Intelligent use of indicators and targets to improve emergency care

Matthew W Cooke

The NHS Plan\(^1\) introduced a series of targets for England in 2000, including that patients should spend no longer than 4 h in the emergency department from arrival to discharge or transfer to a ward. It has been demonstrated that focussed targets can help drive improvement.\(^2\) But Bevan and Hood\(^3\) highlighted the ‘element of terror’ required by targets, combined with an assumption that problems of measurement and gaming do not matter. Goodhart\(^4\) stated ‘Any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes’. The 4 h emergency care access target in England has at times demonstrated all these features. Without it the patients in emergency departments in England could still be waiting in corridors and have the well-described increased adverse events\(^5\) and increased mortality\(^6\) related to overcrowding, but equally we have also seen examples of over-focus on the target. Harned\(^7\) describes the 4 h target as an example of a destructive goal pursued and he stresses the need for multiple goals, for all domains of quality to be addressed in these, and for a focus on effective team working and team learning. The target has on occasions resulted in perverse actions aimed at solely achieving that target and forgetting the reason it was created—to reduce unacceptable delays that can result in worse outcomes and increased likelihood of unnecessary admission\(^8\) as well as being a common source of decreased patient satisfaction.\(^9\)

Using a single headline indicator for one clinical area may be an example of the ‘oversimplification’ that is avoided by high reliability organisations, which the NHS is trying to copy in the patient safety field. Cameron et al\(^10\) described the principles for developing measures of quality to support continuous improvement. Beatie and Mackway-Jones\(^11\) undertook a Delphi study that proposed a set of performance measures but also highlighted the challenges in taking those forward as national indicators. In England a new set of clinical quality indicators\(^12\) was introduced in 2011 to balance the adverse effects of over-focus on a single time measure and to encourage continuous improvement. The Design Council\(^13\) acknowledged that ‘while initiatives which aim to improve performance against a single indicator without considering the effect on the other indicators should be avoided, there is potential to use the indicators as triggers for continual improvements’. They are a balanced series of headline indicators but are mostly proxies for outcome and process measures. The diversity of cases, the lack of definitive diagnosis (many cases are rule out rather than diagnosed) and the lack of follow-up means that true outcome measures are difficult to measure across the breadth of emergency care. The data\(^14\) from the first year of the quality indicators are difficult to interpret as most of the ‘improvement’ may be due to the improvements in data quality. However, it has recently been suggested that ‘continued target compliance (is considered) to be to the detriment of both, patients and staff’.\(^15\)

This has largely resulted because of the means of implementation and adoption at a variety of levels in the system. Factors include:

1. A regulatory system that only centrally monitors the total time in the emergency department and no other components, promoting a continuation of the single target culture.
2. Commissioners who create financial penalties for breeches that massively outweigh other incentives for other aspects of quality of care.
3. Organisations who only ask why a patient has breeched not what was best for the patient or how we promote best care in the future.
4. Clinicians who are keen to criticise the present system but fail to initiate effective sustainable improvement.
5. Individuals who feel disempowered and so do not speak up for best care.
6. Those (including the media) who pillory organisations who are honest about their challenges and so create an environment where it is safer to hide your problems.

Underlying these actions is a web of attitudes, behaviours and culture, (the ABC of improvement) partly created by complex reactions to the evidence, to the beliefs and to previous experience in the system and promoted by the actions of leaders. However, the positive role of the organisation and its management is well recognised in influencing improvement,\(^16\) with strong leadership stressing the overriding need to do what is best for the patient rather than what simply achieves a target.\(^17\)

All organisations and individuals should follow three key principles in order to encourage the intelligent use of quality indicators:

1. Quality indicators should be based on accurate data combined with knowledge and observation of the underlying processes and then create constructive debate, discussion and healthy competition among the individuals who can directly influence the quality, who are striving to deliver the best care possible.
2. A good system should openly and accurately demonstrate its quality (including outcomes, safety and experience) across the whole range of patients and should be more concerned with their own improvement than with their relative ‘scores’ (eg, league tables) or performance against an arbitrary level.
3. The attitudes, behaviours and culture across the whole system (from policy makers and regulators to individuals on the front line) should all promote a patient-focussed approach to global improvement in clinical outcomes and service experience.

Even simpler, is everyone in the system asking the question ‘do my actions benefit the patient’ and standing up for that principle above all others?

A way forward is to have a deeper understanding of the quality of care offered. The first step is to move away from the reliance on simple data measures and move to describing the facts. All clinicians working in emergency care should be encouraged to use the whole array of information available to them (eg, clinical quality indicators, patient satisfaction surveys, care bundle adherence, locally determined audits and quality standards) to demonstrate the quality of their service and acknowledge where there are deficits and risks. A method of using narrative, supported by data, to create a coherent argument to describe the safety has been used in other safety-conscious sectors and is now being trialled in patient safety,\(^18\) but they could be equally used in quality improvement. It has the advantage of promoting structured thinking about risk...
among clinicians and fostering multidisciplinary communication, integrating evidence sources, aiding communication among stakeholders and making the implicit explicit. It would change the regulatory paradigm from ‘we will assess how good you are’ to one of ‘tell everyone about the quality of care you provide’ and, hopefully, allow free constructive discussion on future improvement. However, it must be undertaken in an environment that allows and encourages complete honesty and openness so people will include deficiencies in the system rather than only presenting the positive findings. If this is then backed up by a peer review system (such as that used in the West Midlands)\(^{19}\) to add a validity check but also an opportunity for mutual learning and peer assistance then would we not have a more responsive system to support continuous improvement?

When a healthcare system can honestly say that all its decisions are made to improve quality of care and that we are truly using standards or targets to encourage and support continuous improvement, then we will have achieved success.

Acknowledgements The author would like to thank all the clinical, managerial and policy colleagues who commented on drafts of this article.

Competing interests Professor Cooke led development of the national clinical quality indicators when he was National Clinical Director Urgent and Emergency Care at the Dept of Health, England.

Provenance and peer review Not commissioned; internally peer reviewed.


Received 16 January 2013
Revised 16 January 2013
Accepted 20 January 2013
Published Online First 12 February 2013

doi:10.1136/emermed-2013-202391

REFERENCES

5 McCarthy M. Overcrowding in emergency departments and adverse outcomes. BMJ 2011;342:d2830.
Intelligent use of indicators and targets to improve emergency care

Matthew W Cooke

Emerg Med J 2014 31: 5-6 originally published online February 12, 2013
doi: 10.1136/emjmed-2013-202391

Updated information and services can be found at:
http://emj.bmj.com/content/31/1/5.full.html

These include:

References
This article cites 10 articles, 6 of which can be accessed free at:
http://emj.bmj.com/content/31/1/5.full.html#ref-list-1

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/