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## **Capstone: Burn Surgery Education Module**

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### Abstract

I chose to solve a training and continuing education problem in my workplace, by creating a manual on burn surgery. This manual will later be turned into a computer education module, but will always be available in a hard copy as a reference material. I had to find an approach that reflected how my peers wanted to be educated and on what education points they felt were the most important to their success in surgery.

*Keywords:* Burn, Surgery, Education, Workforce Training

## **Introduction to your Capstone Project**

### **Section 1: Innovative Approach**

#### **Bringing Together Perspectives:**

I have been working in surgery as a surgical technologist for the past eight years. Since early 2018 I have been specifically working in Burn and Reconstructive surgery, and have worked with other departments to start Idaho's one and only burn center at Eastern Idaho Regional Medical Center. It is always a challenge to start a new program or specialty at any hospital and we have faced our share of unique challenges.

Bringing in such a unique surgical specialty to Eastern Idaho has come with many challenges. Surgeons receive training in burn care as part of their training, but it is not a typical specialty taught to nurses or surgical technologists, unless it is seen in their clinical rotations. The hospital selected staff, including myself, in late 2018 to fly to Augusta, Georgia to train at one of the largest burn centers in the United States. After returning home it was the job of the selected staff to train our peers and help begin the burn program.

Unfortunately with the timing of the pandemic and the high turnover rate in the healthcare profession in general, it was hard to keep trained staff employed and to keep up with the training of new staff. The burn center opened in early 2019 and received and continues to receive a high volume of patients seeking specialty care. This required staff from different specialties to be flexible and willing to work in new territory. This would be no small feat. Some of the staff are very set and comfortable in their current positions and assignments. This would take a lot of convincing.

## **Creating Innovative Approaches: Beyond Either/Or**

“Because innovation and change involve experimenting and taking risks, your main contribution will be to create a climate for experimentation, the recognition of good ideas, and the willingness to change the system”(Kouzes & Posner, 2017). It was my goal over the last three years to find a way to bring staff together on a united front and streamline the training process to accommodate the changing staffing needs. I chose to focus first on my surgical department, which is my primary residence.

Traditionally, once beyond basic knowledge and skills training, the operating room training protocol is typically described as; See One, Do One, Teach One. First you observe a particular procedure, then the second time you perform the procedure, and then after that you perform or teach others the skills needed to perform the procedure. This is functional in almost every specialty because they all are based on a standard basic skill set. Burn surgery unfortunately is different from one patient to the next. Not one burn injury is the same as the next, and not all patients heal in the same way, as observed by Deguire(2020). This requires a different mindset and set of skills to evaluate the needs during surgery.

## **Section 2: Emotional Intelligence**

### **Awareness of Self and Others**

The longer we were open as a new center and the more patients we treated, it was clear to me that we had to approach training for burn surgery in a nontraditional way. The staff and surgeons were struggling to get on the same page and lacked understanding of one another. This eventually led to impatience with one another and resentment towards some. I had to find a

better way to introduce this new specialty to my peers and alleviate some of the frustrations.

### **Consideration of the Audience: Emotional Intelligence**

The biggest problem I could foresee in creating a new system and education module for my department and peers, was the fact that everyone was already frustrated with the situation. I had to not only find a new way to train everyone, but to win the trust of my peers and feel empathy for their situation and validate their frustrations. “When your success, career, or even your life hangs in the balance, you learn what is most important, what you are prepared to sacrifice, and what trade-offs you are willing to make” (Robinson et al., 2010). I took a great deal of time just talking to my peers about the frustrations they experienced while working in burn surgery. I also inquired to some where their resentment for certain staff in the burn specialty stemmed from. I concluded that my suspicions were accurate and that a lack of effective communication and training was creating a tangled nest of problems.

### **Value to Others: Emotional Intelligence**

Everyone of my peers I work with all share one thing in common. We all come to work and dedicate ourselves and our time to helping our patients receive the best possible care while in our hands, in observation from Deguire(2020). I know even more frustrating than a foreign specialty to them, is feeling like they didn't deliver the best to their patients. Not only will a solution to our training help alleviate the stresses I have about constantly training others while putting out fires, it will also empower my staff to provide the best care possible to all of our patients. Creating a solution that works well will change the perspective of all the staff working in this department.

### **Section 3: Creative Thinking**

#### **The Creative Framework**

I believe that the best way to find a creative solution to a problem is to listen closely to those who are in the thick of the problem. “The roots of our bad decisions-whether individual or collective-can be found in the way our minds process and understand the world”(Riel & Martin, 2017). I had to get out of what I saw and my bias to see the problem clearly. I began talking to my peers about what they struggled with in burn surgery and what they thought could be better. I also talked with surgeons and evaluated cases to see where the breakdowns in education originated. The only way to find something that could be successful would be to cast my net wide and wait for the defining moment. Then it came. I had spent a weekend at home with my family and had ended up taking several calls from work. These calls were all from staff trying to do their best in a situation that was foreign to them. I easily rattled off information and gave instructions without much pause, even down to the detail of what side, row, and container particular supplies were placed in a cabinet.

Then it happened, the very thankful surgical technologist and registered nurse commented on me being a burn surgery encyclopedia and they felt much more at ease knowing they had someone to reference. That was it, I needed to create something that could provide trainees with a basic skill set and reference they could use at any time they needed it. I was going to create a manual that could be later turned into a computer learning module, and always be used as reference material.

#### **Unique Approach/es to Project**

The unique approach I took to solving this problem might not seem very unique unless

you completely understand training and continuing education in the operating room. There is no reference material and there is no manual. Having this available to my peers would be something that had never been done before at my facility. I began running it by my peers in a casual way hoping to obtain honest feedback and see if I had their support before starting something so different. I found that most found the idea to be a great one, and I received lots of feedback that helped me to shape how the manual would look and be laid out based upon how my peers wanted to learn.

#### **Section 4: Your Innovative Solution**

##### **Accomplishment of Capstone**

I completed two drafts of the manual before ending up with the third and final draft. I had multiple peers, surgeons, and management members run over it with a fine toothed comb. I wanted to be fact checked from every angle. I also wanted it to flow and be easy to follow for anyone who was reading. Once the final draft met my expectations it was time to send it for printing.

##### **Innovative Approach to the Problem/Project**

Once I had copies of the manual printed and ready for distribution I began to hand them out to my peers. One or two copies would always stay in the office and operating room suite for easy access to reference material for all staff needing it. The delivery of the manual was met with interest and the days after were showers of compliments and thanks. I had many peers who were the most resistant and hardest to gain trust from, come to me after the manual was presented and thank me for making something that met their needs in such an effective way.

## **Section 5: Results**

### **Benefits to Stakeholders**

I received a great deal of satisfaction from completing something that so honestly helped my peers, surgeons, and patients. I also was recognized by my department managers along with the Chief of Burn Surgery for my work and efforts to improve the process. My peers also gained so much from feeling more comfortable while getting more experience in the art of burn surgery itself. The patients in my regional area continue to benefit as they receive the best care in the area.

### **Impact on Stakeholders**

I feel the completion of this project has profoundly impacted and changed the way my peers see and approach the burn surgery specialty. Nothing is more terrifying than something we are unfamiliar with. Having a reference and guide available to them at all times to help through training or that last minute call shift, changes everything for them. They are able to approach burn surgery with confidence and control. This was able to change my peers' entire view and outlook on working in burn surgery.

## **Section 6: Conclusion**

I have found while working through the problem of the training and continuing education in my workplace, I have learned so much more than I had anticipated. I learned about how to bring people together and collectively find a solution to a problem that had existed for years. I saw that bringing these people together was going to take an unbiased approach and a winding road to winning their trust. Yes I created a great manual that is soon to be an education model that's praises are already being sung. What I found to be most profound about my capstone

experience was the realization that I have come so far and done so many things I had never thought myself capable of. I became a leader and won the trust of my followers. We worked on a collaborative team to create something that benefits everyone for years to come. This was more than a project, this was a profound journey through education where the puzzle pieces of learning fall into place at last to reveal a student transformed.

## References

Deguire, L. (2020). *Flashback Girl: Lessons on Resilience from a Burn Survivor*. Dr. Lise Deguire LLC.

Kouzes, J. M., & Posner, B. Z. (2017). *The Leadership Challenge: How to Make Extraordinary Things Happen in Organizations (J-B Leadership Challenge: Kouzes/Posner)* (6th ed.). Jossey-Bass.

Riel, J., & Martin, R. L. (2017). *Creating Great Choices: A Leader's Guide to Integrative Thinking*. Harvard Business Review Press.

Robinson, D., Gibbs, J., Parks, B., Rea, V., White, K., & Willis, D. (2010). True North: Discover Your Authentic Leadership by Bill George with Peter Sims. *Administration in Social Work*, 34(3), 307–309. <https://doi.org/10.1080/03643107.2010.481205>