

## Electronic Health Record Use in Ambulatory Care Clinic Settings in Minnesota June 2010

### Background

The Minnesota Department of Health (MDH) is responsible for assessing the level of adoption, use and interoperability of electronic health records (EHRs) and other Health Information Technology (HIT) in a variety of health and care settings. This vital information is needed to:

- Measure Minnesota's progress on state and national goals to accelerate adoption and effective use of health information technology;
- Monitor advancement towards meaningful use of information technology to help ensure that eligible professionals and hospitals receive federal incentives under the HITECH Act or other federal incentive programs; and
- Identify gaps in capacity in local communities so that limited resources can be better targeted to areas of need.

### Introduction

The Minnesota Statewide Quality Reporting and Measurement System (Minnesota Rules, Chapter 4654) requires that all physician clinics complete an HIT ambulatory clinic assessment survey. MDH contracted with Minnesota Community Measurement (MNCM) to develop and administer this survey. The survey was designed to collect information for use by multiple stakeholders to minimize the number of surveys medical groups and clinics are required to complete. The survey was also intended to be comprehensive and aimed to collect data which would fit multiple needs. This fact sheet highlights results of the 2010 assessment.

### Methods

A ten member technical advisory group guided the development of the HIT ambulatory clinic assessment survey. The group reviewed previous national and state surveys and identified 65 survey questions. A link to the online survey was sent to 1100 clinics registered as part of chapter 4654 rules. Some clinics in Wisconsin and Iowa were registered and completed a survey. Data was collected but only Minnesota based clinics are used in this analysis.

### Results

The survey was returned by 915 of 1027 Minnesota based clinics identified, for a response rate of 89%.

#### Adoption Rate

The reported ambulatory clinic EHR adoption rate in Minnesota is 66% (608/915). This includes clinics who indicated that they have an EHR installed and either *some or all* of the clinic staff and providers are using it (see Table 1).

Sixty percent (548/915) of the clinics have an EHR installed which is in use in all (more than 90%) of the areas of the clinic. Twenty four percent of the clinics responded having no EHR.

Table 1 : EHR Adoption and Implementation Status	% (#) clinics
EHR installed and in all (more than 90%) areas of the clinic	60% (548)
EHR installed and in use by some of clinic staff and providers	6% (60)
Purchased/begun installation of an EHR, but not yet using system	9% (86)
Do not have an EHR	24% (221)
Total	100% (915)

Source: MDH, Minnesota Statewide Quality Reporting and Measurement System

The survey also showed that a majority of the clinics using EHR rely solely on electronic records. Two-thirds (410/608) of these clinics responded that “We do not maintain paper charts, we are entirely paperless”

#### Effective Use Rates

Clinics responded to a series of questions regarding use of EHR functions known to be associated with helping improve the quality of care.



*The Minnesota e-Health Initiative is a public-private collaborative whose Vision is to accelerate the adoption and use of health information technology in order to improve health care quality, increase patient safety, reduce health care costs and improve public health.*



Use of Computerized Provider Order Entry (CPOE) is an indicator associated with improved quality of care. Respondents reported CPOE use for some or all provider orders in 78% (474/608) of the clinics (*see Table 2*).

<b>Table 2: CPOE Function</b>	<b>% (#) clinics</b>
Use CPOE for some or all provider orders	78% (474)
Have CPOE, but not in use	8% (48)
Do not have CPOE	13% (80)
No response	1% (6)
Total	100% (608)

Source: MDH, Minnesota Statewide Quality Reporting and Measurement System

Clinical Decision Support (CDS) systems provide clinicians, staff, patients, and other individuals with knowledge and person-specific information which is presented at appropriate times to enhance health and health care. The Institute of Medicine advocates use of CDS systems to improve quality of care and health of communities.

Measures for seven areas of CDS systems were studied. The percent of clinics with any type of clinical decision support tool is 95% (580/608). Routine use of CDS for at least one item is reported by 87% (530/608) of the clinics (*see Table 3*).

<b>Table 3: Use of Clinical Decision Support (CDS)</b>	<b>% (#) clinics</b>
Number of clinics with any type of clinical decision support tools	94% (573 / 608)
Number of clinics using any type of clinical decision support tools ROUTINELY	87% (530 / 608)

Source: MDH, Minnesota Statewide Quality Reporting and Measurement System

### Health Information Exchange Rates

The clinics reported a higher rate of exchange of information with hospitals that are affiliated with the clinic than with hospitals that are outside or not affiliated with the clinic (*see Table 4*).

**Table 4: Health Information Exchange (HIE) with Affiliated and Outside Hospitals**

<b>Clinics that:</b>	<b>Hospitals (in-system / affiliated)</b>	<b>Hospitals (outside of system)</b>
Send clinical data to this entity only	20% (121)	16% (96)
Receive clinical data from this entity only	6% (39)	1% (6)
Send AND receive clinical data from this entity	29% (179)	2% (15)
Neither send nor receive clinical data from this entity	42% (254)	78% (477)
No response	2% (15)	2% (14)
Total	100% (608)	100% (608)

Source: MDH, Minnesota Statewide Quality Reporting and Measurement System

### Barriers to Implementation

Providers reported a number of barriers to implementation. The cost to implement, concerns about return on investment and lack of knowledge/resources were cited as the most frequent issues. This was followed by the need for physician support, staff education and training and security/privacy concerns.

### Discussion

This survey shows a notable increase in effective use and exchange activity compared to previous surveys. Little change was noted in the approximately 25% of clinics reporting that they have no EHR. Coordination with HITECH programs that support adoption and implementation is essential to help remove barriers and support achieving meaningful use requirements.

### For More Information

For more information and updates on assessment data for a variety of care settings visit online at: <http://www.health.state.mn.us/e-health/>.

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