Adult Vaccination: What Works

Name of the Organization:
University of North Carolina Center For Maternal and Infant Health
UNC Hospitals, Chapel Hill, North Carolina

What We Did
Inspired by the Tdap outreach of Dr. Geeta K. Swamy at Duke Medical Center, the UNCH Tdap Initiative began with a collaborative effort by Robert Strauss, MD, UNCH Medical Director, and UNCH Public Health Maternity Care Coordinator, Mary Heintz, RN, CCM, MS, Women’s Hospital.

Project Overview:
- Identified missed opportunities for postpartum Tdap vaccination within post-partum patient population & shared this ‘opportunity for improvement’ with our maternity care providers & maternity nursing leadership team.
- Conducted record review (audit) of postpartum records and Tdap vaccine documentation within our electronic medical records documentation system, Webcis.
- Recognized that there were multiple ‘touch points’ during the patient admission, delivery and discharge process where Tdap vaccination opportunities were being missed.
- Formed a Six Sigma Quality Improvement work group with interdisciplinary representation, including: physicians, nurses, pharmacists, information technology (IT) specialists and public health.

Process
The Tdap Six Sigma Quality Improvement Team was led by an Operational Efficiency Specialist.
- In 2010, the Public Health Maternity Care Coordinator conducted telephonic communication with referring community providers, performed patient record reviews, and identified that postpartum Tdap vaccination at UNCH presented an opportunity to improve vaccination rates and quality of care.
- Researched and reviewed local, state, and national data on NC’s cases of pertussis.
- Conducted chart reviews from a random selection of post-partum mothers in community maternity clinics.
- Participated in a mapping process to identify customer needs, human and systems barriers, communication, documentation, identify gaps, ‘hand off’ processes, impact on patient health outcomes, and contractual expectations of the external clinics with the delivery facility.
- Communicated with community maternity clinics and enlisted their input and support to provide documentation of their patient’s Tdap status in the prenatal record.
- Provided teaching to new OB and Pediatric residents about pertussis, stressing the importance of reading the prenatal record and talking with the patient when assessing vaccine and infectious disease history.
- Trained inpatient& outpatient providers and nursing staff to improve Tdap assessment & vaccine administration.
- Provided patient education and developed Tdap patient education materials on the importance of receiving Tdap vaccination and having adult family members and caregivers protected against pertussis.
- Implemented enhancements to our Webcis System, the hospital's electronic medical records reporting system.

Progress to Date:
- Improved consistency in identifying prenatal women in need of Tdap vaccination.
- Increased compliance in obtaining physician order for Tdap vaccine, administration of Tdap vaccine and Webcis documenting.
- Revisions to the ‘Nursing Kardex’ utilized by staff to document Tdap and other vaccines administered.
- Improved quality of care and ongoing evaluation of Tdap rates appear to support the Tdap Six Sigma (Green Belt) team’s initial goals with implementation of system and communication processes. Results included inpatient and outpatient Tdap education for medical/nursing staff, improved documentation in Webcis, & more consistent prenatal record documentation of immunization status from the referring community maternity providers.

Next Steps:
A Tdap Cocoon Initiative at UNC-CH is now currently involved in efforts to promote greater access to Tdap vaccination to help protect fathers, family members, and caregivers of newborns against pertussis. We are exploring partnership with AmeriCares - Adacel G.I.F.T. Vaccine Donation Program (Give Immunity, Fight Transmission) to provide donated Tdap vaccines to fathers of newborns and caregivers who are in need and are uninsured.
- Conduct formal tracking reports from our Webcis and Pharmacy Systems on Tdap vaccine administration.
- Review further data we collect and continue to improve recommended vaccine processes.
- A critical component has been listening to stakeholders in the community & including them in this process.

Outcome or Results We Got:
Unlike in other communities where providers do not always know which vaccines their patients may have received while receiving hospital care, this effort was different. As a large tertiary care academic center, we (1) recognize the value of working in partnership with our community maternity providers to increase Tdap vaccination in the community and (2) effectuated improvements to our internal hospital patient medical records system, (3) improved provider communication processes, (4) additional Tdap outreach research was generated, and (5) expansion of Tdap efforts implemented to
vaccinate close family members and caregivers of infants. One partner, Dr. Kathleen Shapley-Quinn, Medical Director, Alamance County Health Department, wrote that her clinic’s former experience with patients receiving postpartum Tdap at UNC, was inconsistent. Now, patients consistently receiving clear information regarding Tdap immunization with Tdap administered to the appropriate people at the right time. "As medical director of a county with a large pertussis outbreak only one year ago, it is reassuring to know our hospital maternity partners are committed to this important effort for our community’s newborns.”

About Our Organization:
The UNC HealthCare System is a not-for-profit integrated health care system owned by the State of North Carolina and based in Chapel Hill, North Carolina. It exists to further the teaching mission of the University of North Carolina and to provide state of the art patient care. UNC Center for materials and Infant Health focuses on high-risk pregnancies and families with medically fragile infants. Our goal is to improve the health of North Carolina’s women and infants and help to assure they are receiving the best care and support available. http://www.mombaby.org

Our Organization’s Website / Resources / Contact Information:
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