



Integrating Communications in Health Care

The Organization:

Brethren Retirement Community, Greenville, Ohio

The Problem:

Brethren Retirement Community wanted to update and modernize its current communications systems to prepare for the future needs of residents and staff.

History/Background of Facts:

To have a thorough understanding of the situation, interviews with all departments and a sampling of residents were conducted to gather pertinent information and assess all communications issues. Brethren's staff established goals to maximize the performance of *all* communications systems, including but not limited to:

- ▶ Telephones/cell phones
- ▶ Internet services
- ▶ Data systems
- ▶ Two way radios/pagers/intercom
- ▶ Nurse call/patient safety devices
- ▶ Resident alerts
- ▶ Cable/CCTV

The goals also included improving office automation to provide for a more productive, efficient and dependable living and working environment. Brethren hoped to offer staff and residents enhanced, value added services like telecommunications, cable/satellite television, and Internet services. They wanted to reduce manpower through better utilization of technology, and network their two campuses together, consolidate billing and minimize extraordinary operating expenditures related to communications.

Analysis of the Problem:

No central management or control of communications expenses resulted in multiple systems, little integration and excessive costs. In addition, Brethren's equipment had been problematic. The phone system was over 20 years old, and their voicemail system was approximately 13 years old. The current systems were outdated, as well as expensive and time consuming to maintain. Multiple voice and data networks existed to accomplish the same tasks.

The outdated telephone system technology caused numerous problems for the Brethren staff and residents, including cross talk, hearing background secondary dial tones and frequent static. Many times, “ring-back” would occur after calls were terminated, outside lines would be unavailable, and delays as long as 24-48 hours to receive voicemail messages occurred.

Recommendations:

The outcome of these recommendations enhanced the short and long-term business goals of Brethren. Their desire to provide new and enhanced services to residents, and wireless applications and software to a very mobile employee group continues to grow. Brethren needed a path that would lead to more efficient employee systems, better resident care, and one that simultaneously created a more hospitable environment for the residents.

The recommendations included the following:

1. Centralize management and administration of all communications systems and expenses to streamline workflow, ensure integration and control costs.
2. Replace the data infrastructure using a fiber-optic backbone in increase speed and install a Wireless Network throughout the entire campus to enable wireless devices.
3. Develop a Professional Implementation Strategy using a professional services team.
4. Converge the LAN and WAN voice and data services using an IP Telephony solution.
5. Introduce 4 new resident services to generate revenue thereby promoting a “Hospitable Environment”.
6. Install new network carrier services to capture reduced annual costs of \$125,000.
7. Reduce FTEs by three through the use of new technology.
8. Ensure Voice Quality of Service through the use of new IP technology.
9. Establish a modular and scalable design to enable adding other campuses.

Benefits:

The recommendations were successfully implemented and have allowed Brethren to achieve its desired goals.

The outcomes achieved are as follows:

1. Reduced carrier expenses by over \$125,000 annually
2. Created new offerings to residents that included, but were not limited to enhanced telephone services, internet and email, and concierge services
3. Projected new revenue of \$25,000 + annually
4. Improved employee productivity by 2%
5. Reduced FTEs by 3 resulting in an estimated \$50,000 per year
6. Developed a long-term strategy for their voice and data communications network

ROI (entire investment): 28 to 36 months

ROI (fees only): 2 to 3 months