

Clinical Data MANAGEMENT

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Health Hero Improves Patient Care With Direct Provider Link

The move from inpatient care to home-based treatment and the rapid rise of the Internet as an everyday tool available to healthcare consumers have intersected in a product that one user says can lower costs and improve patient education. The key, he notes, is customizing communications with individual patients to better target treatment for high-cost chronic conditions.

The product is Mountain View, Calif.-based Health Hero Network Inc.'s Online Service, which is a broad-based, two-way communications link between healthcare providers and patients. It allows providers to access up-to-date information about their patients' health status, while at the same time allowing them to provide personalized feedback and ongoing support to patients. That includes frequent reminders, feedback on their progress and lessons on effective self-care practices.

That's accomplished by installing HHN's Health Buddy in patients' homes, explains Steve Brown, HHN's founder and CEO. Health Buddy is a laptop device with a brightly lit, high contrast screen display and four large response buttons. Designed for use in a daily "dialogue" between providers and their patients, it connects through a standard telephone line and toll-free number and includes messages such as these:

- "Hello, Joe. What is your weight today?"
- "Reminder: A weight gain may be a sign of fluid retention. Be sure to take your medicines and call Dr. Jones if your weight goes up more than 3 pounds."

- "Daily Health Quiz: What is the best way to avoid feeling thirsty? 1. Drink water constantly. 2. Save your fluids for mealtime and when you are feeling very thirsty. 3. Eat more salt."

In using the system, authorized caregivers have access to a secure Web site that provides software tools and access to patient programs and data. The tools are available on the Caregiver Desktop, a Web site home page where caregivers can access the Care Composer, Care Director and Care Administrator applications, as well as online support materials.

- **Care Composer** allows the service's users to design or modify protocols and assists them in defining patient health status data and designing disease-specific messages.

- **Care Director** allows authorized medical staff to view individual patient data — or information on groups of patients — through graphic reports and detailed data displays. Providers use that information to generate individual patient and population summary reports. The primary emphasis is on managing large numbers of patients by permitting care managers to identify patients who either are outside expected parameters or who appear to be at higher risk for complications.

- **Care Administrator** allows providers to create, edit and update patient records that include contact information; profiles that include height, weight, gender and age; primary care physician information; and payer information.

Health Hero Network

Health Hero Network received some of its venture capital — close to \$20 million of it, in fact — from a coalition of backers led by Psilos Group Managers LLC and Oracle Strategic Partners. As part of the transaction, Psilos founder and managing director Albert Waxman, PhD, also became chairman of the board at HHN. Waxman was a board member prior to the transaction; he replaces Steve Brown, HHN's founder and chief executive officer, as chair. Waxman's name has been associated with a number of managed care companies over the years, including Merit Behavioral Care Corp., American Biodyne and Diasonics Inc.

Restructuring the System

The trend that the Online Service helps foster is nothing less than a restructuring of the healthcare system, says Robert Beardall, MD, medical director at Electronic Data Services Inc., the Plano, Texas-based company that manages its data infrastructure. "The current acute care focus of our healthcare system tends to address the needs of the chronically ill after they become unstable," he explains. "Combining the core competencies of HHN and EDS

creates a solution that shifts this model to one of proactive intervention prior to the occurrence of a crisis."

Patient responses and data from medical devices, Brown notes, "are automatically downloaded each night

via the EDS infrastructure." EDS, he points out, "integrates telecommunications, decision support services, Internet capabilities and its Electronic Commerce Management System to form the core HHN Online Service infrastructure. Information from patients travels via the ECMS to a central repository, where it can be viewed from multiple geographical locations by care providers and case managers using a secure Internet connection."

Developing Partnerships

HHN also is "pursuing strategic alliances to co-develop and market its technology platform," Brown notes. HHN filed a 501K submission with the Food and Drug Administration in November for the Health Buddy appliance for use as a general communications tool and as a specific communications tool for use with blood glucose monitors.

Once approval is received, Brown notes, the device "will be able to send data from the meters to a patient's care providers." Future application plans include connecting the Health Buddy device directly to peak flow meters, blood pressure cuffs and weight scales.

One partner already is on board.

"After a year of outsourcing on a per member per month basis, HHN's system allows us to efficiently monitor our congestive heart failure patients using our own nurse case managers," reports Calvin Chao, MD, associate medical director at Santa Clara County IPA, San Mateo, Calif. "The best feature of HHN's Online Service is the ability to customize communications between patients and a case manager. We're able to probe certain health issues with individuals and develop insights into each patient's educational needs, based on their responses to our questions. It's the next best thing to a direct Internet link to our chronically ill patients."

He adds: "Even though the patients in our CHF program have the same disease, each has different associated conditions and needs different information to help manage his or her condition. With HHN, we can customize interventions and detect patterns of behavior that might not otherwise be noticed."

SCCIPA represents about 800 physicians and provides services for more than 125,000 HMO patients. The group is the first to implement HHN's Online Service for CHF patients. Indeed, the product has been available commercially only since the end of March. It's undergoing further customer field trials at 10 sites across the United States; together, they involve more than 1,200 patients with CHF, diabetes and

Resource Center

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juvenile asthma. Previous trials looked at using the service with more than 250 patients covering diabetes, pregnancy and women's health.

Customization is possible by "creating custom HHN protocols," Brown explains. They are, he says, "collections of predetermined, disease-specific dialogues between a patient and healthcare provider intended to help assess, modify and monitor pivotal aspects of patient behavior, knowledge and patient-observed symptoms."

While no hard data is yet available, Brown expects that users will experience increased productivity and effectiveness of nurses and case managers monitoring high-risk patients and managing the cost of care. ■