

LAUREATES 2007

HEALTHCARE

What does being a part of the 2007 Computerworld Honors Program mean to you?

Inclusion in the 2007 ComputerWorld Honors Program would be a momentous achievement in terms of recognition for a product and service in which PHT deeply believes. PHT's mission is to help the clinical research industry obtain high quality data to develop new therapies, treat disease, and improve quality of life. PHT invented the modern ePRO industry in 1994, and continues to grow it, along with several other providers, today. It is heartening to see the significant increases in market adoption as more sponsors hear the proven success stories and realize the benefits firsthand. A well-known and respected publication such as ComputerWorld publicly recognizing the power of the LogPad System to improve how drugs and therapies can be investigated would be a humbling, rewarding and welcome accomplishment.

PIEDMONT HOSPITAL

Atlanta, GA, United States

Driving Improved Patient-Care Outcomes with Technology

In his 2007 State of the Union address, President Bush implored hospitals to start using healthcare information technology as a means to reduce medication errors. This is yesterday's news to Atlanta, GA-based Piedmont Healthcare, an organization at the forefront of using technology to improve patient safety. Through the use of clinical information technology from Eclipsys Corporation, Piedmont not only dramatically reduced medication errors but also documented many other significant patient care outcome improvements. Piedmont determined that computerized physician order entry (CPOE) was the key to preventing medical errors, and improving adherence to standard clinical pathways. Through careful planning and exceptional execution, Piedmont was able to achieve 100-percent physician adoption for CPOE, which, in conjunction with adjacent initiatives, led to a reduction in medication errors from 5.5 per 10,000 doses dispensed to 0.86 per 10,000 doses dispensed and a six-percent drop in unadjusted mortality rate.

POSSIBILITY FORGE

Hurricane, UT, United States

openEMR

Possibility Forge is delivering openEMR - an open source Electronic Medical Record System for small and medium clinics. Possibility Forge is one of the first companies to fully implement new open healthcare standards for interoperability of patient records.

openEMR is an open source product that makes electronic health records available at no license cost to any healthcare provider no matter how small.

openEMR is the only open source product participated in the IHE Connectathon 2007 in the US and the HIMSS interoperability showcase.

How do you think Information Technology will be different in 2010?

At the current rate of advance, technology in healthcare will hopefully allow care providers to gain a "whole view" of the patient's health, and allow the patient to take a more direct hand in their own treatment. We aren't just talking about driving down costs - although with a 73% increase in health insurance premiums since 2000, that is welcome - we are talking about making technological changes that enable providers to better understand and care for patients, defeat illness, save lives, and improve quality of life for everyone.

What does being a part of the 2007 Computerworld Honors Program mean to you?

To have the members of our team recognized by key partners and industry icons is very rewarding. To be able to be a part of a legacy of forward thinking technical innovators and contributors is humbling. Most importantly, the opportunity to better "get the word out" about this product to those who can use it to provide better patient care is phenomenal. Taking part in this process will help us to help more care providers, and help them to help more patients.

PROVENA HOME CARE

Mokena, IL, United States

Mobile Patient Information System

The Centers for Medicare and Medicaid Services (CMS) requires Provena to collect information measuring changes in patient outcomes. Data is collected at the start of care, recertification, transfer, and discharge to assess treatment effectiveness and for reimbursement. To meet patient care and business goals, the ability to accurately track patient information is vital.

To improve efficiency, accuracy of patient and billing information, and quality of patient care, the IT team implemented a mobile, touch-screen enabled, digital patient information system and equipped clinicians with Tablet PCs to enable them to record symptoms, care provided, and general observations at the point of care.

Provena has improved the accuracy of patient and billing information. CMS collects data from home care agencies nationwide and ranks them against one another in terms of patient and business outcomes. Since implementing the patient information system, all five health agencies have been ranked among the top agencies.

How do you think Information Technology will be different in 2010?

- Wireless access will become more prevalent allowing great real-time access to home care information
- The user interface will continue to move away from the keyboard and toward voice and hand writing recognition.

What does being a part of the 2007 Computerworld Honors Program mean to you?

Being part of the Computerworld Honors Program means being able to share our experience and also learn from a greater community thereby building greater and greater communities of healing and hope.

RAYTHEON

Ballwin, MO, United States

Emergency Patient Tracking System (EPTS)

To help emergency management organizations and hospitals manage resources more effectively, provide quicker patient treatment, and accurate information to worried family members, Raytheon created the Emergency Patient Tracking System (EPTS).

The EPTS system automates the collection and dissemination of patient information and status through the use of barcoded patient medical identification wristbands and mobile technology. As patients are triaged, transported to hospitals, treated, and ultimately discharged, their wristbands are scanned and their status is continually updated in the central database. It also provides an audit trail, enabling emergency response organizations to generate reports and comply with regulatory requirements.

This technology has allowed real-time communication between first responders, emergency management, and hospital officials, allowing authorities to balance resources, minimize hospital overcrowding, and increase survival rates. Responses to inquiries by family, friends and the media can be handled more quickly and accurately.

How do you think Information Technology will be different in 2010?

As we are already seeing today, mobile technology is a key extension to the access and accuracy of up-to-date information anywhere, anytime. In 2010 these mobile capabilities will continue to grow. Using mobile solutions patient tracking applications will continue to expand with growing technology concepts such as Radio Frequency Identification, GPS tracking, and remote communication protocols. The result of these technologies will be greater patient care, increased accurate tracking of patients, and informed and educated decisions made by medical personnel.

What does being a part of the 2007 Computerworld Honors Program mean to you?

In the technology industry, the focus within development organizations, in the industry media and even among analysts is often very granular. That is to say it is focused on solution features and functionality, marketplace dynamics, etc.

The Computerworld Honors Program provides a unique opportunity for those of us in the industry to step back and consider technology from a much larger perspective. It provides an opportunity for industry insiders to reflect on the use of various technologies in novel ways

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to produce solutions that provide both immediate benefits in specific business situations as well as on the larger issues of how else the technology might be used to produce additional and perhaps even more significant business and societal benefits.

Participating in the 2007 Computerworld Honors Program has provided us with this gift of reflection. Of course, it is flattering to be nominated by others in the industry who feel that our work is noteworthy. More important, however, are the insights gained by going through the formal process of preparing a case study, and the opportunity to read case studies from other organizations. The program, by searching out and recognizing innovation, is a reminder of the possibilities that lie before us, and as such, is bound to spur additional innovation

SAINT CLARE'S HOSPITAL

Weston, WI, United States

Chartless Hospital Environment

Saint Clare's Hospital is a state-of-the-art facility, featuring a chartless environment. To create an all-digital environment, the hospital equipped caregivers with Tablet PCs to read and record patient data, by typing, writing or dictating information into the patient information system. Doctors, nurses and other staff have immediate access to critical patient information such as orders, progress notes, test results, vital signs and medication forms.

By digitizing patient information, the hospital has improved the patient experience and reduced the cost of care. The hospital has realized significant savings on administrative and infrastructure costs, estimating an initial savings of between \$400,000 and \$500,000 in up-front and operational costs. For example, the hospital didn't require a traditional medical filing room, pay for record storage or hire a staff to support medical record tracking or filing. Moreover, medical staff can now spend their time focusing on caring for patients rather than managing paper charts.

How do you think Information Technology will be different in 2010?

The future of Healthcare IT will shift more and more towards supporting consumer-driven healthcare. Patients are becoming more knowledgeable about their conditions and are now technologically savvy and will be researching best practices and comparing providers. Consumers do have a choice in their care, and providers will need to be measured as we move towards a pay for performance model and consumers will choose where to have their care just as they research and choose a mortgage lender with high quality and competitive pricing. We will see more advances in how information is provided to patients. There will be an increase in development and adoption of patient portals so that patients can communicate with their providers and keep track of their progress, register for an appointment, pay their bills on-

line, and even perform simple tests from home and submitting the results, all on-line.

What does being a part of the 2007 Computerworld Honors Program mean to you?

The Computerworld Honors Program recognizes the work of organizations and innovators that have promoted the use of technologies to facilitate change and provide improvements that benefit society. To be part of this elite group of those that have been recognized is truly an honor, and to share our accomplishments with others that can learn and benefit from our experience was part of our goal from the inception of Saint Clare's. We had a unique opportunity to start fresh and new, and now it is our pleasure to share our story with others and contribute to improvements in the healthcare industry.

SIMBEX

Lebanon, NH, United States

Head Impact Telemetry System (HIT System)

Simbex is a research and product development company whose expertise is biomechanical feedback systems. The company creates products and solutions for active life improvement in the areas of human performance, sports injury prevention, and rehabilitation.

Simbex's "Head Impact Telemetry" (HIT) system is the first real time impact monitoring system that measures and monitors head impact in helmeted activities (including football, hockey, boxing and military use). The HIT System's sensor/encoder transforms any helmet or headgear into a head impact monitor. A data collector wirelessly receives impact data continuously from encoders and can monitor dozens of players or soldiers simultaneously. Software analyzes data and sends a pager warning if any impact has a potentially injurious profile.

Analysis of this data is used to shed new light on the biomechanical causes of mild traumatic brain injuries. This research may lead to advancements in protective equipment or other injury reduction strategies.

How do you think Information Technology will be different in 2010?

A continue emphasis is likely in the area of mobile technology. Real-time, "gotta-have-it-now" streaming data seems to be the trend. Yet an important aspect of the desire for all-data-all-the-time is the ability to process, sort, organize, and filter that information into usable chunks for different individuals. Data availability is useless unless the user can transform that data into actionable tasks. In the case of HIT system data, it doesn't help to know if your child sustained a head impact, if you cannot get that information to the appropriate medical personnel to analyze. Likewise, having that data without appropriate access to other relevant data for that individual, or for a database for normative comparison, makes analysis and interpretation of the information more difficult. Information

Technology developments that provide secure access (in this case HIPAA compliant access) to relevant data in real or near-real time from widely disparate sources (eg. from a physicians database on the individual, the school's database of demographic data on the athlete, a national database of head injuries, a national database of normative data on head impacts, etc.) would be extremely important. IT Solutions for more global access to key information, in a secure and transparent fashion, are likely to be more in demand in the very near future.

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We are honored that our application of biomechanics and information technology is relevant to Computerworld's mission and readership. HIT System technology is not a traditional IT solution to a market need. In this case, there is a pressing national need to better understand brain injury in our young athletes and our soldiers. Solving this problem requires a novel use of data collection, data storage, data transmission, and data retrieval capabilities. Simbex partnered with:

- The government, for funding
- Relevant industry, for strategic partnerships (Riddell)
- IT providers, for critical solutions related to overcoming key technical hurdles associated with large amount of data being collected and analyzed for widespread use

MTBI is a very real and very high profile problem. By bringing attention to the application of computer-based technologies as part of Computerworld's public base, we can hopefully generate more demand for solutions that prevent and treat of head injuries. The information technology behind the prevention and treatment of injury is relevant and valuable to a broad spectrum of the population. The Computerworld Honors program allows for further dissemination of this information to a wider public base than we might not otherwise have access to. We believe that these technical readers are also parents, administrators, and athletes themselves-all of which may benefit directly or indirectly from this technology.

SUMMA HEALTH SYSTEM

Akron, OH, United States

Using CPOE to Establish Best Practices in Care Delivery

While many healthcare organizations have had great success in implementing some clinical information systems in recent years, adoption of computerized physician order entry (CPOE) systems has lagged. Physicians often resist the new technology despite substantial evidence that automating order entry can reduce medical errors and improve turnaround times. Despite these challenges, Summa Health System achieved 95-percent physician adoption of Eclipsys Sunrise Clinical Manager's CPOE at Akron City Hospital, Akron, OH. Although Summa's clini-