SIMULATED INTERACTIVE MANAGEMENT SERIES

Article 4. Team structure, waiting time and a psychotic patient is banging on your door

J Wardrope, S McCormick

To understand this article fully it is essential to read the extra material available in emjonline.

Feedback

The SWOT analysis has set a large agenda and the direction of the department. The internet feedback contains a project plan along with an example of a delegated operational plan (week-end waiting time). This is a critical part of strategic planning and a step that is often neglected. However, this process reveals the priorities, the resources required and helps plan delegation to other members of the team. It is not possible to do everything on your own. The operational plan sets out in some detail the process that will achieve the objective and sets out the targets for the manager.

This process of *Management by objective*¹ is a powerful tool that gives clarity, form and performance targets for both the manager and the person who is being given the "lead" in delivering the results. SpRs should all be familiar with this process as they should have an educational plan made at the start of their training (strategic plan), yearly objective setting (operational plans) with three to six monthly reviews of progress.

Replies to the complaint letters about waiting time are given along with a letter to the deputy chief executive. One of the complaints was about Dr York. This is always a significant event. Dr York has acted correctly in asking a colleague's advice. This achieves a number of different results. Firstly, and most importantly, it gives the opportunity to talk about the matter. Internalisation of feelings of anger/guilt/ frustration/fear is unhealthy. Sharing these is an important part of staying sane! Secondly, it will bring some objectivity to bear on the response. Denial and self justification are natural reactions but also a sense of guilt might lead to errors in answering the complaint appropriately. Lastly, there may an underlying problem that needs further attention. This complaint was about attitude and waiting time but it occurred when Dr York had been working too hard and had become hypoglycaemic. The "problem" in this case is now resolved in that all the staff now know that she is diabetic and can be sensitive to the warning signs of future hypoglycaemic episodes.

Your request for a replacement ECG machine has not been successful. See letter from medical director (who holds the equipment budget).

The responses to the request indicate that an independent review has been granted. One of the in tray tasks is to prepare for this.

An example of the short listing documentation is appended (emjonline.com).

In tray

(see internet site for full details emjonline.com)

DOCUMENTS

Request for a medico-legal report in a case of personal injury.

Request from police for information.

Clinical problems get in the way of management! As you are sitting in the office a large patient starts hammering on your door and shouting that he wants to go home.

TASKS

How are you going to prepare for the SHO job interview? Who is going to interview? What training should they have had? What is the format of an interview for a job at this level? What is your next step over the ECG machine? What preparation is needed for the independent review?

How are you going to reply to the request from solicitors? Have you the correct training? What are the rules now governing experts? Is this work part of your normal job for the trust? How are you going to reply to the police? What are the issues surrounding the "clinical problem".

It is always important to know what is going on in the department, a look at the diary will indicate a matter that needs immediate management action. What are you going to do?

Time out—people management**TEAM BUILDING**

Working as part of a team is an integral part of A&E medicine. Many of the management decisions and tasks need the support and ideas from the team to have the best chance of a good outcome. What are the characteristics that make a well rounded team? What happens when teams form or change? How do you manage the team to get the best out of the team?

TEAM STRUCTURE AND CHARACTERISTICS

Belbin,^{2,3} at Henley Business Management College, carried out some very interesting

Department of
Accident and
Emergency Medicine,
Northern General
Hospital, Herries
Road, Sheffield
S5 7AU, UK

Correspondence to:
Mr Wardrope
(Jim.Wardrope@northgh-tr.
trent.nhs.uk)

Table 1 Team roles (adapted from Belbin²)

Chairman	An individual who can coordinate the efforts of the team, recognising each members skills and guide them towards a realistic goal.
Shaper	Someone who influences more directly the thoughts and decisions of the group.
Creative	The person who comes up with ideas but who may not understand the practicalities of their implementation.
Monitor/evaluator	Someone who can objectively analyse the issues being addressed by the group.
Company worker Team worker	Looks at how to implement the group's plans in to the work place. Keeps the team together by recognising and addressing its needs as well as supporting individuals.
Resource investigator	This person acquires the resources that are required for the group and its plans.
Completer/finisher	Someone who ensures that the goal is achieved on time and to an acceptable standard.

management research when he observed a large number of "teams" of managers who were attending courses at the college. He charted the behaviours of the teams and their members and was able to define the characteristics of people that made up a "winning team". These characteristics are summarised in table 1. It is unlikely that you or your team will have all the characteristics that are needed but by knowing what attributes are required you can list the characteristics that the team has and identify those that are missing. Once the missing skills are identified the next step is to try and bring this skill into your team either by developing it in an existing team member or by adding a person to the team. As an example, the two skills that are often missing are those of the "creative" and those of the "monitor/evaluator".

Belbin found that in many of the teams of middle/senior managers that he observed, creativity was often absent and that by "planting" a "creative" member into the team the team performance was greatly improved. Creativity is a trait that is not encouraged in clinical medicine especially as we move into a world driven by guidelines and protocols in an effort to discourage variability of treatments. To think or even work outside of standard practice has the potential to be disastrous in individual patient care. However, when we come up against a problem it is the "creative" who might come up with the simple and obvious solution. Creativity should be encouraged in all team members but as a leader you may find that you have to generate a lot of the ideas. It is time to exercise those lateral thinking skills that years of clinical medicine may have atrophied.

A less popular role than the creative is that of the "monitor/evaluator" but this person is vital to the team if they are to be kept on task. While the creative is providing ideas the monitor is evaluating their feasibility, bringing logic and reason to bear. This helps prevent diversions, ensures that individual enthusiasms do not divert the team from their task. They also try to ensure that deadlines are kept, meetings finish on time and that action points from meetings are all carried out. The monitor is the ego to the creator's id. These are not roles to make someone popular and may not be a natural part of many personalities, however they are key skills that will serve you in many of the wider aspects of life in A&E.

If you have formed a "management team" for this series then examine the function of the team. Do certain individuals adopt certain roles? Which roles are missing? If you are doing this on your own then reflect on your own personality but if you are feeling brave ask others how they perceive you! What are your strengths and weaknesses and how can you develop the other characteristics?

TEAM FORMATION AND FUNCTION

In this series you have joined an existing management team and rather artificially you have been thrust forward as the team leader. Your arrival and the position you assume will cause reactions in the other members of the group and awareness of these reactions will help you to manage the people concerned.

As a new team forms there are a number of stages to go through as people adjust to the tasks at hand and the characteristics of the individuals within the team. Initially there is a surge of creativity and enthusiasm as the individuals struggle to show their worth or establish their status. At this time the team output can be very high but as personalities clash and arguments occur the internal conflict of the group causes output to drop off. A well constructed team will eventually work through these problems and begin to recognise the worth of each individual to the group. Improved working relationships, respect for each others skills and recognition of the common goal lead to increased efficiency and improved output. These phases are sometimes referred to as "forming, storming, norming and performing".³

The St Jude's team is in the midst of "storming". It is a time of changes. Mr London, the senior consultant, taking a very distant stance from the management problems of the department. This may be by choice but it may be that he is being driven there by his feelings about others in the group or how they are treating him. The nursing staff are becoming polarised in opinions.

How would you deal with this situation (many of you have already taken steps to avoid this happening)?

Let us look at St Jude's A&E management team; remember, what maybe obvious to those of us standing on the outside is not always obvious to the players.

Mr London

Mr London has been at the department for some time and has perhaps become disillusioned with the process of management as a whole. He may be best suited to the monitor/evaluator role but his negative attitude may seem overly obstructive to the team. His experience will give him authority, perhaps enough to intimidate but he knows the hospital system as well as anyone. *Monitor/evaluator; Chairman*

Dr York

As the new member of the team and a complete unknown Dr York has advantages and disadvantages. She gets to build relationships afresh and can reintroduce those who have become disenfranchised within the group or may act as a mediator between those whose relationships have become strained. However, she has not had a chance to build up relationships or understand those around her yet, something essential if she is to work well within the team. *Shaper; creative; team worker; completer*

Sister Oak

Sister Oak, like Mr London, carries authority and has built a relationship with him over time. Similarly she seems much more concerned with practicalities than new ideas and appears the nursing staffs equivalent of Mr London within the team. *Monitor/evaluator; company worker; resource investigator*

Sister Ash

Lisa Ash is enthusiastic and looks to the future. She has already expressed a wish to move the department forward and try new ideas. If she can come up with ideas of her own then she may well fill the role of creative in the group. She is likely to form a relationship with Dr York as Sister Oak and Mr London may frustrate her, however it may be difficult for her to challenge her senior colleague openly. *Creative; company worker; team worker; completer*

Fiona Smith

As the "outsider" in medical terms Mrs Smith may have difficulty forming working relationships within the group but this may also allow her to remain neutral in clinical discussions. She may become isolated if she has to bring financial constraints to bear on clinical issues. Benefits from being the only member of the group actually trained to work in a management setting. *Resource investigator; shaper; company worker; monitor/evaluator*

Time out—A&E issues**WAITING TIME**

This section will concentrate on "waiting time to see clinician" (doctor or nurse practitioner). Waiting time for admission to hospital ("trolley time") is a very different problem with different causes and solutions. It is an equally important topic and will be examined in later articles. Many factors can cause waiting time problems but the main problem that demand is greater than supply and there are more patients presenting than can be processed by the staff

available using the normal operating procedures of that department.⁴ There is some evidence that as excess numbers of patients attend, the waiting time and numbers of patients waiting increase exponentially.⁵ As the waiting time increases patients and staff become less satisfied.⁶ Increasing numbers of patients leave the department without being assessed.⁷ While most of the time patients make a correct judgement about delaying their treatment 2%–4% of patients leaving without assessment subsequently are admitted to hospital.^{8,9}

Let us look at the variables in this equation and examine possibilities for intervention.

DEMAND

Demand for A&E care has risen very significantly over the years and continues to rise.⁹ Not only are the numbers of patients increasing but casemix is more complex.¹⁰ However, it is possible to predict the times of peak demand. Obviously there will be events whose exact timing are not predictable, such as major incidents and the large increases in demands that are seen at times such as "flu epidemics". However, we know that these rare events will happen at some time and we have to develop contingency plans to cope. However, this article will concentrate on the day to day problems.

Even the most rudimentary computer systems should be able to give the profiles of department attendance and disposition (a better word than "disposal"). These give measures of the patient load on the department both in terms of numbers and of casemix.¹¹

In some departments there are marked seasonal variations linked to holiday makers or to specific events.¹² Again these peaks are predictable. There are many models described to help cut waiting.¹³ However, even without detailed information systems most A&E clinicians will know the times when their department is likely to come under pressure.

STAFF SUPPLY AND EFFECTIVENESS

At present 70%–80% of the new patient workload is seen by SHOs. Numbers in this grade has been capped. However, even in departments with reasonable numbers of SHOs the problem is matching rotas with demand. Weekend and night work is hard and unattractive. There is no current incentive for doctors to work these shifts, and indeed the difficult working conditions are positive disincentives (motivation theory will be discussed in a later article).

This has led to the exploration of alternative staffing such as staff grade, non-recognised grades such as clinical fellows or "trust doctors" and the increasing use of nurse practitioners. General practitioners were an important source of extra staff and while some departments report success^{14,15} in their use others have not¹⁶ and many have great difficulty in attracting them to work for the rates of pay currently offered.

There is some evidence that numbers of patients seen per SHO per hour is falling.

Increasing quality of care (or defensive practice), increasing complexity of treatment (for example, thrombolysis), increased need for training and supervision all mean that it simply takes longer to see patients. Trained doctors such as staff grades and consultants may be more efficient but there is little evidence to support this thesis. Nurse practitioners, despite specific training and experience, are slower than SHOs (although they may be more thorough).¹⁷

Detailed work study on consultants is not available in the UK. Senior house officers are expected to see on average two patients per hour.¹⁸

Flexible staffing can be used and is effective in coping with fluctuations in demand,¹⁹ but again the problem usually comes to finances and lack of finance can wreck even the most detailed waiting time reduction initiatives.

INTERNAL PROCESSING

It is increasingly recognised that this can have an impact on waiting time. As more time is spent with each individual patient then the waiting time will increase.

There are strategies that can significantly decrease waiting time. The "front loading" of triage with experienced staff is highly efficient. These staff can outline the treatment plan, start off investigations and in 20%–30% of patients they can actually make the definitive treatment decisions. This role can be carried out by experienced medical staff, experienced nurse practitioners, or other nurses with computer support.²⁰ However, such schemes are an intensive use of expensive trained resources and the cost effectiveness of these models has not been explored.

However, even using current resources, triage can be used to initiate investigations²¹ or to identify patients who can be "fast tracked" through the department on previously agreed "pathways of care" that might reduce time spent in the A&E department.

There is some evidence that dividing the workforce into small teams might be effective in increasing the throughput of patients by making it clear where responsibility lies. In the future it is probable that increasing pressure will be applied to have a separate "fast track" for minor injury patients.

Summary

Waiting time is a perennial problem. Lack of resource is the probable root cause of many of these problems. However, if the A&E manager is to be able to show that they have squeezed all available efficiencies out of the system then hospital management is left with little choice of either accepting the situation (usually "unofficially") or giving more resource. The pledge given by the prime minister in the NHS national plan that average waiting times will fall to 75 minutes²² will be concentrating managerial effort on this problem.

Internet contents (emjonline.com)

INTERNET FEEDBACK

- Summary of strategic plan (part)
- Operational/project plan waiting time (part)
- Replies to waiting time complaint letters
- Reply to deputy chief executive.
- Copy of hospital reply to independent review request
- Letter from medical director about ECG machine
- Short listing form

Internet in tray

DOCUMENTS

- Letter requesting medico-legal report
- Memo regarding telephone call from police
- Information about clinical incident

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Disclaimer

Most of the characters and situations in this series are entirely fictional and any resemblance to any person or institution is coincidental. A few situations are based on real life but all names have been changed.

- 1 Drucker P. *The practice of management*. New York: Harper, 1954.
- 2 Belbin RM. *Management teams- why they succeed or fail*. London: Butterworth- Heinemann, 1981.
- 3 Cole GA. Groups and group behaviour. In: *Management theory and practice*. 5th ed. London: Letts Educational, 1996:58–69.
- 4 Mazandi Iseke RJ. Improving emergency department flow. In: Rosen RA. *Managing to get it right. The ACEP users guide to emergency department management*. Dallas: American College of Emergency Physicians, 1998:75–88.
- 5 Rosenquist CJ. Queueing analysis: a useful planning and management technique for radiology. *J Med Syst* 1987;11: 413–19.
- 6 Kyriacou DN, Ricketts V, Dyne PL, et al. A 5 year time study analysis of emergency department patient care efficiency. *Ann Emerg Med* 1999;34:326–35.
- 7 Stock LM, Bradley GE, Lewis RJ, et al. Patients who leave emergency departments without being seen: magnitude of the problem in Los Angeles County. *Ann Emerg Med* 1999; 23:294–8.
- 8 Bindman AB, Grumbach K, Keane D, et al. Consequences of queuing for care at a public hospital emergency department. *JAMA* 1991;267:1091–6.
- 9 Khanna R, Chaudry MA, Prescott M. Emergency department patients who leave the department without being seen by a doctor. *Eur J Emerg Med* 1999;6:233–5.
- 10 Wass A, Zoltie N. Changing patterns of accident and emergency attendances. *J Accid Emerg Med* 1996;13:269–71.
- 11 The National casemix office. *Healthcare resource groups*. London: NHS Executive, 1995.
- 12 O'Donnell JJ, Gleeson A, Smith H. Edinburgh's Hogmanay celebrations: beyond a major disaster. *J Accid Emerg Med* 1998;15:272–3.
- 13 Hu SC. Computerised monitoring of emergency department patient flow. *Am J Emerg Med* 1993;11:8–11.
- 14 Dale J, Lang H, Roberts JA, et al. Cost effectiveness of treating primary care patients in accident and emergency: a comparison between general practitioners, senior house officers and registrars. *BMJ* 1996;312:1340–4.
- 15 Murphy A, Bury G, Plunkett PK, et al. Randomised controlled trial of general practitioners versus usual medical care in an urban accident and emergency department; process, outcome and comparative cost. *BMJ* 1996;312:1135–42.
- 16 Gibney D, Murphy AW, Barton D, et al. *Br J Gen Pract* 1999; 49:43–4.
- 17 Sakr M, Angus J, Perrin J, et al. Care of minor injuries by emergency nurse practitioners or junior doctors: a randomised controlled trial. *Lancet* 1999;354:1321–6.
- 18 British Association for Accident and Emergency Medicine. *The way ahead 1998*. London: British Association for Accident and Emergency Medicine, 1998.
- 19 Shaw KN, Lavelle JM. VESAS: a solution to seasonal fluctuations in emergency department census. *Ann Emerg Med* 1998;32:698–702.
- 20 Lawson K, Maslove L, Chaplin S, et al. *Evaluation of urgent need assessment service. Final report*. York: York Health Economics Consortium, 2000.
- 21 Lindley Jones M, Findlayson BJ. Triage nurse requested x rays—are they worthwhile? *J Accid Emerg Med* 2000;17: 103–7.
- 22 The NHS Plan. *A plan for investment, a plan for reform*. London: HMSO, 2000.