

Case Study

Overview

Challenge

Managers and clinicians in NHS Trusts across the Kent and Medway region needed better, more timely information at their fingertips to improve patient care and operational efficiency. Turning a mass of data into actionable insights based on consistent information against a backdrop of budgetary pressure is a familiar challenge in the NHS.

Solution

Kent & Medway Health Informatics Service (KMHIS) decided to implement a data warehouse to collect base data from numerous Trusts and deploy an advanced business intelligence / performance management tool. KMHIS created HISbi, a brand name for a BI system managed by a small team who were focused on this challenge. They decided to implement IBM Cognos software from Bidetime Ltd to assist in converting NHS data into useful information that healthcare managers and clinicians can use in their every day work – from commissioning to patient care.

Benefits

- Provides automated reporting of consistent information.
- Delivers detailed insights into patient-related activities.
- Provides dashboards and scorecards to highlight ‘actionable’ information.
- Enables cost savings through a shared service model.

Can be continuously evolved to meet changing requirements.

“Ultimately, the Cognos solution will help Kent and Medway’s NHS organisations save money, increase transparency and improve patient care.”

Paul Bolton
Head of Informatics
Kent & Medway HISbi

Kent and Medway HIS delivers increased value to NHS Trusts and GPs

Kent and Medway Health Informatics Service (KMHIS) designs, delivers and supports IT services to NHS Trusts and GPs across the county of Kent. It employs 250 people who work with health, social care, third sector and private organisations, as well as GP surgeries, to understand their business objectives and create an effective IT framework to support them.

“We manage systems and data for over 12 organisations at all levels of the NHS, commissioning, provision and community, and we constantly aim to develop new IT services that make it easier for users to focus on helping patients rather than spending time on admin and paperwork,” says Paul Bolton, Head of Business Intelligence and Systems Development at KM HIS. “Over the past few years, government requirements around reporting have become more and more stringent, so one of our biggest challenges is to help GPs and hospitals collect, analyse and present data to meet their reporting targets.”

In addition to these requirements, GPs and Trusts are increasingly discovering new opportunities for using information to help them in their everyday jobs – improving patient care and operational efficiency.

As one example, the UK Department of Health has instituted Practice Based Commissioning (PbC), which enables GPs’ practices to make their own decisions about commissioning services for their patients based on cost and quality of care. If a local alternative is more cost-effective or more suitable than the service that the NHS provides centrally, then individual practices can choose for themselves. However, justifying these decisions to the Department of Health can be a complex task, and many GPs are forced to spend valuable time creating spreadsheets to calculate savings.

Powerful and flexible solution

The KMHIS team realised that if they could automate the analysis and processing of data for reporting from local Trusts and central government systems, it would be possible to improve the efficiency and reliability of creating the PbC reports.

To meet the PbC and numerous other NHS reporting requirements, KMHIS decided to create a centralised data warehouse and analytics platform that would bring together data from acute, community and primary care trusts across the region, and would also integrate with central NHS databases such as the Secondary Uses Service (SUS). The resulting solution is known as ‘HISbi’.

“For HISbi to be a success, we needed to find a business analytics solution that would be powerful enough to handle a very large and diverse data set, and flexible enough to support a broad and ever-changing range of reporting requirements at all levels of the NHS,” explains Paul Bolton. “We looked at solutions that were already in use within Kent and Medway NHS organisations, and we were impressed with a Cognos solution that had been implemented by an IBM Business Partner called Bidetime.”

Working with Bidetime

The HISbi team worked with Bidetime to install the IBM Cognos Business Intelligence software and began building reports for various key requirements – including PbC reports, Contracting and Procurement (CaP) reports and several others.

Simpler, automated reporting

HISbi has automated the majority of the data collection and analysis process for PbC and acute contracting reporting which eliminates a considerable amount of spreadsheet-based manual work for both ACT and GP practices. This is essential as the reporting schedule is so tight that it would require an army of analysts to do what KMHIS do with effectively one person. The reports are generated very quickly and the quality of the data is higher since there is less scope for human error.

“By simplifying the PbC and CaP reporting process, HISbi gives GPs more time to focus on patient care and the contracting team more time to analyse the information thus avoiding costly mistakes that could run into millions.” comments Paul Bolton. “The ease of use of the reporting solutions also provides a greater incentive to use local suppliers and reduce costs. Ultimately, this benefits the whole NHS. Our customers like the fact that we provide a custom solution that fits practically all their needs not just a percentage of them that they would get from a commercial supplier.”

Dashboards and Scorecards

HISbi is now also delivering vital information directly to the desks of managers and clinicians.



Dashboards and scorecards provide ‘at-a-glance’ information (using a mix of graphs, gauges, tables and other graphical elements) to help doctors and managers make decisions. They can be designed, developed and delivered in a matter of days or even hours. By delivering consistent information that is automatically updated they make performance management and decision-making easier for everyone involved.

Keeping the data secure

“HISbi is probably the most comprehensive NHS data warehouse in the south-east,” comments Peter Gough, HISbi Centre Manager. “Because of the sensitive nature of much of the data we need to ensure high levels of security. Cognos gives us complete control over user access so we can enable users in different NHS Trusts to view the data they need while still ensuring full compliance with data protection.”

Increased control of information security enables KM HIS to give doctors access to more data about their own patients. For example, if a patient goes to hospital, their GP can use HISbi to check the hospital’s records and find out which department they were admitted to, how long they stayed, whether they underwent any operations or procedures, who their consultant was and so on.

Previously, this data would have been much more difficult to obtain, because it was very difficult to give GPs direct access to hospital systems. HISbi is now starting to provide GPs with almost real time information that they have never had access to before such as which of their patients were admitted to A&E the previous day and for what reason.

Adapting to new requirements

As the structure of the NHS changes and Primary Care Trusts will be replaced by Clinical Commissioning Groups (CCGs), KM HIS plans to continue adapting HISbi to offer new services and meet emerging reporting needs.

“The greatest benefit of HISbi is its flexibility,” explains Peter Gough. “We can develop new reports and analytical services very rapidly and we can provide them to GPs via a cost-effective shared service model. We already have 150 GPs who are licensed to access HISbi, and every time we develop something new it’s automatically rolled out to them at no extra cost. HISbi could be very valuable for the new CCGs since it will mean they don’t have to build their own business intelligence solutions from scratch.”

The HISbi team is already working with a number of GPs to develop new analytics solutions aimed at improving clinical management. For example, one GP has been using HISbi to analyse the effectiveness of stroke care and HISbi can pinpoint which patients are at high risk.

“As our customer-base expands we’ll be able to devote more resources to developing new services,” says Paul Bolton. “Ultimately, the Cognos solution will help Kent and Medway’s NHS organisations save money, increase transparency and improve patient care.”

Notes

Bidetime specialises in the development and delivery of information systems for UK healthcare organisations. We help clients manage, analyse and deploy information as efficiently and painlessly as possible. Bidetime's solutions give clients control over the delivery of their information by using market-leading software and industry-standard techniques.

With over 20 years' experience in developing and delivering health solutions and more than 4,000 licensed users, Bidetime is one of the largest suppliers of business management solutions to the NHS.

IBM Business Analytics solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Business Analytics solutions bring together technology, analytical applications, best practices and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Business Analytics solutions.

If you'd like to discuss your needs or for a demonstration please contact Bryan Sergeant, Bidetime Business Development:

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