

The High Achieving Governmental Health Department in 2020 as the Community Chief Health Strategist

Public Health Leadership Forum

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Background

Local and state health departments need to adapt and evolve if governmental public health is to address emerging health demands, minimize current as well as looming pitfalls, and take advantage of new and promising opportunities. To succeed requires a view into the future. This paper provides that vision. And, importantly, it zeroes in on what a high *achieving* public health department of the future will be doing differently. It does so not with a comprehensive inventory of tasks but rather with a distillation of the most important new skills and activities essential to be high achieving and serve in the role of the *community chief health strategist*.

A working group of public health practitioners and policy experts was convened by RESOLVE as part of the [Public Health Leadership Forum](#) with funding from the Robert Wood Johnson Foundation (See Appendix B for a list of members). The working group purposely set a time frame of public health in 2020 – just six years into the future – in order to look far enough ahead to provide a compelling beacon, while staying close enough to the present to emphasize the urgency of taking immediate steps to start the process of change and build the leadership necessary to be successful.

Vision

The core mission of public health remains the same: the reduction of the leading causes of preventable death and disability, with a special emphasis on underserved populations and health disparities. This is our perpetual north star. But *how* we achieve that mission has to change, and change dramatically, because the world in which we find ourselves is very different than just a few years ago, and it will continue to rapidly change. Unless we recognize the new circumstances and adapt accordingly, public health will not just be ineffective, it runs the risk of becoming obsolete.

Just what are the conditions that have brought about the need for this overhaul and a call for new practices and skills? A short list includes:

- *The health care needs of the population are changing.* The prevalence of chronic disease has skyrocketed as life expectancy has increased and other causes of death have

decreased. Much attention has appropriately focused on obesity and asthma in the last several years, and health departments have scrambled to find the necessary resources to respond. In the coming years these diseases are likely to continue to remain priorities, but in addition, health departments will need to focus on other chronic diseases that are leading preventable causes of morbidity as well such as those associated with behavioral and oral health and sensory-related disabilities.

- *The demographics of the country are changing.* The increased prevalence of the chronic conditions mentioned above will continue as the elderly and very elderly (over 85 years of age) population grows. Public health departments will face the challenge of developing strategies to help elders maintain their independence and quality of life. The continuing growth of the Latino population and other populations of color could intensify the already existing health disparities even as access to care increases for many. To date, our public health successes have not often been evenly effective by class and race. As a consequence and particularly in poorly resourced areas the preventable disease burden of the future will require new approaches perhaps drawn from the global health arena.
- *Access to clinical care will change in a post Affordable Care Act (ACA) environment.* Although there will be differences from community to community, access to clinical care will likely grow everywhere due to an increase in public and private health insurance coverage. As a result some services traditionally provided by public health departments will be covered by health insurance. This change will mean that the role of public health departments as the safety net provider will be diminished and in some instances eliminated entirely. At the same time there will likely be an enhanced role of such departments in assuring that the care provided by others is accessible as well as high quality, prevention-oriented and affordable.
- *An information and data revolution is underway as the world changes to an internet-based, consumer-driven communications environment.* Public health's role as the primary collector of population health information will be reduced as new, diverse and real-time databases emerge. However, the public health role as interpreter and distributor of information will become more pronounced. Governmental public health will have the responsibility for surveying and aggregating the many sources and ensuring accessibility of the essential information in understandable formats.
- *As attention to the factors contributing to chronic diseases increases, the non-health sectors will often be the key to optimizing the health of the public.* Public health's role will involve working collaboratively with these diverse sectors – be they city planners, transportation officials or employers – to create conditions that are likely to promote the health and well-being of the public.

In combination, these new required practices might be characterized as creating a sweeping new role, one we are calling the “*chief health strategist*” of a community. This new role builds upon the past and present functions of health departments and is a critical evolution necessary to be a high achieving health department in the near future.

Public health departments functioning as chief health strategists should retain, refine and defend the programs that are currently successful, such as environmental health, infectious disease control, all hazards preparedness and response, and other skills, strategies and programs essential for protecting and improving the health of communities. But as the chief health strategist, public health departments’ roles will differ in significant ways.

Departmental representatives will be more likely to design policies than provide direct services; will be more likely to convene coalitions than work alone; and be more likely to access and have real-time data than await the next annual survey. Additionally, chief health strategists will lead their community’s health promotion efforts in partnership with health care clinicians and leaders in widely diverse sectors, from social services to education to transportation to public safety and community development. The emphasis will be on catalyzing and taking actions that improve community well being, and such high achieving health departments will play a vital role in promoting the *reorientation of the health care system towards prevention and wellness*. Health departments will also be deeply engaged in addressing the causes underlying tomorrow’s health imperatives.

While it won’t be easy for health departments, even those with the most resources, to achieve this vision of becoming chief health strategists in their communities, it is imperative. Even the smallest of health departments can take partial steps, and some departments are already changing to meet the new demands, and can provide examples for others to follow.

The vision of high achieving health departments serving as community chief health strategists may seem ambitious, particularly for those health departments that are small or under-resourced, and we recognize that many agencies will not be able to adapt quickly. Change across our nation’s diverse health departments will occur at different times and at different paces, but beginning the process is necessary for departments of all sizes whether or not they have lost resources. The demands of the future are unavoidable. Governmental public health must be ready to meet them.

Key Practices of the Chief Health Strategists of the Future

High-achieving local and state governmental health departments of 2020 serving as the community's chief health strategists will share several key practices, seven the working group identified as the newest or most unique are highlighted below. Following the description of the practices, we suggest a beginning menu of steps that health departments large and small can take in order to begin to work toward at least the first practice in the next few years.¹

PRACTICE #1: Adopt and adapt strategies to combat the evolving leading causes of illness, injury and premature death.

Starting in the first few decades of the 20th century, public health departments focused great attention and received considerable funding to fight infectious disease. This orientation of funding reflected the dominance of such diseases as tuberculosis, food-borne illness, and influenza as causes of death in the early part of the century. While improved water and sewage-system regulations, widespread public education, and medical interventions helped address those illnesses, the HIV and then the H1N1 epidemics made clear the continuing health threat posed by infectious diseases, which remain serious health concerns in the U.S. These health threats will require adequate resources to maintain the progress that has already been made, as well as address new infectious disease challenges.

But health departments lack the equivalent capacity to prevent and respond to today's leading causes of illness and death: heart disease, cancer, lower respiratory illness, stroke, and unintentional injuries and overdoses. Unlike infectious diseases, many of these involve chronic conditions that require years if not decades of expensive care and control. Today's public health budgets are not properly aligned or sufficiently funded to tackle these now leading causes of illness, injury, and premature death. Current funding and programs are in fact more reflective of the health concerns of the past than of the present, let alone the future.

Here is where health departments of the future need to shift their focus and the funding streams must follow. Chief health strategists of the future will be able not only to *anticipate* those factors contributing to death and disease in a community, but be able to identify and secure the essential resources necessary to focus attention on chronic disease prevention. The health department strategists of the future will need to focus on the ongoing as well as emerging leading health concerns with the same intensity and strategic skills they once directed toward eliminating tuberculosis.

The most effective preventive solutions for these chronic conditions are often similar across disease categories. The widespread benefits associated with modified and improved conditions at community work places or schools, such as infrastructure for fresh fruits and vegetables and

¹ We look forward to gathering additional action steps for the other practices as this paper is disseminated more broadly.

locating near parks and other open spaces, to support the concurrent behavioral changes of improved diet and exercise, for example, can help individuals and communities that share multiple and interacting risks and health conditions. But prevention efforts that would substantially reduce deaths by addressing tobacco use and obesity are currently underfunded—dangerously so.

And while more needs to be done to address tobacco, obesity, heart disease, cancer and stroke, there are other challenges that will be increasingly appearing on our radar screen. For example, the lack of progress that has been made in reducing the prevalence of disabilities related to behavioral health, musculoskeletal disorders, and sensory loss, will become ever-growing problems if unaddressed as the make up of our communities change and as life expectancy increases. To effectively and efficiently improve community health, public health departments as chief health strategists must keep up to date not only with *what* is threatening people's health, but also *who* is most at risk – discussed in Practice #2 below.

To summarize: the high-achieving health department of 2020 serving as the chief health strategists must understand and address the primary causes of illness, injury, and premature death. These departments will ensure that their efforts are aligned with the needs of the growing prevalence of disabilities; that they have developed expertise in the prevention and/or treatment of chronic conditions; that they are continually looking to and preparing for the newly emerging health trends; and that they are seeking, securing and channeling resources to be successful.

PRACTICE #2: Develop strategies for promoting health and well-being that work most effectively for communities of today and tomorrow.

Demographic trends are shifting the make-up of our communities, rendering some of our focus and community health strategies outdated. If not updated, these changes will potentially compound some of our current weaknesses. By 2020, baby boomers will be over 65, and the percentage of the population that is elderly will be larger than ever before. This shift will intensify the need to focus on the health of the elderly, the importance of preserving their quality of life and the prevalence of such conditions as dementia, as well as paying more attention to their preventable health concerns, such as the injuries resulting from falls.

The country will also be more racially and ethnically diverse, as the non-white population edges toward outnumbering the white population for the first time. And unless we tap new strategies to more effectively confront and reduce health disparities, not only will these disparities increase, they will jeopardize the overall health and well-being of our communities even more extensively. To date our public health advances have often been less successful at reducing class and racial disparities. The preventable burden of the future will differentially require new,

health equity approaches including those that specifically improve health in poorly resourced areas.

These and other changes will compel the health departments of 2020 as the chief health strategists to focus on the health needs and concerns of the fastest-growing populations. Health departments that have historically focused on maternal and child health activities – understandable as high level of death and disability were occurring in infants and pregnant women in communities of the past. However, now – in communities of today and because of successes we have had with maternal and child health issues - health departments will need to broaden their vision to include the elderly as they become a larger proportion of the community and the injuries and illnesses they experience become a more significant variable of overall community health. Health departments also will need to pay greater and greater attention to people of color and Latinos, Asian-Americans, and other immigrants. Demographic shifts may also be accompanied by socioeconomic changes such as a growing income gap and concurrent inequalities in health outcomes. The state and local health departments as chief health strategists should be the trusted source regarding emerging demographic and health trends.

The high achieving health department and health strategist must address the needs related to emerging demographic patterns, and the health inequities experienced by specific sub-populations. Chief health strategists need to answer these questions for each community:

- What are (and will in the future be) the greatest health threats, and who is (and will be) most at risk?
- What will it take to reduce these threats and reach the greatest number of high risk populations with whatever resources are available?

A starting point is to have access to accurate, timely, and understandable data. And that leads to the next essential practice.

PRACTICE #3: Chief health strategists will identify, analyze and distribute information from new, big, and real time data sources.

Public health has always been an information-based discipline. That's its stock in trade. But the old ways of collecting and analyzing information are no longer sufficient. The nature of information technology, information sources, and public expectations of accessibility are changing, and public health needs to rapidly adapt and evolve in response.

Other new and often big data sources can help correct that. Future health departments as strategists should be able to retrieve certain up-to-date clinical data from Electronic Health Records. Among the other sources used will be “big data,” data sets so large and complex that

traditional processing and management approaches don't apply. Health departments are unlikely to have data systems within their control that are large enough to capture all the necessary behaviors, attributes, and community determinants of health.

Instead, by 2020 health departments as chief health strategists may submit regular requests for data from Medicaid, Medicare, from all payer claims, or even outside of the health arena, from city planners, schools, and public safety officials. The strategist will need to look beyond the usual health-related data sources to patient-initiated feedback from social media and to extract data from search engines.

Once these data are collected, assessed, and aggregated, the public health departments as chief health strategist will not just make these data available but analyze them and translate the health implications of identified trends and hot spots, as well as share this information with the public, providers, partnering agencies, and policy makers to inform community-wide decision making and actions collaboratively in order to improve overall health and well being. The chief health strategist's responsibility is to the community it serves, and communities will want and should have meaningful interpretations of what information means for them and their health. The goal, in addition to informing the broad community, will be to offer a more comprehensive picture of health that will deepen their and their partners' understanding of the complex factors affecting the health of a community.

But by 2020, the obligation of health departments as strategists will go beyond accessing and analyzing data to providing information. Health departments will make information accessible for users to customize questions whenever they are needed for whatever purpose they are needed. Data collection and analysis must move closer and closer to real time. It will be unrealistic and unacceptable, in 2020, to wait one year or longer to have the latest reported information on, for example, infant mortality and diabetes rates, as is currently the case.

The health department as the chief health strategist will be prepared to answer what is happening in the current year and not what was happening one, two, or even three years ago. How will the health department as strategist get that information? One way is for clinicians, hospitals, and health departments to look to up-to-the-minute reporting of dangerous infectious disease outbreaks and the response to them. In recent years there have also been numerous examples of the value of rapid responses to clusters of health care associated infections. Access to such information might not require the regulatory-imposed reporting systems of infectious disease thanks to the evolving opportunities to access such data through meaningful usage agreements. In a growing number of communities there are local health information exchanges that can become intermediaries, collecting the data in a format that is usable by a health department without requiring unrealistically sophisticated IT capacity.

The range, freshness, and subtlety of new data sources can make the health department as strategist of the future far more responsive and effective than in the past. With such data health departments can, and good strategists will, focus interventions to more effectively serve populations with disparities. They will be able to evaluate ongoing interventions with more precision and accuracy. And with access to new kinds of data, the high achieving health department as strategist can respond quickly and inventively to chronic disease diagnoses, not just infectious disease outbreaks. If clinicians identify clusters of newly diagnosed asthma cases in one neighborhood, for instance, the public health department can determine which neighborhood environmental factors can be altered in order to reduce future incidence. This means that health departments as chief health strategists of the high achieving departments will need new kinds of skills. Mobilizing the department's existing resources to respond most effectively to the new health priorities will require familiarity with multiple data sources, the ability to advocate for access to those data sources, and then the ability to extract and interpret new data and share the most meaningful findings with the health department's partners and the public. Analysis, energy, and imagination will be essential characteristics; so will clear communication and the ability to make the complex seem simple.

Clear, accurate, and well-analyzed data will be especially important as health departments as strategists expand their partnerships to include multiple governmental agencies and community-based organizations that may be less familiar with health indicators and disease causation – as the next section will make clear. And above all, health departments as strategists will strive for increased accessibility of information to the community by such means as tapping friendly interfaces to accessible information and increasing sophistication in the use of social media.

In these efforts, high achieving health departments will rely heavily on one particular segment of the larger community – health care providers and facilities. The chief health strategist will understand, reach out to and collaborate with key partners in the health care community. These key allies and alliances promote good health, of course. But they may also be crucial in answering the all-important question of how high achieving health departments as chief health strategists of the future will fund community mobilization and policy-oriented campaigns – namely by redirecting funding from services for which they no longer need to pay. This leads to the next practice.

PRACTICE #4: Build a more integrated, effective health system through collaboration between clinical care and public health.

With some notable exceptions, the American public health and the clinical care systems have long been separate and distinct. One is focused on population groups and the other on individual patients; one is largely funded by the government, the other mostly by insurers.

Today, the two systems sometimes interact - for example, through infectious disease reporting during an outbreak like measles or pertussis, or when a community health center or a hospital needs a license. Numerous health departments directly provide or fund a limited number of clinical services such as immunizations or treatment for sexually transmitted infections. A few departments even run their own federally qualified community health centers. But these are the exceptions, not the rule.

Collaboration with Clinical Partners

In Massachusetts, a Prevention and Wellness Trust was created in 2012 by the state legislature, which awarded \$60 million to the Department of Public Health to oversee a process of establishing community-clinical partnerships to promote health and reduce costs. With this resource, the health department has funded 9 collaborative initiatives made up of municipalities, community-based organizations, healthcare providers, health plans, regional planning agencies, and worksites. The activities funded include enhancing community-clinical relationships, lowering community members' barriers to optimal health, identifying health-related community resources, tracking referrals to and the use of community resources in clinical records, and using quality improvement to strengthen community-clinical process and linkage.)

family planning services.

By 2020, health departments as chief health strategists will have conducted careful analyses of the available and accessible clinical services in their communities and determined if their departments should continue to provide them, at what level, and for whom. The high-achieving health department will reduce, eliminate, or significantly adapt its provision of direct services, implement billing practices where services are still needed, and may shift to primary care providers some activities such as tuberculosis care and disease intervention so they are more integrated.

This separation of public health and health care has not served us well in our overall goal to create a system that improves health. That can and must finally change. The high achieving health department as chief health strategist in 2020 will form close and interactive relationships with the clinical providers and health insurers in its municipality. The chief health strategist will know who to connect with and how best to make these connections, as well as work within the financing network to make respective efforts viable.

There are several reasons why this change will occur. The ACA is increasing health care access to millions of additional Americans and decreasing (although not eliminating) the need for the public health system to provide safety-net services such as immunizations, STD treatment, and

As more people have access to care through expanded health insurance benefits, governmental public health can increasingly serve an expanded health assurance function – linking those in need with potential providers rather than offering the services themselves. And they can play an increased role in monitoring and reporting on community access, cost, and quality of treatment care.

Departments may identify certain new services they can provide to complement those offered by clinical providers. One example: bundled packages of home visits by educators and risk reduction specialists to women with high-risk pregnancies or to families with a child who has moderate to severe asthma. Such services can be new generators of revenue, offered to insurers and clinicians in exchange for reimbursement. A second example involves using community health workers or other strategies to help patients address the social determinants of health, linking with opportunities for improved housing, employment training, or family unification.

Another dynamic changing the landscape is the continuing rise of health care costs and associated interest by the health care community in turning to partnerships to leverage their ability to improve health. The widening range of state and national payment reform initiatives will bring with it new possibilities for linkage between public health and clinical medicine. The movement away from the predominant fee-for-service to a global, value-based system of reimbursement should open the door for greater partnership and to the allocation of new revenue to support public health efforts. New global payment systems can potentially add population-based outcome measures to the list of quality measures that must be met to maximize reimbursement. For example, if clinicians have a financial incentive for their patients to stop smoking, they may seek the involvement of the local or state health department. And in turn, departments can share in the revenue incentives.

Such possibilities also build upon the momentum created by the ACA's provision that hospitals must develop community health assessment reports or face penalties from the IRS. Many hospitals have sought the guidance of and/or collaborated with their public health departments to meet that requirement. The health departments of the future will strive to solidify those connections, and to ensure that those connections result in the investment of hospital resources in population health initiatives. In addition, health departments may seek out or solicit new strategies for innovative investment in community prevention, for example through the use of wellness trusts and social impact bonds.

High-achieving health departments as chief health strategists will fight for a seat at the table where payment reform and insurance expansion are being determined in their states and localities, alongside the usual participants of Medicaid, private insurers, and providers. To achieve this goal by 2020, chief health strategists must develop new knowledge and skills in

such areas as benefit package design, identification and analysis of health metrics, and analyses of return on investment.

Finally, the movement to near-universal use of electronic medical records (EMRs) governed by the ACA's required "meaningful use" provisions will offer access to new and timely data, as discussed in Practice #3. And EMRs may assist in the tracking of patient referrals and the usage of community-level services supported by public health such as smoking cessation services, chronic disease self-management training, and home visits by community health workers.

In summary, the high achieving health department as chief health strategist, then, will take advantage of the numerous opportunities to join the efforts of public health, clinical providers and insurers. Health care and payment reform will allow for innovative collaboration such as linking smoking cessation treatment with community level cessation groups and expanding smoke-free regulations. Departments will face challenges in the process, as they reduce their own direct services and refer newly insured residents to primary care medical homes and as they strive to acquire a new understanding and appreciation of insurance practices.

Additionally, as health departments work more closely with clinical partners, they may also learn useful lessons about quality improvement measures and transparent goal setting and monitoring – aspects of the health care business model that can be integrated into the high achieving health department's in 2020 and beyond. They can then look inward and identify some of the organizational system changes in their own departments that will help them function more efficiently and effectively. The following practice highlights why it will be important for departments to be on the lookout for those lessons, as well as Practice #6 which pushes further the need for improved business systems.

PRACTICE #5: Collaborate with a broad array of allies – including those at the neighborhood-level and the non-health sectors – to build healthier and more vital communities.

A century ago, as public health advocates grappled with deadly infectious diseases, they looked to other disciplines for assistance. They knew they would need the involvement of other kinds of authorities if they were going to solve the problems associated with, for example, water-borne and air-borne infections, which spread rapidly in the living conditions of the poor. It was changes in housing codes and municipal investments in sewer systems, plumbing infrastructure, swamp drainage, and aerial insecticide spraying that saved more lives, faster, than public information campaigns or even medical breakthroughs could.

The conditions today and in the future are clearly different. As mentioned in Practice #1, it takes more focused teamwork within the public health community, with new and different skills and strategies, as well as cooperation and coordination with the health care community, when grappling with chronic conditions instead of infectious disease. But there are some

additional lessons in the past successes worth learning from and adapting to the present. And among them is the importance of working beyond a limited circle of partnerships – even a more expanded team among health and human service organizations. There is once again the need for cross-disciplinary collaboration and close partnerships with non-health-oriented organizations.

Environmental irritants in the home, the workplace, and the community contribute to ever-rising asthma rates, to choose one current and pressing example of an illness that requires collaborations among diverse non-health – oriented agencies and community leaders as well as those in the public health and health care sectors. In order to reduce these asthma triggers, health departments need to align their particular skill sets, as well as form partnerships with the medical community, landlords and housing code inspectors, employers and unions, polluting businesses and environmental regulators – to name just a few.

But developing the needed partnerships with other sectors takes time, training, and specialized personnel, and those partnerships will happen only if they are made to be priorities. Much of our work with these sectors will need to be through adaptive leadership and influencing without direct authority. These partnerships will require developing experience and skills among non-governmental organizations and other community leaders with how to effectively navigate regulatory and legal processes at the local and state levels and to influence policy. But they will also require understanding and respecting the priorities, goals, and objectives of other public and private, governmental and non-governmental agencies and organizations.

Building Community Coalitions

The Robert Wood Johnson Foundation's County Health Rankings initiative has prompted the creation of a number of broad-based community coalitions to tackle local health problems. One such effort was in Scioto County, Ohio, which was ranked last among all 88 Ohio counties in 2012. That ranking motivated community leaders to convene meetings of stakeholders to set the agenda for helping improve the county's health. Local health departments played a key role in providing data, identifying needs and gaps, and highlighting other efforts that were already underway. The initial coalition members decided to broaden the group so it would include people from contiguous counties in urban Kentucky that were facing similar issues. While the meetings were initially primarily of health professionals, they soon included teachers, superintendents of schools, clergy, law enforcement officials, and large employers. An early project involved improving childhood immunizations by linking schools and electronic medical records.)

It is not just diseases that require cross-disciplinary partnerships. It is the socio-economic conditions that foster them and make them worse. As health departments confront and address health disparities caused by economic inequality, racism, and discrimination, they need to take a broader approach. Factors as diverse as housing segregation, high school dropout rates, gang violence, and unemployment contribute to elevated risk for illness, injury, and premature death in low-income and minority communities. Working on these issues can, it is true, push most health departments out of their comfort zones. Nonetheless, the high achieving health departments as chief health strategists of the future will speak out compellingly on the connection between these issues and specific health outcomes, and then work collaboratively to change those factors to improve health outcomes.

The health department of the future will also encourage and support the leadership of community members in the efforts to promote healthy conditions. By training, informing, and nurturing leadership in neighborhoods with elevated health problems, the chief health strategists can develop a valuable and long-term resource for health promotion and, in essence, expand the public health base.

The Surgeon General's National Prevention Strategy of 2011 touts the importance of a health department's active engagement with community members and organizations. Community efforts, the report says, help people "take an active role in improving their health, support their families and friends in making healthy choices, and lead community change."¹

Health departments should thus explore the possibility that federal resources can support local and state health departments in convening broad-based collaborative efforts at the community level. But with or without federal funding, such convening is necessary.

In summary, by 2020 chief health strategists will identify, pursue and establish effective partnerships with those in positions to make a difference in the community's health. In addition to partnerships with others in the health system, as well as other governmental agencies, chief health strategists will participate in and support community-based coalitions that examine health data, set goals, and develop plans to improve health. They will enlist civic and other community leaders such as key local businesses and the Chamber of Commerce as well as leaders at the grass roots level to help carry out those plans. In community-based collaborative efforts, health departments will share the latest findings on evidence-based action steps and, if possible, give community coalitions grants and other resources.

Partnerships can be catalyzed and fostered through the provision of access to information and unique skills that others see as adding value to their respective endeavors, as well as joining in meaningful collaborations. Additionally, potential and ongoing partners and patrons alike are drawn to professional practice and conduct, and business practices are key elements in demonstrating value.

PRACTICE #6: Replace outdated organizational practices with state-of-the-art business, accountability, and financing systems.

Not surprisingly, the training most public health professionals received in school and on the job is insufficient to handle the challenges of the future and as the health enterprise changes. Mining big data? Tapping social media for epidemiological information? Embedding population health metrics within value-based insurance contracting? Participating in designing bidding packages for major transportation projects? These aren't in the job description or the skill sets of the employees in most public health departments. But they need to be... and soon.

To assume the mantle of chief health strategist, health departments need to retool and retrain and seek new employees with updated required skills. The high achieving health department of 2020 will have the personnel, know-how, and technological tools to handle the variety of required tasks. By 2020, the health departments as chief health strategist will have assessed the necessary skills - particularly the newer ones required – and compared them with the skills of the current workforce. Where they don't match, the health department will develop a plan to either rewrite job descriptions or hire people with the needed skills as positions become available. Or, it will investigate and pursue re-training opportunities for the current workforce, prioritizing the skills that are most essential.

Public health programs operate inefficiently for a number of reasons. One is that they are simply following the practices that have previously been put in place. But these outdated modes need to be replaced with current business practices. These include being efficient, effective, transparent, and accountable – in other words, being good stewards of public resources. Among the necessary practices will be establishing visible goals (perhaps with the use of an online dashboard), measuring and analyzing the progress in meeting them, and striving for continuous improvement using a thorough analysis of the lessons learned in the process. Such practices are now common in the private sector. Health departments would do well to study and learn from the best of such models.

A second reason for the inefficiency of public health departments is the size and structure of some departments. Some are too small to capture the efficiencies that come with scale or to have the degree of specialization that is needed. So a key task of the chief health strategist will be to examine if such limitations can be overcome by sharing agreements across jurisdictions. This may necessitate and lead to formal affiliations and even mergers of health departments.

Health departments will need to make the business case for public health activities – that is, using health economics to highlight examples when public health interventions save money in the short, as well as the long, term. It will no longer be sufficient to simply claim that prevention saves money without the economic analysis to demonstrate that this is the case for

each specific activity. Such analyses will also be needed to demonstrate that health departments are wisely using their own resources and translating them into positive health and economic outcomes. One way to prove that they are will be to achieve accreditation from PHAB.

The health department as chief health strategist in 2020 will diversify the funding base for public health. In addition to relying on local, state, and federal grant funding, health departments will establish mechanisms to bill insurers and providers whenever possible. However, newly identified funding might or might not come to the health department itself, depending on an assessment by the department of where the funding can be of most use. Part of the role of the chief health strategist will be assuring that resources are directed to others. For example, departments of the future will collaborate with non-health related government agencies to encourage that they direct their own resources towards practices which will directly improve community conditions.

Accomplishing this expected practice is a tall order for any health department. To acquire this and the other goals for skills and practices mentioned previously, health departments need to help create and become part of a learning health system in which science, informatics, incentives, and culture are aligned for continuous improvement and innovation, with best practices seamlessly embedded in the delivery of public health, and community health overall, and new knowledge captured as an integral by-product of the ongoing experience of becoming chief health strategists.

Health departments as chief health strategists also need guidance, support, and encouragement from what for many is their largest funder and most important technical assistance and policy partner... the federal government. The next section explores why the federal public health system is so important for the health departments of the future.

PRACTICE #7: Work with corresponding federal partners - ideally, a federal Chief Health Strategist - to effectively meet the needs of their communities.

Chief health strategists require the support (financial and policy) and architecture of the federal government. Without this support – and, moreover, leadership – from the federal government, it will be difficult for local and state health departments to adequately prepare for 2020 and become chief health strategists. Locals and states can and must be their own agents of change to become the health departments of the future.

But the necessary transformation is not something they can make entirely on their own. Certainly, they need financial support from the U.S. Department of Health and Human Services. The federal government, as a major (sometimes THE major) funder of state and local public

health, sets the tone and drives the structure and function of public health at the state and local level.

In order for local and state health departments to function cohesively, they need greater flexibility in funding than federal agencies currently provide coupled with the skills and tools to take advantage of that flexibility. Grant awards with narrowly segmented focuses – a short-term work plan for asthma, a separate one for tobacco, a third one for diabetes – lead to organizational silos and more limited external partnerships. If locals are to bring together all who can affect health, then federal health agencies need to make it easier to braid federal funding, and the federal health and non-health agencies need to design their programs to permit closer coordination of funding.

Such flexibility will encourage health departments to address community, workplace, and school conditions in ways that have a positive impact on many health problems. Prevention-related activities that encourage healthy eating and active living decrease a number of many health risks, including diabetes and heart disease. Efforts have been underway at the Centers for Disease Control and Prevention (CDC) to provide more coordinated funding in such areas as HIV and other sexually transmitted diseases and has piloted integrated chronic disease grants. Such approaches enhance the likelihood of improving health outcomes.

An additional example that will be of growing relevance to the health department of the future is the potential to use funding for what might be referred to as foundational public health services such as the needed steps to update Health Information Technology, develop broad-based partnerships, and collaborate with clinical systems.

To be clear, flexibility in the use of funding should not be confused with the lack of accountability. But the chief health strategist will be hampered in accomplishing specific necessary (and measurable) tasks if the funding continues to be awarded in an overly restrictive manner.

But the federal government's role in fostering change at the state and local level is not simply about funding. Transformation also requires a change in the way the federal agencies interact with the local and state officials. To begin with, a unified set of policies and practices, including but not limited to funding, would provide a consistent system within which to function.

One obvious challenge to such cohesive structure is that the current federal health enterprise is not a single "health department" with a unified set of policies and practices. Rather, it is a diffuse set of agencies charged with different aspects of health services that drive state and local public health activities through different funding streams and associated requirements, regulatory authorities, and legislative efforts.

The federal system needs to establish and embrace a goal and a plan to function as a “virtual” federal health department and be a chief health strategist at the national level. Federal inter-agency coordination that gives consistent and unified guidance, resources, and training to support local and state changes is invaluable. In fact, without such support, the necessary changes mentioned in each section of this report are more difficult to achieve. It may be too ambitious to propose that within the next six years (our 2020 time frame) there should be a federal equivalent to the chief health strategist at the local or state level. But, the closer the federal health system can come to operate with a single voice, uniform procedures, and a common set of priorities, the better.

There is opportunity and evidence that federal leaders recognize the changes needed for the future. The National Prevention Strategy paints an ambitious picture of what public health and prevention efforts need to be. And that picture looks startlingly and encouragingly familiar to a number of the themes identified above. For instance, it strongly reinforces Theme #4 regarding the importance of seeking broad-based meaningful partnerships, as indicated by its language that *“Aligning and coordinating prevention efforts across a wide range of partners is central to the success of the National Prevention Strategy. Engaging partners across disciplines, sectors, and institutions can change the way communities conceptualize and solve problems, enhance implementation of innovative strategies, and improve individual and community well-being.”*² A consistent message throughout the National Prevention Strategy is the importance of bringing all societal and governmental resources together to address the determinants of health and their direct health consequences.

The same observation applies to the six practices discussed above. For example, if locals and states are to harness health information technology and mine new data sources, they can’t be sidetracked by outdated national approaches to surveillance and other data collection. Or by conflicting reporting requirements that narrowly define what are the acceptable data for each federal agency and/or program. This means that the same vision of innovation and diversification in data sources needed at the local and state levels must occur at the federal level. Dozens of federal data collection efforts, surveys and registries need to be modernized. Cross-agency conferences and webinars should be held to identify promising practices. Partnerships with those managing useful big data sites should be brokered at the national level in ways that ease access to the data at the state and local levels. National and regional training for state and local health information technology staff should be frequent. And all federal agencies that fund public health should commit to abide by the outcome of such efforts, so that local and state health departments are not required to maintain the current, inefficient patchwork quilt of agency-specific data sources.

Similarly, if locals are going to succeed in bringing the community and clinical world together, then the federal government needs to incentivize both public health *and* the clinical world to

work together. Promising steps in that direction are beginning with the growing collaboration of CDC and the Center for Medicare and Medicaid Innovation, and the inter-agency support for Million Hearts and ABCS campaigns. But the funding, training, and prioritization of such efforts is limited.

One final point mentioned earlier but worth reiterating is the magnitude of the challenges faced by the health department of the future. It is unrealistic that a small and under-resourced department can achieve these. Therefore, an additional role for federal agencies might be to create incentives for health departments to consider municipal partnerships across local and state lines. Just as the ACA opens up whole new vistas for chief health strategists to collaborate across previously separated public-private lines, state and federal agencies should look to break down bureaucratic barriers.

In summary, the previous sections have called for the rethinking of the role of new local and state chief health strategists, suggesting a sweeping set of responsibilities that should be adapted to meet the actual conditions of the future. This final practice suggests not only that the state and local health departments as chief health strategists form a more effective partnership with the federal government agencies, but also necessitates that the federal government modify and adapt as well, as a virtual federal chief health strategist with the whole nation as its community, both to meet the new health needs and conditions, and to optimize, through unified goals, policies, and funding, the likelihood that local and state health departments will be modernized and well prepared. A few obvious starting points for such a federal health transformation would include the translation of the National Prevention Strategy into the terms and practices by which federal government and health agencies actually do business, and the creation of new, more unified working relationships across the federal departments and sectors.

Action Steps and Conclusion

It is not that long between now and 2020. Even as health departments persevere under the stressful conditions of several years of budget cuts and the simultaneous increase in the number of issues they must address, they must evolve. For some health departments, their limited size and relatively narrow scope of activities may potentially require combining resources with others in their state or region. It may simply be unrealistic for health departments below a certain size to become the chief health strategist and manage the necessary division of labor and flexibility to adapt to the new circumstances.

However, some health departments are already embracing the new opportunities outlined in this paper – whether through strategic planning, preparing for the Public Health Accreditation Board process, and considering the departmental changes they must make. They will recognize in our concept of a chief health strategist the new roles they have begun to assume.

These seven proposed practices are a tall order and require action that starts today if it is not already underway. Given the urgency of this need, we offer the following menu of suggested action steps, which are designed to stimulate discussion, idea development and additional to-dos. Some of the suggestions are intended to be scalable to the circumstances faced by any department. They emphasize processes that can be undertaken to assess new and future conditions, compare current practices to future needs, begin to explore new data sources, start one or more new partnerships, mobilize leadership at the community level, and strengthen management systems. Health departments can undertake necessary exploratory work – even without new resources. As more and more health departments engage in these efforts, there will be success stories and lessons from which all can learn.

Appendix A: Becoming the High Achieving Public Health Department as the Chief Health Strategist by 2020 and Beyond

1. *The first practice mentioned above involved understanding and addressing the primary causes of illness, injury, and premature death, while the second practice highlights the needs related to emerging demographic patterns, and the health inequities experienced by specific sub-populations.*

To achieve both objectives of a health department as a chief health strategist of any size could begin with a planning process both internally and in partnership with others to determine the likely needs of 2020 and consider how best to meet them. Some of the steps could include:

- a. Collecting the most comprehensive available data on health and demographics including that prepared by area hospitals to meet the new IRS regulations;
 - b. Assessing data for increasing prevalence of illness and injury and for changing demographics in the coming decade. Focus on the major causes of illness, injury and premature death; what's changing and what's problematic now and unaddressed.
 - c. Convening an advisory group with external members to review data and determine if there are likely future trends and needs of the most prevalent current and future conditions not captured by the data; consider open public meetings to solicit additional input.
 - d. Reviewing internal distribution of staff and resources relative to the issues of growing concern; assess ability to redistribute existing resources to better reflect these issues.
 - e. Discussing possible steps to address the future needs with the advisory group; prepare materials highlighting the dilemma
2. *Assess the diagnoses, trends, and underlying causes of the leading illnesses, injuries, and premature deaths within a municipality and analyze their significance in relation to the current distribution of public health funding.*
 3. *Assess the demographic trends for the municipality as well as the populations with the greatest health disparities, and analyze their significance in relation to the current distribution of public health funding for the area.*
 4. *Examine existing and emerging databases in the area that can offer information relevant to the health department's planning, programs, and policies. Select one or two promising databases such as open-source, social media, or big data systems and invest in exploring what it would take to gain access to and analyze the data they hold. Learn to analyze aggregated information to better understand the health determinants in your area.*

5. *Convene meetings of clinical providers and insurers to discuss potential linkages between population health and clinical care. Develop at least one pilot program to strengthen these connections.*
6. *Collaborate with new non-health-sector partners such as police officers and educators who have the potential to make an impact on the living conditions of some of the more vulnerable segments of the community.*
7. *Invent or adapt job descriptions for positions likely to be needed in the future. These include: information technology, with expertise in big data systems, social media, and analyzing claims data from insurers; building coalitions and organizing communities; building bridges with other sectors including health care providers, non-health governmental agencies, large employers, and community-based organizations.*
8. *Initiate an effort to strengthen internal management systems in ways that create transparent goals, and establish ways to measure progress in achieving them.*

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End Notes

¹ <http://www.surgeongeneral.gov/initiatives/prevention/strategy/>

² *Ibid.*