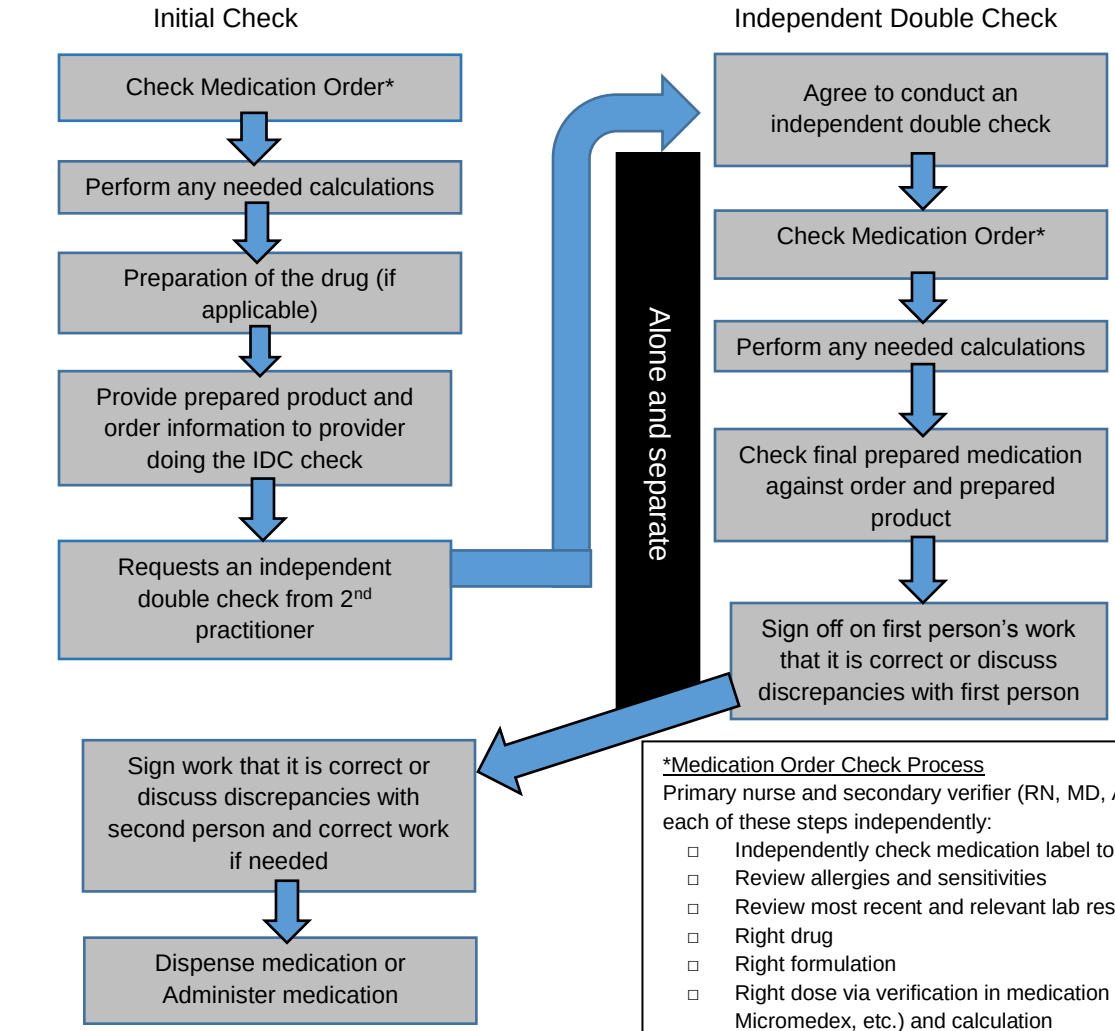
American Society of Health-System Pharmacists
Medication Safety Section Advisory Group
2016-2017 Subcommittee Workgroup on Independent Double Checks

Appendix A – Special Considerations for Independent Double Checks

A manual independent double check (IDC) is often utilized as risk mitigation strategy for high alert medications. Controversy exists, but in general, this strategy is thought to be effective in reducing medication errors when the IDC is completed properly. The following information outlines the steps necessary to complete a quality IDC, general considerations to examine before implementing the strategy, and examples of where an IDC might be utilized and where this strategy should be avoided. In general, IDCs are recommended for *limited* use and only in situations where the quality of the check can be ensured and monitored. The considerations and examples below are provided to aid professionals in the decision making process for implementation of this strategy.

Definition of IDC: A manual double check conducted independently by a second person whereby two people separately check each component of the work process.

<u>Step by step instructions of the Manual IDC Process:</u>



➔ At the patient's bedside or point of administration, patient identification is verified using two unique identifiers against the information on the patient's ID band

<u>*Medication Order Check Process</u>
Primary nurse and secondary verifier (RN, MD, APRN or PA) completes each of these steps independently:

- □ Independently check medication label to provider's order
- □ Review allergies and sensitivities
- □ Review most recent and relevant lab results when applicable
- □ Right drug
- □ Right formulation
- □ Right dose via verification in medication resource (e.g. LexiComp, Micromedex, etc.) and calculation
- □ Right concentration
- □ Right frequency
- □ Right route
- □ Right time of administration
- □ Right total volume (medications given via infusion pump)
- □ Right rate (medications given via infusion pump)
- □ Product expiration(for manufactured or compounded items; beyond use date or expiration)
- □ Product integrity (eg, no precipitate, no leaking or damage)

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Considerations for use of an IDC:

- What technology is currently in place (ie, BCMA, BCMP)?
- Does the electronic medical record support the process?
- What other risk reduction strategies are in place?
- Can the IDC workflow be standardized including use of a checklist?
- How many high alert medications require an IDC at your facility (recommended for very selective high-risk task or high-alert medications, not all)
- How long will it take to complete a quality IDC? Do current staffing patterns support the time needed keeping in mind how often the medication is used?
- Does leadership support the process and provide resources to audit and promote the *quality* of the IDC?
- Would a system redesign or improvement changes eliminate the need for an IDC? Use other, more effective, strategies when possible (eg, barriers, improving access to information, automation)
- Is there a process to track and evaluate errors noted during the IDC to help with continued process improvement?
- Are IDCs being utilized as a risk mitigation strategy secondary to a sentinel event or other risk identified for your facility?

An IDC is typically recommended for:

- High Alert Medications (See ISMP for complete High Alert List)
  - Opioid infusions (including PCAs and epidurals)
  - Anticoagulant Infusions
  - Insulin Infusions
  - Concentrated Electrolyte Infusions
  - Neuromuscular Blocking Agents
  - Chemotherapy
  - Parenteral Nutrition
- Complex Processes
  - Compounded products (in particular products with multiple ingredients such as TPN).
  - Tasks requiring calculations (titrated infusions dosed on patient weight (i.e. mcg/kg/min).
- High risk populations:
  - Critical Care Patients or patients on dialysis or with other poor organ function (heart failure, liver failure, etc.)
  - Cancer Patients (Chemotherapy)
  - Neonatal/Pediatric Patients
  - Pregnant patients

For any medication, avoid use of an IDC strategy when:

- System improvements are more reliable and accurate than an IDC, and are utilized throughout the medication use process
- The sheer volume of IDC's required will render the process ineffective (SQ Insulin)
- Barcode Scanning can more accurately complete the IDC
- Technology can replace calculations of dosage. (i.e. integrated smart pumps)
- The dose is manufactured/prepared in a ready to administer form