The findings outlined in this assessment represent a first step in defining the need for health system change. Rather than providing conclusive recommendations regarding what or how the community should change, the assessment aims to provide a comprehensive screen against which stakeholders can evaluate community health and health care delivery system performance.

**Organization of Factbook**

The two-volume community assessment contains four major analytic components: a Health Assessment, a Resource Assessment, a Value Assessment and a Disease Category Analysis. Each component contains smaller sections and begins with a broad overview of results. Subsequent pages within each section highlight specific results in greater detail. Throughout the component and section summaries, “Issue for Future Study” boxes suggest ways to validate or further explore and highlight data concerns. “Technical Notes” boxes discuss specific data issues that may be affecting the results in this assessment.

The **Health Assessment** provides: (1) a general gauge for judging whether the health care delivery and public health systems are meeting community needs; and (2) a context for more in-depth analyses of the nature and effectiveness of the delivery system.

The Health Assessment examines the demographic, socioeconomic and health status profiles of the target community. It relies on numerous published reports, such as the 1997 Delaware Vital Statistics Annual Report, submitted to The Lewin Group from representatives in Wilmington and the state of Delaware. The Health Assessment compares the health status of the target community to national and state norms, comparison communities, and industry leaders.

The **Resource Assessment** serves to: (1) identify available resources and estimate service capacity levels; (2) assess health service needs; and (3) pinpoint areas of resource imbalance.

The Resource Assessment focuses on the full continuum of health care services, ranging from an in-depth examination of physician resources to a detailed analysis of inpatient capacity. It relies on a wide variety of data sources to assess health system capacity, including American Medical Association and American Hospital Association statistics, limited primary data collection and interviews with knowledgeable community representatives. We estimated community need using actual utilization data where available, “benchmark” or optimal utilization levels and some risk adjustment (e.g., age/gender and case-mix adjustments). To the extent that county residents leave the county for health care services and/or residents of other counties come to Delaware for services, these “migration effects” are factored into analyses of available resources and need. We also incorporate some information about migration for inpatient and physician care in this analysis to highlight utilization dynamics of the health care system.
Measures of service capacity and community need are integrated to determine areas of resource imbalance.

The Value Assessment allows the community to: (1) assess the effectiveness, invasiveness and timeliness of the delivery system in achieving positive health outcomes (i.e., assessment of quality); and (2) determine the cost-effectiveness of the delivery system (i.e., assessment of utilization and unit costs).

The Value Assessment focuses on the appropriateness of services while the Resource Assessment focuses on their availability. The Value Assessment relies on patient-level transaction data (e.g., claims data, hospital discharge data) and aggregate quality and cost reports. Benchmarks are drawn from existing research, published literature, expert opinion and best performance systems and institutions. The conclusiveness of benchmark comparisons depends primarily on the availability of appropriate risk and severity adjusters. Although we employed the most sophisticated adjustment techniques, data was not available to adjust for differences in disease prevalence among populations.

The Disease Category Analysis: (1) identifies disease areas in which Delaware’s performance is sub-optimal from a number of different perspectives; and (2) provides substantive focus to the action planning phase by highlighting the issues around disease categories. It brings together indicators from the Health, Resource and Value Assessments and supplements them with additional indicators to provide a more complete picture of each disease area. This analysis is valuable in determining how different aspects of disease category care (e.g., inpatient utilization, outpatient utilization, preventive care, disease mortality) interact to create outcomes in the community.

Use of “Benchmarks” and Statistical Significance

To stimulate a community-based process of continuous quality improvement in the Area’s health care delivery system, The Lewin Group compared the experience and performance of Delaware against a wide range of “benchmarks.” These benchmarks include:

- Norms, such as state and national averages;
- Comparison communities, such as metropolitan areas that are demographically and socioeconomically similar to Delaware;
- Recognized industry leaders; and
- Consensus-based standards, such as Healthy People 2000 objectives.

Benchmarks serve as reference points against which the community can assess its performance and identify opportunities for improvement, not necessarily as definitive best practices. Those findings for which Delaware performs outside of the range of benchmarks present more compelling opportunities for change than those for which Delaware performs within the range of benchmarks. However, such performance does not necessarily require change.
Comparison communities used in this analysis include Maryland; New Jersey; Pennsylvania; Washington State; Seattle, WA; San Joaquin, CA; and Wichita, KS. These communities were selected based on:

- Availability of data;
- Similarity of demographic and socioeconomic characteristics; and
- Differences in type of health care delivery system (e.g., level of managed care penetration).

In addition to comparing Delaware’s performance to benchmarks, The Lewin Group also conducted tests of statistical significance for selected indicators to further understand the state’s performance compared to benchmarks. In some cases, we constructed tests of statistical significance to evaluate whether a difference from a benchmark is meaningful. In other cases, the reader needs to exercise some judgment as to whether a finding is significant when an observation exceeds one or more benchmarks. In our view, exceeding just one benchmark probably provides little insight. The reader should place more weight where an observation is outside all or most of the benchmarks provided. This latter approach has driven our narrative discussion of which findings we describe as significant when a test of statistical significance is unavailable.

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1 See Appendix D for a table comparing Delaware to comparison communities on several socioeconomic and health care factors.