

# Metric Selection and Use\*

\*This worksheet was adapted from a 2011 book published by the Healthcare Information and Management Systems Society (HIMSS) entitled "Improving Outcomes with Clinical Decision Support: An Implementer's Guide, Second Edition."

This worksheet is anchored by a list of example metrics that are arranged into four outcome categories: efficiency, quality, safety, and cost. For each intervention, complete a separate checklist. Consider what specific metrics might be appropriate for assessing the intervention's role in addressing its corresponding objective. Note that interventions may address more than one clinical objective, and clinical objectives may be targeted by more than one intervention. The idea behind this worksheet is to help you brainstorm and make explicit how you will know the effects the intervention is having and how you will measure those effects. The last three columns are a scratchpad for thinking through the "who," "when," and "how" for using each metric that you select for the intervention.

## ***Metrics Selection and Use***

**Clinical Decision Support Objective: Prevent Prescription of Medication to Allergic Patients**

**Intervention Name: Prescription Allergy Alert Window**

Check Those That Apply	Efficiency	Metric Owner	Measurement Schedule	Collection Method
X	By how much has time taken to use system is increased or decreased?	PI coordinator	Weekly X 4	Silent observer, system logs
<b>How has efficiency been affected at the following medication management process nodes:</b>				
X	Prescribing	PI coordinator	Weekly X 4	Silent observer, system logs
O	Transcribing			
O	Dispensing			
O	Administering			
<b>Quality</b>				
X	Mortality rate	PI coordinator	Monthly	Existing adverse event reporting process
X	Morbidity rate (including adverse drug events and reactions)	PI coordinator	Monthly	Existing adverse event reporting process
X	Length of stay changed?	Sam D. (medical records)	Monthly	Chart review – semi automated
X	NCC-MERP outcome metrics	Jean S. (pharmacist)	Monthly	Chart review
X	Effects of CDS on number, class, and type of medications ordered	Jean S. (pharmacist)	Monthly	Existing pharmacy database

Check Those That Apply	Efficiency	Metric Owner	Measurement Schedule	Collection Method
<b>Safety</b>				
	Are number of errors reduced at each of the following medication management nodes:			
X	Prescribing	PI coordinator	Monthly	Existing adverse event reporting process
O	Transcribing			
X	Dispensing	PI coordinator	Monthly	Existing adverse event reporting process
X	Administering	PI coordinator	Monthly	Existing adverse event reporting process
X	Are number of errors reduced at each NCC-MERP category (B to I)?	Jean S. (pharmacist)	Monthly	Existing adverse event reporting process
X	Are there unintentional adverse effects?	James V. (CDS Team/evaluation)	Monthly X6	Walk rounds, focus groups with clinicians to assess qualitative alert responses
<b>Cost</b>				
X	Resource management changes due to CDS implementation - cost/benefit ratios	Joan R. (billing)	Monthly	Query current billing system
X	Change in cost of prescribed medication related to CDS interventions	Joan R. (billing)	Monthly	Query current billing system