The New York State Health Care Provider Database: A Framework for Action

DECEMBER 2014

Prepared by
HealtheConnections Health Planning

HealtheConnections HEALTH PLANNING

NYS HEALTH FOUNDATION
Improving the state of New York's health

Contents

Acknowledgments

Support for this work was provided by the New York State Health Foundation (NYSHealth). The report would not be possible without the expertise of Gerald Richmond, Sara Wall Bollinger, and the advisory groups. Direction for the report was provided by Bronwyn Starr, Emily Parker, and Brian Byrd of NYSHealth.

Advisory Committee

Caleb Wistar	Associate Director, Division of Workforce Development, Office of Primary Care and Health Systems Management
Anu Ashok	Senior Director, Graduate Medical Education, Greater New York Hospital Association
Jonathan Bick	Assistant Division Director, OHIP Operations, Office of Health Insurance Programs
Paula Breen	Deputy Director, Office of Professional Medical Conduct
Thomas Burke	Executive Director, NYS Council on Graduate Medical Education, Office of Primary Care and Health Systems Management
Sherry Chorost	Director Physician Workforce, Healthcare Association of New York State
Stacy Connors	Vice President, Membership and Advocacy, Iroquois Healthcare
Liz Dears	Senior Vice President for Legislative and Regulatory Affairs, Medical Society of the State of New York
Laura Dellehunt	Director, Division of Data Management and Research, Office of Primary Care and Health Systems Management
Kate Ebersole	Director of Community Health Improvement and Care Transformation, P2 Collaborative of Western New York
Patricia Deferio	Vice President, Network Contracting, MVP Health Care
Robert Martiniano	Project Director, Center for Health Workforce Studies
Susan Naccarato	Acting Director, Professional Licensing, Office of the Professions
José A. Pagán	Director, Center for Health Innovation, The New York Academy of Medicine
Loretta Ponesse	Director of Organization and Corporate Relations, New York State American College of Physicians
Tanya Shah	Assistant Commissioner, Bureau of Primary Care Assess & Planning, New York City Department of Health and Mental Hygiene
Mary J. Sienkiewicz	Director, NYS Area Health Education Center

Acknowledgments *(continued)*

Jo Wiederhorn	President and Chief Executive Officer, Associated Medical Schools of New York
Paul Wilder	Vice President of Product Management, New York eHealth Collaborative
Peter Winkelstein	Executive Director, Institute for Healthcare Informatics, State University at Buffalo
Dorothy Zelenik	President, New York State Association of Medical Staff Services

Data Group

Gaetano Forte	Director of Information Management, Center for Health Workforce Studies
Kathy Kosek	Program Research Specialist, Division of Data Management and Research, Office of Primary Care and Health Systems Management
Maushumi Mavinkurve	Implementation Director, PH Informatics, New York City Department of Health and Mental Hygiene
William McFerran	OHIP Datamart/APD Technical Director, Office of Quality and Patient Safety
Vicki Myers	Research and Data Analysis Unit, Office of Professional Medical Conduct
Art Streeter	Project Manager/Health Planner, Finger Lakes Health Systems Agency
Adrianna Takada	Bureau of Medicaid Statistics & Program Analysis, Office of Health Insurance Programs
Ying Wang	Research Associate, Division of Data Management and Research, Office of Primary Care and Health Systems Management
Jim Welsh	Director of Data Systems, Community Health Care Association of New York State

Resource Advisors

George Harrington	Division of Data Management and Research, Office of Primary Care and Health Systems Management
Joe Kelly	Business Development, Treo Solutions
Linda Lambert	Executive Director, New York State American College of Physicians
Lawrence H. Mokhiber	Executive Secretary, Office of the Professions, State Board of Pharmacy
Eunice Skelly	Vice President for Membership, Medical Society of the State of New York
Prabhakar Rajupet	Associate Auditor, New York State Council on Graduate Medical Education, Office of Primary Care and Health Systems Management

Acknowledgments *(continued)*

HealtheConnections Health Planning Project Staff Members

Gerald Richmond (Terry)	Project Director
Sara Wall Bollinger	Executive Director
Patty McMahon	Senior Planner
Kate Warner	Senior Planner
MaNtsetse Kgama	Community Health Planner

Executive Summary

As a result of the Affordable Care Act (ACA), more than 1 million New Yorkers have signed up for health coverage. With this dramatic surge of health insurance coverage and the coinciding increase in demand for health care services, data on health care provider locations and practice characteristics that can inform needs and opportunities are critical to the success of health reform in New York State.

Currently, New York State lacks a centralized data source that can provide planners, policymakers, and other stakeholders with up-to-date, accurate data about all health care providers[1] in the State. Physicians in New York State, for example, are not required to update practice statistics, such as where they are practicing or what health plans they accept—and data that are available may not be accurate. The U.S. Department of Health and Human Services designates Health Professional Shortage Areas (HPSAs) based on physician-to-population ratios. HPSAs do not, however, take into account a number of important variables, such as age of the population and availability (or lack) of additional primary care services, including those provided by physician assistants or nurse practitioners.

The process of collecting accurate health care provider information today is laborious, expensive, and time consuming. It requires users to examine multiple local, State, and national resources. To prepare a 2013 report[2] that identified ways in which federally qualified health centers could improve access and capacity, Community Health Care Association of New York State had to examine multiple sources of national- and local-level data, explaining, "To gather the data necessary to produce this report was a long, arduous task."

A reliable statewide database of provider locations and characteristics would help health planners and policymakers build health care capacity and target investments to achieve greater primary care access for New Yorkers.

In summer 2013, with support from the New York State Health Foundation (NYSHealth), HealtheConnections Health Planning undertook a planning project to assess the feasibility of making a statewide health care provider database a reality. Such a database could be instrumental in ensuring the best use of resources to achieve the maximum impact on reducing costs and improving service delivery throughout the State.

The database is envisioned to incorporate all licensed New York State health care providers (approximately 100,000–120,000 individuals), offer information that is modifiable and validated, and give users the ability to provide real-time feedback on accuracy of the information. The database is intended to be queryable and downloadable so that (1) users with different skill sets can develop simple tables with geography-based tabulations and statistics and (2) data can be analyzed independently or readily incorporated into user projects that employ standard formats (e.g., CSV, Excel).

1 For purposes of this project, health care providers refer to physicians, physician assistants, nurse practitioners, midwives, dentists, and mental health providers.

2 Community Health Care Association of New York State, "A Plan for Expanding Community Health Centers in New York," http://nyshealthfoundation.org/resources-and-reports/resource/a-plan-for-expanding-sustainable-community-health-centers-in-new-york.

Executive Summary *(continued)*

The potential uses for a provider database extend beyond understanding the supply of medical providers in a given geographic area. A provider database would benefit a variety of stakeholders by allowing them to:

- Improve the ability of the State to conduct in-depth assessments of resource capacity and need and to integrate payers and providers;
- Monitor organizational and other practice trends and plan for replacement needs resulting from an aging workforce;
- Address the increase in demand resulting from health reform;
- Prepare staff development plans, target placement of new practices and/or health centers, and submit federal and State shortage area designation requests;
- Assist medical schools and residency programs in determining the need for expanded training and medical education;
- Allow funders and planners to better understand provider shortages to target areas with the highest need for primary care expansions; and
- Create linkages to community-based organizations and other social service groups that are working to serve the same patient populations.

As part of the planning process, HealtheConnections solicited help from stakeholders (see Acknowledgments) to provide recommendations on how such a database could be made a reality. At the end of a 10-month planning process, the stakeholders proposed 5 key recommendations needed to successfully build and sustain a statewide health care provider database:

1. The New York State Department of Health (NYSDOH) should build and maintain the database.
2. The database should be designed as part of a universal New York State credentialing system.
3. Existing sources of revenue can be reallocated to maintain the database.
4. The database can be populated with information from current resources.
5. The database can be supported if certain regulatory changes are made.

Executive Summary *(continued)*

There is strong consensus among participating stakeholders that a functional provider database that incorporates these recommendations is essential for statewide planners to successfully address issues of provider capacity and patient access to care.

While one recommendation does suggest how to financially maintain the database, no committed funding exists to establish a database. Start-up costs are estimated to be at least $10 million.

If the proposed recommendations for a New York State health care provider database are adopted, it would be the first national example of such a database and serve as a potential model to be replicated in other states.

Background

With both the dramatic surge of health insurance coverage and the coinciding increase in demand for health care services, robust data and careful planning are critical for the success of health reform in New York State. The State lacks a single source of information that provides planners, policymakers, and other stakeholders with up-to-date, accurate data about the health care workforce in New York. Currently, collecting provider information is arduous and requires users to examine multiple local, State, and national resources.

The national-level data on physician location and need in New York State are insufficient for statewide planning purposes. For example, the U.S. Department of Health and Human Services designates Health Professional Shortage Areas (HPSAs) based on a physician-to-population ratio of 1:3,500. HPSAs do not, however, take into account a number of important variables, such as age of the population and availability (or lack) of additional primary care services, including those provided by physician assistants or nurse practitioners.

Knowing where providers are practicing can help to connect the dots and advance the many system reforms happening throughout the State. The State Health Innovation Plan (SHIP), for example, aims to coordinate and integrate payers and providers with a goal to align incentives that will ultimately lead to systemic reform. This includes reforms to create incentives and support for primary care and ensure effective geographic distribution of care. SHIP and other State initiatives not only work toward improving the Triple Aim[1], but also help to create strong linkages to community and social service resources. The enormous financial investments at both the State and federal levels that are pouring into New York State should be used as efficiently as possible.

1 The Triple Aim is a framework developed by the Institute for Healthcare Improvement that describes an approach to optimizing health system performance: improving the patient experience of care (including quality and satisfaction); improving the health of populations; and reducing the per-capita cost of health care.

Background *(continued)*

The potential uses for a New York State provider database extend beyond understanding the supply of medical providers in a given geographic area. A provider database could increase health care access and capacity in the following ways:

User	Database Function
Health systems	• Plan for the development of new health centers and/or expansions and mergers; • Prepare staff development plans and submit federal and State shortage area designation requests; • Monitor organizational and other practice trends; • Strategically colocate primary care and behavioral health services; and • Design regional staff development and training opportunities.
Medical schools	• Determine need for expanding residency programs.
NYSDOH	• Improve the ability of the State to conduct in-depth assessments of resource capacity and need; and • Integrate payers and providers.
Community-based organizations	• Create linkages to social service groups that are working to serve common patient populations.
County health departments	• Inform community needs assessments.

The potential users for a provider database are numerous; public, private, and academic institutions will be able to access, query, and download data on New York State's estimated 120,000 providers.

To initiate the planning process, HealtheConnections convened a wide range of stakeholders from both the private and public sectors (see Acknowledgments) to advise on the project and put forward recommendations.

The data group, made up of information management and data system professionals from across the State, met four times between September 2013 and January 2014. This workgroup examined user needs, catalogued existing data sources, researched systems used in other states, assembled information on national standards, and developed recommendations regarding desired data elements

Background *(continued)*

and the best data sources for each item. The group also looked at specific issues, including restrictions on use; extent to which the database represents the full universe of providers; extent to which certain data elements are unique or are derived from other files; how often the information is updated; and the method used for updates.

The advisory committee included representatives from local and State health departments, private payers, medical societies, and various other State health care associations. The committee was convened to address issues related to development, implementation, and operation of the proposed database on a long-term basis. Convening a total of four times between January and April 2014, the committee examined specific issues, including a review of states' experiences where common application forms or credentialing systems have been established; credentialing verification; data validation; and master data management (MDM) services. The advisory committee also reviewed the work of the data group and developed the final plan with recommendations regarding data access, funding, hosting, and legal and regulatory changes.

Time and resource constraints influenced what topics could be addressed and dictated that some issues had to remain unresolved at this stage of the planning. The groups had originally planned, for example, to recommend a platform to host the database and a cost estimate. As the planning process evolved, the advisory committee made the decision that the project recommendations should focus on needed data management capabilities and services rather than a particular software package, system, or vendor. There were difficulties in getting price estimates from vendors and information from State agencies about the cost of related activities. While one of the recommendations does suggest how to financially sustain the database, no committed funding exists to establish a database. Start-up costs are estimated to be at least $10 million. At the same time, such a provider database envisioned by HealtheConnections has never been done and would offer the first example of a robust and accurate resource for planners and serve as a model to be replicated nationwide.

Provider Database Planning Recommendations

1. The New York State Department of Health (NYSDOH) should build and maintain the database.

The most sustainable way for the provider database to exist as envisioned will be to have it housed and maintained at NYSDOH, as NYSDOH oversees the provision and quality of health care for the State. NYSDOH already operates many of the data sources that would be used to populate the database and, as the architect of the health care reform programs in the State, it stands to benefit the most from a provider database.

The advisory committee considered other options for alternative organizations to build and house the database. These options included the creation of a new statewide collaborative comprising governmental and nongovernmental stakeholders; the use of an existing independent nonprofit entity with workforce experience (such as the Center for Health Workforce Studies); a university-based health informatics center; a contract with a proprietary entity that specializes in health care provider directories; or a combination of these approaches. Based on its exploration, the committee advised against these options and advocated in favor of a database housed by NYSDOH.

NYSDOH has a great deal of experience and expertise in the development and operation of data systems designed to meet the needs of multiple stakeholders (e.g., Statewide Planning and Research Cooperative System (SPARCS), New York State Physician Profile, Medicaid Salient software, NY State of Health Marketplace provider directory, and Open New York). It also has expertise in the development, issuance, and evaluation of requests for proposals and vendor contracts for large-scale data projects. The State also currently has budget items that could be reallocated in part to support the database, such as Medicaid Management Information Systems, Medicaid provider credentialing, Medicaid Managed Care provider directories, New York State Physician Profile, and New York eHealth Collaborative (NYeC), which works to improve the use of health information technology across the State. Finally, NYSDOH has the authority to address and resolve interdepartmental issues that may impede progress, and it can resolve unforeseen issues that may arise.

The benefits of having a State-sponsored provider database outweigh the risks. The risks may include budgets and support being subject to political shifts and cycles, lack of coordination among agencies, or reluctance to take on such a large, new program. To mitigate the risks, the organizational structure should have advisory committees representing key nongovernmental and governmental stakeholders (such as those that served in advisory roles on this project) to guide system development, policies, and practices regarding data access, the selection of vendors, and the overall design of the system.

2. The database should be designed as part of a universal New York State credentialing system.

Credentialing is the process by which the qualifications of health care providers are verified by an accrediting body. Credentialing data include providers' education, experience, practice history, location, disclosure of any issues impacting their ability to provide care, and other background information. In New York and many other states, the process of credentialing is cumbersome and disjointed. Health care providers who contract with a variety of health plans, for example, may have to go through several different credentialing applications every few years.

The Council for Affordable Quality Healthcare (CAQH), a nonprofit organization that exists to reduce the burden and requirements for credentialing, has developed a Universal Provider Datasource (UPD) that simplifies the process by allowing providers to submit one credentialing application. New York State's Medicaid program is a current UPD user, and there is interest from Medicaid, insurers, hospitals, and other providers in developing a uniform credentialing process. Many states now have uniform credentialing application forms; a few—such as Washington, Arkansas, and Massachusetts—have global credential verification programs that are used by insurers. If New York State were to adopt a universal credentialing system, it could provide access to a vital source of information for the provider database, enhancing its accuracy and effectiveness.

To that end, the advisory group recommends that a special task force on credentialing be formed to explore this option further. The task force should be made up of representatives from New York State Medicaid, insurers, hospitals, and other providers that would share a common interest in participating in a global or uniform credentialing process.

One of the issues the task force will need to assess is that, in its current form, the data needs of credentialing are extensive and much of its information is not public. While there is a strong interest on the part of CAQH in considering expanded uses of its data, CAQH will still need to find a way around the public/private use of data before it can be operational. An NYSDOH task force that can engage CAQH leadership, and the leadership of other companies that specialize in credentialing, should be the first step in the process of overcoming barriers and helping to devise a credentialing support plan that addresses industry requirements, preferences, and expectations.

While credentialing is not vital to the success of the database, credentialing could help to support the operational costs of the database (see recommendation 3 below), limit the need for direct data collection, and be an incentive to promote timely submission of updated information.

3. Existing sources of revenue can be reallocated to maintain the database.

A basic tenet of the database is that it be accessible to all and free from fees or dues. However, there will be costs to developing and maintaining the database. Both start-up and maintenance costs can vary considerably, depending on the extent to which commercial data sets are used and whether or not universal credentialing is integrated into the database.

An original goal of this planning project was to provide a cost estimate to develop the database. There were difficulties along the way in obtaining reliable cost estimates from both private vendors and State agencies. Given that this system involves complex MDM services, validation techniques, and credential verification services, the exact cost of such a system is difficult to determine; however, the advisory committee, which is more privy to cost structures, estimates that it would cost at least $10 million to establish the database.

If data from a universal, State-credentialing process can be used to populate the database, the savings generated should be used to support the database. Every year, an average of 30,000 physicians need to recredential. Currently, each of these physicians recredential with an average of 12 separate credentialing groups at a cost of $30 per group, and this recredentialing process has the potential to generate upwards of $10 million a year, which could then be used to maintain the database. This estimate does not include nonphysicians, whose credentialing can also be used to support the database. Other providers are likely to have fewer credentialed relationships, however, and therefore generate less revenue.

On the cost side, the CAQH UPD is used by many credentialing systems for baseline data, charging an annual license fee of approximately $4 per practitioner. The savings that could be achieved by reducing the time and costs incurred by providers in preparing, submitting, and resubmitting multiple credentialing applications (as well as by hospitals, health plans, and medical practices) could potentially exceed the costs of operating the database.

The financial resources currently being used to collect, acquire, and analyze provider data, including Medicaid, Office of Professional Medical Conduct, New York State Physician Profile, NYeC, and New York State Education Department (NYSED) could be applied, in part, to support the development and operation of the provider database. Other potential sources of funding that should be considered include:

- State and federal budget appropriations;
- ACA implementation funds, including for the NY State of Health Marketplace;
- Demonstration programs funded by federal, State, and/or foundation sources; and
- Licensing and registration fees.

4. The database can be populated with information from current resources.

Despite being the first of its kind, the establishment of a provider database does not require reinvention of the wheel. The database should build on existing initiatives that focus on workforce and provider practice characteristics. To do this, NYSDOH will need to bring together and acquire certain external data sources and systems in a manner that avoids duplication of effort and expense. Examples of these existing systems include:

- Professional licensure and registration sources;
- New York State Physician Profile and workforce survey redesign;
- Professional conduct oversight systems;
- Medicaid information systems;
- Medicaid Managed Care and NY State of Health Marketplace provider directories; and
- Health information technology sources, such as the Statewide Health Information Network of New York.

The database will need to be adaptable and, ideally, able to incorporate relevant data from various sources, such as SHIP, NYSDOH's Primary Care Development Project, and Delivery System Reform Incentive Payment program.

No single data source is capable of populating all the recommended data elements for the database. The database will need to incorporate data from multiple sources of information into one MDM system and include the services of a certified Credentials Verification Organization (CVO). The MDM will manage data from the multiple sources by synchronizing records, validating data, and eliminating redundancies. The ultimate goal of the database should be to promote access to as many fields as possible, and in today's open source environment, many data items that were once considered confidential (e.g., a practitioner's age) can now be found in public online data sources or in commercial data sets sold for marketing purposes.

Strong data validation processes will be critical to the success of the database and are essential if the database is used to support credentialing, as the provider universe is in a constant state of flux. Enclarity, a LexisNexis company that provides data validation services, estimates that 2.5% of all provider demographics change each month, 30% of doctors change their affiliations each year, and 5% of doctors change their status each year. It also has found that the typical provider has errors or omissions in 30 to 40% of his or her records, and that key information, such as phone numbers or addresses, are wrong in about 1 out of every 5 to 6 records.

Provider Database Planning Recommendations *(continued)*

The data sources listed below in Table 1 include examples of vendors that maintain data sources. MDM needs strong validation mechanisms and the services of a credentialing verification system. The data group examined the needs of potential users by cataloguing more than two dozen existing data sources. The group acquired copies of data dictionaries; developed a comparative matrix of data elements; conducted a stakeholder survey that asked about different data elements and experience with various sources of information; researched systems used in other states; and assembled information on national standards for minimum data sets and provider directories. Private data set companies also were contacted to gather additional information about their sources, explore their interest in working with the project, and engage in testing of database capabilities.

TABLE 1. Data Sources Reviewed

New York State Data Sources

- New York State Physician Profile
- Center for Health Workforce Studies Registration Survey
- New York State Education Department (NYSED) Licensure and Registration Files
- NYSDOH Medicaid Managed Care Plan Directory
- Medicaid Provider Enrollment Data

Federal Data Sources

- National Plan and Provider Enumeration System NPI Registry (NPI)
- Medicare (Enrollment Files and PECOS)
- National Practitioner Data Bank (NPDB)
- TRICARE (Department of Defense)
- Drug Enforcement Administration (DEA)

Association Data Sources

- Council for Affordable Quality Healthcare (CAQH) Universal Provider Datasource (UPD)
- American Medical Association (AMA) Profile
- Medical Society of the State of New York
- Federation of State Medical Boards (FSMB)
- American Board of Medical Specialties (ABMS)

Commercial Data Sources

- SK&A, Health Market Science, and FolioMed (specializing in provider databases)
- Salient Management Company (developed New York State Medicaid claims analysis system)
- Treo Solutions (developed provider database systems for Colorado's all-payer database and health benefit exchange)
- MAXIMUS (operates New York State Physician Profile)
- ZocDoc
- Medical Marketing Services (first database licensee of AMA)
- MEDICAlistings
- Medical mailing services and other electronic mailing lists (e.g., USADATA, Physicians Lists, Doctor List Pro)

Provider Database Planning Recommendations *(continued)*

A summary of the most important data elements is included in Table 2 below, with a full list of recommended data elements in Appendix I. Physician Profile refers to the New York State Physician Profile. Managed Care Directory refers to NYSDOH Medicaid Managed Care Plan Directory.

TABLE 2. Data Elements

Data Element	Best Data Sources	Alternative Sources
Personal Information		
Name	NYSED	
Birth Date	CAQH	CAQH/Physician Profile (Self Report)
Birth Country	Physician Profile (Self Report)	Physician Profile (Self Report)
Sex	Physician Profile (Self Report)	
Race (Optional)	Physician Profile (Self Report)	
Mailing Address (Street, City, State, ZIP code)	Physician Profile (Self Report)	NYSED/CAQH
Type of Professional (e.g., M.D., P.A.)	NYSED	
Professional ID Numbers		
License Number	NYSED	
License Type	NYSED	
License State	NYSED	
Date Granted	NYSED	
Expiration Date	NYSED	
Practice State	CAQH	Physician Profile (Self Report)/NPI
NPI	CAQH	Physician Profile (Self Report)/NPI
DEA Number	CAQH	DEA
Professional Education		
Degree	CAQH	Physician Profile (FSMB)
School	CAQH	Physician Profile (FSMB)
Year	CAQH	Physician Profile (FSMB)
GME/Training Information (up to 3)		
Institution	CAQH	Physician Profile (FSMB)
Department/Specialty	CAQH	Physician Profile (FSMB)
Year Completed (plus Number of Years)	CAQH	Physician Profile (FSMB)

Provider Database Planning Recommendations *(continued)*

TABLE 2. Data Elements

Data Element	Best Data Sources	Alternative Sources
Specialization		
Primary Specialty (Self-Designated)	CAQH	Physician Profile (Self Report)
Board Certified Specialty	CAQH	Physician Profile (FSMB)
Percent of Time Devoted to Specialty	Physician Profile (Self Report)	
Primary Field of Practice	CAQH	Physician Profile (Self Report)
Initial Certification Date	CAQH	Physician Profile (FSMB)
Last Recertification Date	CAQH	Physician Profile (FSMB)
Expiration Date	CAQH	Physician Profile (FSMB)
Certifying Board	CAQH	Physician Profile (FSMB)
Secondary Specialty (Self-Designated)	CAQH	Physician Profile (Self Report)
Board Certified Specialty	CAQH	Physician Profile (FSMB)
Initial Certification Date	CAQH	Physician Profile (FSMB)
Last Recertification Date	CAQH	Physician Profile (FSMB)
Expiration Date	CAQH	Physician Profile (FSMB)
Certifying Board	CAQH	Physician Profile (FSMB)
Specialty Codes		
NPI Taxonomy Code	NPI Taxonomy/CAQH	
AMA Specialty Code	AMA	
DOH Profile Codes	NYSDOH	
Medicaid Specialty Code	Managed Care Directory	
Role (Primary Care, Specialist, Both)	Managed Care Directory	
Worker's Comp Codes	Medicaid	
Group/Practice Information		
Group/Practice Name	CAQH	SK&A/Physician Profile (Self Report)
Corporate Address	CAQH	NPI
Phone Number	CAQH	SK&A/NPI
ACO	SK&A	
IPA Association (Name)	SK&A	
Hospital Ownership	SK&A	

Provider Database Planning Recommendations *(continued)*

TABLE 2. Data Elements

Data Element	Best Data Sources	Alternative Sources
Location Information		
Practice Address (up to 3)	CAQH	Physician Profile (Self Report)/SK&A
Site Name	CAQH	Physician Profile (Self Report)
Phone Number	CAQH	Physician Profile (Self Report)/SK&A
Office e-mail Address	CAQH	Physician Profile (Self Report)/ Managed Care Directory
Type of Site (e.g., Single/Multi, Specialty)	CAQH	Physician Profile (Self Report)
Type of Setting (e.g., Private Office, Hospital, Health Center)	Physician Profile (Self Report)	SK&A
Primary Professional Activity (e.g., Patient Care, Admin, Research, Teaching)	CAQH	Physician Profile (Self Report)
Type of Patient Care (e.g., Ambulatory, Inpatient, Emergency Services)	Physician Profile (Self Report)	
Site Specialty	Physician Profile (Self Report)	SK&A
Years Since Last Provided Patient Care	Physician Profile (Self Report)	
Clinical Work Hours (by Activity/Week)	Physician Profile (Self Report)	
Days of Practice per Week	CAQH	Physician Profile (Self Report)
Accept New Patients	CAQH	Managed Care Directory
Age Limitations	CAQH	Physician Profile (Self Report)
Other Limitations	CAQH	Physician Profile (Self Report)
Handicapped Accessible	CAQH	Physician Profile (Self Report)
PCMH status	Physician Profile (Self Report)	NCQA
Use Electronic Medical Records	Physician Profile (Self Report)	
Languages Spoken/Translation Capacity	Physician Profile (Self Report)	
Use Physician Extenders	Physician Profile (Self Report)	
HIV Services/Referrals	Physician Profile (Self Report)	
Other Location Information (up to 3)	CAQH	Physician Profile (Self Report)

Provider Database Planning Recommendations *(continued)*

TABLE 2. Data Elements

Data Element	Best Data Sources	Alternative Sources
Location Codes		
County	Physician Profile (Self Report)	NPI
FIPS County Code/or Equivalent	External Code-Census	
ZIP code	CAQH	Physician Profile (Self Report)
Latitude/Longitude (Geocode)	Geocoded Address	SK&A
Site/Practice Relational ID Numbers	SK&A	Other Commercial
Insurances Accepted		
Accept Medicaid/Medicare Patients	CAQH	Physician Profile (Self Report)/SK&A
Medicaid Managed Care Plans/ACA Plans	Managed Care Directory	Physician Profile (Self Report)
Plans Specified	Physician Profile (Self Report)	SK&A
Hospital Appointments (Multiple)		
Hospital Name and Address	CAQH	Physician Profile (Self Report)/SK&A
Type of Appointment/Status	CAQH	Physician Profile (Self Report)/SK&A
Restrictions/Failure to Renew	CAQH	Physician Profile (NPDB)
Other		
Work History	CAQH	Physician Profile (Self Report)
Malpractice Insurance	CAQH	Physician Profile (Self Report)
References	CAQH	Physician Profile (Self Report)
Teaching Activities	Physician Profile (Self Report)	
Memberships	Physician Profile (Self Report)	
Publications	Physician Profile (Self Report)	
Sanctions/Actions/Convictions/Restrictions	CAQH	Physician Profile (NPDB)

5. The database can be supported if certain regulatory changes are made.

There are two monitoring changes that will need to be amended to move forward with a New York State provider database:

1. As stated in recommendation 2, CAQH will need to decide if, as a private organization, it will make some of its data public. Currently, its internal policies state that each physician has the right to indicate how his or her data will be used. Public use of physician data is already happening to a limited extent in a few other states where its use is now mandated for the purposes of insurance directories authorized by the state's Department of Insurance.

   CAQH leadership has indicated its willingness to consider participating in a New York State provider database. If CAQH is not able to change the use of its data, the recommendation will be to expand the use of the current New York State Physician Profile system (www.nydoctorprofile.com) to collect the desired information.

2. The practice that governs the collection of workforce survey data by NYSED will need to be formalized. These data are collected during the reregistration process for physicians, physician assistants, dentists, dental hygienists, registered nurses, nurse practitioners, and midwives. It is currently specified that individual responses will be kept confidential, cannot be publicly shared (i.e., they can only be used by the Center for Health Workforce Studies), and can only be analyzed and presented in aggregate form.

To address these concerns, it is recommended that changes be made to broaden the purposes of the profile system; use it as a vehicle to collect workforce survey data and other items which cannot come from existing sources; expand the types of practitioners it covers; and make more items mandatory.

The advisory committee, although not experts in the law, anticipates legal changes will be needed to support the collection and sharing of information described in this plan. The current statute and regulations which govern the New York State Physician Profile (Public Health Law, Section 2995(1)(b) and 22 NYCRR 1000.4), for example, specify the information that should be collected, how often it should be updated, and indicate that it should be electronically shared with consumers. Much of the data collected is highly sensitive (e.g., data on criminal convictions and malpractice judgments). The law does not prohibit collection of additional items or other means of data sharing, but it has, in practice, served as a barrier to expanded data collection and information sharing. The law also makes physician reporting of certain important items optional (e.g., practice name, address, and telephone number; names of partners; insurances accepted). The provisions of the law do not currently extend to other practitioners included in the database: physician assistants, nurse practitioners, and nurse midwives.

Amending the law(s) and regulations also will require working with State organizations other than NYSDOH. For example, cooperation between NYSED's Office of the Professions, which is responsible for

Provider Database Planning Recommendations *(continued)*

licensure and the boards that govern professional practice, and the Department of Financial Services, which regulates health insurance, will also be necessary. NYSDOH is in the best position to approach other State agencies to begin discussions on how to make necessary changes.

The goal of the recommended changes is to give the New York State Physician Profile greater flexibility in determining what data should be collected, permitted uses, how it might align with other data collection systems, and the means used to share and distribute information. If deemed necessary, NYSDOH, for example, could recommend that structures similar to the data protection review boards used for SPARCS and Vital Statistics be established. These issues also will dictate the State's ability to integrate existing data collection for the New York State Physician Profile and NYSED's physician reregistration survey.

Next Steps

Since the final recommendations were issued by HealtheConnections, NYSDOH's Office of Primary Care and Health Systems Management, which participated in the planning process, has established an internal committee to continue discussions on ways to secure start-up funding for the provider database. This committee is charged with developing a governance structure and addressing HealtheConnections' recommendations regarding regulatory and policy issues.

The internal committee first is addressing the collection of physician information. Also on its agenda will be to assess if additional collection is needed beyond NYSED's data set for other types of providers or if legal changes have to be put in place to collect information for these providers.

Within the last two years, New York State has been the recipient of unprecedented levels of federal funding designed to reform its health care system. This infusion of funds and the direction of its use have created an urgent need for a statewide provider database that will provide capabilities to improve access and capacity for both existing patients and the influx of new patients who have gained coverage through the ACA.

Such a database could be queryable so that users with different skill sets and interests can develop simple tables with geography-based tabulations and statistics. It also will be downloadable so that data can be analyzed independently or readily incorporated into user projects. This tool will not only ensure the best strategic use of resources and improve service delivery, but also enable New York State to maximize its impact through smart and informed planning, resulting in a greater reduction of costs.

HealtheConnections and its stakeholders have made the case that such a database is indeed possible. The recommendations provided in this framework are a starting point. The database will be a continual process to be developed and financed in phases—requiring buy-in and collaboration from the public and private sectors and policymakers.

Successful implementation of health reform in New York State requires expanding primary care access and capacity, but effective planning cannot be accomplished without first assessing where and how providers across the State are practicing. If the proposed plan is implemented, it would be the first national example of such a database and has the potential to be replicated in other states that are grappling with access and capacity issues.

Appendix I. Data Elements for a Provider Database

The table below is a comparative matrix of data elements that should comprise the provider database. It includes information from data dictionaries and stakeholder surveys that asked about different data elements and experience with various sources of information. HealtheConnections researched systems used in other states, as well as information on national standards for minimum data sets and provider directories.

Column two, "Included in HRSA Mininum Data Set," contains the Health Resources and Services Administration's (HRSA) minimum data set for health professions. It sets minimum data standards for answering questions on supply, demand, and distribution of the workforce.

In the third and fourth columns, the term NYSED refers to the New York State Education Department licensure and registration files; the term Physician Profile refers to what would be envisioned for the updated and revised version of the New York State Physician Profile using data from different sources (i.e., self-reported, Federation of State Medical Boards (FSMB), and the National Practitioner Data Bank); the term CAQH refers to its Universal Provider Datasource; the term NPI refers to the National Plan and Provider Enumeration System data file; the term Managed Care Directory refers to the NYSDOH Medicaid Managed Care Plan Directory file; and the term SK&A refers to that company's provider data file.

Data Elements				
Data Element	Included in HRSA Minimum Data Set	Recommendation	Best Data Sources	Alternative Sources
Personal Information				
Name	X	Include	NYSED	
Birth Date	X	Include	NYSED	CAQH/Physician Profile (Self Report)
Birth Country		Include	CAQH	Physician Profile (Self Report)
Sex	X	Include	Physician Profile (Self Report)	
Race (Optional)	X	Include	Physician Profile (Self Report)	
Hispanic/Latino (Optional)	X	Include	Physician Profile (Self Report)	
Mailing Address (Street, City, State, ZIP code)		Include	Physician Profile (Self Report)	NYSED/CAQH
Type of Professional (e.g., M.D., P.A.)	X	Include	NYSED	

Appendix I. Data Elements for a Provider Database *(continued)*

Data Elements				
Data Element	Included in HRSA Minimum Data Set	Recommendation	Best Data Sources	Alternative Sources
Professional ID Numbers				
License Number		Include	NYSED	
License Type		Include	NYSED	
License State		Include	NYSED	
Date Granted		Include	NYSED	
Expiration Date		Include	NYSED	
Practice State		Include	CAQH	Physician Profile (Self Report)/NPI
NPI		Include	CAQH	Physician Profile (Self Report)/NPI
DEA Number		Include	CAQH	DEA
Medicaid Number		Include	CAQH	Managed Care Directory
Medicaid State		Include	CAQH	Physician Profile (Self Report)
Medicare Number		Include	CAQH	Managed Care Directory
Professional Education				
Degree	X	Include	CAQH	Physician Profile (FSMB)
School	X	Include	CAQH	Physician Profile (FSMB)
School Address (Street, City, State, ZIP code)		Include	CAQH	Physician Profile (FSMB)
School Country	X	Include	CAQH	Physician Profile (FSMB)
Year	X	Include	CAQH	Physician Profile (FSMB)
GME/Training Information (up to 3)				
Institution		Include	CAQH	Physician Profile (FSMB)
Department/Specialty		Include	CAQH	Physician Profile (FSMB)
Institution Address	State Only	Include	CAQH	Physician Profile (FSMB)
Institution Country		Include	CAQH	Physician Profile (FSMB)
Year Completed (plus Number of Years)	X	Include	CAQH	Physician Profile (FSMB)
Status		Include	Physician Profile	External Verification

Appendix I. Data Elements for a Provider Database *(continued)*

Data Elements				
Data Element	Included in HRSA Minimum Data Set	Recommendation	Best Data Sources	Alternative Sources
Specialization				
Primary Specialty (Self-Designated)	X	Include	CAQH	Physician Profile (Self Report)
Board Certified Specialty	X	Include	CAQH	Physician Profile (FSMB)
Percent of Time Devoted to Specialty		Include	Physician Profile (Self Report)	
Primary Field of Practice		Include	CAQH	Physician Profile (Self Report)
Initial Certification Date		Include	CAQH	Physician Profile (FSMB)
Last Recertification Date		Include	CAQH	Physician Profile (FSMB)
Expiration Date		Include	CAQH	Physician Profile (FSMB)
Certifying Board		Include	CAQH	Physician Profile (FSMB)
Secondary Specialty (Self-Designated)	X	Include	CAQH	Physician Profile (Self Report)
Board Certified Specialty	X	Include	CAQH	Physician Profile (FSMB)
Initial Certification Date		Include	CAQH	Physician Profile (FSMB)
Last Recertification Date		Include	CAQH	Physician Profile (FSMB)
Expiration Date		Include	CAQH	Physician Profile (FSMB)
Certifying Board		Include	CAQH	Physician Profile (FSMB)
Specialty Codes				
NPI Taxonomy Code		Include	NPI Taxonomy/CAQH	
AMA Specialty Code		Include	AMA	
NYSDOH Profile Codes		Include	NYSDOH	
Medicaid Specialty Code		Possible	Managed Care Directory	
Role (Primary Care, Specialist, Both)		Possible	Managed Care Directory	
Worker's Comp Codes		Possible	Medicaid	
Group/Practice Information				
Group/Practice Name		Include	CAQH	SK&A/Physician Profile (Self Report)
Corporate Address		Include	CAQH	NPI
Phone Number		Include	CAQH	SK&A/NPI
Type of Organization		Include		Physician Profile (Self Report)
ACO		Include	SK&A	
IPA Association (Name)		Include	SK&A	
Hospital Ownership		Include	SK&A	

Appendix I. Data Elements for a Provider Database *(continued)*

Data Elements				
Data Element	Included in HRSA Minimum Data Set	Recommendation	Best Data Sources	Alternative Sources
Location Information				
Practice Address (up to 3)	X	Include	CAQH	Physician Profile (Self Report)/SK&A
Site Name		Include	CAQH	Physician Profile (Self Report)
Phone Number		Include	CAQH	Physician Profile (Self Report)/SK&A
Office e-mail Address		Include	CAQH	Physician Profile (Self Report)/ Managed Care Directory
Federal Employer ID (FEIN)		Possible	CAQH	Managed Care Directory
Type of Site (e.g., Single/Multi, Specialty)	X	Include	CAQH	Physician Profile (Self Report)
Type of Setting (e.g., Private Office, Hospital, Health Center)	X	Include	Physician Profile (Self Report)	SK&A
Primary Professional Activity (e.g., Patient Care, Admin, Research, Teaching)	X	Include	CAQH	Physician Profile (Self Report)
Type of Patient Care (e.g., Ambulatory, Inpatient, Emergency Services)	X	Include	Physician Profile (Self Report)	
Site Specialty		Include	Physician Profile (Self Report)	SK&A
Active at Location		Possible	CAQH	Physician Profile (Self Report)
FT/PT Status (Employment Status)	X	Possible	Physician Profile (Self Report)	
Years Since Last Provided Patient Care	X	Include	Physician Profile (Self Report)	
Clinical Work Hours (by Activity/Week)	X	Include	Physician Profile (Self Report)	
Days of Practice per Week		Include	CAQH	Physician Profile (Self Report)
Percent of Time Devoted to Patient Care	X	Possible	Physician Profile (Self Report)	
Weeks/Year or Average Hours/Week	X	Possible	Physician Profile (Self Report)	
Patient Care Hours/Week by Site	X	Possible	Physician Profile (Self Report)	
Office Visits per Week		Possible	Physician Profile (Self Report)	
Accept New Patients		Include	CAQH	Managed Care Directory
Age Limitations		Include	CAQH	Physician Profile (Self Report)
Other Limitations		Include	CAQH	Physician Profile (Self Report)
Handicapped Accessible		Include	CAQH	Physician Profile (Self Report)
PCMH status		Include	Physician Profile (Self Report)	NCQA
Use Electronic Medical Records		Include	Physician Profile (Self Report)	
Languages Spoken/Translation Capacity		Include	Physician Profile (Self Report)	
Office Manager Info		Include	CAQH	Physician Profile (Self Report)
Use Physician Extenders		Include	Physician Profile (Self Report)	
Future Plans		Possible	Physician Profile (Self Report)	
HIV Services/Referrals		Include	Physician Profile (Self Report)	
Other Location Information (up to 3)	X	Include	CAQH	Physician Profile (Self Report)

Appendix I. Data Elements for a Provider Database *(continued)*

Data Elements				
Data Element	Included in HRSA Minimum Data Set	Recommendation	Best Data Sources	Alternative Sources
Location Codes				
County		Include	Physician Profile (Self Report)	NPI
FIPS County Code/or Equivalent		Include	External Code-Census	
ZIP code	X	Include	CAQH	Physician Profile (Self Report)
Post Office Name		Possible	USPS Data Files	
MCD		Possible	From Geocode	
Census Tract		Possible	From Geocode	
Latitude/Longitude (Geocode)		Include	Geocoded Address	SK&A
Site/Practice Relational ID Numbers		Include	SK&A	Other Commercial
Insurances Accepted				
Accept Medicaid Patients		Include	CAQH	Physician Profile (Self Report)/SK&A
Accept Medicare Patients		Include	CAQH	Physician Profile (Self Report)/SK&A
% of Practice Allocated to Medicaid Patients		Possible	Physician Profile (Self Report)	
Medicaid Managed Care Plans/ACA Plans		Include	Managed Care Directory	Physician Profile (Self Report)
Plans Specified		Include	Physician Profile (Self Report)	SK&A
Hospital Appointments (Multiple)				
Hospital Name		Include	CAQH	Physician Profile (Self Report)/SK&A
Hospital Address		Include	CAQH	Physician Profile (Self Report)/SK&A
Type of Appointment/Status		Include	CAQH	Physician Profile (Self Report)/SK&A
Restrictions/Failure to Renew		Include	CAQH	Physician Profile (NPDB)
Other				
Work History		Include	CAQH	Physician Profile (Self Report)
Malpractice Insurance		Include	CAQH	Physician Profile (Self Report)
References		Include	CAQH	Physician Profile (Self Report)
Teaching Activities		Include	Physician Profile (Self Report)	
Willingness to Sponsor Preceptorships		Include	Physician Profile (Self Report)	
Memberships		Include	Physician Profile (Self Report)	
Publications		Include	Physician Profile (Self Report)	
Professional and Community Service		Include	Physician Profile (Self Report)	
Life Support Certifications		Include	CAQH	Physician Profile (Self Report)
Sanctions/Actions/Convictions/Restrictions		Include	CAQH	Physician Profile (NPDB)

Appendix II. Credential Verification Services

Credential verification services are provided by entities that are accredited by organizations such as The Joint Commission (formerly Joint Commission on Accreditation of Health Care Organizations), URAC (formerly Utilization Review Accreditation Commission), Accreditation Association for Ambulatory Health Care, and National Committee for Quality Assurance (NCQA). Credential verification services include verification of licensure, education, and training; Drug Enforcement Administration certification; malpractice claims; work history; payer sanctions; and performance of all functions, including application processing, attestation, and ongoing credentials monitoring.

Nationally, 80 organizations are certified by NCQA as Credential Verification Organizations (CVOs) to perform one or more of these functions. The roles played by CVOs vary. Some serve national markets; others have a regional focus, work with different types of providers (medical, behavioral, dental), or verify specific information items for all providers. Still others assist providers in preparing applications, while others help to review applications for health plans, hospitals, health centers, and other provider organizations, such as independent practice associations (IPAs).

CVOs include the Federation of State Medical Boards and the American Board of Medical Specialties, which verify information on education, training, and sanctions for licensure boards, health plans, hospitals, and provider organizations; professional organizations, such as the American Medical Association and the National Commission on Certification of Physician Assistants; private companies, such as Med Advantage, Credential America, MedVentive (a McKesson company), Verisys, VeriPoint, and Enclarity, that serve national markets; insurers, such as Aetna; and state and local entities involving private companies and provider organizations. The Westchester Management Services Organization, for example, is a CVO that is also an IPA representing Hudson Valley physicians in their contracts with managed care organizations. HealthPlex, another New York-based CVO, only works with dental providers.

CVOs involved in statewide credentialing processes include Aperature Credentialing (a division of OptumInsight), which works with a consortium of health plans in Massachusetts; Medversant, which assists Washington State; and Arkansas State Medical Board, which became a CVO to support that state's efforts to create a state-operated credentialing process.

In addition to CVOs, another 60 organizations have certification because their credentialing and re-credentialing (CR) programs meet NCQA standards. Most entities with this certification are health plans or provider organizations, such as academic health centers, hospitals, health centers, and IPAs. In New York State, entities with CR certification include Albany Medical Center, University of Rochester Medical Center, Greater Rochester Independent Practice Association, and WESTMED Practice Partners.

Appendix III. Master Data Management and Data Validation Services

Master Data Management (MDM) processes include source identification; data collection and transformation; normalization; rule administration; error detection and correction; data consolidation, storage, distribution, and classification; taxonomy services; item master creation; schema mapping; product codification; and data enrichment, remediation, and governance. Its tools involve data networks; file systems; data warehouses and marts; and data mining, analytics, virtualization, federation, and visualization.

Examples of vendors that provide MDM services include: Computer Science Corporation, which operates the State's Medicaid Management Information System; MAXIMUS, which operates the New York State Physician Profile; Treo Systems, which developed provider database systems for Colorado's all-payer database and its health benefit exchange; Salient Management Company, which developed the State's Medicaid claims analysis system; Vistar Technologies; Informatica; CGI; credentials verification organizations, such as Accenture; software companies, such as Oracle, SAS, Xerox, and Microsoft; and companies that specialize in the development and sale of provider databases, such as SK&A, Health Market Science, and FolioMed.

Other vendors that have related experience and expertise in working with complex, multisourced practitioner data sets include companies specializing in the development of credentialing-related software and databases for health plans, hospitals, and medical practices. Examples include: Applied Statistics and Management (MD-Staff credentialing software), Medkinetics, CredSimple, Santéch, Morrisey Associates, PHYND Technologies, and CACTUS Software.

Two general approaches are used for data validation—one based on prevalidation, periodic validation, and/or continuous validation of data sources through contacts with providers; the other based on use of data-mining algorithms to assess the probability that a data item is correct or invalid. SK&A, for example, validates its data by verifying its database by telephone every six months, while Health Market Science uses a consortium (comprising retail pharmacy chains and other health care provider organizations) to gather real-time, daily reports on changes. Enclarity uses Web-harvesting and data-mining algorithms to search multiple data sources, including claims data to develop probability measures that indicate whether an item may be correct. In most instances, data validation processes are built into the MDM system, no matter which approach is used.

It is also important that vendors have the capability to address validation issues from a national perspective, given the number of practitioners that move, change practice location, retire, die, have multiple state licenses, or work for national or regional organizations that do business in more than one state. Another advantage of using a national vendor is that most now have indices or other mechanisms that permit users to understand the relationships between individual providers; service delivery locations; corporate structures and practice names; hospital systems; IPAs; accountable care organizations; and/or managed care networks.

NYS HEALTH FOUNDATION

Improving the state of New York's health

VOICE: 212-664-7656
FAX: 646-421-6029
MAIL: 1385 Broadway,
23rd Floor
New York, NY 10018
WEB: www.nyshealth.org