

DELAWARE FACTBOOK

EXECUTIVE SUMMARY

DaimlerChrysler and the International Union, United Auto Workers (UAW) launched a Community Health Initiative in Delaware to encourage continued improvement in the state's health care delivery system. The initiative seeks to ensure appropriate high quality care, promote healthy lifestyles, prevent disease and reduce health care costs through the efficient and appropriate delivery of services.

The findings outlined in the Factbook represent one part of an overall assessment process. The health initiative includes gathering information from community leaders, health care providers, as well as reviewing previous and ongoing assessments done by the community. Information from these sources is used in combination with findings from the Factbook to facilitate the "action planning phase" of the initiative. 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 relative to the nation and other communities with similar characteristics.

The assessment reflects the experience of the entire community, not just that of auto industry employees. The community initiative vision rests on the notion that diverse constituencies, such as providers, consumers, labor unions, purchasers, insurers, public health and other government agencies, elected officials, philanthropic organizations and the media, can come together to identify common goals and implement synergistic strategies for health system improvement.

Specifically, the community assessment supports this vision by:

- providing a common understanding of local population needs and health care resources;
- comparing performance of the current health care delivery system in Delaware to other communities and national standards;
- identifying specific opportunities for improvement in health status and health care delivery;
- identifying gaps between needs and resources and targeting opportunities for feasible change;
- providing a "fact base" to facilitate community-level action planning and priority setting; and
- establishing an information baseline for future community monitoring efforts.

Where possible, the experience and performance of Delaware was compared against a wide range of “benchmarks”. Benchmarks serve as reference points against which the community can assess its performance and identify opportunities for improvement. Benchmarks used in the assessment include:

- norms, such as state and national averages;
- comparison communities, including the neighboring states of Maryland, New Jersey and Pennsylvania, as well as other areas that are similar to Delaware, including Washington State; Seattle, WA; San Joaquin, CA; and Wichita, KS;
- recognized industry standards or practices of care; and
- consensus-based standards, such as Healthy People 2000 objectives.

OVERVIEW OF KEY FINDINGS

- **The socioeconomic status of Delaware residents is favorable, while the health status of residents is comparable to or less favorable than benchmarks.** Delaware’s demographic profile is comparable to the nation and benchmark communities, and its socioeconomic status is slightly favorable. Delaware compares less favorably than benchmarks with respect to cancer, chronic diseases, several communicable diseases, some social environment indicators, several behavioral risk factors and a few maternal and child health indicators. African American residents in Delaware have worse health status compared to white residents in the state, but racial disparities in Delaware are less pronounced than in other communities.
- **Health care resources in Delaware appear adequate, although the majority of resources are concentrated in New Castle County.** Given current inpatient utilization and migration patterns, approximately four percent of beds are in excess of the capacity demanded within the community. The physician supply per 100,000 Delaware residents is comparable to that of the U.S., while the dentist supply per 100,000 residents is lower than the industry standard. The number of nonresidents who obtain care in Delaware is similar to the number of residents of the state who obtain care from facilities located outside of the state.
- **The quality of care delivered in Delaware is generally comparable to other communities, though high utilization of some services suggests that care is not always provided in the most appropriate settings or with the least invasive technologies.** Resident care is comparable to benchmarks for length of stay; however, high inpatient use rates are associated with some ambulatory care sensitive conditions¹ (e.g., diabetes, pediatric asthma) that may be more appropriately treated in outpatient settings. In addition, Delaware residents more commonly utilized some invasive surgical procedures relative to other communities, including cardiac catheterization, back surgery, and gall bladder surgery.

¹ An ambulatory care sensitive condition is defined as a condition where timely and appropriate outpatient treatment would reduce the risk of inpatient hospitalization for common health problems such as asthma and diabetes.

- **Inpatient utilization, including admissions and total days, is generally higher in Delaware than in other communities.** Delaware residents use inpatient care more often than benchmarks, particularly for circulatory conditions, respiratory disorders and mental health treatments.
- **Inpatient charges in Delaware hospitals are comparable to other communities, while costs are slightly lower.**² Average charges per admission fall within the range of charges in other communities. Charges in Kent County were slightly higher than either New Castle or Sussex County. The average hospital cost per admission was generally lower than costs in other communities.
- **Professional services utilization by Delaware's Medicare enrollees is slightly lower than benchmarks, and average Medicare payments and charges for professional services are comparable to benchmarks.**³ Medicare professional services utilization tends to be lower than benchmark rates with some favorable exceptions (mammography and immunization services).
- **Three disease categories appear to pose particular areas of concern for Delaware.** The state performs less favorably on a number of indicators specific to respiratory disease, cardiovascular disease and mental health.

HEALTH STATUS

- **Delaware's population is not at increased risk for poor health status associated with socioeconomic factors relative to comparison communities.** Research has shown many demographic and socioeconomic factors influence population health status. Compared to state and national benchmarks and most comparison communities, Delaware residents:
 - have similar **incomes**;
 - experience a lower **poverty** rate than the nation, but a higher rate than some neighboring states;
 - have a slightly lower **unemployment** rate;
 - are less likely to be **uninsured**; and
 - are slightly less likely to graduate from high school, but a comparable number possess **college and graduate/professional school degrees.**

² Average charge data is based on data from the Delaware Health Statistics Center and hospital discharge data from the benchmark communities. It reflects the amount charged per inpatient stay, regardless of the payor or hospital. Cost estimates reflect the amount that hospitals spend to provide inpatient services and are based on aggregate hospital spending on personnel, equipment, space, supplies and other resources used to provide patient care.

³ Professional services are defined as services provided by physicians and other health professionals; examples of these services include office visits, radiology, pathology, well-baby visits, cardiovascular services and inpatient and outpatient surgery services.

- **Overall, Delaware residents have comparable or less favorable health status related to disease prevalence and health behavior relative to norms and comparison communities.** Specifically, Delaware exhibits:
 - less favorable **chronic disease** rates for some conditions, including higher mortality rates for heart disease, cancer and diabetes and higher estimated prevalence rates for ischemic heart disease, asthma, hypertension and diabetes.
 - mostly favorable results relative to **behavioral risk factors** such as preventive services, health screenings, binge drinking and seatbelt usage but unfavorable results in other areas, including exercise, smoking and alcohol-related motor vehicle accidents.
 - mixed results in terms of **communicable disease**, with higher rates than benchmarks for some sexually transmitted diseases and AIDS and lower rates for tuberculosis, syphilis and mumps.
 - higher incidence and mortality rates for **trachea, lung, and bronchus cancer, colon cancer, breast cancer and cervical and prostate cancers.**
 - comparable results on some **maternal and child health** status indicators, including prenatal care and Cesarean births, as well as smoking and alcohol use during pregnancy, but higher rates of teenage births, infant mortality and low and very low birth weights.
 - favorable results with respect to **air quality**, except ozone, but some problems with **surface water quality.**
 - comparable or favorable performance on most **social environment** indicators such as crime and homicide rates but higher rates of rape offenses and child abuse and neglect.
 - less profound **racial disparities in health** status between African American and white residents than other communities, despite findings that African American residents in Delaware are more likely to live in poverty and die from chronic diseases compared to the state’s white residents.

RESOURCES

- **Delaware has adequate hospital resources to meet current demand within the community.**
 - Delaware residents receive 90 percent of their **inpatient care** in Delaware hospitals.
 - The total number of hospital beds available in Delaware appears to match capacity needs within the community, with a slight excess of beds available for some bed types (e.g., **psychiatric/substance abuse** beds in private sector hospitals).⁴ Under current

⁴ Data for this analysis is based on hospital identified psychiatric/substance abuse beds in private acute and psychiatric hospitals. This analysis does not include either the supply or utilization of psychiatric/substance abuse beds in Delaware’s public inpatient psychiatric facility. Public hospital utilization data in benchmark communities was not available for this analysis.

utilization scenarios, approximately four percent of hospital beds (83 beds) in Delaware are excess.

- **Delaware has an adequate supply of physicians relative to benchmarks, with exceptions in some specialties.**
 - Delaware has approximately 194 physicians per 100,000 persons, which is slightly lower than most benchmarks. Kent County has the fewest physicians per 100,000 persons, while New Castle County has the most.
 - The primary care versus specialty mix of physicians is consistent with the U.S. norm.
 - Delaware has more pediatricians per 100,000 children under age 18, but fewer OB/GYNs per 100,000 females, compared to the nation.
- **Delaware's supply of dentists is inadequate relative to the industry standard.**
 - Delaware has fewer than 39 full-time dentists for every 100,000 persons in the state, 23 percent less than the industry standard of 50 full-time dentists for every 100,000 persons.
 - Sussex County had the lowest proportion of full-time dentists with only 18.5 per 100,000 persons, while Kent and New Castle had 29.4 dentists per 100,000 persons and 52.6 dentists per 100,000 persons, respectively.
 - The supply of dentists decreased by eight percent from 1996 to 1998, while the population increased two percent in the same time period.

VALUE

- **The quality of care received by Delaware residents is generally comparable to other communities; however, high utilization rates for ambulatory sensitive conditions and some surgical procedures may indicate that care in Delaware is more hospital-centered than in other communities.**
 - The effectiveness of treatments delivered to Delaware residents is generally comparable to benchmark communities.⁵ Delaware's rate for seven of the nine length of stay indicators are comparable to the nation and neighboring communities, including **coronary artery bypass grafts, angioplasties, Cesarean sections, gall bladder surgeries, hysterectomies, laminectomies and appendectomies.**
 - Mortality rates for Delaware residents undergoing open heart surgery are favorable relative to other communities.

⁵ Effectiveness of treatment was measured by examining a select set of length of stay indicators and mortality rates. Measuring length of stay for certain surgical procedures provides a useful proxy for health care quality under the assumption that higher rates of post-operative complications will lead to longer hospital stays.

- Delaware residents are admitted for ambulatory care sensitive conditions, including **diabetes, pediatric asthma** and **pneumonia** at rates higher than those in most comparison communities.⁶
- Delaware used invasive procedures at higher rates than benchmark areas for **cardiac catheterization, back surgery, and gall bladder surgery.**
- **Delaware performs comparably to most communities on indicators measuring utilization of primary and preventive care.**
 - The Medicare population in Delaware utilized mammography services at a higher rate and were immunized at rates comparable to other communities.
 - Delaware’s Medicare population used hospital emergency room care less often than residents in comparison communities.
- **More emphasis on patient education for chronic disease management in Delaware may be appropriate.**
 - A recent survey of Delaware residents conducted by The Lewin Group indicated that patient education on asthma and diabetes disease management fell short of optimal practice pattern targets of 100 percent. Less than sixty percent of respondents with asthma reported being counseled about severe flare-ups or were told how to adjust their medication, and only 57 percent of respondents with diabetes reported being asked by their doctor about foot care.
- **Inpatient care is utilized at higher rates in Delaware than in most comparison communities.**
 - Utilization of **total inpatient days** is higher for Delaware residents than for residents in most comparison communities.
 - Delaware residents’ hospital admission rates are higher for **medical, surgical and psychiatric care.**
 - The average lengths of stay for Delaware residents are longer for **surgical, maternity and well-newborn care** but comparable for **medical, psychiatric and substance abuse** care.
 - Delaware residents’ use of inpatient days for care related to the **circulatory system** (e.g., cardiac catheterization) exceeds that of residents in most comparison communities.

⁶ An ambulatory care sensitive condition is defined as a condition where timely and appropriate outpatient treatment would reduce the risk of inpatient hospitalization for common health problems such as asthma and diabetes.

- **Average charges in Delaware across all payers and types of admissions for inpatient care are within the range of charges in comparison communities, while average costs appear to be slightly lower.**
 - Average inpatient charges fall within the range of most benchmark communities. Charges were higher, on average, for Kent County residents than for residents of Sussex or New Castle Counties.
 - Average inpatient costs per admission were six percent to 35 percent lower in Delaware than costs estimated in comparison communities.
- **Professional services use rates for Medicare enrollees are generally lower, and payments for Medicare enrollees are comparable relative to benchmarks.**
 - While Medicare enrollees' utilization of professional services is slightly lower for most high volume services (e.g., pathology, radiology and outpatient surgery), it is slightly higher for some low volume services (e.g., inpatient surgery, dialysis).
 - Medicare payments for professional services are generally comparable to benchmark communities.

DISEASE CATEGORY ANALYSIS

- **Delaware residents utilize more inpatient services and experience slightly more deaths for indicators related to respiratory disease than do residents of benchmark communities.**
 - Rates of respiratory disease, including cancer, other chronic conditions and communicable disease, are higher in Delaware than in the nation. State residents are diagnosed with and die from trachea, lung, and bronchus cancer more often than benchmarks.
 - Utilization rates for respiratory system diagnoses, including chronic obstructive pulmonary disease and pneumonia and pleurisy, are higher in Delaware than other communities.
 - The pediatric asthma admission rate is higher in Delaware than in comparison communities but comparable to the national rate.
 - Based on a survey conducted by The Lewin Group in 2000, Delaware residents experience higher than average asthma rates. The estimated proportion of residents with asthma who received patient education falls short of physician practice standards.
- **Cardiovascular Disease is one of the leading causes of death in Delaware. Inpatient utilization for cardiovascular disorders is higher in Delaware than in comparison communities.**
 - Higher rates of smoking and less physical activity place Delaware residents at higher risk for developing cardiovascular conditions relative to other communities.

- Cardiovascular disease prevalence and mortality rates of Delaware residents are greater relative to national rates. State residents also experience higher inpatient admission rates for cardiovascular diseases. In particular, admission rates for heart failure and shock, chest pains, transient ischemic attacks, heart attacks and cardiac catheterization are higher than benchmarks.
- Despite relatively high inpatient utilization within the state, Delaware residents seek a considerable portion of their inpatient circulatory system care in neighboring states.
- **Delaware residents utilize more inpatient mental health services⁷ relative to other communities and have a surplus of beds available for psychiatric care in private facilities.⁸**
 - Utilization of inpatient services for psychiatric diagnoses are higher in Delaware than in benchmarks. In particular, hospital admissions for psychoses, depressive neuroses and childhood mental disorders are higher than benchmarks.
 - Mental diseases and disorders account for a substantial portion of total inpatient admissions and days utilized in Delaware’s hospitals. The majority of this care is delivered in New Castle County.
 - Delaware appears to have a surplus of inpatient psychiatric/substance abuse beds available in private hospitals and a higher proportion of physicians practicing psychiatry, relative to the total number of physicians, than benchmark communities.

⁷ Information on the prevalence of mental health disorders was not available for Delaware or the benchmark communities.

⁸ This analysis does not include either the supply or utilization of psychiatric/substance abuse beds Delaware’s public inpatient psychiatric facility. Information from the community suggests that inpatient psychiatric care is harder to obtain in the state’s public facility and that beds are now being purchased from private hospitals for public-sector clients to deal with the shortage.