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## **The Primary Care Portal: An Intranet-based Management Reporting System for Providers and Administrators**

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### **Objective:**

Provide physicians and administrators with useful strategic practice data for primary care through a secure intranet access enabling a single portal for practice management information.

### **Methods:**

In order to foster efficient, high quality medical care to patients enrolled in a primary care provider's panel, the provider needs timely access to information about their practice patterns. Using data mart technology for data storage and analysis and web technology for report delivery, we are able combine existing electronic data from our appointment system, billing system and medical records to create a data portal which summarizes patient information for physician-specific panels for all primary care physicians. Panels are defined as those patients identified with a specific primary care provider. All utilization experienced by a patient for a specified timeframe is attributed to the panel. Currently, there are five reports available: 1) Patient Management Reports, a performance summary of panel patients meeting specific recommended clinical services or who may need attention, with the capability of identifying specific patients; 2) Patient Resource Utilization Reports, a summary of key medical care resource use among panel members over a selected timeframe (the last 1,3 or 12 months experience) with patient identification capabilities; 3) Panel Demographics, a graphical and tabular display of the demographic and visit history characteristics of panel members; 4) Panel Drug Usage, the relative use of specific drugs prescribed among several classes of medications; and 5) Metrics for Primary Care Population-Based Management, a summary report with sections on "The Needs of the Patient Come First" (measures of access, quality of care, and patient satisfaction), "Right Care, Right Place, Right Time" (measures of specialty referral and emergency department usage), "Financial Management" (measures of total expense, formulary use, laboratory and radiology service use) and "Panel Size" (measures of provider capacity) for each panel. The first four types of reports have interactive features and are based on data from the most recently available, complete timeframe and processed and updated on a monthly basis. The last report is a static report which is processed on a quarterly basis.

The project has been an evolving collaboration between our clinical staff, administrators and technical specialists. Our efforts started in the fall of 1999. Monthly reports have been distributed to our primary care providers since 2002. It took about one year to develop the infrastructure necessary to assure secured access to protect patient confidentiality. Over time, additional components of the electronic medical record have been extracted to improve measurement validity. Individual providers have access only to data on their own panels as well as department and institution-wide summaries; however, those with administrative privileges have the ability to compare providers with access to identifiers.

### **Results:**

Availability of information on primary care provider panels has fostered several projects to improve the reported metrics. Access statistics have been used to encourage "open-access" models. Several projects have used data to increase the rate of preventive service provision, including a reminder message for women needing mammograms. Interventions focused at patients with persistent high primary care visits are also under study.

Over the last year, the number of patients empanelled in primary care has increased from 135,420 to 141,061. The percent of all primary care and emergency visits made in primary care sites have increased from 75% to 78%. The mammogram screening rate among eligible women has increased from 57% to 61%. The glucose control rate (HbA1c<8%) among patients with diabetes has increased from 82% to 83%. Specialty utilization has increased (1821 visits/1000 to 1842 visits/1000), while laboratory use has declined (6875 tests/1000 to 6324 test/1000).

### **Conclusions:**

Providing information about their own panels to primary care providers enables them to take more responsibility for a population management perspective. Although limited in its current data sources, the portal has raised the interest of practitioners. Changes in care delivery can not all be attributed to this project, but we feel it has positively contributed.