

## Variation Analysis

Analysis of geographic variation in healthcare delivery, which has its roots in Maine, New Hampshire, and Vermont, has shown vast differences in spending on care among areas of the United States and among smaller areas within the State of Maine. Although early studies of geographic variation could simply note differences in utilization frequency or volume, current studies are informed by evidence-based guidelines which define quality of care, by linking processes of care such as treatments or tests to beneficial outcomes such as longer life, higher functional status, or avoided hospitalization.

Variation analysis has shown that there are large differences in health care spending among areas of the United States. For example, research from Dartmouth's Center for Evaluative Clinical Sciences has documented more than a two-fold difference in annual spending per Medicare beneficiary between the Miami and Minneapolis regions. This difference is due not to a difference in price of services or in prevalence or severity of illness in either region; it is due to differences in utilization of services. In turn, local rates of utilization are tightly correlated with local supply of services. However, outcomes of care, including measures of quality of life, mortality, or patient satisfaction are not necessarily better in areas of higher utilization.

There are rich sources of variation data in Maine, including hospital discharge data, Maine's unique paid-claims database, and data on specific performance indicators chosen by MQF and its Advisory Council and submitted to MHDO by hospitals. (The Maine Health Management Coalition, through its Pathways to Excellence program, also has considerable primary care practice performance data.)

The question remains, "How can this information best be used to improve practice, achieve better patient outcomes, and lower costs?" This process will require engagement of providers, especially medical practices, in a discussion of practice- and region-specific information in order to involve them in initiatives targeted toward improving performance and diminishing variation.

### Tasks:

- Update variation data which is currently displayed on MQF website
- Continue analysis of more current paid-claims data (currently being done by Health Dialog Analytic Solutions under contract with MQF)
- Convene practitioners to discuss their performance as reflected in the paid-claims data and their hospital community's variation from state norms as expressed in discharge data, in order to develop performance improvement initiatives