

## CASE STUDY

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### PHNS: Healthcare outsourcer and partner McLaren Health Care implement revolutionary EMR system.

The Dallas, Texas-based hospital services firm PHNS Inc. (PHNS) provides a vast continuum of services to hospitals and healthcare organizations, including health information technology (IT), health information management (HIM) (records management, records storage, release of information, coding, transcription and electronic medical records (EMR), revenue cycle management and advisory services. PHNS' services allow healthcare facilities to improve their operations and technology while reducing costs through the maximization of their resources and infrastructure.

With approximately 400 hospital and healthcare customers across the United States, PHNS and Flint, Michigan-based partner McLaren Health Care (MHC) launched one of the first paperless, system-wide EMRs in the country.

### THE CHALLENGE

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**The Customer.** Based in Flint, Michigan, MHC is one of the top 25 integrated healthcare systems in the United States, spanning 29 counties with eight regional hospitals in Flint, Lapeer, Lansing, Bay City, Mount Clemens and Pontiac. MHC also includes surgery centers, imaging and dialysis centers, a primary care physician network, assisted living



### SUMMARY

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- **Customer Profile:** McLaren Health Care, an eight-hospital, 2,148 bed integrated system based in Flint, Michigan
- **Goals:** Streamline HIM and IT by systematizing EMR
- **Solution:** Re-engineering of workflow and business processes and enhanced technology – a paperless, online medical records system
- **Deployment:** EMR implementation
- **Benefits:** Reduced labor costs, reduced supply costs via the elimination of bulky paper records handling, decreased accounts receivable, improved online accessibility for clinicians, improved patient record security and reduction of hospital errors

facilities, HMOs, home healthcare, medical equipment, a malpractice insurance company and graduate medical education programs. MHC's affiliation with the Michigan State University College of Human Medicine affords collaboration between experienced clinicians and physicians-in-training, and the result is a healthcare model that delivers pioneering research, cutting-edge technology and compassionate, high quality treatment to residents of Michigan. It is this unique model of blending "high tech" with "high touch" that distinguishes MHC from its peers.

**High-Tech Demand.** It was the vision of MHC's President and Chief Executive Officer Phil Incarnati in 1994 to perpetuate this high-tech provider model and secure MHC's position as a leader in innovation in an increasingly technologically driven healthcare industry. However, like most health systems at the time, MHC was heavily burdened by the manual, paper-based medical records system out of which many inefficiencies arose, including lengthy record retrieval times that did not meet physicians' numerous record requests, record inaccessibility, high paper demand and supply costs, and duplicate patient data. With a pioneering vision for a method of online medical records storage, but few knowledgeable resources to turn to, MHC was still successful in implementing the first system-wide EMR in 1996 at Lapeer Regional Medical Center and then in 1999 at McLaren Regional Medical Center. In the beginning of 2000, MHC outsourced its HIM and IT to PHNS, and PHNS was able to assist in providing fresh strategy in implementing EMRs at MHC's other sites. "Our focus and initiative was to take their 'stand alone' EMR initiative and make it a system approach that was not vendor dependent, but truly system

and clinically driven," said Belinda Wiegand of PHNS. Through the MHC and PHNS partnership, this EMR strategy has successfully supported MHC's health system growth with the addition of Bay Regional Medical Center, Mount Clemens Regional Medical Center and POH Regional Medical Center.

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## THE PHNS SOLUTION

**Planning for Change.** Given the vast complexities inherent in EMR implementation and integration, PHNS recognized planning to be the most essential stage of the process and planners from the clinical community were an integral part of the implementation. Understanding the risk in change initiatives, PHNS convinced MHC that a complete re-engineering of hospital workflow and business processes and an improvement in efficiencies and costs should be in place prior to EMR integration in order to ensure a smooth changeover. This included assigning leadership, creating accountability, analyzing and redesigning workflow, and making accommodations for staff training.

**Implementation and Maintenance.** The bulk of the change occurred in the implementation and maintenance phase, during which PHNS assisted MHC with the clinical data transformation in combining electronic patient data with paper data following paper data conversion. In addition, PHNS assisted in installing the software and hardware necessary for EMR integration, aiding in obtaining and maintaining software and hardware documentation, establishing software and hardware support procedures, and establishing testing procedures for data recovery and system backup, providing MHC with data center management, telecommunications management (voice

and data), applications support and implementation, help desk and desktop management. PHNS also aided in establishing best practices in data entry and coding, and assisted in creating user training to ensure that administrative and clinical staff had the necessary skills to manage successfully the electronic patient data that was now available at their fingertips from any Internet connection. Individualized clinical data at MHC had never been more accessible. PHNS' innovative installation of bar code technology even assisted MHC with medication management: by swiping a patient's wristband, a clinician could identify all of a patient's medications and allergies. PHNS was similarly instrumental in maintaining the successful EMR integration, optimizing increased collaboration between IT and HIM departments, implementing intelligent data mining, and recognizing and re-evaluating areas of positive impact and areas that could be improved.

## THE RESULT

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**Positioned for Success.** With the aid of professionals at PHNS, MHC successfully integrated EMR at its subsidiary sites and the rapid results have been immense. MHC is now able to quickly discard paper patient data after discharge and utilize the EMR as the legal record. "The EMR has eliminated the handling and assembly of bulky paper medical records and increased online accessibility to clinicians," said Belinda Wiegand of PHNS. "It has put real-time results at their fingertips." The instant portal online access to clinical information that the EMR provides to MHC's staff has resulted in reduced record retrieval times, significant labor and supply cost savings, and the replacement of folders, chart dividers and other bulky storage devices with high capacity magnetic and

optical storage. The healthcare system's accounts receivable has significantly decreased, as have delinquent charts. Moreover, EMR has reduced system slowdowns and, most importantly, it has reduced hospital error and risk by computerizing highly complex patient data. By encapsulating a patient's confidential clinical information online, the EMR has made records storage more secure and reliable than ever before. Patients of MHC have clearly reaped the rewards of EMR -- the computerized system has diminished much of the unnecessary waiting time and frustration involved in repeatedly filling out paperwork, which has reduced anxiety and the new-found ease of accessibility has been pivotal in creating a positive hospital atmosphere for patients at MHC. "PHNS' role in the systemization of the EMR has improved our productivity, reshaped our business processes and allowed us to do more for less," said Phil Incarnati, President and Chief Executive Officer of MHC. "PHNS continues to play a key role in MHC's ability to stay competitive and profitable at a time when so many other not-for-profit hospitals are hurting. PHNS is helping us live up to our mission to be Michigan's best value in healthcare as defined by quality outcomes and cost."