

Comparative Health System Performance Initiative: Compendium of U.S. Health Systems, 2018, Technical Documentation

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Appendix A. OneKey and AHA Methodologies

IQVIA maintains two integrated databases relevant to the study of health system performance under the umbrella of Healthcare Relational Services (HCRS). The first, the Healthcare Professional Services (OneKey Professionals) database, focuses on health professionals (for example, physicians, residents, and physician extenders, such as nurses and physician assistants) and contains healthcare administrators.

IQVIA maintains OneKey Professionals by using manual stewardship and updates from industry source data (including American Medical Association, CMS' National Plan and Provider Enumeration System [NPPE], State Controlled Substance Registration, Drug Enforcement Administration [DEA] identifier, and other established industry source data). OneKey Professionals providers are integrated into the OneKey Organizations database, the second of the two OneKey databases.

The providers in OneKey Professionals are bridged to the organizations in OneKey Organizations as provider affiliations via a combination of a proprietary address intelligence algorithm and manual stewardship, in which individual provider addresses are processed against organizations in OneKey Organizations through established business rules to create a provider affiliation.

OneKey Professionals addresses are run through proprietary address intelligence software and given a rank from negative 5 to 10. A rank of 6 or higher triggers an attempt to match to organizations in OneKey Organizations. Most professionals in OneKey Professionals will have at least one address with a score of 6 or higher. Of the approximately 9.6 million professionals in OneKey Professionals, about 4 million have an association with an organization in OneKey Organizations.

OneKey Organizations contains information on approximately 702,000 medical group practices, hospitals, accountable care organizations (ACOs), and other organizations. Fields include organizational characteristics such as bed count, provider counts, health information technology infiltration, and finances.

OneKey Organizations is periodically verified via telephone; the timing of verification calls varies by organization type. Each time a medical group practice is verified, so too are the providers within that group. For hospital verification, IQVIA confirms with hospitals that their website is up to date. Then, IQVIA uses web-based information to determine which providers are affiliated with that hospital. They also break down affiliation types for physicians' relationships to hospitals—attending or admitting. All relationships between organizations in OneKey Organizations are researched and the relationship is verified with both entities to confirm that a relationship exists and to determine the nature of the relationship.

AHA fields an annual cross-sectional survey of the more than 6,400 U.S. hospitals; the survey typically has a response rate of more than 80 percent. The objective of the survey is to track and monitor the evolution of new systems of care, care coordination functions, and various payment models used in providing care to a population as they are experienced by hospitals. Data are supplied by hospital administrators online, as well as by paper and pencil. Although the survey

has a cross-sectional design, the unique hospital identifier (AHA ID) can be used for cohort studies to monitor changes in hospitals over time. Data from the survey are stored in the AHA Annual Survey Database.

The AHA survey provides several mechanisms for identifying healthcare delivery systems. The data may be used to identify horizontally integrated hospitals, identify hospitals that have vertical relationships with physicians, and characterize the nature of these relationships in a health system taxonomy. The relationships include hospital affiliations with physicians through integrated salary models or equity models; medical group or physician ownership of hospitals; hospital participation in foundation models; and hospital-physician alignment through management services organizations and physician hospital organizations. In creating the list, we used a system membership variable that identifies multihospital and diversified single hospital healthcare systems.