

## **Guidelines for Outpatient Computerized Prescriber Order Entry (CPOE)**

**Preface:** The Board of Pharmacy receives many requests for information concerning CPOE. The following guidelines have been developed by the Board to provide guidance to pharmacies and pharmacists. These guidelines do not have the force of law or rule and, therefore, are not binding on prescribing practitioners or on pharmacists and pharmacies. However, the Board strongly recommends that CPOE systems be developed with these guidelines in mind. The Board has received and investigated complaints involving dispensing errors that were directly related to prescriptions generated by poorly designed CPOE systems. The Board is committed to working with other interested parties to develop further guidelines and, if necessary, to enact legislation to address CPOE and other electronic prescribing issues.

1. Per Minnesota law (Chapter 325L), both parties must agree to conduct electronic transactions. Whether the parties agree to conduct transactions by electronic means is determined from the context and surrounding circumstances, including the parties' conduct.
2. A policy addressing these issues needs to be made readily available to any pharmacist receiving an electronic order on request.
3. Only the prescriber may enter an order into a CPOE system. Allowing anyone else to enter the order reintroduces the very errors that CPOE supposedly minimizes (e.g. transcription errors).
4. By the definition found in Minnesota statutes, a prescription order must include the name and address of the patient and the prescriber.
5. The system must provide for verification of the identity of the prescriber entering the order.
6. Agents are allowed to transmit a completed order after the order has been verified and certified by the prescriber.
7. All electronic signatures must provide the following:
  - a. Authentication. The prescriber must be the only individual that can reproduce it.
  - b. Non-repudiation. The prescriber cannot later state that they did not sign the prescription.
  - c. Data integrity. Only the prescriber may change a verified and certified order and any such change shall retain all previous information.
  - d. These aspects of the electronic signature must be accepted, in writing, by all prescribers using the system.
8. The system must use more than simple name plus password protection security. Biometric identification is preferred; however, the use of a smart card system may be acceptable. (Similar to the ATM system)
9. The system must limit who can gain access to the prescription record to authorize refills.
10. All DEA regulations must be followed.
11. Abbreviations should be eliminated whenever possible.

12. The system should be designed so defaults to a dosing unit or to standard directions are handled in a way that ensures that the defaults are reviewed and approved by the prescriber.
13. The prescriber needs to be able to view the prescription in its complete final form prior to signing.
14. The system should easily allow for a daily review of all prescription orders transmitted by each prescriber. These orders should be reviewed for accuracy by each prescriber on a daily basis.
15. Physical and remote access to the server being used for CPOE should be limited to only those individuals whose responsibilities require their ability to maintain the hardware or electronic configuration of the server.
16. A diagnosis and route of administration should be included.
17. Known drug allergies and adverse drug reactions should be included.
18. Date of birth, weight and gender of the patient should be included.
19. The name and telephone number of the person in charge of the CPOE system should be made available to pharmacists to coordinate corrective measures in the CPOE system.
20. Pharmacist interventions that result in changes to prescriptions need to be documented in the patient's electronic record by the prescriber and the corrected prescription transmitted to the pharmacy.
21. If the electronically generated order is printed and given to the patient it now becomes a written prescription and must be signed by the prescriber, preferably in non-black ink to reduce chance of fraud.