Quality and Safety in Unintended Pregnancy and Prevention Care
The Patient
Eva is a 23-year old woman who came to the emergency room during a manic episode. She was diagnosed with Type I Bipolar Disorder and is now stable. Her discharge medications include Lamictal 25 mg for two weeks, then 50 mg for two weeks with an expected daily dose of 100 mg per day.

The Setting
A busy emergency room in an acute care hospital.

What Happened
As the nurse reviews Eva’s chart for results of a pregnancy test, STI screening and for a contraception plan, she notices that the result of a pregnancy test, although ordered at admission, is not in the chart. After confirming that the test was not performed, the nurse has Eva collect a urine specimen and ensures that the specimen is sent to the lab. Eva’s discharge is delayed pending test results.

Could Eva continue her medications if she were pregnant?
Many medications are contraindicated in pregnancy, so it is a necessary QSEN for nurses to understand how to counsel to minimize risk to patients who are pregnant and taking medications.

Until recently the FDA used five categories to indicate the potential of a drug to cause birth defects if used during pregnancy. The categories were labeled as A, B, C, D and X determined by the reliability of the evidence and a consideration of risk to benefit ratio. The categories did not address the medication’s metabolites.
in breast milk. The A, B, C, D and X risk categories were replaced with narrative sections and subsections including pregnancy, lactation plus females and males of reproductive potential. In the females and males of reproductive potential subsection, relevant information on pregnancy testing or birth control before, during or after drug therapy, and a medication’s effect on fertility or pregnancy loss will be listed in known. According to the FDA, the new labeling system allows better patient-specific counseling and informed decision making for pregnant women seeking medication therapies. Clinical interpretation is still required, as the new labeling does not generally provide a definitive “yes” or “no” answer. All newly approved medications must use the new labeling; older medications will be phased in through mid-2018. The article Recent Changes in Pregnancy and Lactation Labeling: Retirement of Risk Categories (Ramoz and Patel-Shori, 2014) reviews and summarizes the FDA's new pregnancy and lactation labeling rules.

The older FDA labeling system has not yet been instituted with Lamotrigine. It is a Category C classification with no adequate and well-controlled studies in pregnant women and should be monitored before, during, and after pregnancy. It should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. Women should be advised to notify their health care provider if they plan to start or stop use of oral contraceptives or other female hormonal preparations. Physiological changes during pregnancy may affect lamotrigine concentrations and/or therapeutic effect. Decreased lamotrigine concentrations during pregnancy and restoration of pre-pregnancy concentrations after delivery have been reported. Dosage adjustments may be necessary to maintain clinical response. Additional information is available in the package insert regarding a higher incidence of cleft lip and palate in infants exposed to lamotrigine monotherapy during the first trimester of pregnancy. This data is based on data submitted to the North American Antiepileptic Drug (NAAED) Pregnancy Registry.

According to the FDA, preliminary data indicate that lamotrigine passes into human milk. Because the effects on the infant exposed to lamotrigine are unknown, breastfeeding is not recommended.

Providers are advised to recommend that pregnant patients taking lamotrigine enroll in the NAAED Pregnancy Registry.
What are Eva’s contraceptive options?

The nurse asks Eva's permission to take a sexual history and assess Eva’s reproductive life plan. In these discussions, Eva tells the nurse that she does not want to get pregnant for at least a few years. The nurse uses evidence-based practice to counsel Eva on her contraceptive options.

Following guidance from Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office Of Population Affairs, the nurse offers Eva information on the most effective contraceptive methods first, long-acting reversible contraceptives (LARCs): the hormonal implant (Nexplanon), which would last up to 3 years, and IUDs. Current IUDs are FDA approved for up to 3, 5, or 10 years. Pelvic inflammatory Disease (PID) was once thought to be higher in IUD users and thus IUD use was contraindicated in young women to preserve their fertility. Current research suggests that PID and infertility are no more likely to occur with IUDs than with any other method of contraception. The presence of STIs, usually chlamydia, and not IUD use causes PID, therefore all adolescents should be screened for STIs at the time of insertion of an IUD to reduce the risk of PID (Hubacher, D., Grimes, D. A., & Gemzell-Danielsson, K., 2013).
Many myths exist about IUDs. The presentation IUD’s – Dispelling the Myths from the Reproductive Health Access Project, uses case studies to present factual information about intrauterine devices and their mechanisms, compares different types, and side effects including non-contraceptive advantages. In addition, LARC FIRST is a comprehensive website that not only provides information on long-acting reversible contraceptive methods, but also includes videos, counseling tips, training and preceptoring information, quality management, and patient resources.

Contraceptive counseling should always be patient-centered, that is, provided in a respectful manner that ensures that each person is supported in identifying the method that best meets her or his needs.

If Eva did not want a LARC method, she could start oral contraceptives that day, in which case dose adjustments are necessary with lamotrigine (Lamictal). Ideally both medications would be started at the same time to allow for ease of titration. Estrogen-containing oral contraceptives have been shown to increase the clearance of lamotrigine. In women not taking other anti-seizure medications, the maintenance dose of lamotrigine will likely need increasing by 2-fold over the recommended dosing to maintain consistent plasma levels. The dose increases should begin at the same time that the oral contraceptive is started and continue at 50 to 100 mg/day every week. Gradual transient increases in lamotrigine plasma levels may occur during the pill free week; monitoring for side effects is needed. If stopping oral contraceptives, the dose of Lamictal will likely need decreasing by as much as 50. The effect of other hormonal contraceptive preparations on the pharmacokinetics of lamotrigine has not been systematically evaluated. Progestin-only pills had no effect on lamotrigine plasma levels.
Eva states that she is not ready to be pregnant and parent any time soon, is sexually active, and would like a referral to a gynecology/women’s health or family practice provider who can discuss her contraceptive options. Unfortunately, many health care systems lack processes and infrastructure to track referrals and follow-up. If Eva does not make or keep her appointment, her health care provider or system of care may not be aware of this fact if they are not tracking referrals and follow-up. Eva may continue to be at risk for unintended pregnancy and not get the care she needs.

Providing effective referrals to community based care

The QSEN Institute defines patient-centered care as the ability of providers to “[r]ecognize the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient’s preferences, values, and needs.” The article Caring for Women with Unintended Pregnancies (Simmonds and Likis, 2011) highlights the nurse’s professional responsibilities in providing care to women with unintended pregnancies, including appropriate assessment, options counseling, referrals and care coordination, and prevention efforts with a focus on patient-centered care.

The process of transferring responsibility for care is referred to as the “handoff,” with the term “signout” used to refer to the act of transmitting information about the patient. Handoffs and signouts occur in the context of transfers of care during hospitalization and related to discharge and follow-up in the community. This is often done via electronic medical records using informatics to provide quality patient care.

In a hospital setting, no provider can work around the clock, so shifts in staffing inherently create a discontinuity of care. The Agency for Healthcare Research and Quality notes that “[t]his discontinuity creates opportunities for error when
clinical information is not accurately transferred between providers.” In nursing, the SBAR method (Situation-Background-Assessment-Recommendation) has become widely accepted not only as a signout tool but also as a structured method for all communications between providers.

The Joint Commission requires all health care providers to “implement a standardized approach to handoff communications including an opportunity to ask and respond to questions” (2016 National Patient Safety Goal 2E). The Joint Commission National Patient Safety Goal also contains specific guidelines for the handoff process and preventing “adverse events” after discharge. For Eva, an “adverse event” could be barriers that prevent her from keeping a contraceptive appointment. Common barriers include the cost of care, transportation difficulties, limited ability to take time off of work, lack of childcare or language difficulties. Delays in initiating a contraceptive method could lead to an unintended pregnancy. If pregnant, barriers to accessing care could lead to late entry for prenatal care or delay in accessing an abortion.

To provide effective referrals, it is essential for nurses to be aware of other providers in the area.

- **Find a Nurse Practitioner** is a resource from the American Association of Nurse Practitioners. The interactive map will help a consumer find a NP in their geographic area.
- **DoctorFinder** is a resource from the American Medical Association that provides professional information on almost every licensed physician in the United States and can be used to locate doctors who specialize in prenatal care.
- The Association of Reproductive Health Professionals maintains a database of providers of long-term reversible contraceptive methods (implants and IUDs). The interactive map will help a consumer find a LARC provider in their geographic area.

**What if the pregnancy test was positive?**

The nurse must be prepared for the Eva’s reaction as well as any questions of safety concerns related to her medications.

The nurse recognizes that this patient’s care requires a team approach to meet all of Eva’s needs. The nurse contacts the hospitalist or provider on call. The hospitalist orders a gynecology consult prior to discharge as well as a social work consult. However, when Eva learns of the test result, she is likely to begin talking with the nurse, the care provider at her bedside. The nurse is prepared to discuss pregnancy test results in a nonjudgmental manner. The nurse knows that hearing the results of a pregnancy test can be a life changing moment for patients, and may be difficult for Eva.
When giving pregnancy test results it is important for nurses to understand that the results belong to the patient and it is the nurse’s responsibility to provide the results and what they mean without bias. Hearing the results of a pregnancy test can be a life changing moment; women may be delighted, regretful, anxious, and sometimes ambivalent about the being pregnant. Since it is difficult to predict how someone will feel when receiving the results, it is important not to congratulate the patient and allow time for the information to “sink in” before asking if she would like more information.

This presentation, *Giving Pregnancy Test Results: A Primer for Nursing Students*, serves as a guide for nursing students on giving pregnancy test results, identifying immediate health concerns and providing referrals. It also provides an overview of laboratory pregnancy tests. The Power Point presents specific questions and counseling language to use when giving either negative or positive results and when working with a patient who is ambivalent about the test results.

After giving Eva the results of the pregnancy test, the nurse will calculate the gestational age of the pregnancy based on the first day of the last menstrual period. Pregnancy wheels are commonly used to determine the due date or estimated date of confinement (EDC). Wheels are based on Naegele’s rule which estimates the EDC by adding one year, subtracting three months, and adding seven days to the first day of a woman's LMP. The result is approximately 280 days (40 weeks) from the LMP. It is easy for a health care provider to misread a wheel by a day or two. Electronic calculation is considered more accurate.

Depending on Eva’s reaction to the test results, and with her permission, the nurse would discuss Eva’s options in a non-directive, patient-centered manner. Eva’s options include a first trimester abortion with medication or an aspiration procedure, continue with the pregnancy, or she could make an adoption plan. *Options Counseling for Unintended Pregnancy* was designed to give nurses and APRNs information on the attitude, skills, and knowledge needed to provide options counseling to patients who experience unintended pregnancy.

Truly non-directive options counseling can be difficult because of one’s own beliefs, especially if we have a strong feeling that we know what the best option is for a woman. In *Options Counseling: Techniques for Caring for Women with Unintended Pregnancies* Singer provides guidance for clinicians to examine their own beliefs and values to improve their skills in providing nonjudgmental and nondirective options counseling for women experiencing unplanned pregnancy. A set of exercises in *The Abortion Option* from the National Abortion Federation supports health care workers to identify their values and define their boundaries related to options counseling, abortion care, adoption care, pregnancy care and the role of health care workers in providing options counseling.

While options counseling is a critical component to high quality health care, not all health care workers have the knowledge and skill to provide effective options counseling. Simmonds and Likis address the conflicts that nurses may experience when providing unintended pregnancy prevention and care, and examine the intersection of personal values with professional responsibilities.
These nursing education modules use the term “aspiration” abortion when discussing first trimester abortion care because it more accurately depicts a first trimester abortion than does “surgical” abortion. According to Weitz et al. (2004) surgical “implies incision, excision and suturing and is associated with the physician subpopulation of surgeons.”

The First Trimester Abortion: A Comparison of Procedures from the National Abortion Federation (NAF) shows a side-by-side comparison of three types of abortion procedures, how they work, advantages and disadvantages to each. NAF also publishes Clinical Policy Guidelines, which are evidence-based guidelines and standards on abortion care. They include clinical practices on patient care and counseling and different types of abortions. These guidelines, which are revised annually, are based on rigorous review of medical literature and known patient outcomes to support and educate providers on the most current information, standards, and recommendations. The following modules are specific to this competency:

- Module 5: Limited Sonography in Abortion Care
- Module 6: Early Medication Abortion
- Module 7: First-Trimester Aspiration Abortion

A 2014 Guttmacher Institute reports on the many barriers that exist for access to abortion care. The barriers are based on state specific restrictions such as mandatory waiting periods, doctor and clinic restrictions, lack of abortion providers, and limits on insurance coverage. Often such delays mean the woman is more advanced in pregnancy when she is able to access care. The nurse may need to coordinate with other providers to ensure Eva gets the care she needs, when she needs it, if she decides to terminate the pregnancy.

Making an Adoption Plan

If Eva decided to continue the pregnancy and make an adoption plan, she would likely place the baby for adoption shortly after birth. In a domestic infant adoption there are several options for how the process could work for Eva and the adoptive family. A social worker can work with Eva to find an optimal good match in an adoptive family. Eva could choose to have an open adoption, where identifying information is shared between families with an agreed-upon level of contact, or she could opt for a closed adoption with no shared identifying information. The Basics of Adoption Practices: A Bulletin for Professionals from the U.S. Department of Health and Human Services’ Administration for Children and Families via the Child Welfare information Getaway, details types of adoption, family and child assessments, birth parent involvement, and how the placement
and adoption process works including post-adoption services.

The nurse could also direct Eva to view *Open Adoption: Could Open Adoption be the Best Choice for You and Your Baby?* a resource from the U.S. Department of Health and Human Services' Administration for Children and Families for expectant parents. There is a specific section on open adoption that details how it works, the benefits, legalities and action steps for this type of adoption.

Backline promotes unconditional and judgment-free support for people in all their decisions, feelings and experiences with pregnancy, parenting, adoption and abortion. Their Talkline offers peer counseling and support to people throughout the United States and Canada. Talkline welcomes calls at any point during or after pregnancy, whether callers are looking for options counseling, support before or after abortion, or a chance to talk about parenting, pregnancy loss, adoption, or infertility. FaithAloud offers compassionate, nonjudgmental religious and spiritual support for a pregnancy decisions through their clergy counseling line. Callers can connect with trained clergy and religious counselors from diverse faith backgrounds: https://www.yourbackline.org/

With the choice to make an adoption plan, Eva commits to continuing the pregnancy, which requires intensive management of lamotrigine.

**Continuing the Pregnancy and Parenting**

In addition to managing Eva’s lamotrigine doses and response during her pregnancy and postpartum, Eva will need a plan that involves additional psychological support after the baby is born. Viguera et al. (2011) found that the risk of postpartum depression increases from 15% in the general population, to 50% in women with bipolar disorder (30% for women in unipolar disorder). Eva may benefit from home nurse visits. A recent study by Horowitz et al. (2013) found that when nurses visited new mothers diagnosed with postpartum depression for support, symptoms of depression decreased and interaction between mother and baby improved.

**References**


