Nurses Must Knock Down Professional “Silos” and Create Quality, Safe and Effective Interprofessional Teams. From the Inside Looking Out: A Healthcare Providers Experience Being the Family Member

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Introduction

After several days of what was thought to be just a common cold, progressed into a severe sinus infection followed by three separate emergency room (ER) visits (one via 911). The entire case resulted in a total of 21 days in an acute care hospital, three months' home from work totally debilitated, and a prognosis of a yearlong rehabilitation with hopes of a full recovery. After 21 days in a nationally recognized ANCC “Magnet” status teaching and research hospital, a diagnosis of bronchiolitis obliterans organizing pneumonia (BOOP), also known as cryptogenic organizing pneumonia (COP) was made. COP is a rare lung condition in which the bronchioles and alveoli become inflamed with connective tissue. This is an uncommon illness occurring in 6 out of 100,000 hospitalizations, which was noted by the repeated ER visits and hospitalizations (American Lung Association 2015). The intent of this article is not to discuss the pathophysiology, diagnosis, and treatment of COP but to explore this healthcare experience through a different lens. As healthcare providers we each work within our specific area of expertise or what may be referred to as our “silos.” Each silo is rich in research, knowledge, experience, and expertise regarding best practices for quality patient care. Each silo also assumes that the other healthcare silos always know, respect, understand, and implement their expert advice and wisdom. However, after this 21-plus day experience as a patient's family member, not as the healthcare provider, the harsh reality is that each of the wide array of health care “silos” work alone and are not in collaboration with each other. In addition to the fragmentation, there is no unifying body pulling all the parts together to create this individualized quality healthcare experience so often discussed in not only the literature, but also in every healthcare system's mission statement. It is the nurse's responsibility to ensure that quality patient/family centered care is provided by knocking down these silos and unifying care.

Abstract

As healthcare providers, we like to think that the care we provide is always quality, safe, and patient-family centered. This article describes an experienced nurse practitioner’s recent acute care hospital experience as a wife sitting on the other side, watching their loved one receive care. This stressful eye opening experience forced a careful examination and assessment of what the patient and the family members really need to ensure quality and safe care. All nurses must take the lead, and listen closely to their patients and families. Be more than just their advocate; be the gatekeeper, knock down professional silos, unify and coordinate care, and most of all, ensure agreement and understanding between the patient, their family, and all team members.

Background

The patient is a 59-year-old active, healthy male, married with two grown married children and a grandchild. Presently he is the laboratory manager of a large microbiology lab in a well-known and respected hospital, as well as a part time employee as a microbiologist at a local veteran's hospital. With over 30 years in the field of microbiology, he considers himself to be very proficient and an expert. His wife is an experienced advance practice registered nurse (APRN) teaching nursing at a nearby state university. Her daughter is also an APRN and former employee of the same hospital her father worked in. His son is a highly trained special agent for the federal government residing in New York. The family is extremely close, spending a great deal of time together.

Prior to this illness, the patient states that he is in excellent health. He walks six blocks to and from the hospital parking lot each day and easily climbs the six flights of stairs to his office. He enjoys exercising, especially hiking and power walking several times a week. The patient has no significant past medical history. He routinely completes his yearly physical exam, including routine blood work, flu vaccine, and all other age required preventative screenings. All findings have always been within the normal ranges. He rarely requires medical care, with the exception of a prescription to treat an occasional cold or virus. He has only been hospitalized twice in his entire life: in 2009 for a left total knee replacement as a result of an earlier sports injury and a tonsillectomy 30 plus years ago. Presently, he takes no medication on a daily basis. He never smoked and drinks on rare occasions, usually a glass of wine or a beer.

Experience

It all began with a cold; common rhinitis that after three days turned into a sinus infection which required a visit to a local clinic for an antibiotic. After taking the antibiotic for three days, the patient’s symptoms increased in severity. He called his Primary Care Physician (PCP), stating that he had an elevated temperature, nausea, vomiting, a
headache with mental confusion, and a persistent cough. The PCP instructed him to go to the emergency department (ED) for assessment. The patient insisted on going only to the ED at the hospital at which he worked, which was a 45-minute drive. The PCP was not pleased with his choice of hospital, not because of the geographical distance and ride, but because it was out of his network and very difficult for him to communicate with.

Emergency Department Visit #1

Upon arrival to the ED, the triage nurse completed the assessment and asked why the patient did not go to see his PCP first. The patient explained his symptoms and stated the PCP felt he could be best and immediately evaluated in the ED. After several hours of waiting, a complete physical evaluation was completed, during which time the ED physician reiterated the comment "I guess your PCP had no time to see you today!" The chest X-ray noted diffuse infiltrates throughout both lungs suggestive of a viral or atypical pneumonia. An IV was started, the patient was hydrated, and given medication for nausea and vomiting. Vital signs were stable, lungs clear, patient was afebrile with a slight cough, and the ED physician felt the patient was stable and he was discharged. Patient stated that he felt 100% better than he did on admission. However, just prior to discharge, during the last set of vital signs the patient's O2 saturation had dropped down to 88 (normal 90 and above). The patient was asymptomatic, and the ED physician stated the change in O2 saturation could be due to the possible pneumonia, and to continue with antibiotics and to return to the ED if condition deteriorates, especially if there is an increase in shortness of breath.

The next 24 hours were relatively uneventful; however, the patient showed no signs of improvement. A follow up appointment with the PCP was scheduled for later that week. This same day the ED physician who treated the patient in the ED called to see how the patient was feeling. He stated that he was concerned with the drop in his O2 saturation while in the ED and that he felt the PCP should send him for a CT scan of his lungs. The PCP, angry because the ED physician did not communicate this information along with the rationale directly to him, agreed to order a CT scan. However, the earliest a CT scan could be scheduled as an outpatient was four days from the present day.

Emergency Department Visit #2

During the night the patient woke up extremely short of breath with minimal exertion, nauseous, and with a temp of 101 degrees Fahrenheit. He was extremely anxious, slightly confused, and weak. He returned to the ED, wheel chaired from the car to the triage area, with an O2 saturation of 82. At that point, service was fast and the medical team moved quickly. He was quickly sent for a CT scan to rule out a pulmonary embolus. Everything was moving so fast; family members were called to come down to the ED because of the uncertainty of the patient's rapidly declining condition. The patient and family continued to explain to the medical team how the patient had been at the ED just two days earlier and the rapid progression of the patient's illness. The same questions, medical history, and progression of the illness were all repeated over and over and over to every new healthcare provider that walked through the curtain.

Admission #1

The patient was admitted to a floor that treats primarily patients in acute sickle cell crisis. However, because of the advances in the treatment of sickle cell, most patients no longer required inpatient care. Therefore, the unit became an “overflow” unit, caring for a variety of both medical and surgical patients with no designated expertise. The unit was old, run down and needed to be cleaned, especially dusted. The patient was first placed in a three bed room with two female patients. A family member mentioned that sharing a room with female patients was very unusual and would be very uncomfortable for their father. Apparently the bed assignment was an error, blamed on the premise that the patient’s first name can be either a female or male name; however, all documentation and the patient’s identifying wrist bracelet indicated male. The patient and his family requested a private room and were very willing to pay extra. The patient felt very entitled to a private room especially since he worked at the hospital and he was considered part of the management team. However, they were informed that at this time no private rooms were available. The patient was placed in a room with a patient who was intoxicated and proceeded to vomit profusely and loudly all night. Needless to say this did little for the patient’s own symptoms of nausea and vomiting. The patient’s wife stayed the night, diligently attending to all of his needs while trying to get a wink of sleep in a hard, straight back chair. The assigned nurse and patient care assistant (PCA) came into the room at the start of the shift, introduced themselves, and wrote their names and phone numbers on the bulletin board. For the remainder of the night, the patient was woken up routinely for vital signs, a 2 am weight, and to be asked if he needed anything for nausea or vomiting. All night long the atmosphere on the unit was very loud and noisy. The sound of continuous bed alarm monitors going off, followed by nurses running down the hall to check on the escaping, disoriented, and confused patients who were yelling “let me out of here,” The halls were brightly lit with nurses gathered next to each other with their workstations on wheels also referred to as WOW’s, completing their electronic charts and talking. The patient’s room was located next to the staff lounge which was another area for loud noise and all night conversation. Because the patient was admitted late on a Friday evening, staff informed him that minimal diagnostic assessment is completed on the weekend and that any type of testing would most likely happen on Monday. Over the weekend, he was followed by the pulmonology fellow as well as the weekend medical hospitalist and her team.

Treatment over the weekend was based on symptom management. The patient was placed on a cocktail of antibiotics, medications for his nausea and vomiting, bed rest, and continuous O2 at 3 liters. Although his lungs were clear with minimal diminished breath sounds, he was to receive respiratory treatment every 6 hours. These treatments would have been sporadic, based on the respiratory technician’s assessment of his lung sounds or their desire not to wake him, however, the patient insisted that he receive the treatment as ordered. Although the patient had excellent healthy veins, the intravenous cocktail of antibiotics was toxic to his veins. After several infiltrated IV sites and collapsed veins, the family spent a great deal of time as a gate keeper in the prevention of infiltrated IV sites. Despite the nursing staff’s reassurance that the patient’s IV site was adequate, the patient and family insisted that all sites were frequently checked and flushed prior to antibiotic administration.

On Monday, all teams were back in operation. The pulmonology teams came in several times a day with an entire array of possible
diagnoses. The medical team came in with their "to do list," which consisted of all of the other areas that the pulmonary team does not cover. After numerous complaints from both the patient and his family, the nurse manager had the patient moved to a private room located in a quiet area on the unit. As the week progressed, the patient's condition appeared to have stabilized. However, he continued to be extremely short of breath with minimal exertion and his O2 saturation levels remained in the mid to high 80's with continuous O2. At the patient's persistent request and frequent reminders by the patent that he was a medical specialist groups were examining or discussing the patient's health medical team in for a consult. As can be predicted, there were numerous possible diagnoses, no definitive answers, and many brilliant professionals, all experts in their own field of expertise, or "silos," in total disagreement with each other. What they did agree on was to send the patient home on a cocktail of antibiotics, oxygen as needed, activity as tolerated, analgesics for the fever, and rest. They all agreed that the patient would either get better or return back to the hospital. After 8 days in the hospital with very little sleep, both the patient and his wife agreed to go home and follow the outlined plan. Prior to his discharge, at the recommendation of the occupational / environmental health medical team, all newly purchased linens and drapes were removed from the house, as well as "baby chicks" that were purchased as an Easter gift and temporarily residing in a porch inside the home. All of the air vents in the home were professionally cleaned and sanitized. The nursing staff completed all of the appropriate discharge paperwork. The discharge planning nurse came in to work out the details required to get oxygen in the patient's home. This was the first time the patient met the nurse in his eight-day hospital stay and was surprised to note that her office was located only three doors down from his room. Whatever happened to the quality patient care concept that stated that discharge planning should begin when the patient is admitted to the hospital? Needless to say, the patients discharge was that stated that discharge planning should begin when the patient is admitted with a weekend ahead of "symptom management" and no procedures, never reviewed with the patient and family. The packet was filled each day with a variety of drug information handouts and safety tips that the nurses were required to provide the patient with daily and then religiously document in the medical record under patient education. And the patient was faced with another Friday night admission with a weekend ahead of "symptom management" and no real answers or further assessment. Once again, after much complaining, the patient was moved to a private room.

On Monday, the pulmonary and infectious disease teams agreed to stop the antibiotic cocktail based on the patient not getting better; in fact, his condition worsened. He had a temperature of 101 degrees Fahrenheit, significant shortness of breath with minimal exertion, chest pain with inspiration and expiration, and a significantly elevated white blood cell count (WBC) despite being on antibiotics for over 10 days. The patient was sent for a bronchoscopy and the results were inconclusive, thus requiring further invasive diagnostic work up. A lung biopsy was performed. The biopsy reported noted gross changes at the base of the lung tissue, described by the pulmonary surgeon to the patient and family as a hard, ridged "wet cotton candy" type of encapsulation of connective tissue. After the procedure, in the OR, a chest tube on low continuous suction was placed in the lung to prevent a pneumothorax. Prior to the procedure, the patient and the family asked if he would be returning to the same floor since he would be requiring specific care for the chest tube. The nursing manager guaranteed them that she and her staff often take care of patients with chest tubes and she ensured that they would be all set.

The entire lung biopsy between pre and post-operative time took over 5 hours. Because the patient was not a scheduled procedure, the patient did not go up to the OR until after 3 pm, therefore returning into the post-operative area at 8pm. The biopsy was uneventful, the chest tube was in place and patient was stable enough to return back to his hospital room. Hospital protocol did not require that the patient be transported from the post-operative area to the floor with portable suction attached to the chest tube, provided that the patient was immediately connected to low continuous suction upon arrival to the room. The magic word was "immediately!" Upon arriving back to the room, the nurses went to attach the patient's chest tube to suction however, the room had no suction equipment in it. After frantically searching numerous other rooms, suction equipment was attached to the wall mount however, the nurses did not know how to use the equipment. By this time over an hour had passed it was almost 10 pm and the nurses had to call the on call supervisor for assistance. The on call supervisor came down to the unit, was unable to get the suction equipment to work and called the Specialized Workforce for Acute Transport Team (SWAT) nurse who came to the unit and eventually sent via ambulance back to the large medical center from where he was recently discharged. Fortunately, the patient was admitted directly back into the hospital, avoiding the rigorous wait and routine of the ED. Unfortunately, he was readmitted to a different floor, another "overflow" or "catch all" unit. This unit had a wide variety of patients: medical, surgical, young, and old. The nurses were also very young and inexperienced, with their ages ranging from the early 20's to early 30's. For many of them, this was their first nursing job and an entering point into this large research hospital. The nurse manager was also young and appeared to have had some prior nursing experience; however, she lacked leadership skills or experience. As the saying goes, déjà vu! The patient was admitted to another semi-private room with a patient detoxing from a drug overdose. The nursing staff was completely clueless to the prior admission and ED visits. The admission packet was placed on the night stand with all admission policies and procedures, never reviewed with the patient and family. The packet was filled each day with a variety of drug information handouts and safety tips that the nurses were required to provide the patient with daily and then religiously document in the medical record under patient education. And the patient was faced with another Friday night admission with a weekend ahead of "symptom management" and no real answers or further assessment. Once again, after much complaining, the patient was moved to a private room.

Admission #2

The patient went home with the outlined plan of care in place. Oxygen equipment and tubing ran the length of the house. Antibiotics, inhalers, spirometers, thermometers, and various other supplies covered the kitchen counter. The patient rested and slept in a living room recliner in a semi Fowler position, connected to continuous O2 at 4 liters. After 24 hours of trying intensely to feel better, the patient spiked a high fever, rapidly deteriorated, became extremely nauseous, and respiratory arrested. Emergency medical response (911) was called and the patient was transported to a local hospital. The patient had an emergency CT scan to rule out a pulmonary embolus again and was
got the suction to work. However, at this point, due to the 1 ½ hour delay in maintaining continuous suction to the lung via the chest tube, a pneumothorax developed and the lung needed to be reinflated. The OR was called and the surgical resident, who was part of the team of doctors who performed the lung biopsy, angrily reinflated the lung. Unfortunately, the patient's lung was reinflated at the bedside, which is a relatively quick but an extremely painful procedure. Needless to say, at this point, the patient and his family were all devastated, tired, and angry. They had been not only told, but reassured, by the nursing manager that the nurses on the unit had experience working with chest tubes. They also knew the patient would be returning to the floor with a chest tube in place, but yet no one checked the equipment prior to his return.

The lung biopsy report identified significant lung tissue changes which confirmed the diagnosis of bronchiolitis obliterans organizing pneumonia (BOOP), also known as cryptogenic organizing pneumonia (COP). Very often short-term low dose corticosteroids are used to treat these patients, which at first masks the patient's symptoms only to have them return once the medication is finished. Because COP's rate of recurrence occurs in up to 50% of patients, treatment consists of long-term corticosteroids, with a duration of 8 to 12 months, starting with high a dose and slowly tapering the medication. Other care interventions included symptom management such as O2 monitoring and regulating activities of daily living (ADLs) by providing frequent rest periods and naps, frequent blood glucose monitoring and diet control to prevent steroid induced diabetes and obesity, and daily low dose antibiotics to prevent pneumocystis pneumonia, common in immunosuppressed patients.

The patient and his family were relieved to finally have a diagnosis, but were also very anxious about the long-term treatment plan and chance of reoccurrence. Being healthcare providers, the patient, his wife, and his family vigorously researched the Internet for information about COP. They created an extensive list of questions and concerns. The pulmonary medical team was eager to provide direct, concrete answers, most of which ended with “only time will tell, we do not know.” All of the other teams, including the nurses, referred the patient to the pulmonary team for answers. The patient and his family felt as though they were the ones educating all of the staff and nurses other than the pulmonary team about COP. Everyone was eager to learn, but shouldn't the roles be reversed?

Two days after the diagnosis was made, the patient was discharged home to recuperate. He had a folder filled with all of the medication and safety information provided to him from the nursing team, all of which he never saw before. The discharge nurse introduced herself and provided him with a list of follow up appointments and prescriptions. The patient was very concerned about missing so much work and the need to go out on disability until he was physically able to return to work. He had a stack of paperwork that needed to be completed and returned within 24 hours to his employer to avoid any disruption in his pay. The discharge planning nurse was quick to bluntly state that she had no idea who needs to complete the paperwork; she does not complete it, and perhaps he needs to have his own PCP complete it. Ironically, his own PCP had no idea he was ever in the hospital; he was never called or notified of his patient's admission or medical status by anyone from the hospital, but yet he was the assigned medical person to complete all required paperwork that needed to be returned within 24 hours. What do patients do when they have no families? What do families do when their primary provider suddenly becomes sick, totally dependent on others for care, and is given stacks of required medical paperwork to immediately complete in order to continue to receive their paycheck?

Review of the Literature

Between the years of 2011 and 2016, there were over 9000 articles published documenting how and why nurses need to work collaboratively within interprofessional teams. The need for interprofessional collaboration in health care has been discussed for decades [1]. The term interprofessional collaboration is a fairly new, but the concept has been documented as early as 1928. Lowell T. Coggeshall, a physician who began his career in 1928, reported in 1965 at the Association of American Medical Colleges Annual Conference (AAMC) that “the concept of medicine as a single discipline concerned with only the restoration of individual health from the diseased state should be replaced by the concept of health professions working in concert to maintain and increase the health of society as well as the individual” [2]. In 1970, The Lyxaught Report, released by the National Commission for the Study of Nursing and Nursing Education, stated that roles and responsibilities of nursing as a profession need to be clarified and that nurses and physicians must work together to improve patient care [3]. In 1972, the Institute of Medicine (IOM) recommended the advancement of health teams, and by 2000, the IOM Crossing the Quality Chasm series emphasized the critical need and importance of making the necessary changes within our present day healthcare system in order to successfully deliver high quality and safe patient care. In 2011, the IOM report, The Future of Nursing: Leading Change, Advancing Health was a call to transform healthcare systems where “interprofessional collaboration and coordination are the norm.” The report states that nurses must be positioned to take charge and lead the way in the improvement of patient-centered care. The American Nurse Credentialing Center (ANCC), a subsidiary of the American Nurses Association, requires that nurses demonstrate their involvement in interprofessional collaborative practice within the care delivery system as part of the Magnet Status application and renewal process. The Patient Protection and Affordable Care Act (ACA) upholds the belief that interprofessional collaboration is crucial in order to ensure patient-centered care.

All of the articles, reports, and other evidence-based research documented throughout decades demonstrates that working collaboratively within interprofessional teams is not only essential, but critical in the delivery of quality, safe patient centered care. In addition to the research, health professional programs have made great strides in ensuring that their graduates in each of the various types of health related programs meet core competencies in the area of collaboration and team work. The American Association of Colleges of Nursing has integrated interprofessional collaboration expectations into its “ Essentials” for baccalaureate in 2008, master's in 2011, and doctoral education for advanced practice in 2006. The Accreditation Council on Graduate Medical Education (ACMG) uses their Outcomes Project as a competency guide for undergraduate programs in medicine. The guide incorporates competencies in core areas such as professionalism, mastery in interpersonal, communication, and leadership skills, and most importantly, how to effectively work within a interprofessional teams [4]. In 2011, the Association of Schools of Public Health (ASPH) drafted undergraduate learning outcomes intended for two- and four-year institutions. One of the key four learning outcomes that directly focuses on interprofessional education was: “Engage in collaborative and interdisciplinary approaches and teamwork for improving population health” [5]. Other health related professions such as
dentistry, pharmacy, osteopathic medicine, and physical and occupational therapy have all worked diligently to create and implement specific core competencies in their related areas regarding collaboration and interprofessional teamwork.

It is very evident, as noted above, that the research and data collected demonstrates that health professional organizations and educators “get it.” They understand and appreciate the need for interprofessional collaboration. But, as noted in the above case study, interprofessional collaboration did not happen! It was apparent that nurses like the various other healthcare professionals worked in their own “silo.” Nurses completed required tasks, drove their WOW’s up and down the halls and in and out of patients rooms documenting work completed, and managed their patient workload, but they were not part of an interprofessional team that helped to coordinate and deliver quality, safe patient centered care. Perhaps each individual health profession should meet the core competencies outlined by their program on how to work as a team collaboratively within their own profession. After all, most of the clinical training provided to students is with professionals within their own discipline. Therefore, are health profession students, such as nurses, graduating and lacking the critical skills required to work effectively and efficiently as an active team member within an interprofessional healthcare environment?

First, it is important to define the term “interprofessional collaboration” as it will be used within this article. In researching numerous publications, the World Health Organization (WHO) definition of interprofessional collaboration as “multiple healthcare workers from different professional backgrounds [working] together with patients, families, care providers, and communities to deliver the highest quality of care” [6] is the most commonly used. Others more loosely define interprofessional collaboration as a partnership that starts with the patient and includes all involved healthcare providers working together to deliver patient and family centered care. The term “interprofessional” is the updated version of older terms such as interdisciplinary, cross-disciplinary, and trans-disciplinary.

Discussion

Step one, understanding that we need to collaborate and work within interprofessional teams, appears to be well established and documented. Step two, teaching all health professional students core competencies within their own discipline regarding coordination and collaboration of care amongst each other, also seems to be established and progressing. However, there seems to be a lag and deficit in teaching health professionals how to work efficiently and collaboratively within interprofessional teams. The main crux of this article is how we, as nursing educators, can best prepare our students to have the critical thinking and leadership skills to be engaged, active, and collaborative interprofessional team members. The goal is to empower students to enter the workforce prepared to knock down “silos,” coordinate care, and empower other team members to work together to deliver quality, safe care.

A starting point requires that all nursing programs include core competencies for interprofessional practice into their curriculum with the expectation that all students meet these competencies prior to graduation and entrance into the workforce. The American Association of Colleges for Nursing (AACN) published a report in May 2011 identifying the core competencies for interprofessional practice (CCIPP). The report was written by group of expert panelists from various health care professions who were inspired by the vision that interprofessional collaborative practice was the key to safe, quality, patient centered care. In order to achieve this vision, the report states that all health profession students must be provided with continuous education and opportunities throughout their educational program in order to develop interprofessional skills and meet core competencies for collaborative practice. It is the role of health profession educators to prepare students to enter the workforce prepared and confident to work collaboratively as an active team member. The report uses the definition of interprofessional education defined by WHO which states “when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes”.

The CCIPP report identifies four competency domains. Each domain contains a set of more specific competency statements. The four domains are: Values/Ethics for Interprofessional Practice, Roles/Responsibilities, Interprofessional Communication, and Teams and Teamwork. Each domain addresses how health professionals can adopt standardized interprofessional collaborative skills to successfully implement interprofessional collaborative patient-centered care. The author will use these four domain competencies outlined in the CCIPP report and relate their application to the case study presented.

Values/Ethics for Interprofessional Practice

This first domain, values and ethics, is an individualized patient-family centered approach, grounded in a sense of shared purpose to support the patient. This domain requires health professionals to mutually respect and trust each other. Collaborative care honors the diversity that is reflected in the individual expertise each profession brings to care delivery. Gittell describes the link between interprofessional values and effective care coordination in health care stating, “Even timely, accurate information may not be heard or acted upon if the recipient does not respect the source”.

The case study identifies that the patient and his family are healthcare professionals. The study also identifies the patient and family as being educated and completely invested in the care of the patient. Also noted is that they have had very little experience being “on the other side;” sick, in the hospital, and a patient. Additionally, the patient is ill with a complex medical problem that requires multiple health professionals to coordinate and collaborate care. Lace the interests of patients and populations at the center of interprofessional health care delivery. All interprofessional healthcare providers caring for patients and families must:

- Respect the education level and expertise of the patient and family (i.e. Microbiologist, APRN).
- Respect and support the fear, anxiety, and unknown the patient and family is undergoing.
- Respect the privacy of the patient and family, but at the same time share and communicate vital information to each other (verbally as well as electronically).
- Collaborate as a team, break down “silos,” and operate as a united front, all on the same page with the patient at the focus of care.
- As a team, build a trusting relationship with the patient and family. Trust includes honesty, familiarity (same care team, same floor, same nurses, same health care providers), support, understanding, and open discussion. Create an environment for the patient and family where “everyone knows their name!” Repeating the health history and what brought the patient to the hospital over and over
pregnant, and the intensity and severity of health care problems challenge health care professionals today; there is no possible way one person can do it all. Gone are the days of the local general practice physician and his or her nurse directing all components of their patient's care. Collaborative practice requires that each profession knows and uses the their expertise and skills in a patient-centered way. Clearly defined professional boundaries and scope of practice must be established and identified in order for health professionals to easily communicate their expertise and responsibilities to professionals of other disciplines. All interprofessional healthcare providers caring for patients and families must:

- With their introduction to the patient and family, clearly communicate their roles and responsibilities regarding the patients care. Don't make the patient and family ask who you are and why you're there. If the patient is alone, leave a business card or some form of identification of your role and responsibilities so they can accurately share this information with their families.
- Know your limitations in skills, knowledge, and abilities. If you are a new health care professional and something is new to you, ask for help. Plan ahead so that appropriate help is available when needed (i.e. the chest tube situation could have been totally avoided if nurses were prepared to care for the patient upon his return from the OR). If a skill or knowledge resource involves a health professional from a discipline other than yours, ensure that they are aware of their role and responsibilities within your team.
- Know the roles/responsibilities of the other interprofessional team members. Engage in respectful, interdependent relationships to improve care and advance learning.
- Work collaboratively with other healthcare professionals to complement each other's own professional expertise and to develop strategies to streamline and meet specific patient care needs together (i.e. healthcare assistant can take vital signs the same time medications are given so the patient is only woken up once).
- Educate the patient and family as to what roles/responsibilities each of the interdisciplinary team plays. Facilitate their ability to access other team members when needed (i.e. respiratory therapy for a respiratory treatment, dietary for meal requests, discharge planner for discharge planning requests).
- Treasure and use the unique and complementary abilities of all members of the team to optimize patient care (i.e. the experienced nurse who has taken care of numerous post bronchoscopy patients and knows that ice chips soothe the sore throat and cough; use other nurses and health care professionals who have taken care of patients diagnosed with COP regarding specific care strategies and ideas).

Interprofessional Communication

According to the Joint Commission of Hospital Accreditation (JCAHO) more than 60 percent of cases of medical malpractice that result in the risk for injury, actual injury, or death, are caused because of miscommunication or poor communication [8]. Accurate, open interprofessional communication is probably the most important competency domain! Why don't team members just talk to each other? Perhaps coming from a generation of continually hearing “if you did not document it, you did not do it,” health care professionals have become obsessed with documentation, perhaps to a point where they no longer verbally communicate. Is it the influence of the next generation of health professionals, the millennial generation, who finds it easier to “text” and communicate electronically then verbally, influencing our total communication system? Are health care professionals so isolated in their own “silos” that there is a creation of professional hierarchies with demographic and professional differences creating dysfunctional communication (i.e. physician to nurse; specialist to medical hospitalist team)? Whatever the case might be, it needs to stop.

All health professionals on all interprofessional teams need to communicate not only electronically but also verbally. Communicating feelings, thoughts, ideas, knowledge, expertise, and plans provides the team and patient with direction. All interprofessional healthcare providers caring for patients and families must:

- Use a variety of effective communication tools and techniques to facilitate discussions and interactions that will enhance team function (i.e. team meetings, electronic medical records, rounding and assessing the patient together, casual discussion and information sharing).
- Always use every opportunity to communicate and collaborate together as a team (i.e. when the Pulmonary Specialist is in examining and talking with the patient, the nurse assigned to the patient should go into the room and participate in the discussion). Don't wait and read the "notes" in the medical record later!
- Talk with the patient and family, not to them. Use language that is simple and easy to understand, avoid medical terminology, and deliver information in small chunks, step by step. Ask them to repeat what was stated and always allow time for questions.
- Give the patient and family your full attention, not WOWs or computer tablets; use eye to eye contact, uninterrupted time, actively listen, and demonstrate empathy and support. Never just leave information for the patient to read! Written information should be used as resource for the patient and family to refer to. It is best used after the patient and health care provider have completely discussed the topic and all questions and concerns have been addressed.
- Always include the patient and family in the team's treatment discussion. Expressing one's knowledge and opinions to team members with confidence, clarity, and respect will ensure common understanding of information, treatment, and care.
- Do not communicate concerns, difficulties, team relationship conflicts, or problems to the patient and their family. The patient and the family are undergoing enough strain and anxiety without needing to be concerned about another team member's inadequacy.
- Do communicate accurate, timely information to all team members, including the patient and family. If you do not know the answer, identify who on the team may know the correct answer and help facilitate the delivery of the answer to the patient or other team member in a timely manner.
- Do not be afraid to communicate to other team members safety concerns, knowledge deficits, skill limitations, and inexperience
teams and teamwork

Teamwork and collaboration are essential for coordinating complex care involving several health care disciplines [9]. Teamwork not only involves cooperation and collaboration in the delivery of care, but also working as a team to prevent gaps, redundancies, and errors. Teamwork requires shared problem solving and decision-making, demonstrating the interdependence among the team members. Therefore, health professionals need to break out of their own professional autonomy or "silo," and create a patient-family centered "interprofessional team silo." There are numerous quality improvement tools that can be implemented to foster teamwork behaviors, such as TeamSTEPPS. TeamSTEPPS is a teamwork system developed by the Department of Defense and the Agency for Healthcare Research and Quality to improve collaboration and communication relating to patient safety [10]. All interprofessional healthcare providers caring for patients and families must:

- Incorporate the knowledge and experience of other professions (i.e. Pulmonary specialist, other nurses, and team members who have cared for patients with COP or other complex diagnoses) in the past.
- Designate a team leader, which needs to be the team member with the most contact with the patient and family. This team member will most likely be a nurse since nurses are the health care professionals who spend the greatest amount of time with the patient and the family.
- Therefore, nurses need to take the lead and apply leadership practices that support collaborative practice and team effectiveness. Read the chart, notes, documentation, and attend the meetings, rounds, and any other interprofessional activity regarding your patient. Be an active, knowledgeable team member! Know what is going on and why!
- The nurses, as the team leader, need to constructively manage disagreements about values, roles, goals, and actions that arise among healthcare professionals and with patients and families (i.e. Confirm discharge plans and orders between all health care providers. Assure that discharge planning starts at the date of admission and hold the discharge planner accountable to start the discharge plan at the time of admission).
- The nurses, as the team leader, need to keep all team members on the same page and keep the patient and family informed with current, accurate information and care plans.
- The nurse, as the team leader, needs to continuously provide feedback to the team regarding the patient and families’ concerns, questions, and thoughts.

- Each team member has a responsibility to use evidence-based research to inform effective teamwork and team-based practices. Learn, share, and add to the research and literature the information and experience gained regarding complex patient's diagnoses and care.
- Lastly, one of the most critical components of effective team work is to always stop and take time to reflect on individual and team performance. How did we do as a team and what can we do in the future as a team to enhance the quality, safety, efficiency, and patient centeredness of our care?

Conclusion

Throughout the case study noted above, there are numerous gaps in care that greatly impeded the quality, efficiency, and safety of care. All healthcare providers worked diligently to provide the best patient-family centered care. All of the noted professional "silos" were rich in knowledge, expertise, and skill. Pulmonologists, nurses, respiratory therapists, medical hospitalists, etc., all worked exceptionally hard and professionally to provide exceptional patient-family centered care. Each silo also assumes that the other healthcare silos always know, respect, understand and implement their expert advice and wisdom. However, as noted throughout the case study, each of the wide array of health care "silos" worked individually and not in collaboration with each other. There was a lack of interprofessional collaboration and teamwork. One professional health care provider was clueless as to what the other team member's roles and responsibilities were. There was a lack of communication between health care providers. This case study is an example of why transformational change is not just recommended, but critically needed in our present complex health care system.

As outlined in the AACN report (2011) interprofessional collaboration education competencies and noted from the extensive review of the literature and research there is not just a need to change, but a requirement to change across educational programs. It is critical to bridge the gap between interprofessional collaboration education and current practice. By requiring the implementation of core competencies on collaboration and team work across all health profession disciplines, taught not only in the classroom but in clinical as well, health professions will be forced to work together.

The case study demonstrates not only the fragmentation in care but also the lack of a unifying body pulling all the parts together to create the individualized, quality healthcare experience so often discussed in not only the literature but also in every healthcare system's mission statement. Because nurses work on the frontline of patient care, they must take on leadership roles within teams to demonstrate, build and maintain professional partnerships that efficient, quality and safe patient care may flow from. Nurses need to ensure that quality patient/family centered care is delivered, silos are knocked down and care is unified. They can take the lead in facilitating effective modes of communication with professionals of other disciplines. By modeling an understanding, appreciation, and respect of the diverse professional values, roles, responsibilities, knowledge, and expertise of each health professional team member, nurses can lead change and create a unified team!
References