

# Beware – what gets measured might just get done

In the first in a series of two articles, Dr. Davida De la Harpe, Dr. Paul Kavanagh and Mark Turner examine how performance indicators can be used to catalyse change and bring about health service improvement if they are designed and used with care.

Lest anyone be in doubt - the health service in Ireland is being transformed. Health managers must be able to improve the performance of health services so they deliver the most possible health for the population, distributes this benefit fairly and provide value for money.

Performance indicators can be used to catalyse change and bring about health service improvement; however, to fulfil this potential, and to avoid well-documented risks associated with this approach, they must be designed and used with care.

## Vision

Tom Peters, one of the authors of “In Search of Excellence” and “A Passion for Excellence” was the first to write “what gets measured gets done”. It is this vision which underpins the drive to measure performance, an increasing focus of health system reform internationally. Performance measurement is a powerful instrument to bring about change and service improvement. While performance indicators are a useful addition to the health manager’s toolkit, to fulfil this potential, and to avoid well-documented risks associated with this approach, they must be designed and used with care. Put simply, the right things must be measured in the right way if they are to underpin the right management decisions to improve health service performance - the downside

is that if we measure the wrong things in the wrong way, then wrong things may get done.

## Designing the dashboard

Performance measurement should be used to navigate towards this destination; instrumentation that is unfocused on objectives can steer the service off course. Quality is always the fundamental issue in health service provision. Health managers should strive to improve performance; quality is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

## What to measure

Assessment of healthcare can consider structure, process and outcome. Ideally, indicators to help manage health system performance should consider outcome: we provide a health service to provide better health for everyone, so measuring

“If we measure the wrong things in the wrong way, then wrong things may get done”



DR. DAVIDA DE LA HARPE

health outcomes should provide the best information for managing performance towards this objective. In reality, moving to outcome measurement from a system in which process measuring predominates is a challenge for all health systems.

There are some advantages and disadvantages to process and outcome approaches to performance indicators. Process based indicators require more regular updating as healthcare advances than outcome based indicators as healthcare advances. They can usually be measured more easily and in a shorter time-frame than outcome measures and can often be abstracted from routinely collected data. However, while process-based indicators are attractive in terms of their resource requirements, on the other hand,



Mark Turner

outcome based indicators may be more valid. The public generally care more about outcome measures than process measures. Outcome measures have the advantage of encompassing many processes in health care; for example, outcome may capture how well a health care process is executed as well as the frequency. It is usually more challenging to identify actions and responsibilities arising from outcome measures but in the long term, may be a more useful approach.

### Right indicator

Management is an art and a science. However, the design of a robust performance indicator and the analysis and interpretation of the information it provides, are by necessity technical. These technical aspects to performance measurement are important

- as if we get it wrong – then it is the patients and staff who will lose out.

*Relevance:* The PI should be relevant both to the people who manage the organisation and to the people who provide the data.

*Clear definition:* The definition of the PI should be as simple, clear and intelligible as possible to facilitate the collection of the right information in a consistent manner. Use existing definitions where possible, and draw on standard languages in the context of an overall approach to information governance where available; for example, use the International Classification of Disease (ICD) to define diseases.

*Easy to understand and use:* While there is a requirement for clear definitions behind indicators, these do not necessarily have to be presented to users in the description of the PI to ensure that they are usable; for example the PI may refer to “heart failure” while the underlying definition may clearly specify the relevant ICD codes to be considered.

*Comparable:* PIs should be comparable between place (organisations or parts of the organisation) and time if they are to be used to inform performance management decisions.

This requires data standards and

“Outcome may capture how well a health care process is executed as well as the frequency”

quality assurance, as well as adjustment for contextual influences; for example, length of stay in hospital reflects case complexity as well as efficient bed utilisation.

### Verify

*Verifiable:* It should be possible to verify the quality of the systems for data collection and the data itself as well as the validity of the techniques used to construct the PI.

*Cost-effective:* The costs of collecting information should not outweigh the value derived from its use; data collected with routine information systems provide an efficient option.

*Unambiguous:* It should be clear to the user of a PI that a change in its value is associated with a change in the service it examines.

*Attributable:* Individuals within the service, whose performance is being measured by the PI, should at least in part, if not wholly, be in a position to influence it; for example, a PI based on delayed discharge from hospital may be less attributable to the hospital service provider than a PI based on discharge planning.

*Responsive:* Operational change in response to performance management on the basis of one PI measure should be reflected in the next PI measure in a time series.

*Avoid perverse incentives:* What gets measured gets done. Sometimes actions taken in response to management based on a PI may lead to an improvement in the indicator which is not associated with an improve-



The public generally care about outcome



performance | measurement

ment in outcome. For example, reduction in the average wait time for a diagnostic procedure could be effected through shortening the wait for people with less clinical need at the expense of extending the wait for people with more clinical need.

#### **Innovation**

*Allow innovation:* PIs which focus on process risk deterring innovation in process development necessary to improve outcome.

*Statistically valid:* Most PIs are based on numeric data. It is important to understand the properties of the data and to consider these in designing the PI. Lengths of stay, a popular subject of PIs in the health sector provide a good demonstration. The spread of length of stay times for individual patients never falls evenly around the mean value; median is a better measure of the central value for length of stay in a hospital. However, in this case it is the spread of the lengths of stays which may be as much of interest as the central value and this could be captured in the PI using a measure such as percentiles.

*Timely:* PI-related data should be available within a reasonable time-frame to allow the information provided to inform decisions with regard to performance management.

Arguably, the drive for performance improvement in healthcare is urgent; this may challenge the organisation's ability to take full consideration of these issues. Top-level management may effectively shine a spotlight down through the great cloud of existing business information in an endeavour to find focus areas that seem to have maximum positive change impact. Perfection should not

**A PI based on delayed discharge from hospital may be less attributable to the hospital service provider than a PI based on discharge planning**

be the enemy of the possible; however, robust analysis of any PI set against these criteria is required if this information is to be used intelligently and with minimum risk of perverse consequences if change is to be sustainable. A manageable degree of consultation and consensus on data ownership and data definitions should be sought. A pilot approach is desirable. Risk mitigation measures include scenario planning to assess possible undesirable outcomes, watertight data definitions to maintain commonality, rigorous audit processes to avoid gaming and careful consideration when associating incentives or penalties with the performance indicator results.

In the next issue, we will look at using PIs and reflecting on lessons learned here and internationally. Refs on request. **HM**

[DR. DAVIDA DE LA HARPE and DR. PAUL KAVANAGH work with the Health Intelligence, Population Health Directorate, HSE.

[MARK TURNER is Asst. National Director – Decision Support with the HSE Decision Support Unit.