EXPENDITURE AND UTILIZATION ANALYSES

The state's contractor shall provide a broad range of analytical services that will help the state identify and evaluate targeted strategies to reduce the rate of growth in health care costs while improving the health of the Vermont population, without compromising health care quality. The scope of work is based primarily on the "Green Mountain Care Board Data Analytic Plan" (http://gmcboard.vermont.gov/sites/gmcboard/files/AnalyticPlan060612.pdf) and accompanying presentation titled, "Analysis in Support of Health Care Reform" (http://gmcboard.vermont.gov/sites/gmcboard/files/GMCB060512.pdf).

There will be two analyses and several ad hoc analyses performed using the following datasets: vital, demographic, socioeconomic, and health statistics for the Vermont population; all-payer claims data from the Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES) and other claims data sources; payer, insurer, and provider administrative data, budget and financial reports with details not found in VHCURES or other claims-based sources; hospital discharge data from the Vermont Uniform Hospital Discharge Data Set and other sources such as the Agency for Healthcare Research and Quality (AHRQ) Healthcare Cost and Utilization Project (HCUP); Vermont Household Health Insurance Survey (VHHIS) and similar federal health insurance surveys with national and State-level data; and other useful and relevant data types and sources that would contribute to a comprehensive profile of health and health care in Vermont.

The two initial analyses are: 1. Develop appropriate populations for analyses; and 2. Develop detailed expenditure analyses.

1. **Develop Appropriate Populations for Analyses**

   The goal of this task is to determine population groupings to support analyses of health status, health behaviors, health care services, cost of care, and outcomes of care for Vermonters. The contractor shall develop a portfolio of Health Analyses Populations (HAPs) to support flexible and robust population-based analyses (e.g. disease prevention, utilization rates, per capita spending, etc.) and develop population denominators defined by geography (health service areas), markets (catchment), care-seeking patterns (behavior), demographics (population characteristics), or health needs (population health and risk).   The contractor shall use HAPs as approved by the State as the basis for analytical deliverables that identify the most important subgroups to examine and assess where health and health care use patterns differ across these groups, what are the most costly subgroups and disease conditions, and why.

2. **Develop Detailed Expenditure Analyses**

   The major goal of this task is to provide more granular estimates of health spending and use by integrating claims data from the Vermont Health Care Uniform Reporting and Evaluation System (VHCURES) into the Vermont Health Care Expenditure Analysis

(VHCEA). The contractor shall assist in the integration of all-payer claims data into the VHCEA model including the categorization of complete expenditures and services for all payers and also what would constitute an "apples-to-apples" comparison of spending and utilization across commercial and government payers for comprehensive major medical services and expenditures.

The ad hoc reports may include the following types of analyses:

- Analysis 1: Macro Trends and Healthcare Spending Index. The first analysis will focus on spending and growth overall and by provider service category for certain payer groups. The Contractor will compare Vermont to neighboring states (NH, ME, MA) and to national norms across all payers. The Contractor will leverage the analyses completed in Task 3 to compare changes in Vermont's historical and current levels of per capita spending to changes in national levels of per capita spending from MarketScan. The Contractor will also include a comparison of Vermont to bordering states.

- Analysis 2: Small Area Comparison of Population and Market Characteristics. The second analysis will look at variation in population characteristics and structures of care. The Contractor will examine variation in population density, income levels, education levels, poverty, and income inequality within hospital service areas. The Contractor will also look at the number of providers (primary care, specialists, nurse practitioners, physician assistants, hospitals, nursing homes, etc.) per capita, hospital competition, and market share. This will help to contextualize areas.

- Analysis 3: Spending by DRG and Episode. The third analysis will focus on DRGs and episodes of care to see if specific DRGs and episodes are more or less resource intensive in Vermont compared to norms from bordering states and national norms. These analyses will include an examination of spending per selected DRGs and episodes.

- Analysis 4: Comparison of Primary Care Utilization. The fourth analysis will examine utilization of primary care and access to primary care. Specifically, the Contractor will examine the ratio of patient utilization of primary care to hospital care and the ratio of patient utilization of primary care to specialist care. The Contractor will compare these ratios within small areas of Vermont, between Vermont and bordering states, and Vermont and national benchmarks. The Contractor will also compare measures of access to primary care including availability of advanced practice primary care practices, availability of Community Health Centers, and availability of primary care providers including nurse practitioners per capita.

- Analysis 5: Spending by HAP Population. The final analysis will focus on HAP populations identified in Task 2. The Contractor will calculate the spending and growth overall and by provider service category for the special population in Vermont and outside of Vermont, when appropriate.