**CareGroup**

Troy Smith

10/29/2023

**History of CareGroup**

CareGroup is a consortium of healthcare professionals that offers a wide range of healthcare services in Eastern Massachusetts. This consortium was originally formed by a merger that took place in 1996, after the merger CareGroup became the second largest healthcare group in Eastern Massachusetts. The goal of the merger was powered by healthcare professionals wanting to find a way to improve healthcare while also reducing the cost of it, making it more accessible to the people who need it all while being competitive with its competition.

**IT System Collapse**

In October 1986, the CareGroup’s IT organization, which was led by John Halamka, started a decentralized non-standard operation. Before the merger, each hospital had their own legacy systems running in their IT departments. Since the merger, they all started to unite and started to use the Meditech system as the central software. This was a state-of-the-art system that included protected email, networking, PC’s, and financial systems. While this upgrade seemed expensive, it was actually around the same price as all the individual hospitals running their own systems simultaneously. By the year 2003, it was said that CareGroup had one of the nation’s best IT departments in healthcare. This system had the information of over 900,000 patients and nearly 3,000 physicians and was only managed by about a support staff of 200 people. Even though the had not been a power outage in nearly 3 years, CareGroup had 3 backup generators in case of a blackout. They also asked Cisco to run a complete report of their system to check for any weaknesses. When they got the report back, nothing that was discovered was found to be anything that put their system in trouble. Around the same time the company’s top networking expert had left the company to pursue another opportunity, leaving a position to be filled in the CareGroup IT department. In November of 2002 a researcher working for CareGroup started using and experimenting with a new knowledge management system using file sharing, a software that was made to instantaneously copy data across different CareGroup networks. Due to a family emergency the researcher had to leave and stop working on the system, letting in run in the background while he was away. The system started to go rogue and was copying terabytes of data across the networks. Due to the large amount of data being transferred through the network, no other data was able to get through, so they started to look for other paths to use, paths not were not meant to be used to transfer data. This complexity in the system caused the system to work overtime creating and finding paths to transfer data, and due to the primary switch not being available, multiple systems would copy the same data. While this was happening, none of the workers were able to see it happening, and eventually lead to every software application to stop working. The applications not working affected multiple parts of multiple hospitals, including clinical units, email, admission functions, operating room functions, clinical labs, radiology, ambulance functions, pharmacies, medical records, payroll systems, and emergency department functions. After twelve hours they were able to get the system running again, but it was spotty and not reliable to use.

**Alternatives**

One of the first things that CareGroup did once they realized that this was a problem that was not going away was to call CISCO. Due to severity of the issue CISCO’s help immediately offered to help find a solution for the problem. Within hours of the call from CareGroup, they had a Boeing 747 filled with equipment and support engineers heading to help CareGroup. When Cisco finally arrived, they implanted their CAP process. As a part of this process CareGroup was to delegate all authority over to Cisco. They also decided to freeze all the changes that had recently been made to the system. Over the course of the night Cisco managed to install a new, large modern switch that made it possible for the data to be copied correctly as well as carefully mapping the infrastructure. It was said that Cisco always had at least 10 people on site through the night and managed to accomplish a months’ worth of work in one night.

Another thing that CareGroup did to help combat the fact that their system was down was to go to the backup procedures. A lot of the backup procedures were done on paper, while this might be more time consuming it allowed them to continue their business without coming to a full halt. If they were to go to a full halt, lives would be in danger as it is hospitals that were being affected by the systems going down. This took some adjustment, but the employees were able to figure it out well and continued to do their job.

Once the systems were officially back on, they transferred all the information that was recorded on the paper and transferred them onto their systems. While it was a tough ride, they managed to get through it all and even managed to catch up to where they were supposed to be by transferring all the paper data to the computers.

**Best Alternative**

I believe that the best alternative that was made was to bring Cisco on site in order to help solve the problem. Cisco acted with haste and was able to race to the cite in a very short amount of time with the resources they might need and the people who knew how these resources worked. They also acted with authority, allowing them to freely act on the changes that they knew needed to be done without asking permission from CareGroup. This allowed to work even more quickly and with more effectiveness. It was very clear that the Cisco support knew a whole lot more about the system than CareGroup did.

**Lessons Learned**

Through all of this, CareGroup’s mistakes lead to the creation of lessons to be learned from the incident. The first of these being to not be afraid to bring in an expert. It is better to sure a system is going to work rather than trial and error. The next lesson being that it is not the fault of one person. The entire IT department should be working together to solve and prevent problems. The third lesson being to keep your working knowledge current, this means that it is important to keep up to date with new technologies or you will never know how to solve new problems. The fourth lesson being to be cautious of users that have knowledge of the system. The main problem for CareGroup was a user experimenting with new software, so be sure to trust these users. Another lesson learned was to adapt to externalities, meaning to pay attention to what is happening with new and old systems working together. The last of the lessons being to have good life cycle management, ensuring that everything is work properly and knowing when they need to be replaced is important in order for a business to succeed.

**Conclusion**

The merger that created CareGroup led to a complex, but state of the art IT infrastructure. Even though it still had its flaws it was regarded as one of the greatest in the country. Due to the complexity of the system and integration of new software, it got clogged up and caused a system failure that took days to fix. No matter how good an IT infrastructure is, there is always work that needs to be done to ensure that everything is working the way they it should be.

**Works Cited**

McFarlan, F. W., & Austin, R. D. (2005, August 11). *CareGroup*. Harvard Business Publishing Education.