

UC San Diego

Winter 2010 - UC San Diego Health Journal of Nursing: The Unique Power of Nursing

Title

O.R. Nursing: A Complex Practice

Permalink

<https://escholarship.org/uc/item/2zq8g2jd>

Journal

UC San Diego Health Journal of Nursing, 3(1)

Author

Thompson, Kathleen, RN, MBA, BSHA

Publication Date

2010

Peer reviewed

O.R. Nursing: A Complex Practice

By K. Thompson RN, MBA, BSHA, CNOR

If you are a nurse who thrives on innovative technology and is a multi-tasking machine, then the operating room environment may be the perfect place for you! Our surgeons like toys, lots of very expensive, technical toys! Come on in...take a peek into our world!!

Operating room nursing has evolved into a very complex practice, especially over the past two decades with the advent of advanced technology. It takes a minimum of two years for nurses to familiarize themselves with all the surgical procedures and specialties. U. C. San Diego Perioperative Services boasts four locations: Hillcrest Hospital, Hillcrest Outpatient Surgery, Thornton Hospital, and the Shiley Eye Center. These four sites provide a total of 25 operating rooms that cover all surgical services. As a group, we performed approximately 16,000 cases during the last fiscal year totaling 37,000 operating hours. Surgical specialties at our facilities include: Solid Organ Transplant, Cardiac, Burn, Neuro, Head and Neck, Orthopedics, Spine, GYN, Plastics, General (including minimally invasive and robotic), Pulmonary Special Procedures, Vascular, Urology, and Ophthalmology.

Each morning we meet for report. After reviewing any pertinent case information and departmental updates, we prepare for our cases. A typical day includes the following:

- Interview, assess, and check patient; review lab results, consents, paperwork etc.
- Check case cart and preference cards (which list instruments and supplies required for surgery).
- Confer with anesthesia.
- Prepare room for surgery with our surgical technologist partners verifying

instruments, loaner sets, supplies, and equipment; open for case.

- Patient is brought to operating room by anesthesia personnel by 0720.
- Perform surgical pre-brief in the OR suite when attending arrives.
- Assist anesthesia with induction.
- Attend to needs of surgeon, surgical technologist and anesthesia provider throughout the case.
- Document all pertinent information in the electronic medical record.
- Perform sponge, needle, and instrument counts.
- Manage blood products, blood gases, frozen sections, and specimens.
- Notify front desk when closing to call for next patient.
- Call report to PACU and accompany patient during transport.

Each one of us has a specialty. We become the clinical expert, liaison, and resource person for that specialty service. Technology advances more quickly than we do (daily!). As a result, OR nurses and technicians are no longer considered experts in



Kathleen Thompson RN, MBA, BSHA, CNOR is the Assistant Director of Perioperative Services at UC San Diego. She has 33 years of experience in perioperative service. She spent the first 15 years of her nursing career as a clinical nurse in the operating room before entering the management arena.





every case. To meet this challenge, we develop core people to function as service coordinators in each specialty, but each nurse must know enough to rotate through the weekend shifts. We really need to know a lot; here is a little glimpse into a few of our specialties....

We perform a lot of orthopedic surgery. At Hillcrest, the Ortho Trauma Room is filled each day with 'add on' cases that present the day before; in addition, we perform many total joint replacement surgeries. Orthopedics has become progressively more complicated over the years. As you know, it deals with the fixation of bones (206 to be exact) that requires us to develop a strong base knowledge of both the equipment and the multiple instrument sets we use to perform surgery. We have specialists that are well versed in every procedure we do (photo 1, 2). Once our patient is situated and the procedure is in progress, we need to document every detail of the care we give. For these specialty cases, this includes documenting every nail, screw, and plate in the electronic perioperative record. We need to cite serial number, lot number, type, company, size, and quantity for each item; we can use up to 20 implants per case (photo 3, 4)!

Another of our specialties is spine surgery. Setting up for spinal surgery entails opening as many as twenty different sets of instruments and a multitude of supplies (photo 5, 6). The patient is placed on a unique

operating room bed that accommodates positioning to allow for direct exposure of the spine (photo 7). Since space is a rare commodity in our rooms, we have developed towers to house many pieces of our electrical equipment such as our spinal tower (photo 8).

Advanced, innovative technology is ever present in our arena. Robotic minimally invasive surgery is being used by more and more surgical specialties including General Surgery, Urology, and GYN. Each million-dollar robot takes on a life of it's own; we have three Da Vinci Robots that work in this way:

- The robotic telescope has two lenses, one for each eye; this provides the surgeon with 3-D vision.
- The gray light cable has two extensions, one for each telescopic lens (photo 9).
- The scrub tech and circulating nurse drape the camera and perform the scope alignments.
- The robotic arms are then 'docked' and connected to the ports placed in the patient's abdomen while the surgeon sits at a console in the room and operates the robot remotely...
- It takes a 'Village' to do a robotic case... Once this colossal machine is moved into place, its multiple arms need to be accurately positioned and draped in a sterile fashion and a wide array of instruments and supplies need to be opened and set up on a sterile table (see photo 9, 10)

Need a new liver?? Transplant surgery requires a highly specialized team of nurses and surgical technicians that cover the service 24/7. In addition, for liver transplants we have a second circulating nurse in the room to ensure blood can be checked and given in a timely manner. We may use in excess of 200 units on any given case. We perform heart/lung, liver, kidney, pancreas, and cornea transplants. There are strict protocols we must follow for all organ



11



12



13



transplant procedures, so we work in concert with our Lifesharing partners to ensure strict compliance with all regulatory requirements.

Since UCSD functions as the regional burn center for San Diego, we have developed a highly skilled surgical team devoted to the care of critically ill burn patients; we carefully monitor every aspect of their care. Fluid management is of the utmost importance as we debride and graft these patients to support their survival. Grafting is a specialized procedure most commonly used for this population of patients. We use different grafting products based on patient need and the severity of the burn; they may include allo, auto, transcyte matrix of bovine tendon collagen, and porcine. When auto grafts (using the patient's own skin) are the treatment of choice, we need to expand the tissue to provide a firm surface for the split thickness skin graft harvesting (photo 11). This is done by injecting fluid that contains a vasoconstrictor under the skin and is referred to as a 'tumescent' procedure.

Our knowledge base is multidimensional and exceeds the parameters of actual surgical procedures. To perform our roles effectively, we need a basic understanding of multiple entities. It is our job to point out things that may adversely affect patient outcomes and

prevent them. We need to be familiar with the sterile processing area and all that it entails, especially the cleaning and processing of instrumentation. Ongoing construction projects complicate our lives, but the outcome will be worth it!! We are under construction at the present time to provide a larger work area and improve storage capacity for our Sterile Processing Department. We have literally thousands of sterile supplies, instruments, needles, and specialty items (photo 12, 13); one entire wall in our storage room is dedicated exclusively to suture alone (photo 14)! We have an extensive variety of choices including Silk, Chromic, Nylon, Monocryl, PDS, and Vicryl; there are 251 combinations on the wall with various size needles. Equipment?? That is the never ending story....

Our world is ever changing, but our core remains the same: the patient is the heart of our practice. All of us work together as a team, a family actually, to provide the finest patient care possible. We strive to do our best every day to make a difference in someone's life and promote excellent surgical outcomes. We have our obstacles and challenges, but seem to find a way to overcome them together. We recognize that we need to take our jobs, but not ourselves too seriously.....and we love what we do! photos 15,16,17,18,19)

14



15



16



17



19



18

