THE STAFFING CONUNDRUM: 
Matching care staff time to resident needs

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Background:
As a background to the central issue of whether decisions on staffing hours are related to meeting the assessed needs of residents or not, we need to understand the workforce engaged in aged care. Possibly the most comprehensive profile of the Australian aged care workforce is provided by the National Institute of Labour Studies (NILS) reporting on information collected from all aged care providers as part of their mandated agreement for receiving the Conditional Adjustment Payment (CAP) of 1.75% annual increase in government subsidy. The 2003/04 report and the second in 2007/08 contained information of particular interest to staffing.

In the residential aged care occupational structure section it was noted that there had been a decline in registered nursing positions which accounted for 21% in 2003 but only 16% in 2007 – a decline of 1600 positions. At the same time the proportion of personal care workers rose from 59% in 2003 to 64% in 2007 – a rise of 17,500 positions. Registered nurse vacancy levels are rising with 26% of aged care homes reporting an RN shortage and 37% claim it takes at least one month to fill such a vacancy.

While many explain the decline of RN participation in aged care as a feature of a global shortage of registered nurses, the reality is that RNs availability is influenced by the location and type of work and remuneration offered. In 2009 around 2,000 new RN graduates were not able to find suitable nursing work in Australia making the 'RN shortage' a myth. Providers unable to attract and retain RNs in clinical areas may need to review their approaches to employment of professional nurses who, after all, are key to the provision of safe, effective and regulatory compliant services.

The anticipated third NILS report may provide further insights into work re-design decisions of approved providers. In particular we may see if providers attitude toward clinical professionals has resulted in a further change in RN workforce participation rates.

In other staff categories allied health numbers remained stable across the two NILS reports but enrolled nurse numbers also fell. Agency shifts for nurses increased from 3.5% in 2003 to 5.7% in 2007. Personal care (PC) staff form a very small part of agency shifts and 60% of job vacancies are filled within 2 weeks.

Aged care career paths show that 50% of care staff had no prior aged care experience. Formal training and Aged Care Certificate III increased from 55% in 2003 to 65% in 2007. Most want work that fits with family life and personal commitments and see aged care work as an extension of domestic skills. Informal recruitment is the dominant mode of filling positions.

Providers are required to employ people with appropriate skills to safely meet the needs of the residents admitted for care under the Aged Care Act (1997). There is broad understanding within the aged care industry as to what ‘appropriate’ might mean however at the time the clause was drafted, levels of resident frailty, morbidity and need for highly skilled nursing and medical care were much lower than they are in 2011. ‘Appropriate’ therefore needs to be understood in relation to the resident case-mix (health and treatment needs profile) rather than simply the number of people in residence.

Proposals to consider introducing staff to resident ratios generally focus on limiting staff workloads but fail to address the complexity of meeting needs of sicker, older and frailer residents. Staff rosters based on Staff/Patient ratios are no more than a ‘blunt instrument’ that regards all residents as having the same needs and all staff as having the same skills and experience. Still, work redesign across aged care may be further reducing RN participation and increasing the roles and scope of care staff work to substitute for RNs.

Decisions on safe and effective staffing are complex and need to be driven by (1) Case-mix (patient/resident characteristics
and need for care); (2) Intensity of care and size of care unit (individual dependency, number of individuals with high care needs, variability of care, admission and discharge frequency); (3) Context (geographic dispersion of residents, size and layout of the individual rooms, technology, equipment); and (4) Expertise (experience and qualifications of RNs, ENs and other staff, as well as management proficiency in resourcing clinical areas).

The obvious outcomes of getting staffing and skill mix right also address the general public’s perception that a quality chasm in residential aged care is increasing as RN clinical participation decreases or as RNS are diverted into management roles. Systematic reviews of research consistently find a strong relationship between clinical care staffing and specific adverse events, particularly in relation to vulnerable people. Acquired infections, urinary tract infections, blood stream infections, pneumonia, falls, medication errors, pressure ulcers, and increased mortality have been associated in more than one study with poorer staffing (more patients/residents per nurse or fewer hours of nursing care per patient/resident day). Competent management of work environments, type and quality of equipment, careful recruitment and staff support, clinical and organisational care processes and good communications between managers and clinicians may be able to mitigate some adverse outcomes.

The ability to assess resident care needs, obtain funding and provide the amount of care hours required to residents is a core management function for residential care services. Monitoring and maintaining a balance between these three independent processes is crucial to the short and long term sustainability of the organisation. Australian aged care providers who subscribe to the QPS Quality Benchmarking System are able to take advantage of research undertaken to assist QPS clients to understand the relationship between funding and care hours provided to their residents.

For example, an analysis of 3 months of benchmarking data on both funding derived from the Aged Care Funding Instrument (ACFI) and direct care staff work hours, submitted to QPS from 135 facilities (including high and low care; for-profit and not-for-profit; across a range of sizes from <50 to >150 beds), enabled an investigation of questions around whether labour intensity influences the cost of providing services in residential aged care.

**Analysis**

In a correlation study using regression analysis associations between the variables mentioned above were identified. A regression line fitted to the data has an R-Sq of 58% (An R-Sq of around 20% is considered a good fit for this type of research).

**Is ACFI funding being spent on care staff hours?**

The graph at the top of the next column illustrates the results of the correlation, with model showing a strong relationship between care staff work hours (CSWH) and ACFI.

The fitted regression line shows that, on average, an increase of 1 in ACFI value results, on average with an increase of 0.02228 in CSWH. In other words, the higher the ACFI value for residents the higher the direct care staffing hours need to be and are shown to be in the sample tested.

**Does facility size matter?**

The scatter plot (below) of CSWH against ACFI, with facilities differentiated by size, indicates that the number of beds does not appear to have an effect on the relationship between CSWH and ACFI. When regression lines are added for each group size there is a remarkable similarity between the regression lines.

**Summary of findings**

The main study and analysis was more extensive than has been reported here, including for instance, the analysis of for-profit and not-for-profit differences in funding and staffing decisions. QPS members can access this information to assist them to maximise efficiency without compromising resident and staff safety.
In terms of the issue raised as to whether funding and care staff hours are associated, the following findings are of interest:

1. A direct statistical relationship exists between care staff work hours and funding received. The results demonstrate that participating QPS clients monitor and adjust their care hours according to resident care needs.

2. There is no direct relationship between the size of the facility, funding and care staff work hours provided. This means that, for these facilities, care hours are provided according to resident needs rather than by the size of the facility.

Conclusions

Through measuring, monitoring and responding to changes in resident care needs and care hours provided residential aged care facilities can gain efficiencies, or provide safer care. Access to reliable analysis of key elements in staffing decision-making can support providers in achieving efficiency without overloading staff or compromising resident safety. Clearly where resident dependency and need for skilled care and treatment is accurately assessed under ACFI, this funding is needed to access appropriately skilled staff in sufficient numbers to provide safe and effective care. Direct care staffing decisions need to be based on an appreciation of the clinical and organisational complexities of each organisation rather than a simple, one-dimensional formula such as staff to resident ratios. Benchmarking information on push factors in staffing and funding can increase the certainty of good management decisions.

Endnotes


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