

The Value of All-Payer Claims Databases to States

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All-payer claims databases are being developed in states across the nation to fill gaps in information about the health care system. The value of such databases is becoming more apparent as these databases mature and are used more frequently to help states better understand their health care utilization and costs.

Current developments in health care reform, including the passage and implementation of the Patient Protection and Affordable Care Act of 2010, have prompted health policy professionals and decision makers to call for improved assessment of health care outcomes (such as price transparency, quality, and effectiveness). The need for data-driven evaluation and greater consumer engagement, which is only possible through improved transparency, has been further reaffirmed by the development of accountable care organizations and by the provision of Cycle III funding from the Centers for Medicare & Medicaid Services (CMS) for rate review and development of state data centers. In a number of states, the establishment of all-payer claims databases (APCDs) have filled critical information gaps for state agencies, supported health care and payment reform initiatives, and increased transparency in health care at the state level. States with APCDs are responding to a need for comprehensive, multipayer data that the state and other stakeholders can use to obtain a clearer picture of the cost, quality, and utilization of health care.

Overview of APCDs

APCDs are large-scale databases that systematically collect health care claims data from a variety of payer sources. Statewide APCDs are usually created by a state mandate; in states without a legislative mandate, data may be reported to the APCD voluntarily. APCDs generally include data derived from medical claims, pharmacy claims, eligibility files, provider (physician and health care facilities) files, and dental claims. Payer sources are both public and private and currently include insurance carriers, third-party administrators, pharmacy benefit managers, dental benefit administrators, state Medicaid agencies, and CMS. APCDs may eventually grow to include the Federal Employees Health Benefits program, TRICARE (the program that provides civilian health benefits for military personnel, military retirees, and their

dependents), and the Veterans Health Administration.

APCDs collect data from existing claims transaction systems used by payers and health care providers (facilities and practitioners). The information typically collected in an APCD includes patient demographic characteristics; provider demographic characteristics; and clinical, financial, and utilization data. Certain types of information are sometimes omitted because they are difficult to collect; for example, most states implementing APCDs have decided not to include denied claims, workers compensation claims, and data about services provided to uninsured individuals (for which no claims exist) [1]. Despite these exclusions, APCDs can provide an almost-complete sample of a state's insured population, which makes it possible for these systems to support a broad range of information needs and studies. As Figure 1 shows, 14 states already have APCD systems (3 of which are voluntary rather than state-mandated), and 26 additional states are in various stages of developing an APCD system, ranging from general research by stakeholders to rule making to vendor acquisition. In other states, such as North Carolina, there have been informal meetings and queries regarding the feasibility of APCD reporting, but these have yet to coalesce into legislation or other organized action.

The APCD Council is a learning collaborative of government, private, nonprofit, and academic organizations that focuses on improving the development and deployment of state-based APCDs. This council is convened and coordinated by the Institute for Health Policy and Practice at the University of New Hampshire and by the National Association of Health Data Organizations. The APCD Council has been providing shared learning and technical assistance to states since 2007.

The Value of APCDs

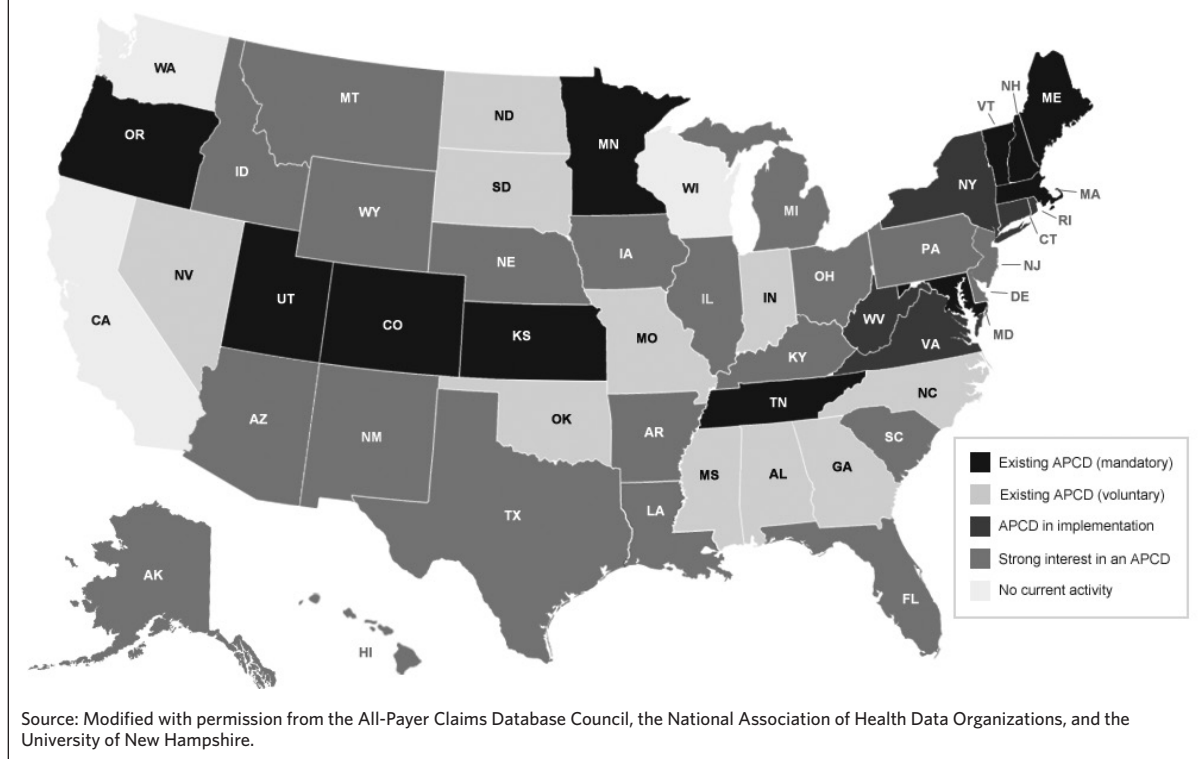
To identify opportunities to improve the public's health, state governments and health services researchers need high-quality, consistently collected data about population

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FIGURE 1.
Development of All-Payer Claims Databases (APCDs) Across the United States, January 2014



health across many areas, including health status, health care utilization, access to care, health care quality, and health care costs. Types of data commonly used for health services research include population-based data (eg, hospital discharge data and Medicare claims data) and sample-based data (eg, data from the Medical Expenditure Panel Survey). Although both types of data help to answer very important questions related to health services research, each has certain limitations.

Hospital discharge data are used broadly and in many different ways; for example, such data can be used to study patterns of care in the inpatient setting, to understand rates of hospitalization for disease and injury, and to explore patient characteristics of different hospitals. In addition, the widespread availability of inpatient data has allowed the Agency for Healthcare Research and Quality to develop quality indicators for inpatient care, which serve as standard measures that can be used consistently at the national and state levels [2]. Similar data and quality indicators for office-based care are not publicly available on a population level; however, the majority of health care in the United States is provided in outpatient settings.

CMS collects data based on claims paid by Medicare, including claims for ambulatory care, and it makes these data available for research. Although these data can provide a robust understanding of patterns of care [3], the data are limited to people covered by Medicare—those 65 years of age or older and/or those with permanent disabilities or cer-

tain medical conditions. State-based Medicaid program data also provide a wealth of information about the type, quality, and cost of care for the Medicaid population; like Medicare data, however, Medicaid claims reflect care for only a small, albeit important, portion of the population.

Although health services researchers have options for obtaining data about the Medicare and Medicaid populations, data about ambulatory care for the majority of the US population is not available in all states. Sample-based surveys such as the Medical Expenditure Panel Survey provide important data that can be used to analyze care at the national level and in some states, but the sample sizes for these surveys preclude many state and substate analyses and may not allow for analyses of subpopulations (such as those with chronic conditions or disabilities). In many states, population-based data are needed to study priority populations—such as minorities, children, persons with disabilities, and those living in rural areas—because samples rarely include data on enough individuals to allow for analyses in these subpopulations. Recognizing the need for these data, states began developing APCDs because of their potential to provide a much deeper understanding of patterns, quality, and cost of care across the entire population.

Examples of How States Are Using APCDs

In an effort to highlight how states are using their APCDs, the APCD Council in 2013 launched the APCD Showcase (<http://www.apcdshowcase.org>). This Web site provides

case studies of how APCDs are being used in several states including Colorado, Maine, Massachusetts, New Hampshire, Utah, and Vermont. Examples from some of these states are provided below.

Colorado has developed a Web site (<https://www.cohealthdata.org/#/home>) that uses its APCD data to report on health care costs and utilization of services by geographical location (county or zip code). The following types of reports are available: total cost of care per person; total actual cost of care compared with expected cost of care (an average based on the type of people who live in that area); the percentage of all prescriptions filled that are for generic rather than name-brand drugs; rate of hospital readmission for any reason within 30 days of discharge (per thousand population per year); rate of emergency department visits (per thousand population per year); the percentage of individuals with claims indicating a diagnosis of diabetes; the percentage of individuals with claims indicating a diagnosis of asthma; and illness burden, which is a measure of relative health based on the number and type of health services used.

Another example is Vermont's APCD, the Vermont Healthcare Claims Uniform Reporting and Evaluation System, which was used in combination with other provider data sources to develop primary care service areas for a spatial analysis study of Vermont. A report on the development of these primary care service areas is available at <http://gmcbboard.vermont.gov/sites/gmcbboard/files/PCSA-Spatial-Analysis.pdf>.

The Maine HealthCost Web site (<http://gateway.maine.gov/MHDO/healthcost/>) provides information for consumers and employers about charges and payments for medical care in Maine, organized by insurance plan and by procedure. It also provides the estimated price of medical care for uninsured individuals. Price information is based on APCD data collected by the Maine Health Data Organization.

The Massachusetts Health Connector, the state's health insurance exchange, applied for and received federal certification to implement a state-based risk-adjustment program. As part of this work, the Massachusetts Health Connector partnered with the administrator of the state's APCD to leverage this system for data collection. More information about the Massachusetts APCD is available on the Web site of the state's Center for Health Information and Analysis (www.mass.gov/chia/apcd).

A final example of APCD use is New Hampshire, which used funding from the Assessment Initiative of the Centers for Disease Control and Prevention to launch a Web-based claims data module (<http://nhhealthwrqs.org/>) to support community health assessment. This module is part of the existing New Hampshire Health Web Reporting and Query System, which allows users to access standard indicators of population health from modules based on vital records data (births and deaths), hospital discharge data (inpatient and emergency department care), cancer registry data, behavioral health data (from the Behavioral Risk Factor

Surveillance System and Youth Risk Behavior Surveillance System surveys), and environmental health data from the New Hampshire Environmental Public Health Tracking Program. The claims module was specifically built to allow users to select indicators that include rates of diseases of particular importance for public health, as well as indicators of care for those diseases.

Vision for the Future

Although the core components of APCD development and maintenance remain consistent, the process of developing relationships with stakeholders and implementing APCD systems is constantly evolving and is somewhat unique to each state. As a result, the issues that take priority in APCD development and maintenance will vary by state. Some priority issues identified by states include provider identification, rate review enhancement, standardization of data collection, and the use of APCDs for risk adjustment. These areas of potential enhancement and expansion will play an important role in the future of APCDs.

The value of APCDs to states and their stakeholders is becoming increasingly apparent as more states develop APCDs and existing systems continue to mature. In order to move forward and better assess APCDs and the value that they provide, emphasis should be placed on the need for states to define the uses of APCDs and to provide evidence that APCDs support transparency in health care. NCMJ

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