Prescriber Order Entry

What is CPOE?

Computerized Prescriber (or Physician or Provider) Order Entry (CPOE) refers to the process of a medical prescriber entering and sending investigation and intervention orders or instructions electronically via a digital health record instead of paper charts.

Why is CPOE important?

CPOE offers the means by which clinical process and outcome improvements can be facilitated by a CIS. It provides a focal point for clinical decision supports which, in turn, can help physicians avoid unsafe medications, promote best practices and learn how to improve system performance. Studies show that the move from paper to CPOE decreases common medication errors by 50% or more.

It is important that the prescriber issuing an order interact with the CIS when doing so. That is the only way that orders can be grouped to avoid oversight, checked for completeness, and harmonized with other orders to avoid misadventure.

What is Connect Care's CPOE Commitment?

The Connect Care initiative seeks near 100% CPOE where its clinical information system (CIS) is the record of care. Physicians, residents, nurse practitioners and other prescribers must work closely with their nursing and allied health colleagues to ensure optimal care. Connect Care Minimum Use Norms have established expectations clinicians have of one another for safe and collaborative care. These are provincially endorsed, backed by professional regulatory bodies and consistent with Alberta Health Services (AHS) Medical Staff Rules.

One norm holds that where Connect Care is being used as the record of care: "All tests, interventions and medications that can be ordered in the CIS must be ordered in the CIS." Similarly, Medical Staff Rule 4.18.3 (a) states: "…Where electronic order entry is available, utilization of the system is mandatory."

Connect Care commits to tools and workflows that make CPOE as easy as possible for prescribers. Indeed, with the convenience of ordering on any computer or mobile device, anywhere, anytime; ordering is easier to do, and do well, than when constrained by paper.

Are there Exceptions to 100% CPOE?

Protocolized Orders

Not all orders are the same and not all ordering contexts have the same tight coupling to clinical decision supports.

Sometimes orders are part of a set or protocol where the important decisions are made in advance and conditionals are built into the plan. The orders are pre-directed and signed by the responsible prescriber. Subsequently, medical support staff may act on instructions in the plan, including requesting test or therapy adjustments explicitly called for by the plan. In this way, CPOE function is preserved while non-physicians can assist with things like triggering tests that are part of a referral triage protocol or ensuring standardized preoperative preparations. These situations are not an exception because the prescriber simply issues the "orders" as part of a protocol.

Urgent Verbal Orders

While there are local and regional variations in practice, it is important to recognize that AHS policies, professional guidelines, and legislation allow for verbal orders (whether the alternative is paper or digital) in specific situations. AHS directives are clear:

- Verbal (in-person) medication orders shall only be accepted by a health care professional in an **emergency situation** or an urgent situation where delay in treatment would place a

patient at risk of serious **harm**, and it is not feasible for the prescriber to document the medication order (e.g., during a sterile procedure, during a resuscitation).
- Verbal medication orders shall not be accepted for **chemotherapy** unless the order is to hold or discontinue the medication.

Authorized health care professionals (e.g. nurses) can take a verbal order from a physician and transcribe (enter) it onto the system. The expectation is that the nurse can immediately inform the prescriber of any alerts or other decision supports (e.g. dosage checks) that arise during the order-transcription process.

Telephone Orders

Connect Care prescribers have easy access to the patient's chart and quick-order tools from any computer. Preference list orders can also be placed from smart phones (iOS only) and tablets (iPad or Windows). The need for verbal orders given via telecommunications should be rare. However, policy allows for situations where there is urgent need and no alternative to a telephone-delivered ("telephonic") order:

- Telephonic (conveyed by telephone and/or radio) medication orders shall only be accepted by a health care professional where the authorized prescriber is not physically present to document the medication order and a delay in ordering, administering, or discontinuing the medication would compromise patient care and/or **patient safety**.
- A telephonic medication order shall not be accepted via voicemail.
- Telephonic medication orders shall not be accepted for chemotherapy unless the order is to hold or discontinue the medication.

Again, the expectation is that the telephonic order is delivered to an authorized provider (nurse) who can immediately inform the prescriber of decision supports arising during the order-transcription process. Under no circumstances are text message, email or other asynchronous communications acceptable.

Other Exceptions

The intent of Connect Care is to improve care. Unforeseen situations may arise where an alternative to CPOE is compellingly justified by safety considerations. Such exception-cases must be described in standardized way and submitted for approval at the level of the Connect Care Executive Committee.

How will Exceptions work in Connect Care?

The clear expectation is that all Connect Care prescribers will enter the vast majority of orders directly to the CIS. Orders may be entered indirectly in the following situations, with the proviso that the person entering orders on behalf of the prescriber is able to receive, relay and act on decision supports:

- **Accommodated Orders**
  In rare situations, an authorized provider may not have physical capacity to interact with the CIS. Under duty-to-accommodate, authorized and certified medical scribes may be able to enter orders on their behalf.
- **In-Person Verbal Orders**
  These will be accepted in an emergency or if the situation otherwise precludes CPOE and time is of the essence (e.g. a patient needs analgesia for a broken leg and the physician is in the middle of performing a procedure) and the indirect order entry is facilitated by a provider able to recognize, relay and act on prescriber responses to decision-supports.
- **Telephonic Verbal Orders**
  Synchronous indirect orders relayed via telephone or radio will be accepted when the prescriber cannot be reasonably expected to access Connect Care for CPOE in the time-frame appropriate for the clinical circumstance (e.g. driving in the car, scrubbed in the operation room) and an authorized provider is available to help relay and act on decision-supports.

What can be expected of Inpatient Nurses and Ward Clerks?

Facilitating acceptable indirect prescriber orders (accommodated, verbal or telephonic) requires health care providers with order-entry capacity and training to enter order(s) to the CIS. They can do this only if within their scope of practice and training. There may be circumstances where extended role non-nurses (e.g. medical scribes) have been trained and authorized.

Once entered, the indirect order becomes active. The prescriber has to sign the order when able.

Inpatient Unit Clerks are not able to enter orders into Connect Care unless special dispensation, extended role, training and approval have all been secured. The historical practice of hailing inpatient support staff with new or modified order instructions is…. historical.

What can be expected of Outpatient Nurses and Medical Office Support Staff?

AHS clinic support staff are not, in general, able to relay or transcribe indirect orders into the CIS in outpatient settings. Nurses may facilitate allowed indirect or protocolized orders, as they would in an inpatient context.

Clinics vary widely in how multi-disciplinary teams facilitate complex care. There may be situations where support staff have approved extended roles, backed by training and/or certification, to allow more participation in indirect or protocolized order transcription.

Independent (non-AHS) outpatient clinics or offices may have well established protocolized or indirect order management policies, also involving authorized extended-role medical office support staff. Subject to acceptable training and role-assignment, these roles are supported by Connect Care on a case-by-case basis. In all situations, prescribers must ensure that they are able to perceive and act on decision-supports, take full accountability for their orders and sign the order to document that accountability.