Factors Influencing EHR Use in Small Physician Practices: Case Studies in Four States

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Purpose

- **Describe barriers and facilitators to adoption of health information technology (health IT) reported by physicians and staff in selected primary care practices participating in the ongoing Medicare Care Management Performance Demonstration (MCMP)**

MCMP Background

- **Designed to encourage use of health IT to improve quality of care to chronically ill, fee-for-service Medicare beneficiaries**
- **Annual financial incentive:**
  - **Approximately 640 practices**
  - **Practices located in 4 states: AR, CA, MA, and UT**
  - **Maximum of $192,500 per practice over 3-year period**
- **Annual bonus based on 26 clinical measures, plus additional bonus if data are submitted via a CCHIT-certified electronic health record (EHR)**

Case Studies

- Teams of two evaluators visited all four states during June – September 2008
- Eight participating practices per state (32 total)
  - Good cooperation from targeted practices
  - Non-random selection, to vary on urban/rural location, number of physicians, number of fee-for-service (FFS) Medicare beneficiaries, and use of EHRs
- Semi-structured protocol shaped discussions
- Detailed notes were coded to identify themes

Case Study Practice Characteristics

Characteristics	Case Studies (32)	Other Demo (608)
% urban	72	85
Mean # physicians	5.7	3.8
% solo practice	28	31
% any health IT use	84	83
% using EHR	72	62
% using e-prescribing	66	67
% with registry	53	44
% with >250 eligible beneficiaries	56	35
% affiliated	63	73

Source: Office Systems Survey, Fall 2007; Demonstration and CMS claims data provided by Actuarial Research Corporation; Area Resource File; MCMP Application Data.

Year-One Responses to the Demonstration

- **Improved documentation (18 of 32), such as:**
  - **Obtained documentation when women had mammograms elsewhere**
  - **Asked practitioners to document foot exams and heart failure education in a specific way for easier reporting**
  - **MDs said to be "more aware" of need for documentation (e.g., reasons for no colonoscopy)**
- **Changes to EHR or its use (7 of 32)**
  - **New registry**
  - **Tailored EHR point-of-service alerts**

Workflow Change With EHR Implementation

- About one-third increased their use of medical assistants after implementing EHRs
  - Entering data to complete patient EHRs
  - Interviewing patients as first step in the visit
  - Outreach to patients needing tests or appointments
- 15 of 24 with EHRs operate "paperless"
  - Those using both paper and EHR generally transitioning and/or frustrated with inefficiency of dual processes
- Other major workflow changes were rare
  - Only one appointed an EHR project manager
  - One working toward systematic diabetes care management

Factors Facilitating Better Use of EHRs

- **In-house champion for improving EHR use: physician (13) and/or administrative staff (9)**
- **Staff ability to customize EHR products (12 of 24)**
- **Ownership by a larger organization**
  - **Owned practices had transitioned faster, were better supported during implementation**
- **State and payer environment**
  - **Practices in one state, participating in P4P and tiered provider networks, appeared to be moving more aggressively to improve system use than practices in other states**

Factors Limiting Use of EHRs

- System limitations
- Day-to-day pressures
- Cost
- Individual practitioner, not practice, is often the decision-maker about how and how much to use the EHR
- Lack of strong motivation to improve system use
- Size and ownership
  - Small, independent practices faced more difficulties

Conclusions

- **In year one, modest operational responses were found in a large subset of visited practices**
- **Types of year 1 responses are more "foundational" than "transformational"**
  - **Heavy emphasis on improving documentation**
- **Fits with theory that financial incentives are a relevant tool for influencing practice change and system improvement**
  - **Some indication that overall payment environment more important than any single payer**
- **Too early to know if the responses will result in measurable quality improvement**

Implications

- **Important for future study: How to maximize use of medical assistants to leverage EHRs for care improvement while increasing efficiency**

- **Improving EHR use will require**
  - **Special attention to small, independent practices**
  - **Improved products and implementation assistance to meet clinicians' needs**

For more information, see report:

http://www.cms.hhs.gov/Reports/Downloads/Felt-Lisk_2009.pdf