

# Maximale verblijftijd van 4-uur op de spoedeisende hulp

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PICA seminar 7 april

# 4 uur maximaal op de SEH

- Achtergrond
- Situatie UK
- Situatie Nederland
- Oplossingen

# 4 uur maximaal op de SEH achtergrond

- Sense of urgency
- Tijdigheid zorg:
  - Samenvattend rapport Uitvoering Zorgverzekeringswet 2006: wachtlijsten
  - Te lange verblijftijd SEH onvermijdbaar?

# Google: wachttijd eerste hulp

- Op [HospitalImpact.org](http://HospitalImpact.org) viel ook al te lezen dat het het Detroit Medical Center een enorm verlies in 2003 naar een winst in 2005 heeft weten om te buigen door mede de wachttijd bij de spoedeisende hulp tot een half uur te beperken.

Kortom, wordt het - in een toekomstige concurrentieslag tussen zorginstellingen - belangrijk om vooral te investeren in je spoedeisende hulp?

## *De wachttijden*

Bij binnenkomst op de SEH meldt u zich eerst aan het loket. De triageverpleegkundige, een speciaal opgeleide verpleegkundige, vraagt naar uw klachten en verricht eventueel onderzoek naar de ernst van uw letsel. Op basis hiervan wordt bekeken of u meteen behandeld moet worden, of dat u toch even moet wachten, bijvoorbeeld omdat er patiënten zijn die er ernstiger aan toe zijn dan u. Wij realiseren ons dat het voor u vervelend is om te moeten wachten. Wij proberen de wachttijd uiteraard zo kort mogelijk te houden. Het kan echter voorkomen dat meerdere mensen zich tegelijk melden met klachten of letsel die door dezelfde specialist moeten worden behandeld. De wachttijd voor die betreffende specialist loopt dan aanzienlijk op. Patiënten die door een andere specialist worden behandeld zijn dan vaak eerder aan de beurt. Kinderen proberen we altijd met voorrang te behandelen. Indien u pijn heeft en u bent nog niet aan de beurt, kan er (meestal) toch al een pijnstiller worden gegeven. Dit is afhankelijk van de aard van uw klachten of opgelopen letsel.

Let op! Indien uw toestand verergert, breng dan de triageverpleegkundige hiervan direct op de hoogte.

# Situatie in de UK

Health

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National report

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# Targets – what do they mean?

- 1948 – NHS established
- 1997 – Labour elected and pledged to ‘improve frontline services’ and end ‘top-down management’
- 2001 – Targets introduced
- 2007 – Pledge to ensure that all ‘NHS staff are fully involved’ in all reforms

- **target** (AIM)
- noun [C]  
a level or situation which you intend to achieve:  
*The government's target of 3.5% annual growth seems easily attainable.*

(from [Cambridge Advanced Learner's Dictionary](#))



## The NHS Plan 2002/03 performance headlines

### Acute trusts

Likely to be achieved (%) At high risk (%)

More flexible employment conditions	94	6
Improved childcare provision for staff	92	8
90 per cent of patients to spend no more than four hours in A&E	<b>30</b>	<b>70</b>

# The four hour target

‘We have a target for waiting times in A&E—by the end of 2004, no one (unless it’s clinically advisable) should spend more than four hours between arrival and admission, transfer or discharge. I think that is reasonable and achievable, even modest in some ways, but I don’t expect it to happen by magic. The way we organise and cooperate across the whole emergency care system has to change.’

David Lammy (2003)

## Aim

- For no patient to wait more than four hours for admission, transfer or discharge
- Exceptions being those with a clinical need



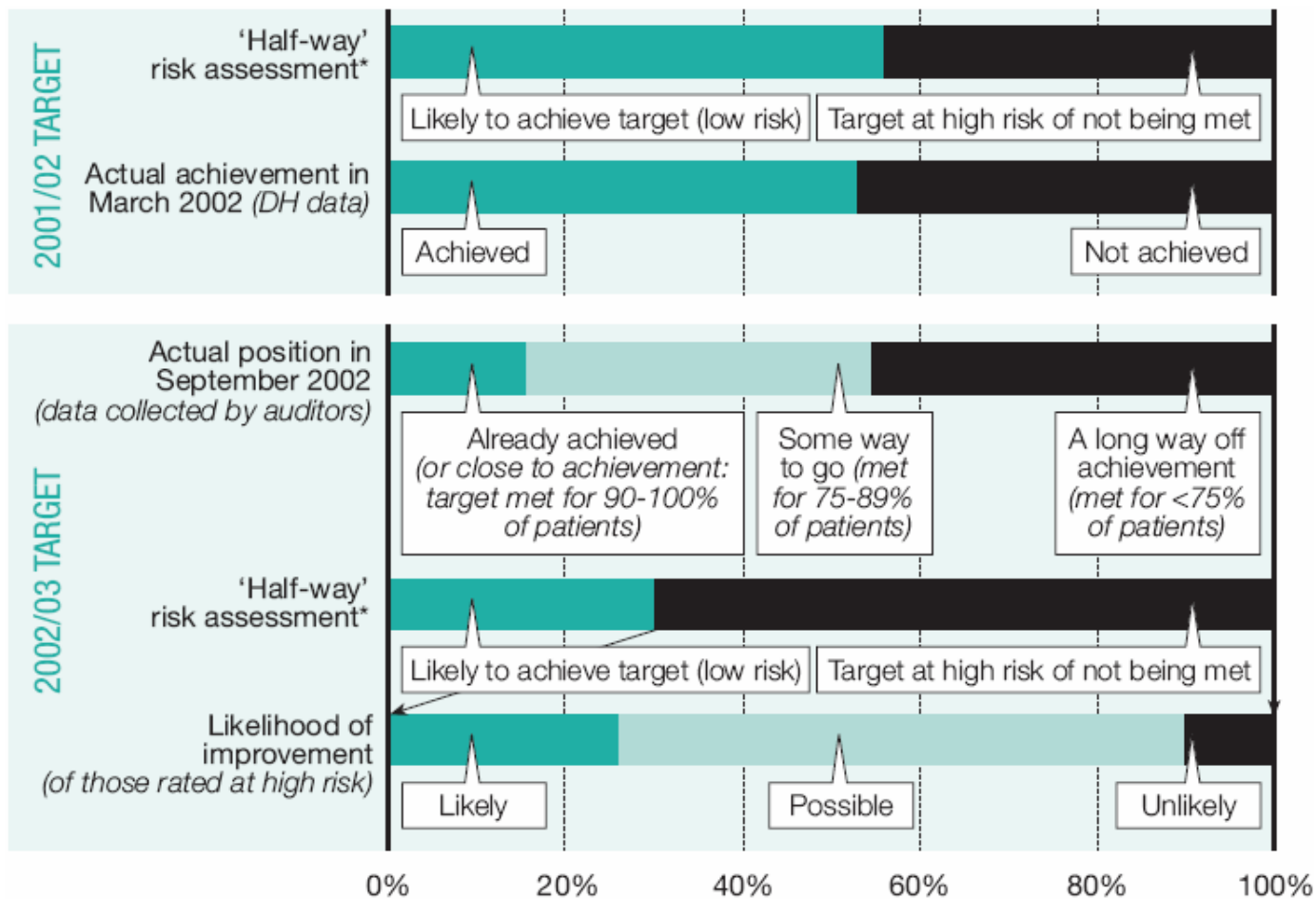
# Achieving the NHS Plan

Assessment of current performance, likely future progress  
and capacity to improve

# *Waiting times in A&E*

## *Waiting times in A&E*

In 2001/02 nearly half of acute trusts failed to achieve the Plan target that no more than 75 per cent of patients should wait any longer than four hours in A&E (**Ref. 6**). For 2002/03, the target was tightened to 90 per cent of patients and was rated the second highest risk of all those assessed by the auditors of acute trusts (**Exhibit 3**). Few acute trusts were able to keep waits in A&E to target levels.



## NATIONWIDE CASUALTY WATCH - AVERAGE WAITING TIMES

	ALL PATIENTS		PATIENTS OVER 65	
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
London	673	5.21	256	6.03
South Eastern	684	5.19	272	6.38
Eastern	280	3.19	104	3.38
South and West	253	3.03	9	3.27
North West	606	2.50	215	3.34
West Midlands	357	2.34	132	3.03
Northern & Yorkshire	445	2.12	146	2.35
Trent	201	2.11	48	2.37
Northern Ireland	255	2.10	79	2.37
Wales	139	1.38	48	2.00
<b>England, Wales &amp; Northern Ireland</b>	<b>3893</b>	<b>3.32</b>	<b>1394</b>	<b>4.20</b>

KEY: 1. Region name 2. Count 3. Average wait hrs: mins 4. Count 5. Average wait hrs: mins

# 4 uur maximaal op de SEH

- Situatie in Nederland

M.C.A. Smit  
M.E. van Baar  
M. Meier  
A.J.P. Schrijvers

UMC Utrecht  
Julius Centrum voor Gezondheidswetenschappen en Eerstelijns Geneeskunde

Utrecht, oktober 2006

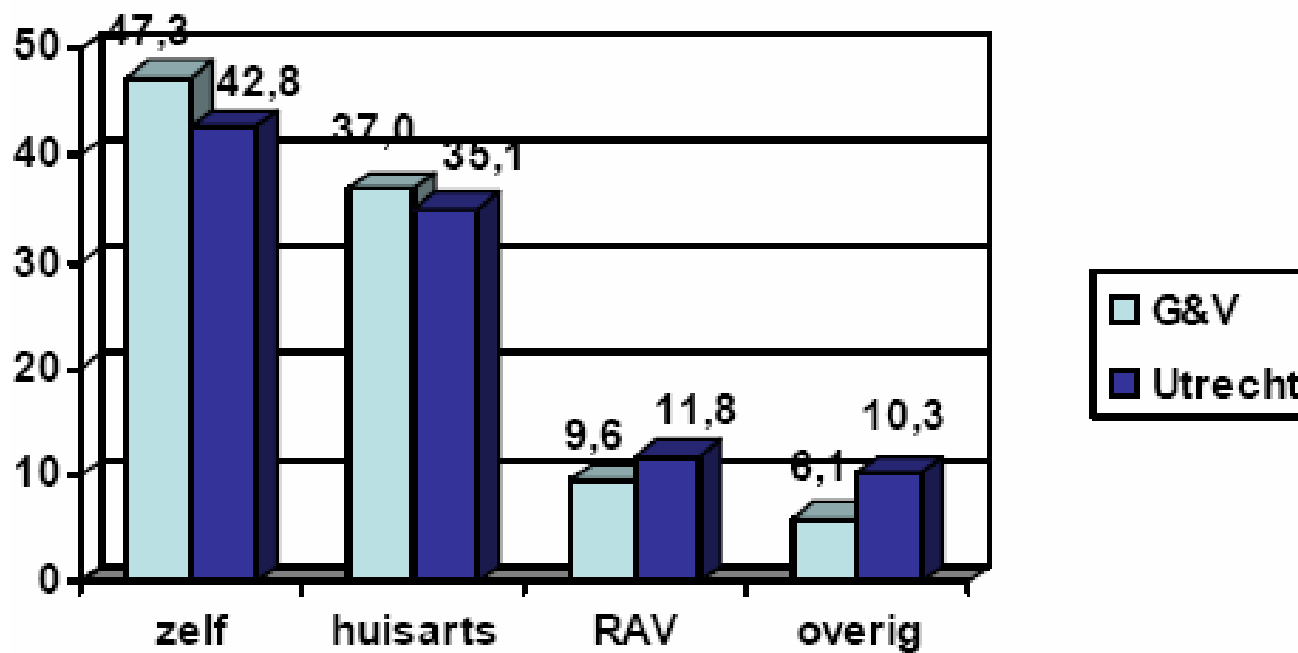
# **Vraag en Aanbod van Acute Zorg in de Regio Gooi en Vechtstreek**

*Onderzoek naar de kenmerken van de vraag en het aanbod  
van het netwerk van acute zorg in de regio Gooi en Vechtstreek*

Tabel 4.1 Kenmerken van de patiënt met een acute zorgvraag

	HAP		RAV		SEH		Bevolking	
	G&V (n = 1110) %	Utrecht (n = 4443) %	G&V (n = 169) %	Utrecht (n = 1043) %	G&V (n = 757) %	Utrecht (n = 2864) %	G&V (241816) %	Utrecht (1180039) %
<b>Zorgvraag per 1000 inwoners</b>	4,59	3,77	0,70	0,88	3,13	2,43	-	-
<b>Geslacht</b>	(n = 1110)	(n = 4443)	(n = 120)	(n = 726)	(n = 750)	(n = 2863)		
Man	45,1	44,4	58,3	51,9	55,7	54,2	48,2	48,8
Vrouw	54,9	55,6	41,7	48,1	44,3	45,8	51,8	51,1
<b>Leeftijd</b>	(n = 1110)	(n = 4443)	(n = 120)	(n = 726)	(n = 738)	(n = 2846)		
0 – 4 jaar	19,9	18,7	2,5	3,6	8,6	8,2	6,0	6,7
5 – 19 jaar	15,8	14,9	6,7	9,0	24,4	21,4	17,5	18,5
20 – 54 jaar	33,7	39,6	24,2	37,6	30,0	38,8	45,8	50,9
55 – 74 jaar	15,3	15,5	18,3	25,5	17,4	19,0	22,1	18,0
75 jaar en ouder	15,3	11,3	48,3	24,4	19,6	12,5	8,6	5,9
<b>Herkomst</b>	(n = 1107)	(n = 4435)	(n = 122)	(n = 716)	(n = 751)	(n = 2831)		
Eigen regio	86,0	89,9	88,5	88,1	80,2	84,0	-	-

#### 4.4 De acute zorg op de spoedeisende hulpafdelingen vergeleken



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*Tabel 4.5 Verblifsduur op de spoedeisende hulpafdelingen*

Verblifsduur op de SEH		
	G&V (N = 732)	Utrecht (N = 2864)
Mediaan (min.)	71	98
90 <sup>e</sup> percentiel (min.)	185	207
Min - max (min.)	1 - 345	0 - 1314

# 4 uur maximaal op de SEH

- Situatie in VUmc voor afdeling neurologie

# ***Ontwikkeling SEH VUmc in de jaren 2002 - 2007***

<b>Parameter</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Aantal SEH bezoeken	32.612	33.215	33.525	33.923	34.364
Zelfverwijzers	23.839	24.465	24.559	24.049	
Aantal verwijzingen door ambulance	5.044	5.147	5.031	5.541	
Aantal verwijzingen door huisarts	2.616	2.620	2.857	3.058	
Overig	1.113	984	1.078	1.275	
Aantal acute opnames via de SEH	3.346	3.956	4.236	4.914	

# Specialisme

# aantal

Heelkunde	26.461
Inwendige geneeskunde	1.615
Kindergeneeskunde	1.392
Neurologie	1.027
KNO	383
Urologie	338
Longgeneeskunde	258
Neurochirurgie	247
Verloskunde & Gynaecologie	234
Cardiologie	231
Onbekend	178
Orthopedie	148
Niet door arts gezien	888

# 4 uur maximaal op de SEH

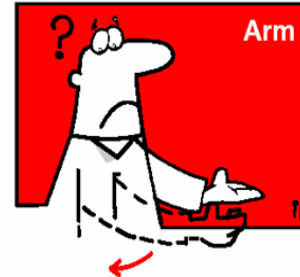
- Situatie in VUmc voor afdeling neurologie
  - Polytrauma
  - Licht schedel hersenletsel
  - Herseninfarct/hersenvloeding/TIA
  - Insulten
  - Wegraking
  - Intoxicatie
  - Dwarslesie
  - Nekklachten
  - Complicaties neurologische ziekten

# Herken een beroerte *be FAST*

Met een eenvoudige test kunt u een beroerte herkennen: de **Face-Arm-Speech-Time test**. Als de persoon één of meer opdrachten niet kan uitvoeren, heeft hij/zij waarschijnlijk een beroerte. Let op de tijd en ... handel direct!



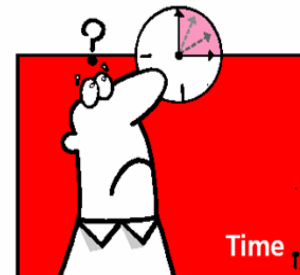
**Face** Vraag de persoon om te lachen of de tanden te laten zien. Let op of de mond scheef staat en een mondhoek naar beneden hangt.



**Arm** Vraag de persoon om beide armen tegelijkertijd horizontaal naar voren te strekken en de binnenzijde van de handen naar boven te draaien. Let op of een arm wegzakt of rondzwalkt.



**Speech** Vraag aan de persoon of aan de familieleden of er veranderingen zijn in het spreken (onduidelijk spreken of niet meer uit de woorden kunnen komen).

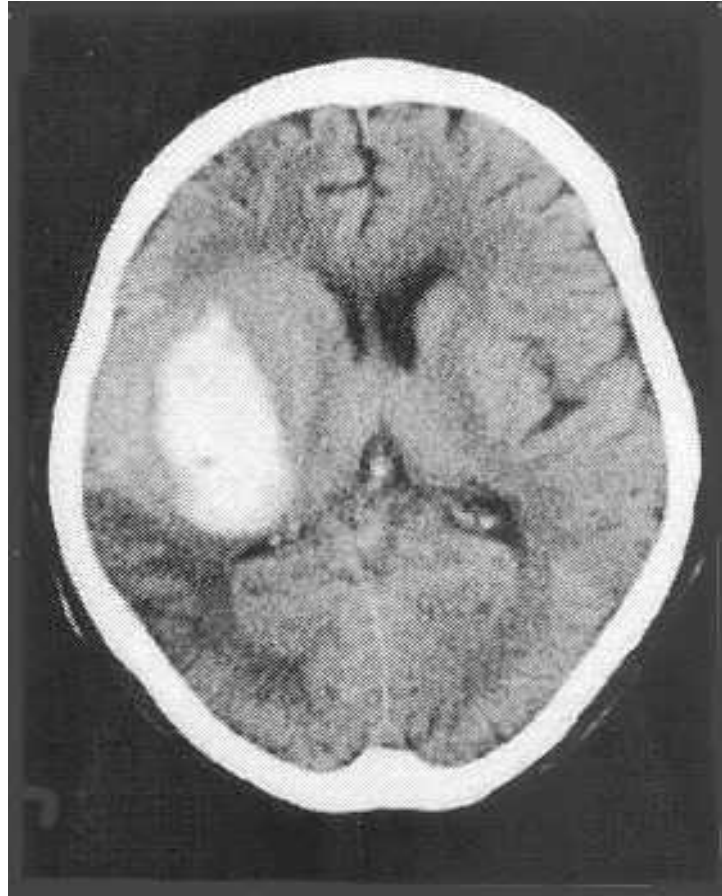


**Time** Stel vast hoe laat de klachten bij de persoon zijn begonnen. Dit is van belang voor de behandeling. Bel direct huisarts of 112.

HANDEL DIRECT want **TIJDVERLIES = HERSENVERLIES**  
Bel huisarts of 112

# Maar haastige spoed niet altijd goed

Bloeding is  
contraindicatie  
Voor acute  
behandeling!



# 4 uur maximaal op de SEH

- oplossingen

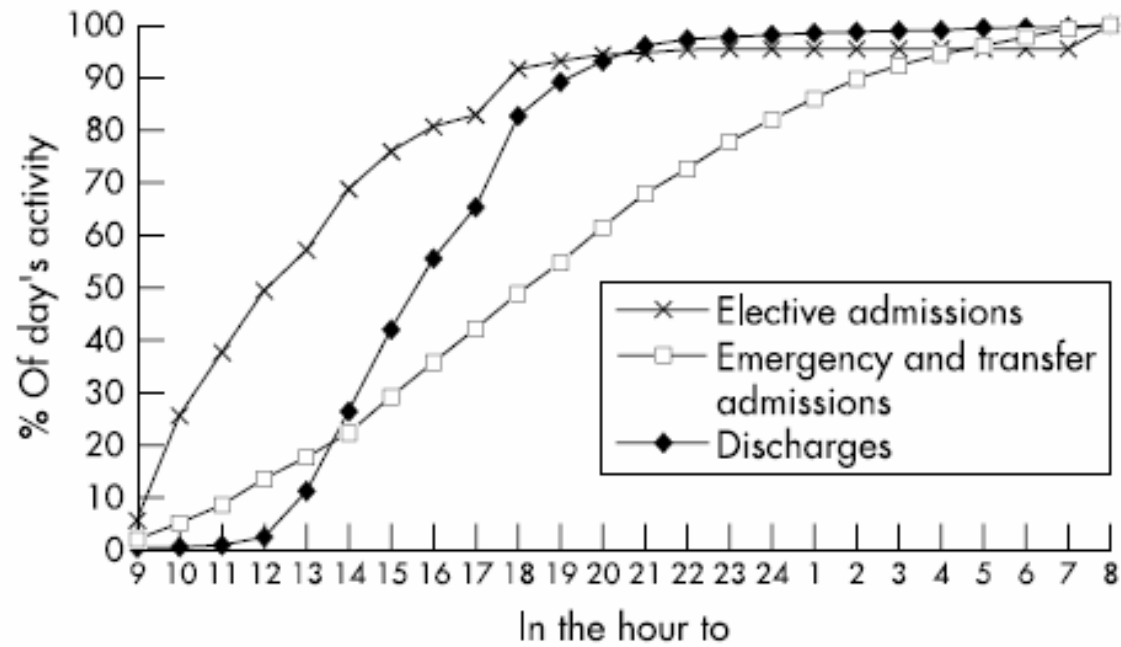


## **Can good bed management solve the overcrowding in accident and emergency departments?**

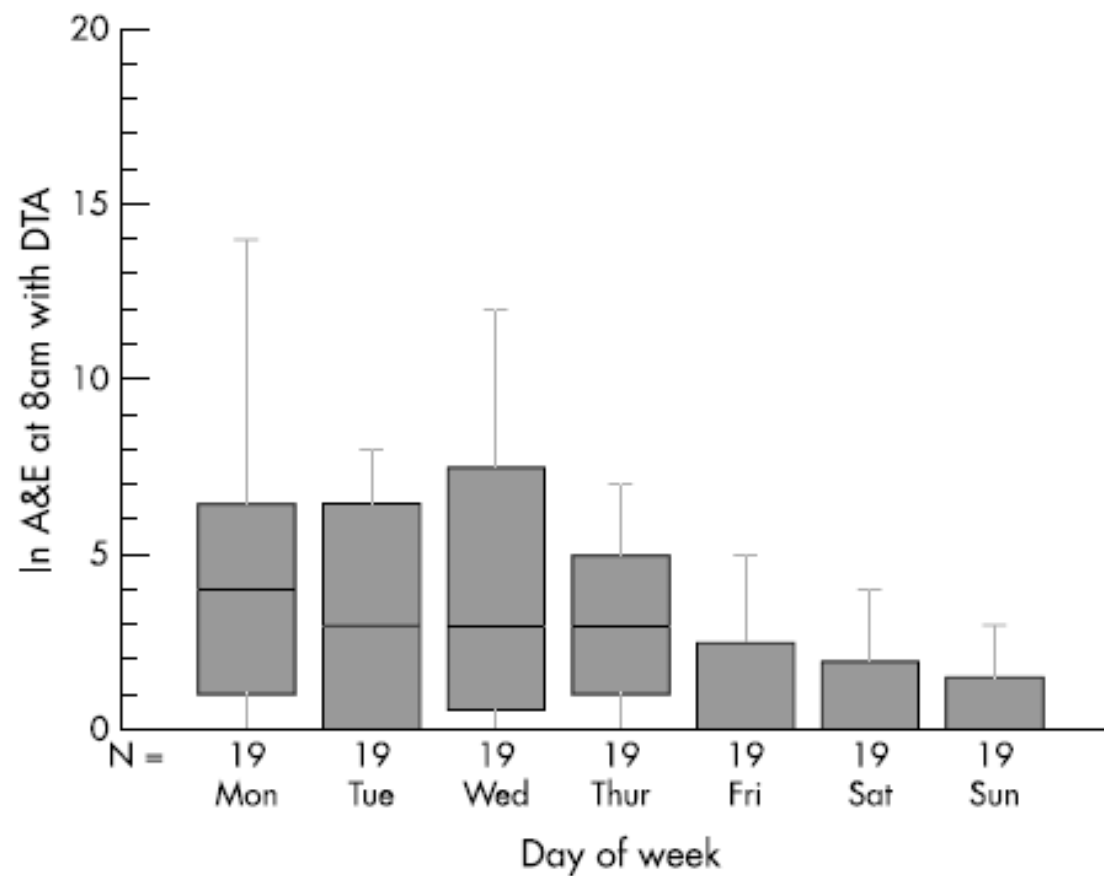
N C Proudlove, K Gordon and R Boaden

*Emerg. Med. J.* 2003;20:149-155  
doi:10.1136/emj.20.2.149





**Figure 4** Proportions of inpatient admissions and discharge activity by time of day.



**Figure 5** Box plots of numbers of patients waiting in A&E at 8 am with DTA, SMUHT 6 June to 16 October 2002.

## **CONCLUSIONS**

The balance of priorities in many trusts seems to have swung towards the elective side over the past few years. One factor might be the greater visibility of and repercussions from problems with waiting lists and cancelled operations than with trolley waits. The shift to much shorter A&E waiting times is a great challenge to most trusts, and is re-focusing attention on the emergency side.

A&E trolley waits are largely attributable to the lack of a “buffer” of empty inpatient beds, which could absorb the backlog of DTAs, particularly overnight and, at some trusts, at weekends. Such backlogs cannot start to be cleared until general hospital activity (and often BM) starts up again in the morning.



# The four hour target

‘We have a target for waiting times in A&E—by the end of 2004, no one (unless it’s clinically advisable) should spend more than four hours between arrival and admission, transfer or discharge. I think that is reasonable and achievable, even modest in some ways, but I don’t expect it to happen by magic. The way we organise and cooperate across the whole emergency care system has to change.’

David Lammy (2003)

## Aim

- For no patient to wait more than four hours for admission, transfer or discharge
- Exceptions being those with a clinical need

## How?

- Extra porters
- Extended skills for nurses
- Making beds available for admission
- More efficient discharge system
- Modern Matrons

# The changes

- PEAT (Patient Environment Action Team)
- Strengthen communication
- Improve practise

Improving the patient experience – last updated feb 2007 – DOH

- Observation wards
- Discharge Lounges
- Ambulatory areas to await blood and other clinical test results
- Pathways

# Implications for the nurse

- Extended skills
- The advent of 'Meet and Greet' and 'See and Treat'
- Streaming
- 'Pushing' patients through the department by creating 'pathways'
- Working under Patient Governed Directives (PGD's)

# The role of the nurse

- To still feel valued
- To not feel they are 'being split' (Doherty, 2003)
- To still deliver basic nursing care
- To have time for the patient
- To avoid becoming assessment 'automatons'

# The Pros



- As the NHS changes so do we
- More demand for healthcare – targets help face it
- Decreased amount of violence and aggression (Woods, 2003)
- No patients on trolleys in excess of 12 hours
- Source help from internally and from external agencies
- No longer a ‘dumping ground’
- Targeting ‘frequent flyers’

# The Cons



- Targets intensify the pressure
- Increased pressure on the ‘individual’
- Less emphasis on ‘team’
- Less time for tasks that are not target orientated
- Increased burden in attendances/bypass of primary healthcare
- Technician/nurse (Woods, 2003)

# Conclusion

- Targets are here to stay
- Need to use to improve care
- Nurses are in a unique position to influence this change
- Adopt the problem solving approach
- Remain true to the core values of nursing

## **£100,000 for reduced A&E waiting**

**Health bosses have been awarded £100,000 in government funding for cutting waiting times in emergency departments.**

Oxford Radcliffe Hospitals NHS Trust made sure 95% of patients attending A&E in the John Radcliffe and Horton hospitals were seen within four hours.

The target was met thanks to a **traffic light system** that makes staff aware of how long patients have been waiting.

The cash was freed up under the government's emergency service incentive scheme. 3

## **£100,000 for reduced A&E waiting**

### **'Tremendous efforts'**

Trevor Campbell Davis, the trust's chief executive, said: "Our staff have always provided first-rate clinical care for patients.

"In the past, however, patients have had to wait too long for this care, and in overcrowded conditions.

"Over the past six months staff at all levels throughout the trust have put tremendous efforts into tackling this problem and our patients are now beginning to see the results."

**The trust plans to use the money to develop a medical assessment unit at the Horton Hospital in Banbury.**

The unit will allow emergency patients to be admitted straight to available beds.

It is hoped the unit will be up and running by the end of the year.

BMJ

**Short term measures to meet NHS targets  
cannot be sustained**

Zosia Kmiotowicz

*BMJ* 2003;326:1229-  
doi:10.1136/bmj.326.7401.1229

Achieving a maximum four hour wait in accident and emergency departments has been harder to achieve. Last year some 45% of hospitals missed the target, and so far this year 70% are off target.

“There is a lot that can be done to improve outpatient and accident and emergency waiting times in the short term, but to achieve sustainable improvements for the long term is more difficult,” said Mr Wilkinson.

Health Care Manage Sci (2008) 11:11–21  
DOI 10.1007/s10729-007-9033-8

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## **Using queuing theory to analyse the Government's 4-h completion time target in Accident and Emergency departments**

L. Mayhew • D. Smith

## **2 A&E as a queuing process**

In mathematical terms A&E workflow is a classic example of a queuing process—patients arrive, wait, are treated and then leave. Literature on queuing theory goes

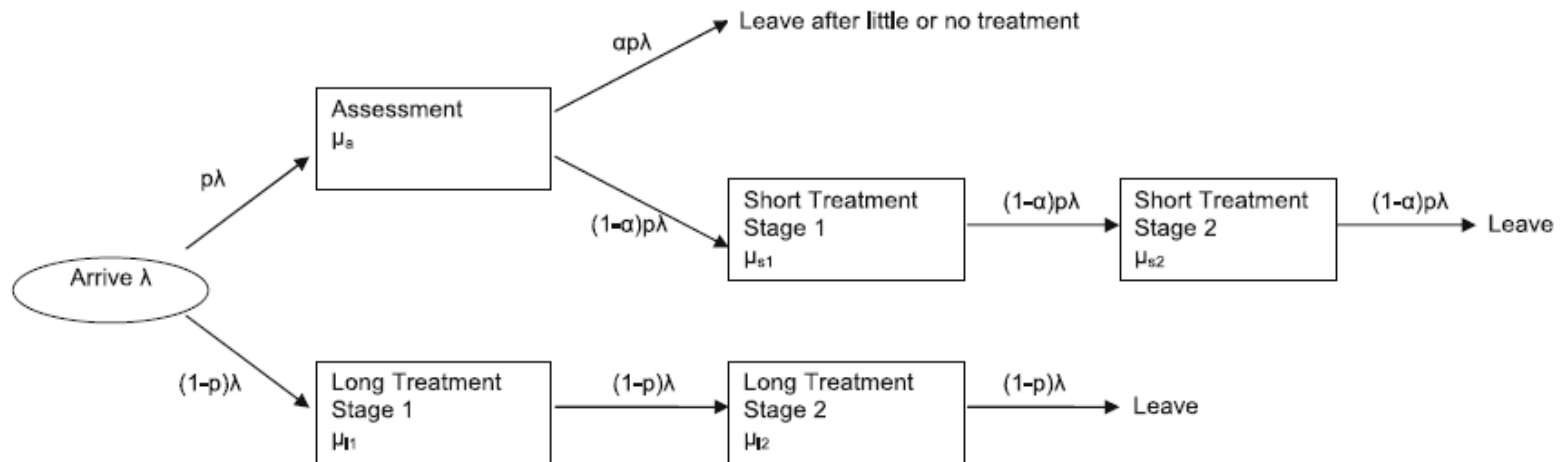
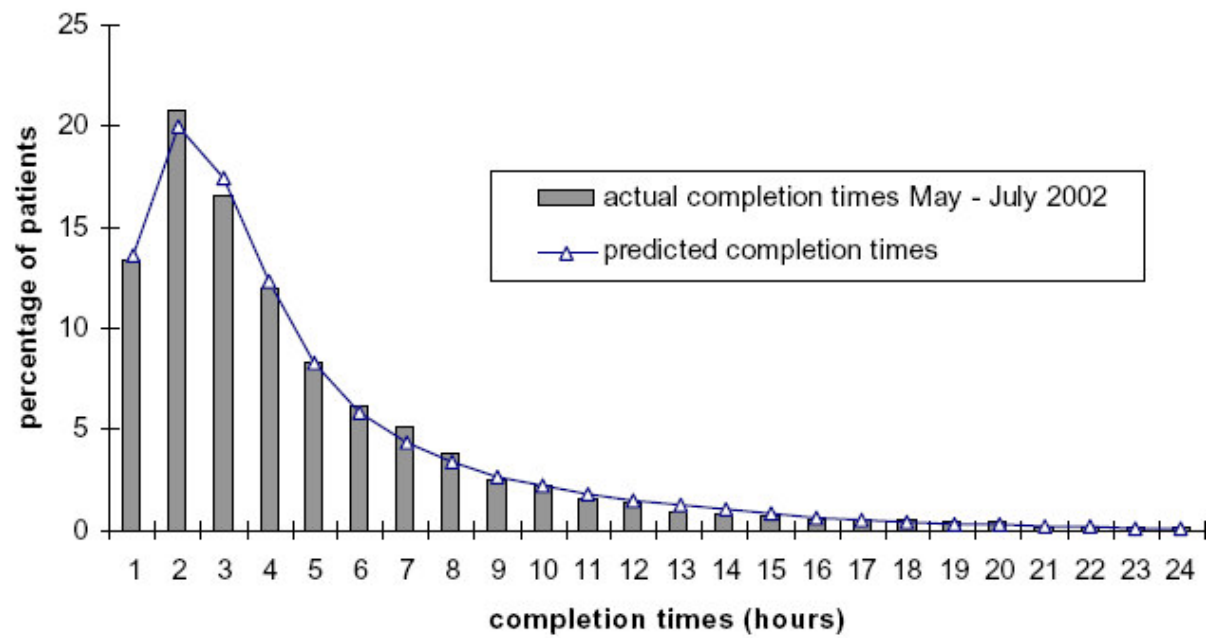


Fig. 1 Diagram of the model

**Fig. 3** Comparison of observed and predicted completions times based on the initial model and May–July 2002 data



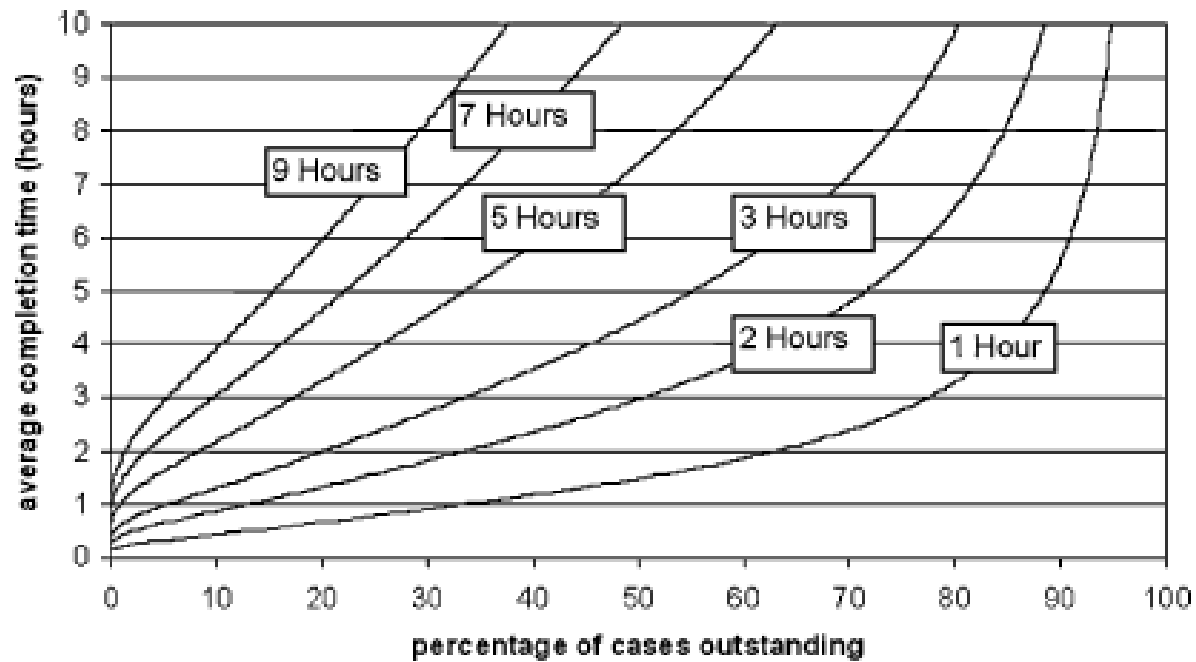
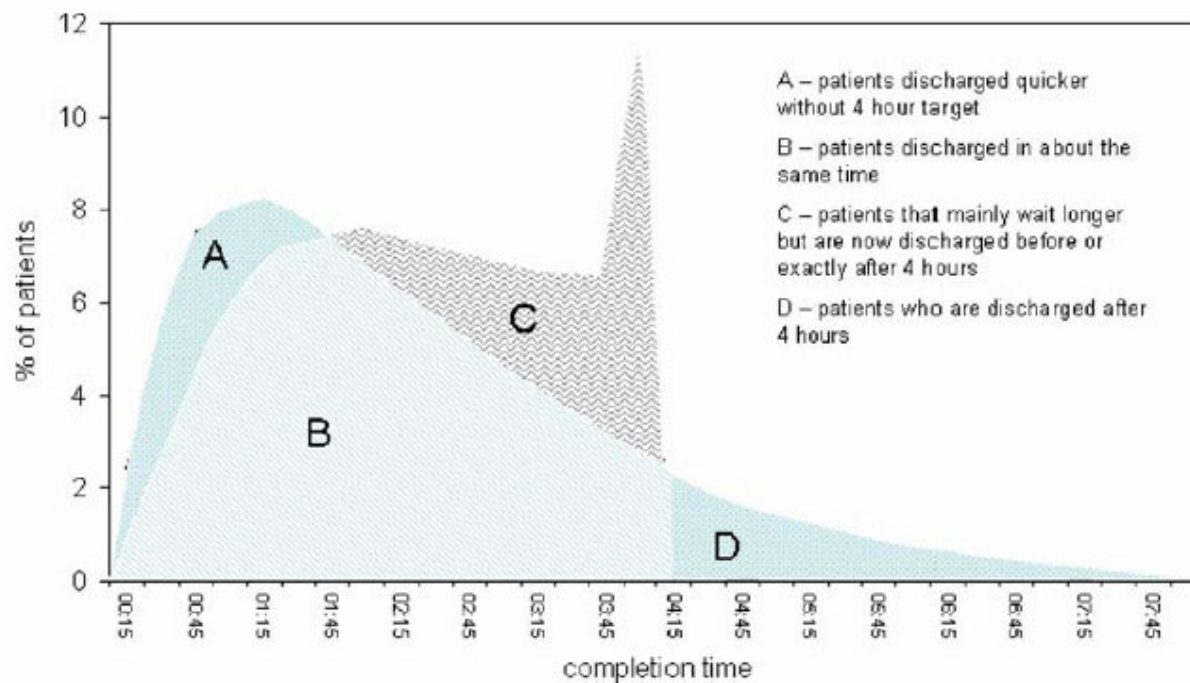


Fig. 5 The percentage of cases still outstanding after the given number of hours in A&E, for a given average completion time

**Fig. 10** A comparison of completion times in 2 months in 2003 and 2006 before and after the introduction of the 98% in 4 h target





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The  
American Journal of  
Emergency Medicine

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[www.elsevier.com/locate/ajem](http://www.elsevier.com/locate/ajem)

Original Contribution

## Specialized emergency nurses treating ankle and foot injuries: a randomized controlled trial<sup>☆</sup>

Robert Jan Derksen MD<sup>a,\*</sup>, Fred C. Bakker MD, PhD<sup>a</sup>,  
Elly S.M. de Lange-de Klerk MD, PhD<sup>b</sup>, Irma M. Spaans<sup>c</sup>, Emil A. Heilbron MD, PhD<sup>d</sup>,  
Bart Veenings MD<sup>a</sup>, Henk J.Th.M. Haarman MD, PhD<sup>a</sup>

Research article

Open Access

## **Cost-effectiveness of the SEN-concept: Specialized Emergency Nurses (SEN) treating ankle/foot injuries**

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Bart Veenings<sup>1</sup> and Fred C Bakker<sup>1</sup>

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\* Corresponding author

**Table 1: Mean (SD) invested time spans per treatment group**

	<b>SEN</b> <i>mean</i>	<i>(SD)</i>	<i>N</i>	<b>HO</b> <i>mean</i>	<i>(SD)</i>	<i>N</i>
<b>Invested time per observer (SEN/HO)</b>						
Duration clinical assessment (min)	5	(1.3)	11	5	(2.2)	7
Duration radiograph interpretation (min)	2	(0.8)	10	1.8	(1.1)	5
Duration review radiograph (min)	0.5	---	3	0.5	---	3
<b>Invested time per patient</b>						
Waiting time 1 <sup>st</sup> assessment – radiograph (min)	37	(12)	10	33	(8)	5
Waiting time diagnosis – treatment (min)	3	(4)	11	16	(14)	7

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**INDIRECT HEALTH CARE COSTS**

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Time spent in waiting room	3.8	(3.3)	5.7	(4.7)	-1.9 (-2.6 ; -1.2)
Waiting time assessment – radiograph	4.0	---	3.7	---	0.3*
Waiting time diagnosis – treatment	0.4	---	2.2	---	-1.8*

**Table 4** Questions and answers from the patient satisfaction questionnaire with regard to waiting times

	SEN	HO	SEN	HO	SEN	HO	SEN	HO	SEN	HO	<i>P</i>
	< 15 min		15-30 min		30-45 min		45-60 min		> 60 min		
How long was the waiting time between diagnosis and treatment?	33.1	19.6	32.2	30.1	17.1	20.1	5.3	11.0	10.2	17.4	< .01
	Yes		No								
Were you seen by the treatment office within 15 minutes after arrival?	57.6	36.5	42.4	62.6							< .01
Was the waiting time for assessment by treatment officer acceptable?	83.7	62.6	14.3	37.4							< .01
Was the waiting time between diagnosis and treatment acceptable?	84.5	70.8	12.7	26.9							< .01

	89.0	80.8	10.2	16.0	0	1.4	
	Yes		No				
Did you receive answers to your questions by the treatment officer?							.01
Would you return to this ED for another injury/condition?	98.8	98.2	1.2	1.8			.60
Would you recommend this ED to family/friends?	96.7	92.2	2.4	6.8			.02
In general, were you satisfied with the delivered care in the ED?	97.6	94.5	2.0	5.0			.08
Was the proposed treatment explained clearly to you?	90.2	81.7	9.0	17.4			< .01
Were you satisfied with the thoroughness of the treatment?	92.2	83.1	7.3	15.5			< .01
Did the treatment officer seem secure of him/her self?	96.7	95.0	2.9	4.1			.45

# Conclusies

- Verblijftijd SEH multifactorieel bepaald
- Multi-factorieele oplossingen!
- Capaciteitsplanning (zeker bij medici) onontgonnen gebied
- Veel winst te behalen: gezondheid, veiligheid en patiënttevredenheid
- Een uitdaging!!

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