

Table 5: Lessons Learned and Specific Recommendations for Improved Alert Acceptance

Minimize workflow interruptions – Alert burden should be reduced by presenting clinicians with only the most clinically relevant contraindications, and clinicians should only be interrupted for contraindications with high clinical severity.

Minimize false positive alerts – Inaccurate alerts should be reduced by keeping drug alert knowledge bases up-to-date with current clinical literature, maintaining accurate clinical documentation in electronic medical records, and creating optimal linkage to all repositories of patient information.

Cancel vs. Modify actions – Although clinicians may not cancel an order for an alerted medication order, their subsequent actions may eliminate the potential contraindication. These actions represent an acceptance of alert recommendations and should be assessed when evaluating the impact of a CDSS.

Facilitate clinician actions – Alerts should include the automatic generation of dialog boxes or other means to facilitate clinician actions that will eliminate drug contraindications (ie: discontinuing pre-existing medications or inappropriate diagnoses) or will implement recommended monitoring (ie: ordering laboratory tests).

Collect Override Reasons – Clinicians may override alerts for good clinical reason. Drug alert systems should capture these override reasons for evaluation and use in subsequent alert revision.

Central Repository – The creation of a customized knowledge base requires substantial institutional resources. Since not all organizations can devote needed resources, a central repository of knowledge base information should be created for public sharing.