Chapter 9
Telehealth Implementation:
The Voice of Experience

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ABSTRACT
Improving the opportunity to access care by infectious disease specialists and improve the overall quality of care received is the core mission demonstrated by this clinic through the on-going and continued development of their telehealth services program. This focus does not remove the need for the clinic to adhere to sound business practices. Instead, this case demonstrates that both focuses can be appropriately accomplished. Current regulatory issues will continue to pose challenges, but these barriers are not significant enough to shut down the enthusiasm for continuing this service or for future expansion plans. This study will discuss the benefits of telehealth not only to patients, but also to the clinic practice as a whole.

ORGANIZATION BACKGROUND
Infectious Disease Specialists, PC (IDS) is a small independently owned and operated clinic providing clinical services for patients requiring an Infectious Disease (ID) specialist. This clinic has been in active practice since 2001. There are currently three providers (all MDs) with a fourth coming in 2012. At this time there are no Physicians Assistant’s (PA) on staff. A Nurse Practitioner (NP) focusing on wound care has recently joined the practice. A previous office manager, working during the time of initial implementation, was generally supportive of advancing this effort. However, their current office manager has extensive knowledge of telehealth, having first worked in their clinic when they initiated telemedicine services, then also working in a hospital-based telehealth services program, before returning to the clinic as manager. This knowledge base has

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been very beneficial as they plan and develop the expansion of their current clinic services.

The number of physicians who specialize in infectious diseases practicing in this extended service area is very limited and highly regionalized. There are currently 8-10 physicians that serve the entire state of South Dakota (and into neighboring states). These physicians are located in Sioux Falls (the eastern-most border) and Rapid City (the western-most border), approximately 350 miles apart. The service area of this Sioux Falls-based healthcare practice is highly rural and it reaches into southwestern Minnesota, northwestern Iowa, and northeastern Nebraska, and southeastern North Dakota. They actively serve approximately 50 clinical locations and receive referrals from 70+ providers throughout the region (see Figure 1).

While remaining an independent clinic, the IDS clinic office space has been located on the main campus of one of the two major health systems in the region, both systems headquartering out of Sioux Falls. Because of the presence of an active telehealth program being operated within this hospital, this particular location allowed for their initial exposure to the idea of telehealth, in general, and specifically patient-focused telemedicine services.

**SETTING THE STAGE**

Infectious Disease Specialists (IDS) is based out of Sioux Falls, the largest city in South Dakota, which also is home to the region’s two largest healthcare systems. Unfortunately, the availability of infectious disease specialists remains extremely limited. The highly rural and frontier nature of the region also makes accessing specialized care services very challenging for patients and their families.

Prior to the implementation of telehealth, the services of an ID specialist were accessed through one of the following ways:

1. The patient would come to the physical location of the clinic for an in-person appointment, often from hours away;
2. If the patient’s illness was at a critical level, the patient would likely be transferred to a Sioux Falls-based hospital for care and the ID specialist would see them as an in-patient;
3. The physician would schedule time to come to a community for a periodic (maybe monthly or quarterly) outreach clinic, requiring the physician to leave Sioux Falls and putting in extensive “wind-shield” time; or
4. The patient’s primary care provider would pick up the telephone and discuss the case with the ID specialist, hoping for additional insight regarding his patient’s illness.

The final option was a frequent occurrence and one for which the specialist’s time and expertise was not compensated. An unfortunate outcome was that often providers would simply “wing it,” sometimes leading to further complications. In many cases, patients simply did not or could not gain access to these specialized services, which many times meant that their overall care was compromised, sometimes significantly.
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