

Moving to 12-hour shift patterns:

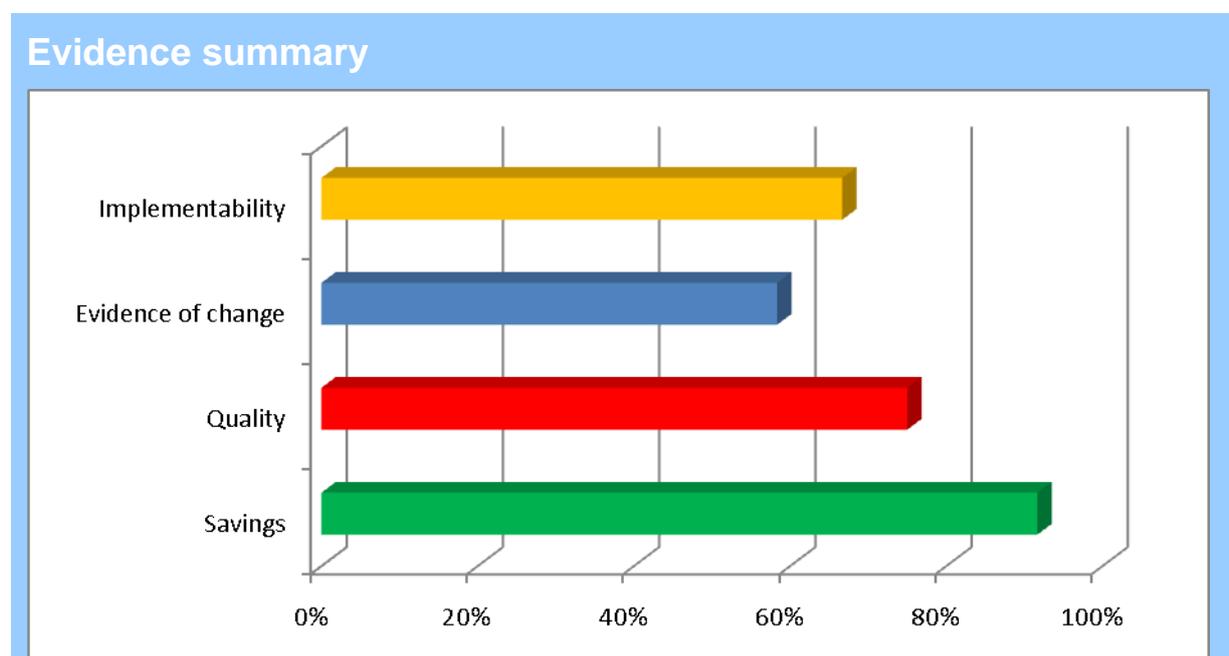
to increase continuity and reduce costs

Provided by: Basingstoke and North Hampshire NHS Foundation Trust

Publication type: Quality and productivity example

QIPP Evidence provides users with practical case studies that address the quality and productivity challenge in health and social care. All examples submitted are evaluated by NICE. This evaluation is based on the degree to which the initiative meets the QIPP criteria of savings, quality, evidence and implementability; each criterion is given a score which are then combined to give an overall score. The overall score is used to identify the best examples, which are then shown on NHS Evidence as 'recommended' or 'highly recommended'.

Our assessment of the degree to which this particular case study meets the criteria is represented in the evidence summary graphic below.



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Details of initiative

Purpose	To lower costs by reducing the numbers of overlap between shifts and improve quality of care by increasing continuity throughout the day.
A description (including scope)	<p>Previously, the wards were operating a 3 shifts/day system with overlaps of 1–3 hours between shifts. There were two handovers every 24 hours. In effect, for 24 hours of care, there were 28 hours of staffing and 14% of paid time spent in handovers. There was also concern that information was not always passed over from one shift to another and that this delayed discharges and possibly reduced the quality of care. This initiative means that there are fewer handovers, meaning fewer chances to fail to pass on information.</p> <p>A full consultation was undertaken with staff before implementing this system. All wards across the Trust have moved from a 3 shifts/day system to a 2 shifts/day system. In some ward areas there are additional short shifts at busy times of the day. For example, on the orthopaedic elective ward there is a 07:30 to 13:30 shift for one member of staff to aid discharge.</p> <p>Costs have decreased by approximately £1 million a year, with potential to improve patient care. There are early signs that staff prefer the 12-hour shift system because they only need to come to work three times to work a 36-hour week.</p>
Topic	Productive care.
Other information	An outline consultation document was provided for assessment.

Gate 1: Savings delivered / anticipated

Amount of savings delivered / anticipated	The Trust covers a population of 300,000 so the savings are £333,000 per 100,000 population.
Type of saving	Real cash savings will be achieved through spending less on temporary staffing to fill shifts. Instead of staffing for 28 hours, staffing for 24 hours only is needed, reducing the overall nursing establishment without affecting the number of nurses providing care at any specific time. Costs are based on the total new staffing model, including a few short shifts.
Any costs required to achieve the savings	Change can be achieved with minimal additional resources to run the consultation process and recalculate rotas. No cash resources are required.

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Programme budget	Initiative is spread across a number of programme budgets.
Details supporting Gate 1	<p>No investment is required except managerial time to run the consultation and rework shift patterns. For a ward, a ward sister needs to spend a day reworking shift rotas. Consultation can take place over a month. This time expenditure was incorporated into existing matron and ward sister working hours.</p> <p>Savings can be directly cash releasing. The Trust went from paying for 28 hours of staff per 24-hour period, to paying for 24 hours. The handovers are in effect funded by the unpaid lunch breaks: for 12 hour shifts a half-hour unpaid lunch break means staff are in the Trust for 12.5 hours and can do 30 minutes handover. This potentially saves 14% of shift nurse spend, which equates to a maximum saving of £3 million for the Trust. However a more conservative estimate of £1 million has been used for this submission. In addition, because the Trust had already stopped using agency staff, savings were delivered on day one of implementation by reducing bank shifts and by not filling vacancies. Other trusts are likely to have sufficient levels of temporary staff to be able to realise cash savings immediately.</p>

Gate 2: Quality outcomes

Impact on clinical quality	Clinical quality could potentially improve with greater continuity of care and a reduction in points of transfer of information. There is some anecdotal evidence of an impact on patient hydration, for example.
Impact on patient safety	Similarly there is a theoretical improvement in patient safety with greater continuity of care and a reduction in points of information transfer.
Impact on patient and carer experience	Improved patient and carer experience anticipated.
Supporting evidence	<p>Clinical quality: nurses on the elderly care ward have anecdotally reported that continuity of daytime care is improving patient hydration.</p> <p>Patient safety: There is evidence in healthcare and other sectors (HSE book 'Managing shift work'), that incidents often happen when responsibility is transferred from one person to another and not all the information is transferred robustly. By halving the number of transfers in a 24 hour period, we have reduced the possibility for information to be lost or miscommunicated.</p> <p>Patient experience. Patients appreciate having the same person looking after them all day. This has been especially commented on in maternity, where midwives are able to stay with a mother for longer, but it is true across all specialities where patients may get</p>

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confused when their carer changes during the day.

Staff experience. Although not formally quantified, managers report that the majority of staff prefer 12-hour shifts because it allows them to provide continuity of care to the patients and because they can work their contracted hours over fewer days, giving larger blocks of time at home.

Gate 3: Evidence of effectiveness

Evidence base for initiative	<p>There are several studies supported by published research evidence:</p> <p>Bloodworth C, Lane S and Ginn R (2001) Challenging the myth of the 12-hour shift: a pilot evaluation. <i>Nursing Standard</i> 15:33–6</p> <p>Estabrooks CA, Cummings GG, Olivo SA et al. (2009) Effects of shift length on quality of patient care and health provider outcomes: systematic review. <i>Quality and Safety in Health Care</i> 18:181–8</p> <p>Stone PW, Du Y, Cowell R et al. (2006) Comparison of nurse, system and quality patient care outcomes in 8-hour and 12-hour shifts. <i>Medical Care</i> 44:1099–1106</p>
Evidence of deliverable from implementation	<p>This example is from one organisation: Basingstoke and North Hampshire NHS Foundation Trust.</p>
Where implemented	<p>NHS England. Basingstoke and North Hampshire NHS Foundation Trust.</p>
Degree to which the actual benefits matched assumptions	<p>The benefits were greater than expected; however, it is too early for formal evaluation.</p>
If initiative has been replicated how frequently / widely has it been replicated	<p>There are a number of published studies looking at different shift patterns (see references listed).</p>
Supporting evidence for Gate 3	<p>There are several studies looking at different shift patterns. Some studies show a measurable increase in quality, safety and satisfaction, others show little change. It is clear that safety risks associated with working long hours apply when people work longer than 12 hours, or work more than 40 hours in a week, whether those hours are blocked in 8- or 12-hour shifts.</p>

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Gate 4: Details of implementation

Implementation details	<p>Each matron reviewed the requirements for their wards for a 12-hour shift pattern. A generic consultation paper was written outlining the principles, and then specific papers were written for each clinical division, taking into account the needs of each ward. For example, some elective wards had a base 12-hour shift pattern, and then an additional short shift Monday to Friday daytime to help with the times of high activity.</p> <p>A 30-day consultation period was allowed, and during this time shift rotas were worked out such that staff had sufficient time to plan for the change in rotas. The implementation date was known well in advance for each ward. Our maternity areas went first on 4 April 2010 and other wards have followed such that by June 2010 all the wards are operating a 12-hour system.</p>
Time taken to implement	Can be achieved in the medium term: 3 months to 1 year. This includes consultation time.
Ease of implementation	Can be implemented across a whole organisation.
Level of support and commitment	Likely to get a mixed reception. Key managerial stakeholders support the change but some of the staff may be unhappy due to the change in their working hours.
Barriers to implementation	There was some resistance to change from people who did not want to change their working hours, but this was actually fairly small (less than 20%) because most people could see that they would get more time off if they worked 12-hour shifts.
Risks	Longer shifts could increase tiredness and therefore reduce safety. This was considered and discussed on a ward by ward basis. Additional short shifts were added where this was required. Risks around not being able to find cover for a 12 hour shift were considered. With the 3 shift system it was possible to ask people to stay on for an extra few hours if someone called in sick at the last minute. The evidence around 12 hour shifts suggests that sickness absence is less of a problem, and that cover is no more difficult, because there are more people who are on a day off at any one time and can be called upon to come in and cover. Sickness in the Trust has reduced since shift patterns have changed. This may be due to other work to manage sickness. Turnover has remained flat.
Supporting evidence for Gate 4	No further information provided.

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Further evidence

Dependencies	No significant dependencies were identified.
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Contacts and resources

Contacts and resources	If you require any further information please email: contactus@evidence.nhs.uk and we will forward your enquiry and contact details to the provider of this case study. Please quote QIPP reference 10/0017 in your email.
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