

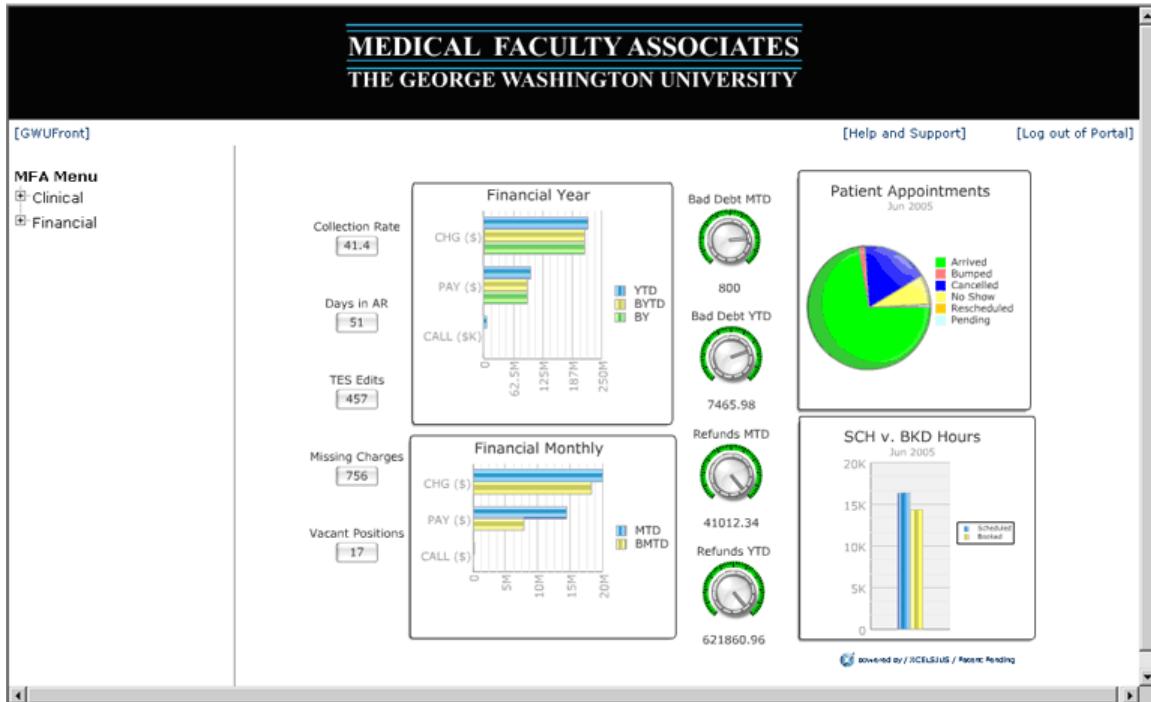
Medical Faculty Deploys 'Real-time' Dashboards to Monitor Performance

By Paul Henchey, Editor

The George Washington University Medical Faculty Associates (MFA) had already deployed an electronic health record, accomplishing an information technology milestone that has been very challenging for many other physician organizations. But by mid-2004 the success of that project had created a group of physicians who were now more computer-savvy and had higher expectations about the electronic delivery of critical information in all areas of their practice. It became apparent that the organization's system for reporting on financial and clinical performance metrics needed to be updated. Not long ago, the annual report had been the focus of performance reporting, but now even monthly reports were seen as inadequate - physicians and administrators needed to see how they were doing against their goals day by day during the course of each month.

The MFA's CIO, Praveen Toteja, clearly understood the need to deploy a new performance reporting system quickly. "Times are changing," he said, "Data is very critical for everybody." But he faced several challenges in devising a solution. Key data elements were stored in several separate information systems on diverse types of servers and databases but he could not expect hundreds of busy physicians to login daily or weekly to multiple applications to track their performance against administrative metrics. Integrating all those diverse data elements in a single data warehouse is the approach that many have taken in that situation, but Toteja knew that such projects could be long, complex and costly, and in the end provided somewhat 'dated' information. So Toteja chose to build a physician dashboard using InterSystems' Ensemble integration tool, a solution that can pull data directly from multiple data sources on demand, and present it in a readily grasped graphical format. The development of the MFA dashboard was quite rapid - work on the initial release started in early 2005 and "90% of the work was done within the next month," said Toteja in a phone interview in early July. The dashboard has been in use by a group of about 25 pilot users for four months already and the MFA implementation plan calls for rolling out the dashboard to all 275 physicians in mid-July, coinciding with the start of their new fiscal year.

Exhibit A - Graphical Dashboard (Source: MFA)



Organizational Infrastructure

The George Washington University Medical Faculty Associates (www.gwdocs.com) is located in a single building in Washington, D.C. and employs about 1,000 people in addition to the 275 physicians who comprise the multi-specialty practice. The practice bills about \$215 million in gross charges annually. Toteja's IT staff consists of sixteen people with responsibilities for applications, interfaces, the computer network, the phone system, and a help desk. As is typical of large healthcare organizations, its technical infrastructure includes a diverse selection of best-of-breed applications. The applications that contribute data to the physician dashboard include:

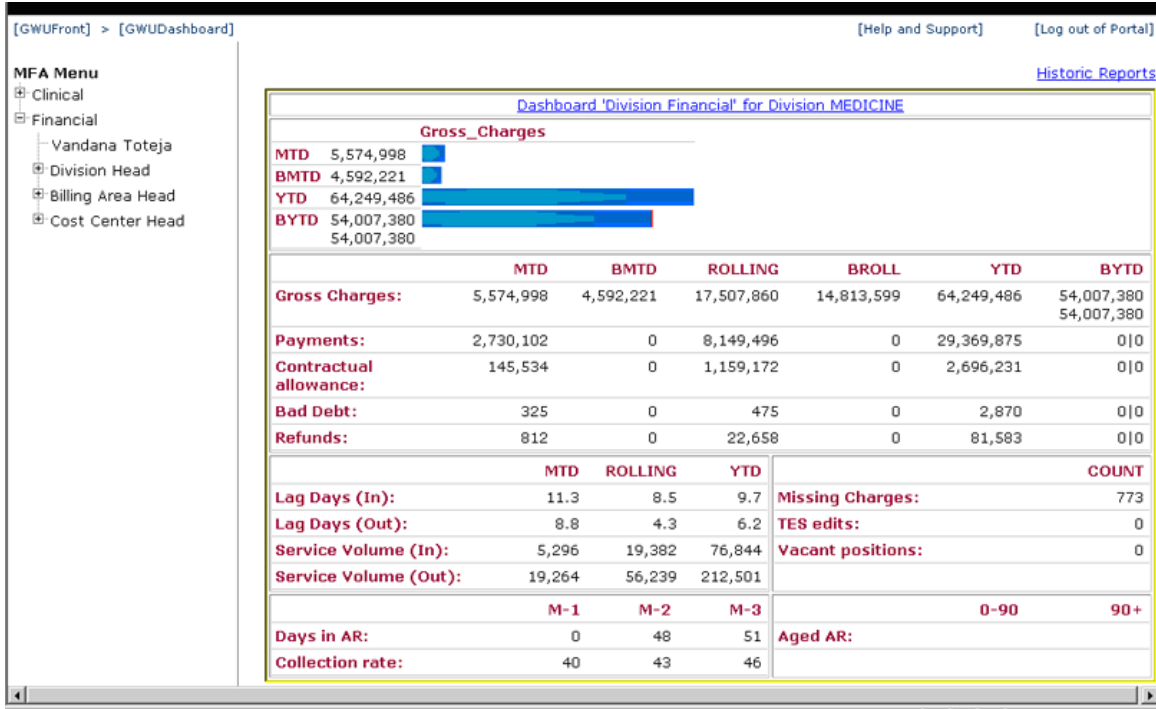
- IDX Flowcast billing and scheduling - Caché
- Allscripts TouchWorks Electronic Health Record - SQL
- Great Plains Financial Management System - SQL
- ADP payroll system - Oracle

In addition, some key data elements such as budget targets are stored online in Excel spreadsheets.

Performance Metrics

The MFA dashboard provides individual physicians with real-time access to their key performance metrics via a shortcut from their web browsers. It also provides division heads and practice administrators with rolled-up views of their parts of the organization and can drill down all the way to the provider level if needed. On first logging in, using their Novell network password, users see a graphical view of several of the most important key performance indicators on one screen.

Exhibit B - Financial Measures (Source: MFA)



From there, users can access additional screens that show more detail of the financial and clinical metrics in a tabular, numeric format. Some of the financial measures included in the initial version of the dashboard are:

- Gross Charges
- Payments Received
- Contractual Adjustments
- A/R Days
- Collection Rate
- Missing Charges

Clinical measures include items such as:

- Booked Hours vs. Scheduled Hours
- "No Show" Rate
- Number of New Patients
- Number of Prescriptions
- Tasks Completed

"Tasks Completed" is a customer service measure that tracks physician activities such as reviewing lab results or responding to email inquiries and referral requests from patients. The organization's goal is to turnaround all such requests from patients within 24 hours.

Looking Ahead

As the dashboard is rolled out to the entire practice, Toteja anticipates that there will be considerable interest in adding additional metrics to the dashboard, beyond those requested by the pilot users in the Department of Medicine. Physicians in different specialties have some specific measures that particularly important to their type of practice. One likely addition to the dashboard is an RVU metric, for tracking productivity.

Longer term, the MFA would like to start tying physician compensation to some of the metrics tracked in the dashboard. The fiscal year starting in July 2005 will provide the practice with an opportunity to become familiar with the measures and establish some baseline levels of performance. Potentially, some new compensation formulas will be put in place a year later, based on the first several months of experience with the dashboard.

Toteja is very pleased with the initial results of the virtual data integration project at the MFA and sees "unlimited potential" for expanded use of the Ensemble tool. He even sees potential use of the toolkit beyond the walls of the MFA's group practice. Toteja believes that virtual data integration could be a key technology for implementing the future data sharing requirements of the regional health information organizations (RHIOs) that are being widely discussed in political and medical circles. Virtual data integration could potentially allow clinicians to share essential medical information to improve patient care, without requiring large databases of consolidated medical data that could create concerns about patient privacy.