



IT – The Best-Kept Secret: Using Advanced Technology to Recruit/Retain Physicians in A Competitive Marketplace

WHITE PAPER

About Carefx

Carefx supports healthcare organizations in achieving their vision of advancing the quality and safety of patient care delivery through its Fusionfx solution suite. Fusionfx streamlines and simplifies clinical and business workflow and connects care providers to the information they need, where and when they need it. Fusionfx delivers crucial patient information with speed, efficiency, and logic by managing care transitions and information gaps between diverse departments, systems, and facilities. Carefx supports more than 400 hospitals, health systems, regional health information organizations (RHIOs), and health information exchanges (HIEs) across North America and Europe.

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Table of Contents

Abstract	4
Executive Summary	4
Introduction	5
The Changing Physician Marketplace	5
The Competitive Landscape	7
The It Advantage	8
Information Aggregation Platforms: What Physicians Want	10
Choosing An Iap Solution	10
The Carefx Solution	11
Why It Matters	13

Abstract

This paper examines the challenges facing healthcare organizations as they seek to recruit and retain physicians in an increasingly competitive healthcare marketplace. It describes the two key forces driving a change in physicians' professional culture: a looming physician shortage and the demographic shift occurring as large numbers of aging physicians retire. It discusses the implications of these forces for healthcare organizations, examines the limitations of traditional recruitment/retention tactics and explains how, in order to remain competitive, healthcare organizations must align recruitment/retention strategies with the changing physician culture.

Next, it shows how advanced information technology can be a key competitive differentiator for healthcare organizations. It goes on to describe physicians' data needs and how healthcare organizations can use IT to meet those needs. Finally, this paper introduces an IT solution that meets physicians' information needs and healthcare organizations' implementation challenges.

Executive summary

It's a convergence—Twenty-five years of attrition, misguided vision and government mandates have set in motion a physician shortage of dangerous proportions. The number of physicians entering the profession today roughly equals the number retiring. False predictions of a physician glut led to more than two decades of efforts to curb growth of the profession. By 2020, the nation will face a shortage of 85,000 to 200,000 doctors. And that's not the only challenge.

There's a very different type of doctor entering the marketplace today. Today's "typical" physician is a Gen X'er and female. These new professionals bring with them a new set of values and demands that are changing the culture of medical practice, a culture heretofore shaped by Baby Boomer males.

These two forces—an imminent physician shortage and an emergent cultural shift—have clear implications for healthcare organizations hoping to recruit and retain physicians. Organizations must look beyond such traditional incentives as salary, perks and partnership opportunities, which are less effective and more regulated.

Today's doctors value quality of life and quality of care above everything else—healthcare organizations must provide solutions that can help physicians achieve them. The one solution that can address both quality of physician life and quality of patient care? Advanced information technology. Increasingly, IT is becoming the competitive edge healthcare organizations need to secure the best physicians in this competitive marketplace.

This paper describes Fusionfx®, a data aggregation platform that provides timely access to patient data for physicians by leveraging the organization's existing IT investment.

Introduction

Strong winds are rising in the physician world. Two fronts—a workforce shortage and a cultural shift—are heading for convergence. When they hit, hospitals and healthcare systems will find themselves in a staffing storm of catastrophic proportions.

The storm has been brewing for some time. In a survey of physician recruitment trends, 85 percent of the hospitals responding were actively recruiting physicians. More than half of those that were not (56 percent) planned to do so within six months. Physician recruitment was one of the top two priorities of 60 percent of the hospitals surveyed and a majority (53 percent) responded that physician recruitment has become more difficult and time-consuming in the past 12 months. And conditions are worsening.

On one front, an imminent physician shortage. On the other, changing demographics within the physician workforce. Add to these tightened regulations on pay, perks and practice buy-ins and healthcare organizations must look to new recruitment strategies that reflect the demands of the changing healthcare landscape and the physicians entering it. One of the most promising? Healthcare information technology (IT). But to understand how technology can be an advantage in a competitive environment, one first must understand how the environment got this way.

The Changing Physician Marketplace

Together, two forces are changing the physician marketplace. The first is the looming shortage of doctors, which is occurring for two reasons:

1. **Erroneous predictions:** In 1994, the Journal of the American Medical Association predicted a surplus of 165,000 doctors by 2000. In response, the American Medical Association and other industry groups have spent the past 25 years working—successfully—to limit the number of new physicians. Problem is, they were wrong.

According to Richard Cooper, director of the Health Policy Institute at the Medical College of Wisconsin, U.S. production of new doctors has changed little since 1985. The number of physicians entering the profession roughly equals the number retiring. As a result, in 10 years, the number of baby boom doctors (i.e., licensed in the '60s, '70s and '80s) retiring will outstrip the 25,000 new doctors produced each year.

2. **Government regulation:** The law of supply and demand regulates the number of professionals in most industries. In healthcare, the number of doctors is a political decision—Congress controls the supply of physicians by how much federal funding it provides for medical residencies. And it isn't providing much.

Already, Medicare funding for residents is frozen at 1996 levels. As a result, the physician pipeline—medical schools—is dwindling. More than 80 percent of medical school deans and medical society executives report shortages, usually in multiple specialties. If a proposed Centers for Medicare & Medicaid Services rule goes into effect, the situation will worsen as teaching hospitals' training budgets are cut as much as 30 percent.

The Dept. of Health & Human Services (HHS) wants to end federal matching of state Medicaid graduate medical education reimbursements. According to HHS estimates, this would cost teaching hospitals \$1.78 billion over five years. According to graduate medical education leaders, it could be that much per year.

Kenneth E. Raske, president and CEO of the Greater New York Hospital Assn—whose hospitals train 16 percent of medical residents in the United States—says the cut could “cripple the financial ability of our institutions to train tomorrow’s doctors.”

To meet the growing medical needs of an aging nation, the country needs to train 3,000 to 10,000 more physicians a year, up from the current 25,000. Factor in the time it takes to train a doctor—10 years—and the nation faces a shortage of 85,000 to 200,000 doctors by 2020. And that’s just one of the forces affecting the physician marketplace.

The other is a generational and a gender shift occurring in the medical profession. On one hand, Generation X doctors are replacing retiring baby boomers. On the other, an increasing number of women—Gen X women—are joining the profession. More than 75 percent of all physicians are male; 40 percent of all Gen X physicians are female. In addition, female Gen X physicians dominate certain residency programs. Fifty percent or more family practice, psychiatry, dermatology, pediatrics, and OB/GYN residents are female.

How does this change affect the marketplace? It has to do with the way these new doctors distinguish themselves from their predecessors. As a group, Gen X physicians tend to look at quality of practice issues that reflect their quality of life requirements. To younger physicians, medicine is a profession, not a lifestyle—and lifestyle is what happens outside the office or hospital. While older physicians may blur the lines between home and work, Gen X physicians demand defined practice hours, limited calls, reasonable patient loads, and set vacations.

Female physicians bring their unique requirements for family time and quality of life into their professional careers. According to the AMA, female physicians work seven fewer hours per week than male physicians and see fewer patients. Female Gen X physicians often are married to physicians or to other professionals, which greatly restricts their geographic flexibility unless the healthcare organization can accommodate the professional needs of their spouses.

Fewer doctors, with an entirely new set of values—the combination is standing traditional recruitment practices on end.

The Competitive Landscape

Changing numbers and changing demographics are demanding changing recruitment tactics. Healthcare organizations must adopt competitive strategies that take into consideration the various dimensions of the physician marketplace in order to recruit top-tier talent. Formulating this strategy requires understanding the target physicians, what they are looking for and how they perceive the recruiting organization.

According to the study, *Organizational Culture and Physician Satisfaction*, Generation X doctors look for organizations with:

- Competitive compensation,
- Participatory culture, and
- Technological sophistication.

However, complex laws govern physician recruiting. With traditional incentives, healthcare organizations confront various legal issues when trying to establish competitive compensation packages.

When it comes to physician recruiting, the government is concerned about several things. The Stark Laws seek to limit financial relationships between physicians and hospitals. The Internal Revenue Service does not want physicians to profit unduly through financial relationships with not-for-profit hospitals. The Department of Health and Human Services does not want hospitals to recruit physicians merely to capture patient referrals, particularly referrals of Medicare or Medicaid patients.

This tight regulation of financial incentives means healthcare organizations must look for other physician recruitment and retention incentives. For the most part, individual healthcare organizations still control the purchase and implementation of technology. Therefore, it increasingly is becoming a key differentiator. Indeed, technology may well be the final frontier in the physician talent rush.

Physician use of the Internet and emerging media is growing. Consider the recent technology ‘firsts’:

- “Running a Hospital,” The first hospital CEO blog, authored by Paul Levy of Beth Israel Deaconess Medical Center in Boston
- Sermo, the first major social media Web site exclusively for physicians
- Medem, a physician portal service that will work with YouTube

According to the recently published Jupiter Research report, US Online Physician Executive Survey 2007, physicians are no longer behind the curve on using the Internet. Indeed, the proportion of physicians e-mailing with patients doubled in two years from 20 percent in 2005 to 39 percent in 2007.

How important is technology to Generation X physicians? Monique Levy, lead analyst at Jupiter Research notes, "What doctors are doing in their civilian life, they're now doing in their professional life. The doctor that's doing financial services online is the same doctor dealing with Medscape and every other medical channel." Generation X physicians are technologically savvy. They honed their skills in the Internet age. They used the latest technology in their medical schools and they expect to have the benefit of these technologies in their practices.

How important is adopting technology to healthcare organizations? The cost to replace a physician, including lost fees, recruitment and reestablishing a physician's practice is estimated at \$200,000. Given this cost, adopting healthcare technologies that improve physician satisfaction makes good financial sense.

The IT Advantage

One of the most talked about healthcare technologies is computerized physician order entry (CPOE). Despite the growing body of evidence of the benefits of investing in healthcare information technology, many hospitals are late in adopting new technology. In fact, in the case of CPOE, hospitals are sometimes late in adopting old technology. Practically science fiction at the time, CPOE was first rolled out in the early '70s at El Camino Hospital in Mountain View, Calif., part of a groundbreaking collaboration between the Silicon Valley hospital and defense contractor Lockheed Corp.

Three decades later, in 2000, the Business Roundtable, a coalition of large corporations, formed the Leapfrog Group to push for healthcare improvements. They cited CPOE as one of those improvements, making its adoption one of the first three goals of its public-reporting program. A year later, just 21 of 425 hospitals responding to a Leapfrog survey had functioning CPOE systems.

Today, there are more CPOE systems but adoption is slow. In a recent survey, more than half (51 percent) of the responding health organizations still didn't have them. One of the biggest barriers: physician acceptance.

CPOE success rests on physician acceptance and use, which is not always forthcoming. Understandably, physicians don't relish the increased time it takes to enter an order. In a well-publicized 2003 case, doctors at Cedars-Sinai Medical Center in Los Angeles, staged a rebellion and forced the hospital to shelve the CPOE portion of a \$32 million implementation project after only three months of use. They were unhappy with the extra time it took them to enter orders on the computer. They were not alone.

Physicians spend more than a third of their days looking for information. More than 60 percent of clinical questions generated at the point of care go unanswered. Approximately 50 percent of those answers would have had a direct impact on patient care, but most clinicians abandon the search if it takes more than 30 seconds to find an answer.

Physicians wisely question the benefits new technology has for them—it's the "What's In It For Me?" query. However, if the systems give physicians what they want, they will use them says retired physician-turned-hospital-IT-consultant Ken Wagerman:

"What my clients want is technology that's easy to use, affordable, improves care, and fosters a better doctor/patient relationship. Give them that and they are the world's most fervent adopters of technology."

Systems consultant Bob Berner notes that if physicians "see a real time and cost benefit, they turn into total technology geeks."

System fragmentation and design present additional barriers to CPOE. Indeed, in some organizations with disparate systems out of synch with physician practice, CPOE implementation actually increased the probability of medication errors. One study identified more than 20 situations that might cause this to happen, including :

- Information errors generated by fragmentation of data and hospitals' many information systems, which alone accounted for 45 percent of the errors;
- Human-machine interface problems, where the computer's requirements differed from the way clinical workflow; and
- Multiple-screen access for patient medication information, which increased the likelihood of selecting a wrong medication. Seldom aggregated on a single screen, as many as 20 screens might be needed to see all of a patient's medications.

The message is clear: In a competitive physician marketplace demanding solutions that improve care and streamline practice, information technology—which can provide such benefits—is advantageous for hospitals and health organizations' physician recruitment/retention efforts. Physicians are looking to healthcare organizations for IT solutions that speed and expand their access to patient data. Accordingly, healthcare organizations are looking for solutions they can implement quickly, affordably and with minimal disruption to processes.

A new technology—the information aggregation platform—can give both physicians and healthcare organizations the data access and system affordability they need.

Information Aggregation Platforms: What Physicians Want

Healthcare typically under-invests in information technology, significantly lagging behind other industries. Banking spends \$14,764 on IT per employee; insurance spends \$13,564. The overall average across all industries is \$6,918. IT spending per employee in healthcare is only \$3,047.

Most hospitals rely on legacy systems, often big, centralized, mainframe-based data processing systems primarily designed as charge-capture systems for pass-through reimbursement. Those that have moved forward to clinical information systems have data spread across different systems, technologies and terminologies. CPOE, as well as electronic health records (EHRs) and other technologies that rely on patient data, simply cannot be effective unless these applications are integrated. But that's easier said than done.

Traditionally, healthcare organizations have had two options for integrating disparate systems. One option: A complete swap out of the old for the new. Understandably, this could mean millions of dollars and a total upset of workflow across the entire enterprise. The other, more common option: Interfaces. However, expensive to maintain in terms of financial and human resources, they, too, are problematic.

Practicality difference notwithstanding, neither option solves the most challenging problem facing physician users: Having to sign on and navigate different systems in an effort to create a complete patient picture. While single sign-on (SSO) solutions have alleviated some of the problem by streamlining a physician's login process, they do not address the need to navigate multiple applications to locate patient data.

Logically, a solution that solves this problem would be a competitive advantage for hospitals seeking to recruit and retain physicians. Fortunately, such a solution now exists: Information aggregation platforms (IAPs).

Choosing an IAP solution

According to Alan Cooper, software invention, design and construction pioneer: "Users don't give a hoot what the storage system is. All they care about is how the retrieval system works.we don't care how the system stores it away, as long as the process of finding it and bringing it back to us is successful."

IAPs give physicians real-time access to information, regardless of where it resides. Rather than spending millions replacing applications, incurring inordinate interface costs or abandoning legacy investments, hospitals can deploy IAPs, which leverage the existing IT environment and aggregate patient information at the user-interface level.

IAPs are a relatively new technology. As such, only a few true IAPs exist; even fewer have any significant longevity. Key features to look for in choosing an IAP include:

- **Context-sensitive views:** To streamline physician data access, the IAP should provide a clinically relevant, comprehensive summarization of data that parallels individual physicians' care processes. Not only does this speed physicians' access to data, the intuitive nature of this feature also shortens their learning curve.
- **Remote access:** Physicians manage patient care from their offices and homes, as well as various places throughout the hospital. Remote access gives physicians data whenever and wherever they need it, which is especially important given the changing demographics of the physician marketplace.
- **User-level aggregation:** View-only solutions aggregate data without creating new records. This eliminates the need for additional data storage and processing resources.
- **Security:** To ensure confidentiality and data integrity, data should reside in the source application only. The IAP should have ways to access, aggregate and present the data without having to move it. This feature is increasingly important as healthcare organizations begin forming regional health information organizations (RHIOs) and health information exchanges (HIEs).
- **Scalability:** The solution should be built on a platform that meets current information needs, while supporting future growth.
- **Experience:** Look for an established IAP provider/vendor with a strong record of accomplishment and a significant client base.

One IAP solution that meets the needs of both physicians and healthcare organizations is Fusionfx®.

The Carefx Solution

Fusionfx® is an information aggregation platform that quickly synthesizes data from disparate clinical systems to give hospitals, IDNs, physicians and RHIOs/HIEs clinically relevant views of patient information. Fusionfx leverages existing system investments and deploys quickly and affordably. Important features include:

- **Physician portals and remote access:** Fusionfx provides anywhere, anytime access to comprehensive, context-sensitive and clinician-specific patient information views.
- **Legacy system synthesis and clinically relevant views:** Fusionfx can 'virtualize' legacy applications to define how and what data is presented in each portlet.

- **Enterprise-level interoperability:** Fusionfx integrates real-time data from disparate databases through a high performance standards-based data access layer. This “integration at the glass” approach eliminates additional clinical data repositories as well as the resources required to integrate data into a database through HL-7 messages and normalization.
- **Data security and confidentiality:** With Fusion’s federated data model, organizations don’t have to relinquish data control in order to collaborate. This model allows the owner of each source database to decide exactly what data to share with others, inside and outside of the organization. A truly federated model, Fusionfx creates indexes and pointers to data stored in multiple source systems. These indexes allow Fusionfx to access and present data—without having to move the data from its local database.
- **Scalability:** Fusionfx meets current information needs, while supporting future growth. Using the industry’s only open and scaleable information aggregation platform, Fusionfx interoperates with existing IT investments, making deployment quick and affordable. It is a clientless and agentless solution accessible from any workstation with Internet connectivity. With Fusion, you measure time to deployment in weeks, not years.
- **Flexibility and speed to data:** Fusion’s JSR168/WSRP portlet and webparts allow you to deliver libraries that function in any portal. These libraries include an SOA compliant data access layer that retrieves data from backend clinical systems in one to three seconds and provides clinical views of such systems as MEDITECH, Eclipsys Sunrise Critical Care, and Cerner PowerChart to name a few.
- **Solid experience and industry acceptance:** Carefx is the leading provider of open and scalable interoperability solutions for healthcare provider organizations. Founded in 2002, the Carefx customer base of nearly 300 hospitals across the US, Canada and Europe includes some of the world’s most prestigious organizations. Additionally, a number of RHIO/HIE efforts across the U.S. use the Fusionfx platform. Carefx is the preferred partner to leading infrastructure and application vendors, including Cerner, Eclipsys, Epic, GE Healthcare, McKesson, Siemens Medical Solutions, IBM, Novell and CA.

For physicians, Fusionfx synthesizes patient data from relevant clinical systems into an inclusive information view that aligns with their unique thought processes and practice methods. Fusionfx provides anywhere, anytime access to comprehensive, context-sensitive and contextually relevant patient information views. What clinicians see is a function of what they do and how they do it—workflow determines access and presentation.

For hospitals and IDNs, Fusionfx leverages legacy systems by aggregating their previously siloed data into completely new, infinitely useful data views that truly can inform care. The revolutionary Fusionfx platform aggregates disparate data from silos across the enterprise. Where the data resides is irrelevant—if a physician needs it and has the clearance to access it, he or she gets it—quickly, simply, wherever it is needed, in a format that makes sense for what he or she is doing.

In addition, Fusionfx is an integration agent, facilitating data exchange between and unified information display from disparate systems. Fusion's highly functional clinical dashboard paves the way to physician and enterprise portals.

For RHIOs/HIEs, Fusionfx links dispersed, disjointed organizations into a connected, streamlined network. Fusion's rich clinical dashboard greatly enhances community portals.

Fusionfx gives physicians access to the patient data they need from the systems they know in a format they can use—a clinically relevant, comprehensive summarization of data that parallels their care processes. And because Fusionfx can run on a desktop or over the Web, the data is available whenever and wherever the clinician needs it.

Why IT Matters

Experts advise healthcare organizations to align their recruitment/retention efforts with prevailing marketplace trends:

- “When facilities seek to understand what is most important to physicians on a personal level, hospitals and clinics can greatly improve the chances of retaining existing physicians and enhance their ability to recruit new providers,” said Scott Hurst, Director of Consulting, Delta Physician Placement.
- “Retention efforts should address workforce trends and begin during the earliest stages of recruitment. For example, practices can tailor each interview to better match the generation and gender of a specific candidate,” said Carol Westfall, president of Cejka Search.

Physicians are changing. Increasingly, they value quality of life and quality of care above all—and they understand the power of information technology to provide it. Because they do, they expect the organizations with which they affiliate to provide such technology. Those that do will gain the advantage in the increasingly competitive market for physician talent. Fusionfx® gives healthcare organizations an effective way to compete.



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Simply Advancing Healthcare

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