



Eurofound

# Work organisation and innovation

*Case study: Nottingham University Hospitals  
NHS Trust, UK*

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# Introduction

The public health sector was decided on as a case study because of the pressures on the sector in recent times, its importance as a major employer and evidence that work organisation innovation can be driven by a bottom-up employee process. There is no doubt that health is a significant sector; a report from the European Observatory on health systems and policies estimated that expenditure on health across the EU Member States in 2010 accounted for 9.0% of GDP (OECD, 2012). Approximately 10% of the active EU workforce is engaged in the health sector in its widest sense, including physicians, nurses, pharmacists, administrative and supportive staff, researchers, teachers and trainees. The OECD report discussed the potential effect of rising government debt and deficits on social expenditure, coupled with health systems facing major new challenges such as ageing populations, new health threats, rapid development of new technologies, rising expectations of citizens, and their implications for spending on healthcare. The conclusion is that an efficient and effective health workforce is necessary to respond adequately to these challenges. Moreover, the healthcare sector is one which is exposed to relatively high levels of technological innovations, thus exposing the workforce to change in the nature of products and services. Because it faces ongoing pressures on efficient service delivery due to rapidly expanding demand as a result of an ageing population, coupled with fiscal pressures on levels of public financing for healthcare, the healthcare sector could benefit from introducing High Performance Work Practices. Furthermore, a recent EU consultation document 'Green paper on the European Workforce for Health' (2008) and a Policy Dialogue in 2010 concluded that improving work organisations and conditions were important factors in recruiting and retaining a high quality workforce.

The UK has been particularly active in creating the conditions for new work methods and processes. The key Department of Health strategy documents driving innovation in health include:

- High quality care for all, 2008
- Innovation for a healthier future, 2009
- The Health White Paper: *Equity and excellence – Liberating the NHS*, published in July 2010.

In particular, the UK Department of Health established the NHS Institute for Innovation and Improvement to provide support and inspiration to individual healthcare organisations. The NHS Institute has undertaken a number of projects and developed various support mechanisms to enable organisations to undertake social innovations based on work organisation, as opposed to clinical innovations in drug treatments or therapies – which tend to receive greater attention within healthcare communities.

# Background to the organisation

Nottingham City Hospital is part of Nottingham University Hospitals NHS Trust (NUH). NUH was formed in 2006 after the City Hospital underwent a merger with Queen's Medical Centre. Queen's Medical Centre now forms the emergency care site and the City Hospital houses services for strokes, heart disease and cancer, focusing on planned care and those with long-term conditions.

NUH is now one of the largest and busiest acute Trusts in England, employing 13,000 staff. It provides services to over 2.5 million residents of Nottingham and its surrounding communities, and specialist services to a further 3–4 million people from neighbouring counties each year. The Trust has an annual income of GBP722.5 million (approximately €858 million as at 20 January 2013), 90 wards and around 1,700 beds.

The Trust prides itself on standing at the forefront of many research programmes and new surgical procedures; it is the only NHS trust in the country to have had three successful bids for Biomedical Research Units. As a teaching trust, NUH has a strong relationship with the University of Nottingham and other universities across the East Midlands, and plays an important role in the education and training of doctors, nurses and other healthcare professionals.

On its establishment in 2006, however, NUH was confronted with a number of challenges. At the time, the Trust was running a GBP20 million deficit. More recent cuts to public spending mean that the need to make savings remains an important strategic priority for the organisation; the Trust is seeking to save GBP40 million in 2011/12 alone. The merger of two large hospitals also presented the challenge of standardising policies, procedures and working practices across the two sites, which continues to be a management priority.

The Trust has embarked on a number of initiatives over the past few years, which have been designed to address these issues. In 2007, it became one of the first 'whole site' pilots of the Productive Ward programme. Since then, its ambitions have broadened, and the current vision is to be England's best acute teaching trust by 2016. This will involve ensuring the Trust is rated as the best or among the best in the following areas: clinical outcomes, patient experience, staff satisfaction, teaching and training, research and providing services which are value for money. This ambitious objective has partly inspired 'Better for You' – a programme which encompasses all areas of the Trust and aims to act on the ideas of staff and patients to improve systems and processes and focus on delivery of high-quality, efficient patient care. This programme was also partly inspired by the Productive Ward programme.

As part of this case study, interviews were carried out with the Assistant Director of Nursing, who is leading on the Productive Ward programme, two ward managers on participating wards, and employees working within the programme in front line roles as nurses and healthcare assistants.

# Nature of the innovation

The Productive Ward (PW) programme was designed by the NHS Institute for Innovation and Improvement, in partnership with nurse leaders and industry partners, in 2005. The programme was intended to increase the efficiency of NHS working practices, therefore creating more time for staff to devote to patient care. In more recent years, however, it has also been designated an important tool in helping the NHS confront ‘the biggest challenge of its history’ as recent cuts to public spending mean it must make GBP15–20 billion worth of efficiency savings by 2014.

The PW programme purpose states that it ‘aims to provide tools specifically developed to engage frontline staff in the initiation and implementation of change’, giving them the information, skills and time they need to identify areas for improvements. The programme draws on principles of ‘lean thinking’, which aims to focus on the values which drive healthcare and work to maximise operational processes which achieve those values, while reducing activities which do not. It is intended that additional time can be released through more efficient operational routines, better organised ward environments and effective use of patient data. This should lead to improvements in health and safety, the quality and reliability of patient care and the patient experience.

The programme was piloted at four test sites in 2006. The NHS Institute and a consultancy firm with expertise in lean management processes spent a year in these pilot locations looking at how wards operated, and developing and refining the tools and modules to improve efficiency. In 2007, the project was tested on a larger scale and NUH became one of the first ‘whole hospital’ test sites. The hospital volunteered for this role; the project lead believed this was linked to the challenges they faced, relating to both the recent merger and the need to reduce a substantial financial deficit.

The PW programme encompasses three foundation modules and nine process modules. The module activities and resources include training (described below), supplemented by toolkits for use at ward level. The foundation modules are:

- **Knowing How We Are Doing (KHWAD):** this involves measurement of current performance and using the data to monitor the impacts of change and to improve the safety and quality of patient care. Participating wards have introduced data boards, which visually display recent data on key performance areas such as infection rates, falls and pressure ulcers. The data presented is designed to tie into all of the hospital’s improvement initiatives, including Essence of Care and Nursing Metrics.
- **Well Organised Ward:** this module aims to simplify the workplace and reduce waste by ensuring all equipment ordered is necessary, and in the right place at the right time.
- **Patient Status at a Glance:** this links to the trust-wide initiative to reduce internal waits.

These are accompanied by nine ‘process’ modules in areas such as meals, medicines, patient observations and patient hygiene. Teams of three or four relevant staff are assigned to implement each of these modules. These staff may volunteer for the role due to their particular interest in an area or the ward managers may select staff they feel would benefit from the additional responsibility – this is at the discretion of the ward manager. The modules are run as three training days provided by the PW project team spread out over a two- or three-month period, which all staff implementing a module must attend, with mornings spent in a classroom setting and afternoons set aside for directed study time. The lead reported that certain modules are more popular – particularly those which were also part of the Care Quality Commission’s inspection standards, such as meals, medicines and observations. Less popular modules include the ward round and patient hygiene and the lead suggested this may be because they are viewed as ‘bread and butter’ activities. However, each ward has to complete all modules.

NUH embarked on the PW programme one year after the merger of the two large hospitals. The project lead believed Trust management viewed the initiative not only as a tool to help the two hospitals standardise their working practices, but also to help the organisation financially, given that it was attempting to deal with a GBP20 million deficit. The lead stated that the Trust's executive team was confronted with two choices. On the one hand, they could have adopted the 'slash and burn' approach, in which the organisation simply cut jobs and services. Although this would have been a fairly easy way to bring costs down, the lead pointed out that it was viewed as undesirable, since it was not considered a sustainable policy and it would be difficult to ensure cuts were made in the right areas. Instead, the Trust was keen to ensure that savings were achieved through a more 'transformational' process, with a focus on quality and efficiency. It was hoped that PW could contribute to finding efficiencies in a way that continued to ensure high-quality care for patients and a positive experience for staff. The Lead cited the three central motivations behind the programme as safety, quality and the improvement of the patient and staff experience.

The Lead felt that much of the content of the PW programme was actually focused on nursing practices; it was 'more about becoming a productive nurse'. She felt this focus was an important one, since nurses are traditionally under great time pressure. It is therefore rare for them to have an opportunity to consider the way they work and where they could make improvements.

The PW programme is not the only improvement initiative that the hospital is currently undergoing. For example, since 2001, the hospital has been implementing the Essence of Care guidelines drawn up by the Department of Health. This programme encourages hospitals to benchmark their performance in 12 key areas designed to capture the fundamentals of patient care. Nurses are also monitored according to Nursing Quality Metrics, which monitor the weekly results of nursing audits and the Patient Experience Questionnaire. The project team has attempted to ensure that the focal areas and data collected in relation to the PW programme tie in, wherever possible, with the priorities of these additional initiatives.

# Process of implementing the innovation

The PW programme is implemented by a designated project team. This is led by the Assistant Director of Nursing, who has been in the role since 2004 and leading the programme since the Trust's first engagement with PW in 2007. The team was initially made up of four former ward managers; this has now been reduced to two as the programme becomes embedded. The team was selected on the basis of communication and leadership ability, rather than their existing knowledge of service improvement; the project lead pointed out that service improvement methods are more easily taught than communication skills. The project team received training from the NHS Institute and a consultancy firm which specialised in lean management. This training was then extended to all ward managers, giving them each a one-hour session on the nature of the programme during their development day. All registered nurses were also offered a 45-minute training session on the programme. The training was funded by the NHS Institute.

The PW programme was rolled out gradually over three years and is now in place across all of the Trust's 90 wards. There was an initial debate on whether the programme should be implemented on a voluntary basis, or whether it should be rolled out by specialisation. It was eventually decided to launch the programme on a voluntary basis. The project lead felt it was more effective to make PW voluntary at the start, since the commitment and motivation of ward managers is vital to the success of the programme. She also believed that, given the common methodology and aims of the programme, sharing learning and best practice across sites and specialisms would be a useful way to foster greater interaction between staff during the merger period. It was hoped that, once some wards had started the programme, others would be convinced of the benefits of joining. Ward managers were invited to a presentation on the PW programme and this led to 35 wards initially volunteering to participate.

The PW programme is implemented at ward level by each ward manager. Ward managers are responsible for all areas of the ward, including ensuring clinical standards are maintained, recruiting staff, overseeing staff development and training, handling patient complaints, health and safety, budgetary issues and representing the ward at Trust level. In relation to the PW, the ward manager's responsibilities are listed as:

- ensuring all staff are aware of the principles of PW, and working with the team to develop a culture of continuous improvement and sustainability
- updating performance data and developing monthly action plans with the team
- using daily ward briefings to focus the team on actions around safety and quality
- reporting to the PW team to identify potential problems which may affect ward progress
- actively encouraging and supporting staff in getting involved with process modules and ensuring the focus is on a whole-team approach to improvements.

Ward managers are assisted in the implementation by the PW project team, clinical leads and the practice development matrons. These groups take responsibility for supporting ward managers and ensuring they have the knowledge and skills to implement the modules, establishing links between the PW programme and other quality and improvement projects, encouraging the sharing of best practice, measuring progress against the agreed project plan and reporting on progress to Trust management.

The ward teams are responsible for:

- contributing to monthly action planning and suggesting ideas for improving quality and safety
- updating any data they are required to collect

- getting involved in all process modules and taking the opportunity to make suggestions which may improve patient or staff experience

Individual staff members who lead each module, are responsible for ensuring completion of all work in the allocated timescale and updating the ward manager on progress, as well as acting as a champion for that module to ensure changes are sustained.

The PW programme now encompasses all of the hospital's 90 wards and 4,000 nurses. When a new ward signs up to the programme, the project team run a 13-week course, devoting a half day each week to teach the ward manager the basic lean methodologies. During these sessions they can talk to the manager about what needs to be implemented that week, any problems that have been encountered and action plans for the coming weeks.

The project team has also begun to organise training days, according to the different modules wards need to implement. Wards which are all carrying out the medicines module, for example, can send representatives to training days, which amount to 3 study days over 6–8 weeks. The representatives participating undertake a half-day of training, then check back with their team and return with feedback on the next training day. The Lead reported that this is useful for problem-sharing and collective problem-solving.

The PW programme also includes a focus on the collection and analysis of data. The project lead pointed out that ward managers allocate a budget of around GBP1 million each year for operating each ward but, prior to the introduction of the programme, they were not always doing this on the basis of clear data. Before the implementation of PW, ward managers would receive much of their sickness data aggregated according to specialism. This meant that it was hard to assess the performance of individual wards. Under PW, managers receive much more localised data, which encourages them to take ownership of it and seek to improve. There was also a sense that the type of data collected prior to PW was quite 'negative', in that it was focused only on sickness and infection rates. This led to the introduction of quarterly staff satisfaction surveys and display of patient experience data, to highlight areas of positive performance.

Changes have also been made to the way in which data is presented, to make it more accessible to staff and patients. The project lead pointed out that nurses used to collect data but they did not always 'own it or understand it'. Nurses are now offered clearer presentation of data via the 'nursing dashboard' and 'patient status at a glance', which charts and colour-codes performance in key areas. Under PW, each ward has also introduced a 'performance board', which present data on patient safety and experience, efficiency of care and staff well-being, visible to both staff and patients.

In terms of the costs of implementation, the time invested by the project team amounts to GBP80,000 per year. However, the Trust has not costed the time invested by individual wards. The project lead felt that, despite the pressure these types of initiatives face to generate a cost–benefit analysis, this was not something which had been achieved successfully. She felt that, despite the close involvement of the NHS Institute during the first 6–9 months of programme implementation, the Trust would have benefited from ongoing support from the Institute to measure the return on investment or analyse benefits realisation. The initial cost–benefit analysis that had been carried out had been based on the rather 'sweeping generalisations' of a rapid impact assessment.



# Reactions and challenges

Reactions to the implementation of the PW programme have generally been positive. Staff on both wards visited for this research had initially been slightly sceptical at the idea of ‘yet another initiative’, but according to both employees and ward managers, ward teams saw the benefits of the programme and the processes have quickly become embedded in their way of working; according to one ward manager, they ‘just embraced it’. Staff did not identify any particular aspects of the programme that worked better than others, and the lead suggested this was due to using a common methodology. Ward managers were very positive about the support they had been offered from the Trust and the project team.

However, the impact of the programme appeared to depend on the particular circumstances and size of each ward. One ward manager interviewed did not feel that the programme had had a substantial impact, as the ward team had already been well organised and there were only 13 beds on the ward. The nurses had quite specialised tasks so it had been fairly easy to match up nurses with the modules they should implement (for example, the nutrition nurse implemented the meals module). The second ward manager interviewed felt that the programme had made a more significant positive impact. This was a much larger ward of 27 beds, which could discharge between 60 and 80 patients per week. The ward manager had taken over at the beginning of the implementation of PW, in January 2010. He reported that, prior to his arrival, the ward had been neglected and was facing significant staffing and financial problems. In this context, he believed that the PW had served as a useful tool for improving efficiency and performance. The project lead also believed that the effects of the PW programme were often highly dependent on the type of ward involved and the leadership offered by the ward manager.

The main challenges cited by interviewees were finding the staff time needed for implementation and sustaining engagement with the whole of the programme and beyond. The project lead reported that there had been few problems with the modules themselves but more in ensuring staff have time to carry out the programme. Some wards have been better at managing time than others, and have attempted to schedule in staff time to complete modules, but there are still instances of staff being co-opted back into normal duties when teams are short-staffed. However, one ward manager reported that this became less of an issue once practices became embedded and less time was required.

Another challenge was that of sustainability: ensuring that staff remained engaged, practices stayed in place, and that the uptake of modules continued. One ward manager had tried to address this by keeping the ward team informed and trying to address their feedback. The project lead had also run focus groups with participating ward managers. These highlighted that part of the problem with sustaining module uptake – particularly after the initial 13 weeks’ training – was that managers and staff nurses did not always know how best to guide their teams through the modules. In response, the project team began to run training on ‘leading a module’, which any participating staff member could attend. One of the clinical leads has also put together action learning sets for the ward managers.

The project lead believed the key to successful implementation of the PW is the commitment of each ward manager to the programme. She felt that where the programme has not gone well, it has tended to reveal ‘weaker’ ward managers. As a result there has been some attrition of ward managers with a few moving to other positions, but the lead stressed that it was sometimes hard to determine the reasons for this. Ward managers who have struggled have been offered one-to-one coaching on leadership skills, and the hospital has also attempted to ‘buddy up’ managers of high-performing wards with those who are having problems. The project lead believed that some initially ‘mediocre’ ward managers have improved dramatically within the structure provided by the PW programme. In this context, both the lead and ward managers pointed out it presented a major challenge where ward managers have been away for extended periods of sickness absence or maternity leave – the programme suffered from the ‘loss of a figurehead’.

The lead also suggested that the hospital could improve the extent to which wards share best practice. There had been some attempts to do this on training days, but this had not been as extensive as hoped. She pointed out that in very large organisations, communication is always a challenge.

Finally, while the focus of the PW programme on processes at ward level had been useful, the lead pointed out that it could feel be 'a bit insular', in that it disregarded care pathways across the hospital. These are considered a vital aspect of hospital functioning because it is possible to have very efficient wards, but inefficient processes for patient transfers across wards and between wards and surgery. This has been addressed through the Trust-wide 'Better for You' project, which has sought to extend the lean principles of the PW across all areas of the hospital.

# Impact on employees

## Staff involvement

Much of the impact on employees is centred on the changes to opportunities for staff involvement. The project lead felt that this has traditionally been a challenge for the NHS, which has a very hierarchical structure. She pointed out that the hospital employs 4,000 nurses, and ‘every one of them must have one idea’. However, until now there have been few opportunities for staff to make suggestions and part of the PW programme has been focused on how to capture these ideas and bring them to fruition.

Both ward managers highlighted the new opportunities for staff involvement as a positive outcome of the PW; one ward manager believed it had been the ‘best thing’ about the programme. On the smaller ward, the manager estimated that at least 50% of staff are now directly involved in implementing change. He felt that the most important change associated with PW was a more sensible division of tasks, which had encouraged staff to take responsibility for their designated areas and helped to sustain the changes. The manager on the larger ward also felt that delegating implementation responsibilities to staff had encouraged more active engagement and positive outcomes. For example, while trying to rationalise the equipment purchased, one nurse took responsibility for fluid orders. This nurse then analysed orders and usage rates and devised a checklist for ensuring the ward was ordering sufficient fluids at the correct time. The manager believed this was vital to embedding practices: ‘fundamentally, they’re the ones who’ve got to work with the systems’. In trying to ensure that all staff sustained the changes, he had also delegated responsibility to several other staff members who were particularly observant and therefore adept in identifying process improvements. He pointed out that ‘if it comes from me all the time, they just switch off’, and that involving other staff ensures consistency in processes, rather than just when the manager is present.

Staff are also given more opportunities to offer feedback. Monthly ward meetings include discussion of ideas for change, and documents such as the ward routine and the ward vision are sent out for comment. When a module is completed, staff are asked for feedback on the process, and comments are then displayed for others to discuss. The manager of the larger ward believes that PW has given staff more opportunity to challenge practices. Obviously, many areas are regulated by Trust guidelines, but PW has encouraged staff to be clearer about the changes that can be made on the wards. He also felt that it was his responsibility as a ward manager to offer staff new ideas; he pointed out that many staff had been in post so long that they were less likely to question their own habits. In this sense, he felt that PW has been ‘very good for him as a new manager’, encouraging him to think about and challenge the old ways of working.

The manager on the larger ward also felt that a major factor in the extent of staff involvement was the approachability and attitude of individual ward managers: staff are keen to make suggestions ‘because they know I’ll listen to it’. Like the project lead, he argued that if the ward management team does not support the programme, nothing will change because they have to be receptive to new ideas. One ward manager discussed the way his role as a manager had changed in a more participatory environment; he felt his responsibility as a manager in helping staff implement new ideas had shifted towards ‘letting [staff] run with it but stopping them if they’re going the wrong way’. He also felt that managers should provide staff with other options, rather than simply stopping a practice that was not working. However, the project lead also stressed that these expanded opportunities for staff involvement were still at the very early stages. She felt that changing an organisation takes time, and much remains as future planning.

## Staff development

A further major impact of the PW programme was in providing opportunities for staff development. One ward manager pointed out that delegating module leadership responsibility can enhance nurses’ CVs and increase their confidence. He gave the example of one member of the nursing team whose confidence was very low; he had therefore worked through the first module with her ‘to show that she did know what she was doing and she was good’. The project lead felt that

PW demanded a particular skills set, especially when it came to service improvement, assertiveness and problem-solving. She felt that nurses find these skills easy to apply to clinical care, but cannot always transfer them to more routine issues so PW had been a useful tool in this respect. This could put staff in a better position for promotion, although ongoing challenging financial circumstances may limit the number of promotion opportunities.

## **Working conditions**

There were some improvements to staff working conditions and their work–life balance. The manager of the smaller ward felt that the programme had not had much impact on the work–life balance of staff. However, on the larger ward the manager stated that, when he started in the role, many staff reported that they had missed breaks or were late finishing their shifts. This has now changed, with far fewer staff working late or missing breaks. The ward manager felt this was important not only for staff’s work–life balance but also for patient safety, and has been supported by clearer procedures and better communication for patient handovers during shift changes. It should be noted, however, that it is difficult to attribute this change entirely to PW. Since the ward was under-performing when the manager took over, over the past two years it has had a large influx of 12 new staff, which has eased capacity problems.

Staff sickness absence has also declined – both in the wards surveyed and across the hospital. The manager of the larger ward reported that, when he began in the role, staff sickness absence was high, at 13%. It declined during 2010, but has since increased, although this is largely due to one staff member going on long-term sick leave. The project lead also mentioned that sickness absence had declined, and felt that the improved data collection under PW has helped managers to address the issue. However, she also pointed out that a new Trust-wide sickness absence policy was implemented at about the same time as PW, making its direct impact harder to estimate.

## **Team-working**

The PW programme had a limited impact on team-working; the project lead pointed out that, although PW process are designed to improve team-working, this may not take place in practice. Because nurses work variable shifts, there is a new ward team every 12 hours, and the team does not always consist of the same people. Small teams therefore exist for line management purposes, but working teams and their responsibilities change daily. One ward manager felt that, although PW could not strengthen teams themselves, it made staff more aware of working in a team.

## **Performance management and staffing**

The effect of the PW programme on performance management and staffing was limited, since in many cases hospital regulations took precedence. For example, there had been no reported changes to pay structures, recruitment, shift patterns or staff turnover. Appraisals are also carried out according to Trust guidelines and have not changed. However, one ward manager stated that the implementation of PW had provided managers with a framework which allowed them to address performance problems on the spot, now that there are better procedures around observations or data collection for example.

# Impact on the organisation

The evidence suggests that the PW programme has had a number of beneficial impacts for the organisation, but also that these may not always have been the effects originally intended.

The recent focus on cost-cutting in the NHS means that PW's potential financial benefits have been an important incentive. The project lead mentioned that the original plan was that the implementation of PW would allow the hospital to remove one nurse from each of its participating wards. However, ultimately, this did not take place. It was instead decided to keep the programme focused on quality of care, rather than as a tool for staffing reductions. Three wards were eventually closed due to budget constraints, but they were selected on the basis of bed stock, rather than their relative efficiency in operation. The PW programme lead reported that one ward which was closed was, in fact, one of the best performers in the PW programme. The ward managers believed that saving money was not a major benefit of the programme, with one stating that the most important outcomes have been increased staff involvement and improved performance, rather than financial benefits.

The second area that the PW programme was designed to address was staff–patient contact time; the programme's tagline is 'releasing time to care'. However, while the project lead believed that the programme had enabled nurses to spend more time with patients, one ward manager did not agree. He argued that the programme had not actually increased the time nurses spent on patient care, but instead meant the care offered was of higher quality if staff were more conscientious as a result of having proper breaks: 'if it means that the nurse has actually gone for her break, that beforehand she wouldn't have gone for, if it means that she's finished her shift on time and that everything's been done properly, that observations have been done properly... then I think it's been effective. It may not have meant more time at the patient's bedside, but it's actually led to more efficient and effective care for that patient.'

Many of the organisational benefits discussed centred on more efficient working practices and working environments. Both the manager and particularly the employees on the larger ward felt that the opportunities provided by PW to assess the ordering and storage of equipment had been an important step forward. The manager pointed out that, just by going through the stockpile of ward equipment they had managed to get rid of 25% of stored items and make ordering a more efficient process ('we were a male urology ward ordering female catheters – why?!'). The nurses interviewed cited the increased space and better organisation as a major advantage when carrying out their tasks, and believed it had improved patient safety. For example, the ward had previously only used one drugs trolley. This meant that by the time it had been taken to every patient some medicines were not being administered at the correct times. When this was highlighted, the ward manager made a request for extra equipment and the ward now uses three drugs trolleys to ensure that patients do not have to wait for medication.

The evidence suggests that PW also improves the experience and safety of patients. One ward manager pointed out that, although small, the observations module had had a huge impact on patient safety. He recalled seeing a patient in May 2010 who had received no observations for 36 hours but believes this would never happen now. Audits of safety issues used to be carried out once a week, but are now conducted every day. The manager felt that these improvements were also reflected in patient surveys: satisfaction rates have increased and are now quite high. The ward has only had one registered patient complaint in six months, despite discharging 60–80 patients per week – a substantial reduction.

Both the project lead and managers felt that a major element of performance improvement attributable to PW is the new focus on data collection. The project lead felt that the more visual display of localised data was very powerful, and had made figures easier for managers to understand, encouraging them to work towards improvements. The Trust has seen an improvement of figures in a number of areas: staff sickness rates have declined, cases of MRSA, C-Diff and ward-acquired pressure ulcers have reduced, although numbers of patient falls remain an issue. The Trust's target for MRSA cases is five per month; last month there were only three.

However, it is important to note that most staff highlighted problems of disaggregation and variation in analysing the effects of the PW programme. Sickness absence had reduced, for example, but this may also have been linked to a recent stricter sickness policy implemented by the Trust. Infection rates have fallen, but there have also been new Trust guidelines in this area. One ward manager had recently seen an influx of new staff, which may have improved productivity and working conditions. It is also hard to separate the effect of PW from the numerous other improvement initiatives being implemented across the NHS, such as the Essence of Care benchmarks and Nursing Quality Metrics.

# Lessons learnt and future plans

In general, both the ward and project teams believed the programme had improved the performance of the hospital. Staff felt that patient safety had been improved, and that there was better data collection and managerial focus on key performance areas. Organisational culture was also changing; the project lead believed that the programme was helping to develop an organisation that listens more to employees and that puts processes in place to capture good ideas, and recognised that this was quite a major change from the previous culture at the Trust. She felt that the programme helped to break down hierarchies and to 'use staff as change agents' and described leading the PW programme as 'one of the best opportunities I've had in my nursing career'.

Both the project lead and ward managers felt that the impact of PW was heavily conditioned by the leadership and conditions on individual wards. The lead pointed out that some wards have achieved far more through the programme than others. This was largely determined by the attitude and abilities of the ward manager, although the Trust has taken steps to improve managerial engagement, such as 'buddying' effective ward managers with those who are struggling. Employee engagement and gaining employee suggestions are fundamental and critical to the success of the programme, but in order to elicit these managers need to be both competent and committed to the ethos of the programme.

One of the major challenges for the programme, both currently and in the future, is that its impacts are difficult both to identify and to distinguish from the contribution of other complementary schemes. There are many overlapping initiatives in place and all programmes take considerable time to become embedded.

The project lead also pointed out that nursing has traditionally been 'full of hierarchy' and that this will be slow to change. She felt there remained a 'long way to go' with the PW programme and the switch to a lean model, but she was optimistic: 'look at Toyota. They've taken 60 years to get where they are and we're in year three.'

The effectiveness of the PW programme has also encouraged the Trust to expand its focus. The ward-centred approach of the programme meant that the scheme necessarily neglected 'care pathways' (the stages of a patient's care across different areas of the hospital between admission and discharge). Therefore, once the PW programme had been in place for around a year, the hospital began to expand the focus, and to look at the ways in which improvements to whole-hospital practices could contribute to the effectiveness of the PW programme. This kind of thinking contributed to the development of the Trust-wide initiative 'Better for You'.

The project lead believed that PW served as the foundation for 'Better for You', with both being based on the 'lean' methodology. However, the wider initiative was designed internally by the Trust rather than the NHS Institute. The Lead believed that the main development of 'Better for You' was that this initiative works on a cross-functional basis, to encompass care pathways. It expands the focus on efficient processes at ward level to look at the relative efficiency of processes of referral across the hospital as a whole.

As part of their bid to expand the underlying principles of PW through the 'Better for You' programme, the Trust has also attempted to create opportunities for greater staff involvement outside the traditional ward setting. The project lead explained that they had recently organised a series of gatherings known as the 'events in tents'. Marquees were opened on the hospital grounds and were accessible between 6am and 10pm for two weeks, to cover all possible shift patterns. Facilitated discussions took place about the PW programme and the 'Better for You' initiative and staff were offered the opportunity to make suggestions. Around 8,000 of the Trust's 13,000 employees attended and suggestions will be analysed as the 'Better for You' initiative is extended. The project lead reported that the Trust is also keen to allow for quicker reaction to staff suggestions. They had recently launched an initiative known as 'Just Do It', which will explore how staff ideas can be quickly put into practice.

The increased data collection required under PW has been extended into the 'Better for You' initiative. This programme's broader focus has encouraged staff to consider the data which is not always picked up at ward level. The project lead cited one example as a focus on internal waits. The Trust analysed data on all internal waits (e.g. for tests or X-rays) over a six-week period. This revealed that, on any given day, 117 patients have a day's wait. The lead pointed out that the majority would still be in hospital, but that some could have been discharged earlier if they had had a test or referral completed more quickly. The Trust is now aiming to reduce internal waits by 50%, and has used the staff and principles involved in the PW programme to achieve this. Over the last four months, the PW team have helped ward staff to use data already being collected for performance boards and 'patient status at a glance' to better identify and monitor internal waits.

The Trust's future plans to sustain the improvements under PW are therefore focused on an expansion of its principles. As well as the implementation of 'Better for You', there are also plans to extend the initiative to other areas including 'productive cleaning' and 'productive training'. The commitment and engagement of managerial staff is viewed as the key to the success of these initiatives and the project team is continuing to focus on providing support and advice for ward managers.

## **References**

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