



Measurement Grid

Adverse Drug Events: Sustain & Spread

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.

Data collection forms:

See the Collaborative web page for sample data collection forms. Modify these forms as needed.

Timeline for Measurement:

Each team will collect baseline data (see below), as well as 12 months of collaborative data (July 2008 – June 2009). A comprehensive baseline allows comparison of initial to final performance.

Report 3 months of pre-collaborative (baseline) data for all measures if available (Apr – Jun 2008). If you have not been collecting observation data on pump programming accuracy (most hospitals have not), begin reporting as soon as you put the observation process in place (this data can only be collected prospectively).

Population:

Collect data for each measure only on the target population selected for the collaborative. See the Change Package for details on the target population. If possible, report data on the same patient population over time.

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 Improvement Handbook for a more complete discussion of measurement for improvement.

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Measure	Statistic	Definitions	Data Collection	Collaborative Goal
OUTCOME MEASURES				
Measures of change [or lack of change] in the well-being of a defined population related to an intervention. Improvement in outcome measures reflects the health status of the patient, whereas process measures reflect the care delivery to the patient. Improvement in outcome measures has a direct effect on mortality and morbidity.				
O1. ADEs per 1000 patient days	N = # of ADEs D = # of patient days Report per 1000 days	See trigger toolkit.	Trigger chart review on a random sample of 20 patients per month. See trigger toolkit for full instructions on trigger chart review.	Reduce by 50%
O2. Opioid ADEs per 1000 patient days Report only if targeting opioids	N = # of ADEs related to opioids D = # of patient days Report per 1000 days	See trigger toolkit.	This is a subset of O1 (no additional chart review required)	Reduce by 50% Teams that have sustained improvement from the 2005-2006 ADE-Narcotics collaborative: Reduce by 25%

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<p>O3. Anticoagulation lab values out of range</p> <p>Report unfractionated heparin and low molecular weight heparin separately</p> <p>Report only if targeting anticoagulants</p>	<p>N = # of days with at least one lab value out of range</p> <p>D = # of anticoagulant days</p> <p>Report per 100 anticoagulant days</p>	<p>Include as many types of laboratory findings as possible, e.g., PTT, INR, ACT, anti-10A.</p> <p>Use hospital-specific ranges.</p> <p>Include only patients receiving unfractionated heparin or low molecular weight heparin</p> <p>Anticoagulant day = any day during which an anticoagulant was administered. For continuous infusions, count each day during which the infusion was given.</p>	<p>Laboratory data: report out of range values based on internal tracking systems (existing or developed for the collaborative)</p> <p>Pharmacy data: request or use existing electronic report from your pharmacy system.</p> <p>Report on all patients if possible.</p>	<p>Reduce by 50%</p>

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<p>O4. Rescue doses for IV insulin-associated hypoglycemia</p> <p>Report only if targeting insulin</p> <p>OPTIONAL: O4A. Rescue doses for subcutaneous insulin-associated hypoglycemia</p>	<p>N = # of patient events of rescue dosing due to hypoglycemia</p> <p>D = # of insulin days</p> <p>Report per 100 insulin days</p>	<p>Include only patients on IV drip insulin (unless reporting O4A).</p> <p>Include all forms of glucose, including nutritional agents such as juices.</p> <p>Laboratory confirmation of hypoglycemia is not required; rescue doses given based on symptoms should be included.</p> <p>Multiple rescue doses to treat a single episode of hypoglycemia count as one event.</p> <p>One patient may have multiple, independent events that are counted separately.</p> <p>Insulin day = any day during which insulin was administered. For continuous infusions, count each day during which the infusion was given.</p>	<p>Select a random sample of 30 patients per month and review only for the use of rescue agents. This is separate from trigger chart review (measure O1).</p> <p>If you have less than 30 patients per month review all patients.</p> <p>Optional measure O4A (subcutaneous insulin) requires a separate sample of 30 patients per month.</p>	<p>Reduce by 50%</p>

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PROCESS MEASURES				
What is done to, for, with, or by defined individuals or groups as part of the delivery of services.				
P1. Automated dispensing device overrides for opioids Report only if targeting opioids OPTIONAL: P1A. Automated dispensing device overrides for opioids - INAPPROPRIATE ONLY	N = # of overrides for opioids D = # of opioid doses administered via automated dispensing device Report as a percentage	Exclude the Emergency Department but include Observation Unit(s) if applicable.	Include all automated dispensing activity for opioids (not a sample)	Decrease by 25%
P2. Pump programming accuracy OPTIONAL: P2A. Pump programming accuracy via random audit	N = # of correct initial pump settings D = # of pump programming events Report as a percentage	Include continuous syringe pump infusions only. If a double check was not done or not done properly, count as incorrect.	Perform direct observation on 20 pump programming events (shift change or bag change) per month.	95% compliance If initial compliance is >95%: 50% reduction in errors
ADDITIONAL MEASURES				
Patient Days	Total # of patient days	Exclude patients who were discharged from the Emergency Department without admission to the hospital.	Report total inpatient days using standard hospital reporting systems.	None. This data is used to extrapolate trigger results to entire population