MBQIP Phase 3:
Pharmacist Verification of Medication Orders Within 24 Hours

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Department of Health and Human Services
Health Resources and Services Administration
Federal Office of Rural Health Policy
“...a hospital patient can expect on average to be subjected to more than one medication error each day.”

July 20, 2006
Percent of Total Measured HACs – PFP 2010 Baseline (4.745M)

- Adverse Drug Events (57% Hypoglycemic Events & 42% Anticoagulant Drug Events)
- Pressure Ulcers
- Catheter-Associated Urinary Tract Infections
- Falls
- Surgical Site Infections
- Obstetric Adverse Events
- Ventilator-Associated Pneumonia
- Central Line-Associated Bloodstream Infections
- Venous Thromboembolism
- All Other HACs -- based on 14 other specific measures (from C diff Infection to Contrast Nephropathy)
Processing a prescription drug order through a CPOE system decreases the likelihood of error on that order by 48%.

Current policies to increase CPOE adoption and use will likely prevent millions of additional medication errors each year.  

JAMA - Feb. 20, 2013
Despite CPOE systems’ effectiveness at preventing medication errors, adoption and use in US hospitals remain modest.

Critical Access Hospitals and other small, rural hospitals struggle to include CPOE in clinical workflow...
Advantages of CPOE...

- averting problems with handwriting, similar drug names, drug interactions, and specification errors;
- decision support systems, and adverse drug event reporting systems;
- faster transmission to the pharmacy;
- integration with electronic medical records.
Processing a prescription drug order through a CPOE system decreases the likelihood of error on that order by 48%.

...however, it is unclear whether this translates into reduced harm for patients.  

JAMA - Feb. 20, 2013
The increasing rate of introduction of so many new pharmaceutical products has increased the difficulty of pharmaceutical management of patients and has amplified the importance of expert pharmaceutical consultations, with resulting increased reliance upon pharmacists.

Rural Inpatient Telepharmacy Consultation Demonstration for After-Hours Medication Review

Prescribers override more than half of CPOE-generated alerts of “critical” drug-drug interactions without providing a clinical justification.

Medication order review is one aspect of pharmacist patient care. All health-system pharmacies have an obligation to provide a review of medication orders that ensures safe medication use.

Recent studies on rural hospitals have begun to identify the clinical, financial, and demographic constraints that may predispose rural facilities to higher incidences of medication errors.
Many small rural hospitals have limited hours of on site pharmacist coverage...

...and the fact that rural hospitals have greater difficulty recruiting pharmacists than those in urban settings.
“Approximately one in five of the nation’s smallest hospitals have... (1) a pharmacist review of orders within 24 hours...”

- Prevalence of Evidenced-Based Safe Medication Practices in Small Rural Hospitals

RUPRI Brief No. 2008-1   April 2008
ONC has posted two webinars about leveraging CPOE in CAHs on www.HealthIT.gov:

1. **Computerized Physician Order Entry (CPOE) in Rural and Critical Access Hospitals** is an overview webinar about CPOE; and

2. **Computerized Physician Order Entry (CPOE): Barriers and Best Practices from the Pharmacist's Perspective** is a more complete “how to” in implementing remote pharmacist review of orders in CAHs.
Please check out the latest 4 ½ minute MBQIP video on the importance of the Phase 3 Pharmacist CPOE/Verification of Medication Orders Within 24 Hours on HRSAtube:

http://youtu.be/CqwxlqS38w0
Pharmacist CPOE/Verification of Medication Orders Within 24 Hours

The Measure:

- **Numerator:** Number of electronically entered medication orders for an inpatient admitted to a CAH (acute or swing-bed), verified by a pharmacist or directly entered by a pharmacist within 24 hours.
- **Denominator:** Total number of electronically entered medication orders for an inpatient admitted to CAH (acute or swing-bed) during the reporting period.

Inclusion / Exclusion Criteria:

- ✔ Included: Inpatients admitted to acute care bed, swing bed; observation patients
- ✗ Excluded: Outpatients; ED patients
Flex Coordinator Role

To prepare for this measure, Flex Coordinators should be having conversations with the CAHs in their state. Items to discuss include:

- How many CAHs have computerized medication order entry?
- How many CAHs are still using paper MARs (Medication Administration Records)?
- Encourage the CAHs with computerized medication order entry to reach out to their vendors to determine the capability to run the numerator/denominator report for this measure.
ORHP Role

ORHP is working to:

- Develop a reporting mechanism option through PIMS.
- Assist with the sharing and dissemination of tools, resources, and best practices from other states.
- Project Officers are your point of contact for MBQIP-related questions.
**Critical Access Hospital Role**

To prepare for this measure, CAHs should:

- Reach out to your vendor to check on the capability to have a report generated in your medication order entry system.
- Determine appropriate pharmacist coverage for your facility:
  - Do you already have onsite coverage 7 days a week?
  - If not, would it be possible to share remote pharmacist services with other CAHs or hospitals in a system?
  - Or, would contracting remote pharmacy services be the best option for your needs?

*ORHP recognizes that there are still a number of CAHs that do not yet have computerized medication order entry, but are moving in that direction. These CAHs may not be ready to collect data for this measure in the first reporting period of Phase 3, and that is okay. As soon as the CAH is equipped with computerized medication order entry, they can begin reporting, even if it is two or three quarters in to Phase 3.*
Pharmacist Verification Report

A Pharmacist Verification Report, generated by your computerized pharmacy system or EHR, can provide you with all of the data elements required in order to report on this measure.

The minimum data elements that should be included in such a report include:

- Date for each order;
- Time ordered;
- Time verified (or whether “no verification required” because it was entered by the pharmacist);
- Total number of orders verified or entered by pharmacist within 24 hours; and
- Total number of orders entered.
Pharmacist Verification Report

Does the CAH have a Computerized Pharmacy System Vendor?

- An EHR vendor
- A pharmacy system such as Pyxis, Omnicell, Meditech, etc.

**YES or NO**
Does the CAH have a Computerized Pharmacy System Vendor?

If **NO** → the CAH should consider working with a Pharmacy Vendor in the future

- These CAHs will not be able to report on this measure at this time
Does the CAH have a Computerized Pharmacy System Vendor?

If **YES** → the CAH should check on the availability to generate a Pharmacist Verification Report:

- **If the report IS available with the required data elements included**, you have what you need to report on this measure.

- **If the report is available BUT not every data element is included**, the CAH should contact their pharmacy vendor to find out how to go about getting the extra data elements included.

- **If it is unclear whether the report is available**, the CAH should contact their pharmacy vendor and ask for assistance in generating the Pharmacist Verification Report.

- **If the vendor indicates that the report is not readily available**, the CAH should ask how they can go about getting the report capability added to their current pharmacy system or EHR.
Sample Pharmacist Verification Report

<table>
<thead>
<tr>
<th>Scheduled Date/Time</th>
<th>Order Verification Date</th>
<th>Order Verification Hour</th>
<th>Order Verification Status</th>
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</tr>
<tr>
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<tr>
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<tr>
<td>10/01/13 08:00:00</td>
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<tr>
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</tr>
</tbody>
</table>

Numerator: 14  
Denominator: 18  
77.78% compliance
## Sample CAH Tracking Template

<table>
<thead>
<tr>
<th>Measure / Definition</th>
<th>Numerator: Number of electronically entered medication orders for an inpatient admitted to a CAH (acute or swing-bed), verified by a pharmacist or directly entered by a pharmacist within 24 hours</th>
<th>Denominator: Total number of electronically entered medication orders for an inpatient admitted to CAH (acute or swing-bed) during the reporting period.</th>
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ORHP Contact Information

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