

A Case Study on Shortages of Nurses in St George's Healthcare Trust in Tooting Objective: St George's Data

The St George's Healthcare Trust is the National Health Service (NHS) organisation providing acute hospital care in South West London. Most of the Trust's services are based at the St George's Hospital facility, which it shares with St George's University of London Medical School. Originally founded in 1733, hospital is one of the oldest teaching hospitals. It is located in Tooting, a suburb in the London Borough of Wandsworth in south London. The hospital makes its services available at the Bolingbroke Hospital in Battersea and the Wolfson Rehabilitation Centre in Wimbledon. And it has services that are similar to inner London teaching NHS Trusts such as Barts and The London NHS Trust because it provides a variety of specialist and tertiary services, which include neurosurgery, cardiothoracic surgery and cancer care. St George's Hospital consist of 1,000 beds, over 5,000 staff members including 2,500 nurses, 800 physicians and 25 theatres. It has an annual budget on more than €330m; however, in the last 24 months there have been serious financial difficulties which have resulted in a gross deficit of €34.5.m.

Role of Technology

In the early 1990, the NHS reforms developed a new workforce planning system that reduced a large number of student nurses without considering the demand for nurses. By the 1997, the supply of nurses did not meet the demands and as a result, Britain developed a severe nursing shortage. Today since nurses are retiring or leaving the practice, the NHS has made much effort in addressing this grave issue. To alleviate the nursing shortage, the NHS has considered redesigning its workforce planning system to attract and retain nurses. However, due to criticisms by the House of Commons Select Committee on Health, the Department of Health gave their workforce plan a decisive review.

The solution is to relieve the workloads and reduce the nurse shortage. Though the use of technology will not resolve the nursing shortage, it can assist in making improvement in the work environment and support workflow that delivers safe, high quality nursing care. There are a variety of useful tools available - point of care documentation, tools bars coding for medication management, devices that support communication and workflow, staffing and scheduling systems based in automatically generated, real time acuity scores. There is automated access to library resources, alerting and decision support, and business systems that illustrate the cost and benefits of nursing.

Challenge 1: Not Enough Nurses to Manage Workloads

Because nurses are overworked, under paid, stressed out, changing careers, shortening their hours, and leaving the profession all together due to the perceptions of not being valued, there are not enough nurses to manage workloads. Other reasons for retention problems in the NHS include career breaks, retirement, maternity leave, nurse education, non-nursing work, and travel. Nurses' not joining or leaving the nursing and midwifery has been devastating for the healthcare delivery in London.....fewer nurses caring for more patients. In March 2001, a Department of Health Survey revealed that St George's Hospital NHS Trust's number of three month qualified nursing, midwifery and health visiting staff vacancies were 160 and the three month qualified nursing, midwifery and health visiting staff vacancy rate was 10.3%.

To reduce such vacancies, the government make efforts to recruit an extra 20,000 extra nurses to the NHS by 2004. The campaign was successfully, however, areas with the highest vacancies, London received few nurses to reduce their nursing shortage.

**Technological Innovation: Back to Work Online Refresher Course **

The shortage of nurses is not only due to the number of nurses available but to an overall skills deficit in the nursing workforce. Abiding government policy, St George's Hospital has implemented strategies, which include practice courses, overseas recruitment

and open days for immediate appointment of nurses. Because of the rising demand for nurses with extra skills, Stirling University has designed a unique web solution to alleviate the nursing shortage, an internet-training course accessible to registered nurses all over the world. This way nurses can update their training online from an accredited university. The South West London Workforce Development Confederation welcomes all qualified healthcare professionals back to the NHS by offering nurses the opportunities to enhance and develop their skill. The courses that are offered enable nurses to regain their professional competency and successfully re-enter their specific professional register. The "Return to Practice" module is theoretical, delivered by web-based learning and practical, requiring work placement within the nurses' localities. After successfully completing the course(s), the nurse can rejoin the Nursing and Midwifery Council's Professional register. Other modules such as Back-to-Work Online Refresher Course(s) will make it possible for nurses with inactive licenses to return to the profession by renewing their skills via the internet. These course(s) are available 24 hours day seven days a week.

According to Isobel Chisholm, a Nursing and Midwifery lecturer at Stirling University, allowing nurses to renew their skills via the internet will be a "benefit to patients, nurses and clinical areas both in private and public sectors, where recruitment and retention of trained staff is becoming a national problem".

Challenge 2: Nurse Assignment to Non-Familiar Care Areas

The shortage of nurses and the changing labour market for nurses have resulted in staff nurses having to play the role of a senior nurse or cross professional boundaries to cover vacant posts in areas where they are unfamiliar and do not have the required skills. This places many staff nurses under intense stress and decreases the quality of patient care. This normally occurs when one unit does not have nurses available and the other unit has a surplus nurses.

Because nurses' duties should absolutely match their skill, a computerized workforce management tool such as the Nightingale System by Vas Tech can provide St George with the capacity to create a template for the skill-mix required for each unit. Decreasing time for scheduling by 2/3, this system ensures an adequate skill-mix in that it detects when a nurse does not have the required skills to work in an assigned unit.

Technological Solution: Ensuring Adequate Skill-Mix

And because there is evidence that a skill-mix, the level of workload, and other organisational factors impact the quality of patient care, redesigning the nurse scheduling system or enhancing the scheduling webpage, similar to RNJobs is essential. A webpage that nurses login and view the available shifts then bid, particularly for overtime shifts. After they have entered their skill-level and a bid for an hourly wage, a nurse manager reviews the bids and decides whether to close or accept the bid. This not only allows nurses the opportunity to work more or less depending on their needs but it eliminate the time that a nursing manager has to spend calling around in search of nurses or posting job bulletins. With assess to a nurse's skill level, managers assign nurses to the appropriate units. As a recruiting tool, the webpage gives newly hired nurses the option of filling out an application, take written test and completing new hire orientation online before they can bid or work a shift.

Challenge 3: Nursing Time Spent on Non-direct Care Activities

Another problem quite often overlooked is the time nurses spend on non-direct care activities as removing food trays and cleaning rooms. They spend too much time doing job functions of others. Nurses ought to be performing the work that they are paid to do and not the work of the orderly or janitors; such duties are demoralising and result in job dissatisfaction. The American Academy of Nursing (AAN) and its Commission on Workforce researched how technologies might assist the nurse workforce to improve patient care demands. As a result, they identified areas where less time for non-direct care activities

and more time for patient care can be accomplished with the use of technology. (1) way in which patient-specific information is accessed at the service site. (2) interactive point-of-care technologies for caregivers and patients. (3) Technology that improves medication use processes. (4) best-practice models immediately available across all care settings. (5) efficient inpatient environments that respond to issues of trust, responsibility, and accountability.

Technological Solution: Reduce Bulky Paperwork

Documents and paperwork demand much of a nurse's time and takes away from patient care. According to one study, it is estimated that every hour of patient care produces 30-60 minutes of paperwork for a nurse. Nurses spend hours at the end of their shift processing paperwork when they should actually be able to record their actions, interventions, and patient information as they provide care. With technology, documents become an integral part of patient care instead of a separate task. The automation of information replaces paper-based and administrative tasks with a paperless, point-of-care, computer-based patient record. Required information will be gathered at the point of service then entered in a wireless device, thereby allowing nurses to dedicate more time to patient care. This process could possibly improve the quality of information collected and give nurses the opportunity to spend more time with patients. The concerns regarding liability are reduced because redundancy can be the elimination. Not only is documentation standardised but the system also allows nurses to know exactly what information is required.

Computerized medication administration can reduce medical errors and reduce the time required to pass medication. Such automation will eliminate transcription or verifications of orders and safety checks for each administered dose of a medication. To eradicate the need of locating a patient's chart, an electronic device manufactured by Mechitech decreases delays in patient's care. A physician enters orders at patient's bedside

and an order notification prints the information for the nurse. Because the nurse can capture the patient's information online, there is no need to assess a patient's charts.

Challenge 4: Balancing the Demands of Work and Home

How best should the St George's Hospital provide a balance the demands of work and home for nurses? The NHS Executive's Regional Nurse Champions have suggested flexible and family-friendly policies. Policies that help improve their employees' quality of life and allow them to centre their attention on work. Such policies provide for parental leave; paternity leave; time off for emergencies; job sharing; term-time working; working at or from home during normal working hours; ability to change form full to part-time hours; workplace or other nursery provision; help with child care costs and flexi-time. Flexible childcare solutions provide nursing support because they offer time off and the ability to alter work schedules.

Technological Solution: View Work Schedules from Home

However, to enhance flexi-time, the Nursing Department may consider implementing the Nightingale Scheduling System because it can provide flexibility and meets the needs of multiple units. The system has a variety of tools that assist in managing work schedule; credential and certification tracking; and time and attendance. Via the internet, nurses are able to select shift that they prefer, a work schedule that meets their needs. Instead of the 40 hours a week needed to put together a complex schedule manually, producing the schedule using technology takes only 10-12 hours per month. With the Nightingale System, empty shifts can be easily filled because administrators enter the requirements for each unit, the system runs through algorithms to create the work schedule that meet every nurses needs.

Laptop and remote access technology can give nurse coordinators, who manage services for patients living in the community, the ability to work from home. Using technology in this matter will allow nurses to address work as well as family issues.

Fill Empty Shifts

Unfilled posts due to turnover rates for nurses in 1999-2000 were high, with one in three leaving their post in almost a third of London's acute Trusts. High turnover results in higher costs, lower morale and affect patient care.

Of the 33 acute Trusts in London, 25 had turnover rates above 20%, 18 Trusts had rates exceeding 25%, and nine had rates exceeding 30%. The nursing shortage crisis is most acute in inner cities and teaching trusts, particularly in London, where some turnover rates range from 11% to 38%. Trusts with turnover rates higher than 25% are more likely to be in inner London and to be teaching trusts such as St. George Hospital. Finlayson (2002).

Conclusion

Yet the number of nurses will increase further in NHS hospitals due to new recruits, nurse recruitment from abroad and nurse return programmes, and the government is tackling the crisis but change is slow and the problems are complex. Technology will not provide all the answers to the nursing shortage but it can have a significant impact on nurse recruitment and retention, particularly when new nurses or returning nurses desire technology based environments. Other solutions that recruitment and retention strategies may include are increased salaries, and sign-on bonuses. St George's Healthcare Trust must note that identifying and purchasing technology is only a portion of the solution. There are other additional challenges such as budget issues, low vendor interest in applications specifically for nurses, the need for visionary nursing leaders, and reluctance to change.

The government needs to gain an understanding and recognise the increased use of technology, data collection, research findings, medication options, and health care treatments, which have caused a sudden increase in information. Nurses are highly educated and skilled

professionals who now must manage a huge variety of patient management routines in environments where patient insight has increased and staffing levels are at a stand still, or in many cases decreased. It is time for the government to recognised and support the changing role of nursing, and give nurses the level of support required to practice safely, maintain professional integrity and provide quality nursing care Malone (2002).

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