Benchmarking and tracking regional performance on key quality and cost measures is critical to monitoring California's progress toward high-quality, affordable, patient-centered care. A new online tool—the California Regional Health Care Cost & Quality Atlas at costatlas.iha.org—highlights the wide variation in quality and cost across the state. Developed by the Integrated Healthcare Association (IHA), in partnership with the California Health Care Foundation (CHCF) and California Health and Human Services Agency, the Atlas includes information about care provided in 2013 to nearly two-thirds of the state's total population, or 24 million people. Spanning commercial insurance—both health maintenance organization (HMO) and preferred provider organization (PPO) products—Medicare Advantage, Medicare fee for service (FFS), Medi-Cal managed care, and Medi-Cal FFS, the Atlas brings together data on clinical quality, hospital utilization, and total cost of care to assess geographic and insurance product type performance variation.

A SNAPSHOT OF CALIFORNIA HEALTH CARE
While most health care cost and quality transparency initiatives typically focus on individual health plan and provider performance, the Atlas takes a different approach by tracking performance by geographic region and insurance product type. In doing so, the Atlas provides a clearer picture of population-level health care quality and costs and identifies so-called hot spots for targeted performance improvement. For ease of comparison, the Atlas’ 19 geographic regions follow boundaries defined by Covered California, the state's health insurance exchange. Building on a previous IHA-CHCF collaboration to highlight geographic variation in quality and resource use known as HEDIS by Geography, the Atlas adds cost data for people covered by public and private health insurance.

WHAT THE ATLAS TRACKS
The Atlas tracks six clinical quality measures for cancer, diabetes, and asthma; three hospital utilization measures; and average annual per-enrollee total cost of care.

- **Clinical Quality Measures.** Breast cancer screening; colorectal cancer screening; blood sugar screening for people with diabetes; poorly controlled blood sugar for people with diabetes; kidney disease monitoring for people with diabetes; medication management for people with asthma; and a composite combining performance on all six clinical quality measures.

- **Hospital Utilization Measures.** **Emergency Department (ED) Visits:** Number of ED visits that did not result in an inpatient admission, per thousand member years (PTMY). **All-Cause Readmissions:** Percentage of acute inpatient hospital stays that were followed by an acute readmission within 30 days for any diagnosis. **Inpatient Bed Days:** Number of days enrollees were hospitalized for acute inpatient care, on a PTMY basis. **Composite:** Combines performance on all three hospital utilization measures.

- **Total Cost of Care Measure (TCC).** Average actual payment to providers to care for enrollees for one year, including professional, pharmacy, hospital, and ancillary services and patient cost-sharing amounts. The TCC measure is risk adjusted to account for differences in enrollee age, gender, and health status. A TCC Index shows relative performance on total cost.

ATLAS DATA SOURCES
Ten health plans participated in the Atlas—Aetna, Anthem Blue Cross, Blue Shield of California, Cigna, Health Net, Kaiser Permanente, SCAN Health Plan, Sharp Health Plan, UnitedHealthcare, and Western Health Advantage—providing commercial HMO, commercial PPO and/or Medicare Advantage data, as applicable. Clinical quality results were calculated by plans directly, while hospital utilization and total cost of care were calculated by Truven Health Analytics, an IBM Company, using health plan claims/encounter, eligibility, and cost data. For Medicare FFS, county-level data from Centers for Medicare & Medicaid Services public use files were aggregated to the 19 regions. Medi-Cal managed care and Medi-Cal FFS results were provided by the California Department of Health Care Services.

WHAT THE ATLAS SHOWS
A new IHA Issue Brief—*Benchmarking California Health Care Quality and Cost Performance*—analyzing Atlas data for 14.5 million of the 19.4 million Californians enrolled
in commercial HMO and PPO products confirms earlier research documenting wide geographic and insurance product variation on clinical quality measures while shining new light on regional and product cost variation.

- **Commercial Insurance.** From a regional perspective, Northern California shows the strongest performance on clinical quality for commercially insured enrollees but at relatively high cost; Southern California performs solidly on quality at much lower cost; and Central California shows weaker performance on quality with mixed cost performance. Geographic variation in cost of care is dramatic—a difference of $1,800 in the average annual per-enrollee total cost of care between the most costly and least costly regions—respectively, San Francisco County at $5,400 and Kern County at $3,600. Comparing commercial HMOs to commercial PPOs, HMOs frequently outperform PPOs on both clinical quality and cost measures across the state’s 19 geographic regions, reflecting underlying differences between product types, including the use of integrated care delivery systems in HMO provider networks.

- **Medicare.** The quality and cost of care also varies widely for seniors enrolled in Medicare Advantage, according to 2013 Atlas data. For example, in the North Bay Counties, about nine in 10 women (90.6%) are appropriately screened for breast cancer, compared to seven in 10 (70.2%) in the Eastern Region. Similarly, the average annual per-enrollee total cost of care varies for Medicare Advantage enrollees, ranging from a high of $14,500 a year in Los Angeles-East to $11,500 in San Diego.

- **Medi-Cal.** For Medi-Cal managed care enrollees, the 2013 Atlas data show considerable variation in quality across geographic regions. For example, Orange County had the highest breast cancer screening rate at 66.4 percent, compared to 44.2 percent in the lowest performing region, Greater Fresno Area. Comparing Medi-Cal managed care to Medi-Cal FFS, breast and colorectal cancer screening rates across regions are higher, on average, in managed care than in FFS. Specifically, 50.7 percent of eligible enrollees in Medi-Cal managed care received breast cancer screening compared to 44.8 percent in FFS. Similarly, 23.6 percent of eligible Medi-Cal managed care enrollees received colorectal cancer screening compared to 21.3 percent in Medi-Cal FFS.

**IMPLICATIONS**
The Atlas highlights substantial geographic variation in the quality and cost of care provided across the state. Such sizable quality and cost performance differences indicate significant opportunities to improve care for many Californians. For example:

- If care for all commercially insured Californians represented by the Atlas were provided at the same quality as top-performing regions, nearly 200,000 more people would have been screened for colorectal cancer and 50,000 more women would have been screened for breast cancer in 2013.

- If care for all commercially insured Californians represented by the Atlas were provided at the same cost as observed in San Diego—a relatively high-quality, low-cost region—overall cost of care would decrease by an estimated $4.4 billion annually, or about 10 percent of the $44 billion total cost of care for the commercially enrolled people represented in the Atlas in 2013.

Similar opportunities to improve quality and reduce costs exist for Medicare and Medi-Cal.

**COMING SOON—ATLAS 2.0**
With continued CHCF support, IHA in 2017 will update the Atlas with 2015 data, highlighting changes from the 2013 baseline data. Tracking regional performance on key quality and cost measures through the Atlas will mark an important step toward reducing unwarranted cost and quality variation and advancing high-value care.