

CHCA Clinical Improvement Collaborative: Reducing ADEs related to Opioid and Non-Opioid Narcotics MEASUREMENT GRID

Purpose of the Measurement Grid:

The measurement grid outlines the measures to be collected over the life of the collaborative. The grid includes the specific parameters for each measure. See the Instruction Manual for information on data collection sheets and monthly reporting.

Measurement for Improvement:

CHCA improvement collaboratives are about making hospital systems safer for patients, not measurement. But measurement plays an important role. Always remember that measurement should be designed to accelerate improvement, not slow it down. See the Project Charter for a more complete discussion of measurement for improvement.

Timeline for Measurement:

Baseline data will be collected during the pre-work phase, as well as 12 months of collaborative data (April 2005 – March 2006).

Three Types of Measures:

The Measures Grid is broken down into three categories: Outcome, Process and Balancing Measures. Teams may also develop additional measures based on the issues that are of most interest and importance to their hospital. Only the measures in the grid below will be submitted to CHCA.

Outcome Measures (voice of the customer or patient):

These measures tell you whether changes are actually leading to improvement – that is, helping to achieve the overall aim of reducing ADEs related to narcotics. Outcome measures answer questions like, “How is the system performing?” and “What is the result?”

Process Measures (voice of the workings of the system):

To affect the outcome measure of reducing ADEs related to narcotics, changes will be made to improve many core processes in the care system, as well as changes to improve the culture as it relates to safety. We will want to know if the parts / steps in the system are performing as planned. Measuring the results of these process changes will tell you if the changes are leading to an improved, safer system.

Balancing Measures (looking at a system from different directions / dimensions):

We will use these measures to make sure that changes to improve one part of the system aren't causing new problems in other parts of the system. Balancing measures help us to draw reasonable conclusions about the sustainability of the changes.

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Required Measures			
Measure	Formula	Data collection plan	Goal
OUTCOME MEASURES			
1A. Narcotic ADEs per 1000 narcotic doses OR Narcotic ADEs per 1000 narcotic days	<p>N = The total number of ADEs related to narcotics in a sample of patient records</p> <p>D = The total number of narcotic doses administered to those patients.</p> <p>Dose = any administration of a drug at a single point in time regardless of the quantity administered. For continuous infusions, each bag is considered a dose.</p> <p>If total doses cannot easily be obtained, D = Total narcotic days in hospital for each patient in the sample.</p> <p>Day = any day during which a narcotic drug was administered regardless of the quantity administered. For continuous infusions, count each day during which the infusion was given.</p>	<p>Trigger chart review (only narcotic-related triggers). See trigger toolkit for full instructions on trigger chart review.</p> <p>Select a random sample of at least 20 closed patient records from those patients who received narcotics. Each patient should have had a minimum stay of 24 hours.</p> <p>Baseline data: January 2005 - March 2005</p> <p>Monthly data: April 2005 – March 2006. Patients are reported based on discharge month. This data may lag by a few months due to the time required to close patient records before performing the trigger chart review.</p>	Reduce by 50%
1B. Narcotic-related constipation per 1000 narcotic doses (or per 1000 narcotic days)	<p>N = The total number of occurrences of narcotic-related constipation</p> <p>D = The total number of narcotic doses administered to those patients.</p>	<p>Subset of total ADEs as defined above</p> <p>Do NOT include patients receiving prophylactic laxatives and/or stool softeners without constipation.</p>	Reduce by 25%

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Measure	Formula	Data collection plan	Goal										
1C. Days between narcotic oversedation events	<p>N = The total elapsed time (in days) since the last narcotic oversedation event</p> <p>D = N/A</p>	<p>Identify all patients receiving narcotics (narcotics) and naloxone (Narcan) and perform chart review for each patient. If oversedation occurred over multiple days, record the date it began, if possible.</p> <p>Include only events of severity E or greater:</p> <table border="1"> <tr> <td>Category E:</td> <td>contributed to or resulted in temporary harm to the patient and required intervention (e.g., treatment with naloxone)</td> </tr> <tr> <td>Category F:</td> <td>contributed to or resulted in temporary harm to the patients and required initial or prolonged hospitalization</td> </tr> <tr> <td>Category G:</td> <td>contributed to or resulted in permanent patient harm</td> </tr> <tr> <td>Category H:</td> <td>required intervention to sustain life</td> </tr> <tr> <td>Category I:</td> <td>contributed to or resulted in the patient's death</td> </tr> </table> <p>Include patients to whom naloxone was not actually administered, as long as there was an oversedation event of severity E or greater.</p> <p>Baseline data: January 2005 - March 2005</p> <p>Monthly data: April 2005 – March 2006</p>	Category E:	contributed to or resulted in temporary harm to the patient and required intervention (e.g., treatment with naloxone)	Category F:	contributed to or resulted in temporary harm to the patients and required initial or prolonged hospitalization	Category G:	contributed to or resulted in permanent patient harm	Category H:	required intervention to sustain life	Category I:	contributed to or resulted in the patient's death	Double the days between events
Category E:	contributed to or resulted in temporary harm to the patient and required intervention (e.g., treatment with naloxone)												
Category F:	contributed to or resulted in temporary harm to the patients and required initial or prolonged hospitalization												
Category G:	contributed to or resulted in permanent patient harm												
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1D. Withdrawal symptoms after narcotic stop NOTE: Collect this measure only if baseline rate $\geq 10\%$ and/or if patients are not routinely weaned. NEW MEASURE 11/05	N = The number of patients experiencing withdrawal symptoms after discontinuation of a narcotic D = Total number of patients who had a narcotic stopped after extended continuous narcotic infusion (7 days or the # of days per individual hospital policy) A scoring system for withdrawal is recommended; e.g., withdrawal might be defined as a Finnegan score of ≥ 11 .	Random sample of 20 patients who had a discontinued narcotic after extended narcotic administration (see Formula for details). Include only symptoms after narcotic stop (do not include symptoms during the weaning process). If switched to a different narcotic or to methadone for weaning, narcotic is not yet considered "stopped." Recommend 3 months of baseline (pre-improvement data) if possible, but may not be available (e.g., no scoring system was in use).	Reduce by 50%
Days between high severity ADEs	DELETED FROM MEASUREMENT STRATEGY		
PROCESS MEASURES			
2A. Automated dispensing device overrides	N = Number of overrides for a dose of narcotic D = Number of narcotic doses administered via automated dispensing device	Include all automated dispensing activity (not a sample) Baseline data: January 2005 - March 2005 Monthly data: April 2005 – March 2006	Decrease by 25%

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2B. Patients weaned after continuous narcotic infusion NEW MEASURE 11/05	<p>N = The number of patients weaned (e.g., presence of a form in chart or written orders describing a wean).</p> <p>D = Total number of patients who had a narcotic stopped after extended continuous narcotic infusion (7 days or the # of days per individual hospital policy)</p> <p>NOTE: This measure evaluates the intent to wean (e.g., a weaning form was placed in the chart) not actual effectiveness/compliance of the individual wean.</p>	<p>Random sample of 20 patients who had a discontinued narcotic after extended narcotic administration (see Formula for details).</p> <p>If numerator and denominator can be captured on entire population, compute on all patients rather than a sample of 20.</p> <p>If switched to a different narcotic or to methadone for weaning, narcotic is not yet considered "stopped."</p> <p>Recommend 3 months of baseline (pre-improvement data) if possible.</p>	95% compliance

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Measure	Formula	Data collection plan	Goal
2C. Medication reconciliation completed Report separately for admission, transfer, discharge (report only those targeted by current reconciliation efforts) NEW MEASURE 11/05	N = Number of patients with medication reconciliation process completed (e.g., reconciliation form located in correct location on chart) at admission, transfer or discharge D = Number of patients admitted, transferred or discharged OPTIONAL: Could include only those completed with the required timeframe, e.g., 24 hours. <u>Admission</u> = patient comes into hospital from outside the hospital, including into the ED. <u>Transfer</u> = patient transferred within the hospital, including from the ED to an inpatient unit. <u>Discharge</u> = patient leaves the hospital, either to go home or to another facility.	Random sample of 20 patients admitted, transferred, or discharged (20 patients from each group). Include only patients with an LOS of at least 2 days. Patients seen in the ED and then admitted to the hospital should be reconciled at each transition of care, i.e., home to ED and ED to inpatient unit. Use both paper and electronic documentation as needed. Recommend 3 months of baseline (pre-improvement data) if possible.	95% compliance

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Measure	Formula	Data collection plan	Goal
2D. Unreconciled medications per 100 patients Report separately for admission, transfer, discharge (report only those targeted by current reconciliation efforts) Select either 2D or 2E (do not need to report both) NEW MEASURE 11/05	N = Number of medications not reconciled D = Number of patients admitted, transferred, or discharged Reconciled = medication continued or documented as stop/change Reconcile based on the following: Admissions: home list Transfers/discharges: current unit list NOTE: Count medications, not individual doses. <u>Admission</u> = patient comes into hospital from outside the hospital, including into the ED. <u>Transfer</u> = patient transferred within the hospital, including from the ED to an inpatient unit. <u>Discharge</u> = patient leaves the hospital, either to go home or to another facility.	Random sample of 20 patients admitted, transferred, or discharged (20 patients from each group). Include only patients with an LOS of at least 2 days. Patients seen in the ED and then admitted to the hospital should be reconciled at each transition of care, i.e., home to ED and ED to inpatient unit. Use both paper and electronic documentation as needed. Recommend excluding OTC and herbal medications (hospital may choose to include). Each team must determine if/how to reconcile PRN medications. Clinical judgment may be used for obvious variances, such as contraindicated medications, drug toxicity, or formulary substitutions (these medications would be considered reconciled). Recommend 3 months of baseline (pre-improvement data) if possible.	Reduce by 50%

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Measure	Formula	Data collection plan	Goal
2E. % of medications unreconciled Report separately for admission, transfer, discharge (report only those targeted by current reconciliation efforts) Select either 2D or 2E (do not need to report both) NEW MEASURE 11/05	N = Number of medications not reconciled D = Number of medications on home or current unit list Reconciled = medication continued or documented as stop/change Reconcile based on the following: Admissions: home list Transfers/discharges: current unit list NOTE: Count medications, not individual doses. <u>Admission</u> = patient comes into hospital from outside the hospital, including into the ED. <u>Transfer</u> = patient transferred within the hospital, including from the ED to an inpatient unit. <u>Discharge</u> = patient leaves the hospital, either to go home or to another facility.	Random sample of 20 patients admitted, transferred, or discharged (20 patients from each group). Include only patients with an LOS of at least 2 days. Patients seen in the ED and then admitted to the hospital should be reconciled at each transition of care, i.e., home to ED and ED to inpatient unit. Use both paper and electronic documentation as needed. Recommend excluding OTC and herbal medications (hospital may choose to include). Each team must determine if/how to reconcile PRN medications. Clinical judgment may be used for obvious variances, such as contraindicated medications, drug toxicity, or formulary substitutions (these medications would be considered reconciled). Recommend 3 months of baseline (pre-improvement data) if possible.	Reduce by 50% or Less than 10%
BALANCING MEASURES			
3. Population Size: Narcotics	Total number of patients on narcotics	Baseline data: January 2005 - March 2005	

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Measure	Formula	Data collection plan	Goal
		Monthly data: April 2005 – March 2006	