

## Clinical Benefits: Patient Safety, More Informed Prescribing

- According to the Center for Information Technology Leadership (CITL), use of electronic prescribing systems with a network connection to pharmacy and advanced decision-support capabilities could help prevent 130,000 life-threatening medication errors annually.
- Statistics from the Henry Ford Health System based on its use of e-prescribing:
  - Reduced Adverse Drug Events
    - Hospital Admits
    - 2% of hospital admissions due to ADEs (50% of published research)
    - 33% of these avoided with ePrescribing
  - Emergency Department Visits
    - 1% of ED visits due to ADEs (50% of published research)
    - 33% of these avoided with ePrescribing
- A recent survey of physicians in the Southeast Michigan ePrescribing Initiative (SEMI) program revealed that improved patient safety and quality of care topped the list of key benefits of the technology. According to the survey, conducted by HaldyMcIntosh & Associates:
  - Three out of four prescribers believe strongly that ePrescribing improves safety for their patients.
  - Nearly 70 percent of respondents say it improves the quality of care.
  - The study also found that nearly 65 percent of physicians changed at least one prescription in response to a safety alert that warned of potentially harmful drug-drug interactions and drug-allergy risks at the time of prescribing.
- According to a recent survey of participants in the Massachusetts eRx Collaborative – an e-prescribing adoption effort headed by Blue Cross Blue Shield of Massachusetts (BCBSMA), Tufts Health Plan and Neighborhood Health Plan (NHP) – approximately 104,000 electronic prescriptions were changed due to drug safety alerts in 2007.
  - This represents 2.1 percent of total electronic prescriptions that were changed or cancelled due to drug messaging.
  - This number increased after mid-year, and remained steady for the latter half of the year at around 2.5 percent.
  - The highest number of electronic prescriptions that were changed or cancelled in a single month was 9,960.

- A 2005 survey of 2,888 physicians sheds light on what they value most from the opportunity to prescribe electronically. Their responses covered a range of clinical and administrative capabilities.

The top three clinical opportunities for e-prescribing:

- Medication history across providers
  - Patient adherence
  - Identify potential drug interactions (drug, food, allergy)
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- Eighty-three percent of physicians say they could productively use more information on their patients' medication history and potential drug interactions at least some of the time.
    - Thirty-six percent say they could productively use more information most of the time.
    - 47 percent say some of the time.
    - Before writing a prescription, physicians do not typically use e-prescribing to learn their patients' medication history.
    - The most common way physicians learn of their patients' prescription history is by asking the patients themselves—57 percent.
    - Twenty-three percent pull the patient's chart, and 6 percent use an electronic system.
    - The survey of 407 physicians was conducted June 7 through July 6, 2007 by Ayres, McHenry & Associates, Inc.
    - Respondents were selected randomly from a list of physicians throughout the country in fields that typically write prescriptions.
    - The sample was purchased from American Medical Information, and all respondents confirmed that they regularly write prescriptions for their patients.