the triggers for initiating development of the dependency and capacity tool for Solihull was nursing metrics data. Nursing metrics is an audit of the nursing process. For the community, this includes a particular focus on assessment documentation and clear care planning to meet all identified needs. Although this data is not specific to the capacity and dependency tool, it is important to review the impact of changes in the context of this measure. Fig 3 identifies significant improvements in nursing metrics for the team that piloted the initial dependency and capacity tool. Although this could be attributable to other factors, such as improved staff awareness of standards required for nursing metrics, the information gathered through one-to-one interviews and the focus group highlighted some important themes; in particular:

- Use of the dependency and capacity tool provides an overview of what is happening with workload;
- Management of workload is calmer (they felt the tool helped them anticipate the level of care required and plan for it rather than being reactive);
- Use of the tool promotes equity and fairness in workload allocations.

**References**