Avoiding Technology Disasters with Medical Facilities - 5 Case Studies

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Are you building or moving into new or remodeled medical space, like an MOB, ASC or imaging center? Getting the financial, legal and real estate details reight are essential. However strategic technology expertise is frequently not given enough consideration until it's too late. Here are 5 case studies of technology disasters that could have been easily avoided:

1. Lack of fiber causes costly clinic opening delays. A new clinic location for a very busy specialty group ran into major technology snags, which delayed clinic opening by several weeks. The new site was in a medical office park with 4 other buildings with fiber already in place; however the 5th building was assumed to have fiber but it did not. The only options were to pay the carrier expensive expedite charges, or put microwave radios on the roof, or delay opening. It all could have been easily avoided by engaging the right technology team earlier and getting the carrier's engineers onsite to do a site survey before the building was even selected.

2. The $10,000 data drops: A large surgery center with multiple OR suites decided they only needed a few data drops for a phone and a computer on the side desk. Within months after opening, they realized they needed data drops for other needs, including anesthesia, imaging, dictation, etc. And because of extensive steel bracing for the surgery lights, plus med gas lines in the walls, delivering WiFi into the suites was not an option. The ASC had to shut down the ORs and put in more data drops, which cost over $10,000 per OR, plus lost revenue.

3. Lack of redundancy leads to degraded performance and outages. A growing specialty group wanted lots of bandwidth for a new facility. They bought (no, they were sold!) a very attractive high-capacity circuit contract from the local carrier that promised 10x the capacity they currently had, at lower cost. However two things quickly happened: 1) the usage shot up to match the capacity (which always happens); and 2) the practice discovered they only had one carrier circuit, and when the first outage occurred, they had no backup network path. Newer technologies using Software Defined Wide Area Networking (SDWAN) allow a facility to get much higher capacity network services from multiple carriers at lower cost. You can also prioritize traffic and isolate guest access, not just for the requisite security, but to limit someone streaming the latest episode of Downton Abbey from impacting business/clinical needs.

4. New facility runs out of WiFi within 2 years: A new multi-million dollar hospital was built with an unheard-of 700 Wireless Access Points (WAPS). However, they quickly ran out of capacity and within 2 years they had to overlay an entirely new and larger-capacity wireless system to accommodate growth. WiFi is no longer an optional, nice-to-have convenience for

the occasional laptop or tablet user. It is now a mission-critical core feature set, with needs growing each year as new devices are brought to market. Patients have also come to expect robust guest WiFi as a given. Fortunately there are newer WiFi technologies that provide much more bandwidth (speed) and are backward-compatible with prior standards, plus better coverage for the entire facility at lower cost.

5. Lack of a holistic technology strategy creates expensive headaches: A large and rapidly expanding specialty group relegated technology decisions for several new clinics to multiple departments - purchasing, office services, facilities, IT. They each had differing ideas and priorities about technologies for their new facilities, which led to a patchwork of 3rd party solutions and vendors. In addition, there was little consideration of the impact to the existing facilities, creating a gap between the haves and the have-nots. By setting up a technology governance structure and addressing technology holistically, with input from all stakeholders - clinical ops, business office, providers, ancillaries, patient experience, etc. - the duplication was eliminated, resulting in 6-figure savings over the first year alone.

Summary:
When designing a new or remodeling an existing medical facility, no one can totally plan for (or even afford!) every technology option that might satisfy everyone's wants and needs. A trip to HIMSS or your Academy's annual conference shows a dizzying array of "new stuff" on the technology horizon. You don't need (nor could you afford) every new tech toy. However, by proper up-front strategic and holistic technology planning, and engaging the right technology resources early (before land, buildings and floor plans are set) many new and beneficial technology capabilities may be available, and many problems can potentially be avoided.