Rx to Avoid Health-Law Fines

Tech Entrepreneurs Prescribe Solutions for Hospitals Facing Readmission Penalties

By SARAH E. NEEDLEMAN



Chris Corio's startup, Engineered Care, sells technology to help patients complete the recovery process after being released from the hospital. Jason Henry for The Wall Street Journal

Facing rising penalties under the health-care law for high readmission rates, some hospitals are turning to tech entrepreneurs like Chris Corio of San Francisco for help.

Mr. Corio's four-year-old startup sells technology that assists patients in completing the recovery process after getting discharged. Health-care experts say one of the leading causes for readmissions is failure by patients to follow doctor's orders once they leave a hospital.

Last year, a provision of the Affordable Care Act went into effect that puts the nation's roughly 3,400 acute-care hospitals at risk of getting penalized for excess readmissions of Medicare patients. The maximum penalty is 1% of a hospital's base Medicare payment, but that will increase to 2% on Oct. 1 and go up to 3% by fiscal 2015. The penalties are based on the number of patients above the national average who are admitted to an acute-care hospital due to heart failure, heart attack or pneumonia and then readmitted within 30 days.

Under Pressure Highest percentage of hospitals penalized DISTRICT OF COLUMBIA NEW JERSEY 92% WEST VIRGINIA 90% ILLINOIS 89% KENTUCKY 88% Note: Penalties for second year of Affordable Care Act readmissions-reduction program Source: Kaliser Health News The Wall Street Journal

According to federal data released Friday, an estimated \$227 million in fines will be levied this year by Medicare against 2,225 hospitals starting in October. Last year, 2,214 hospitals were fined a total of roughly \$280 million.

Entrepreneurs like Mr. Corio are building new software and smartphone app products that they hope can help hospitals reduce readmissions by converting a technical medical diagnosis into easy-to-understand instructions for a patient, or by using big data to identify those patients who might be most at risk of readmission.

Convincing a hospital to invest in a new technology to be used by hundreds or thousands of hospital staff and consulting physicians can be challenging, he says. "If a chief nursing executive says this is great, an [information-technology] guy still has to sign off on it," he says. "The sales cycle could be two years."

Mr. Corio, a former Microsoft Corp. software engineer, formed his firm, Engineered Care Inc., in 2009 with private funding. Its technology costs between \$30,000 and \$100,000 to set up, and the hospitals also pay an annual maintenance fee, which varies according to their size, to use the service.

The software culls data from hospital records to create personalized instructions for patients to follow after they've been discharged, such as diet requirements and how and when to take prescribed medicines. Hospital-care providers print the instructions to create booklets about 10 pages long that patients take with them when they leave. Patients may also be able to access the information online through a secure Web portal that features a talking animated character.

Mr. Corio says he's so far signed up more than 30 customers, including St. Dominic Hospital in Jackson, Miss., which was penalized less than 1% of Medicare reimbursements twice under the Affordable Care Act.

The nonprofit 535-bed facility began using the startup's technology about a year ago in half of its units. Dianne Mott, a director at St. Dominic, says Engineered Care's software has

helped the hospital reduce Medicare readmissions for those units so far by about 1.25 percentage points to roughly 8.5%. Previously, patients were given a "horrible" two-page document "that had everything crammed onto it," she says. "It met the government requirement but it was not a patient-friendly product."

Another hurdle for health-technology entrepreneurs is convincing hospitals that their product is the best way to reduce Medicare readmissions. Some hospitals are making personnel-driven changes, such as by training nurses and other caregivers on how to better identify patients likely to be readmitted and best practices for following up with patients after they're discharged.

"We're competing against hospitals using a nonsoftware-based approach," says Simon Arkell, co-founder of Predixion Software Inc., a four-year-old San Juan Capistrano, Calif., startup that raised \$31 million in funds from investors such as Accenture PLC and General Electric Co.'s investment arm, GE Ventures.

Predixion makes predictive software that sifts through mountains of data to help hospitals identify patients most likely to be readmitted after being discharged. According to the latest data from the Centers for Medicare and Medicaid Services, a federal agency, the 30-day, all-cause readmission rate among U.S. hospitals was 18.4% in 2012.

So far, 12 hospitals are using Predixion technology, and they pay an annual subscription fee that varies by size. A facility with 300 beds would be charged approximately \$150,000 a year.

Carolinas Healthcare System, a nonprofit network based in Charlotte, N.C., began using Predixion's technology last month in one of its acute-care hospitals in Pineville, N.C. About a dozen of the network's 41 hospitals have been penalized under the Affordable Care Act.

"Before, we had a shotgun approach," says Zeev Neuwirth, senior vice president of ambulatory care. "We were offering discharge planning to everyone. We didn't know who needed more enhanced care."

To be sure, there are some factors that may contribute to high hospital readmission rates that are beyond the control of hospital officials, even those armed with a new high-tech tool: Some patients are simply unwilling to take the medicines they're prescribed upon being discharged, for instance, while others lack the funds or support needed to complete the recovery process after leaving the hospital.

"Patients need access to good primary-care clinicians, rehab facilities and other resources after they're discharged, and these are more difficult to come by in low-income

communities," says Nancy Foster , vice president of quality and patient safety at the American Hospital Association in Washington, D.C. "It's a team sport."