Unexpected Pharmacist Benefits

in the Implementation of Computerized Provider Order Entry (CPOE)

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Every generous act of giving, with every perfect gift, is from above, coming down from the Father of lights, with whom there is no variation or shadow due to change.
James 1:17 (NRSV)

Change in the hospital setting has been the one constant theme over the past 15 years of pharmacy practice. Many of these changes have been dramatic, such as widespread implementation of clinical pharmacy practice, integrated hospital computer systems, barcoding and electronic medication administration records. Computerized provider order entry (CPOE) is one of the latest innovations in hospital practice. CPOE has been well recognized to reduce preventable adverse drug reactions and increase accuracy of medication orders.[1,2] Many articles support CPOE use in large teaching and university hospitals, but there is little evidence to support its use in smaller, community hospitals.1 In October 2012, a medium-size community hospital in North Carolina implemented CPOE after many years of careful planning and staff training. As expected, the first few months were challenging with several glitches, but over the past 12 months, medication ordering has evolved into an efficient process. As a School of Pharmacy faculty member, this hospital serves as my practice site during the school year for third-year pharmacy student rotations. Being a hospital pharmacist for a number of years prior to my current academic position, I am acutely aware of the various roles of the pharmacist in a hospital setting. Thus, a few subtle changes have become obvious to me over the past year, as the comfort with CPOE process has increased by both providers and pharmacy staff.

The first change I have noticed is the increased visibility of pharmacists throughout the facility. They are present on patient care units, attending rounds, educating patients, and providing valuable medication information to providers throughout the hospital. By allowing pharmacists to leave the confines of the inpatient pharmacy I have noticed an increase in the respect of providers for pharmacists over the past year. As they have mutually endured the change of CPOE, both parties have learned to rely on each other and become valuable allies in patient care. Gone are the days of avoiding each other in the hall and heated telephone discussions about drug-related issues, as many differences of opinion are now quickly resolved with a simple hallway conversation. This enhanced communication has been reported in the literature as well, with Devine's cross-sectional study indicating that pharmacy communication is one of the ten identified perceptions improved in CPOE implementation.[2] In the end, this improved relationship serves the patient well as they benefit greatly from improved communication and collaboration of care between the pharmacist and the medical provider. This positive relationship has also been observed by Allenet and colleagues, who reported 94% of providers approved of pharmacist presence on the patient ward,[3] a less tangible but important benefit of CPOE implementation.

Another change that can be noted is the pharmacist's recognition and participation in spiritual activities throughout the hospital. Before the CPOE change, pharmacists were often "stuck" in the pharmacy and had minimal interaction with patients and other caregivers in the hospital setting. Thus, medical health was emphasized and became pharmacist's primary focus for patient care. However, by being in patient care areas, the pharmacist

begins to observe other types of care that are vital to patient health, including emotional and spiritual care. With direct patient and team access, pharmacists are integrating themselves into the whole health of the patient. This has been demonstrated in many ways over the past year, with observations of pharmacists participating in prayer prior to morning rounds, providing emotional support to patients and/or families, and participation in pastoral care rounds. This change may be the most important to our fellow Christian pharmacists, as they integrate spiritual and emotional health into their daily work. This will become an important step in allowing them to fully practice Paul's important direction in his letter to the Romans:

Do not be conformed to this world, but be transformed by the renewing of your minds, so that you may discern what is the will of God--what is good and acceptable and perfect.
Romans 12:2 (NRSV)

Perhaps this integration will move the pharmacy profession towards a perfect union of God's will and works in our daily patient care routine.

The last noticeable change from the CPOE process has been an increase in communication between the pharmacists and other health care providers, including physicians, nurses, therapists, and other health care team members. This increased communication was observed during the planning and building phases of CPOE implementation, as representatives from each discipline of the health system were included on the CPOE team in order to build a successful system. This early communication between team members not only facilitated development of a successful computerized system, but also significantly impacted the teambuilding process within the whole hospital system in a positive way. It has been observed in many studies that improved communication and teamwork leads to better patient care.[4] This has certainly been brought to life and witnessed on a daily basis within this community hospital in the past few years.

Change has become a part of existence in modern life and continues to be the only consistent theme seen in healthcare. Although we as pharmacists are forced to change in ways that may not be comfortable for many, may we have hope and comfort in the Scripture that assures us that God does not change and his promises are the only certainty we have in our modern world. *For I the Lord do not change; therefore you, O children of Jacob, have not perished.* **Malachi 3:6 (NRSV)** Let us also remember that change may not always be bad, as we transition towards a new paradigm of care---may our pharmaceutical care works be God-centered, moving us towards God's will for our lives and those of the patients we so proudly serve.

References

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