



Quality Measurement Efforts: Primer

<p>Key Points</p>	<p>Measurement is a way of monitoring whether we are achieving our goals</p> <p>Quality Measurement Efforts</p> <ul style="list-style-type: none"> ▪ Clinical improvement — focus is on change from current state to new state ▪ Performance measurement — a quantitative way to measure health care quality which may or may not have resulted from a clinical improvement <p>Caution → Measurement is complex and prone to pitfalls</p> <ul style="list-style-type: none"> ▪ Look for valid and useful evidence using an evidence-based approach <ul style="list-style-type: none"> ▪ When measuring health status outcomes, use proxies which are related to services or processes ▪ Quality measurement efforts are usually observational, not experimental. Observations are highly prone to confounding <ul style="list-style-type: none"> ▪ For clinical interventions, unless you are doing “research,” you should choose to measure occurrences that have a link to the outcomes <p>Advice</p> <ul style="list-style-type: none"> ▪ Utilize valid, useful evidence as much as you can ▪ Be aware of pitfalls and potential for confounding ▪ Try to frame as a focus on “attention to quality”
<p>Occurrences for Measurement</p>	<ol style="list-style-type: none"> 1. Outcome-related occurrences: <ol style="list-style-type: none"> a. Health status outcomes: morbidity, mortality, symptom relief, functioning and health-related quality of life b. Health care outcomes: satisfaction, behaviors, costs 2. Performance-related occurrences: diagnostic, therapeutic and monitoring interventions 3. Process-related occurrences: patient services such as visits, providing information, etc., and behind-the-scenes processes such as hours worked, equipment calibration, chart delivery, etc
<p>Measurability Considerations</p>	<p>Measures should be —</p> <ul style="list-style-type: none"> ▪ Quantifiable and valid ▪ Measure is accurate (e.g., correctly identifies the occurrences it is designed to identify) and dependable (e.g., with repeated testing measurement should yield same results) ▪ Measure is useful and usable – includes capability for risk stratification, comprehensible and helps with quality improvement <p>Measurement must be achievable</p> <p>Caution →</p> <ul style="list-style-type: none"> ▪ Even with a valid measure, invalid results can occur if appropriate data are not obtained or gathered correctly
<p>Performance Measurement</p>	<p>Performance measurement in clinical care is a quantitative way to measure what is done to patients or what care patients receive, consisting of a denominator, a numerator and a frequency</p> <ul style="list-style-type: none"> ▪ To measure quality, the denominator specifies the “universe” of who or what ought to have had an occurrence (e.g., who should be treated with an ARB). ▪ The numerator is the count of what actually happened (e.g., who actually got an ARB out of those who should have received an ARB).



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	<ul style="list-style-type: none"> ▪ The frequency specifies how often it is supposed to happen. <ul style="list-style-type: none"> ▪ Denominator = the base number of units from which you are measuring for your improvement ▪ Numerator = the subset of your denominator in which you will count the number of occurrences of your events of interest ▪ Frequency for measurement = the intervals for your measurement <p>Example: “All patients, without exclusions, with diagnosis of diabetes mellitus receiving at least one hemoglobin A1c annually”</p>
<p>Performance Measure Validity</p>	<ul style="list-style-type: none"> ▪ A valid denominator specifies the right base from which the measurement will be made (what ought to be measured) <ul style="list-style-type: none"> ▪ Denominator validity means that the denominator has the right inclusions and exclusions to identify the right pool for measurement ▪ Numerators generally count events such as something that happens to a patient or something patients receive <ul style="list-style-type: none"> ▪ A valid numerator is based on valid, useful and usable scientific evidence ▪ Ideally frequency and other time issues in numerators, such as time-to-intervention, is derived from evidence <p>Caution →</p> <ul style="list-style-type: none"> ▪ Even with a valid measure, invalid results can occur if appropriate data are not obtained or gathered correctly
<p>Performance Measure Calculation</p>	<p>Numerator: (# of patients meeting numerator criteria) divided by</p> <p>Denominator: (# patients in denominator) – (# patients with valid denominator exclusions)</p>
<p>Performance Measure Pitfalls</p>	<p>Performance Measure Cautions (including P4P applications) →</p> <p>In addition to potential problems of invalid numerators, denominators and frequencies and data collection challenges, performance measures can severely threaten quality if not utilized correctly —</p> <ul style="list-style-type: none"> ▪ Potential for misleading information about what constitutes quality care or what constitutes quality achieved ▪ Penalize quality performers ▪ Reward poor performers ▪ Alienate those who are “measured” <p>These potential pitfalls include —</p> <ul style="list-style-type: none"> ▪ Differences in populations which might not be adjusted successfully through risk adjustment ▪ Performance measures can introduce an element of inflexibility ▪ Legal considerations <p>Caution →</p> <p>Evaluating and comparing organizations, units and individuals using performance measures can result in misleading conclusions. Some relevant factors include —</p> <p>Bottom-line: performance measures (and therefore pay-for-performance initiatives) have the potential for misinforming the end-user:</p> <ul style="list-style-type: none"> ▪ The system can be gamed ▪ Risk adjustment challenges ▪ Appropriate actions may have been taken to improve quality of care, but because of patient factors, systems factors or small sample size, performance may not result in clinical improvement ▪ Small sample sizes can create validity problems, especially at the individual level ▪ Many confounders ▪ Adjusting for case mix is problematic