

## Measure Type Definition

Donabedian's structure-process-outcome model is a useful framework for quality assessment and illustrates the link between process and outcome.

"Before (quality) assessment can begin we must decide how quality is to be defined and that depends on whether one assesses only the performance of practitioners or also the contributions of patients and of the health care system. (To adequately assess quality of health care) we also need detailed information about the causal linkages among the structural attributes of the settings in which care occurs, the processes of care, and the outcomes of care." (Donabedian, JAMA, Vol. 260 No. 12, September 23, 1988)

**Structural measures** – measures of organizational characteristics (such as staffing ratios, number of hospital beds)

**Process measures** – interactions between healthcare practitioner and patient; a series of actions, changes, or functions bringing about a result (such as mammography screening rate)

**Outcome** – changes (desirable and undesirable) in individuals and populations that are attributed to healthcare. There are a variety of outcome measures and ways to label them.

- Those representing an end result (such as mortality or function)
- Intermediate outcomes (physiologic or biochemical values – like blood pressure or LDL value). These precede and may lead to longer-range end result outcomes.
- Proxies used to indicate an outcome – (such as hospital readmission indicates deterioration in health status since discharge). These can be the same as process measures.

Some types of outcome measures and examples:

### Type of Outcome

### Example

- |   |  |
|---|--|
| • Healthcare acquired adverse event           | - Surgical site infection  |
| • Patient function                            | - Performance of activities of daily living                      |
| • Mortality                                   | - ICU mortality  |
| • Intermediate clinical outcome               | - Improvement in blood pressure/<br>Blood pressure under control |
| • Service utilization as proxy for pt outcome | - Return to higher level of care (ICU)                           |
| • Morbidity related to disease control        | - Blindness related to diabetes                                  |
| • Health related quality of life              | - Social role and mental capacity                                |