

Scenario Matrix

The following pages offer a side-by-side comparison of the scenarios across multiple dimensions. Each column is consistent with but not solely duplicative of the respective scenario.

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
MACRO ENVIRONMENT				
U.S. Economy	Slow growth with recessions in 2016 and 2022.	Slow growth. Severe recessions in 2016 and 2023. High unemployment. Political polarization and one-upmanship block substantive legislation.	Strong recovery. National minimum wage fixed at living wage level, with inflation adjustments Persistent structural unemployment. New community economic models help households sustain themselves.	Slow and uneven recovery. Major recession in 2017. Expanded earned income tax credit. National living wage. Persistent structural unemployment. New community economic models help households sustain themselves.
State and Local Fiscal Health	Virtually all states face severe fiscal constraints. Many cities and counties are at risk for bankruptcy.	Recessions hurt most public budgets at state and local levels. Many cities declare bankruptcy.	Most states and cities follow the recovery.	After some healthier years, recession constrains government spending.
Internet and Social Media	Subsidized smartphones with basic data packages lower digital divide. Social networking platforms reinforce negative health behaviors. Internet of Things (IoT) enhances social and environmental monitoring.	Digital divide grows, reinforces economic, educational, and health disparities. Social networking platforms often reinforce negative health behaviors and spread misinformation. IoT is poorly integrated and maintained; riddled with security vulnerabilities, and targeted by malicious hackers.	Subsidized smartphones with basic data packages lower digital divide. Use of health apps grows, integrated with personal biomonitoring, community health. Social networking supports widespread personal and community wellbeing. IoT enhances social and environmental monitoring.	Highly intuitive and adaptive technologies and subsidized minimum connection data packages eliminate digital divide. Social networking improves dissemination and civic engagement. IoT enhances social and environmental monitoring.

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
MACRO ENVIRONMENT				
Environmental Threats and Impacts	<p>More intense and variable weather extremes; hotter and drier summers; floods, tornadoes.</p> <p>Occasional super-storms.</p> <p>New viral and bacterial outbreaks, multiple pandemics.</p> <p>Increased prevalence of cancers, mental and behavioral health problems, asthma, chronic diseases.</p>	<p>Multiple 100-year floods per decade, in some regions followed by scorching summer droughts.</p> <p>Periodic superstorms cause extensive damage.</p> <p>Frequent major outbreaks, increased deaths.</p> <p>Multifaceted health impacts overwhelm public health and health care.</p>	<p>More intense and variable weather extremes; hotter and drier summers; heat waves and short-term droughts.</p> <p>Superstorms more common and strike the east coast most frequently.</p> <p>Bacterial and infectious disease outbreaks.</p> <p>Challenges to air and water quality are better reduced or managed.</p>	<p>More intense and variable weather extremes; hotter and drier summers, heat waves, short-term droughts.</p> <p>Floods and periodic superstorms.</p> <p>Bacterial and infectious disease outbreaks.</p> <p>National commitment to slow or reverse climate change and its effects.</p>
Health Care	<p>Vast majority are insured, have access to effective, age-appropriate preventive services without copays by 2020.</p> <p>Most care is integrated and capitated.</p> <p>Electronic health records (EHRs), integrated information, digital health coaches common for most providers.</p>	<p>Number of uninsured rise.</p> <p>Most care remains fee-for-service.</p> <p>Having insurance coverage does not ensure access to actual and good care.</p> <p>Unreliable “virtual doctor” solutions proliferate to meet demand.</p>	<p>Virtually all have access to affordable, high quality, and comprehensive health care.</p> <p>Most care is integrated and capitated.</p> <p>EHRs, integrated information, digital health coaches common for most providers.</p>	<p>40% of patients are enrolled in Consumer Directed Health Plans and use effective self-care technologies.</p> <p>Most care is integrated and capitated.</p> <p>EHRs, integrated information, digital health coaches common for most providers.</p>

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
MACRO ENVIRONMENT				
Primary Care	Patient-centered medical home (PCMH) model and enhanced primary care teams are the norm.	Wide variation; many practices become PCMH; others remain fragmented and not integrated. Many lack primary care.	PCMH evolves to Community-centered health home (CCHH) model and expanded teams with community health workers (CHWs). Digital health coaches improve care, especially for low-income individuals, families.	Most systems move to CCHHs, expanded care teams, CHWs, and digital health coaches. Many individuals and families self-manage their own primary care with digital health coaches and peer support.
Tobacco Control and Prevention	Improved access to cessation programs. E-cigarettes are regulated as tobacco products, with age and marketing restrictions. Overall use of tobacco continues to decline. Racial and geographic disparities in tobacco use grow.	E-cigarettes and negative social network influences increase tobacco use among young people. Weakened Tobacco smoking, marketing and sales restrictions in some states. Tobacco use increases overall.	Policies raise taxes, ban smoking in or adjacent to parks, workplaces and schools, raise smoking age. Near universal access to cessation programs. Targeted efforts for special populations. Tobacco use declines dramatically.	“Nudges” via social networks prevent youth initiation. Expanded access to cessation programs. Targeted efforts for special populations. Tobacco use declines dramatically.
Health Equity Outcomes	Some improvements in absolute health measures. Continued disparities across race and class on almost all measures.	Starker health disparities.	Significant improvements in health equity across racial and ethnic groups and neighborhoods. Some health disparities are eliminated entirely.	Significant improvements in health equity across racial and ethnic groups and neighborhoods.

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
Prime Public Health Roles	<p>Provide communicable disease control.</p> <p>Analyze, interpret, and respond to surveillance.</p> <p>Improve emergency preparedness, response and recovery.</p> <p>Provide health and safety assurance, inspections.</p> <p>Promote enhanced health conditions, including healthy food and activity.</p> <p>Conduct or disseminate comparison effectiveness research and evidence-based practice.</p> <p>Promote Health in All Policy analysis.</p>	<p>Provide communicable disease control.</p> <p>Provide emergency preparedness, response, mitigation, and recovery.</p> <p>Perform mandated inspections, regulation.</p>	<p>Function as “health development agency”</p> <p>Provide or assure assessments and evaluations, planning, and policy development.</p> <p>Forecast public health trends, test in simulations, and plan responses to trends.</p> <p>Conduct or disseminate comparison effectiveness research and evidence-based practice.</p> <p>Provide quality control and improvement of automated inspection systems.</p> <p>Promote Health in All Policy analysis. Guide public and private investments that/to promote health.</p> <p>Recruit and facilitate partners.</p> <p>Stimulate or lead community goal-setting activities.</p>	<p>Guide public and private investments that/to promote health.</p> <p>Conduct or disseminate population-level analytics and research, comparative effectiveness research, and evidence-based practices.</p> <p>Promote community engagement.</p> <p>Stimulate community goal-setting activities. Help the public separate good information from bad.</p> <p>Provide quality control and improvement of automated inspection systems.</p> <p>Support capacity building. Advise and promote public- and private-sector collaborations and solutions.</p>
	PUBLIC HEALTH			

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
PUBLIC HEALTH				
Funding for Public Health <i>Federal Funding</i>	<p>Reductions in public health spending for primary care, rural health, health professions, and health care systems. Funding priorities fluctuate.</p> <p>Federal spending is reduced for screening and treatment, especially for HIV/AIDS, breast cancer screening, asthma, maternal and child health, immunizations.</p>	<p>Crisis-driven funding, with repeated funding cuts.</p> <p>Needs increase, but federal spending for screening and treatment programs is cut.</p> <p>Remaining funding best supports delivery of mandated services, infectious disease control, and emergency preparedness.</p>	<p>Programmatic funding structure largely maintained.</p> <p>Stable or increased funding for surveillance and prevention; emergency preparedness; feeding programs; food standards and safety enforcement; and water supply and pollution protection.</p> <p>Federal funding cuts to personal health care services for screening and treatment.</p> <p>Prevention and Public Health Fund restored. 2% tax on health care services.</p>	<p>Funding supports public health action on broader determinants of health.</p> <p>Federal funding cuts to personal health care services for screening and treatment.</p>
State and Local Funding	<p>Funding level varies widely. Modest increases in fiscally healthy cities and states. Spending reductions in most fiscally challenged jurisdictions.</p> <p>Increased sharing of services and consolidation among local health departments.</p>	<p>Repeated funding cuts in most jurisdictions to public health, health care, and safety-net services.</p> <p>Many local health departments are consolidated, eliminated, or subsumed into other government agencies.</p>	<p>Wide variation, but tech savvy PHA staff do more with less.</p> <p>Fiscally healthy states and city/counties slightly increase public health spending.</p> <p>Accreditation and evidence of effectiveness and positive return on investment (ROI) give some protection from cuts to public health.</p> <p>Federal Prevention Fund and much of the 2% medical services tax flow through state and local PHAs.</p> <p>PHAs foster private sector/foundation funding, crowd funding, and gain sharing or social impact bond development.</p>	<p>Wide variation, but tech savvy PHA staff do more with less.</p> <p>Fiscally healthy states and city/counties slightly increase public health spending.</p> <p>Accreditation and evidence of effectiveness and positive ROI give some protection from cuts to public health.</p> <p>Smarter spending based on sophisticated simulations and assessments.</p> <p>PHAs foster crowdsourcing, private sector and foundation funding, and generate more public health resources, rather than dollars, from co-production, and time dollar exchanges.</p>

Scenario #1	Scenario #2	Scenario #3	Scenario #4
PUBLIC HEALTH			
<p><i>Philanthropy, Foundations and Other Funders and Support</i></p> <p>Foundations shift some health care funding to community prevention/public health approaches as health care coverage increases. Emergence of a global market for social-impact investing and social impact bonds leads to knowledge and experience with gain-sharing approaches. PHAs help foster these kinds of programs with local health care providers/payers that lead to measurable reductions in health care costs.</p>	<p>Foundations split; as economic challenges rise, some concentrate their efforts on providing communities and families with basic requirements; others shift health care funding to efforts focused on changing community conditions that will yield the greatest health.</p>	<p>Major foundations lead in shift from health care to health/public health support; more community-focused public health funding, some of which flows through PHAs. Other foundations join to support improving community conditions after effectiveness and return on investment (ROI) of public health programs are shown clearly. PHA analysis of needs and effectiveness support foundations in targeting investments; PHAs provide analysis and targeting for gain-sharing investments by health care payers.</p>	<p>Foundations make major shifts from health care to community health. Some foundations drive to create a “culture of health”; others shift in response to clarity in effectiveness and ROI of community/public health programs. Many support community economics models (e.g., Time Banks, community gardening, collaborative consumption efforts). Communities themselves, with their time and dollars, crowd-source and crowd-fund health improvement efforts at the local level.</p>
<p>Public Health Agency Role in Health Care Delivery and with Health Care Providers</p> <p>PHAs drop most direct clinical preventive and primary care services, as health care access expands. PHAs provide quality assurance of clinical functions and population health improvement.</p>	<p>Wide variation but most PHAs provide screening, preventive, and supportive services in those categorical programs – those most have reduced funding.</p>	<p>PHAs aid providers in including social determinants of health (SDH) related risks in screening and assessments. Evaluate effectiveness, accessibility, and quality of health services. Provide supportive services (e.g., HIV/AIDS, MCH), and primary care for uninsured.</p>	<p>PHAs aid providers in including SDH-related risks in screening and assessments. Evaluate effectiveness, accessibility, and quality of health services.</p>

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
PUBLIC HEALTH				
Health Care Providers' Role in Population Health	Varies by region and provider. Ranges from pursuing population health by focusing on their sickest patients, to working with community organizations and health departments in addressing the built environment and socio-economic factors.	Most define population health as managing their sickest patients - hot spotting.	All do hot spotting, case management of their sickest. Most use big data analytics and community goal setting to target highest priorities. Community benefits funding shifts largely to changing community conditions; net revenues to invest in community benefits are reduced by competition and reductions in medical care payment and reductions in demand.	All do hot spotting, case management of their sickest. Most use big data analytics and community goal setting to target highest priorities. Community benefits funding shifts largely to changing community conditions; net revenues to invest in community benefits are reduced by competition and reductions in medical care payment and reductions in demand.
Surveillance and Epidemiology	Integrates data from electronic health records (EHRs), Internet of Things, social media, biomonitoring, and mobile phones to varying degrees of effectiveness. “Citizen science” monitoring supports some PHAs. PHAs facilitate hot spotting efforts by health care providers. PHAs forecast community health trends, provide early-warning by neighborhood. But cannot mobilize timely pre-event response.	Data collection and quality are limited by public distrust in government; neglect surveillance done by marketers. “Citizen science” surveillance and monitoring focus on better-off neighborhoods. Policymakers look to the private sector to apply newly available technologies to solve problems. PHAs are overwhelmed by citizen, social media and internet-based reporting.	Increasingly automated surveillance; integrates data from EHRs, Internet of Things, social media, mobile devices, environmental monitoring. PHAs lead in big data analysis in most communities – enhancing surveillance and epidemiology. PHAs forecast community health trends and provide early-warning for challenges by neighborhood.	Automated surveillance, integrates data from EHRs, universities, community-based organizations, citizen scientists, social networks, PHAs. PHAs provide technical assistance, training, and quality monitoring of community health trends forecasting, early-warning, surveillance and analyses conducted by others. PHAs incentivize public- and private-sector solutions and consumer tools that facilitate surveillance.

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
PUBLIC HEALTH				
Emergency Preparedness, and Response, and Recovery	<p>PHAs facilitate improvements in coordination, preparation, response, and recovery by non-profits and the business community.</p> <p>PHAs use gaming activities to improve preparedness, minimize costs and impacts of environmental disasters, and help community groups imagine and practice “emergent” roles in disaster response.</p>	<p>Communities are under-prepared for physical and mental health impacts. Frequently ineffective responses to emergencies due to low funding, overworked staff, inability to analyze real-time data, and poor communication and coordination among organizations and residents.</p>	<p>PHAs use simulations and gaming activities to improve environmental monitoring, preparedness, and ensure effective response and recovery aid for vulnerable populations.</p>	<p>PHAs work with social networks and technologists to automate monitoring, improve preparedness, and ensure effective response and recovery aid for vulnerable populations.</p>
Environmental Protection, Climate Change	<p>PHAs focus on resilience, adaptation, and mitigation for extreme weather events and climate-induced disease outbreaks.</p>	<p>PHAs work to prepare for and mitigate the physical and mental health impacts of climate change.</p> <p>PHAs are often unable to recover from damages to PHA buildings caused by extreme weather events.</p>	<p>PHAs promote sustainability practices, use environmental health promotion to build community resilience, and prevent and mitigate emergencies.</p> <p>Environmental resilience, sustainability, and mitigation are integral parts of local, state, and federal policies.</p>	<p>PHAs promote sustainability practices, use environmental health promotion to build community resilience, and prevent and mitigate emergencies.</p> <p>Environmental resilience, sustainability, and mitigation are integral parts of local, state, and federal policies.</p>

PUBLIC HEALTH				
	Scenario #1	Scenario #2	Scenario #3	Scenario #4
Environmental Health and Safety Inspections	Increasingly automate inspections and/or conduct through private sector companies. PHAs provide quality control and improvements. Smart apps speed up and integrate data, results are public, and for restaurants, included in consumer ratings.	Increasingly automate inspections and/or conduct through private sector companies. PHAs focus on mandated inspections, regulation.	Increased self-regulation among licensed and inspected businesses and institutions as inspection automated. PHAs provide quality assurance of the system and compliance; link this data to consumer rating services. PHAs use licensing process to also enforce labor and wage protections, environmental regulations.	Increased self-regulation among licensed and inspected businesses and institutions as inspection automated. PHAs provide quality assurance of the system and compliance; link this data to consumer rating services. PHAs use licensing process to also enforce labor and wage protections, environmental regulations.
Injury and Violence Prevention	Health care provides universal screening for intimate partner violence. Technological innovations in design and monitoring reduce overall rate of unintentional injuries. PHAs move away from one-on-one services (e.g., in child safety seat education) to population-level education; and expand focus on elder violence. Rates of violence continue to be closely tied to poverty, race, education, and geography.	Cuts to health care and safety net services for vulnerable populations, and injury and violence prevention programs. Economic and environmental challenges drive growth in prevalence of depression, homelessness, substance abuse, violence, and crime. PHAs increase reliance on law enforcement to control and prevent injuries and violence.	Debate on violence prevention and control reframed to a population-level discussion. PHAs more strategic in promoting community programs with local non-profits, faith-based organizations, businesses, and school systems. PHAs provide population-level education and assist school districts in enhanced violence prevention programming. “Smart design” movement and technological innovations improve product safety.	Schools, faith-based institutions, local businesses, state and local agencies integrate injury and violence prevention into strategic planning, business practices, and policies. PHAs assure population-level education, and work with communities to change cultural norms. PHAs assist school districts in designing and coordinating the most impactful educational efforts, including mentoring, tutoring, or after school programming.

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
PUBLIC HEALTH				
Chronic Disease Prevention	PHAs guide community benefits investments to address housing, education, neighborhood safety, physical activity, and access to food. PHAs research social dynamics of networks, find ways to “nudge” them for better health.	Chronic illnesses become more prevalent. PHAs work to counteract negative influence and misinformation relevant to chronic disease prevention propagated via social networks.	PHAs target highly sophisticated and effective messages and interventions to improve community health. PHAs monitor, facilitate the growth of urban gardening and other activities to improve nutrition and physical activity.	PHAs promote the integration of chronic disease prevention throughout communities, into strategic planning, business practices, and policies. Assist communities in designing and coordinating the most impactful changes.
Health Equity Promotion	PHAs work to institutionalize a health equity focus throughout their units. Goals for certain indicators (e.g., infant mortality, vaccination) are shared across departments.	PHAs remain committed to health equity but can do little to reverse the growth of health disparities. Private sector innovations overlook the needs of the most vulnerable members of society.	PHAs lead other state and local agencies to incorporate equity metrics and goals into their strategic planning, business practices, policies. PHAs push for community-level interventions (e.g., mixed income neighborhoods, transit-oriented neighborhood development, community development); and entrepreneurialism, job matching and training programs.	PHAs monitor programs, partnerships and innovations for quality, cultural competence, equity in access, and effectiveness in community engagement. PHAs push for community-level interventions; and entrepreneurialism, job matching and training programs.
Evaluation, Return on Investment (ROI) and Effectiveness of Public Health Interventions and Programs	Good ROI and effectiveness shown for behavioral programs and interventions, as well as strategies addressing social determinants of health. Help stabilize funding in fiscally healthier cities, states.	Good ROI and effectiveness outcomes are available for some PHAs, but ignored in program cuts. Many PHAs have low effectiveness, little or no ROI. Most PHA and community programs are not evaluated.	PHAs drive consistent evaluation of interventions and programs. PHAs model and explore ROI and effectiveness prior to implementation. Success of public health programs and high ROI contribute to passage of 2% medical services tax.	PHAs drive consistent evaluation of interventions and programs. PHAs model and explore ROI and effectiveness prior to implementation. Where community partners are more cost-effective, PHAs pass programs to them.

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
PUBLIC HEALTH				
IT and Informatics	<p>Cloud-based and secure.</p> <p>Most PHAs keep pace with “big data” analytics, using it to target community needs, monitor trends, and make better forecasts.</p> <p>Smaller PHAs, if they have the funds, rely on private contractors and local ACOs to provide big data analyses.</p>	<p>Poorly maintained, unsecure, and cloud-based.</p> <p>Most PHAs don’t have staff or funds to do big data analytics. Most rely on private care providers.</p>	<p>Cloud-based and secure.</p> <p>PHAs utilize big data analytics to enhance surveillance, assessments, and evaluations.</p> <p>Networked PHAs improve planning and policymaking, and rapid learning.</p>	<p>Cloud-based and secure.</p> <p>Utilize big data analytics in surveillance, assessments, and evaluations.</p> <p>Networked PHAs improve planning and policymaking, and rapid learning.</p>
Accreditation	<p>Pursued by most PHAs, proves useful in grant seeking, and improves agency-to-agency comparability and recurring quality improvements.</p> <p>Consistency aided by uniform chart of accounts</p> <p>PHAs can use up to 5% of federal funding for accreditation costs.</p>	<p>Most PHAs cannot afford the fees or are unable to provide all the services required to meet the standards.</p> <p>Uniform chart of accounts not uniformly applied across PHAs.</p> <p>No federal funding support for accreditation.</p>	<p>Most PHAs become accredited.</p> <p>Accreditation standards include equity.</p> <p>PHAs can use up to 10% of federal funding for accreditation and building foundational capacities.</p>	<p>Most PHAs become accredited.</p> <p>Accreditation standards include equity, environmental responsibility and sustainability measures.</p> <p>PHAs can use up to 10% of federal funding for accreditation and building foundational capacities.</p>