Measurements Framework Introduction, improvements in healthcare will only occur when the measurement of outcomes is linked to the healthcare processes and systems supporting the production of the results. Healthcare process steps create a result, for each patient (or population), which can be measured in a set of quality-related outcomes and costs. At the end of each illness episode (or post-treatment), the patient or population can be described with respect to clinical status, functional status, and satisfaction against fundamental need and pre-treatment expectations. The patients can also be characterized with respect to the incremental health-related costs they have incurred due to this treatment/illness episode.

The Clinical Value Compass, named to reflect its similarity in layout to a directional compass, has at its four cardinal points (1) North - functional status, risk status, and well-being; (2) South - costs (direct healthcare costs for physicians, hospitals, drugs, and so on and indirect social costs incurred by the family, employer and community; (3) East - satisfaction with healthcare and perceived benefit; and (4) West - clinical outcomes (such as mortality, morbidity and complications). All four compass points are important to define and measure the quality of care in a comprehensive manner.

(Nelson, Mohr, Batalden, Plume “Improving Health Care, Part 1: The Clinical Value Compass.” The Joint Commission Journal on Quality Improvement 22(4) April 96)

**Use**, unlike a traditional compass, the points on the clinical value compass is not used to navigate in one particular direction versus another. Rather, the compass as a whole serves as a guide to maintain perspective on the entire care process. A specific improvement initiative can focus on one quadrant of the compass; however, the overall project must consider all four quadrants.

The Clinical Value Compass also enables physicians to see their patients from more than one angle; to look past the disease and evaluate the patient's environment that harbors the disease. By diagnosing the clinical problem, a physician can determine which care plan to pursue. But by ignoring what the patient expects from the health care, disregarding the costs of various care
plans, and neglecting the patient’s physical, mental, and social function, a physician can easily develop a care plan that is inconvenient, unpleasant, unfeasible and very costly to the patient. A care plan may be medically appropriate, but it may not necessarily suit the patient. The Value Compass provides a lens through which physicians can clearly see every angle of their patients. It is an easy-to-remember, easy-to-apply framework that incorporates the crucial aspects of a patient’s care into four cardinal points:

- North - functional status, risk status, and well-being.
- South - the cost of the care delivered, including medical expenses, lost days of work, and other non-health care costs incurred by the patient and his or her family.
- East - the patient's satisfaction with and expectations of health care.
- West - the presenting clinical problem and its manifestations.

By exploring these four coordinates for each patient, a physician can help in a manner that is both medically sound and fully satisfying to the patient.

In summary, the Clinical Value Compass presents a balanced approach to measuring and displaying value in health care. It is a measurement system that is designed for identifying and monitoring those key indicators of care that enable one to assess the quality of health care.

Example

**Functional Health Status**
- Baseline Questionnaire
  - Physical function
  - Mental health
  - Social/Role
  - Pain
  - Health Risk

**Biological Status**
- Short Term:
  - Controlled BP
  - Diet compliance
  - Med compliance
- Long Term:
  - Stroke
  - Coronary Artery Disease
  - Kidney Function

**Satisfaction Against Need**
- Physician/Provider
- Nurse Visit
- Process of Care
- Perceived Health Benefit

**Cost**
- Physician and Nurse Visits
- ED Visits
- Medications
- Work Time Missed
- Length of Stay