

The Healthcare Information Technology Gap

An Independent Review on the Acceptance of
Information Technology for Improving
Healthcare Quality



Reported by Porter Research

Sponsored by MedPlus

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Sponsor/Research Team



About MedPlus

MedPlus, the information technology subsidiary of Quest Diagnostics, is a leading developer and integrator of health information technology. Healthcare institutions, physicians, and healthplans use our solutions to improve efficiency and deliver better patient care.

Our family of leading solutions - Care360TM - creates a nationwide network of patient-centric clinical information technology solutions that securely collect, store, manage and integrate clinical information within an organization, practice, or community. These solutions offer providers and other stakeholders a proven transaction infrastructure that delivers patient-centric data from diverse sources. The result: an integrated, meaningful view of a patient's health.

About Porter Research

Since 1989, Porter Research has delivered the needed knowledge to the healthcare information technology industry. Senior executives with world-class sales and marketing experience at major healthcare I.T. companies lead a team of veteran I.T. market research specialists to conduct more than 6,000 annual research interviews with decision makers and influencers at all levels of healthcare delivery, from physician offices and hospital to payers. Our custom B2B market research products enable our customers to develop plans and strategies to take to the market, validate opportunities to improve sales success, and ultimately increase customer satisfaction.

Executive Overview



Conventional wisdom supports the notion that healthcare information technology has a direct impact on improved healthcare quality. However, this does not seem to translate into the growth expectations for technology adoption. This is true across all segments of the healthcare industry.

The purpose of this study, a two-part study commissioned by MedPlus®, the healthcare technology subsidiary of Quest Diagnostics, is to gather direct feedback from key healthcare stakeholders and decision makers about the role of technology in furthering their objectives to provide better healthcare at sustainable costs. This includes an assessment of their tangible near-term and long-term plans with regard to the deployment of information technology. This information is then analyzed to better understand the dynamics of this healthcare technology adoption gap.

This research, conducted in the first half of 2005, interviewed Medical Directors, Chief Executive Officers, and other administrative leadership at 37 large physician group practices throughout the United States. All of these organizations were designated as an IPA, PHO, or PPA ranging between 100 and 4500 physicians. To better understand the differences and similarities between the provider's and payer's perspective, participants from 15 major healthcare payer organizations were targeted with a similar set of questions. The second part of the research, to be conducted in mid-2006, will further explore the dynamics contributing to this adoption gap.

The survey opened with questions related to payers offering and physicians participating in pay-for-performance programs, a key indicator in the increasing focus of improving quality within U.S. healthcare. Adoption of P4P is certainly on the rise:

- 62.2 percent of all respondents are currently enrolled in P4P
- 53.9 percent of physician offices not enrolled in P4P plan to enroll within the next two years
- Less than 11 percent of the sample stated they are not participating in P4P plans currently available to them

The research was then designed to understand the major quality concerns for physicians and payers, the perceived impact these stakeholders believed healthcare information technology, or HIT, could have on quality, and finally the specific adoption trends in terms of HIT.

When asked about “quality,” the research found that clinical policies and measures for assessment and comparison are “top-of-mind” for healthcare providers today. Physician groups consider improved patient safety through medical error reduction and efficient communication with patients as important areas of focus for their organizations.

The study found overwhelming acceptance of the value of HIT with respect to quality:

- 100 percent of physician groups surveyed felt IT investment has a positive impact on clinical measures and outcomes, with 86.5 percent describing it as a significant impact
- 89.1 percent of responding providers felt the investment has a positive impact on patient satisfaction

Payers echoed the thoughts of the physician groups, with 86.7 and 78.6 percent feeling IT investments can have a positive impact on clinical measures/outcomes and patient satisfaction, respectively.

Furthermore, the research identified both current and planned implementation rates for systems intended to ensure attaining various quality initiatives:

- 78.4 percent of respondents have already installed or have plans to install each of the following: Electronic Medical Records, Decision Support Tools and Physician Portals
- While the current rate of usage was lower, more physicians planned to implement Prescribing than any other physician office technology (62.2 percent)

Despite the fact that both physician groups and payers are stressing improvements in healthcare quality and patient satisfaction, and also seem to have a common appreciation of the role of HIT in achieving these objectives, there still appears to be a gap between these beliefs and the corresponding urgency in acting upon those positions. This is demonstrated in our research through the lack of direct movement or investment in HIT in the next twelve months.

Specifically:

- Both Electronic Medical record and ePrescribing have average planned implementation dates more than two years out.
- More than 40% of those surveyed plan to implement in greater than two years.
- Less than half of the participating payers were willing to pay incentives for their physicians to utilize ePrescribing, or similar physician office technology.

In other words, the interest is there - on both the parts of payers and physician groups with an emphasis on pay for performance programs. Second, there is almost unanimous sentiment that IT will drive quality improvements. However, there is no real evidence of the large scale adoption of IT in the physician office environment. The rate of increase of adoption is not as rampant, as urgent, or as timely as industry expectations.

So why is this the case, and what drivers can help get the industry to the desired end-state?

One notion is that an external catalyst is needed to overcome the market inertia. Examples of these catalysts include a combination of the government, the provider community, and the private sector. The government has taken a leadership role in catalyzing this change. But there is no evidence of the funding that is necessary to impact change. Providers also seem to be engaged at the community level, though these community initiatives typically lack a sustainable business model. Finally, payers, although active, have not demonstrated a consistent approach across the country.

Additionally, this research specifically pointed out that Providers and Payers are not always in alignment with respect to the technology to emphasize or promote. ePrescribing is the first technology that appears to cater to both audiences. Also, we've seen evidence that provider and provider organizations do not always have the ability to monitor and report on their quality objectives, even when the pay for performance programs do exist. Focusing on technology that furthers both providers' and payers' objectives and ensuring that provider groups have the ability to monitor their performance appear to be two key drivers to getting to the desired end state. This will be further explored in the second phase of the research.

Introduction



This report discusses the initial results from a two-part study commissioned by MedPlus®, the healthcare technology subsidiary of Quest Diagnostics. The focus of this study was to assess perceptions about the role of HIT in effecting healthcare quality. Two major constituent groups were targeted: large physician groups and healthcare payer organizations. The respondents included senior management with knowledge of quality initiatives and influence over information technology decisions.

This research, conducted in the first half of 2005, interviewed Medical Directors, Chief Executive Officers, and other administrative leadership at 37 large physician group practices throughout the United States. All of these organizations were designated as an IPA, PHO, or PPA ranging between 100 and 4500 physicians. To better understand the differences and similarities between providers' and payers' perspectives, participants from 15 major healthcare payer organizations with influence on clinical decisions were targeted with a similar set of questions.

MedPlus commissioned Porter Research, a primary market research firm specializing in healthcare information technology, to conduct the research within the physician group and healthcare payer organizations.

Background to the Study

At the simplest level healthcare quality encompasses two principles:

a consistent and comprehensive application of known best practices between physicians and a decrease in the variation and error rate associated with the delivery of healthcare services.

Healthcare provider and payer organizations seem to be facing increased pressure to improve the quality of care being delivered within the US healthcare market. In truth, it isn't so much becoming more important as it is that they are facing an emergence in publicity and increased visibility around what is a perceived quality gap with other countries around the world. Many internationals receive better outcome measures and higher rates of insured than US citizens on an expenditures per-household basis. Although there are several contributing factors to this, quality and consistency of care are primary drivers.

One way some payers have begun to take action is through the introduction of pay-for-performance programs (P4P). An initiative of the Integrated Healthcare Association, P4P was originally introduced by six California payers in 2002. Although still heavily polarized in California,

P4P is growing in popularity throughout the United States. The programs allow physicians to enroll and receive incremental payments based on performance, or movement toward improved performance, in terms of effective patient care. Typically, physicians are evaluated on metrics encompassing three areas: quality of care, patient satisfaction, and investment in HIT.

The second area, patient satisfaction, is an area health plans are continually measuring. In evaluating P4P plans across the country it is a fairly consistent metric. Physicians and payers are hesitant to initiate change in the way care is delivered without ensuring that patient satisfaction remains constant or improves.

The third element, HIT, is directly linked to quality in that it is difficult to make improvements in the way healthcare is delivered when providers are reliant on manual, paper-based systems. Improved technologies, enabling physicians to reduce medical errors and streamline the patient care process, have received national exposure in part due to government scrutiny and calls for improvements. Health plans offering P4P recognize this and, therefore, are incenting providers to make investments in HIT.

For the purpose of this report we define healthcare information technology (HIT) as the software-side of a healthcare delivery organization's technology infrastructure. The software is used to automate and document activities common in a physician's practice.

More specifically this study measured the perception and utilization of both clinical and non-clinical HIT applications. Non-clinical applications support the business-type activities of the physician group and include Practice Management Systems and Demographic Verification Tools. Clinical HIT applications support the care delivery process. HIT vendors market their products in a variety of ways, but commonly expected benefits of these clinical applications include the following:

- Reduction of medical errors by providing access to data, care procedures, and orders at the point-of-care
- Lower healthcare costs through reduced waste and time savings
- Heightened privacy and security of patient data
- Improved communication within the healthcare community and between the patient and doctor

Additionally, the concept of clinical integration has received renewed focus. Clinical integration refers to a linked network of primary care and specialty physicians working as a single team to coordinate care for patients.

In a clinically integrated healthcare environment, physicians share clinical information, coordinate treatment, develop practice protocols, and monitor the compliance of individuals in the group. P4P has driven physician groups to work for clinical integration through incentives while governments are beginning to introduce legislation to ensure large physician groups are sharing common practices and tools for care delivery.

Despite the fact that both physician groups and payers are stressing improvements in healthcare quality and patient satisfaction and are understanding of the role HIT can play in facilitating these improvements, there appears to be a gap in these beliefs and the urgency of taking advantage of HIT.

The Office of the National Coordinator for Health Information Technology (ONCHIT) has stated four key market barriers and challenges for the adoption of HIT. They are summarized as:

- Health plans, or healthcare payers, have not typically rewarded quality or efficiency
- High failure rates for implementation contributed by risk of failure from changing business processes, low availability of IT expertise, and supplemental implementation support for small practices
- Interoperability, or the ability to exchange and use information, is not well-standardized between HIT products; nor is there an established medium by-which to exchange this information
- Other adoption issues covered were: negative business cases for adopters, adoption gaps between organizations of different size and, common to all industries, fear of being a “first mover” by investing in technology before peers.

Focus of Research

MedPlus was interested in better understanding these perceptions of different stakeholders in the healthcare market. Therefore, they commissioned an independent, third party survey of clinical and HIT decision makers within major healthcare provider and payer organizations.

Specifically the study was designed to qualify the needs and goals of the healthcare market in terms of the two main objectives:

1. What are the chief quality concerns within the organization and what actions are being implemented to address them?
2. Is HIT seen as a viable solution to facilitate changes in the quality effort?

In support of these objectives the study also wanted to understand:

3. What HIT applications are already being utilized and what is planned for implementation? What is the perceived value for specific types of software?
4. What role are payers playing? What is the prevalence and resulting adoption rate of P4P plans across the country?
5. What are the similarities and differences between a healthcare provider and health plan's point-of-view?

Undoubtedly, the research study has shown that providers and payers are stressing the quality of healthcare delivered to patients and are considering technology an integral component for addressing their quality needs.

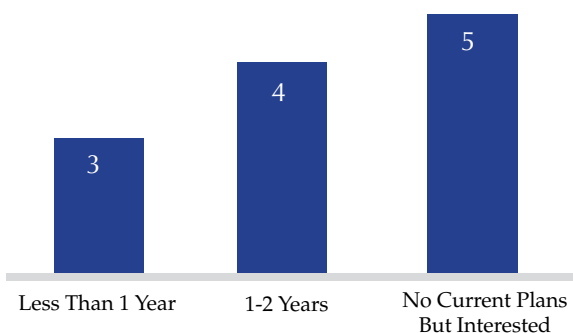
Pay-for-Performance Adoption



To understand the role healthcare payers are playing in the improvement of healthcare quality and adoption of HIT, P4P participation for each responding physician group was identified early in the survey:

- 62.2 percent of all respondents are currently enrolled in P4P
- 87 percent of participating California-based physician groups are enrolled
- Only 10.8 percent of the sample stated they are not participating in P4P plans currently available to them

Do You Plan to Enroll in a P4P Plan in The Future? When?



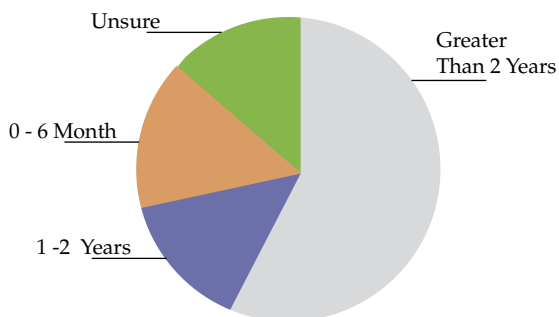
Perhaps more important than current participation rates is the interest expressed towards these programs for groups not currently participating in P4P. In total, 53.9 percent of these groups will be enrolling within the next two years.

46.7 percent of participating health plans currently offer P4P to their physicians with another 20 percent introducing a plan in the next one to two years. Similarly, three of the five organizations without plans for implementing the offering are “considering” P4P.

The number of total physicians currently active in P4P defined the existing plans:

- Plans ranged from 70 to over 10,000 participating physicians
- Four organizations placed their physician population between 2,500 and 4,000
- Plans aged from less than six months to more than two years old

Age of P4P Plan



Healthcare Quality Concerns and Priorities



Provider and payer respondent populations were asked to discuss their most pressing quality concerns and what is driving those concerns.

Quality concerns for both groups were mostly anchored by clinical procedures and policies; however, providers were also interested in the ability to accurately measure and compare their performance.

Clinical/ Medical Issues

Clinical procedures and policies were the primary quality concern for 48.6 percent of the responding physician population. Individual responses of focus areas varied greatly, though they can be summarized as follows:

- Consistency in care delivery and maintaining patients within acceptable guidelines, including disease management like diabetes and cardiology
- Preventive healthcare
- Medical errors

“We need to develop critical pathways or care plans so that there is consistency in the way our patients are treated. The information we are receiving from our partners says patients are sometimes treated differently - even though they present the same issues - depending on where they go.” CEO, Arkansas IPA

“Adherence to guidelines that support consistent delivery of desired medical outcomes (are very important).” Regional Medical Director, California IPA

The views of physician groups are consistent with and supported by the responding health plans. In fact, 86.7 percent attributed their chief quality concerns to patient safety. Respondents highlighted disease and preventive care, general patient safety, and adherence to standards. HEDIS and other scoring mechanisms were often the driver for these concerns.

“We’re very concerned about the care of diabetic patients and making sure they get all of their adequate testing, eye exams and foot care. HEDIS requires us to report these scores to a national databank.” Head of P4P Initiatives, Florida-based payer

“Adherence to standards of care by patients and physicians. Most studies have shown that only 50% of people with chronic disease get the care they need. That is due to several factors, one of which being physicians may not be aware of or for whatever reason does not provide the appropriate treatment. Failure to treat properly leads to higher costs and worse clinical outcomes.” Plan Medical Director, Texas-based payer

These concerns define healthcare quality. Essentially, physicians and payers are stating that their most pressing quality concerns are improving the delivery of patient care. While the responses may seem vague, this is a testament to the complexities of addressing the quality gap and varying needs of the market place.

Measures for Comparison and Assessment

Nearly one-third of the provider-based participants spoke of the need or desire to adequately measure their performance. When asked about their concerns relating to the quality challenge, many groups spoke of the need to have tools for self-assessment and benchmarking, a better understanding of quality gaps, and more accurate measures. IT integration was often the backbone of these priorities.

“Like any physician organization, our physicians believe they deliver high quality care but being an IPA we are made up of many, many independent practices. [It is more difficult] to get your arms around it and collect the data. Implementing a uniform information system is going to prove that we are delivering quality care. I don’t think that we are not, I think we are concerned that we need to be able to prove it.” Executive Director, Colorado IPA

“Our most pressing quality concern is probably the integration of IT through our IPA. The fact that we know there is a huge gap between where we would, could, and should be and where we are currently in terms of empiric evidence and literature. We are not any different here in our IPA in terms of understanding that there is a big gap and we don’t even know how to measure it.” Medical Director, California IPA

So physicians aren’t just concerned about improving the healthcare being delivered but they’re also stressing the importance of measuring their performance and improvement. Without accurate metrics and a system by which to gather and report those metrics, quality improvements are essentially a guess.

Most Important Areas for Improvement

Next, physicians and payers were asked to rate how important different areas were to their organization in terms of meeting quality initiatives within the provider setting. While both groups rated “Patient Safety – Medical Error Reduction” as most important, specific areas of focus shifted for the remaining rankings.

Most Important Areas of Provider Focus



Providers were more likely to give importance weight to areas with higher visibility to their patients. Both “Efficient Communications with Patients” and “Patient Perception of Quality” were ranked in the top three. Implementation of HIT can assist providers on both objectives through automated appointment reminders, online visits, population health management, and more defined paths of care.

Meanwhile, health plan participants attributed more importance to quality-based metrics, including proprietary performance measures and HEDIS-based measures. Key functionality of HIT supports a physician group in monitoring, documenting, and reporting for such scoring mechanisms.

Interestingly enough, providers and payers rated their direct communication between each other amongst the lowest of priorities.

Most Important Areas of Payer Focus



Payers' Areas of Focus for Physician-based Quality Improvement

Next, payers were asked what they were providing to physicians for the purpose of improving quality within their group.

Which of the following things are payers focusing on to improve quality in physician groups?

Area	# Of Payers	% Of Payers (N=15)
Education	14	93.3%
Patient-specific Alerts	14	93.3%
Sharing of Evidenced-based Guidelines	13	86.7%
Provider Profiling	13	86.7%
Gap Reporting	12	80.0%
Incentives	9	60.0%

All areas queried received support from at least 60 percent of the responding health plans. The two most common responses were “Education” (for physicians and patients) and “Patient-specific Alerts” (automatic reminders to schedule an appointment or test). The latter is not feasible without the support of technology.

“Incentives” received the lowest direct support initially, although that isn’t surprising given that we know payers have historically been reluctant to award payment based on quality or performance. Still, considering incentive-based payments are a key part of P4P reimbursement, we fully expect this practice to increase over the next few years.

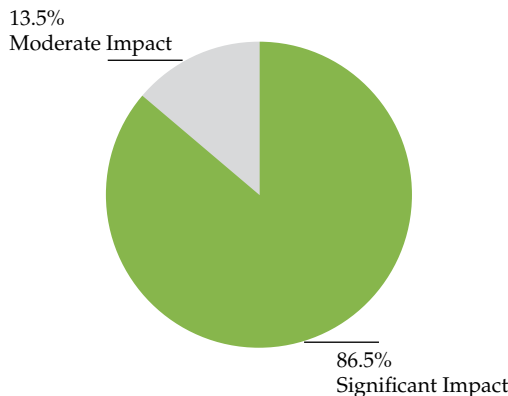
Perceived Impact of HIT



To directly map the perception of the effect physicians' HIT investment can have on healthcare quality, respondents were asked to characterize their feelings as to the specific impact on both "Clinical Measures and Outcomes" and "Patient Satisfaction." They were asked to respond using a four-point scale from "Negative Impact" to "Significant Impact" and then explain their selection.

Clinical Measures and Outcomes

Providers' Perceived Impact of HIT on Clinical Measures and Outcomes



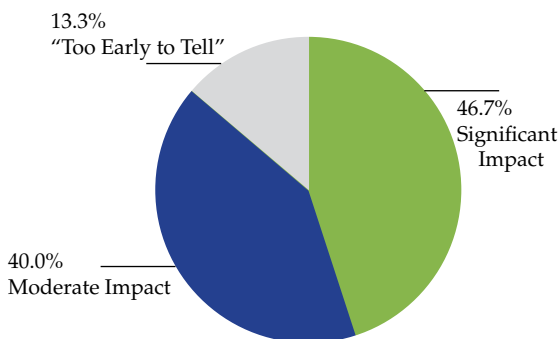
Provider-based responses demonstrated an overwhelming belief that their HIT investments can positively affect clinical measures and outcomes.

More specifically, 86.5 percent characterized this impact as "Significant." Most respondents justified their response by stating HIT will better enable them to track, measure, and evaluate their performance.

"You have to be able to measure the outcomes and be able to evaluate what is happening in the care setting in as easy and efficient a manner as possible. Up until this point it has been having nurses look at the records and make assumptions as to the quality of the care provided. With an IT investment we are able to extract objective data and look at the quality of care and the outcomes being achieved on the basis of easily defined and measurable data." Quality and Management Director, California IPA

"You need technology to track when people should be scheduled for certain health improvement screenings. The average physician is not going to remember that your mother's mammogram is due next month." CEO, Massachusetts IPA

Payer's Perceived Impact of HIT on Clinical Measures and Outcomes



The payer sample was more guarded on their assessment with 86.7 percent feeling that physician investment in HIT would positively impact clinical measures and outcomes. Two respondents did not provide a response feeling it was "Too early to tell." Encouragingly, 46.7 percent described the impact as "Significant."

Payers were quick to point to examples of medical error reduction and patient-specific prompts.

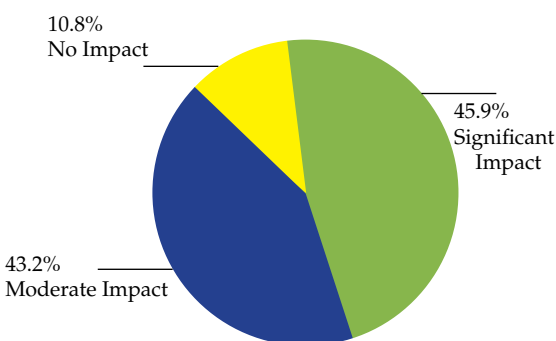
"It is one thing for us as a plan to tell the physician they missed a mammogram here, an immunization there, or this members hemoglobin A1C is too high. It's another thing for the provider to have the infrastructure so that stuff is flagged automatically in his record whenever he sees the patient. It's a much more efficient way to get the quality measures met." AVP Association and Quality, Pennsylvania-based payer

“It gives them the ability to get follow-up reminders to patients who are missing certain tests. It gives them information when a patient comes in about tests that haven’t been done, as well as, if they have ePrescribing products built into their technology the ability to avoid adverse drug events.” Program Director for Quality & Pay for Performance, Connecticut-based payer

The data certainly supports that HIT is having, and will continue to have, a positive impact on clinical measures and outcomes, a key part of healthcare quality.

Patient Satisfaction

Provider’ Perceived Impact of HIT on Patient Satisfaction



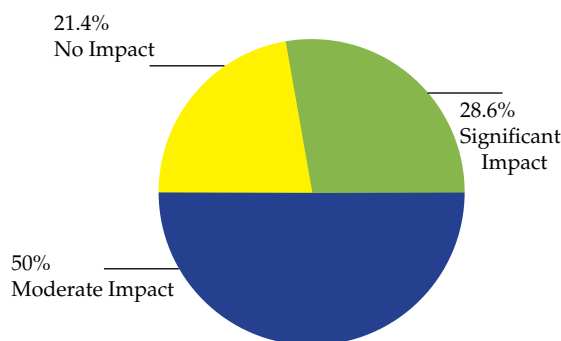
Largely, with 89.1 percent responding positively, physician groups felt that HIT investments would have positive impacts on patient satisfaction, too.

Roughly 45.9 percent of the respondents felt the impact was “Significant.” Many respondents felt that the communication improvements would drive the impact.

“I think patients are already using IT in their everyday lives and are probably concerned that they don’t have that same level of ability to get their information and communicate with their physicians. I think it will be significant from that standpoint.” Executive Director, Colorado IPA

“If we can find out at a Physician (or) company level what people are satisfied with and what they are not, then IT can let them know what is working. That is how Kaiser works so well, they are totally electronically integrated, and they control each other with all sorts of information.” Medical Director, Colorado IPA

Payer’s Perceived Impact of HIT on Patient Satisfaction



Another 10.8 percent deemed there was “No Impact”, stating they felt the effect would be more transparent to patients.

Overall, 78.6 percent of health plan responses felt that the physician investment in HIT would yield positive results in terms of patient satisfaction.

Half of the responding organizations felt that the impact was best described as moderate, with only 28.6 percent stating that there was a significant effect. The impact seems to be more an effect of improved quality of care.

“Better treatment based on the doctor having that tool, if they apply it appropriately. I’m not sure they are necessarily going to see as much advantage as the physician directly.” Plan Medical Director, Texas-based payer

"It comes under patient safety and quality. To improve physician quality of care is going to improve the satisfaction of the member." Manager QI & Accreditation, Illinois-based payer

Finally, 21.4 percent of the surveys payers felt that HIT investment would have "No Impact" on patients.

Collectively there was extensive support for HIT being an investment to positively impact patient satisfaction.

Physician Group Adoption of Technology



Finally, the study needed to uncover adoption trends for specific HIT applications. Through our research the technology was further defined into three categories:

- Non-Clinical Applications: Support the business-type activities of a physician’s office, including scheduling and accounting. Demographic Verification tools and Practice Management Systems were surveyed. These applications were included as a baseline to understand the IT proficiency of participating groups but were not the focus of the study.
- Emerging Clinical Applications: Support the care-delivery process and have a high rate of planned or future implementation. Electronic Medical Records (EMR) and ePrescribing are included. These applications had greater than a 50 percent planned rate of implementation.
- More Established Clinical Applications: Support the care-delivery process and have a higher rate of current use than Emerging Clinical Applications. Included in this group are Decision Support Tools and Physician Portals.

Which of the following applications are currently used or planned for implementation?

Category	Tool	% Currently Using	% Plan to Implement
More Established	Physician Portals	54.1%	24.3%
	Decision Support Tools	48.7%	29.7%
Emerging	EMR	24.3%	54.1%
	ePrescribing	10.8%	62.2%
Non-Clinical	Practice Management Systems	48.7%	24.3%
	Demographic Verification	35.1%	27.0%

Physician Portals, Decision Support Tools, and Practice Management Systems (PMS) are currently the most widely accepted, with current implementation rates at 54.1 and 48.7 percent respectively. ePrescribing enjoys the highest rate of planned implementations at more than 62 percent of the sample, followed closely by EMR at 54.1 percent.

When do you plan to implement this technology?

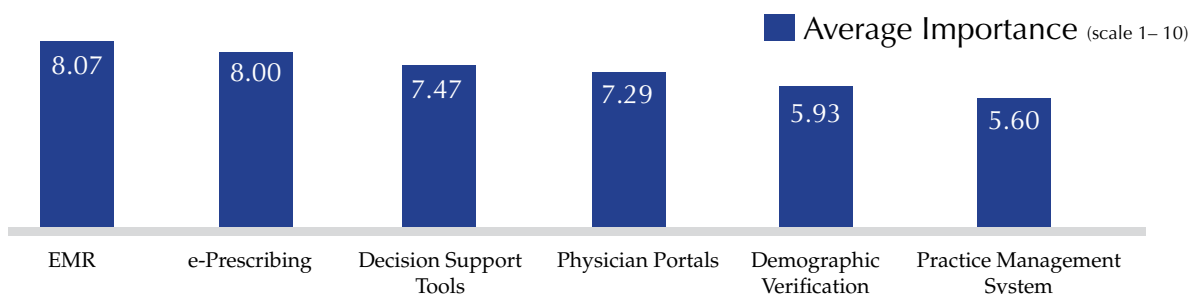
Tool / When (Weighted Time)	< 2 Years (3)	1-2 Years (2)	6-12 Months (1)	< 6 Months (.5)	Average Weighted Time, Years
ePrescribing	45.5%	22.7%	27.3%	4.5%	2.11
EMR	40.0%	30.0%	20.0%	10.0%	2.05
Decision Support Tools	18.2%	45.4%	18.2%	18.2%	1.73
Demographic Verification	50.0%	10.0%	30.0%	10.0%	2.05
Physician Portals	33.3%	22.2%	11.1%	33.3%	1.72
Practice Management System	11.1%	55.6%	22.2%	11.1%	1.72

The table above illustrates the planned implementation time frame for each of the applications interviewed. Respondents were asked to select a range of less than six months to more than two years. The responses were then weighted to determine the average number of years until adoption for each application.

ePrescribing and EMR are both considered “emerging” when compared to “more established” clinical applications like Decision Support Tools and Physician Portals. Both have a longer average time frame to implementation and lower rate of current use. An average implementation timeframe greater than two years indicates a strategic objective. However, install rates and timeframe for implementation do not appear to be directly related to perceived value.

Application Value and Impact on Quality and Clinical Outcomes

Value, or perceived value of HIT investment for specific applications, was measured within the sample by the impact each can have on quality and clinical outcomes. Payers were asked to rate each application on a one to ten scale, ten being most important, to describe how important the solution is in terms of physician investment for driving improvements in quality and clinical outcomes.



Payers emphasized the importance of emerging clinical applications through their ratings. Fittingly, more established clinical applications still enjoyed greater value recognition over non-clinical systems.

Electronic Medical Record (EMR)

Payers were most likely to offer incentives for EMR. While one plan is currently offering physicians an incentive for the implementation of EMR, another plans to offer incentives within the next one to two years. Seven of the fifteen total health plans stated they would be willing to pay incremental costs or incentives to ensure their physicians have installed the tool.

Provider respondents were asked which IT system they were not currently using that would be of the greatest value to them. EMR overwhelmingly received the highest mention at 42.9 percent.

“We can potentially do more documents efficiently and effectively, use patient reminders, and integrate lab, pharmacy and radiology. The hope is then to be able to use that information to create more effective, efficient and higher quality client care programs.” Executive Director, California IPA

“The EMR (is) the way that physicians can communicate healthcare information from one practice to the next, from a specialty to a primary care hospital. People will be able to access information that they can’t get now because of location.” CEO, Massachusetts IPA

ePrescribing

ePrescribing was a close second to EMR, rated an eight by payers overall. As with EMR, seven payers were willing to offer an incentive or pay incremental costs for their physicians to use the technology. Two plans are currently offering an incentive.

Providers were placing a lot of emphasis on ePrescribing as well, with more planned implementations than any other application. Nearly 63 percent are planning implementations, 30 percent of those are within the next two years.

“ePrescribing (offers the greatest value) because that is where the greatest opportunity for reducing medical error exists currently.” CEO, Connecticut IPA
Decision Support Systems

More established in terms of current implementation, clinical Decision Support Tools have been accepted for the assistance they can provide to a physician during the care delivery process. Nearly 49 percent of responding physician groups has already used this technology. Another 30 percent have plans to implement.

"Decision Support Tools... have the most practical capacity." VP and CMO, Texas IPA

"These tools are important when you're in hospital-based services and making diagnostic decisions and going down the tree for standards of protocols on care and criteria." Director of Provider Services & Contracts, Washington-based payer

Although not rated as important by payers when compared to EMR and ePrescribing, Decision Support Tools still received strong backing from participating health plans. Six were willing to pay their physicians an incentive for ensuring use of the tool. One is currently offering an incentive, and another one will offer an incentive in the next twenty-four months.

Physician Portals

Physician Portals received mention from 17.1 percent of provider respondents when asked which HIT application they're not currently utilizing that would be of the most value to them, second to only EMR. The technology is more established than any other clinical application as defined by the study results, with more than 54 percent stating they are currently utilizing the technology.

*"It gives the physicians information at their finger tips, which helps everything else."
Board Chair, Florida PHO*

One health plan is currently paying an incentive for their physicians making use of the technology while another four stated they would be willing to pay incremental costs for physician portals.

Conclusion: The Benefit Acceptance and Implementation Gap



Clearly there is acceptance among both health plans and providers in the role HIT can play in improving healthcare quality. Key quality concerns of both physician groups and payers fall in line with core functionality of clinical HIT:

- 48.6 percent of provider-based respondents attributed their most pressing quality concerns directly to delivery of care, for example, reduction in medical error
- 86.7 percent of health plans related their most pressing quality concerns to patient safety
- 100 percent of physician groups surveyed felt HIT investment will have a positive impact on clinical measures and outcomes
- 86.7 percent of payers agree

Both health plans and providers seem accepting of the role HIT can play in improving quality of care and outcomes, but there is a gap between this interest and the urgency by which the technology is being implemented.

Too many physician groups have deemed the implementation of emerging clinical applications as a strategic objective. Both EMR and ePrescribing received considerable mention as integral to successful reduction of medical error and improved care; however, both have average timeframes of implementation exceeding two years.

Percentage of Strategic Implementation Plans (>2 years) and Average Timeframe for Adoption

Clinical Application	% Implementing in 2 Years	Average # of Years Until Implementation
ePrescribing	45.5%	2.11
EMR	40.0%	2.05
Decision Support Tools	18.2%	1.73
Physician Portals	33.3%	1.72

Payers are not taking as active a role as you might expect. Outside of patients, no one benefits more from improved physician efficiency and clinical outcomes than health plans.

Although they are making progress and recognizing the importance they play in these performance improvements, no application received support by more than 50 percent of payers in terms of willingness to provide incentives to ensure their physicians are using the technology available to them.

Payer Importance Score for Physician Adoption of Technology and Percentage of Payers Willing to Pay Incentives for that Adoption

Clinical Application	Payer Importance Rating (10 "Very Important")	%Health Plans Receptive to Paying Incentives
EMR	8.07	50.0%
ePrescribing	8.00	46.7%
Decision Support Tools	7.47	42.9%
Physician Portals	7.29	33.3%


The above table rates how important payers ranked each clinical IT application for physician investment in terms of how it can improve quality and clinical outcomes, in addition to the percentage of payers willing to pay incremental costs or incentives for their physicians to implement the technology. While there is a direct correlation to stated importance and the percentage receptive to offer incentives, increased support will likely lead to higher implementation rates and more urgency to make use of the technology.

The interest is there - on both the parts of payers and physician groups with an emphasis on pay for performance programs. Second, there is almost unanimous sentiment that IT will drive quality improvements.

However, there is no real evidence of the large scale adoption of IT in the physician office environment. The rate of increase of adoption is not as rampant, as urgent, or as timely as industry expectations.

So why is this the case, and what drivers can help get the industry to the desired end-state? One notion is that an external catalyst is needed to overcome the market inertia. Examples of these catalysts include a combination of the government, the provider community, and the private sector. The government has taken a leadership role in catalyzing this change. But there is no evidence of the funding that is necessary to impact change. Providers also seem to be engaged at the community level, though these community initiatives typically lack a sustainable business model. Finally, payers, although active, have not demonstrated a consistent approach across the country.

Additionally, this research specifically pointed out that Providers and Payers are not always in alignment with respect to the technology to emphasize or promote. ePrescribing is the first technology that appears to cater to both audiences. Also, we've seen evidence that provider and provider organizations do not always have the ability to monitor and report on their quality objectives, even when the pay for performance programs do exist. Focusing on technology that furthers both providers' and payers' objectives and ensuring that provider groups have the ability to monitor their performance appear to be two key drivers to getting to the desired end state. This will be further explored in the second phase of the research.



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