

The History of the Intensive Care Unit and Nursing at Lancaster General Hospital Lancaster, PA

The Early Years: Part 2 1970s



By Elizabeth J. Thompson, RN, BSN, MBA

The 1970s

Ruth Hepler/Martha Gingrich/Elizabeth Thompson/June Stum/Fran Peachey/Darlene VanOrmer/Anne Creitz/Toni Ehrhart/Debbe Milliken/Darla Cardin/Cathy Myers/Lori Good/Patsy Fasnacht /Kay Knepper/ John Esbenshade III/Alan Peterson

The 60s rolled into the 70s with much or most of the before-mentioned practices continuing. But change was in the air and the 1970s was a period of great change. Nurses evolved from primarily administering basic nursing care, having a basic education and applying what they learned at the bedside, to becoming increasingly knowledgeable about, for example, arrhythmias, 12 lead EKGs, cardiac medications, and physical assessment. They were providing more active assistance with a code blue, and becoming adept in the management of patients with a range of highly sophisticated equipment to support patient care. Examples of equipment introduced during this time include more versatile ventilators, dialysis machines, temporary pacemakers, intra-aortic balloon pumps, arterial lines, and physiologic monitoring systems. Surgical intervention also evolved assisted by newer, complex endoscopic procedures and radiologic discoveries, like ultrasounds and CT scans, which helped to revolutionize diagnosis and treatment.

The Unit

By late 1970 a now expanded 20 bed ICU opened on the 2nd floor Stauffer wing. A larger unit demanded increased management support: Ruth Hepler assumed the Head Nurse position on the medical side in early 1971, with June Stum remaining solely on the surgical side. Surgical had 9 open unit beds in a straight line; medical had a more of a private room makeup, with 9 beds in a U shape configuration, many of which having sliding glass doors. Both sides had an adjoining private room where the two units



Figure 1: June Stum, RN, BSN, adjusting a bedside Burdick monitor.

a connected to one side. An inner central corridor linked both sides with rooms off to the left and right, including a small staff locker room and a blood gas/storage room. The pantry was tucked away behind the desk on medical side. Located close to the exit on surgical side was a small dirty utility room. Bedside Burdick monitors were installed throughout, however, not all patients were automatically monitored on surgical side. Medical



Figure 2: Nurse charting and central monitoring system.

also had a corresponding set of central monitors at the nurses' station. Basically, the head/charge nurse would scan the cardiac rhythms as often as possible. The unit secretary became adept at reading the patterns as well, particularly significant arrhythmias. Even a knowledgeable Red Cross volunteer might be called in to assist. Surgical had no central monitoring at its nurses' station. Initially, Unit Directors were Dr. Davidson on surgical side and Dr. Mann on medical side. Visiting hours were two persons at a time, adults only, for 5 minutes on the half hour.

Staffing only gradually improved and it was an uphill battle to persuade Nursing Office leadership of the need, not only for better nurse to patient ratios, but for more formal education and standards. There were 2-3 nurses scheduled to a side, with each side having 1-2 nurses' aides to assist. Day shift was usually assured of a unit secretary; evenings sometimes, nights not at all. A house orderly was available to assist with patient care, including patient turning and some transport. One great orderly was Tom Westphal, who later became an orthopedic surgeon at LGH. The unit secretary, Toni Ehrhart, stayed on in the new unit for a time; she still remembers her first day on the new wing on the second floor working with Elaine Davis, Martha, Ruth, and June amongst others, and how the team all pulled together.

They moved the critically ill patients down from the 6th floor, many of whom were on ventilators, and had to quickly adjust to the unfamiliar environment. Other nurses who transferred to the new unit from 6 East that Martha recalls include Sandy Hinkle, Emily Siemasko, Shirley Conlin, Janine Guintier, Annie Creitz, Betty Pearsall, Cordelia Stanley and Sue Sydansk.

Red Cross volunteers assisted with patient care, filling water cannisters, helping turn patients, tidying the bedside cabinets etc. One everyone remembers is Bobbie Stewart who also taught innumerable Red Cross CPR classes. If there was no housekeeper available, nurses shared in the damp dusting of bedside cabinets and floor mopping when a patient was discharged, transferred to another floor, or there was a major spill. It was always “all hands-on deck.” According to Liz Thompson, who worked that Friday evening shift on surgical side when Three Mile Island went into partial meltdown in 1979, only 2 nurses total remained by 7 P.M, with no aide, as staff were leaving left and right. Every patient on surgical side was on a ventilator, all ten of them, all critically ill. Somehow everybody got essential care. And thankfully, there were no emergencies.

Martha graduated in August, 1970 along with Janine Guintier. Martha had



Figure 3: Martha Gingrich, RN, BSN

completed a student rotation in ICU, so that experience had been introduced by then at the LGH Nursing School. Janine went on to be a nurse clinician for Dr. Bonchek, and nurse manager for both 5 East and Radiology Intervention Units. Note that nurses were now being paid the princely base wage of \$600 a month.¹ Everyone worked every other weekend, head nurses included, until 1991. Martha and Darlene VanOrmer, hired in

1972, rotated charge nurse positions, until June left a couple of years later to lead the newly-opened Intermediate Care Unit (IMCU) on 2 West. (The unit is interchangeably called Intermediate Intensive Care Unit, ICU.) Martha remembers being asked in the stairwell by the Director of Nursing, Ruth Todd, if she wanted June's position. It shows how much we have progressed in terms of recruitment practices!

With Martha's promotion, Darlene essentially assumed the 2nd in charge role overall, as she would relieve both Ruth and Martha on their days off. There were others who could also take the lead on dayshift, including Betty Pearsall and Angie Joe. Darlene worked all her professional life in ICU, initially fulltime, and then part-time following the birth of her children. She states there was no orientation program; that it was "sink or swim.... I showed up on my first evening shift, was given my assignment, and expected to know the routine and what to do. (This was at a time that I was still confused between a "drawsheet" and a "bath blanket.") Thankfully, Elaine Davis saw my perplexed look, and took a few minutes to tell me what the evening shift was, when dinner came, and gave me a quick tour of the unit. I was forever grateful and quickly adjusted to 3-11 in ICU." Darlene retired four decades later in 2016, ***the oldest serving ICU nurse to date***. What a testament to devotion to her profession! She states that she loved the challenge of coding patients most of all; it gave her a "real adrenaline rush", and she loved helping successfully resuscitate patients. Those were the days before the "rapid recovery teams" that have contributed to a precipitous drop in codes called throughout the hospital. According to Darlene, "never a day went by without a code being called."

A number of other new registered nurses (RN) were hired into the ICU during this decade, especially in the early summer months following graduation. Some came with previous med-surg and/or critical care nursing experience. Not all can be identified by name, but some include Fran Peachey, Bev McCann, Pat Cohen, Darla Cardin, Debbe Millikin, Joyce Wenger, Liz Thompson, Patsy Fasnacht, Jeanne Donlevy-Arnold, Shelvy Thompson, Cathy Myers, Lori Good and Kay Knepper. Many of them provided feedback for this section/article. As far as we know, only two Licensed Practical Nurses (LPN)s ever worked in the unit. Annie Creitz (Spangler)

was hired in 1971, briefly to the old unit, and worked in ICU until 1977, when she transferred to the cath lab. There was no orientation on 6 East. In fact, on 6 East when she first arrived, she was so new she had no idea how to call a code. Told to call “222” per procedure by the nurse, (Sandy Hinkle) for a coding patient, Annie called the operator and hung up. When no one came she repeated the process, not once but twice, until it was figured out what was happening. Sandy intervened on her behalf, for which she was immensely grateful. The other LPN left the unit soon after and the nurses from that era cannot remember her name. LPNs were given great latitude in the unit. Annie could not administer P.O or IV push medications or start IVs, because of limitations with her scope of practice. But she could hang IV infusions which the RN would hang, defibrillate as needed, take the same patient assignment as the RNs, and be routinely assigned highly complex patients. She remembers a charge nurse assigning her a “VIP” patient because she “gave such great care.” Annie has never forgotten that. Her response: “I give VIP care to all my patients.” And she did. In fact, she cared for Dr. Kirchner when he was a patient. For Annie, the best part of working in ICU was the challenge and continuous learning, as well as the team work, not just within the department but throughout the hospital: respiratory therapists, lab technicians, pharmacists, X-Ray personnel, etc. Many of these employees would meet after work at a diner and regale each other with stories, tears and laughter. She tells the story of one of Dr. Davidson’s patients, a young boy of whom he was very protective, not wanting to transfer him



Figure 4: Anne Creitz, LPN (right)

to Pediatrics. In fact, the child was discharged from the unit, almost unheard of in those days. The boy was bored and it was a lovely sunny day, so Annie asked if she could take him outside in a wheelchair. She remembers he picked flowers outside Mr. Wedel's office and basked in the sunshine, making for a very therapeutic experience for him.

Great aides and secretaries continued to be hired into the department, some staying until retirement like Annie Landis, nurse's aide on nights. Names that stand out include Suzy Kelsy, Karen Dinkle and Janet Metzler, dayshift aides, and Cindy Sultzbach, Pam Wiley and Audrey Baxter, day secretaries. Great evening aides included Joannie Mull and Kathy Greenawalt. Joannie still worked part-time until her 80s! Audrey came in 1975; remaining in the unit until retirement in 2019. The secretary Toni initiated a ledger including ongoing census, biographical details and diagnoses—an invaluable historical reference before computers. With no formal training, secretaries and aides became adept at recognizing lethal arrhythmias. Ruth tells the story of when Cindy Sultzbach performed a precordial thump on a patient when he went into v tach, as she couldn't get a nurse's attention. She had previously observed Shelvy Thompson successfully performing the procedure. The patient opened his eyes and asked Cindy, "Why did you do that?" She answered, "Because the nurses do it!" From then on Dr. Kirchner called Shelvy, "One blow Thompson."

Another important point about this decade is that the newly-approved Family and Community Medicine program, developed and led by Dr. Nikitas Zervanos, was introduced in 1969. The program is now recognized nationally for its rigor, caliber of residents and quality outcomes. Two standout residents of that era, according to numerous reports, were Ken Brubaker and Clair Weaver. They would teach the nurses



Figure 5: Nikitas Zervanos, M.D.

what they knew to support patient care, including key arrhythmias. Residents had a rotating schedule throughout the major specialties and took call every 3rd night. Many of them went on to work in doctors' offices throughout the county. They were very green when they first arrived and grateful for the support and guidance from seasoned nurses on the floors and in the intensive care settings. "You know more than I do, you just tell me and I'll write the order" said one very new resident to Debbe Milliken when he was called to his first code. Dr. Mann could be tough on them, too. Ruth tells how he would invariably quiz a resident new to the rotation when a patient was in atrial fibrillation. He would ask, for example, about specific heart sounds. However, certain heart sounds do not occur in atrial fibrillation, and the resident would visibly struggle and guess the answer, to his/her chagrin. And no one could chew gum in Dr. Mann's presence.

Typical Shift

Unless you were working over to cover for the following shift, you were always scheduled for an 8-hour shift: 7am-3:30 pm; 3-11:30 pm; 11pm to 7:30 am. Twelve-hour shifts came relatively late to the ICU. Staffing assignments were split strictly amongst the two units; all the staff rotated between sides every 4 weeks. Newly graduated orientees would be assigned with another nurse for a couple of weeks; those nurses hired with experience, like Janine Guinter, Liz Thompson, and Bev McCann, were expected to take an independent assignment immediately following a few days of hospital orientation. Report started promptly so you needed to be in on time. In those days, everyone listened to report given by the previous shift charge nurse. The head/charge nurse continued with the practice begun on 6 East of rounding with the physicians; making phone calls to them for updates and new orders; administering scheduled medications; signing orders off, completing unit rounds/consulting with the nurse regarding patient status and condition changes; covering for lunch or emergencies as able; and making the assignment for the next shift based on acuity, staffing and competence level. For the bedside nurse the focus was on your patient(s). Although you usually had up to 4-5 patients as your assignment, as a bedside nurse you could also be on a one-to-one with a very



Figure 6: Shift report

unstable patient. A patient may need transport to another facility, a frequent occurrence before open heart surgery (OHS) was implemented at LGH. Often calls were made to find someone to do that instead of sending the shift bedside nurse. Once you transferred a patient, it was very likely there was someone else to fill the bed. Turnover averaged 2-6 individuals a day. But every day was different so averages do not mean a whole lot.

As a bedside nurse, you jotted down key points during report about your specific patients. Following that you perused the Kardex to ensure you knew about specific orders and when treatments were scheduled. If the off-going nurses were still in the department, you would catch up on any new developments with them, or ask them to clarify any communications from report. Typically, you then went right in to see the patient you deemed the most critical, doing a quick overall scan of the patient's status to determine if anything significant had changed in the interim. You might not get back to her/him for a while.

Aides took the standard vital signs (VS) and documented them in the medical record. Once invasive lines began to be inserted the RN would document VS displayed on the bedside hemodynamic monitor. Thereafter, VS would be obtained as ordered depending on patient status, or duration of time following admission/surgery/procedure. Hemodynamic values were noted a minimum of hourly, along with urinary output if a foley were in situ. Typically, there was one in place; everyone had a foley in those days! IV rates needed to be counted hourly and IV sites evaluated frequently. A fast-flowing IV, if it became infiltrated, could induce significant edema in a short space of time. That may be because in those days all the

patients had to have an 18-gauge catheter with a metal stylet inserted, a standard until 1975 when plastic stylets became the norm. Once IV pumps were introduced late in the decade, it eliminated the constant calculations, and reduced the frequency and severity of infiltrations, as well as the every 15-minute BPs required when a vasoactive drip was infusing. Infiltrations needed to be wrapped in moist, warmed towels or wash cloths, encased in a blue pad and the limb elevated on a pillow. Frequent assessment of the site was essential, along with 1-2 hourly changes of the moist towels. Extravasation of the tissue and ensuing necrosis was not unusual, particularly if the infiltration were due to a vasoactive drug.

As a bedside nurse you also might participate in rounding with your patients, always rather in the background, to clarify and update the provider and charge nurse in real time. Often, you were just too busy with patient care. However, rounding was a great opportunity for nurses and residents alike to learn and be engaged with the attendings. Some prn medications could be administered by the bedside nurse. Calls could be placed to physicians independently, but generally, all information regarding new orders, requests etc. were funneled through the charge person, especially on the off shift. All this could be rather frustrating to nurses who had worked elsewhere having a primary nursing setting, where they made independent judgements, called and rounded with physicians, administered all their own medications, and gave their own report. With changing unit leadership later in the decade these important changes were introduced.

Nurses were (are) always prioritizing their shift activity based on scheduled and unscheduled events. Thus, one patient might be going to the OR for a procedure and needed to be seen earlier than a more critical patient. Having said that, a “stable” patient’s status could change in very short order, and the priority change accordingly. A code could be called at any time, in house, or in the department. If you were on code call for the house, you ran for the MaxCart and barreled down the hallway to the elevators. Someone would cover your patients until your return (often with the coding patient in tow on the MaxCart). Your aide left with you. Per Kate Cunningham (an aide who graduated as an RN in 1980), during a code, aides documented medications, defibrillations and VS. They called out if it was time to

consider re-bolusing with sodium bicarbonate, if 5 minutes had ensued since the last one. They were also assigned the daily crash cart check.

A full body assessment was completed once a shift. Thereafter, targeted systems assessments were completed at least at a halfway point in the shift. A repeat full assessment was also completed when the patient returned from the OR. But it was an ongoing process as you completed treatments like trach or wound care, administered a tube feed, or helped the aide with the two hourly turns (a great time to listen to breath sounds). “You started at one end of the ward and worked your way down, stopping briefly to check a BP, put someone on the bedpan, respond to a cardiac monitor alarm etc.,” says Annie.

Decubiti (pressure or bed sores) were uncommon, even in the long-term or paralyzed patients. You knew if a skin area under pressure became reddened the patient needed to be off that affected area as much as possible. Little was understood about pressure sore development, however. One thing considered counter-productive today, vigorously rubbing the reddened area when you turned the patient, is no longer recommended. Should there be an area of true skin breakdown, one treatment included maalox/methiolate/heat, as described in the 1960s section. Another approach was to pack deep decubiti with sugar. Sugar granules soak up any moisture. Bacteria do not thrive in dry environments, so a dry environment facilitated wound healing. A decubitus on the back of the head created its own special challenge and a different approach was needed. For one such case, to cushion and relieve pressure in a quadriplegic patient named “Cathy”, Darla Cardin remembers improvising by placing a 1000cc plastic IV bag under her head.

Full body baths were begun on night shift and those patients not yet bathed were completed on days. Assist baths were usually left to the day shift to increase the patient’s independence. Daily weights were obtained on night shift (often timed with the bed bath). It could take at least 3 people to move the patient onto the bed scale. And what a creaky, noisy contraption it was! On evenings, patients received a backwash and then another backrub with lotion. In those days this “evening care” was considered sacrosanct. And somewhere in the shift you *might* get a break!

Another task assigned to the night shift RNs was that of rewriting the medication record. These records allowed for documentation on the medications scheduled for 5 consecutive days. In those days, there was a sheet (or more than one) for routine meds and one for prn or stat meds. As a medication was discontinued or modified, you “yellowed out” the line with a highlighter. Once the sheet was full, the whole sheet had to be rewritten, even if 5 days had not ensued. The whole “rewrite” procedure was fraught with potential for error. And unfortunately, those occurred due to omissions, misreads and the like. This, despite the fact that the bedside nurse reviewed all physician orders for the previous 24 hours to ensure they were appropriately transcribed. Just as is the case now, patients were at risk for other untoward events and injury, particularly falls, for which nurses and aides were constantly trying to prevent.

About an hour before the shift was over, a total intake and output (I/O) calculation was completed. Charting of these, and much of the rest of the activity for the day was frequently left until after report due to time constraints. Charting was brief and to the point. The nurses’ notes at that time had 3 columns; one for each shift, with side headings related to key aspects: activity, diet, bowel movement, hygiene, to name a few. The process of writing with a different color for each shift, as described in the 1960s, continued. Twenty-four hour I/Os were calculated by hand daily at 6 A.M. Another night shift task was to evaluate the medication needs for the next 24 hours, communicating those needs to pharmacy. Darla Cardin, later an Infection Surveillance nurse in the hospital, shakes her head about another nightly routine. “We had to change all the IV tubings nightly at the exact same time. It didn’t matter if an IV bag were due to run dry in another hour or so, the tubing had to be changed at the specific time.”

Aides continued to be nurse extenders: Kate Cunningham even recalls hanging IVs and blood, practices that are no longer permitted. They rinsed and cleaned bedpans and urinals, then autoclaved them and cleaned with Comet between patients. Reusable suture sets were soaked in alcohol and later, hibiclens, before being sent to Central Supply to be sterilized. They were returned, one for one, with scissors, forceps and hemostats, wrapped in the proverbial green sterile cloth.

Bedside nurses, wherever they work, are themselves at risk for injury, from falls, sprains, needle sticks or being hurt by a patient under duress. They particularly need to be on their guard with restless, agitated patients. One day, June suffered a blow to the side of her head from just such a patient and needed to go to the ED. Thankfully, her jaw wasn't broken and she did not suffer a concussion. She actually returned to the unit the same day, despite being very shaken and experiencing some pain. Of course, she would not have allowed an employee to return! Nurses are taught proper lifting techniques to avoid back injuries. Despite their best efforts, these occur with both nurses and aides. Some spend months receiving therapy for back and other lifting-related injuries. Those days we attached a needle to a syringe, drew up the medication, capped it, administered the medication, recapped, then separated it from the syringe to dispose of. This procedure was repeated multiple times during a shift. Each step in that process carried the risk of a needle stick.

Sustained stress, facing life and death situations daily, the expectations of families, and high expectations you have for yourself to be thorough and do your best for your patients, take a toll. The individual can be left feeling exhausted, lacking in motivation and empathy. The term "burnout" was actually coined in the 1970s by Herbert Freudenberger, an American psychologist.² We didn't know about it then, but it was, and is, a very real phenomenon with healthcare workers. There was no support mechanism, you relied on your co-workers for that.

In the midst of the activity, drama and intermittent crises, the nurses could have moments of calm, where the pace was slower and there was time to talk with patients and families, and with each other. It was a time to get to know the patients personally. One evening, Darlene was caring for a gentleman who had been a patient for a while. He was pining for his German Shepherd dog. The dog was also pining and not eating. The nurses huddled together to discuss what could be done to relieve the patient's anguish. They decided to call the family to bring the dog in to visit. No calling the supervisor or doctor for permission. Per Fran, "it was our unit."

Cardiovascular

All the nurses were intimidated by the E for M - Electronics for Medicine-machine,³ the first invasive line monitoring system which Dr. Mann insisted the hospital purchase. "It was like a "large industrial freezer with monitor screens" according to Debbe. "Higher than me" says June and "I'm 5 ft 1 inch." E for M was one of a range of physiologic monitoring devices used in cardiac cath labs since the 50s. Due to their size and that they could be used for two patients simultaneously, it made for constant juggling of patients should they need invasive lines inserted. The infusion line for the catheter connected at the machine and needed frequent recalibration to ensure it was working properly. Per Fran, you used a screwdriver to calibrate it and were always calling cath lab personnel to troubleshoot. Infusion rates were also difficult to calculate. Everyone cheered when better monitoring hardware was introduced. First it was with the portable A-O (American Optical) monitors which also needed to be wheeled between patients, but at least they were smaller and easier to manage. Later, hemodynamic monitoring, as it came to be called, was incorporated into bedside A-O monitors. Arterial catheters were initially metal and inserted percutaneously into a radial artery site, sutured in place, then stabilized to limit movement and prevent dislodgement. A rolled washcloth was placed behind the wrist with the hand hyperextended over it. The arm was subsequently extended onto an arm board with wide tape securing the setup both at the hand, forearm and antecubital regions. Following arterial line removal, the site had to be held for a minimum of 10 minutes. Often those "holds" could last up to 30 minutes or more, particularly if the patient were receiving anticoagulants.

Also intimidating was the Emerson Intraortic Balloon Pump (IABP) machine, another rather towering, green structure placed at the end of the bed. Its use was reserved primarily for patients in cardiogenic shock, and it was one of the early devices for invasively augmenting blood flow and cardiac output. Surgeons inserted the catheter; cardiologists managed the balloon pump cycling. Typically, the machine was set to inflate 1:1 with the patient's own heart rate. As their condition improved the cycling was weaned down to 2:1, and then 3:1. It was risky to keep the balloon in place for any extended time. One reason was the potential to lose a

peripheral pulse due to intravascular clot formation. As the nurse, you were frequently assessing both for the presence of a peripheral pulse and its quality. A specially fashioned foot cradle was placed over both legs and covered with a sheet. You needed only to lift the sheet to check on the posterior tibial and/or pedal pulses. Each cradle was equipped with two bare bulbs with low wattage, one on each inside upper arch of the cradle, which, when the electric cord was plugged in, provided a modicum of heat to the legs to enhance blood flow. Diminished blood flow to the legs was not uncommon. Darla Cardin remembers a patient, JS, who lost her pulse on the affected side. Her leg was becoming cold, despite the heat. Physicians were notified, but chose to wait till the morning to examine her (Darla worked night shift). Eventually JS needed a below-knee amputation, as her peripheral blood flow could not be restored.

If the balloon pump broke down on night shift, Debbe Milliken remembers having to hand inflate the catheter balloon with a 50cc luer lok syringe, while awaiting the cath lab crew to come in and troubleshoot. You did your best to synchronize the inflation/deflation with the aortic wave pattern. As the pump was powered by electricity, manual balloon pumping was required when transporting a critically ill patient needing emergency heart surgery, be it to Lankenau or Hershey Hospitals or the University of Pennsylvania. Manual pumping by a nurse or cath lab technician was needed to avoid clot formation on the balloon itself, which could result in embolization leading to a stroke. These transports were prior to OHS being performed at LGH. As the accompanying nurse all you took was a small tackle box containing atropine, aramine, epinephrine, lidocaine, sodium bicarbonate, and an ambu bag. Time was usually of the essence. Once the decision for transfer occurred, the move was made as quickly as possible. These were often hair-raising trips. One of Darlene's patients coded on route near Coatesville, and a police escort was provided to rush the patient to Brandywine, the nearest hospital.

By 1972, when Dr. McCann returned from the Mayo Clinic after achieving his board certification in cardiology, the cardiologists were typically seeing over a hundred patients daily. Treadmill stress tests were being performed in the Cardiology Dept. (no longer relying on the 2-step method described in the 1960s

section), followed then by echocardiograms introduced in 1974. With those studies nurses began to expand their knowledge of cardiac physiology. The Cardiologists would see their non-ICU inpatients, interpret the daily EKGs and other diagnostic studies in the cardiology department, then walk down the hall for unit rounds. EKGs were taped onto the patient's wall at their bedside. In those earlier pre-coronary intervention days, the full progression of an evolving MI



Figure 7: William McCann, M.D. (center)

could be captured and documented (along with typical enzyme changes). The nurses and residents were grilled as to what the daily changes were and what they meant.

Arterial lines and Swan Ganz catheters were inserted at the bedside, in the x-ray department, and later, the cath lab when it opened in 1975. As the catheter was advanced into the right atrium, right ventricle and pulmonary artery, and subsequently “wedged”, nurses became adept at differentiating the specific waveforms and numbers associated with those intra-cardiac structures. When cath lab functions were still being performed in the x-ray department, ICU nursing personnel always accompanied the patient, providing assistance and watching the monitors and responding to rhythm changes during those procedures. Elaine Davis and Betty Pearsall were frequently asked to assume this role. Cardiac catheters were initially performed via a cutdown at the radial site; it was only later that the femoral site became the standard approach. Interestingly, the radial approach has become more of the standard again in the 2000s.

Instead of only the residents or attendings, nurses now began to shock a patient's heart should he/she become unconscious from ventricular tachycardia or fibrillation. Some were taught the basic mechanics in their arrhythmia class, others

have no recollection of any classes, just learning “on the job.” It is hard to describe the anxiety and dread every nurse feels anticipating their first defibrillation; that at any moment they might be required to run with the cart, confirm pulselessness, apply gel pads to the chest, charge up the machine, tell everyone to stand clear, and then release the electric charge safely. To decrease the possibility of brain damage from lack of circulating blood volume and increase the likelihood of a return to sinus rhythm, defibrillation needs to be performed as speedily as possible. Every ICU nurse remembers her/his first defibrillation and how thrilling and unnerving it was. Cardioversion is another way to shock the heart out of certain tachyarrhythmias, restoring it to normal rhythm if possible. It can be performed under emergent conditions or be a more elective procedure. A cardiologist is present and oversees the procedure. Regardless of the situation, nurses need to continue to monitor the patient closely to reduce the potential for arrhythmia recurrence. Usually, that includes the administration of antiarrhythmic agents.

Central venous pressure (CVP) readings occurred infrequently. They were mostly with surgical and trauma patients who came from OR with the CVP catheter in situ. It was a new way (at least for the nurses) of measuring circulating fluid volume, by providing a close approximation of the right atrial pressure reading. A manifold was screwed onto the IV pole connected to the IV tubing. The patient was laid flat and a leveler used to establish the fluid measurement in the manifold at the phlebostatic axis. Fluid first fluctuated in the column and then stabilized at the cardiac pressure point. Normal CVP pressure readings were in the range of 4-12 centimeters of water pressure. Low readings indicated a need for volume replacement.

With respect to pacemakers, standard insertion at that time for a temporary pacemaker was via a cutdown in the (usually right) antecubital vein. The arm was laid on a bath blanket, which was covered with a pillow slip and wrapped around the arm. Three wide tape strips secured the blanket cover ends together. To prevent dislodgement, the patient was not supposed to roll on that side, or really move much at all. But move they did, often causing catheter dislodgement. Therefore, trips back to cath lab or x-ray for repositioning were not uncommon. Meanwhile the patient

could be severely bradycardic, from loss of pacemaker capture, and/or inappropriate sensing, putting the patient at additional risk for hypotension, ectopy, and even asystole. If a patient's new permanent pacemaker needed a rate change, screwdrivers were kept at the bedside to make such an adjustment. You gave it a "tweak" according to Annie.

Medications

Pretty much all cardiac patients experiencing premature ventricular contractions (PVCs) were administered lidocaine, in 100mg boluses, followed by drips at 1-4 mg/minute. If the PVS were multifocal, in a pattern like trigeminy, were occurring close to the "T" wave, were in runs, or occurring more than 6 in a minute, they were seen as precursors to a lethal arrhythmia and sudden death. If those precursors appeared on the screen, there were standing orders to administer lidocaine. It turns out we significantly over-administered lidocaine and have since substantially backed off from its routine administration. It is still a mainstay for ventricular ectopy during a code, however. Alternatives to lidocaine included Pronestyl (procainamide), Quinidine (quinidex), Bretylol (bretylum tosylate) and, if the patient were digitalis toxic, Dilantin (phenytoin).

With respect to other cardiovascular medications, the range of these greatly increased in the 70s and beyond. Levophed (norepinephrine) was a staple in codes, followed later by dopamine. Levophed, "leave 'em dead, Levophed" was frequently run wide open as a last-ditch effort for patients in refractory shock. Dopamine (intropin), a sympathomimetic, came later in the decade and was used for low blood pressure situations. Of course, Aramine (metaraminol) washes and boluses, (as described in the 60s section) remained a mainstay. The first beta blocking agent, Inderal (propranolol), revolutionized the treatment of angina pectoris as it decreased the workload on the heart. Liz remembers administering the medication as part of a research trial about 1967, in Auckland Hospital, New Zealand, where she trained. It was also valuable in treating supraventricular tachyarrhythmias. Heparin remained a mainstay to prevent recurrence of coronary and other thromboses, along with Coumadin (warfarin). Pre-Nipride use, Arfonad (trimetaphan) was infused for

individuals in hypertensive crisis, particularly from pulmonary edema and dissecting aortic aneurysm. By the mid 70s, a bristojet of Hyperstat (diazoxide) was commonly ordered for hypertensive crisis.

“We gave atropine all the time” says Annie as patients “bradyed” out for a multitude of reasons. And Isuprel (isoproterenol) infusions were run extensively to maintain an adequate heart rate, until a temporary pacemaker could be inserted. Lasix and digitalis were still the prime medications for heart failure, but they were now administered either IV or orally. “It seemed like everyone received Lasix for low urine output” says Darla.

Nitroglycerine (NTG) drips began in the later 70s to prevent/reduce chest pain from angina and reduce preload in heart failure. Pharmacy crushed NTG pills into a glass IV bottle and covered it with a black plastic bag. The dose was listed in milligrams, derived from those NTG pills, making it difficult to exactly identify the dose administered. Note that intramuscular



Figure 8: Martha Gingrich, RN, BSN, starting an IV with Bobbie Stewart (Red Cross volunteer).

injections were becoming a rarity as the intravenous route became the preferred route if the patient could not take them orally. In addition, nurses were learning to insert their own IVs.

Patients in severe diabetic ketoacidosis were admitted to ICU until the IMCU opened, then they were usually cared for in that department. Fast-acting, regular insulin had been available since the early 1920s. It saved and prolonged countless lives, including Lancaster’s own Charles Demuth, the artist. Various longer acting insulins had been available since the 1930s.⁴ These insulins were all routinely administered in ICU, based on blood sugar readings and a pre-determined “sliding scale.”

For sedation, chloral hydrate, seconal and valium were typically prescribed. If appropriate, based on their clinical status, all the patients were offered sleeping pills at night (and often repeated). Cathy Myers also remembers the medication “bibles” nurses constantly consulted. One was a reference sheet to assist with calculating drip rates and dosages. The other was a well-worn sheet which itemized drug incompatibilities.

Intracardiac/Epicardial/Pericardial Considerations

Not only was epinephrine administered intravenously, but also intracardiac by a cardiologist if the patient wasn't responding during a cardiac arrest. Liz remembers how slick Dr Gentzler was in using the subxiphoid approach to inject the heart with a bristojet of epinephrine, as a last-ditch resuscitative measure. The nurses were educated to recognize muffled heart sounds, signifying a possible pericardial effusion or tamponade. Epicardial taps for effusion were not uncommon, with a drain usually left in place for daily drainage as necessary. This called for strict attention to the sterile field, for not dislodging the catheter, and for limiting patient activity. It was a closed system, thus was never changed. A cath lab tech would usually complete the daily drainage into the accompanying bag, if ordered. However, should the patient exhibit a sudden, severe increased shortness of breath (SOB), the nurse could turn the stopcock to drain fluid into the bag. Only cardiologists removed the catheter when appropriate.

If the patient had suffered a transmural MI, you listened closely to the quality of heart sounds, particularly if the individual had a recurrence of chest pain. Rather than ischemia, it could be related to pericarditis. Friction rubs would signify inflammation around the pericardial sac indicating pericarditis. Diagnosis was with the rub, fever, ST elevation and an elevated erythrocyte sedimentation rate (ESR or sed rate). Indocin, (indomethacine), a nonsteroidal anti-inflammatory drug, was usually successful in reducing the inflammation. However, it is no longer the drug of choice as it can inhibit collagen formation at the site of injury. Patients were admitted with Dressler's Syndrome, weeks, even months after their acute coronary event. This was a later consequence of the inflammation, whereby it induced an autoimmune response within the pericardial sac. Symptomatology was the same.⁵

The cardiologists would talk the nurses through the abnormal heart sounds and other characteristic symptoms of Dressler's syndrome and other syndromes, be they rubs, murmurs, muffled sounds, or extra heart sounds, and use them as teachable moments, for which the nurses were very grateful. It helped enormously in their professional development and assessment skills. Likewise, attending physicians from the multiple specialties would contribute to nurses' knowledge with their patients' unique attributes.

Cathy Myers vividly recalls a hair-raising situation with a middle aged, female patient who had a pericardial tap performed for pericardial effusion, and who began to bleed profusely following it. "She was basically exsanguinating." It would have been the winter of 1978, as Cathy was 8 months pregnant. The patient was receiving rapid fluids through her Swan Ganz, and an IABP had previously been inserted. She was also intubated. Her lack of sufficient intravascular blood volume could not only result in irreversible shock, but was highly problematic with an IABP. Immediate blood replacement was essential if she were to survive. Thus, Dr. Purdy inserted a large bore catheter into a larger ankle vein, opposite to the balloon pump leg, with a stopcock attached. Meanwhile, Dr. Gault removed blood via her epicardial catheter into a heparinized 60 cc glass syringe. Once he turned its stopcock off, he handed the syringe to Dr. Purdy to reinfuse through the ankle vein. That process was maintained on a continuous cycle. Next, the patient was placed into an ambulance to take her to Hershey Medical Center for emergency OHS. En route was Cathy, replacing Dr. Gault in withdrawing the blood into the syringe; Dr. Purdy continuing to reinfuse; a pulmonary tech bagging the patient; and a cath lab tech managing the balloon pump. It was very tense, very cramped and very hair-raising. It had been snowing heavily and only one lane was open on Route 283. Oh, did I mention Cathy was 8 months pregnant? The patient was still alive when they reached Hershey, but Cathy was unable to determine how she fared subsequently.

Early Formal Cardiac Education

Formal cardiac and other systems' education remained somewhat haphazard and critical care nursing programs were only formalized in the early 80s. Therefore, the cardiologists took the lead on educating nurses on the new cardiac technologies

and equipment and critical thinking inherent with using them. For example, Dr. McCann taught about arrhythmias, Gentzler about heart sounds and Gault, cardiac output measurements and Swan Ganz pressure readings. Swan Ganz catheters and IAPBPs were introduced in 1974 and 75 respectively; temporary pacemakers around the same time.¹ Darla remembers the Rocom course, which each nurse took to qualify them to be code team members. It was a precursor to the Advanced Cardiac Life Support course (ACLS), now the standard for emergency intervention by nurses, physicians, first responders, and other healthcare professionals. One night, Darla and Debbe were in charge on night shift on their respective sides, not too long after graduation. Neither had yet attended the Rocom course. Darla remembers strategizing with Debbe “what we would do if a code was called.” And they were the “senior” nurses on duty! There were unit standing orders covering emergency and low output situations, be they defibrillation; administering oxygen, atropine, aramine, lidocaine or lasix; infusing normal saline in a rapid bolus; and calling a physician stat or calling a code.

Dr Purdy performed most peripheral and carotid surgical bypass surgeries at that time, and they all came to the ICU postoperatively. Dr. Purdy joined Drs. Kirchner and Pontius in 1977. He taught Martha and the nurses about vascular perfusion, an entirely new concept, and he was an early exponent for drawing central venous gases to assess perfusion and for signs of impending shock. These are not to be confused with arterial blood gasses or the CVP readings previously described. Samples were drawn from the proximal port of a Swan Ganz catheter. A normal venous gas oxygen value was 75-80%, signifying adequate perfusion. The lower the percentage, the more inadequate the perfusion.

To gain extra knowledge, Ruth attended the residents’ class where William McCann taught 12 Lead EKG interpretation. Unfortunately, he often couldn’t make it to classes he was offering the nurses because of patient demands, so in the end, June and Ruth did their best to educate the nursing staff themselves. Night staff would stay over and evening staff come in the morning to attend. Along with your stethoscope, nurses now all carried calipers in their pocket wallets. Ruth was often in the library researching terms and concepts to share with the staff. She was also

one of the first nurses to attain her certification in critical care nursing (CCRN) in the late 70's. Ruth was an early exponent of ACLS training, and she and Debbe Smith Milliken taught CPR to the doctors and later, the nurses. "The nurses were much easier to teach," says Debbe dryly. Ruth, too pushed not only for bedside knowledge for her nurses, but for attaining a bachelor's degree, something she herself achieved later in her mid 50's.

The doctors also taught each other. For example, Ruth recalls Dr. Gault explaining Mobitz II to Dr. Mann, and Dr. Gentzler being the one to formally introduce arterial lines to the hospital. Following a code, the nurses would review monitor strips with each other and the residents to try to learn from them. In addition, every month on a rotating basis, Drs Mann, McCann and Gault would review the previous month's code events and accompanying flow sheets. The expectation was that nursing would attend on their off-time to learn from and contribute to the discussion, particularly if they had participated in the resuscitative effort. Ruth tells the story about when Dr. Gault came for his interview he was walking through the unit when a code was called. He called for an "A-line setup." No one knew what he was talking about (this was 1974). So, he asked for an IV catheter, a BP cuff and IV tubing, and proceeded to insert the arterial line and connect it up to them. It was a memorable event.

Cardiac Rehabilitation

The standard practice of keeping a cardiac patient on complete bedrest for a sustained amount of time began to change. Research was demonstrating that extended inactivity and immobility post cardiac event actually increased morbidity. Now, once the patient stabilized, physical rehabilitation was introduced much earlier. Laurie Harding RN, wife of resident Peter Mason, MD, established the LGH cardiac rehabilitation program in 1977.¹ It went on to become an essential component of cardiac care at LGH, including for patients in critical care. Initially it was reserved for inpatients, but later expanded to become a very innovative and successful outpatient program. The program started small. Patients began receiving passive exercises as soon as they stabilized, to feed themselves, help with bathing, brushing their teeth, getting out of bed earlier, and walking short intervals in

hallways and around the units. It assisted patients' recovery, helping their transfer to a med-surg area earlier, and then being discharged sooner.

Everyone agrees the cardiac diet then was "horrible" - sanka only, low fat, eggs beaters, very low sodium, no taste. Enough to make a cardiac patient crave for something decidedly missing from this diet, like a donut. As a new graduate, caring for a Chicago man who suffered an MI while doing business in Lancaster, Martha became close to him and his wife. Per his request, Martha brought him a donut back from the cafeteria. Whoops! Unfortunately, Ruth found out and reprimanded her for "not following the rules." As you can imagine nothing untoward happened, in fact it probably helped his demeanor and outlook. Thankfully, he achieved a full recovery and he and his wife returned to Chicago. Martha and the couple maintained their friendship and she even visited them on vacation.

Pulmonary

Just as there was an explosion in knowledge and treatment options in cardiology, the same was true in pulmonary medicine. Nurses had to learn and adapt to the



Figure 9: William Porter, M.D.

changes in pulmonary treatment modalities along with therapists. In 1970, Dr. Porter arrived at LGH and established the Inhalation (later Pulmonary) Department. Dr. H. Patel joined him in 1976, and Dr. John Eshelman came in 1977. Dr. Eshelman was a great addition as he was board certified in trauma and critical care medicine. Dr. Porter emphasized the value of routinely evaluating arterial blood gases (ABG), and an ABG machine was placed in the unit for quicker results turnaround. Per John H. Esbenshade III, a certified respiratory therapist,

each blood gas was drawn from an arterial site (usually brachial) via a heparinized 10 cc glass syringe, using a 20-gauge Riley needle. Recalibration of the ABG machine was required prior to each blood gas calculation.

The iron lung was no longer in use, although Darlene remembers one being situated on surgical side for a few days, possibly on standby. To assure it would be functional if needed, periodic checks of the machine were performed by John Esbenshade III. (Note, a few patients are still living who remain iron lung dependent. One such survivor's profile can be viewed on YouTube.⁶ Advances in pulmonary care included improved volume ventilators. Initially there were 2 Emerson ventilators. "We had to call over to St. Joe's if we needed more; there were also a couple of Bird respirators as backup," says Darlene. If more Emerson volume ventilators were needed, and none was available, "Dr Porter would have to decide who most needed what we had. We had to take a less sick patient off the Emerson, clean it, then make the switch to the pressure-controlled Bird respirator," says John. He states it was possible to analyze the oxygen percentage being delivered to an Emerson using a stand-alone analyzer. However, "There was no way to actually measure the oxygen percentage with a Bird respirator. You put the patient on an air-mix setting," which made it "something other than 100%."

The Siemens Servo 900 ventilator was introduced during this period; it was smaller than the Emerson and could deliver intermittent mandatory ventilation (IMV). This was considered revolutionary as it was less traumatic on the lungs and allowed for easier weaning.⁷ Dr. Patel introduced the principle of IMV to Lancaster General. To effectively operationalize this respiratory mode before they became commercially available, John assisted him in fashioning the appropriate circuitry for all the ventilators. Yet another ventilator was the MAI. It allowed the respiratory technician to actually set respiratory rate, tidal volume and inspiratory flow, and was a favorite of Dr. Patel's. Beginning in 1976, positive end-expiratory pressure (PEEP) was another break-out innovation in pulmonary medicine, frequently leading to improved ventilation and perfusion for the patient. PEEP was particularly valuable for patients who developed Acute Respiratory Distress Syndrome (ARDS). ARDS, or post-traumatic respiratory insufficiency as it was initially referred to, was first described by Dr. Charles A. Heisterkamp III, an LGH general surgeon, along with several of his military colleagues. It was based on his experiences caring for individuals with severe blood loss and trauma in a MASH unit in Vietnam.⁸ ARDS

remains a serious concern and nursing and medical challenge in critical care units. Patients develop it from direct injuries to the lung such as aspiration and near drowning; or from indirect factors such as massive trauma, blood loss and sepsis.

The therapists soon began performing IPPB (intermittent positive pressure breathing) treatments using the Bird Respirators, along with nebulization therapy. A common expectorant was the SSKI drops (saturated solution of potassium iodide). Dr. Porter also introduced fiberoptic bronchoscopy to LGH, a procedure which could be performed at bedside if needed. With the arrival in late 70s of ventilation/perfusion scans and pulmonary angiograms, a variety of acute pulmonary conditions could be readily diagnosed, for example, pulmonary embolism.⁹

With the advent of the green Emerson portable pump system there was a more stable and secure process for chest tube drainage. If you had to send a patient to x-ray or were transferring them to med-surg, they could be disconnected from the wall suction and left to gravity drainage (always with large forceps to clamp the tubing should the chest tube become accidentally dislodged). Chest tube removal is a delicate process and Dr. Witmer was very specific about how it should occur, "He was rigid about it" says Martha. And he always wanted Martha to assist. Once he arrived at the patient's bedside, 4 strips of a wide adhesive bandage were cut to the same length and attached to the bedrail. A pack of sterile gauze was opened and ready as well. The patient was turned to the other side from the tube and Dr. Witmer directed the patient take a deep breath and hold it to keep the lung expanded. Then he pulled the tube out and placed a wad of gauze over the site. Adhesive strips were placed firmly over the site: one in the middle, one to each side, and one again in the middle. One day a snowstorm prevented Dr. Witmer from coming in to remove this particular tube. He entrusted Martha with the procedure as he didn't want to leave it in place. She removed it and encountered no problems. Way to go!

All long-term vent patients were kept on the surgical side per Dr. Mann's request. Placement was a huge issue as there was almost nowhere for these patients to go post ICU. Opening the IMCU unit helped considerably with this backlog. Stays

of 3-4 months were not unusual as there were few outside facilities that would accept them. One patient was eligible for the Lebanon VA, but his wife couldn't drive and thus was loath to release him there. Because her parents lived near Lebanon, Martha offered to drive her to the VA once a week--which she did for a considerable period of time. Speaking of the IMCU opening, because few of those nurses had critical care knowledge and skills as it related to ventilator patients (or with patients receiving peritoneal dialysis), ICU nurses were assigned to mentor them. For several weeks one was assigned each shift, which assisted enormously in the continuity of care. Darla Cardin notes there were no real written protocols, however. Those IMCU nurses learned by working alongside an experienced ICU nurse, who oversaw their practice and validated their skills.

For patients who required intubation, unless a tracheotomy was immediately warranted, the pulmonary physicians tried to manage with a naso-tracheal or oral endotube, thus avoiding a tracheostomy. The outside limit was 10-14 days for those tubes to remain in place before tracheostomy was necessary. Be they endotracheal or tracheostomy tubes, those were the days of high-pressure tracheal tube cuffs which could cause significant trauma, even erosion, to the surrounding tracheal mucosa. Lower pressure cuffs became available later in the 70s and were a great improvement. Occasionally, a trach tube would become dislodged. There was always a spare at the bedside in a sterile wrap. For some patients it was a real emergency requiring a stat call to the pulmonary physician to reinsert. If the stoma were "mature" the nurse might be directed to reinsert the clean trach, if the patient were struggling to breath. For other patients they might tolerate having a cold steam collar over the trach site, and close observation, to see if they could tolerate its being left out. Undergoing a radical neck dissection usually involved insertion of a metal trach tube, as the trach was going to be a permanent fixture. Those metal tubes had an inner cannula which was routinely removed each shift, soaked in hydrogen peroxide, cleaned with pipe cleaners and reinserted. There was a locking device to ensure the inner cannula did not accidentally slip out.

The last big breakout of polio in the US in 1979 affected Lancaster County disproportionately. Traditionally the Amish community was extremely reluctant to

vaccinate against this and other infectious diseases. It led to a highly successful community vaccination outreach lead by Dr. John Randall, LGH Family Residency Program Infectious Disease Specialist.¹⁰ One unfortunate consequence of the oral polio vaccine administration was a rise in Guillian Barre (GB) Syndrome. Like polio, GB can result in a rapid change in the patient's physical status, characterized by a rapidly ascending, bilateral muscle weakness or paralysis, with inability to breath on their own. These usually resolve over time, sometime with residual effects like foot drop. The patients needed an emergency tracheostomy following admission and diagnosis. The risk of pneumonia was immense and these GB patients were often totally dependent on their caregivers, just like the polio victims. Darla Cardin says that she was "proud no-one developed bedsores or foot drop." She remembers regularly turning them every two hours and giving back care, providing passive exercises and ensuring they received morphine or Demerol for their pain. Darla and Kay remember a GB patient, WP, who was actually a pharmacist. His disease was of unknown origin, rather than from the oral polio vaccinations. He was in the unit for a few months, as he became completely paralyzed and his breathing compromised. Thus, early on, he was trached. Plasmapheresis was a definitive therapy for GB which had variable success and WP did receive it. Otherwise, patient care was largely supportive. The good news is WP was eventually discharged with no long-term effects, except he was left with an inability to smile. Talking, however, was not a problem.

The working relationship between respiratory therapists and nurses was very close, with "a strong sense of collaboration," says John. Together they managed many of the technologic aspects of patient care and monitored their effects on patient well-being. According to John, "we helped each other constantly.....we assisted with turning the patients; they assisted by holding an ABG stick site." The technicians also inserted arterial lines (on pulmonary service patients only) to ease

the burden of needing to stick the patient so frequently. “We learned alongside each other, teaching each other about new equipment and procedures. And we attended classes together, like the brown-bag luncheons Dr. Porter held periodically.” John was hired in 1972 and retired in 2015.

Other Surgical and Medical Conditions and Interventions

Surgical side still had many of the same kind of patients as described in the 1960s section. Per Martha, there remained “a constant emphasis on coughing, deep breathing and 2 hourly turning.” Getting the patient out of bed and soon ambulating if able, was also critical. The mattresses were flat, very firm and very uncomfortable. She remembers always having a number of hemovac drains to flush every eight hours with KPP (Kirchner, Pontius & Purdy) antibiotic solution constituted by the pharmacy. Double lumen abdominal sumps were common. They were designed to suck out large amounts of abdominal fluid while protecting the abdominal tissue from trauma following extensive abdominal surgery. Scultetus binders, introduced in the 50s, remained a mainstay for GI surgical patients. They had 3-4 layers. Each layer was about 8 inches wide and were wrapped firmly around the abdomen to support abdominal incisions. To prevent abdominal distension, correct functioning of G-I tubes was still of paramount importance with general surgeons, like Dr. Davidson, (a “fetish” Annie believes). So, everyone rushed to check their tubes when those surgeons arrived for rounds! If the Anderson tube were not bubbling correctly, Dr. Davidson would “reposition and reposition to make it work” per Martha: “His intentions were good.”

Dr. Alan Peterson remembers a humorous moment in the OR with Dr. Davidson. After being assigned with him for a few weeks he began allowing Alan to



Figure 10: John Esbenshade III, Pulmonary Therapist.

close an abdominal wound following each surgery. With this particular patient it was proving tough to bring the abdominal wall together, so Dr. Davidson was manually applying pressure on either side of the wound, with Alan trying to thread the sutures as quickly as possible. Suddenly, Dr. Davidson pulled back and shook one of his hands. Alan apologized profusely as he realized he had “speared the august surgeon with a stitch.” Forever afterwards Dr. Davidson referred to Alan as “flashing fingers Peterson.”

Fluid resuscitation was as critical for surgical as medical patients. Fluid loss could be from a myriad of causes, for example, excessive diuresis or sweating, frank bleeding, large hematoma formation, third spacing, burns, N-G drainage, fluid loss during surgery, and vomiting and diarrhea. Depending on the nature of the fluid loss



Figure 11: John Polcyn, M.D.

and its underlying cause(s), replacement of blood products could be with whole blood, packed cells, fresh frozen plasma or albumin (the latter rarely used these days). In fact, a 50cc bottle of “salt poor” albumin, was frequently ordered for postoperative patients thought to be fluid overloaded, particularly if their urinary output was low and lasix administration had not induced the desired diuresis.

Albumin could be repeated if the urine output remained negligible, per standing orders. The choice of crystalloids ranged from Lactated Ringers, Plasmalyte 56 and 148, normal saline, half normal saline, D5 and half saline, and D5 & normal saline. Potassium replacement always needed to be factored in as well.

Dr. Polcyn continued to practice until his early death in the mid 70s. Martha remembers him as “a tall man, who strode with a purpose” into the unit. All the nurses speak to his attention to detail and his unwavering commitment to his

patients. He was also unyielding on many points. It was never enough to prop his semi or unconscious patients on their side, they needed to be at a 90-degree angle. If he wasn't satisfied with their positioning, he would put his hands underneath and pull them over more on their side himself. Despite his reputation, Dr. Alan Peterson remembers the "kind and sad side" of Dr. Polcyn. One day Alan was present in Dr. Polcyn's office when a call came from a nurse at Coatesville Hospital. A child had just died that he had been caring for. A "tear was seen rolling down Dr. Polcyn's face," says Alan.

Dr. Argires joined Dr. Polcyn in 1968. He died in August, 2019. Their interaction with nurses could not have been more different. As their patients were at high risk of aspiration and/or pneumonia, both neurosurgeons occasionally performed a tracheostomy in the unit, rather than transporting them to the OR, to avoid further delay in securing a reliable airway. For a long time, Dr. Polcyn was the only neurosurgeon in the county and beyond, and it was an extremely busy practice. As well as all the local institutions: LGH, St Joseph's and Osteopathic, he saw patients at Coatesville and Ephrata hospitals. In the evenings while his father drove him to each destination, he would sleep in the back seat between hospital stops, according to Annie Creitz.

Other technologies and advanced therapies included Total Parenteral Nutrition (TPN) (or hyperalimentation as it was then called; the term is now interchangeable) by Dr. Christy. Dr. Eshelman worked closely with Dr. Christy as he recognized the need to measure and address the caloric needs of the critically ill, and was instrumental in securing the purchase of a "metabolic cart" for that purpose.⁹ Also arriving in 1972 were Dr. Schubert and in 1977, Dr. Larry Carroll. Together they established a dynamic and successful nephrology practice and an "artificial kidney" was purchased to provide for hemodialysis.¹¹ Peritoneal dialysis (PD) for more temporary relief of acute renal failure was another learning curve for the nursing staff. While the procedure for managing PD was not complicated, it was very time consuming. Those timings needed to be pretty exact. Typical orders were to infuse dialysate, pre-warmed in the blanket warmer, (usually two liters with added insulin and potassium depending on the ongoing blood sugars), through the

abdominal catheter into the peritoneal space for over 15-20 minutes. Dwell time was about the same, followed by a 20-minute drainage, whereby the bottom clamp was released allowing for gravity drainage into the drainage bag. So, there were a lot of moving parts, and of course, you might have several other patients, all with complex needs themselves. There could be difficulties with infusion and drain times, when the flow slowed due to a variety of factors. Bear in mind, however, PD could be life-saving, by reducing a high serum potassium level and severe fluid overload. Annie Creitz remembers two individuals treated by Dr. Schubert not long after he arrived, both thyroidectomies. Interestingly, both developed thyroid storm postoperatively, going into acute renal failure as a result. Dr. Carroll postulates that those two patients may have developed acute Rhabdomyolosis. Remarkably they both survived with PD, and Annie recently read one of them celebrated his 70th wedding anniversary. They would likely have died without the PD intervention.

Annie speaks with great affection about Dr. Schubert, “Schuie”, because of his bedside manner and gentle personality, treating patients as people, reminiscent she says of Dr. McCann. Dr. Carroll smiles in remembering Annie who was assisting him when sewing in a dialysis line. “You’re obviously not a CT surgeon!” she said. He also remembers a fine ICU and TNSU nurse, Liz Martin, when she was caring for Dr. Schubert following his stroke. Through his mental fog Dr. Carroll could hear Dr. Schubert say to him, “always be respectful of the nurses.”

Soon, the Drs. Grosh (John and Paul) expanded the Hematology specialty at Lancaster General. Disseminated intravascular dissemination (DIC) came into prominence in the 1970s as a devastating response to multiple trauma, shock states, obstetric emergencies and sepsis. These patients often required one to one nursing care. Along with addressing the underlying problem, treatment included blood products replacement, correction of volume depletion, and heparin. Other agents became available in later decades.¹² DIC sometimes co-exists with ARDS in the same patient, magnifying the mortality and morbidity. Nurses routinely assisted the Drs. Grosh with bedside bone marrow punctures for patients with acute anemias or leukemias. They are rarely performed at bedside anymore.

With respect to GI related conditions, Dr. Kirchner was the first surgeon to perform a Whipple procedure at LGH. Even now it remains a highly risky operation. So many patients had NG tubes that nurses were forever inserting or re-inserting them, as patients would just as frequently pull them out. Thus, restraints were widely used. Rectal tubes were also common especially postoperatively to facilitate gas removal, but also for copious, loose stool drainage. Drs. Young and Weston were now in practice together as gastroenterologists. The first colonoscopy was performed at LGH in 1972, but endoscopy remained in its infancy for much of the 70s. Patients with stomach ulcers admitted to the ICU (or out on the med-surg floors) were still being prescribed 30cc of an antacid every two hours, say on the even, and 30 cc of milk or half and half on the odd hours, round the clock. This was known as the “sippy diet”. A variation of it could be half and half cream hourly. Per Dr. Fred Saunders, another LGH gastroenterologist, the sippy diet was actually ineffective, despite being in use since the 1950s. It is now recognized that the origin of most stomach ulcers is due to the *H. pylori* bacterial infection.¹³

Common GI x-rays included barium swallow/enemas, and flat plates of the abdomen. Then CT scans arrived, followed by ultrasounds. Robert Hess was the ultrasound technologist in Radiology under Dr. Young. Legions of ICU nurses remember Robert with affection and respect. He worked alongside them in the x-ray department or bedside, explaining the process and the imaging results. He was always calm and professional, even in the midst of chaotic situations.

One day Dr. Peterson was rounding alone on the surgical side and was called over urgently to a post-thyroidectomy patient who was unable to breathe. Her neck was very obviously swollen and she was asphyxiating from post-operative bleeding into her thyroidectomy wound. “I was told by the nurses that this could be corrected by cutting the sutures away. With great trepidation I did as suggested” and the patient began to breath and respond positively. He remains very grateful to those ICU nurses who taught him what to do in this emergency situation.

Martha recalls the first LGH organ donation in the early 70s. It was such a dramatic step and procedure to be involved in. A specialized team handled the surgery, transportation and other details. She still remembers Donald Denny from

Gift of Life, the first person to oversee the process, and the excitement it engendered. Later, Mike Killinger, a previous ICU nurse at LGH, also worked for the Gift of Life for several years. He subsequently became a nurse clinician for the OHS program at LGH, a Nurse Manager on 5 East (OHS step down unit), and a Nursing Director.

Doctors were still “Gods” per Darlene. You “jumped to attention” when they came into the department. If certain doctors arrived who had a number of patients, you gathered up all their charts and carried them with you on rounds. As a patient was examined and orders written, you placed that chart onto the desk for transcription by the secretary (or unit clerk as they were now usually referred to). The physicians wrote out all their orders; there were no pre-printed orders. Or nurses wrote the telephone or verbal orders. It was tricky if multiple attendings arrived at the same time, juggling charts, juggling who to round with etc. (there was a hierarchy to this). When she was head nurse, Liz Thompson was troubled with this rounding expectation, choosing instead to order a circular chart-holder on wheels for medical side. Liz felt this made her nurses seem less of a “handmaiden” to the doctors. According to Cathy Myers some of the doctors were “old fashioned, like Dr. Purdy” who on rounds expected you to “reiterate everything in the chart, basically, rather than reading from the chart which he was holding in his hands!” So a running log was created, with electrolytes, blood sugars, H&Hs, ABGs etc. listed in columns on the record sheet, that the nurses needed to document onto as new results came through. It would provide a readily available summary of those results, and facilitated overall communication.

What remained an enormous challenge to nursing staff and other health care professionals, especially pharmacists, was the quality of physician handwriting. “We nurses would cluster together to try to make sense of it” continues Darlene. “There were some terrifying times when we had to call the physician and see if HE remembered what he had written.” Some of those conversations could be challenging. Thus, nurses made every effort to ensure someone reviewed the new orders before the physician left the department. According to Kay Knepper, “Dr John Eshelman’s writing was the worst. You got used to it after a time, but you had to

huddle together to confirm.” Years later he was actually assigned a “scribe” to reduce this interpretation challenge. Note, after Dr. Eshelman’s death in 2020, a number of clinicians shared stories about the quality of his care and support of his colleagues and nurses. It was also shared that actually he was left-handed and had struggled with writing all his life.

Computerization has virtually eliminated the potential for error due to misinterpreting illegible handwriting. Information is also now at a person’s fingertips. Not so then. Annie recalls Dr. Harvey Seiple’s “little black book” which he always carried with him and would consult, for example, about dosages and lab values. Dr. Peterson suggests that with computerization the progress note might be more “enlightening.” He recalls that Dr. Kirchner’s “entire progress note could read O.K. with his initials as a signature.”

Nursing Personnel and Practice

A 1974 graduate of Penn State and only the second nurse with a Bachelor of Science in Nursing in the ICU (the other being Martha Gingrich), Debbe Milliken was hired with two other long-term ICU nurses and LGH grads, Joyce Wenger and Darla Cardin. She and Darla both worked the night shift. Debbe’s first annual base salary was \$8,300. She speaks of the great teamwork and patient focus all the nurses exhibited. She (and others) would routinely stay till noon, while an evening nurse would come in early if there was a day “call off.” “Everyone just pulled together.” Float nurses typically could not take an independent assignment in ICU at that time. Like any new hire, Debbe feels she had to earn the trust and respect of her co-workers, more so because of her college education, as opposed to hospital-based training. Yet she had spent 10 weeks at Hershey Medical Center in their ICU in her last semester. Diploma nurses tended to believe that their clinical training was superior to that provided by a college, that those graduates were ill-prepared for the “real world” of patient care. This was a belief common throughout nursing in the United States in that era. With time, this bias has waned. Now, a BSN is a

requirement for hire at LGH, or if an individual comes from a 2-year program, they must have a guaranteed enrollment in a BSN program before hire.



Figure 12: Debbe Millikin, RN, BSN

Like so many of the nurses of that era, Debbe likes to recount stories and experiences she hasn't forgotten and which have had a profound effect on her. She speaks to the first time Nipride was run in the unit on one of her patients in hypertensive crisis. The pharmacist mixed the drip in the pharmacy per the specifications, then Dr. Mann hurried it up to the unit to infuse. When Debbe asked him what parameters she should adhere to, she was told to run it until the BP came down to an acceptable level. So Debbe titrated as best she could taking the blood pressure manually every 5 minutes. "You had no idea if it were within the acceptable dosage range." This medication also caused consternation when first introduced, as the bag had to be covered with tin foil to avoid exposure to the light, and it could cause a precipitous drop in blood pressure, even with only a small amount infused. Due to its chemical makeup, sustained high doses could also potentially contribute to cyanide poisoning! To her recollection, there may have been 1-2 IV Dynamap pumps available to regulate infusions, otherwise all IVs were either connected to a microdrip (60 drops per minute), or maxidrip (15 drops per minute). And nurses continued counting those drip rates.

Speaking of new experiences, floating to another department was very unusual in ICU. However, this one night the census was low and it was Debbe's turn to "float." Keep in mind she had not trained at LGH and had little knowledge of the hospital's, or individual med-surg unit's layouts. She came in at 11 P.M. and went home in the morning to sleep when her shift was over. But float she did this one night and she was the only RN on duty with a floor aide. Somehow, she got through the night. However, in the morning while giving report to the oncoming day staff, she was asked to talk about the patients in "short hall." Turns out, she had no idea

there was more to the department beside the “long hall” and had not visited those patients all night! They probably had the best night’s sleep of their hospital stay.

Debbe was assured she would only be six months on night shift before moving to days. Three years later, still on straight nights and seeing no way out, she communicated she might go elsewhere. In an effort to keep Debbe, Ruth began a day/night rotation so Debbe could work part of the time on days, a very selfless act indeed. Months later and still no guarantee of day shift, Debbe interviewed with Hershey Medical Center and was hired to be their Critical Care Instructor. At virtually the same time Peggy Judge, recently graduated with an MSN in Cardiovascular Nursing, was moved to the Nursing School. Their accreditation standards now required an MSN or higher for their Director position. Knowing Debbe’s interest in education, Ruth Todd promoted her to Peggy’s old job as Inservice Director, basically overnight. Debbe saw this as a great opportunity and a way to influence the quality of nursing orientation and critical care education. She developed a pulmonary course for RNs with Drs. Porter and Patel, and an arrhythmia course for the aides. Later she came an Administrative Supervisor for Critical Care Units and 5 East. In 1980 she became the first Assistant Director of Critical Care Nursing, remaining in this role until her first baby was born in 1991 and she left to be a stay at home mom. Marion McGowan was hired in her place.

Darla Cardin (Poole) arrived in the unit with Debbe in 1974. They became firm friends as they both worked straight nights. She too has lots of stories, like PK, severely burned in a fire at his home on Strawberry Street. Darla had been in the unit only about 7 weeks, and PK was admitted soon after she started. She believes he was the first patient to have a Swan Ganz catheter inserted for fluid management. “We had no idea what was normal or abnormal.” One night she remembers going into Bed 10 on surgical side to provide for his ongoing needs: meds for pain, checking his IVS, checking the cold steam apparatus to his trach, providing trach care and suctioning, applying silvadene dressings to his burn sites (which were extensive), and replacing his soiled blue pads. As she left his room, thinking he would be settled for a while so she could attend to her other patients, something made her turn to recheck him. It was then she saw flecks of blood coming out in and

around his cold steam trach collar and thought, “This is new.” Within no time he was hemorrhaging profusely. She yelled to charge nurse Emily Siemasko for help. Emily immediately hooked him up to continuous suction through his trach via a suction catheter, and the canister quickly filled with 500 ccs of frank blood. Despite heroic efforts by nurses and physicians, PK did die. The cause of the bleeding was erosion of his innominate artery. Darla and Joyce Wenger were also on that night with Darla. They too routinely had taken care of him and later at breakfast after work, all the nurses held a debriefing. It was Darla’s first death. PK was close to her age. According to her, “There was no emotional training to prepare for these situations, the codes, the tragedies.”



Figure 13: Darla Cardin, RN

A few days before Christmas that same year Darla came on duty just after a teenager was admitted. She, her twin sister and parents were choosing their Christmas tree, when she suddenly complained of an excruciating headache and collapsed unconscious. She never woke up. CT Scans were still very new to LGH, the technology having only been discovered in 1972. The scan confirmed what was highly suspected given her presentation: that she had suffered an acute subarchnoid bleed. Darla isn’t sure how long she remained in the unit; she knows it wasn’t long. She does remember there was discussion with the family that the remaining twin would need to undergo testing, as many subarachnoid hemorrhages are congenital in origin.

There was another young woman who had a neurological event. “Sandy” had been out riding her horse and for some reason had fallen off. Her horse was spooked and kicked Sandy in the head. She was unconscious and needed a craniotomy to relieve pressure. That, along with drugs like mannitol and lasix, were the main ways to reduce swelling and increased intracranial pressure (ICP). It wasn’t until the 80s that ICP catheters were inserted to monitor pressures and relieve fluid when

necessary. Like all craniotomy patients, Sandy's head was encased by a large bandage. If there were drainage on the dressing, nurses were not allowed to remove it and redress; they were only allowed to reinforce the dressings. Unfortunately, the neurological damage was too great and interventions too limited and the patient did not survive.

Darla has firm memories of working with Dr. Witmer and his thoracotomy patients. She learned quickly from the night aide, Annie Landis, how to make an occupied "thoracotomy bed." The patient remained in bed in high fowler's position while the sheets were changed, reducing the risk of chest tube displacement. The bed linen was changed in two stages: upper body and then lower, removing the soiled sheets and replacing them in a smooth motion. Even more challenging were the circo electric beds and stryker frames. "It was so scary. You checked and rechecked all the attachments before turning." There needed to be a respiratory tech to disconnect the vent and bag them as the machine rotated. Patients used a metal potty which was slotted under their bottom. One night, Shirley Conlin, with others' help, began turning her patient. Too late, everyone realized the potty had not been removed!

Darla worked for 34 years in ICU, primarily on night shift and was in charge for most of those years. She later worked as an Infection Surveillance Nurse for the whole hospital. One thing she shakes her head about is the lack of sinks on surgical side. There were three sinks total for 10 patients: one up close to the first beds as you entered the department; one behind the nurses' station; and one outside Bed 10. She cringes at this but before universal precautions, no one thought anything about it or expected anything different. Nobody wore gloves except for sterile technique or emptying bedpans.

Darla talks with great affection about some of her co-workers: on night shift Emily Siemasko, Shirley Conlin, Dottie Kelly and Annie Nace, who died very suddenly about 1978 or 79 from a brain tumor. Annie worked as long as she could and never complained. All her colleagues loved her. Darla remembers one night when Annie's nose was dripping a lot. Quietly she said to her co-workers, "I think CSF is leaking through my nose." Darla has never forgotten this. Others on evening

shift included Lucy Siechrist, Heidi Fritz, Kay Knepper, Lynn Brubaker, Sandy Hinkle, Patsy Fasnacht, Ellen Vogel and Liz Thompson.

Darla feels she “grew up quickly” in the ICU and “learned on the job, despite the intensity and acuity of the patients. The most rewarding aspects were the knowledge gained and how the experiences molded you.” Of note, Emily Siemasko was a leader and mentor on her shift and could be depended upon in any emergency. A graduate of LGH Nursing School, Emily joined the army as a nurse in World War II. According to her 2004 obituary, she was a captain in the U.S. Army Nurse Corps, serving in Germany, Panama and the United States. We are very proud of that distinction. It is unknown if she was the only LGH ICU nurse to serve in World War II.



Figure 14: Emily Siemasko, RN, BSN

Other memories Darla relates are around early IV technologies. There was the blue Dial-A-Flo, a little round dial with numbers on it that was plugged in close to the IV site and connected to the standard tubing. Rotation of the device allowed you to set a specific flow rate, a great improvement over counting drops. In addition, there were buretrols, chambers which could be filled with up to 200cc of IV fluid. They were spiked directly into the IV bag and connected to the regular IV tubing. A medication could be added to them, usually an antibiotic, and they more effectively controlled infusion rates. Antibiotics in those days were typically either cephalin or gentamicin.

Asked what it was about night shift that kept Darla working for so long in the unit, she writes that she was initially attracted to “the experience of the RNs - Shirley Conlin, Jeanette Stover, Dottie Kelly, Emily Siemasko, Annie Nace.” She liked “the flexibility of my schedule (didn’t need much sleep in those days.)” She always valued the “teamwork and the quietness of the 23-07 shift.”

Fran Peachey, another standout nurse, also worked primarily night shift in her long ICU tenure, from 1974 to 2008. Indeed, she won the first Weidman award for nursing excellence in 1981, for which Liz and Martha nominated her. Like Darlene, Fran was a preceptor and mentor to a generation of ICU nurses. She

remembers many of her patients with clarity and much affection. One patient, Bob, who was in the unit for over 6 months, had suffered a horrendous motorcycle accident, lacerating his liver and causing multiple fractures, for which he received



Figure 15: Fran Peachey, RN

over 30 units of blood. He developed multi-system failure, including acute renal failure, and suffered a complete abdominal wound dehiscence. Virtually every nurse cared for him at some stage, because from the time of ICU's movement to the 2nd floor, all bedside nurses routinely rotated to each side to maintain their knowledge and skills. The patient was trached, had tubes draining everywhere, was receiving TPN and needed hemodialysis for several weeks. Martha recalls that during his most acute period, he would go into asystole while being suctioned, and needed hyperoxygenation with the ambu bag immediately following to restore him to sinus rhythm. Martha remembers his wife sitting at his bedside, watching the monitor intently. One of Fran's most profound memories is when Bob had somewhat stabilized and was allowed up for the first time, an undertaking all of itself! When he stood up, remarkably he began to void--he called out to Fran to come see his "liquid gold." Fran remembers later accompanying Dr. Carroll to assist in the reinsertion of a central line at Bob's house when the other had become clogged, a practice unlikely to occur today. Dr Carroll remembers another time Bob needed fluid replacement. There was no IV pole, so he improvised with a coat hanger and a hook on the wall. Following a prolonged rehabilitation, Bob returned to work and lived for many years. Lori Good says that his daughter became a nurse, inspired by the nursing care she saw being provided her dad.

Fran talks about 3 patients on surgical side, there for many weeks, possibly months, who were trached and on ventilators for different reasons. She says they would look out for each other and got to be friends. They would notify the nurses by rattling their hand bells (yes, that was the primary communication mode!), if one of them needed assistance or were concerned for their welfare, something possible then as it was an open ward. Cathy Myers reminds us of an alternative

communication device if there were insufficient hand bells. Paper clips were placed inside a metal sputum cup and the top was taped shut. A patient would rattle their cup if they needed assistance. Annie thinks it was this same group that saved one of their own. She and several hospital shift workers had been to a party after work the night before where eggnog was served. Not knowing it was spiked, she brought some in to give to “Gary” who was a quad and trached, so couldn’t communicate well. His condition was improving and he was being weaned from the ventilator. While off the vent, Annie offered him some eggnog, which he relished.

Unfortunately, it also made him very sleepy. You don’t want to be sleepy and disconnected from the ventilator. His bedmates, who tended to watch out for the young man “like a hawk” anyway, recognized his slowed breathing and got nursing’s attention right away (tap bells!!). A patient intentionally disconnected like this from his breathing apparatus had no backup alarm mechanism. Now, there would be other monitoring alarms, like from a pulse oximeter, unavailable in those days.

Fran also recounts the story of a 22-year old gentlemen, GV, whom she already knew from her home community in Mifflin County. He needed a heart transplant, having contracted bacterial endocarditis following a chest cold. Dr. Gault arranged for his transfer to Stanford Medical Center, but the family couldn’t afford to pay for the flight. A nurse also needed to accompany GV and his mother. The community came forward and raised the money and, because of her relationship with the patient and the community, Fran was asked to be his nurse, albeit she was very new to the profession. Trouble is she had never flown before. But she “rose” to the occasion. At that time, despite having advanced heart failure, GV only had a heparin lock and was not too unstable. Fran remembers a layover in Pittsburg, en route to Los Angeles, and GV saying how hungry he was and could he have an eggroll? One was located for him by the flight staff and he was as pleased as punch (he was on a low sodium diet). An apartment was located for them in LA while he waited for a suitable heart. Unfortunately, none was found for him in time and 3 weeks later he died.

Darlene remembers a young woman, Lisa, who was run over by a truck as she was riding her bike on Prince Street, becoming trapped between the truck and

the guardrail. All were amazed she even survived, let alone was eventually discharged. Indeed, she was told she would never be able to conceive, but did have a healthy baby in later years. And that she would never walk again, but she did. During her hospitalization, Lisa was variously in a stryker and circular bed as she had fractured her pelvis; both buttocks were crushed and then eroded out; her whole gluteus maximus was sheared off on one leg; and there were other injuries throughout her body. The young woman used to make mewing sounds to get attention. Darlene says she “miaowed.” Now, she wonders if she was really saying “Ow” due to the excruciating pain she must have been experiencing, and feels very badly about that. Lisa was in the unit for over 6 months. Her survival, like for all the patients, is a testament as much to the quality of her nursing as well as medical care. That medical care included Dr. Tony Mastropietro, a resident at the time. Martha remembers how “engaged he was in her care” in a way that happens infrequently, given the breadth of a resident’s responsibilities within the hospital.

Darlene remembers another patient who suffered severe burns to both feet



Figure 16: Darlene VanOrmer, RN (left)

and legs. He was fooling around with some friends in Pequea, and stood on top of a railway boxcar, touching an overhead wire. The live wire travelled down both sides of his body; in fact, one leg subsequently needed a below-knee amputation. She remembers placing maggots onto his charred, blackened foot and stump, and having to rinse the wound sites afterwards with saline and cover with fresh dressings. Maggots were used to digest decaying flesh (essentially

debridement), thereby reducing the risk of infection and facilitating healing. Seems archaic now considering it was used on the battlefield even back to Napoleon’s time.

Surgeons in WW I used it extensively, then its use resurged for a time in the 70s and later, as antibiotic-resistant organisms emerged.¹⁴ Burn patients challenged the hospital's resources and nursing time and mortality and morbidity were high. Once Dr. Lu retired, the attending for almost all the burn patients, the hospital chose to transfer them if necessary, to Crozier Medical Center's Burn Unit, a recognized regional site for comprehensive burn care, following their triage in the ED.

Bev McCann (Ickes), joined the ICU team in August, 1975. She had graduated from the Phillipsburg School of Nursing. By now a single mom with many years of nursing experience when she was hired to LGH, Bev had moved to Mount Joy to be closer to relatives. She was affectionately called "pizza lady" as her cap was similar to the pizza delivery man's cap worn in those days. Annie and Bev worked closely together on the evening shift, becoming life-long friends until Bev's death in 2011. Bev worked full time and was always in charge until she left in 1978. Ruth and Annie recount a story about Bev. Amongst his other fantastic tales this one patient claimed he had been in the Foreign Legion and had swum with Jacques Cousteau. Bev was immediately suspicious because all the labels had been cut off on his clothes. He also had a number of abdominal scars from previous laparotomies, as he had been admitted to nearby medical facilities, including Community and St Joseph's Hospitals, complaining of excruciating abdominal pains. Nothing had ever been found wrong with him.



Figure 17: Beverly McCann, RN (left)

Now he complained of severe chest pain. Bev believed he was suffering from Munchausen Syndrome and shared her suspicions with his attending. Few, if any LGH nurses had ever heard of this phenomenon. However, Dr. Mann, charmed by

the man's story and supposed relationship with Cousteau, let him eat a regular meal (even though he was a rule out MI), and acquiesced to his request for a drink (alcohol). Dr. Mann asked Annie to go to Franks's Restaurant, behind the hospital on Lime St, and get the patient a whiskey. But it was an election day and liquor could not be served until after the polls closed. Annie was then sent to the pharmacy with a script to dispense an alcoholic drink, the so-called "Spirits Fermenti." He didn't stay long in the unit as his probable malingering became apparent and his enzymes and EKGs proved negative.

Kay Knepper (Klunk) was hired following graduation from LGH School of Nursing in the summer of 1975. She attended Hanover High School where she was good friends with Bev McCann's daughter. Originally assigned to the OB/GYN floor, Kay quickly knew this was not for her and requested a transfer to ED. As there was nothing available there, she gladly accepted an evening position in the ICU. "I loved it; my 5 years as a bedside nurse, and 10 years as evening head nurse." She worked alongside a fellow LGH nursing graduate, Sherry Lane, the ICU's first African American nurse. They both worked 3-11 shift in the ICU and shared an apartment together for a time. "In no time Sherry and I were both assigned to be charge nurses on our shift." That was very intimidating as they were still very green, but "you just did it. We switched back and forth between surgical and medical." Two colleagues she was close to and admired were Dawn Bender and Valerie Rieger-Grimm, both who primarily worked the day shift. Dawn was a quiet leader and quality bedside nurse who remained in the unit until 2005. After a few years, Val transferred to the Nursing School where she was an educator and administrator until her retirement. Kay's mentors were Ruth Hepler and Pat Cohen.

Kay remembers assisting new residents who were inserting a Swan Ganz and/or an arterial line and how excruciating it was to see how slow they were, probably understandably. She is convinced she could have easily inserted them herself she had assisted with so many insertions. (Kay was well known for her skill with inserting IVs, per Liz.) Another memory is of one of our own orderlies who became a paraplegic when he fell off a roof, and how unsettling it was caring for a co-worker. He lives semi-independently to this day. In addition, there was the time a

code was called in the unit and she ran to the crash cart and tried to push it to the bedside. Unfortunately, she had failed to unplug the cart and all the drawers flew open and spilled everywhere, including equipment located on the top of the cart. Medications were smashed and leaking and littering the floor. She isn't sure if the defibrillator flew off the top, but she isn't sure that it didn't. She can still recall that experience as if it were yesterday and is still embarrassed. (She is not alone; Liz Thompson did exactly the same in Honolulu.) It's a good thing there was a second crash cart on the other side, but it must have been something navigating through to the patient. Another evening, someone threw a lit cigarette into the trash can in the locker room. It caught on fire and the fire department responded in full throttle mode. As you can imagine, there was controlled chaos and disruption throughout the department.

Kay's biggest challenge was not the burden created by the demands and expectations of caring for critically ill patients, rather it was the infamous handwritten staff schedule. Large sheets of paper were taped to a cardboard backing and posted on the notice board, once the pencil schedule was completed. If it was your turn that month to compose the schedule (shared amongst the head nurses), you first had to navigate all the requests and then input the holiday and weekend requirements. At its peak, Kay remembers as many as 103 individuals working in the department at the same time. (Martha says the highest number was actually 120.) With so many staff, invariably, someone was unhappy. Schedules are now computerized; they still take a lot of time, but are infinitely easier to complete and decipher and staff nurses assist in creating them.

Kay hopes she "made a difference to my nurses." She is extremely proud that her daughter followed her career path and became a nurse. Her daughter is currently working at the Children's Hospital of Pennsylvania. In 1990, Kay was recruited by her old friend Sherry Lane to work as a Cardiac Research Coordinator, with Dr. Gault interviewing her for the role. Following her transfer, she missed the bedside intensely and appreciates those patients enrolled in research studies that she can follow for months, even years. She can develop a relationship, even friendship, and finds that very gratifying.

Betty Pearsall was another highly competent nurse who radiated calm and confidence to her co-workers, new residents and supervisors. She seemed prepared for any eventuality and was unruffled in a crisis. A graduate of Philadelphia General Hospital (according to her 2019 obituary, because she liked the cap!) Betty came to the unit in 1970, soon routinely taking a charge role, prior to becoming a head nurse in 1984.

Liz Thompson was born and raised in New Zealand, where she graduated from the Auckland Hospital Nursing School. She and her husband moved to Honolulu, Hawaii so he could attend the university and be awarded a PhD. Liz worked in step down, coronary and intensive care units at the Queen's Medical Center in Honolulu. There she fell in love with all things relating to cardiac electrophysiology, which stood her in good stead for her career in patient care, managing, teaching and writing. She and her husband moved to Lancaster when he joined the faculty at Franklin & Marshall College. Liz began working in the ICU in August, 1976, on straight evenings until her son was born. Because she was pregnant when hired, she had to resign after his birth. Returning later in 1977, Liz worked part-time until she was offered the head nurse position when Jeanne Donlevy-Arnold (Clements) left in 1979. She held that position for 3 years, then became a critical care staff development instructor, and later, nurse manager in telemetry and outpatient units.

Cathy Myers attended the newly-developed BSN program at Albright College, graduating in 1975. There was antipathy and resistance to a bachelor's program in the county and beyond, and it was one of only a handful of BSN programs in the region. Faculty members included the three Lawrence sisters, Sally, June and Rena, who have been fixtures in the nursing community, in Lancaster County and beyond. Sally passed away in Fall, 2019. Cathy's experience with caring for an unconscious patient with a subdural hematoma in her student ICU rotation, cemented her desire to be an intensive care nurse. LGH seemed an "up and coming institution" so Cathy applied here. However, "Mrs. Todd seemed more interested in the Albright program and Lawrence sisters than my qualifications." The hospital was actually not accepting graduate nurses into the ICU at that time, so she worked in med-surg and

IMCU, until a position became available in March, 1977. Cathy remembers seeing Ruth Hepler in the hallway and Mrs. Hepler saying, “I guess I’ll see you Monday morning then?” Taken aback, Cathy replied, “What? Does Mrs. Hauck, my charge nurse know about this?” Mrs. Hepler said, “I’ll take care of it.” The following Monday morning Cathy started on the day shift rotation, staying until 1979.

Betty Pearsall and Joyce Wenger were Cathy’s primary preceptors. There was an orientation period, but no orientation checklist to confirm her clinical competencies that she recalls. It was basically “see one, do one.” Ruth Hepler taught an arrhythmia class which was most helpful, and the only formal critical care nursing course provided. Later, as a critical care coordinator (instructor), Cathy developed a 6-week critical care course. Finally, formal education was being promoted for our ICU nurses.

“Leon” was a long-term vent patient with COPD who could not be weaned from the ventilator, having been months on surgical side. He was actually a “pet” to the nurses, “our fixture” according to Cathy. “We would cut and wash his hair, trim his nails” and generally keep him looking as good as possible. He could occasionally be “grouchy” but was usually pretty upbeat. However, after a time his spirits began to fade, he became depressed at the lack of progress and wasn’t eating. Cathy asked him “what would you like to eat?” to which he said, “corn beef and cabbage.” That evening Cathy cooked him corn beef and cabbage. Two days later she brought it in for him, only to discover an empty bed. Leon had died the previous night. Cathy was devastated that she couldn’t deliver on her promise. As she related this story to Liz, tears welled up in her eyes. Some patients and situations you never forget.

BB was admitted with a C2 fracture resulting in her being a permanent quadriplegic. Thankfully, she did retain her ability to breath independently. She, too, was becoming severely depressed. That depression became even more acute once it was explained to her



Figure 18: Joni Eareckson Tada's book

that the jerky movements in her arm were reflexive only, not a return of function. Someone had left a book by a Joni Eareckson Tada for her on her bedside table. Joni Eareckson Tada was a Baltimore native who had become a quad several years before, and had written a book about her experience, how she adapted and how she was managing to live a fulfilling life. In an effort to lift BB's spirits, Cathy began reading Joni's story to her, to show her there could be life after suffering such a trauma. Cathy believes it made a significant difference in her attitude and demeanor. At some point BB was transferred to a rehab hospital directly from the ICU.

A very heavy-set man was admitted to medical side with an acute MI. Not long after arriving in the unit, he developed ventricular fibrillation and went into cardiac arrest. He was quickly defibrillated with 200, then 300, then 360-watt seconds, to no avail. He would not convert. Dr. Gault yelled out, "Get the other cart!" says Cathy. She performed CPR with pulmonary's assistance, while Liz Thompson ran for the cart on surgical side. Dr. Gault directed the placement of the 4 paddles, 2 from each cart. He and Liz Thompson then defibrillated the patient simultaneously. Because of his barrel chest the patient needed the 720 joules (watt seconds) to break the fibrillating cycle and restore him to sinus rhythm. A cheer went up at his bedside. Next day, Cathy came in to find the patient sitting up and eating breakfast. "I couldn't believe it was the same patient!" Several years later, she was pulled to 4 East when a patient asked, "Don't I know you from somewhere?" Turns out it was the same person.

Cathy has vivid memories of a patient in Bed 1 on medical side. He had "suffered some kind of muscle injury to his legs." Within a few days he developed a worsening case of bilateral compartment syndrome. She knew next to nothing about compartment syndrome or its treatment. Cathy remembers being astonished when he returned from the OR. Both legs had been "slashed to relieve the pressure" and trapped fluid. Her memories are vague about the subsequent wound care, or the patient's demise, however.

One evening in late 1980, a man was admitted to Bed 1 on medical side. When Cathy started her shift, he had just returned from x-ray following a V/Q (ventilation/perfusion) scan. He was barely back in bed when he was whisked to

cath lab, as his scan result had come back showing “essentially no flow in his lungs.” Dr. Gentzler decided he needed streptokinase - “I had never heard of it”- to break up the clot (s) in his pulmonary vasculature. Cathy was told to “calculate the dose based on his weight.... I was very nervous and asked him (Dr. Gentzler) to re-check my calculation.” To which he responded, “If he gets one drop more than he should, he will bleed to death.” Cathy persisted in her request that Dr. Gentzler double-check her calculation. He also told Cathy, “Don’t drop that vial, it costs \$5,000.” Even so, “We actually called over to St Joe’s for more.” The medication proved highly effective in dissolving the clots. Streptokinase was soon introduced into the unit for acute MI patients by Dr. Mann, to dissolve clots in the coronary vasculature. That will be described in the 1980s section.

Initially, Cathy remained 2 years in the ICU on day shift, returning in 1987 and staying a further 9 years. For part of that time she was the Critical Care Coordinator, replacing Debbe Millikin. In 1996 she became an Administrative Supervisor, until her retirement in 2018. She values both tenures in ICU, what she learned and what she could offer. She was always interested in education and while in the unit, helped the aides in their understanding of arrhythmias. She also enjoyed teaching new nurses auscultation techniques to refine their knowledge of heart and lung sounds. When she was in charge on her shift, she did not assign the aides to an independent assignment. It concerned her that they had the degree of autonomy they did with no formal training. She was taught at Albright that “aides and LPNs worked under the direction of the RN.”

After her graduation from Lankenau Hospital in June, 1977, Lori Good (Perry) was hired by LGH. “I always knew I was going to be a nurse; I read all the Cherry Ames books. And when I was 16, I worked as a nurses’ aide part-time on 7 North.” After reviewing regional nursing programs Lori says, “It seemed like Lankenau was the best program for me, and I never regretted my decision.” Ruth Hepler hired Lori as a graduate nurse (GN) for the evening shift, and she worked from 1977-1981. (It appears the policy not to accept GNs had been lifted in the intervening months since Cathy was hired.) In 1981 Lori took a break to try office nursing for a time. She soon heard about a program at the Cardiovascular Institute

in Phoenix, Arizona, offering a 6-month intensive course in advanced cardiovascular nursing. It accepted only six nurses at a time from across the country. Lori was one of those six and she paid for it herself. It proved invaluable in her long career in critical care staff development, and in the ICU itself, as she was seen as an expert in many aspects of acute cardiovascular care including arrhythmias, heart sounds, IABPs and percutaneous and open-heart surgical interventions. She also attained her BSN from Millersville and MSN from Villanova.

Like many new ICU nurses Lori had her “trial by fire.” She was still on orientation and assisting Dr. Gentzler insert a Swan Ganz catheter. He became frustrated at her pace and called out from the room, “Would someone get in here who knows what they are doing?” It was a tough beginning, “but you learned” says Lori. She remembers evenings on surgical where all 10 beds were occupied with ventilator patients, and how the 2 bedside nurses and aides on duty labored to provide the care and attention the patients needed. She especially remembers how they mixed all their drips, wrapped foil around the Nipride bottle and along the tubing, and drew up and injected additives to the TPN. “You just wiped off the injection site with alcohol and injected. No air filtration hoods as is required by pharmacy nowadays.” Note that pharmacy now mixes all these drips, or provides the units with pre-mixed drips purchased from pharmaceutical companies.

Lori remembers many evenings covering cath lab, as there was often only one cardiovascular tech on call. And pulmonary came if the patient were ventilated or coding. One such evening in the cath lab a patient was “crashing” and not responding to the usual drugs, fluids and defibrillations. Lori was doing compressions and pulmonary was bagging the patient. Dr. Gentzler proceeded to glove up, open his chest with a scalpel and rib retractors, and massage his heart directly by hand. But the patient’s ventricle had ruptured, probably from an extensive anterior MI and could not be saved. She also remembers the very unusual case of a young man who had been drinking extensively the night before. He was admitted the following evening because of intractable vomiting throughout the day. The vomiting had been so intense he suffered an acute MI and needed invasive lines, fluids and drips to survive. He was only 21 years old. In fact, so many of the

patients Lori cared for seemed to “crash” that Linda Boyer, a unit clerk in ICU who was still working there until January, 2020, cut out little paper crosses and attached them above the beds Lori was assigned to when they worked together! All in jest, mind.

Both Cathy and Lori cared for a 15-year-old girl with a long bone fracture and chest contusion, admitted one evening after falling off her bike where, according to Dr. Carroll, she did not have any lights on. Drs. Maley and Mathews were her orthopedic surgeons. The girl needed a pin to stabilize her knee. According to Cathy, one of those surgeons actually inserted it in the unit. The teenager was in ICU only a few days. Despite being on a ventilator, suddenly she became more restless, tachypneic, tachycardic and short of breath. Cathy remembers her mouthing, “Am I going to die?” Then petechiae appeared on her upper chest and around her neck. Knowing she was deteriorating fast and unsure what these specific symptoms meant, Lori and the other nurses on evenings called over to their colleagues in the IMCU for help. Some of those nurses recognized the classic signs and symptoms of a fat embolism,¹⁵ possibly because they had previously worked in orthopedics. None of the ICU nurses on duty that shift had ever heard of this condition. Treatment was supportive only. The young girl did not make it through the night. The girl’s parents, who had been blaming each other for letting her go out at night, now turned their anger on the nurses and doctors. To them “we had looked so helpless to save their daughter.”

Lori too remembers those very “hairy” transports with patients on the balloon pump. By now the IABP could be run on batteries. One time, the pump battery failed near Brownstown. John Minnich, cath lab tech and John Esbenshade III, pulmonary tech, were accompanying her on the transport. “A battery pack was finally located at a nearby EMS location and was delivered to our ambulance under police escort. The police then proceeded to accompany us to our destination in Philadelphia, with one police car ahead and one behind us, their sirens blaring. Meanwhile we were doing CPR all the way.”

Lori “loved it all - the excitement, the drama, the adrenaline rush, knowing you were part of something big. Hoping you were making a difference and knowing

sometimes you did. And every day you were learning, and it's that way in nursing even today. There were fewer options then, less technology, fewer medications. Clinical presentation and physical assessment were paramount. You went with your gut and with such interventions as were available then to help determine the diagnosis." Cathy Myers is in total agreement with Lori's comments. She also especially loved the "challenge of a patient in cardiogenic shock."

Lori also remembers lighthearted moments and playing tricks on each other. An example was one they played on a first-year resident, "Max". He was short, with thin blonde hair and always wore white shoes. He proved an easy one to tease. On one such occasion, the nurses called to inform him that one of their patients was threatening to jump out the window on medical side, which overlooked the ambulance entrance to the ED. They asked him to rush with a gurney to catch him when he jumped. Max quickly responded and most obligingly stood below the windows, poised to make the catch. Took him a while to realize that no one else from the ED seemed the least bit concerned, nor were they joining him in his rescue effort!

At the end of her tenure in ICU, Lori has vivid memories of accompanying patients on a regular airline such as American Airlines, to Emory University Hospital, to undergo a percutaneous transluminal coronary angioplasty (PTCA). First it had to be confirmed that the airline had emergency equipment. The ICU nurse would then accompany a relatively stable patient, taking along the emergency tackle box, as previously described. The new procedure, devised by Andreas Gruentzig M.D. in 1977, was revolutionary in expanding the field of direct intervention to address coronary artery disease. Its action was to compress the lesion(s) inside the coronary artery using a balloon-tipped catheter, which was inflated once it was aligned alongside the lesion(s). Following compression, blood flow distal to the obstruction could be increased or restored, leading to improved myocardial performance. It became an alternative to OHS in appropriate patients.¹⁶ The procedure was performed on LGH patients by Dr. Gruentzig himself at Emory, until our cardiologists perfected the technique and there was back-up OHS on site, should complications arise. Once Lori arrived at Emory ED the staff did the intake

and she was relieved of any responsibilities, taking the next plane back to Pennsylvania.

Born and raised in Tennessee, Patsy Fasnacht was hired in 1977, following her move north from Florida, where she attended nursing school. She had met her future husband in Memphis while he was still in the Navy. They moved to Lancaster where her husband had been born and raised. Patsy came with some experience, having worked in the newly-opened Orange Park Community Hospital, "I was their first hire!" She primarily worked in their 6 bed ICU and, to gain more knowledge, attended a 16-week semester in critical care nursing at the college. "We saw some different things in Florida. For example, I cared for a patient who had been bitten by a snake."

Coming to LGH and Lancaster was "culture shock." "I felt somewhat nervous, so many of the nurses were LGH grads, they were unwelcoming. I felt different. The physicians also did not convey a feeling of equality - very hierarchical. I felt that LGH was not as progressive. There was a lot of "well this is the way we do things here." She felt that she had much more autonomy in Florida - for example, even as a student she had been "allowed to stitch up a young boy's foot in the ED." When Patsy was hired Pat Cohen was interim head nurse on medical, and Betty Pearsall was her mentor. Jeanne Donlevy-Arnold soon assumed the head nurse position. Staffing appears to have improved from even a short time earlier, as Patsy remembers usually having only 3 patients. But she remembers how hard you worked and how little technology was available to assist the nurses. She mainly worked evening shift and "loved" working with Bev McCann, "She was great to bounce ideas off - I hadn't been that long out of school - and Bev was always willing to help." Like many "outsider" nurses like Patsy, after a period of time she came to value, even love her time in the ICU and LGH nursing colleagues. Liz too experienced what it was like to be a "newbie" in the department, not a Lancastrian, but quickly came to appreciate her colleagues and make close friendships. She was deeply moved when Kay Knepper threw a baby shower for her a few months after she was hired. All of evening shift staff were packed into Kay's tiny sitting room for the celebration.

One patient of Patsy's who had been in the unit over 100 days, was an African-American man from the rural deep south. As a southerner, "I was the only one who could understand him." It felt like another language to these northerners. Good news is he was eventually discharged. Another time she was caring for a challenging young male patient who had overdosed on PCP. "He was violent and in leathers," needing Haldol to try to calm him. "I reached across him to get the blood pressure cuff, when he got under my arm and twisted it intensely. I reared back, pushed his hand against the pillow and told him firmly to stop that!" Patsy was successful in getting out of his grip and his father apologized profusely. "When the young man came around, he asked another nurse if he had hurt anyone. She said "no." Patsy was disappointed in this nurse's response as she felt it would have been beneficial if the individual had known the truth. She thinks it could have dissuaded him from using drugs in the future.

One very stressful Xmas Eve Patsy was working short and couldn't remain with a new resident who had been directed to do a cutdown. The patient had suffered an MI with papillary muscle tear, so appropriate IV access was paramount to insert a Swan Ganz catheter. The resident made an incision in the axillary region but could not locate a vein. So, he kept on cutting until the "incision line stretched from one side of the arm to the other." Per Patsy, one of the M2G2 doctors (Mann/McCann/Gault/Gentzler) came into the room to check and said, "My God, you've cut off her arm!" Patsy remains surprised at how much autonomy those first year residents had in their rotations. Another thing that surprised and disturbed her was how "much we were stripping away a patient's personality" when they were in the unit for extended periods. One patient in particular she remembers stood up out of bed "stark naked, with just some tapes and central lines flying about - and he didn't seem to care about his nakedness."

Patsy counts herself very lucky about one situation. On this particular shift, the blue strip of paper posted at the nurses' station on which charge nurses wrote the shift assignment identified, she thought, there were two patients assigned to her. It was actually three, but the name appeared further down, seemingly attached to another nurse's name. Patsy was working days that day. Thankfully about noon,

Martha came and asked her something about that third individual. He had suffered no untoward effects from being largely ignored. (Martha had popped in and answered his bell from time to time.) It has always bothered Patsy enormously, as do many of those many freaky events that nurses encounter. They just stay with us! Something which concerned her at the time was “the amount of Vitamin K administered intravenously - yet in the PDR there was a big warning not to give it IV.” Indeed, “there was a “black box warning” on each unit dose - things like cardiac arrest and anaphylaxis - I took that very seriously.” Initially, she would refuse to give the dose. Instead it would be given by the charge nurse. After a time however, she was “not seeing any side effects” and went ahead and administered the medication, albeit with trepidation.

One evening at change of shift, Patsy had given report to Darla and decided to help her hang whole blood before she went off duty. The blood was placed in a pressure bag to enhance the rate of flow. Almost immediately it burst and blood went everywhere, chiefly on Darla. After helping take care of the situation and clean up, Patsy said she would cover for Darla so she could leave the unit and change into scrubs. Darla refused, saying airily, “No, that’s O.K. It’s only blood!” (Darla does acknowledge she threw her shoes out after the shift.) How times have changed. Just a few years later the era of the risk of blood-borne pathogens had begun.

It was common practice not to completely shut off a NTG drip if a patient’s pressure was rather low, but he or she was not symptomatic, rather than turning it off completely and risking a return of chest pain. You would even continue to run it at just one drop a minute. A new nurse was caring for this particular patient whose BP was low, but not precipitously low, and she “refused to decrease the rate when I recommended it” Rather, she wanted to call the physician to have him decide what to do. Patsy was in charge. She told this nurse, “There was no need to call a physician to confirm. He was fine. I lowered the head of the bed, and decreased his drip.” Patsy was reported to Mrs. Petruni by the nurse for not notifying the physician of the drip rate adjustment. She was called down to see the Nursing Director and asked to recount the details. Following Patsy’s summary of the

situation Mrs. Petruni said to her, “I have to tell you, that Dr. Mann said: “She did the right thing.”

Patsy has two very moving stories about Dr. Mann. One evening an indigent, alcoholic, elderly man was admitted in some pulmonary edema and was receiving an alcohol drip. He had no family, no one to call. Dr. Mann chose to remain at his bedside for “3-4 hours; he was quiet, but very engaged and present with the patient.” As has been stated, Dr. Mann could be “gruff” with staff and residents alike, yet “he could do something this compassionate. He seemed not to want the patient to be left alone.” Another time, Patsy drew to his attention that a patient’s family had not been spoken to for at least 3 days, and were frustrated and very



Figure 19: Richard Mann, M.D.

anxious by this lack of communication. Dr Mann was rounding. Patsy asked, even insisted, that he go and talk to them.” Dr. Mann “seemed angry but did go and see them.” When he returned to the unit he said, “Patsy, you did the right thing, I don’t have to like doing it, but keep making me do it.”

Later in her tenure Patsy became the evening charge nurse when Bev McCann left the unit. Patsy too eventually left the unit, recommending to the head nurses that Kay Knepper would be a great replacement. She then had a variety of bedside positions at St Joseph’s Hospital for a short time, returning to LGH to work bedside in TNSU, 5 East and 5 West. She obtained her BSN from Millersville, then transferred to the nursing school, holding a number of education positions.

Nursing Academics

After leaving the ICU Patsy received an MSN from Villanova and a PhD from Widener University. Along with Patsy, only one other ICU RN is known to have attained a

PhD. That is Priscilla Simmons, who received hers from Columbia University. Priscilla worked a few years in the unit in the 70s. She spent most of her working career as a nurse educator at Eastern Mennonite College, where several of her BSN students were from the ICU. Cheryl Grab (Vitaccio), who also worked in the unit in the early 70s, was a nursing instructor at the LGH nursing school and has her Doctorate in Education. As of 2017, she has been the Dean, Division of Nursing, at the Pennsylvania College of Health Sciences and Nursing. Towards the end of her career, Jeanne Donlevy-Arnold was vice president of patient care at Good Samaritan Hospital, Lebanon. She and her husband were awarded honorary doctorates from Lebanon Valley College, for their financial support and involvement in numerous regional and national organizations.

Male Nurses

We only know of one male nurse hired in the 70s, Tom Lyman in 1979. He worked for a relatively short in the unit, then became a nursing supervisor for a time. The 1980s was when the hiring of male nurses began its rapid rise and their stories will be told then and in later decades.

Nursing Leadership

Ruth Helper ran a tight ship. She was “old school”. Per Fran, if a male patient was being wheeled out from medical side she would go over and pat him on the cheek and say “Goodbye and have a nice day.” She was being friendly but even more she was looking and feeling to see if he had received a shave. Woe betide if that weren’t the case! Darlene shares that Ruth would look under the patients’ beds to ensure they were dust free. Oh, and the day she found a cotton ball under one of Darlene’s beds! Pat Cohen, a nurse who worked in the early 70s until 1975, and was interim head nurse for a short period, challenged Ruth at the time, believing she was too tough on the staff. However, in a letter she wrote to Ruth in 1991 she opened with, “What do you say about a legend upon her retirement?” She goes on to write, “Funny thing is, ten years later as a head nurse myself, I found myself making the same hard decisions”, not necessarily about cotton balls, but about keeping your

patient's environment clean and tidy, being organized and paying attention to the little as well as the big things. Per Pat, "A tidy room reflected tidy care." She refers to Ruth's "four commandments - organization, planning, anticipation, and action" - that



Figure 20: Ruth Hepler, RN, BSN

were drilled into those "green ICU nurses." Pat also recognizes Ruth's ability to laugh and see the humor in things. She shares how everyone was in stitches when Dr. Mann took it upon himself to "pull the plug" on the life support of a brain-dead individual, reinforcing his message about the need for "someone" to take charge in these tough situations. "Too bad that it was the bed cord," Pat

writes. (Actually, it was Kay Knepper who quietly pulled the correct plug.) And who could forget that Ruth always had a small ruler to write with? She placed it on the paper or document and used it to guide what she wrote in a straight line above it. Characteristically, all those letters/words were cutoff somewhat at the bottom. Years later colleagues reviewing this writing know immediately it is hers.

As first described in Part I, Ruth was a tireless patient advocate in an era when questioning a senior physician's medical decisions was unusual. She also had strong support from Dr. Mann who himself closely oversaw any general practitioner's care decisions on medical side. In this particular instance one of the specialty physicians, not an internist or cardiologist, admitted a patient in CHF who also had a low hemoglobin count. Ruth notified him of the lab value and he ordered a whole blood infusion. "I questioned his order" (whole blood versus packed cells) but he "insisted" on their following the original order. "We ran the blood slowly, but, of course, the patient got into trouble and when we called him again, he said I was in error because he ordered packed cells. He reported me to Mrs. Todd but at the time

Dr. Davidson was sitting at the desk and overheard my conversation with the attending physician and supported me.when I called Dr. Mann and told him I had a conflict” with the young physician....”I knew Dr. Mann would support me. Then I called” (the doctor) “and told him he could never call in an oral order again while I was Head Nurse.” There were no further repercussions from Mrs. Todd.

June was seen as “fanatical” about nurses wearing a freshly ironed uniform and having clean nursing shoes. She was known to line up nursing students to check them out. One time one student did not pass muster and was sent to the Nursing Office to locate some shoe polish. Still, many practices were lax by today’s standards; for example, leftover meds were placed in a bottom drawer and used for future patient needs. Only narcotics were locked up. Annie acknowledges June was neat and tidy but talks about how “approachable” she was, that she always felt “comfortable in her presence and wanted to emulate her. I just wanted to work harder to be a better nurse because of her.”

Like all the managers, Martha arrived in the unit each morning between 5 and 6 am, in all seasons. This allowed her to interact with the night shift and get any critical updates, as well as assess what the day might bring. But staff knew not to bombard her with questions either, she didn’t “want to discuss the weather or road conditions.” Darla remembers that in a blizzard Martha walked to work, having booked into a downtown hotel the night before; she was the only one from day shift who made it in. She was seen as a “steady hand, always there for you.” She was respected by all, including the doctors. According to Darla, like all the managers, Martha was particular about ensuring that what physicians ordered was accomplished, unless something untoward happened. Patsy remembers how she would try to keep everything “spic and span” and predict all the things Martha would check on at each bedside as she was rounding soon after the morning shift report, e.g. that dates were current on syringes and blue bowls. “I was probably somewhat compulsive when I checked out each patient,” Martha admits. Still, Patsy admires this attention for detail, “It was probably for the best due to the potential for cross-contamination in an open ward.” In those days you didn’t call your manager when they were at home, you took care of challenges as a team and with

the assistance of the shift supervisor. Note that Martha and Ruth achieved their certification in critical care nursing (CCRN) about 1980 and the late 70s respectively, soon after the exam began to be offered by the American Association of Critical Care Nurses.

Hiring practices remained elementary. Along with other rising graduates, Darlene was asked to list her top three choices on a piece of paper. Thankfully for ICU, she got her 1st choice. Annie was asked if she wanted to work in the unit when it was opening on the 2nd floor, and she said “Sure.” That was it. Debbe got her position by recommendation of Dr. Mann. Fran asked to be assigned to the unit. Dr. Mann wanted to pay for Annie to go on for her RN diploma, but test-taking was hard for her and she wasn’t sure she would be assured of a position back in the unit once she graduated. She found another “niche” in the cath lab and remained there until her retirement. (Dr. McCann expected she would miss the unit so much she would return within 6 months.) Martha actually requested the OR as she liked working with her hands, but there were no positions available. Ruth Todd offered her a slot in the preemie nursery instead. Martha said “absolutely not!” She then accepted a position in ICU and never looked back.

From 1977 to 1986, four head nurses followed Ruth in quick succession: Jeanne Donlevy-Arnold (1 year), Liz Thompson (3 years), Shelvy Thompson and Betty Pearsall (2 years apiece). Jeanne accepted an assistant nursing director position at St Joseph’s Hospital; Liz transferred to Critical Care Staff Development; Shelvy left the organization to pursue other opportunities; and Betty had to leave with the adoption of her daughter. Betty later returned to the hospital, working first in the cath lab, then risk management, for the hospital and community. Once she left the ICU in 1977, Ruth taught in a variety of settings, concentrating on ACLS and CPR and later, following her official retirement in 1991, worked a further 20 years for the Child Protect Program at various community industry sites, administering flu shots and completing wellness screening tests. She did that until she was 84 years of age.

Senior nursing administration was often slow to appreciate the new paradigms and demands for critical care nurses and about the need for more formal

education. Head Nurses continued to doggedly request improved conditions and staffing. Ruth was considered “cocky” when interacting with residents, helping guide their critical care orders. When that was challenged, Dr. Weber spoke up on her behalf, “They didn’t learn this in medical school!” Ruth Todd, however, who continued as Director of Nursing until replaced by Audrey Slater, was instrumental in obtaining funding from Lancaster General Nursing School alumni for a simulator to assist with monitor interpretation. From the Nursing School, Peggy Judge enthusiastically supported programs to enhance nursing professionalism. She was a primary motivator for implementation of an RN to BSN program at Millersville University. Many ICU nurses gained their BSN through that program. Now, most nurses attain their BSN, and some their MSN, through the Pennsylvania College of Health Sciences and Nursing.

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