**CONNECTICUT VALLEY HOSPITAL**  
**OPERATIONAL PROCEDURE MANUAL**

<table>
<thead>
<tr>
<th>SECTION I:</th>
<th>PATIENT FOCUSED FUNCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER 3:</td>
<td>Medication Management</td>
</tr>
<tr>
<td>PROCEDURE 3.3:</td>
<td>Medication Event Reporting System</td>
</tr>
<tr>
<td>REVISED:</td>
<td>07/13/07; 08/21/08; 10/15/09; 04/13; 12/19/16; 08/21/17; Reviewed 02/18</td>
</tr>
<tr>
<td>Governing Body Approval:</td>
<td>05/27/10; 04/25/13; 12/22/16; 09/14/17; 04/18</td>
</tr>
</tbody>
</table>

**PURPOSE:** The Connecticut Valley Hospital (CVH) Medication Event Reporting System is designed to review all medication-related incidents, in an effort to identify opportunities for quality process improvement and to mitigate the negative impact of medication-related events.

**SCOPE:** Nurses, Medical Staff, Pharmacy staff

**POLICY:**

To increase the safety of medication management processes, this system facilitates:

- identification of the medication events that occur;
- analysis of each serious event to determine the root causes that, if eliminated, could reduce the risk of similar events in the future;
- compilation of data about event frequency, type, and the root causes of the events;
- dissemination of appropriate information, to redesign systems and processes to reduce the risk of future events; and
- periodic assessment of the effectiveness of redesigned systems.

**Definitions:**

A. Medication Event

Any occurrence that may contribute to or directly result in patient harm. Such events may be related to the ordering, preparation, dispensing, transcription, administration or monitoring of medications. A medication event may be potential or actual.

1. Potential Medication Event

   A medication event that is detected and corrected through intervention before actual medication administration or omission.

2. Actual Medication Event

   An actual medication event is one that, in fact, reaches the patient. Actual medication events are divided into two subtypes:
   a. Simple – involves only one category of event; and
   b. Complex – involves more than one category with one root cause.
3. Variance

A variance is defined as a discrepancy between what is ordered and what is actually administered to the patient. Prescribing orders are also considered variances since the patient does not receive the intended medication. Each dose of a medication involved in an event counts as one medication variance. There may be a number of treatment alterations that are the result of a single event. Variances only apply to actual events. For example, three incorrect doses are administered due to one event in dispensing. This results in three variances. Variances are reported for each medication involved.

4. Root Cause

The primary source of the event: prescribing, dispensing, or administration.

**Categories of Medication Events**

A. **Prescribing**

Incorrect drug selection (based on indications, contraindications, known allergies, and existing drug therapy), dose, dosage form, quantity, route, concentration, rate of administration, instructions for use, illegible or ambiguous prescription or medication order.

B. **Dispensing**

Drug product incorrectly dispensed, formulated, labeled, or manipulated before distribution to the patient care area, or an order that was not processed by pharmacy in a timely manner, resulting a delay in administration.

C. **Transcription**

Failure to transcribe a medication order, a medication order that is incorrectly transcribed, or a medication order that is transcribed to the wrong patient’s Kardex.

D. **Administration**

Actual medication events can include (but are not necessarily limited to) administration of a medication to the wrong patient, administration of the wrong medication, administration of an incorrect dose of a medication; failure to administer an ordered dose of medication, administration of a medication outside a predefined time interval, administration of a drug product in a different dosage form than ordered by the prescriber, administration of a medication by an incorrect route or technique, administration of a deteriorated or outdated drug.

E. **Monitoring**

Failure to acquire or to respond to appropriate clinical or laboratory data necessary to gauge the safety and effectiveness of a prescribed therapy (for example, continued administration of Lithium when blood levels are within toxic range or failure to conduct accuchek prior to Insulin administration), if ordered.
F. Drug Count Discrepancy

The amount of controlled substances, as entered in the computer, does not correspond to the actual count as found in the medication drawer.

Classification of Medication Events

The outcomes of medication events range from no patient harm to patient death. Classification of medication events based on potential seriousness and clinical significance will allow for better management of follow-up activities.

- **LEVEL 1** An event occurred that did not result in patient harm. (ORYX 1)
- **LEVEL 2** An event occurred that resulted in the need for increased patient monitoring or observation but no other treatment or intervention was required. (ORYX 1)
- **LEVEL 3** An event occurred that resulted in the need for treatment(s) and/or intervention(s) in addition to monitoring, including evaluation/treatment in a hospital emergency room or treatment with another drug. (ORYX 2)
- **LEVEL 4** An event occurred that resulted in the need for acute care hospital admission but was not life threatening and resulted in no permanent patient harm. (ORYX 2)
- **LEVEL 5** An event occurred that was life threatening or resulted in permanent patient harm. (ORYX 3)
- **LEVEL 6** An event occurred that resulted in patient death. (ORYX 3)

PROCEDURE:

I. **Identification of Medication Events** (Anyone involved in patient care can help identify medication events)

A. Prescribing and monitoring events are captured in a number of ways that are documented on the MERF, including, but not limited to, the following:

1. A clinical pharmacist reviews every new or changed medication order for correct dose, allergy, duplicate drug therapy, indication and appropriate monitoring. This review is based on an automated screening by the Pharmacy Performance Computer System and a comparison of prescribed therapy to the Medical Staff approved drug therapy guidelines.

2. The nurse notes prescribing and monitoring events which may result in either a potential or actual administration event which are documented on the MERF.

3. Medication events may be self-reported by the physician.

B. Transcription and administration events are captured in several possible ways including, but not limited to, the following:
1. Nursing completes the 24-hour medication check on every patient on third shift. This check compares the Medication Administration Record (MAR) to the physician’s orders. When a discrepancy is noted, a MERF is completed. A separate MERF is completed for each discrepancy noted.

2. Medication events may be self reported by the nurse.

C. Dispensing events are captured in a number of ways, including, but not limited to, the following:
   1. Pharmacy audits dispensing activity daily. Potential and actual dispensing events are reported on the MERF.
   2. The nurse notes a dispensing event which results in a potential or actual administration event.
   3. Medication events may be self reported by the pharmacist.

II. Reporting and Processing Medication Events (Potential and Actual)

A. The physician and the nurse immediately take appropriate medical action based upon the severity of the actual medication event.

B. The staff who discovers the medication event is responsible for reporting it by completing Section I of the MERF (CVH-495) or calling the ADR/MERF hotline at X 2377.

C. Registered Nurse Supervisors are responsible for completing Sections II-IV.

D. For all actual medication events, a physician reviews the MERF and completes Section V which provides a severity assessment of the medication event within the shift that the medication event is discovered.

1. In cases where the severity rating is below Level 4, the staff completing the MERF forwards it to the Nursing Supervisor within the same shift the event occurred or was discovered. The Nurse Supervisor then forwards the completed MERF to the Chief of Patient Care Services after conducting an investigation of the event and recording findings. In all cases where the severity rating is Level 4 or above, the physician verbally notifies the Nurse Supervisor to begin the critical incident review notification process (See Operational Procedure 5.8 Patient Safety Event and Incident Management); the Nurse Supervisor then forwards the completed MERF to the Chief of Patient Care Services after conducting an investigation of the event and recording findings.

A. All MERFs are forwarded to the Pharmacy via fax (ext. # 6159) or interoffice mail within 24 hours of the event.

B. Pharmacy will maintain an electronic database of all medication events for performance improvement analysis.
C. Pharmacy will inform the Chief of Professional Services, Director of Nursing Quality & Patient Safety or Director of Ambulatory Care Services when an intensive case analysis (ICA) is needed for an event level 3 or greater.

III. Performance Improvement

A. The PNT Committee reviews all ICAs from the appropriate discipline ranked as level 3 or greater.

B. The PNT Committee analyzes aggregate data quarterly, related to reported potential and actual medication events to identify systems issues and opportunities for improvement in the medication processes.

C. The PNT Committee provides a quarterly report to the Executive Committee of the Medical Staff (ECMS) and the Quality Risk & Safety (QRS) Committee, which in turn reports its findings and recommendations to the Governing Body.