Literature Review Performance Measures for Public Health Authorities

Research Question: What is currently known about performance measures for public health authorities?

Introduction Summary

Local authorities have taken initiatives to develop city and county-wide performance measurement systems (Boyle, 2000). It is essential for health authorities to have strong public health, thus "accurate measurement of present deficits is important for governments and technical and financial cooperation agencies working in health" (Pan American Health Organization/World Health Organization, pg. 7). Organizational performance measures should be developed to reflect key strategic issues identified by the strategy goals. Performance measures, are a way to "quantify and illustrate progress toward achieving accessible, high quality and affordable care at the national level using the available nationally representative data" mainly pulled together by public health authorities (AHRQ, 2017, pg. 29).

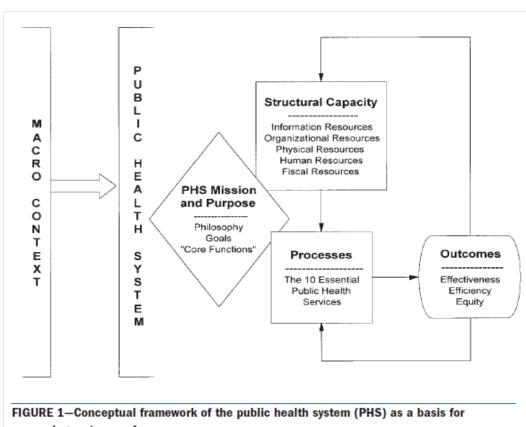
Synthesis

Over time (2000 – 2014), performance for most access to care measures, including but not limited to having health insurance, having a usual source of care, encountering difficulties when seeking care, and receiving care as wanted, have not changed (AHRQ, 2017, pg. 1). Health insurance coverages rates have, however, improved (2000 – 2016) with the most recent increases in insurance coverage for people under 65 a result of increased Medicaid and Marketplace Coverage (AHRQ, 2017, pg. 10). Quality of health care measures have improved over time (2000 through 2014 – 2015), although disparities persist specifically among "poor and low-income households and those without health insurance" (AHRQ, 2017, pg. 23). More than half of the disparities measures show that poor and low-income households and uninsured people have worse care than high-income households and privately insured people. In addition, poor people and uninsured people experience delays or inability to get needed medical care due to financial or insurance reasons.

Performance measures strengthen the public health services infrastructure and allows public health authorities to identify strengths and weaknesses within their organizations, along with the health outcomes described above. Essential public health functions (EPHFs), defined as "conditions that facilitate improvements in public health practice" strengthen institutional capacities in public health (Pan American Health Organization/World Health Organization, pg. 4) and are used to measure the performance of public health authorities. It is important to define the indicators and standards for measuring the performance of EPHFs. Essential public health services/functions can range from monitoring and evaluating health status to evaluation and promotion of equitable access to necessary health services. Measuring performance requires the "development of instruments" that can be "continuously improved" (Pan American Health Organization/World Health Organization, pg. 8). These instruments help define the performance "functions", "indicators", and "measures and sub-measures" that serve as benchmarks; as well as the role of public health in the health sector (Pan American Health

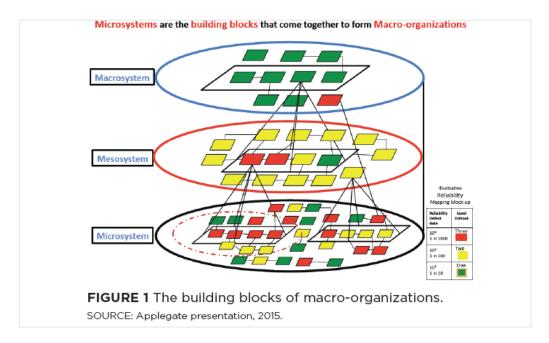
Organization/World Health Organization, pg. 8). The Pan American Health Organization (PAHO) and World Health Organization (WHO) in 2000 released an instrument to measure the performance of EPHFs and the health authorities in public health. The performance measure instrument of the EPHFs includes eleven (11) EPHFs identified as critical in public health practice. The instrument is divided into eleven sections, one for each essential health public function with every function preceded by a definition of the capacities necessary for performing that function, which are then used in constructing the indicators and their respective measurements (Pan American Health Organization/World Health Organization, pg. 12). These indicators are then used to measure the infrastructure, processes, and results associated with performance at a public health authority. The eleven EPHFs include:

- Access to Care (1)
- (2) Community Health Assessment
- (3) Population Health Data including Utilization, Unmet Need and Disease Registries
- (4) Communication & Outreach
- (5) **Community Partnerships**
- (6) Strategic Planning
- (7) Financial Investment
- (8) Organizational Framework including Enterprise Level Human Resources
- (9) Governance
- (10)Workforce



measuring system performance.

An alternative framework to view public-private healthcare partnerships is described as a three-level framework consisting of a microsystem (service provider level), mesosystem (a hospital, health system or health plan level) and a macrosystem (county, state or national level).



Key elements of successful collaboration in public: private health partnerships include:

- Collaboration between health care and public health requires interaction with nonhealth sectors, and in the case of collaborative coalitions, members must reach out to partners to demonstrate the collaborative's worth as an investment (Isham, Nethersole, Ramchandani).
- Data sharing is necessary for better collaboration between health care and public health. Though difficult
 in part due to the size and diversity of the population that public health agencies serve, data sharing and
 methods are central for quantifying the outcomes of collaborative efforts. It is important for future planning
 and ensuring sustainable funding (Allan, Carkner, Cunningham, Jarris).
- There is little published evidence describing and examining failures of collaborative efforts. Reports on failures can inform current efforts and planning for future collaborations (Isham, Mattessich, Montero).
- 4. The current funding structure of the health care delivery system is such that it pays for sick care, and this can be a challenge to public health-health care collaboration, which by its very nature promotes a culture of wellness, not just treatment of disease (Applegate, Cunningham, Mattessich).
- Leaders must have common goals from the beginning for successful collaborative efforts. A skilled leader
 can find creative ways to leverage and align existing resources toward the collaborative effort (Applegate,
 Carkner, Meadows).
- 6. Communication is important for any collaborative effort. It unifies definitions to help partners speak the same language, and facilitates both vertical and horizontal integration. Communication must extend beyond practitioners and providers to the populations they serve, and this requires trust (Applegate, Mattessich, Michener).

Prybil, L., F. D. Scutchfield, R. Killian, A. Kelly, G. Mays, A. Carman, S. Levey, A. McGeorge, and D. W. Fardo. 2014. Improving community health through hospital–public health collaboration: Insights and lessons learned from successful partnerships. Commonwealth Center for Governance Studies. executive director of the Quad City Health Initiative. Echoing previous definitions, Prybil defined collaborations, or partnerships, as "independent parties coming together to jointly address a common purpose."

Prybil presented a study that set out to identify successful partnerships among hospitals, public health agencies, and other population health stakeholders to offer lessons learned and recommendations based on these data and analyses (Prybil et al., 2014). After seeking nominations, the researchers analyzed the partnerships to find 157 that met baseline criteria for effectiveness and inclusion. Using this analysis, the study then identified 63 hospital-public health partnerships from across the nation. Fifty-five partnerships then responded to in-depth questions about goals, performance metrics, and partnership impact within the community. From among these 55 respondents, the study identified 12 exemplary and diverse partnerships. The study made 11 evidence-based recommendations for cultivating partnerships that place a high value on nurturing a culture of health and building trust within their communities (Prybil et al., 2014).

Collaborations or public: private health partnerships are defined as "independent parties coming together to jointly address a common purpose." Prybil presented a study that Identified successful partnerships among hospitals, public health agencies, and other population health stakeholders to offer lessons learned and recommendations based on these data and analyses (Prybil et al., 2014). The researchers found 157 partnerships that met the baseline criteria for effectiveness and inclusion then drilled down to 63 hospital-public health partnerships with 55 of these responding to in-depth questions about goals, performance metrics, and partnership impact within their community. Twelve (12) partnerships were examined in detail, with 11 evidence-based recommendations formed about success factors in cultivating partnership that nurture a culture of health and trust building within their communities.

Core Characteristics and Key Indicators of Successful Partnerships Involving Hospitals, Public Health Departments, and Other Parties

- 1. Vision, Mission, and Values The partnership's vision, mission, and values are clearly stated, reflect a strong focus on improving community health, and are firmly supported by the partners
 Vision, mission, and values are set forth in a written document and shared with key stakeholders, including the community the partnership serves
 Partners are committed to support the partnership's vision, mission, and values
 A board, a steering committee, or other body has the responsibility and authority to adopt policies and approve initiatives that support the partnership's mission
- 2. Partners The partners demonstrate a culture of collaboration with other parties, understand the challenges in forming and operating partnerships, and enjoy mutual respect and trust Partners have a tradition of participating in collaborative arrangements Partners share mutual respect and trust for one another Partners are open and transparent with one another Partners focus on developing programs in which they have expertise and/or can secure external talent readily and efficiently.
- **3. Goals and Objectives** The goals and objectives of the partnership are clearly stated, widely communicated, and strongly supported by the partners and the partnership staff The partnership's goals, objectives, and programs are based on community needs with substantial community input The partnership's goals and objectives are set forth in a written document and shared with key stakeholders, including the community the partnership serves The goals

and objectives include meaningful and measurable outcomes and a timeline for achievement • Information regarding progress towards the partnership's goals and objectives is regularly provided to the partners, the community, and other key stakeholders

- **4. Organizational Structure** A durable structure is in place to carry out the mission and goals of the collaborative arrangement. This can take the form of a legal entity, affiliation agreement, memorandum of understanding, or other less formal arrangements such as community coalitions Organizational documents recite the key features of the partnership including its mission, goals, and core policies The partnership's board, or other body with governance responsibility, is comprised of persons with the capability needed to effectively provide direction, monitor progress, and adopt action plans as required to ensure continued progress Tax-exempt status is preferred but not required
- 5. Leadership The partners jointly have designated highly qualified and dedicated persons to manage the partnership and its programs Leadership roles, responsibilities and decision-making authority are defined in writing, honored by key parties, and updated on a regular basis Members of the partnership's staff have mutual respect for each other, compatible values, and dedication to build and maintain a successful, trust-based partnership The partners and members of the partnership's staff share "ownership" of the partnership and demonstrate commitment to its long-term success
- **6. Partnership Operations** The partnership institutes programs and operates them effectively Partners identify resource requirements (human and financial), build capital and operating budgets that are sufficient, and successfully secure those resources Communication channels among the partners, staff, the community, and other stakeholders are clear, transparent, and effective Mechanisms to identify and resolve conflicts or issues are well-established and used proactively
- 7. Program Success and Sustainability The partnership is operational and clearly has demonstrated successful performance The partnership has been in operation for at least two years The partnership assesses community health needs, prioritizes those needs, and develops evidence-based programs and strategies to address them There is solid evidence of community engagement and support There is solid evidence of successful operating performance, including clear potential to have long-term impact on community health
- **8. Performance Evaluation and Improvement** The partnership monitors and measures its performance periodically against agreed-upon goals, objectives, and metrics The partners and staff are deeply committed to ongoing evaluation and continuous improvement Measurable outcomes, metrics, and scorecards that enable evidence-based assessment of the partnership's performance are employed consistently The partnership's goals, objectives, and programs are assessed regularly; findings are reported to the governing body; and actions are taken to improve the partnership and its performance

There are different elements to performance. Boyle (2000) identifies these elements as inputs, process/activities, outputs, and outcomes. These elements can produce indicators of different dimensions of performance including economy, efficiency, effectiveness, equity, and quality of service. It's essential that performance indicators are developed "for all levels of local authority performance, from the strategic, through operational program, down to the level of the team/individual" (Boyle 2000). At a county/city-wide level, three perspectives on performance are emphasized. These include: service delivery, financial management, and human resources management (Kelly, 1999; Boyle, 1997a). The main emphasis at these levels should be on developing performance indicators that enable the tracking of strategic priorities. For service delivery, organizations should focus on developing indicators from the point of view of the customer or service user; for financial management, the focus should be on developing indicators from the point of view of the resource controller; and for human resource management, indicators should be developed from the employee perspective (Boyle, 2000, ch. For example, when developing performance indicators for service delivery, community status reports should be considered. Community status reports have been identified as a useful mechanism to provide information about key social, health, economic, and/or environmental conditions in a community (Boyle, 2008, ch. 3) across local governments.

To identify performance information useful at a program level, local authorities should use the program logic model. The basis of the logic model is to have "clear program objectives which facilitate understanding of what the program is intended to achieve" (Boyle, 200, ch. 4). The program logic model is "the 'if-then' sequence of changes that the program intends to set in motion through its inputs, activities, and outputs" (Boyle, 2000, ch. 2). By defining the achievement of outcomes, the model allows for relevant indicators to be devised. Performance measurement at the level of the team/individual focuses directly on each team member's understanding of what needs to be achieved in the workplace and how to achieve such goals with support aimed at improving performance. To measure performance at a team/individual level, meaningful objectives and indicators are needed at the program level for the team/individual to be fully effective.

Benchmarking, or comparing performance among jurisdiction and trying to identify management or service delivery strategies that produce results, has also been identified as a strategy when developing performance measurements (Boyle, 2002, ch. 6). Comparative benchmarks encourage a search for best practice and the opportunity to learn from and emulate best practice by others.

It's essential to the public health delivery system to examine aspects of public health performance. Researchers and practitioners must work together to develop a "unified conceptual framework" and an "agreed upon" set of performance measures to achieve this goal (Handler, Issel, and Turnock, 2001, pg. 5). A model conceptual framework to guide the development of strategies and research tools for monitoring public health system performance could include the following components: the mission, structural capacity, processes, and outcomes of the public health system as shown in the figure below (Handler, Issel, and Turnock, 2001, pg. 2). The outcomes are affected by the social, economic and political environment in

which the system operates. This framework would allow practitioners, public health researchers, and policy makers to "more effectively examine the relationship between the practice of public health and population outcomes" (Handler, Issel, and Turnock, 2001, pg. 5).

What are the major findings of performance review for public health authorities?

Given the high rate of spending on healthcare in the United States, the performance ranks last among high-income countries. The major goal of public health should be to 'deliver care that improves the health of individuals and populations.' This goal does not even include the third tenet of the Triple Aim 'at a reasonable cost.'

Key strategies for improving health include:

- (1) Promoting timely access to preventive, acute and chronic care;
- (2) Delivering evidence-based and appropriate care resulting in
- (3) Lower morbidity and mortality that is amenable to health care interventions.

Major barriers to achieving these three goals include:

- (1) Cost of care and affordability for individuals;
- (2) Higher disease burden or premature mortality rate:
- (3) Administrative burden for individuals attempting to receive care;
- (4) Disparities or inequities in delivery of care based on income, educational attainment, race or ethnic background, or other social determinants of health.

The U.S. health system tends to perform poorly on:

- (1) Access to care (measured in terms of timeliness and affordability);
- (2) Administrative efficiency (perceptions as reported by patients and clinicians);
- (3) Income-related disparities.

U.S. performance equals or exceeds that of other high-income countries is in processes of care related to patient-centeredness and in disease outcomes for specific conditions including acute myocardial infarction, ischemic stroke, colon cancer and breast cancer.

For public health entities, lack of access to care is strongly correlated to lack of insurance or high out-of-pocket costs for preventive and primary care.

The second challenge related to access is the relatively low investment in primary care services compared to high funding for specialty care.

Administrative inefficiency relates to the apparent complexity of care and issues in obtaining and paying for services. Confusing benefit design, limited information about doctors and hospitals and surprises in bills for unbundled services is compounded by unpredictable copayments for laboratory and pharmaceutical series.

All the above issues present a disproportionate burden on people with low incomes, low

educational attainment and other social and economic challenges. These individuals face issues with social services including access to stable housing, transportation, education, nutrition and employment that further exacerbates their health status. ¹

Access

There are 16.9 million Americans living in poverty in the suburbs—more than in cities or rural communities. Nearly 40 percent of the uninsured live in the suburbs and almost one in seven suburban residents is uninsured. Despite recent increases in suburban poverty, the perception of the suburbs as areas of uniform affluence remains, and there has been little research into health care barriers experienced by people living in these areas. The objectives of this study were to compare patterns of insurance coverage and health care access in suburban, urban, and rural areas using national survey data from 2005 to 2015 and to compare outcomes by geography before and after the Affordable Care Act took effect. Though unadjusted rates of health care access were better in suburban areas, compared to urban and rural communities, this advantage was greatly reduced after income and other demographics are accounted for. Overall, a substantial portion of the US population residing in the suburbs lacked health insurance and experienced difficulties accessing care. Increased policy attention is needed to address these challenges for vulnerable populations living in the suburbs. (Health Care in the Suburbs: An Analysis of Suburban Poverty and Health Care Access. Alina S. Schnake-Mahl and Benjamin D. Sommers. *Health Affairs* 36, no.10 (2017):1777-1785. doi: 10.1377/hlthaff.2017.0545).

The Institute of Medicine defined access to care as "the timely use of personal health services to achieve the best health outcomes" (see National Healthcare Quality and Disparities Report). This requires gaining entry to the health care system, to sites of care, and to programs and clinical professionals meeting specific health needs.

CommUnityCare

Better working conditions for clinicians and staff could help primary care practices implement delivery system innovations and help sustain the US primary care workforce. Using longitudinal surveys, the experience of clinicians and staff in 296 clinical sites that participated in the Centers for Medicare and Medicaid Services (CMS) Federally Qualified Health Center (FQHC) Advanced Primary Care Practice Demonstration was assessed. Participating FQHCs were expected to achieve, within three years, patient-centered medical home recognition at level 3—the highest level possible. During 2013–14, clinicians and staff in these FQHCs reported statistically significant declines in multiple measures of professional satisfaction, work environment, and practice culture. There were no significant improvements on any surveyed measure. These findings suggest that working conditions in FQHCs have deteriorated recently. Whether findings would be similar in other primary care practices is unknown. Although we did

¹ Schneider EC, Sarnak DO, Squires D, Shah A, Doty MM. Mirror, mirror 2017: International comparison reflects flaws and opportunities for better U.S. health care. The Commonwealth Fund, July 2017. (http://www.commonwealthfund.org/interactives/2017/july/mirror-mirror).

not identify the causes of these declines, possible stressors include the adoption of health information technology, practice transformation, and increased demand for services. (Federally Qualified Health Center Clinicians and Staff Increasingly Dissatisfied with Workplace Conditions. Mark W. Friedberg, Rachel O. Reid, Justin Timbie, Claude Setodji, Aaron Kofner, Beverly Weidmer and Katherine Kahn. *Health Affairs* 36, no.8 (2017):1469-1475; (doi: 10.1377/hlthaff.2017.0205)

IMPACT OF HEALTH INSURANCE ON QUALITY (CUC & SENDERO)

In 2014 many uninsured, low-income nonelderly adults gained access to health insurance in states that expanded Medicaid eligibility under the Affordable Care Act. Federally funded community health centers were likely to be particularly affected by this expansion because many of their patients were uninsured and low income. A difference-in-differences approach was used to compare changes among 1,057 such centers in expansion versus non-expansion states from 2011 to 2014, in terms of their patients' insurance coverage, the number of patients they served, and the quality of care they provided. Medicaid expansion was associated with large increases (12 percentage points) in Medicaid coverage and corresponding declines (11 percentage points) in uninsurance rates. The numbers of patients served increased in both expansion and non-expansion states, and the magnitude of increase did not differ significantly between the groups of states. Medicaid expansion was associated with improved quality on four of eight measures examined: asthma treatment, Pap testing, body mass index assessment, and hypertension control. This analysis suggests that states' decisions about Medicaid expansion have important consequences for health center patients, with expansion improving treatment and outcomes of chronic disease and bolstering the use of recommended preventive services. (At Federally Funded Health Centers, Medicaid Expansion Was Associated With Improved Quality Of Care. Megan B. Cole, Omar Galárraga, Ira B. Wilson, Brad Wright and Amal N. Trivedi. Health Affairs 36, no.1 (2017):40-48. doi: 10.1377/hlthaff.2016.0804)

IMPACT OF HEALTH INSURANCE ON POVERTY

The effects of health insurance on poverty have been difficult to ascertain because US poverty measures have not taken into account the need for health care and the value of health benefits. The first US poverty measure to include the need for health insurance was developed by these researchers to count health insurance benefits as resources available to meet that need—in other words, a health-inclusive poverty measure. The direct effects of health insurance benefits on health-inclusive poverty for people younger than age sixty-five was developed, comparing the impacts of different health insurance programs and of non-health means-tested cash and in-kind benefits, refundable tax credits, and non-health social insurance programs. Private health insurance benefits reduced poverty by 3.7 percentage points. Public health insurance benefits (from Medicare, Medicaid, and Affordable Care Act premium subsidies) accounted for nearly one-third of the overall poverty reduction from public benefits. Poor adults with neither children nor a disability experienced little poverty relief from public programs, and what relief they did receive came mostly from premium subsidies and other public health insurance benefits. Medicaid had a larger effect on child poverty than all non-healthy means-tested benefits combined. (Estimating the Effects of Health Insurance and other

Social Programs on Poverty under the Affordable Care Act. Dahlia K. Remler, Sanders D. Korenman and Rosemary T. Hyson. doi: 10.1377/hlthaff.2017.0331 *Health Affairs* 36, no.10 (2017):1828-1837).

CCC (Integrated Delivery System) & DSRIP

As population-based payment models become increasingly common, it is crucial to understand how such payment models affect health disparities. Health care quality and spending among enrollees in areas with lower versus higher socioeconomic status in Massachusetts was evaluated before and after providers entered into the Alternative Quality Contract, a two-sided population-based payment model with substantial incentives tied to quality. Changes in process measures, outcome measures, and spending between enrollees in areas with lower and higher socioeconomic status from 2006 to 2012 were compared (outcome measures were measured after the intervention only).

Quality improved for all enrollees in the Alternative Quality Contract after their provider organizations entered the contract. Process measures improved 1.2 percentage points per year more among enrollees in areas with lower socioeconomic status than among those in areas with higher socioeconomic status. Outcome measure improvement was no different between the subgroups; neither were changes in spending. Larger or comparable improvements in quality among enrollees in areas with lower socioeconomic status suggest a potential narrowing of disparities. Strong pay-for-performance incentives within a population-based payment model could encourage providers to focus on improving quality for more disadvantaged populations. (Lower- Versus Higher-Income Populations In The Alternative Quality Contract: Improved Quality And Similar Spending. Zirui Song, Sherri Rose, Michael E. Chernew and Dana Gelb Safran. *Health Affairs* 36, no.1 (2017):74-82. doi: 10.1377/hlthaff.2016.0682).

UT: DELL MEDICAL SCHOOL

A major reason for the mandate to increase the number of MD/DO medical students was to increase the supply of primary care physicians. 10 As shown in a prior publication, the 28% increase in US medical students from 2002 to 2016 has not increased the output of primary care physicians. 8 The main reason is that the vast majority of internal medicine residents enter practice as medical subspecialists rather than general internists. It is very unlikely that this 60b-year trend as shown in Table 1 will be reversed. The percentage of pediatricians entering general pediatrics has had a similar, but less severe, decrease. Family Medicine, the remaining primary care specialty, has shown a modest increase. However, the number of U.S. seniors, the major source of Family Medicine residents, has decreased from 77% of those matched to Family Medicine in 1998 to 45% in 2016.6,7 The evidence is clear that U.S. physicians prefer specialty medicine to primary care medicine. It is highly likely that this preference will persist.

Why do U.S. medical students choose specialty and subspecialty practice rather than primary care? The most frequent explanation is that as the debt of graduating seniors increases, the

number choosing the higher-paying specialties increases.13 Other suggested reasons are that the specialties have more prestige and many present a better lifestyle than primary care.13 The Health Resources and Services Administration projects a shortage of 20,400 primary care physicians in 2020.14 Petterson et al15 predicted an even larger shortage of 52,000 primary care physicians by 2025. There will not be enough family practitioners to provide

New Kaiser Permanente Med School Part of a Growing Trend

by Kaiser Health News | December 21, 2015 By Julie Rovner

Thursday's announcement by Kaiser Permanente that it plans to open its own medical school in Southern California has attracted a lot of attention in the health care community.

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But Kaiser is actually at the trailing edge of a medical school expansion that has been unmatched since the 1960s and 1970s, say medical education experts. In the past decade alone, according to the Association of American Medical Colleges, 20 new medical schools have opened or been approved.

That's no coincidence. In 2006, the AAMC called for a 30 percent increase in medical school graduates by 2015 to meet a growing demand, both through expanded class sizes and newly created medical schools.

"We're on track to meet that 30 percent increase in the next three or four years," said Atul Grover, AAMC's chief public policy officer. "Enrollment is already up 25 percent since 2002."

Many of the new schools focus on producing more primary care doctors — those specializing in pediatrics, family medicine or general internal medicine. In fact, Kaiser Permanente already has a partnership with the University of California, Davis in the northern part of the state on a fast-track training program for primary care.

But Kaiser leaders say their new school (projected to enroll its first class in 2019) is about more than just primary care.

"We need to prepare physicians for the way health care is delivered in the future," said Dr. Edward Ellison, executive medical director for the Southern California Permanente Medical Group. He said students need to learn not just medicine, but about integrated systems of care and how to work in a much different medical environment. "Our advantage is we can start from scratch," he said.

Another advantage is the HMO's deep pockets.

"They've got huge resources," said George Thibault, president of the Josiah Macy Jr. Foundation, which focuses on medical education. "This is a grand experiment, but if anybody can do it, Kaiser can."

Kaiser Permanente is far from the first health care provider to launch its own medical school—the Mayo Clinic has had one since 1972 and is about to expand that school from its home base in Minnesota to its satellite campuses in Arizona and Florida.

Thibault said health-provider systems are already heavily involved in the new medical schools, often as partners with degree-granting universities, "which itself is a new trend." For example, on Long Island, the North Shore-LIJ Health System co-launched a medical school with Hofstra University in 2011.

One big question is whether all these new schools will eventually produce more students than there are residency positions, which are necessary to complete the training. The federal government, which funds the majority of those residencies through the Medicare program, capped the number of residencies it would fund in the 1997 Balanced Budget Act.

Currently there are about 27,000 residency slots available each year, which are filled by students who have earned M.D. or D.O. degrees (doctors of osteopathy) in the U.S., as well as foreign medical school graduates and U.S. citizens who have graduated from medical schools overseas.

Between the new M.D.-granting schools and a rapid expansion of osteopathic medical schools, AAMC's Grover said, demand will soon outstrip supply. Residency slots "are growing at about 1 percent per year," he said (mostly funded by health systems themselves since Medicare will not), "while undergraduate medical education is growing about 3 percent per year."

But Edward Salsberg of George Washington University, who has spent a career documenting health workforce trends, said any potential conflict is still a long way off.

"When you start with an excess of 7,000 slots" of residencies over graduating U.S. medical students, "it takes a very long time" to consume that excess, he said. By the year 2024, he and others concluded in a recent article in the New England Journal of Medicine, there will still be 4,500 more slots than graduates.

"So yes, U.S. medical students will have a slightly more limited range of specialties to choose from," said Salsberg, "but still plenty of room."

There are also questions about whether there even is a doctor shortage that all these new schools are aiming to alleviate.

Grover, whose organization has led the call for more doctors, said the anticipated shortage of primary care physicians might not be as acute as originally thought. That's because the U.S. is producing dramatically more nurse practitioners and physician assistants, who also provide primary care.

That's probably a good thing, at least in supply terms, said Thibault of the Macy Foundation. Because it turns out that many students graduating from new primary care-focused school's programs are in fact opting to become specialists instead.

"The career choices in the new schools look remarkably similar to career choices of more traditional schools," he said. The graduating medical students "are responding to the same set of signals and stimuli" about prestige, income and lifestyle.

Kaiser Health News | Nonprofit News Organization

HMO giant Kaiser Permanente plans to open a medical school in Southern California Chad Terhune, December 17, 2015 <u>Los Angeles Times</u>

<u>Kaiser Permanente</u> announced Thursday that it plans to open a medical school in Southern California by 2019, executives also said they wanted to address one of medical education's biggest issues: diversity. HMO giant Kaiser Permanente plans to launch a medical school in Southern California, bucking the healthcare establishment and promoting a new generation of physicians that looks more like the community it serves.

The nonprofit health system said it would enroll its first class in 2019. But the Oakland company said that its approach will differ markedly from that of many established medical schools. It will hew closer to the company's commitment of rapidly adopting new technology and adhering to the latest medical evidence in patient care.

The unorthodox move illustrates the lofty ambitions of Kaiser's chairman and chief executive, Bernard Tyson. He strongly believes that Kaiser's model of coordinated care is the answer for what ails the U.S medical system. Teaching that approach to young doctors could accelerate change across the country, he said.

"We have the opportunity to help train future physicians on 21st century medicine and be on the cutting edge of all the changes we are experiencing," Tyson said. "Our model of care is best for the current and future diverse populations in this country."

<u>When Kaiser Permanente</u> announced that it plans to open a medical school in Southern California by 2019, executives also said they wanted to address one of medical education's biggest issues: diversity. The company wants to recruit more minority students.

Tyson said he explored the possibility of partnering with existing medical schools or universities and opted instead to build from scratch. In some ways, the move extends what Kaiser already has been doing — it has about 600 physicians completing residency programs now and several thousand more do some of their training at Kaiser each year. Kaiser studied North Shore-LIJ Healthy System's medical school in Long Island, N.Y., which accepted its first class only four years ago. The school, affiliated with Hofstra University, diverges from the traditional model of two years of classroom study followed by two years of clinical training, said Michael Dowling, the school's president and chief executive, who advised Kaiser on its plan. Incoming students are immediately sent out to train as emergency medical technicians on ambulances, for example. "It's not a cloistered kind of arrangement where they spend time in the classroom memorizing things," Dowling said. "They're actually out in the field doing things, which we believe is the best way to learn."

Newer medical schools have increasingly shifted toward more hands-on training, Dowling said. "It's all about the move toward population health and it's all about teamwork. ... The whole philosophy and culture is quite different," he said.

Maintaining the health of a large group of people is fundamental to Kaiser. It collects an upfront premium from customers to cover all of their care and has an incentive to keep patients healthy as opposed to the conventional fee-for-service model that can trigger wasteful spending.

Unlike most health insurers, Kaiser runs 38 hospitals across the country, owns hundreds of clinics and has nearly 18,000 doctors on salary at its affiliated medical groups. Kaiser operates in eight states and the District of Columbia, but nearly 80% of its 10.2 million members are in California.

Kaiser said medical education has been slow to move away from an approach centered on facilities and services, and hasn't evolved fast enough to meet patients' reliance on mobile technology to manage their busy lives. Kaiser has been a leader nationally at adopting electronic medical records and offering doctor visits online.

Diversity was another motivating factor behind Kaiser's decision. It wants to recruit more minority students and teach all doctors how to better care for an increasingly diverse patient population.

"We anticipate them going out into the communities and spending time with patients in the communities from which they come," said Dr. Edward Ellison, executive medical director of the Southern California Permanente Medical Group.

Kaiser will face tough competition from more established and better-known medical schools in pursuit of top students and faculty nationwide — including major facilities such as USC and UCLA, and a new school at UC Riverside, which opened in 2013.

Sean Pianka, 24, a first-year medical student at UCLA who has had healthcare through the Kaiser system, said the company's approach is "very efficient," but added that he had some reservations about "a school run by a company like Kaiser. That sounds a little strange."

Tuition will be competitive with other medical schools and financial aid will be provided to help "disadvantaged students," according to Kaiser. The first class of about 50 students should start in fall 2019, and enrollment will grow after that, Kaiser said.

Some health-policy experts were surprised by Kaiser's announcement, but they said a medical school could help fill the company's own workforce needs as it continues to grow.

Kaiser will be creating a steady supply of physicians it can hire, though its graduates won't be under any obligation to work for Kaiser.

"Kaiser is clearly making a statement that they want to train doctors in their culture, philosophy and way of delivering care," said Steve Valentine, vice president and West Coast consulting leader at healthcare firm Premier Inc. "It won't be a fit for some students. They will still want UCLA, USC, Johns Hopkins."

Critics worry a Kaiser medical school might emphasize controlling costs, to the detriment of patient care.

Some Kaiser patients feel the care they want is limited by the HMO's system. Last year, the company paid a \$4-million fine imposed by California regulators related to inadequate treatment of mental health patients.

Outside experts, Medicare officials and patient safety advocates routinely give Kaiser high marks for its preventive care and overall performance. Policymakers hold up the company as a model for how it coordinates care across its hospitals and physician offices.

Kaiser's annual revenue was \$56.4 billion last year, with an operating income of \$2.2 billion. The company said this month that it was spending \$1.8 billion to acquire Group Health Cooperative, a nonprofit insurer in Washington state.

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