Chapter 3
One System of Care, One Electronic Chart

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EXECUTIVE SUMMARY

Regional Health made a commitment as part of quality and patient safety initiatives to have an electronic health record before the federal government developed the concept of “meaningful use.” The “One System of Care, One Electronic Chart” concept was a long-term goal of their organization, accomplished through electronically sharing a patient’s medical record among Regional Health’s five hospitals and other area health care facilities. Implementing a hybrid electronic record using a scanning and archiving application was the first step toward the long-term goal of an electronic health record. The project was successfully achieved despite many challenges, including some limited resources and physician concerns.

ORGANIZATION BACKGROUND

Regional Health’s roots can be traced to a foundation based on communication, cooperation, and collaboration and is a tax-exempt, community-based organization. The original facility, Rapid City Regional Hospital (RCRH), was formed in 1973 by the merger of St. John’s McNamara Hospital and Bennett-Clarkson Hospital.
The new hospital had 280 licensed beds and approximately 80 physicians on the medical staff. Between the late 1990s and the early 2000s, RCRH purchased four other area hospitals (now known as Custer Regional Hospital, Spearfish Regional Hospital, Sturgis Regional Hospital, and Lead-Deadwood Regional Hospital) in an effort to preserve continuity of care within the Black Hills region. As the health care network continued to grow, the system was renamed Regional Health.

Today, Regional Health provides a continuum of care, which includes Regional Hospitals, Regional Medical Clinics, Regional Senior Care, Regional Cancer Care Institute, Regional Heart Doctors, Regional Rehabilitations Institute, and Regional Behavioral Health Center. The service area extends through western South Dakota, eastern Wyoming, northwestern Nebraska, southwestern North Dakota, and southeastern Montana. RCRH is a regional referral center with 400 licensed beds, operates the busiest emergency room in South Dakota, and is the largest hospital located between Sioux Falls, South Dakota and Billings, Montana. Spearfish Regional Hospital (SPRH) is licensed for 40 beds. Custer Regional Hospital (CURH), Sturgis Regional Hospital (STRH), and Lead/Deadwood Regional Hospital (LDRH) are all critical access hospitals with 11, 25, and 18 licensed beds, respectively. In addition to the hospitals, Regional Health also encompasses over 140 physician practices in the surrounding Black Hills area.

Regional Health has a corporate services division that provides services across the system. In addition, there is collaboration between same-type departments through what is known as Value Analysis Committees (VACs). This design functions well in this region where independence is highly valued. While each hospital has its own CEO, strategic planning is done system-wide using the six pillars philosophy: Patient Safety and Quality, Service, Financial Health, People, Growth/Innovation/Integration, and Community. The One System of Care, One Electronic Chart project was part of the Patient Safety & Quality pillar and the Growth/Innovation/Integration pillar.

**SETTING THE STAGE**

Prior to the start of the scanning and archiving project, Regional Health’s main Health Care Information System (HCIS) was essentially a character-based system that had been in use at RCRH since 1983. By 2006, all five hospitals within Regional Health (RH) had been using this platform in an integrated fashion for at least a year; however, each hospital was in different stages of implementation. Because RCRH had been fully utilizing the new HCIS the longest, they were more proficient and advanced with its functionality.

Prior to the scanning project, each hospital used different methods for medical record retention. Even though state laws allowed for destruction of records (Brodnik,
Perceived Level of Benefits and Risks of Core Functionalities of an EHR System
[www.igi-global.com/article/perceived-level-benefits-risks-core/2194?camid=4v1a](www.igi-global.com/article/perceived-level-benefits-risks-core/2194?camid=4v1a)

Application of Computational Intelligence Techniques in Managing Wireless Sensor Networks
[www.igi-global.com/chapter/application-computational-intelligence-techniques-managing/47120?camid=4v1a](www.igi-global.com/chapter/application-computational-intelligence-techniques-managing/47120?camid=4v1a)