

Building information systems that support good clinical governance



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A terrible thing happened at Bristol's Royal Infirmary in the late 1980s and early 1990s but the personal tragedies involved ultimately created a positive legacy that has reverberated around the world.

The deaths of a number of babies and young children during heart surgery at the Bristol Royal Infirmary precipitated the Kennedy Report into paediatric cardiac surgical services.

This 2001 report led to a greater emphasis on clinical governance within the UK National Health Service (NHS) and influenced the governance requirements on healthcare boards in other countries, including Australia.

Ten years on, clinical governance remains one of the most challenging issues facing healthcare boards.

Traditionally, most organisational management and board directorships have focused on corporate governance. Their imperative has been to properly address fiscal matters and put in place processes to support them. To a large extent, that has all been turned upside-down with the recognition that clinical governance is just as important as fiscal governance, if not more important.

With this responsibility come tasks that a board must carry out in addition to those set out by the laws of being a director. As a result, there is now an overlay of clinical governance within healthcare organisations.

While it is something that boards take very seriously, it would be fair to say that not all achieve the high standards set out in the following definition of "governance in healthcare" from the UK:¹ "A framework through which (NHS) organisations are accountable for continually improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish."

One of the challenges that boards face is the need for better information systems to support the new governance agenda.

Healthcare organisations have been very good at deploying IT systems to support a range of administrative and clinical tasks. There is no doubt that modern patient administration and clinical information systems offer improved functionality to support quality of care objectives, but this is just part of the clinical governance equation.

Data collection to enable indepth research and analysis is equally important, as is the ability to access that data in real time to support smarter, faster and more informed decisions for improved quality and safety.

With these objectives in mind, the last decade has seen many efforts to consolidate and modernise IT systems or integrate systems to improve access to healthcare information. But few organisations have succeeded to the point where they have access to a single information repository from where they can pull operational data as needed to support the new governance agenda.

The ideal outcome would be the sort of high-level reporting mechanisms like executive dashboards that are now commonplace in the finance and mining sectors. These dashboards, based on the business intelligence capabilities of advanced IT systems, give insight into the operational aspects of healthcare.

As part of their accreditation, healthcare organisations must have processes in place that give the board this information. Hospitals already have triggers for sentinel events and there are sophisticated methods of evaluation for investigating what goes wrong.

While this after-the-fact reporting and analysis is a necessary first step, being able to deliver insightful information in real-time is far more useful when it comes to avoiding problems in the first place. An emergency scorecard dashboard (see example on opposite page) can monitor time to treatment against government-mandated guidelines. Using live data, it is also possible to correlate time to treatment against contributing factors like episode type and time of day to pinpoint where bottlenecks are occurring.

With good real-time information you get the sorts of alarms that a board may want to be triggered if certain things are happening, as well as other capabilities to support clinical governance including:

- Early risk identification;
- Triggers for timely intervention;
- Real-time tracking of key performance indicators;
- Reports for boards of directors supporting clinical governance;
- Increased accountability for clinicians and managers.

Implementing such an information system creates its own challenges, for example boards need to balance the demands of clinicians and administrators to gain acceptance for the system. Users also need to value and take responsibility for the quality of information to ensure it is useful from a governance perspective.

Unfortunately, the rigidity of most current healthcare information systems has required healthcare professionals to either adapt processes to mirror the solution or face lengthy and costly customised implementation projects. As a result, many clinicians are loyal to departmental solutions that do not fully support the governance agenda.

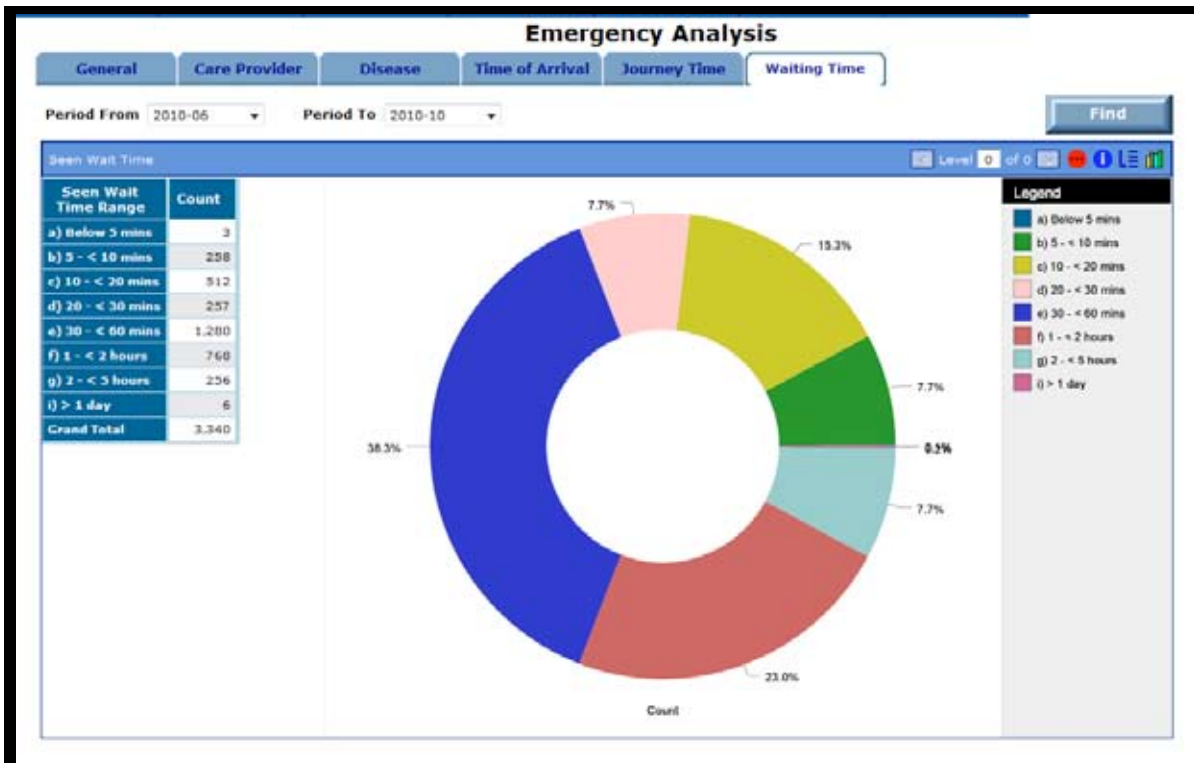
While some resistance from clinicians is understandable, there are alternative approaches to address their concerns. One is the implementation of adaptable healthcare information systems that can be easily configured by organisations to 'work the way you work' without needing customisation by external suppliers.

Another approach is to implement a central integration hub or broker that communicates with other information systems, translating messages and creating a single information repository or electronic healthcare record.

While choosing the right technical approach is vital for success, it is no substitute for insightful leadership. Getting buy-in from all the stakeholders takes leadership from the board and a good CEO to stimulate discussion within the organisation. Leaders must articulate what they want to do and set down realistic strategies that can be implemented and reported against.

Only when that is achieved will boards of governance have access to the right information at the right time to ensure that they are responsibly meeting their clinical governance requirements. ■

¹ G. Scally and L. J. Donaldson, Clinical governance and the drive for quality improvement in the new NHS in England *BMJ* (4 July 1998): 61-65



Executive dashboards are a useful reporting mechanism for the health sector. An emergency scorecard dashboard can be used to monitor time to treatment against government guidelines. In this example, a CEO reviews the waiting time dashboard and identifies that 38.3 per cent of patients are waiting 30-60 minutes to see a healthcare provider. The CEO seeks further analysis on waiting times for the two highest triage categories, which is easily obtained using available business intelligence (BI) tools.