

Vitamin K Ordering at a Connect Care Site

The current standard for prevention of newborn vitamin K deficiency bleeding remains administration of intramuscular vitamin K within 6 hours of birth, and ideally within the first hour of life. This must be ordered specifically for an identified newborn by the most responsible health practitioner (MRHP) before a nurse can administer the medication, as per the Alberta legislation that regulates health professions' scope of practice. To minimize any disruption to routine workflows that may occur with the requirement for a patient-specific vitamin K order from an MRHP absent from the acute care setting, the following scenarios describe practice options for Connect Care sites.

Please note: These are examples only, meant to demonstrate how Vitamin K ordering and order sets could be managed in a Connect Care environment. Teams will need to meet and discuss optimum workflow.

Fictional Connect Care Site

Sunny Valley Hospital, a regional level 2 site with a five bed NICU and C-section capability, implemented Connect Care. The pediatricians were worried that they would have frequent interruptions throughout their clinic days and nights because they needed to enter medication orders for their babies to align with scope of practice in the Health Professions Act. The healthcare team developed a system of scheduled check-in calls for the pediatricians to receive reports for newborns who would be admitted under them pre-delivery, and those who had been delivered. This allowed the pediatricians to order Vitamin K for those babies who had been admitted and born between scheduled calls. The schedule reduced the number of interruptions to the pediatricians and allowed the nurses to provide uninterrupted care within their scope of practice. Below are some examples of how Vitamin K ordering occurs at Sunny Valley Hospital.

Scenario 1: Vitamin K batch ordering

Dr. Francis Mountain is a pediatrician on call through the night. He has a full day of clinic starting in the morning. It is 2130 and he is getting ready to lay down for a rest and calls the L&D unit for an update. The charge nurse gives a report on the obstetrician's three labouring patients and one patient who just delivered 30 minutes ago. The charge nurse and the newborn's MRHP review the patients' histories and agree that the three pending deliveries are likely to be well at birth. An order for Vitamin K is entered into Connect Care by the pediatrician



Vitamin K Ordering – Connect Care Site • 2

for the newborn that was delivered. Based on Sunny Valley Hospital's agreed upon process, Dr. Mountain also enters pending Vitamin K orders into Connect Care for the anticipated deliveries.

At 0037, one of the anticipated deliveries occurs. The primary nurse initiates the *Nursing/Allied Health - Well Term Newborn Admission Protocol Order Set* and enters orders to process collected laboratory specimens (cord blood and gases) using the order mode 'as per protocol - no cosign required'. After the nurse obtains consent from the newborn's parent/guardian, the nurse administers the Vitamin K ordered by the pediatrician.

Scenario 2: MRHP is the same for the pregnant patient and newborn

At 0045, Maria Bejeweled arrives to the L&D unit. She is a G4P3 (40 weeks gestation) with a history of precipitous delivery. Her delivery physician is her family doctor, Dr. Anouk Field. Maria delivers her newborn at 0142. Dr. Field is also the MRHP for the newborn, so she enters her own orders into Connect Care for the newborn using the *Normal Nursery Admission Order Set* that includes Vitamin K.

Scenario 3: Vitamin K order not obtained pre-delivery

At 0200, Chloe Battleship comes to the L&D unit. She is a G3P2 (38 weeks gestation). She is grunting on arrival and is quickly taken to a L&D room where she promptly delivers a healthy female newborn. The nurse initiates care according to the *MNCY Postpartum and Newborn Pathway* and enters the *Nursing/Allied Health - Well Term Newborn Admission Protocol Order Set* using the order mode 'as per protocol - no cosign required'. The nurse proceeds to send collected laboratory specimens (cord gases and cord blood). The newborn remains well, meaning there are no obstetrical or newborn assessment parameters that might require urgent notification of the newborn's MRHP. The nurse recognizes there is no order for Vitamin K in place and the usual time of contact on the unit will be within 6 hours of the newborn's birth; so, the nurse waits until Dr. Mountain calls the unit at 0600. The charge nurse gives a report on Chloe and the newborn and obtains a patient-specific telephone order for Vitamin K from Dr. Mountain. The nurse enters an order into Connect Care for Vitamin K using the order mode 'telephone with readback'. This enables the nurse to now administer the medication to Chloe's newborn.

NOTE: if the pre-arranged (or site process) contact time is greater than 6 hours after the delivery for a newborn without orders, the nurse must notify the MRHP as Vitamin K must be administered within 6 hours of birth.

Scenario 4: MRHP not aware, delivery not anticipated prior to next contact time

At 0300, Jasmine Boggle arrives at the L&D unit. She is 38 weeks G1P0. She is 4 cm dilated and not expected to deliver on Dr. Mountain's shift. There are no indications requiring urgent contact. Dr. Yvette River, another pediatrician, is set to start call at 0700. The charge nurse decides to wait for the next contact time communication with a pediatrician on call and will obtain orders at that time.

Scenario 5: MRHP not aware, urgent notification indicated

At 0400, Chelsea Bicycle, a healthy G3P2 (40 weeks gestation) with no obstetrical risk factors, arrives. She precipitously delivers a healthy female newborn on arrival to the L&D unit. Chelsea's nurse initiates care according to the *MNCY Postpartum and Newborn Pathway* and enters the *Nursing/Allied Health - Well Term Newborn Admission Protocol Order Set* using the order mode 'as per protocol - no cosign required'. The nurse proceeds to send collected laboratory specimens (cord gases and cord blood). About an hour into postpartum care, Chelsea's nurse notices that the newborn has high pitched cry and seems especially sensitive when its head is touched. The nurse suspects that the newborn is in pain and urgently notifies Dr. Mountain. Dr. Mountain provides a telephone order for Vitamin K and analgesia. The charge nurse also updates Dr. Mountain on Jasmine Boggle's admission. Dr. Mountain decides to 'pend' an order in Connect Care for Vitamin K for Jasmine Boggle's newborn as Jasmine is 8 cm dilated and will likely deliver under his care.