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# The Impact of 12 Hour Shifts on Health Care Assistants: Exploratory Interview Study

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This report describes the findings of a research project conducted by the Institute of Mental Health which aimed to explore the impact of 12-hour shifts on Healthcare Assistants' (HCAs') ability to deliver good quality care and their satisfaction with the quality of care they are delivering. The work was commissioned by NHS England (Midlands and East Region) as part of the Compassion in Practice programme.

There are two other related reports which provide further evidence on the impact of 12-hour shifts worked by HCAs: one is a systematic review of existing evidence completed by the Institute of Mental Health; the other is a report by NatCen Social Research describing the outputs from four stakeholder events at which a wider audience of HCAs and other stakeholder discussed the headline findings from this interview study.

## **Institute of Mental Health**

Formed in 2006, the Institute of Mental Health (IMH) is a partnership between two highly respected organisations, namely Nottinghamshire Healthcare NHS Foundation Trust (NHT) and the University of Nottingham (UoN). It brings together the healthcare and education sectors to achieve 'Research Excellence for Innovation'. Housed since 2012 in a new dedicated building on UoN's Jubilee Campus, with over 200 staff and 21 Professors and Associate Professors, we also host the East Midlands Clinical Research Network, part of the East Midlands CLAHRC, East Midlands Leadership Academy and the East Midlands Academic Health Sciences Network.

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## Abstract

### *Background*

There are over 1.3 million unregistered healthcare staff in the UK delivering the majority of the hand-on care to patients in hospital, in care homes, or in the patient's own home, some of whom work 12-hour shifts. However, there is a lack of evidence about the impact of 12-hour shifts on patients and staff, a conclusion further reinforced by the systematic review commissioned by NHS England and reported alongside this report. This study sought to examine the experiences and perceptions of HCAs working 12-hour shifts about their impact on patient care and staff satisfaction and well-being.

### *Methodology*

Semi-structured interviews and focus groups were conducted with 25 HCAs who worked in a range of healthcare settings: 12 acute, 7 mental health, 4 community, 2 care home. The data was transcribed verbatim, and coding of the data then took place using NVivo software. Framework analysis was used to interpret the qualitative data.

### *Results*

The results show diverse perceptions and experiences among the HCAs with a variety of both positive and negative impacts of 12-hour shifts described. Their relative advantages and disadvantages appear more dependent on the HCA's personal circumstances and the other aspects of the psychosocial work environment, than on the presence of 12-hour shifts alone. Whilst most HCAs do not believe that 12-hour shifts affect quality of patient care, many report adverse situations that suggest that care could be compromised where a number of other work conditions are present including staffing levels, high levels of demands and risk on the wards, insufficient breaks and working with unfamiliar colleagues. The intervening factor here is fatigue and tiredness, which is widely reported towards the end of a shift, and particularly after a run of consecutive shifts.

The benefit of better work-life balance when working 12-hour shifts was widely reported, and in particular having 4 consecutive days off. 12-hour shifts were largely seen to be of benefit to developing a positive and therapeutic relationship with patients and their families, and providing continuity of care, which in turn was related to job satisfaction. A positive experience of 12-hour shifts was one that was also characterised by flexibility and control over shift patterns, sufficient staff to meet the demands and allow breaks, and a positive team climate where colleagues supported each other in delivering their duties.

### *Conclusions*

The relationship between length of shift and patient and healthcare assistant outcomes is a varying and complex relationship that is dependent on the nature of other individual and workplace factors. These include shiftwork patterns and flexibility over these, the nature and level of the demands of the healthcare setting, the ability to take breaks, staffing levels and skill mix, a supportive team and management, and personal and domestic circumstances of the worker. Future research into the impact of 12-hour shifts on patient and HCA outcomes needs to view these shifts as part of the wider context of psychosocial factors in the workplace.

## 1. Background

There are over 1.3 million unregistered staff working in the health and social care sector<sup>1</sup>. These are the staff who deliver much of the hands-on care to patients in hospital, in care homes, or in the patient's own home. In July 2013, the Cavendish Review examined the role of HCAs in both NHS and Social Care and founds that many HCAs feel undervalued and overlooked, and that there is a need for consistent training, a minimum standard of competence and clarity on roles and responsibilities<sup>2</sup>. This review, also examined the working conditions and contracts that HCAs work under and reported that, in the NHS at least, 12-hour shifts have become the norm. Indeed, in a national survey of nurses, 63% of nurses in care homes and 41% of NHS hospital nurses reported regularly working 12-hour shifts<sup>3</sup>.

Questions remain over whether this working pattern is compatible with both the time and the emotional and physical energy needed to provide compassionate care to patients, especially when the patients' needs are complex and challenging. Therefore, the Cavendish Review recommended that NHS England should include the perspective of HCAs and support workers in its review of the impact of 12-hour shifts on patients and staff.

The evidence to date is of rather mixed quality and inconclusive, but in some studies of registered nurses long shifts have been shown to have a negative impact on quality of when compared to shorter shift patterns (e.g. 8 hour shift). Some of the negative outcomes in relation to patient care include a higher incidence of medication errors and blood administration errors<sup>4</sup>, a decrease in time spent on direct patient care and an increase in unofficial breaks<sup>5</sup>, poor patient safety and quality of care<sup>6,7</sup>, and patient mortality<sup>8</sup>. In addition, 12-hour shifts have also been regularly found to impact negatively on health and well-being outcomes of nurses e.g.: increased frequency of needlestick injuries and musculoskeletal injuries<sup>4</sup>, higher levels of stress<sup>9</sup> and depression<sup>10</sup>, fatigue<sup>4</sup> and

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<sup>1</sup> 2011-12 data for unregistered staff delivering direct care (NHS and social care). Health and Social Care Information Centre, and National Minimum Dataset – Social Care, managed by Skills for Care.

<sup>2</sup> The Cavendish Review: An Independent Review into Healthcare Assistants and Support Workers in the NHS and social care settings (2013).

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/236212/Cavendish\\_Review.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/236212/Cavendish_Review.pdf)

<sup>3</sup> Ball, J. & Pike, G. (2009). Past imperfect, future tense. Results from the RCN Employment Survey. London: RCN.

<sup>4</sup> Geiger-Brown, J. & Trinkoff, A. M. (2010). Is it time to pull the plug on 12-hour shifts? Part 1. The evidence. *J Nurs Adm.* 40(3), 100–102.

<sup>5</sup> Reid, N., Robinson, G., & Todd, C. (1993). The quantity of nursing care on wards working 8-and 12-hour shifts. *International Journal of Nursing Studies*, 30(5), 403-413.

<sup>6</sup> Griffiths, P., Dall'Ora, C., Simon, M., et al (2014). Nurses' Shift Length and Overtime Working in 12 European Countries: The Association With Perceived Quality of Care and Patient Safety. *Medical Care*, 52(11), 975-981.

<sup>7</sup> Stimpfel AW & Aiken LH. (2013). Hospital Staff Nurses' Shift Length Associated With Safety and Quality of Care. *J Nurs Care Qual.* 28:122-129

<sup>8</sup> Trinkoff AM, Johantgen M, Storr CL, et al. Nurses' work schedule characteristics, nurse staffing, and patient mortality. *Nursing research* 2011;60:1-8

<sup>9</sup> Hoffman, A. J., & Scott, L. D. (2003). Role stress and career satisfaction among registered nurses by work shift patterns. *Journal of Nursing Administration*, 33(6), 337-342.

<sup>10</sup> Lorenz, S. G. (2008). 12-hour shifts: An ethical dilemma for the nurse executive. *The Journal of Nursing Administration*, 38(6), 297-301.

decreased levels of alertness<sup>11</sup>. However, there are also some reported benefits of 12-hour shifts, such as patients seeing fewer different faces each day, which may improve continuity of care and improved efficiency through less handovers<sup>12</sup>. In addition, some studies have found positive outcomes for staff as well, including higher satisfaction and less emotional exhaustion<sup>13</sup>

However, much of this literature has failed to specify whether their participants included both registered and unregistered nurses, as such we are unable to draw out specific recommendations for these two groups of staff. As the Cavendish Review highlighted, the training, job roles and employment contracts are different for these two groups of nursing staff. Therefore, we need to understand the impact of working conditions on HCAs as a separate group, and in the different settings that they work in, and examining the range of patient care and work-related outcomes related to working 12-hour shifts. By examining these in different working settings, we will be able to explore areas for which a consensus emerges, thus identifying common outcomes to all HCA work in different settings. In addition, we will also be able to identify contextual differences, and outcomes that are associated more with the organisational and care setting that the HCA works in. This project aimed to address these issues through exploratory interviews with a range of HCAs in different healthcare settings. A systematic review of the current evidence relating to 12-hour shifts in HCAs was undertaken simultaneously, and is reported separately.

## 2. Project Objectives

The project aimed to explore the impact of 12-hour shifts on non-registered health care staff. Specific objectives were to:

- Conduct focus groups and interviews with HCAs who work in a wide range of care settings
- Analyse the qualitative data to understand HCAs' perceptions of how 12-hour shifts affect positively or negatively their ability to deliver good care to patients or clients, and on their job satisfaction and well-being.

The specific research questions that the project aimed to answer were:

1. What are HCAs' perceptions of the impact of 12-hour shifts on their ability to deliver good quality care to patients?
2. What are HCAs' perceptions of the impact of 12-hour shifts on their satisfaction with quality of care they are delivering?
3. What are HCAs' perceptions of any other outcomes relating to 12-hour shifts?
4. Are there any other factors that might mediate or moderate the relationship between 12-hour shifts and quality of care (e.g. do regular and observed breaks prevent a negative impact of a 12-hour shift on care quality)?

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<sup>11</sup> Geiger-Brown, J., Rogers, A., Trinkoff, A.M., et al. (2012). Sleep, Sleepiness, Fatigue, and Performance of 12-Hour-Shift Nurses. *Chronobiology International*, 29, 211-219.

<sup>12</sup> Josten, E. J., Ng-A-Tham, J. E. E., & Thierry, H. (2003). The effects of extended workdays on fatigue, health, performance, and satisfaction in nursing. *Journal of Advanced Nursing*, 44(6), 643-652.

<sup>13</sup> Stone, P. W., Yunling, D., Cowell, R., Amsterdam, N., Helfrich, T. A., Linn, R. W., et al. (2006). Comparison of nurse, system, and quality patient care outcomes in 8-hour and 12-hour shifts. *Medical Care*, 44(12), 1099-1106.

5. What are the contextual factors that might account for differences in perceptions between different healthcare settings?

These research questions were explored through a series of semi-structured interviews with HCAs working in four different healthcare settings: acute medical wards; in-patient mental health wards; community-based healthcare services; a care home for the elderly. These four different settings enabled us to look at variation in HCA perceptions across differences in:

- work context (providing care on acute wards, care homes or in people's homes)
- patient context (end of life patients, older people, mental health patients, medical patients; the urban and rural populations they serve)
- organisational culture (for example HCAs working for different NHS Trusts, or private sector Care Homes)

### 3. Methodology

#### 3.1 Exploratory Interviews

Semi-structured interviews and focus groups were conducted with 25 HCAs who had experience of working 12-hour shifts. The HCAs were recruited through two methods: first, via emails to senior NHS stakeholders<sup>14</sup> and senior managers at a range of acute and mental health NHS Trusts and care homes who in turn emailed ward managers and HCAs to seek volunteers to participate; second, via an article asking for volunteers that was emailed to HCA members of UNISON. HCAs, or their Ward Managers, contacted the research team directly if they wished to participate.

Data was collected through 17 telephone interviews, 1 focus group (4 participants) and 4 face-to-face interviews. Semi-structured interview topic guides were developed for the interviews and covered the following topics:

- What the HCAs role is, and what a typical shift involves?
- How regularly they work 12-hour shifts and for how long have they been working that pattern? What other shift patterns have you worked in the past?
- Their perceptions of the impact of 12-hour shifts on their ability to deliver good quality care to patients? How this differs from a short shift?
- Their perceptions of the impact of 12-hour shifts on their satisfaction? How this differs from a short shift?
- Any factors that prevent 12-hour shifts from having a negative impact, or that lead to an increased likelihood of a negative impact?
- Any other pro's and con's to 12-hour shifts?

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<sup>14</sup> Stakeholders included Professional Leads in NHS England Regional Nursing Directorates and also networks with Directors of Nursing in provider organisations, and via professional leads at the RCN.

## 3.2 Ethical Approval

Ethical Approval for the study was obtained from the University of Nottingham’s Faculty of Medicine and Health Sciences Research Ethics Committee (Reference Number: A30012015). NHS Permissions were granted by Nottinghamshire Healthcare NHS Foundation Trust.

## 3.3 Analysis

Framework analysis was used to interpret the qualitative data, as it allows for unexpected themes to emerge from the data whilst also allowing the research team to ask questions of the data to address the specific research objectives. The initial framework of themes applied to the data was generated by the research questions and included: negative impact on patient care, positive impact on patient care, negative impact on staff satisfaction and well-being, positive impact on staff satisfaction and well-being, the role of other contextual factors.

The data was transcribed verbatim, and the transcripts were read and re-read and initial ideas and new sub-themes were noted. Coding of the data then took place using NVivo software. Additional sub-themes were added as they emerged from the data.

## 3.4 Limitations

The main limitation of this study is the recruitment methods used. Although recruiting via a UNISON newsletter meant that the participants worked in a wide variety of different healthcare settings across the UK, it also increased the likelihood of participants volunteering who held a particularly strong view on 12-hour shifts.

## 4. Results

Participants came from a variety of healthcare settings and regions across the UK (Table 1).

Table 1. Number of Participants by Healthcare setting and region

Region	Acute	Mental Health	Community	Care Home
North	2	2	0	0
South	2	1	2	0
Midlands	4	4	1	1
East	1	0	0	0
Scotland	1	0	0	0
Wales	0	0	1	1
Unknown	2	0	0	0
TOTAL	12	7	4	2

Key to workplace settings: Acute – hospital wards; Mental Health – mental health inpatient wards; Community – health care services delivered in people’s own homes by mobile HCAs; Care Homes – residential settings for frail older people.



Using the framework of the research questions as a starting point, additional sub-themes were identified in the interview data and coded in NVivo. Table 2 shows the key themes and sub-themes that emerged.

Table 2. Key themes emerging from HCA perceptions of impact of 12-hour shifts

Theme	Sub-theme
Positive Impact on Quality of Patient Care	Continuity and Familiarity Achieving more with Patients
Negative Impact on Quality of Patient Care	Staff fatigue Care not as good, but still good Professionalism prevents bad care
Positive impact on Job satisfaction	From continuity of care A sense of achievement
Positive Impact on Work-Life Balance	More free time Ability to carry out other caring responsibilities
Negative Impact on Staff Well-being	Staff fatigue Staff safety
Negative Impact on Work-Life Balance	Wasted days off Impact on social activities
Moderating Factors	Number of consecutive shifts Sufficient days off between shifts Increased work demands Staffing levels Ability to take breaks Control over shifts Staff mix Supportive team

## 4.1 Positive impacts on care

### *Continuity and Familiarity*

In interviews with HCAs working on mental health wards, participants reported that 12-hour shifts could provide a better quality of care for patients. This was particularly due to the importance of continuity for mental health patients, and the need for known people and infrequent changes of personnel on the ward. Fewer handovers between staff at shift changes were also specified as a benefit of 12-hour shifts that enhanced the continuity of care by avoiding care-related information getting missed or incorrectly communicated.

“My personal opinion is that it can only enhance patient care, because you’ve got the continuity of care throughout the day. ... If they’ve got any issues, or problems, they can

come to you. You haven't got that handover of staff where things can get missed, information can get missed... So for me that's one of the benefits." HCA23, Mental Health

"patients with mental health [needs], love us or hate us, they like continuity and they like to know who's on and what, what they're like, as I say whether they love or hate you. And that continuity helps the patients if they need to be sort of settled and they need to be in a quiet, stimulus free environment ..." HCA11, Mental Health

"Patients don't like a high turnover during the day, they don't like a kaleidoscope of faces changing. They like to get used to someone." HCA20, Mental Health

In an acute setting, the benefit to continuity of care was also mentioned by HCAs. Assessments of patients' physical care needs, such as their mobilisation, was reported to be enhanced by a longer shift. HCAs talked about building a rapport, trust and understanding, and helping the patient to feel secure. Building a rapport with the family members of a patient was also seen as a benefit of longer shifts.

"I actually work three 13 hour shifts a week and I think that's perfect because it's better for patient care... we all get our own bays, and then patients ... we are with them for 12-hours so you have like you build up a rapport with those patients, you get to understand them more so perhaps having that's better because you know that patient and you know if anything is going to go wrong with it. ... If you are working a full 13 hours you have got that knowledge and you know how the patient mobilises and things like that." HCA2, acute

"they physically feel safe, people touch your hand and say "Oh I'm really glad that you're, you know, you're here, I know you're on all night, you know, I feel, I feel really assured". So the continuity of care is to me you know, a massive benefit to the patient." HCA5, acute

"The patients have got much better continuity of care when we're on 12-hour shifts. .. Now when you've got confused Dementia patients, sometimes when you're having a change of shift after six, seven hours, they've already got used to one member of staff, and another member of staff is coming along. That can be quite distressing for them..... So you get to know your patients and you get to know your family, know the family.... The family are interested to know who's looking after them, yeah, they speak, they speak to you more." HCA 7, acute

In a community setting, the majority of participants also reported a positive impact of 12-hour shifts due to continuity of care. The benefits of working with the same staff members were highlighted in this particular context.

"In my current role, when you are working with people on a 12-hour shift there is a continuity between staff members. You can often find yourself in shift changes and people changes you can often spend a lot of time re-communicating things you've already said once or twice. Handovers can take time away from working with the service users. So I think the continuity of care is better for people working longer days." HCA25, Community

"I find it quite beneficial... I quite like it because you do get the continuity.... Usually you are on with the same person, so you do get to work very well as a team. You do tend to know what the other one is thinking, and I think that really does help with patient care.... We do get our regular callers, and we do a lot of palliative as well. On the palliative side of things I do find it really, really helpful because obviously I think patients' relatives do appreciate seeing a friendly face they've seen before.... I think it's beneficial for the patients to have a 12-hour shift" HCA22, Community

### *Time to Achieve More*

In addition to continuity and familiarity, participants in mental health settings felt that long shifts enabled the staff to achieve more with the patients. It gave enough time in the day to see tasks and activities through to completion, including therapeutic activities, writing up notes and making phone calls.

"If you are on a long day, you can plan taking someone out for a few hours. And it doesn't matter what time of day it is. You can go, say, at lunchtime and not be back til 5." HCA10, Mental Health

"You can achieve more because you have a longer length of time to do it in. You can see and reassure a patient, and your relationship grows in that time." HCA11, Mental Health

"I used to find on an early shift I'd try and, I'd be making phone calls to try and get in touch with, I don't know a health visitor and they wouldn't be in the office and you'd have to hand it over and then you'd come back probably, you'd have a day off and come back and it hadn't been done and where quite often you could actually see it through, just those extra few hours they may pop in the office later on in the day or, so it's that bit of consistency" HCA10, Mental Health

"I think you learn more about what happens on the ward – by doing a 12-hour day I learn more about what the nurses do, what the consultants and psychologists do... By knowing that, you know what you can do to assist, to help, and for patients that do have concerns, what is going to happen" HCA11, Mental Health

The potential benefit of being able to achieve more on a longer shift could also apply in the community where a significant amount of time was spent travelling between visits:

"No, I think the quality of my care which I give on a one-to-one basis isn't affected by the shift pattern or duration that I work. However, my shift efficiency, in my current role, is increased by a longer shift because I work over a vast area in the community. I travel and I visit people in their own homes, so I could travel 30 miles to see one person and if I'm on a short shift – taking into account handover either side, and a lunch break, and duration of the travel – I might only get to see one or two people in a short shift. Whereas on a longer shift I might get to see 4 or 5 people... But with regards to the actual care that they receive, no there's no difference" HCA25, Community

## 4.2 Negative impact on patient care

### *Staff fatigue*

A negative impact of 12-hour shifts on fatigue for the last few hours of a shift was reported by a number of participants. Their view was broadly that fatigue and tiredness affected levels of tolerance and patience with both staff and patients alike. It could also affect how observant and alert they were to patient needs towards the end of a shift.

Several judged that the effect of fatigue was cumulative, when working a number of consecutive 12-hour shifts. It could also be influenced by the nature of the demands of the workplace setting, their ability to take breaks, and staffing levels (the influence of these factors is discussed further in Section 4.7 below). “you come to 8 hours within that shift and me personally, I’m on my knees. I’m tired, your patience gets very frayed, obviously, you are not as alert, you’re not as quick and you are tired.... And that is where mistakes get made” HCA8, acute

“I’d probably say it is not as good for the patient because about 10 hours in you are exhausted. When it’s high paced I think the staff are burned out by about 9 or 10 hours in. So they are not necessarily getting the best of you as they could be. Especially if you’re doing more than if you’re on your third long day shift in a row”. HCA12, Mental Health

“People get tired in the last hours of the shift. And they lose the interest in the job, they lose the enthusiasm, they become nervous, impatient, and that impacts on quality of care. In mental health, patients are more unpredictable than in general healthcare.... We can’t lose the sharpness of mind, but we do..... I don’t want to be rude to patients, and I believe I am not. But it costs me more work to be polite and be patient. It requires much support in those last hours to be the same polite, and caring and patient as I was in the first hour.” HCA20, Mental Health

“You come towards the end of the [night] shift and people wake up, and we get calls at half past seven in the morning. And as you can imagine, we start at quarter to 8 [the previous evening], and it can be a bit... you are exhausted. It’s very difficult then, y’know. You really have to be aware of what you are doing. It’s more mental [tiredness]... It’s palliative patients, it’s the families really that you are sitting talking to. So it’s more mental. You’ve really got to be awake” HCA19, Community

### *Still good care, just not as good*

Some HCAs reported that although they were still able to provide good care towards the end of a 12-hour shift, it was probably not as good as the care they were able to give at the beginning of a shift.

“We’d all like to say we give our best all the time, and we do give our best all the time. But I don’t think your best is the same in the first 3 hours as in the last 3 hours of your shift.”  
HCA12, Mental Health

### *Role of Professionalism*

Although about half of the participants recognised the effect of fatigue on themselves and a few felt that this could impact on patient care, some were equivocal about whether their tiredness affected patient care and some denied that there was any difference in their performance because of their 'professionalism';

"I don't think it affects them [patients]. If it affects them, then we're not doing our job properly"  
HCA15, acute

I'd say I'm still not as kind of fresh at 7 o'clock as if I'd kind of just come on shift. But I'd say I'm still am able to give good quality care..... It's kind of just professionalism that you just get on with it" HCA18, Care Home

"It wouldn't matter to me if I worked 8-hour shifts or 12-hour shifts I would still be the same... how do I put this ... it would still have same outcome looking after a patient, it wouldn't make any difference to me whatsoever" HCA1, acute

"Because we are professionals, so we do our jobs really well and care is not sort of compromised I would say." HCA24, Community

## **4.3 Positive impact on job satisfaction**

### *Continuity of Care*

The benefit of providing continuity of care for patients was a theme that was also identified by HCAs in the context of their own job satisfaction. 12-hour shifts were generally reported to lead to more job satisfaction than shorter shifts. This satisfaction seemed to arise from the increased quality of care that HCAs perceived came from the continuity that 12-hours shifts enabled.

"I think I do get quite a lot of satisfaction from the long days, being with the [patients] right from the moment they get up, to winding down in the evening. I enjoy the continuity of that, rather than the few short days I've worked, I've not enjoyed as much. It's almost like I'm missing something if you like or coming in late, things have happened and I've missed it". HCA13, Mental Health

"My job satisfaction is definitely higher working a 12-hour shift. For the basic fact, you've got continuity of care. So a patient could be having problems in the morning, and you being there in the morning you can help them and hopefully by the time you go home at night you've sorted that problem out... You don't feel like that 'It's 5 o'clock, I'm going home' sort of mentality. You're there right until the end of the shift.... You've got more time with the patients so you can do a better job, yeah." HCA23, Mental Health

"I think there is more satisfaction because you get in there, you know you're going to be there for 12-hours. You actually get to pick up everything that comes in... The patients aren't kept waiting,... they are dealt with in a timely manner." HCA22, Community

### *Sense of Achievement*

Some found a sense of achievement in putting in the long hours, a satisfaction in working hard and getting things done.

“It kind of gives you a sense of satisfaction you are able to do it. So you know you’re talking to other people and they say oh I can’t believe you have to work that, that’s terrible and it gives you the sense of kind of well I can and it is possible and it’s amazing what the human body can do I think.” HCA18, Care Home

“For me, I like working longer days. I think I get better out of myself working longer days”  
HCA25, Community

## **4.4 Positive impact on work-life balance**

### *More Free Time*

Many HCAs reported the benefits of more free time due to the compressed working week that a 12-hour shift provides (i.e. working full-time hours in 3 days). This working pattern allowed HCAs to have the majority of the week away from work and free to engage in other activities. However, it was widely acknowledged that these benefits depended on the personal circumstances of each HCA and a preferable shift pattern.

“So to me there is no negative, I have got more time on my hands to see my grandkids when I am working 12-hour shifts.” HCA1, acute

“People like to do the twelve hour shifts, because it gets them out the way, it frees up your week completely.” HCA5, acute

“you can do all your shifts either at the beginning of the week and then you have got the rest of the week off, or like some of them I can spread over the week and it gives you more time ... but I prefer them both together. And then I have got more time off” HCA9, acute

“A 12-hour shift for me enhances my work-life balance ‘cos it gives me time off. It gives me four days off with my family.... You are there for the patients when you are there, but when you are off, you’ve got a few together.” HCA23, Mental Health

“I have just moved onto the three 13 hours [shifts] over the last six months I think it’s a lot better for me. I have got a better work life pattern, like I have got more time off which it’s like a chance to do more things.” HCA2, acute

### *Ability to Carry Out Other Caring Responsibilities*

Many respondents felt that they had greater flexibility to meet their caring responsibilities outside of the HCA work:

“In terms of work-life balance, it feels better because you spend more time at home. I’ve got young children and I feel I can be a good Mum because I can pick them up from school sometimes four times a week... but I guess it differs for everybody ” HCA12, Mental Health

“I care for my husband as well so if I can get four days off that would be better for me to get around appointments etc. ... and make sure that he’s cared for and everything so that I can have more time at home so yeah it would be better for me. It might not be better for everybody else but it would be better for me.” HCA4, acute

“I used to do shift patterns which were seven to three, and two until ten. Those shift patterns were absolutely horrendous for me on my family needs and personal needs, so twelve hour shifts suit me better.” HCA7, acute

“In more recent years, it has become more prevalent for me to work longer shifts than shorter days for childcare. Both my husband and I do very similar jobs and have done for many years, we have a 2 year old and a newborn, and if we couldn’t work opposite shifts our children would be subjected to childminders and strangers more than they would be looked after by their mother and father.” HCA25, Community

## 4.5 Negative impact on staff well-being

### *Staff Fatigue*

Despite the positive reports above, negative effects of 12-hour shifts on HCA health and well-being were also reported, many of which we related to fatigue and tiredness. Participants reported that this negative impact was felt after their shift had finished, and frequently on their first day off after working a 12-hour shift which was often reported as a day to recover.

“It’s when you stop. You go home and have a cup of tea and a sit down. And that’s it. That’s when it hits you. And the next day, you just simply don’t want to do anything because you’re so tired from the day before.” HCA17, acute

“It wipes you out, you are very tired” HCA8, acute

“It’s normally the next day it kinds of hits me, so when I wake up in the morning I’m quite kind of achy and groggy and I have to, I’ve learnt that I have to be quite careful what I do the next day after a shift”. HCA18, Care Home

“If you say you’re on a Monday, Wednesday, Friday, in reality you’re kind of recovering the day, because they are so long you’re recovering the day after your shift and then going to bed early in preparation for your shift. So it kind of dominated your life quite a lot.” HCA12, Mental Health

“It did actually have an impact on me working in the [care home sector] which is why I came to work at the hospital because I was having health issues myself... both mentally and physically”. HCA4, acute

### *Staff Safety*

Staff safety was also mentioned by one interviewee working in a Mental Health setting. This participant felt that fatigue due to the 12-hour shifts lead to decreased vigilance amongst staff towards the end of a shift and increased the likelihood of incidents and assaults against staff.

“I tried to remember if I was the witness of any incidents [against staff], and they were always in the last hours. Personally, I was hit on the head by a patient. It was the patient, but I wasn’t careful enough.” HCA20, Mental Health

## **4.6 Negative impact on work-life balance**

Some HCAs felt that shorter shifts were better for people, leading to better work-life balance than 12-hour shifts. This view also depended on their personal circumstances, and was most prevalent amongst those who didn’t have direct caring responsibilities.

### *Wasted Days Off*

Partly, the negative impact of 12-hour shifts on work-life balance was described as being due to the need for a day to recover from the fatigue of working these shifts. This was seen as a loss of a day off.

“By the time I do get round to that three or four days [off], two of them have gone because I’m too tired to do anything else. So then you’ve got no home life really because you’re just too tired” HCA17, acute

“It is a dreadfully long day, and then you spend the next day, getting over the day that you’ve just done.” HCA8, acute

### *Impact on Social Activities*

Some participants also reported that long shifts were incompatible with social and family activities after work.

“It’s your social life – you can’t really have a social life. You can’t join any clubs because you might be here one Wednesday... And it’s like the family. They work as well as myself, and so when they have time off I probably don’t.... I don’t see my grandchildren.” HCA16, acute

“I do quite a lot outside work, I have kind of regular groups that I like to go to in the evening.... so kind of church groups and they all start at 7.30 at night. So often I am late to things like constantly I’m saying oh I’m coming but I won’t be there until quarter past eight.” HCA18, Care Home



## 4.7 Factors that moderate the impact of 12-hour shifts

In the interviews, a wide range of factors were highlighted as having an influence on how 12-hour shifts impacted on negative outcomes for both patients and HCAs. Most of these factors were related to other aspects of the work design and management that were specific to the working context and setting of the HCAs. This is illustrated in the quote below, where an HCA had previously worked 12-hour shifts in a Care Home setting but was now working 12-hour shifts in an acute setting. It was not the 12-hour shift itself that caused problems for this HCA, but other contextual factors that were associated with the length of the shift.

“INTERVIEWER: so it sounds as if you’re quite favourable to 12-hour shifts in your current setting?”

“HCA: In my current setting I would say yes ... if I was put back into the setting I was in before I would say no.” HCA4

### *Number of Consecutive shifts*

HCAs reported that the shift pattern that they worked moderated the impact that 12-hour shifts had on their tiredness and fatigue. In particular, working three 12-hour shifts on consecutive days was repeatedly mentioned as shift pattern with a negative impact. Some participants reported that there were policies in place to prevent people working more than three consecutive shifts to be a reasonable limit.

“I try not to do three [day shifts] together... I’d rather do a 2 and a 1, with a break in between. It can be quite draining, for want of a better word. I know that sounds awful but it is, because it is mentally draining..” HCA10, Mental Health

“I think three long days together should not be allowed, which I know is ward policy to try to avoid wherever possible. On my third long day, by 4 in the afternoon I can be quite short with people – not just patients but staff as well – because I was just too tired”.  
HCA11, Mental Health

“They gave me 3 days [in a row once] and I said to .... ‘Don’t do it to me anymore’ because on the third day I felt ratty. I didn’t even want to be bothered with the patients to be quite honest. I felt really tired” HCA15, acute

“if I have to do three in a row then that third shift is very, is difficult to get through..”  
HCA18, Care Home

### *Sufficient days off in between shifts*

The number of days off between shifts was also highlighted as being an important factor in recovering from tiredness and fatigue. One interviewee described sufficient rest between shifts as a coping strategy for dealing with the fatigue:

“You need the time off in between shifts. And sometimes there’s only 1 day which is nowhere near enough. You need at least 2 days [off in between shifts]” HCA 6, acute

“And then there’s some weeks you can get five shifts in one week....and when you’ve done quite a few like that, for whatever, you really need, if you get three days off, two of them have gone cos you’re so tired and drained” HCA17, acute

“I think most of the coping strategies [for tiredness following a 12-hour shift] are outside of work. And it’s that thing of ‘oh, I’ve got two shifts together, I know I need a sleep in the next morning so I won’t plan anything’.... There’s not really much you can do on a shift to manage energy expenditure.” HCA18, Care Home

### *Poor Rota Planning*

A number of HCAs described experiences of having worked a large number of consecutive 12-hour shifts due to poor shift planning at the end of one rota cycle and the beginning of the next rota. This appears to happen when the next rota is planned without looking at how the previous rota ends, so the HCA works a series of shifts at the end of one rota and starts a series of shifts on the next rota. Concerns were raised by HCAs over the implementation of e-rostering and whether this would increase the risks of a large number of consecutive shifts.

“sometimes I work like 4 nights and I finish on a Monday morning and every Tuesday, erm ... I am in 4 days. I find that quite hard going because it’s like eight 12-hour shifts out of nine days, but I do do it and I don’t think that,... it’s just now and again we get that on the rota it depends on how the rota plans out.” HCA1, acute

“When I used to do full time sometimes they would put 3 shifts together at the end of the week and then put on your shifts for the following week next to it, so you end up doing 4. The people who do the rosters should look at what they have worked the following week and maybe give them a few days off in-between before they give them their next set of shifts.” HCA9, acute

### *Increased work demands*

Many HCAs reported that particular demands on the ward had an impact on how tiring a shift was. In the acute hospital setting, the increased demands of older frail patients and those with cognitive impairments, delirium or dementia were noted as a particular source of increased physical and emotional demands. Many HCAs described how the workload had changed over time, with an increasing proportion of these patients on acute wards.

“The ward’s changed a lot as well. There wasn’t care for the elderly when I started, and now it’s care for the elderly and it’s very demanding. It’s a lot harder. I mean I’ve been on this ward 15 years. And it’s a lot harder now.” HCA16, acute

“They brought the 12-longer hour shifts in. But as I say it was alright I think to start with but now like the workload’s getting a lot more heavier.” HCA17, acute

“You get tired [on night shifts] because some of our patients are dementia patients, so they don’t sleep at all so you are on the go for 12-hours” HCA9, acute

“I think working in the dementia, when I worked in the nursing homes it was, 12-hour shifts was too much, it was too much of an, it would have been better to have done less hours.” HCA4, acute

The number of patients with dementia or delirium in an acute ward had an additional impact on work load of HCAs, as one-to-one care was often needed to prevent these patients harming themselves by trying to get out of bed. This in turn reduced the number of HCAs available on the ward, and left the other HCAs with additional patients to care for.

“We do get a lot of 1:1 patients that we have to sit with 1:1. We don't want them to get out of bed because it's dangerous or whatever. They would fall or...they insist that they want to come out of bed.....” HCA14, acute

“if you have confused patients getting out of bed and somebody wants a bed pan, where do you go first? Um you know, sometimes there are Specials, but because of funding they often don't have Specials, so therefore, you end up sitting with a patient all night, and somebody else wants a bed pan, really you're scuppered, you know, you've just got to quickly run and a risk of falls. .... but it's the, the knock on affect..” HCA8,

Some of the increased demands in acute settings were due to a high number of patient admissions and also related to bed shortages elsewhere in the hospital.

“Like again it totally depends on the shift. Because you can never predict what a shift is going to be like.... One day you could be going in the ward and you could have like day to day you could have like 15 admissions a day and the next day you could have like 40 admissions but within those 40 admissions you could get a lot of poorly patients.” HCA2, acute

In mental health wards, the physical demands were reported to be generally lower. However, certain situations, such as a particularly distressed patient or high observation levels, would lead to increased demands which would then impact on fatigue. As on the acute wards, the demands of one-to-one observations on a 12-hour shift were noted as having an impact on the physical and emotional fatigue of HCAs, as well as potentially on quality of care and patient safety.

“It depends on the nature of the ward. We are very fortunate on this ward. It's not a fast-paced ward generally. So if it's a quiet laid-back day like that, of course it's better. But if you've got a particularly distressed patient that's requiring 1:1 then the impact on you physically and emotionally is really, really hard. Those shifts become horrendous.” HCA12, Mental Health

“If you've had a shift where different observation levels, if you're on high obs with somebody at arms' length, that's mentally and can be physically taxing. And if you have that for 39 hours over 3 days, that, something is going to give. And you know if something happened with the patient at the end of that third day, realistically you're not going to be mentally alert enough to deal with it as you would at the beginning of your first long day. So it starts to be a bit risky in terms of those kinds of procedures or those kind of checks that you are under” HCA11, Mental Health

### *Staffing levels*

Staffing levels were inextricably linked to demands on the ward, such that when staffing levels were low, the workload demands were perceived to have increased, and that in turn leads to increased fatigue. Although most respondents denied that they themselves were anything less than 'professional' in their individual performance at work, several seem to have acknowledged that staff shortages could affect patient care and gave concrete examples.

"They're trying to get it where there is an auxiliary in every bay. So it's one auxiliary with six patients. It does work some days. But obviously the day we've had someone .... somebody has not turned in. And we lose the...a nurse this afternoon. So we're even shorter down that end." HCA17, acute

"if you have got not enough staff it does have an impact, it is hard work because staff have gone sick and the agency don't cover or if we are short staffed which we are generally all the time on our ward, it does have an impact on the staff that are there. You just have to get on with it because you are there to look after the patients at the end of the day." HCA9, acute

### *Skill Mix*

The mix of skills and experience of staff that are working alongside an HCA was reported to have an impact on whether a 12-hour shift was a "good one" or not. This included the numbers of registered and unregistered staff working on a ward, and the numbers of bank staff that are working and whether they have experience of the specific ward/patient context.

"If you've got two bank staff on with you ...who you don't know, and, for whatever reason, aren't particularly good at that [type of work], the shift is a nightmare." HCA10, Mental Health

"Often we work on 3 staff, and sometimes we have 2 qualified and one unqualified, and sometimes we have one qualified and two un-, but you know so that makes a massive difference in terms of how much we have to be doing of a nursing role with patients. ... like you know sitting and doing therapeutic work with patients, it is not necessarily our role but we don't exclude ourselves from it. But you know it might be done by other staff if they were in, if there was two qualified on." HCA11, Mental Health

"we are relying on bank staff because the Trust won't recruit.... so you're working with people you've never met. Those people are not trained in looking after [these patients]. They've probably, it's such a specialist area they're probably not trained in [the specialism] .... And we just don't have the quality of bank staff to support us. .... so that can make a massive impact you know. Although you've got a third person on you might not feel like you have ... HCA12, Mental Health

### *Ability to take breaks*

Breaks were a contentious issue, mentioned by HCAs in mental health and acute settings, where the work seemed most intensive and risky. HCA often reported that they were unable to take their allocated breaks due to staff shortages or high levels of demands on the wards. This then increased the negative impact of a long shift on their fatigue and well-being.

“We are entitled to a break but taking that break is unsafe because you're leaving a member of staff on the ward on their own. So not only do they expect you to do 12 ½ hour shifts, you're actually doing that without a break... which in my opinion is not acceptable. If you worked 12-hour shifts but you had your half an hour break half way through and you were able to go off the ward and go upstairs, or go out for a walk then that is a little bit of time to recharge your batteries. ... So I think breaks are really important if we are expecting people to be working those longer shifts.” HCA12, Mental Health

“Nurses and carers don't even get a break. I think that's the least they deserve is a little drink at the work station but that's frowned upon.” HCA3,

“The acute setting that I'm in now, a couple of weeks ago, I worked a day shift and it was twenty past four in the afternoon, before I had a drink of any capacity.” HCA5

“You know, and you only get two breaks in that twelve hour, I get two half an hour breaks... I think that you should be able to have more frequent breaks, um, you know, you don't, you don't have time to have a drink, you know. By the time you've sat down, I don't have time to go down to the canteen.” HCA8, acute

### *Control over shifts*

Self-rostering means that staff can choose when to work, and this is a popular approach. When staff talked about their 12-hour shifts, flexibility and control over shift patterns was frequently described as a something that prevented the negative side of long shifts. This was easier on smaller wards.

“It's always been really, because we're such a small group of staff, and a small unit, it's really flexible. You know and we all work together, you know it's, we're very lucky you know” HCA10, Mental Health

“There is flexibility on this ward to do those [short shifts] if it suits you. So there is some flexibility if you've got childcare issues to do those. It becomes more difficult the more staff issues that you have.” HCA12, Mental Health

“I would say I am lucky because especially where I work everybody is like flexible and things and we all help each other out because we are all like one big team, but we don't stick to this ... oh well you are nightshift we are dayshift kind of thing. You are all the one big team and if we can help each other out we will. And I think that's how the 12-hour shift works” HCA2, acute

“They would probably retain staff if they had the option of days or nights or 12-hour shifts, rather than it being just sort of enforced” HCA22, Community

“If you are subjected to working a very long day, and you feel that you are being asked or told to do it by somebody else, that can be quite arduous and tiring. However, if you have asked to do that shift, and you are fully committed to it, then I think you are more likely to feel satisfaction in doing it... You should be allowed to choose.” HCA25, Community

### *Supportive Team*

Another factor relating to the team was the supportive nature of the team providing care. This included both the HCAs and registered nursing staff, and also the support from ward management too. Working 12-hour shifts as part of a supportive team that is well-managed was reported to have positive outcomes.

“I think you know a lot of doing the long days is about the group of people you work with as well, how supportive and how, how erm, you know how good you all work together and how the work load is shared between you all and makes it those 12 hours plus ... because it can, it makes an awful lot of difference, it's a long shift.” HCA10, Mental Health

“I would say I am lucky because especially where I work everybody is like flexible and things and we all help each other out because we are all like one big team, but we don't stick to this ... oh well you are nightshift we are dayshift kind of thing. You are all the one big team and if we can help each other out we will. And I think that's how the 12-hour shifts work” HCA2, acute

“I think it's just like everything, if something's managed well, whether it, it could be a twenty four shift, if it's managed well, um, I think it would work.”HCA5

## **5. Discussion**

This interview study aimed to explore HCAs' perceptions of how 12-hour shifts their ability to deliver good care to patients or clients, and on their job satisfaction and well-being. The results show a very mixed opinions of 12-hour shifts, with some HCAs preferring them, some disliking them, and some seeing both pro's and con's associated with them. Their relative advantages and disadvantages are more dependent on the HCA's personal circumstances and the other aspects of the psychosocial work environment, than on the presence of 12-hour shifts alone.

Whilst most HCAs did not believe that 12-hour shifts affect quality of patient care, many report adverse situations that suggest that care can be compromised where a number of conditions are present. These adverse factors mentioned by interviewees which increase the risks of negative impacts on patient care included short-staffing, three or more consecutive shifts, high levels of demands and risk on the wards, insufficient breaks and working with unfamiliar colleagues in particular bank staff. None of these are directly related to working a 12-hour shift. The factor that

intervenes here is fatigue and tiredness. While most deny that they are anything less than professional when they are worn out, being exhausted is likely to make the high-stress, low-staff environments particularly difficult to withstand. They clearly take a toll on the individuals once they have finished their shift, with many admitting that they needed at least one or two days to recover fully from a run of two or three 12-hour shift. There is a consensus that three consecutive 12-hour shifts is a maximum number of shifts advisable, but that even this was too many for some participants. It would be interesting to explore whether this is in fact the threshold at which 12-hour shifts have an adverse effect on patient care or HCA wellbeing, and the implications of this in relation to the European Working Time Directive.

The patient context is clearly another factor that increases the risk of adverse effects. 12-hour shifts are reported to be particularly challenging on acute wards where HCAs may be caring for several cognitively impaired older patients and the volume of care needs is higher, due to level of patient dependency, and patients may frequently require 1:1 care. Also, on mental health wards, if high observations or 1:1s are needed for at-risk patients then the 12-hour shifts was more likely to have a negative impact on outcomes for patients and staff. The 12-hour shift patterns may not be good for delivering good quality care to these patients if it is not possible to guarantee sufficient staff to cover the increased demands on these wards and to allow HCAs to take breaks, and where inexperienced and unfamiliar staff are used provide cover.

Despite these disadvantages, the freedom and flexibility offered by 12-hour shifts, including self-rostering, and in particular having 4 consecutive days off without needing to take annual leave were a huge advantage to many respondents. In mental health in-patient wards, 12-hour shifts were largely seen to be of benefit to developing a positive and therapeutic relationship with patients. We heard examples of “good 12-hour shifts” across the range of settings. These were generally characterised by flexibility and control over shift patterns, sufficient staff to meet the demands and allow breaks, and a positive team climate where colleagues supported each other in delivering their duties. In these contexts, 12-hour shifts were reported to provide a positive care environment which provided continuity of care for patients and families, which in turn provided increased satisfaction for staff.

## 6. Summary

The relationship between length of shift and patient and HCA outcomes is not a straight forward one, but rather a varying and complex relationship that is dependent on the nature of other factors. These include shiftwork patterns, the nature and level of the demands of the healthcare setting, control over shiftwork, the ability to take breaks, staffing levels and skill mix (ratios of registered and unregistered healthcare workers), quality of the team and management, and personal and domestic circumstances of the worker.

Future research into the impact of 12-hour shifts on patient and HCA outcomes needs to view these shifts as part of the wider context of psychosocial factors in the workplace. By examining how these factors interact and combine to affect outcomes, possible intervention to improve these outcomes will become clearer.

The results of this exploratory interview study have been further discussed at a series of Listening Events with other HCAs and NHS stakeholders. The results of these discussions are described in an additional report authored by NatCen which can be found here:

<http://www.england.nhs.uk/6cs/groups/safe-staffing/>