ORIGINAL ARTICLE

The ''4-hour target'': emergency nurses' views

Andy Mortimore, Simon Cooper

Emerg Med J 2007;**24**:402–404. doi: 10.1136/emj.2006.044933

See end of article for authors' affiliations

Correspondence to: Charge Nurse Andy Mortimore, Emergency Department, Torbay Hospital, Lawes Bridge, Torquay, Devon, TQ2 7AA, UK; andy.mortimore@nhs.net

Accepted 2 March 2007

Objective: To explore nurses' views and to identify the perceived advantages and disadvantages of the ''4-hour target''

Methods: The study was based in one emergency department (ED) in the UK and took a generic qualitative approach. A stratified sample of nine experienced ED nurses were recruited for semi-structured interviews. Data was analysed using the framework analysis[1 2] approach.

Results: The 4-hour target was considered an overall success in reducing waiting times and increasing patient satisfaction. However, staff expressed concerns over the imposed nature of the target, workload pressures, quality of care, and the level of support from secondary and primary care.

Conclusion: Although deemed an overall success, there were reservations as to the target's sustainability. Recommendations are made for improved communication between primary and secondary care and establishing the target as a shared goal within the hospital environment.

In 2000, the Department of Health (DH) launched the *NHS Plan*,[3] which set out ambitious objectives for the improvement and delivery of health care. The following year, *Reforming Emergency Care* specifically outlined the changes required in emergency care and included the statement; ''By 2004 no one should wait more than four hours in A&E from arrival to admission, transfer or discharge''.[4] Prior to the target, the emergency department (ED) included in this study had seen an increase in waiting times as demand increased (94% of patients seen and treated within 4 hours in 1995 vs 90% in 2000). The new target meant that this trend had to be reversed and that additional requirements such as ''no 12-hour trolley waits'' had to be carried out. This had a huge effect on waiting times, but increased financial and staff demands. These demands were reduced slightly by the introduction of clinical exceptions to waiting times[5] and the lowering of the 100% target to 98% in March 2005.[6]

The reason behind the arbitrary 4-hour target, as opposed to 3 hours or ⩾5 hours, is unclear. It appears to be founded on the basis that the public perceive speed to be synonymous with quality,[7] and that there is a correlation between patient waiting times and staff satisfaction.[8] The DH[4] claim that the 4-hour target was based on work by Cooke *et al*,[9] but in fact this work was based in a different context and setting, finding that patient streaming (''see and treat'') in a trauma unit could reduce waiting times by 30% when experienced nurse practitioners and consultants were present.

Concerns over the lack of consultation, planning and communication prior to the implementation of the target have been expressed concisely by Hayes'[10] statement that ''Change is often managed less effectively than it might be because those responsible for managing it fail to attend to some of the critical aspects of the change process''. The focus on targets as opposed to improving emergency care overall has also been widely criticised.[11] Many patients are rushed out of departments in the last 20 minutes of the 4-hour period,[12] which has an effect on receiving teams[13] and it has been said that EDs are becoming ''a queue processing machine''.[14] In fact, a survey of consultant staff by the British Medical Association (BMA)[15] showed that during a monitoring week, most departments directed their efforts towards achieving the target at the expense of clinical quality and staff well-being. A later survey[16] found that it was not the target itself but the way in which the target was implemented that caused so much tension. To quote Donald MacKenzie, Chairman of the BMA Accident and Emergency Committee, ''It is absolutely right that patients visiting A&E are seen and treated as quickly as possible but not if staff are being forced to make inappropriate decisions…I am appalled to hear that some A&E staff are being put under intolerable pressure, even bullied, by their trusts as they attempt to treat and discharge their patients within four hours''.[17]

From a positive stance, however, Munro *et al*[18] found that waiting times are being reduced by increasing nurses' and doctors' hours, improved access to emergency beds and triage by senior staff, as long as staff remain focused. They also found that the morale of staff improved when measures were taken to improve waiting times. Others argue that nurses now concede that trusts would never have addressed some of the difficult issues surrounding emergency care (unnecessary delays and gridlocked systems) without the pressure of the 4-hour target.[19]

In this study we focus specifically on views about the 4-hour wait, and the target's emotional and personal effect on the working lives of nurses in the ED. The aim of the study was to explore nurses' views and to identify the perceived advantages and disadvantages of the 4-hour target.

METHODS

This study was designed as an inductive generic qualitative approach, which Caelli *et al*,[20] (page 3 of their study), describe from the work of Merriam as studies that ''seek to discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved''. In this study, we were particularly interested in the experiences and views of those involved in the 4-hour target, and took a pragmatic approach, which was well served by a generic study. The rigour of this approach is discussed in the conclusions to this paper.

A stratified sample of nine nurses was recruited from the ED at a UK District General Hospital (three healthcare assistants, three staff nurses and three sisters/charge nurses). Respondents were required to have worked in an ED for >5 years, to ensure that they had experience of waiting times prior to the implementation of the 4-hour target,[3] resulting in a population of 19 staff members. Data was collected via audiotaped

Abbreviations: BMA, British Medical Association; DH, Department of Health; ED, emergency department; GP, general practitioner

semi-structured interviews. As the lead author (AM) was the departmental manager, hence, it was a condition of the approval from the local research ethics committee (LREC) that the interviews and transcription were performed by an independent interviewer to maintain anonymity.

To ensure validity, copies of the transcripts were returned to respondents to see if, on reflection, the elements described were essential to the experience.[21] Secondly, emergent themes in a proportion of the transcripts were co-verified by a second researcher.

The framework analysis approach[1 2] was selected to compare and contrast the data and to inform the final outcomes. The key stages inherent in this approach are: familiarisation through reading and re-reading of transcripts; identifying a thematic framework (which in this approach is a deductive aspect); indexing and charting for a system of identification for the data; and thematic analysis to identify commonalities and draw the themes together.

RESULTS AND DISCUSSION

Extracts from the nine nurse interviews are identified below by interview number (e.g. N2 = nurse 2) and transcript line number. Table 1 shows the main themes (which naturally emerged from the interview questions) and subthemes. Several subthemes fell into more than one main theme and are shown accordingly.

Perceived advantages of the 4-hour target

Overall successes

All of the nurses interviewed concluded that the introduction of the target had been a positive experience—or example, ''I feel it is a really good thing and a very positive move'' (N9 L2). Negative aspects were overshadowed by the perceived benefits; however, as one respondent stated, their introduction was ''A success with reservations'' (N7 L45). Respondents suggested that patient satisfaction had increased due to reduced trolley waits, a reduction in investigation delays and improved patient journey. They also reported that infrastructure changes had improved the service ''I don't know what sort of state we would be in now with our capacity if those patients waited for 7 or 8 hours like they used to, we wouldn't be able to accommodate them'' (N9 L105). This theme of ''better now than before?'' was supported by comments such as: ''…it was worse then [before] …definitely it just seemed to be more hectic, there were people on trolleys for 12 hours and you'd leave here at 8 pm and come back in the morning and there would still be some patients here'' (N3 L40). Some respondents also believed that public awareness and embracement of the target had helped to drive forward its success by challenging delays, but this was countered by the argument that the expectations of the public are unrealistic.

Table 1 Themes and subthemes

Main theme	Subthemes
Perceived advantages*	''Overall success''
	Patient satisfaction
	Better now than before?
	Public awareness
	Public embracement
Perceived disadvantages*	Staff pressures
	Workload
	Morale
	Arbitrary 4 hours
	Quality of care
	External factors
	Secondary problems
	Public awareness
The way forward for the 4-hour wait	A&E or hospital target?
	Better ways of working
	Primary and secondary care

*Of the 4-hour target.
A&E, accident and emergency.

Perceived disadvantages of the 4-hour target

In this second main theme, respondents expressed their views on the increase in staff pressure. They focussed on the ''imposed'' (N5 L50) nature of the target and the immense pressure of managing patients within a limited time frame, while being watched by ''Big Brother'' (N5 L35). The target was blamed for its distortion of clinical priorities ''…somebody's in pain and you need to get them on the ward within those 4 hours - do you move them or not?'' (N6 L8), concerns echoed in the aforementioned surveys, which found that 56% of departments believed that efforts to meet government targets distorted clinical priorities[14] and 82% of departments reported threats to patient safety from pressure to meet the 4-hour target.[15] However the target was only one factor in the increase in staff pressure, as the blame was also directed at ''general work pressure and volume of patients coming through'' (N4 L37), which all contributed to a fall in morale.

Arbitrary 4 hours

Respondents felt that patients could be seen quicker, for example by ''streaming'',[4 9 22] but they did not understand why there was a blanket target of 4 hours when it was clearly easier to deal with minor rather than more severe conditions. There were also concerns that the quality of care was compromised by time targets taking priority over clinical need, restricting time and limiting communication and treatment.

External factors

Although there was recognition of the initiatives that had been developed to facilitate the target, respondents felt that help was required from outside the ED: ''…the rest of the hospital doesn't seem to be set up to support the four hour target…'' (N9 L59). This focused on the lack of out-of-hours diagnostic and pharmacy facilities and bed availability, confirming the findings of Cooke *et al*[23] that high bed occupancy is related to long waits in EDs.

Secondary problems were also cited: ''…you don't have time to train junior staff, and a lot of them are leaving because they feel they cannot cope with high pressure work all the time'' (N2 L29). In contrast to the positive side of public awareness, the downside was increased attendance ''…because people perceive that patients get seen more quickly in A&E …they come here as a first resort rather than as a last resort…'' (N5 L13). Public expectations were often seen as unrealistic in a world where clinical priorities had to play a part and emotions were expressed about the leverage that is applied: ''I've certainly met a parent who knew there's a 2 hour target for children [locally agreed], and she said 'we've been here for an hour and a half, I know you've got to get us through in 2 hours, why haven't we been seen yet?'' (N4 L119).

The way forward for the 4-hour target

Taking the view that targets are here to stay, respondents had strong views on sustainability and question of ''A&E or hospital target?'' particularly concerned them. Better ways of working were suggested, such as improved teamwork, a ''discharge lounge'', alternative methods of bed management and ''all the labs should be set up so that it was not batched – so everything just happened like a conveyor belt'' (N5 L56). The consensus was that the target should be viewed as a hospital goal with a collaborative working strategy and a shared responsibility:

''we're all looking after the same people, and those people could be ourselves, our mums or children'' (N4 L86).

Concerns were also expressed about the links between primary and secondary care, especially the bottleneck effect of emergency admissions from general practitioner (GP) referrals for hospital admissions. Support was expressed for the emergency admission team that was set up to co-ordinate the flow of admissions and to build a working relationship with GPs, but it was felt that more could be done: ''Management are not getting together outside and inside (primary and secondary care) and saying look, this is what we've got, this is the situation, what can we do to make it better?'' (N8 L108).

CONCLUSIONS

In consideration of the rigour of qualitative work, Caelli et al[20] suggest that for credibility the theoretical positioning of the researchers should first be described in relation to their disciplinary affiliation and what bought them to the question. In this case, the research team comprised an ED charge nurse (AM) and an emergency nurse academic with experience in the ambulance service (SC), and we were drawn to the question by our previous experience in the field.[24–26] (Cooper et al, submitted). Second, it is important to describe the methodology and methods, which in this case are a generic clinically pragmatic philosophy described in our approach to data collection, and the focused approach to analysis (framework approach).[1 2] Third, studies should demonstrate ''rigour'', which in this study is illustrated by the close account, or audit trail, that we have described in all aspects of the study. Finally, the analytical lens should be clear, in that the assumptions the researchers bring to the data should be apparent, in this case described through our professional allegiance and clinical focus.

Findings from this small study suggest that the 4-hour target was considered an overall success with regard to improvements in patient care and patient satisfaction. Life in emergency care was better now than it had been previously. Government findings support this claim, with the announcement that in the period April 2005 to March 2006, 18.7 million patients had attended EDs, with 98% waiting <4 hours.[27]

These benefits, however, have come at a cost: negative attitudes about the imposed and unsupported criteria for the target, workload issues, concerns over the quality of care, pressure on support systems and training, and increased staff turnover. There is still support for the target but with the caveat that links within the hospital and between primary and secondary care must be improved.

Our recommendations are that representatives from all the care pathways should be brought together to develop shared guidelines, ensuring, for example, diagnostic and pharmacy cover and admissions procedures from primary care.

This study is limited by its sample size and its focus on a single department. However, it has produced a unique perspective within the literature and is a baseline for future research in the area.

The government's ''4-hour target'' has forced hospital departments to look at restrictions in patient flow and make every effort to eliminate those delays. The plan was always going to change more than waiting times. In fact, it has transformed the way emergency care is delivered, to the degree that it is now almost unrecognisable.

ACKNOWLEDGEMENTS

The authors would like to offer their sincere thanks to all individuals who participated in the completion of this study, in particular to the members of the emergency care team who took part in the study and to Neal Foster for his input into the interviews.

Authors' affiliations

Andy Mortimore, Emergency Department, Torbay Hospital, Lawes Bridge, Torquay, Devon, UK
Simon Cooper, Faculty of Health and Social Work, University of Plymouth, Plymouth, Devon, UK

Competing interests: None

REFERENCES

1 **Green T**, Thorogood N. *Qualitative methods for health research*. London: Sage Publications, 2004.
2 **Pope C**, Ziebland S, Mays N. Qualitative research in health care. Analysing qualitative data. *BMJ* 2000;**320**:114–16.
3 **Department of Health**. *The NHS plan*. London: HMSO, 2000.
4 **Department of Health**. *Reforming emergency care*. London: HMSO, 2001.
5 **Department of Health**. Clinical exceptions to the 4 hour emergency care target. 2003. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4091871 (accessed 23 March 2007).
6 **Department of Health**. Letter to all chief executives 23/1/04. http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Dearcolleagueletter/DH_4069650.
7 **The Office for Public Management**. *Opinion research for the NHS plan*, London, 1999.
8 **Alberti G**. *Improving the patient experience in accident and emergency*. London: RCN, 2003.
9 **Cooke MW**, Wilson S, Pearson. The effect of a separate stream for minor injuries on accident and emergency waiting times. *EMJ* 2002;**19**:28–30.
10 **Hayes J**. *The theory and practice of change management*. Hampshire: Palgrave, 2002.
11 **Ashbridge J**. PA backs 'toolkit'. *Emerg Nurse* 2004;**12**:2.
12 **Locker TE**, Mason SM. Analysis of the distribution of time that patients spend in emergency departments. *BMJ* 2005;**330**:1188–9.
13 **Flegg PJ**. This study helps reveal why the 4 hour limit may not be breached (letter) BMJ 2005, http://www.bmj.com/cgi/eletters/330/7501/1188#108166.
14 **Hughes G**. The four hour target; problems ahead (editorial). *Emerg Med J* 2006;**23**:2.
15 **British Medical Association**. BMA Survey of accident and emergency waiting times. 2003. http://www.bma.org.uk/ap.nsf/Content/AEsurvey?OpenDocument&Highlight=2,survey,accident,emergency,waiting,times (accessed 23 March 2007).
16 **British Medical Association**. BMA Survey of accident and emergency waiting times. 2005. http://www.bma.org.uk/ap.nsf/Content/AandEwaiting (accessed 23 March 2007).
17 **Scott H**. BMA claims that patients in A&E are being put at risk [editorial]. *Br J Nurs* 2005;**14**:305.
18 **Munro J**, Mason S, Nicholl. Effectiveness of measures to reduce emergency department waiting times: a natural experiment. *Emerg Med J* 2006;**23**:35–9.
19 **Ritchie L**. Meeting the challenge: an evaluation of an ENP clinic. *Emerg Nurse* 2004;**12**:10–13.
20 **Caelli K**, Ray L, Mill J. 'Clear as mud'. Towards a greater clarity in generic qualitative research. *Int J Qual Methods* 2003;**2**:1–23.
21 Caelli K Engaging with phenomenology: Is it more of a challenge than it needs to be? *Qual Health Res* 2001;**11**:273–81.
22 **Terris J**, Leman P, O'Connor N, *et al*. Making an IMPACT on emergency department flow: improving patient processing assisted by consultant at triage. *Emerg Med J* 2004;**21**:537–41.
23 **Cooke MW**, Wilson S, Halsall J, *et al*. Total time in English accident and emergency departments is related to bed occupancy. *Emerg Med J* 2004;**21**:575–6.
24 **Cooper S**, Evans C. The Resuscitation Predictor Scoring Scale (RPS Scale) for in-hospital cardiac arrests: A statistical model for the prediction of survival during a resuscitation attempt. *Emerg Med J* 2003;**20**:6–9.
25 **Cooper S**, Barrett B, Black S, *et al*. The emerging role of the emergency care practitioner. *Emerg Med J* 2004;**21**:614–18.
26 **Cooper S**. Contemporary UK para-medical training and education; How do we train? How should we educate? *Emerg Med J* 2005;**22**:375–9.
27 **The Times**. A&E target met. *The Times* 13 May, 2006. Available at http://www.dh.gov.uk/en/Publicationsandstatistics/Pressreleases/DH_4134790.