



# Electronic Health Record Landscape Assessment: Minnesota's Primary Care Clinics August 2007

Stratis Health, Minnesota's Quality Improvement Organization, has released the final results of a comprehensive survey measuring the level of electronic health record (EHR) adoption and implementation in Minnesota's adult primary care clinics. Survey results show a significant increase in the number of clinics that have implemented or are in the process of implementing an electronic health record system—from 46 percent in 2005 to 62 percent in 2007. Results indicate that 86 percent of clinics will have an EHR fully or partially implemented within the next two years.

Stratis Health has been assisting adult primary care clinics with the adoption and implementation of EHR systems since 2005. To help prepare for that work, 603 adult primary care clinics were surveyed to assess the status of EHR implementation. The survey was repeated in 2007. The survey tool was a modified online survey developed by the Medical Group Management Association. A primary care clinic was defined as a facility offering general practitioner, internal medicine, or adult family practice services. Survey response rates were 75.0 percent in 2005 and 75.6 percent in 2007.

**Table 1 EHR Implementation: Statewide**

Implementation Stage	All Clinics (%)		Rural Clinics (%)		Urban Clinics (%)	
	2005	2007	2005	2007	2005	2007
Fully implemented	17	42	13	20	20	58
Implementation in process	29	20	23	28	34	13
Implementation in next 12 months	11	11	13	15	10	9
Implementation in next 13-24 months	16	13	22	21	11	8
Implementation beyond 25 months	--	9	--	12	--	7
No plans for implementation	--	5	--	5	--	5

The majority of clinics that responded to the survey represented integrated health care delivery systems and free-standing, independent clinics. Clinics that were part of a health care delivery system showed a higher rate of implementation than free-standing, independent clinics.

**Table 2 EHR Implementation: Clinic Type**

Implementation Stage	Free-standing, Independent Clinics (%)	Clinics that are part of an integrated delivery system (%)
Fully implemented	15.5	54.0
Implementation in process	16.4	23.4
Implementation in next 12 months	10.0	6.1
Implementation in next 13-24 months	24.6	9.6
Implementation beyond 25 months	18.2	6.1
No plans for implementation	15.5	0.8

Survey results showed that the more physicians a clinic had, the more likely the clinic was to have a fully implemented EHR system.

**Table 3 – EHR Implementation: Number of Physicians per Clinic**

Implementation Stage	Clinics Statewide (%)							
	One	Two	Three	Four	Five	6-10	11-25	26+
Fully implemented	22.7	20.8	32.6	40.5	53.9	49.5	58.6	59.6
Implementation in process	24.0	24.5	20.9	16.2	11.5	25.3	13.8	14.9
Implementation in next 12 months	10.7	17.0	9.3	8.1	11.5	11.6	10.3	2.1
Implementation in next 13-24 months	20.0	9.4	23.3	11.1	11.5	9.5	10.3	17.0
Implementation beyond 25 months	9.3	20.8	9.3	13.5	11.5	4.2	6.9	4.3
No plans for implementation	13.3	7.6	4.7	11.1	0.0	0.0	0.0	2.1

**Top three barriers to EHR implementation.** The top three barriers to implementation cited by clinics were: concern about the loss of productivity during transition to an EHR system, concern about the physician’s ability to input data into a computerized medical record, and the lack of capital resources to invest in an EHR.

**Current use of EHR functions.** Clinics vary in the use of all basic functions. Only four percent of clinics surveyed still are using a manual appointment calendar and only 20 percent are using non-computerized lab order and results systems. However, nearly 40 percent of clinics still are using a manual prescription system (fax and/or telephone). Once clinics have mastered these basic software capabilities, they can move on to optimizing their systems for care management, preventive care, and quality improvement.

**Sharing data electronically.** Nearly 50 percent of clinics share clinical and lab data electronically with other organizations. This is important not only for efficiency and improved patient care and safety, but also for providing comparison data to consumers and providers.

**Dominant EHR companies in Minnesota.** Survey results showed that with 60 percent market penetration, Epic is the EHR company most often used by large integrated clinic systems in Minnesota. Allscripts is second at approximately 12 percent. (Stratis Health does not endorse any specific EHR product.)

**Further study and implementation.** Stratis Health will continue to research EHR use in Minnesota clinics by conducting surveys to determine how clinics are optimizing their EHR systems and where clinics need technical assistance. In November 2007, Stratis Health surveyed EHR use in nursing homes and is considering surveying EHR use in other settings of care.

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*Stratis Health is a non-profit organization that leads collaboration and innovation in health care quality and safety, and serves as a trusted expert in facilitating improvement for people and communities. Founded in 1971, Stratis Health lends its expertise to health care providers and other organizations across the health care continuum.*

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