

# Exploring Meaningful Use: Results of an EHR Survey by AMGA and JHD Group

Expectations for EHR Value and Care Improvements Increase with Use



As medical practices nationwide focus on “meaningful use” of electronic health records (EHRs), a recent survey conducted by the American Medical Group Association (AMGA) reveals encouraging findings. Although few groups have yet to achieve all the benefits they anticipated when they began EHR implementation, virtually all groups now have even higher expectations for the potential of health IT as a result of their experience.

A report of the survey findings, “Electronic Health Records: Keys to Achieving Value and Improving Care,” stated that the medical groups reporting greatest satisfaction with

their EHR systems and highest expectations for the future utility of those systems were those with the longest experience, a commitment to redesigning workflows to realize the greatest benefits, and recognition that training of physicians and support staff is an ongoing process, not a one-time event. While still working to achieve full benefits from their EHR systems, the groups have raised their expectations of future benefits for patients and providers based on EHR experience to date.

## Background

The survey was conducted in collaboration with the JHD Group, a noted healthcare management consulting

and technology firm. It was designed to explore the experience of AMGA member groups in implementing and utilizing EHR and practice management systems, with a particular focus on identifying the key success factors for capturing the benefits offered by these increasingly critical tools. Member groups were interested and willing to share their experiences, as evidenced by at least one response from 160 of AMGA’s 340 member organizations. Many of those groups supplied responses from multiple leaders via the online survey tool. Additionally, 39 surveys were submitted by physicians and administrators of large non-AMGA medical groups. This very rich sample enabled AMGA and the JHD Group to draw conclusions about what distinguishes groups that perceive the greatest benefits from EHRs from those that still struggle to realize their potential value.

Groups have raised their expectations of future benefits for patients and providers based on EHR experience to date.

Because more than 85 percent of AMGA member medical groups have already adopted EHRs, this survey focused on use and benefits. Exactly how are groups using EHRs, and what benefits have they achieved in patient care, practice productivity, and clinical quality? Results indicate that these groups view EHRs as

essential tools. Experienced users universally expressed increased optimism regarding the value they expect to capture from continued use of the systems. Experience with the systems has raised their expectations regarding the impact EHRs will have on clinical quality, patient communications, and office efficiency.

Responses to the survey primarily came from groups that have been utilizing EHRs in their practices for some time: more than half the respondents have had EHRs for more than three years, and over 35 percent for more than five years (see Table 1).

The reported 85 percent level of EHR utilization by AMGA members is many times the rate reported by most surveys of EHR adoption among U.S. physicians, and reflects the position of AMGA member organizations (and other large groups) as industry leaders in technology.

The survey collected information about group size and composition, and experience with EHRs. Respondents were asked about the functionality/capabilities of the EHR currently in use by their group, including:

- Integration with an electronic practice management (EPM) system
- Utilization of patient registry(s)
- E-prescribing
- Patient portal
- Interfaces with labs, radiology/imaging systems, pharmacies, hospitals
- Electronic data interchange (EDI) with payors or claims clearinghouses

Respondents were also asked for feedback on their initial expectations, current achievements, and future expectations/aspirations for a variety of potential functions/benefits associated with EHR usage, including

- Improved access to patient medical records/patient data
- Prompts for follow-ups on conditions, medications, etc.
- Reduction of medical errors
- Comprehensive/integrated “view” of the patient
- Physician-patient communications
- Coordination of care and referrals
- Case management
- Tracking patient compliance with treatments
- Use of guidelines/protocols/evidence-based medicine
- Demonstrating clinical cost-effectiveness

Respondents were asked to report the extent to which their group has redesigned (or planned to redesign) workflows and staff roles and responsibilities to gain efficiencies made possible by the new technologies.

## Both technology and the skills of the groups that use it are evolving.

Finally, respondents were asked to evaluate how critical the EHR system is in meeting their organization’s goals along a variety of parameters.

### Findings

Several major themes emerged from the response data, illustrating key success factors in implementing an EHR and capturing its benefits on an ongoing basis.

- Healthcare professionals view EHRs as both essential tools and significant investments that are critical to the future success of the group. Expectations about the benefits offered by EHRs are both broad and deep. They include improvements in clinical quality, patient service, opera-

tional efficiency, financial performance through managing risk or capturing incentive revenues, and market position.

- Today’s EHR systems require substantial time for training, planning, and customization to meet the varied needs of different specialties and practice configurations. Additionally, they demand investment (e.g., interface and template development, ongoing operational support) above and beyond licensing and training costs to deliver full value. System implementations are highly disruptive and resource intensive. They need to be carefully planned to ensure a successful launch.
- Realizing all the potential benefits of an EHR is an ongoing effort: even the most successful users have achieved only some of the benefits they anticipated and desired prior to implementation. These benefits only result after workflow redesign, adjustments to the division of labor/staff utilization, and expanded utilization of system capabilities. One insightful interviewee commented that attempting to use the EHR to support legacy processes was like trying to cut down a tree with a chainsaw by banging the chainsaw into the trunk as though it were an axe.
- Experience breeds optimism. Groups almost universally report increased expectations for the value delivered by EHR systems across a variety of features and functions, even before those groups have captured the benefits they expected the systems to deliver prior to implementation.
- Ongoing education and training are critical to realizing the benefits offered by EHRs. Even among groups with self-rated high achievement and high expectations for their systems, there remains confusion (even at the leadership level) about what their

**TABLE 1**  
**Respondents Grouped by Length of Time Using an EHR**

# Years	Respondents/Percent
5-10 years	49 24.95%
3-5 years	42 21.21%
2-3 years	33 16.67%
1-2 years	29 14.65%
More than 10 years	25 12.62%
Less than 1 year	20 10.10%
Total Responses	198 100.00%

### **How Important Is Training?**

Several groups that responded to the survey had multiple people submit their impressions. While we expected different opinions on expectations and achievement of benefits, we also found different levels of understanding about system capabilities and features.

At one prominent group, two leaders had quite different answers to the following question: Does your organization use a Patient Registry and if so, is it integrated with an EHR?

The CEO answered “No patient registry,” while the chairman of the board (who is a physician) answered, “Yes and integrated.”

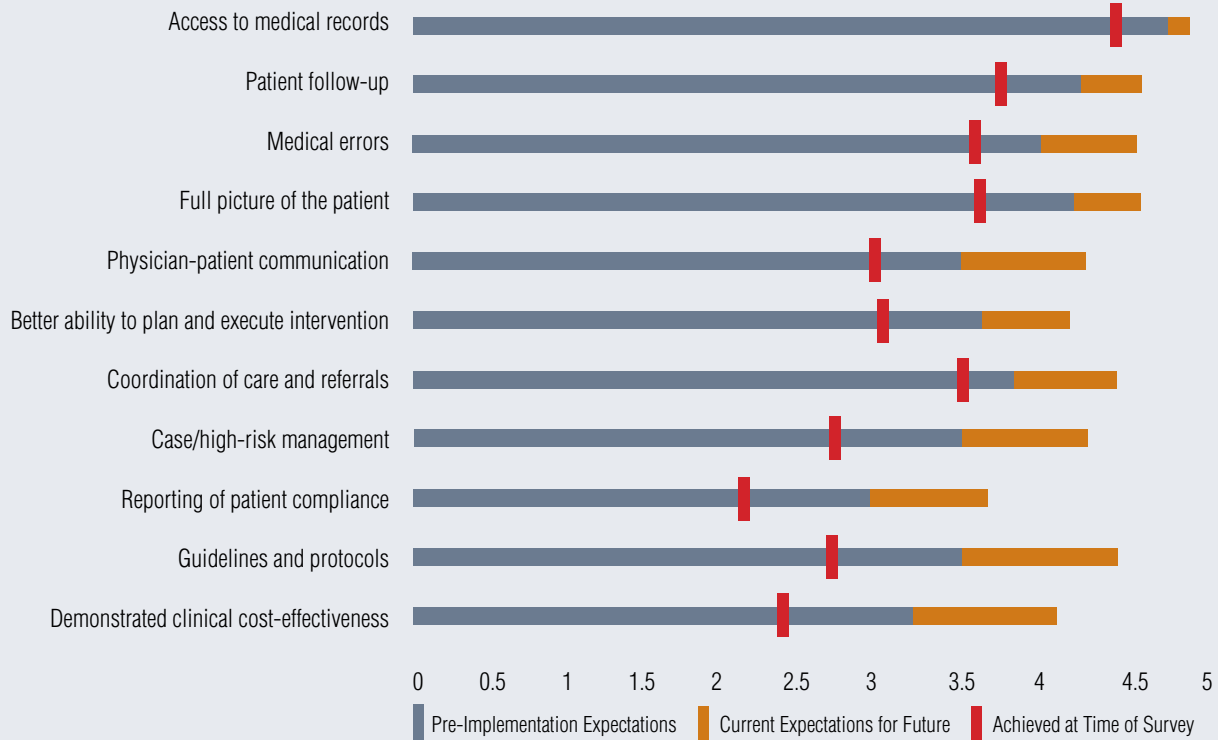
Capturing potential benefits from EHRs can only occur when the system features are used, and they will not be used by physicians or staff who do not know they exist.

### **EHR Systems Critical to Meeting Organizational Goals**

Survey respondents were asked to rate how critical their EHR systems are/will be to meeting their organizational goals. The averaged responses were:

Item	Critically Important	Important	Neutral	Low Importance	Not Important	Not Applicable
Clinical Quality 72.4	21.5%	2.2%		3.9%		
Patient Service 50.3%	39.8%	39.8%	2.2%	2.2%		
Operational Efficiency 61.1%	28.9%	6.7%	1.7%	1.7%		
Risk of Incentive Revenue 38.9%	39.4%	15.0%	3.3%	2.8%	0.6%	
Market Position 40.0%	42.2%	12.2%	2.8%	2.2%	0.6%	

**FIGURE 1**  
**EHR Benefit Expectations and Achievements**



systems are currently capable of delivering.

- Patience and persistence are among the most critical success factors. The groups reporting the most benefits from their EHR systems introduce functionality in stages, allow time for physicians and staff to develop proficiency in subsets of capabilities at a comfortable pace, and plan carefully for the rollout of each new functionality. Groups with the most extensive experience with the systems (e.g., > 5 years) report the greatest success and satisfaction with their EHR systems.

The survey responses also revealed several patterns regarding which functionalities and benefits are easiest to achieve, and which are the most elusive or require the most experience and effort to capture.

The respondents were asked to rank (on a scale of 1 to 5, with 5 being the highest level) their

expectations before implementation, achievement since implementation, and future expectations/aspirations for a series of potential benefits from EHR adoption (see Figure 1).

The “quick wins” (highest achievements) were generally consistent with the groups’ ongoing expectations for benefits they would capture: improved access to medical records, better patient follow-ups, a more complete picture of the patient, and reduction in medical errors. These benefits are most closely associated with the baseline functionality of EHR systems: they flow from routine utilization of the EHR for charting patient encounters and aggregating patient data.

The more difficult system benefits to achieve relate to functions that require more than mechanical utilization of the system. For example, the greatest gaps between average initial expectations and current achievement were for “Demonstrated Clinical Cost-Effectiveness”

(Expected: 3.29, Achieved: 2.39, for a gap of 0.90) and “Improved Use of Guidelines and Protocols” (Expected: 3.53, Achieved: 2.70, for a gap of 0.83). These benefits proved more elusive because they require additional effort beyond baseline usage. Capturing “Demonstrated Clinical Cost-Effectiveness” is more a function of workflow redesign and realignment of staff responsibilities to take greatest advantage of the systems than simply substituting EHRs for paper charts. And while EHRs simplify the dissemination of guidelines and protocols, the degree to which individual physicians choose to utilize those guidelines and protocols is primarily driven by normative culture in the group rather than availability of the information in an EHR.

Finally, as the groups gain experience with EHR systems, their expectations almost universally increase. So, despite delays in achieving the benefits they anticipated when

adopting the new technology (as evidenced by the gap between Expected and Achieved), the respondents have raised their expectations for future benefit capture (as evidenced by the gap between Expected and Future).

### **Conclusions**

AMGA member groups that responded to this survey (along with other large medical groups and organized systems of care) are setting the standard for adoption and benefit capture from EHR/EPM technologies. With a dramatically higher adoption rate than the medical profession as a whole, and concomitant experience in utilizing medical office technologies, these groups are trailblazers in capturing and utilizing data to improve clinical

care quality, patient service, and operational efficiency.

Both technology and the skills of the groups that use it are evolving. System selection and implementation are only the first steps in building care delivery systems that can transform the current model to be more patient-centered, scientifically driven and economically viable.

Groups that have invested significant time and resources are getting results today and expecting even greater achievements in the future. They also realize that future benefits will depend upon integrating the full range of existing and upcoming system capabilities into their practices, and in supporting physicians and office staff in mastering their use.

As the federal government, healthcare industry, and consumers turn their attention to reducing costs and improving clinical outcomes, the survey's lessons on capturing the potential benefits of medical office technologies will be critical to achieving those goals and to defining "meaningful use."

*For more information about the AMGA and JHD Group EHR Survey, visit [www.amga.org](http://www.amga.org).*