Summary Report of the National Workshop *Primary Care 2025: A Scenario Exploration*

Held in Alexandria, VA

on September 19-20, 2011

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THE KRESGE FOUNDATION

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Introduction

Leaders from across the nation met to explore alternative futures of primary care and develop recommendations. They realized that the opportunity to shape a better future is here now. They explored a likely future for primary care that is neither healthy nor affordable, an even worse future indicating a failure of primary care that will make the future much more desperate, and two futures where primary care evolves and improves, enabling a far healthier America with affordable care that other nations will want to emulate. This report identifies the discussion of the participants in exploring the scenarios and the recommendations they developed. The recommendations focus on four areas related to primary care: Health Professional Education, Individual & Community Capacity and Accountability for Health, Technologies of Health, and Population Health. A fifth area, Maintaining Our Global Edge and Securing Our Children's Future by Enhancing Health, deals with larger political and cultural approaches to using health as a focus for enhancing economic and social well being.

Background

On September 19-20, 2011 the Institute for Alternative Futures (IAF) held a national scenario workshop in Alexandria, VA on the future of primary care with health care leaders from across the U.S.. The Kresge Foundation awarded IAF a grant to develop scenarios describing the alternative futures of primary care in the U.S. in the year 2025. Using its "Aspirational Futures" approach, IAF developed four scenarios based on forecasts of key drivers shaping the future of primary care; conducted interviews with 56 leading experts in primary care; facilitated focus groups with a range of health care provider organizations that considered primary care in their settings and organization in 2025; and consulted an advisory committee of particularly knowledgeable and experienced individuals from health provider organizations, the health professions, policymakers, and academic experts. The scenarios describe three zones: 1) the "zone of conventional expectation" (the expected or most likely scenario); 2) the "zone of growing desperation" (a challenging scenario), and 3) the "zone of high aspiration" (two surprisingly successful or visionary scenarios). At the scenario workshop, IAF presented these likely, challenging, and visionary futures for primary care. Participants used the scenarios as tools to explore potential futures, strategies, and recommendations. This Workshop Summary Report provides the highlights and insights that emerged from the workshop discussions. The full scenarios will be available on the IAF website soon at www.altfutures.org/primarycare2025.

Scenarios and Key Insights

After receiving an overview of the scenarios, workshop participants broke into four groups, with each group "stepping into" one of the scenarios and exploring the implications for various stakeholder groups. A few of the highlights from the scenarios are identified below, followed by the "signposts" (events or new media headlines) that would indicate that we are headed toward this scenario, and then the major implications of the scenario.

Scenario 1: Many Needs, Many Models

The "most likely" scenario from the "zone of conventional expectation"

Scenario Highlights

- Healthcare accounts for 19% of GDP in 2025, reflecting the growing morbidity in an aging society.
- The expansion of the patient-centered medical home (PCMH) model and the adoption of sophisticated electronic medical records (EMRs) systems improve the quality of primary care
- Federal and state leaders adopt strategies to promote prevention
- Employers reduce their health insurance rolls, with employees using the exchanges to buy health insurance, including many seeking high-deductible catastrophic care plans
- Primary care teams broaden and nurse-managed health centers expand.
- While primary care improves in aggregate, disparities persist among some poor, minority, and rural populations

Signposts leading to this Scenario

- If a border state like Arizona experiences a second large TB outbreak
- If health improves but high healthcare costs persist
- When half of all payments are performance-based
- If the nation's health cost increases start slowing—but not enough for health care to be affordable
- Disparity between primary care and specialists income diminishes
- Access to preventive screening improves 25% within a decade
- Patients still want Marcus Welby, MD
- Social health networking grows and contributes to improving health status
- Growing acknowledgement that social determinants of health matter to fiscal policy makers
- Financial successes in ACOs
- Increased vulnerability of underserved

Increasing arbitrage through domestic medical travel through which cherry-picking allows the best-funded systems to attract patients for the most lucrative procedures

Implications of Scenario 1 – Many Needs, Many Models

This scenario entails a more sophisticated consumer population with more effective self-management. Patients will need to be able to safely share an increasing amount of data than they currently do and can. Government regulators will need to have tools for risk assessment and harm mitigation for vulnerable populations. We will require improved tools and proper provider management of patients' confusion and expectations to avoid intensifying disparities between patients.

Providers in partnership with patients will need to provide health care in concert with team members and consultants. Educators and employers will need new workforce training designs based on the "team concept". Even though there may be some improvements in the quality of providers' professional life (e.g., work-life balance, salary, and professional satisfaction), it will not be enough to offset the negative impacts under this scenario. There will be an increased demand on

providers in an accountable framework that is not matched with adequate resources. CMS and other government payers will find themselves in the same situation as now in terms of costs, and there will be a greater need for them to perform an "anti-trust" or oversight function.

The need to assure privacy of patient data and the widening population coverage will create more demand without a parallel increase in provider resources. Shortages of healthcare providers will persist and lead to re-engineering of how primary care will be delivered. All providers will be performing at the top of their license, and a proliferation of midlevel providers will mitigate some of the workforce pressures. Even though health cost growth will slow, it will not be enough to close deficits. Policy makers will begin to recognize the value of the social determinants of health in truly bending the cost curve.

Scenario 2: Lost Decade, Lost Health

The "challenging" scenario from the "zone of growing desperation"

Scenario Highlights

- Recurring economic challenges prompt significant cuts in Federal healthcare spending
- Payment reductions leave many providers ever more dissatisfied. Many retire as soon as they can (many can't). Shortages in primary care providers leave many insured without access to actual care
- Integrated and semi-integrated systems become the provider of choice for urban, middle-class consumers and those with access to community health centers
- Fee-for-service primary care providers split between "concierge" practices for the rich and "minute clinics" for the poor
- Many uninsured Americans turn to online primary care solutions of variable quality and pedigree

Signposts leading to this Scenario

- Decreased life expectancy (people dying in the streets)
- AMA disbands Washington lobbying
- Populist movements polarize left and right further to make political instability worse
- Increases in the Medicaid rolls
- People with expensive diseases die without treatment

Implications of Scenario 2 – Lost Decade, Lost Health

The demand for services overwhelms the supply of providers and available resources in this scenario. Communities will need to address health because neither the public nor private sectors provide effective or affordable responses. Fewer people will go into medicine because they cannot afford the tuition and as the medical workforce shrinks and becomes less diverse, the nation will have no excess capacity to manage public health disasters such as a major flu epidemic.

Large provider systems will give way to local concierge and community care models. Minute clinics will expand for those who can pay because insurance will cover only catastrophic expenses. Free

clinics will face overwhelming numbers of people who cannot afford care. Providers will be practicing to the top of their license and there will be efforts to offload care to lower-cost providers. Physicians will be under the greatest risk for pay cuts, which may make them more likely to retrench and become more protective of their turf. This scenario favors nurse practitioners and physician assistants because they are paid less and can provide services to a greater volume and variety of patients. Similarly, the role of community health workers will expand.

In terms of government, power will decentralize to the state level. The VA system will become dysfunctional as it runs out of money. CMS will need to repeatedly cut payments. NIH and research in general will decline and the U.S. will lose its dominant position in medical research. State governments will struggle to deal with the increased Medicaid population, limited funds, and shortage of providers. There will be a return of bartering for care ("Cabbages for CABGs"), and morbidity and mortality rates will rise. To reduce deficits, entitlements will need to be cut back and state governments may consider moving more prisoners out of prisons. However, while some state governments will have the political will to optimize resources for health care, others will be whipsawed by special interest groups and waste money on lower value care.

Scenario 3: Primary Care that Works for All

A "surprisingly successful" scenario from the "zone of high aspiration"

Scenario Highlights

- Policy-makers actively pursue the "triple aim" of improved patient experience, reduced cost, and improved population health
- The PCMH evolves into the Community Centered Health Home that focuses on the individual and the community while effectively leveraging the social determinants of health at the community and neighborhood levels
- Primary care team expands to include social workers and community organizers
- Advanced knowledge technologies and community mapping identifies and remediates "hot spots" of ill health
- Payment systems use sophisticated statistical methods and apply the decision principle, "If it's smart, we'll pay for it." Most payments are capitated with additional rewards for improved health outcomes

Signposts leading to this Scenario

- ACA stands and develops through effective implementation, including payment reform
- Healthcare provider education becomes more inter-professional, particularly in clinical training
- PCMH/CCHH models actually do improve income for primary care providers and bend the cost-curve
- Pockets of high-performance health care providers get spread across the system
- Cost shifting avoided; overall costs decrease
- Increased focus on patient accountability
- Surgeons begin doing primary care

Implications of Scenario 3 - Primary Care that Works for All

Under Scenario 3, the primary care providers play a more central role in health care. Specialists will no longer operate outside the purview of the patient's care team or make independent recommendations on therapies. Relationship management will be the key to primary care, and while technology will be important to care delivery, a human – though not necessarily a physician—will manage the care. Patients and citizens will be responsible for their own health, but will live in communities that support healthy living. The government will play a role in creating these healthy communities (e.g., building sidewalks/infrastructure, ensuring public safety and effective education), but different champions will come forward to lead the efforts in diverse communities. Community-level data will be widely used to identify opportunities to improve health. Health care funding will be capitated based on population demographics and needs as shown by community data. Health savings will be returned to the health system to strengthen the infrastructure and be considered investments in health. The new information infrastructure will promote efficiency and accountability in primary care practices. Success will depend on primary care providers and patients working together with the specialist community so rifts do not form and the public does not see changes in primary care as just another iteration of the managed care that constrained access and became so unpopular in the 1990s.

Scenario 4: "I am my medical home"

A "visionary" scenario from the "zone of high aspiration"

Scenario Highlights

- Advanced knowledge technologies allow self-care to take over many functions of primary care
- Consumers buy health-related products and services through competitive markets that offer high transparency of costs and quality; health costs are significantly reduced
- The insurance market divides between consumer directed health plans and integrated health systems, with some remaining fee-for-service options
- Integrated health systems provide a whole package of care services, including primary care, procedures and hospitalizations as a single entity with competitive annual fees.
- Demand for professional primary care providers declines

Signposts leading to this Scenario

- Health insurers begin to pay for knowledge technologies that displace medical appointments
- Direct to consumer genomic testing gets sold with low price points and high clinical utility for specific conditions
- Retail care delivery platforms – WalMart, Safeway, etc.—experience major growth
- FDA liberalizes OTC drug policy; allowing more easy shift from Rx to OTC status
- Employee wellness programs include Dr.Watson (health coach) technology with training for optimal self-care
- Insurers regulated to so their coverage and payment plans produce better outcomes
- Percentage of GDP spent on healthcare falls significantly
- ACO's return 10% back into the community

- CMS Innovation Center funds 5 pilots for "I am my medical home pilots" – that work
- Medicare Account-based Plan launches incentives for beneficiary health engagement

Implications of Scenario 4 - "I Am My Medical Home"

Scenario 4 will require a transformation of health professional training and our basic health education of the public. State licensing and scope of practice issues will need to be addressed as well, including licensure of facilities."Health", particularly self-management and self-care, will be brought back into primary education, and new quasi-providers or trusted agents (e.g., "competent patients", "patients like me") will become available and linked to existing medical professionals. To accommodate this shift, delivery and utilization models will need to be re-engineered from top to bottom, and CMS will need to adjust payment to embrace appropriate technology applications for better consumer and patient education and engagement. CMS will also need to align GME and training guidelines to enable providers at all levels to deal with the emerging technologies. With the role of technology in this scenario, however, there is a risk that it will undermine the desire of practitioners who go into primary care seeking relationships or to provide "high touch" services.

For providers, there will be a profound mainstream change in their core roles and training. The nursing profession, with "caring and education" as its core, takes on increased importance in this scenario as nursing as a whole will move into care delivery directly rather than remain in a supporting role. More generally however, practitioners of all types will have to practice at the "top of their license" as lower level services are taken care of by new technologies. The definition of the "team" will need to expand to include mental, behavioral, and oral health providers. Providers will also need to be trained in different communication skills with particular emphasis on behavior change support. We will also need to consider training existing or new types of medical professionals in how to manage particularly complex patients within a delivery model that emphasizes self-care (the "complextionist"). We may also need best practice "career transition paths" and retraining for specialists to evolve into primary care-like or -focused specialty condition providers (e.g., surgeons who focus on weight loss as it relates to bariatrics).

Effective design including Anti-trust protection will need to be considered for providers of information, insurance, and care delivery to ensure effective data aggregation, ratings of health care providers, patient security and discrimination protections. There will be major expansion of retail and alternative delivery platforms. The FDA will liberate over-the-counter pharmaceuticals in order to improve patient access. And there will be tension between social media and network forces that provide advice that undermines "evidence-based medicine" and "guidelines".

Synthesis

Participants listened for implications and recommendations that were common to multiple scenarios. These included:

- It is essential to design a new payment system (payment reform)
- We need to create a smarter patient who can work their way to health

- Following the money will demonstrate where resources are not being utilized effectively so that the cost of health care can be reduced
- It will also be crucial to advance policies to promote population health as well as to address the social determinants of health successfully
- Health care will be provided by health care teams whose members include a variety of health care specialists: physicians, nurse practitioners, physician assistants, mental/behavioral and oral providers, pharmacists, physical therapists, CAM providers, social workers, community health workers, and IT specialists. It will be necessary to prepare providers for working in such teams
- The use of advanced technology is an important component in all four scenarios. It will be necessary to prepare primary care providers and consumers/patients to embrace and effectively use technology that enables health
- Given the tsunami of chronic illnesses we are facing, it will be necessary to determine the most effective prevention and treatment approaches and particularly cost effective preventive methods that work for all.
- All scenarios will require population-focused marketing through all forms of media and other mechanisms to promote health and help in making good decisions. This marketing may best be directed towards one of the key levers for change – women, who tend to make most of the health decisions in the family.

The elephant in the room is the polarization of the body politic. All the scenarios will need the body politic to come together and not be obstructionist. Engaging this sector in dialogue will require neutral ground to bring about consensus across the political spectrum through inner space negotiation. This change will have to come from a broader group of sectors as it may not be successful if it comes from health innovators alone. The non-communicable disease summit that was held at the UN on September 19-23, 2011, (during our Primary Care 2025 Workshop) stressed that 63% of the preventable diseases are life-style related and have to do with tobacco use, unhealthy diet, and insufficient physical activity, all of which have little to do with the health delivery system. If primary care is to make a difference, it will need to pay attention to these variables.

Likelihood and Preferability of the Scenarios

Participants estimated the likelihood and preferability of each scenario separately on a scale from 0 to 100%. In IAF's Aspirational Futures approach, Scenario 1 is constructed to be the "best estimate" extrapolation of current trends and therefore should be ranked most likely. Scenario 2 includes many challenges, whereas Scenarios 3 and 4 depicted surprisingly successful and visionary pathways. In voting on the likelihood of the Primary Care 2025 Scenarios, participants agreed that at 48% Scenario 1 was the most likely among the four. However, Scenario 2 (Lost Decade, Lost Health) was thought to be almost as likely at 46%, which shows the profound uncertainty for the future direction of health care and the challenge of potential cuts in health care spending. The visionary scenarios were thought to be far less likely – Scenario 3 (Primary Care that Works for All) at 30% and Scenario 4 ("I am my own medical home") at 25%.

Primary Care 2025 Scenarios: Likelihood & Preferability Polling		
	Likelihood	Preferability
1. Many Needs, Many Models	48%	25%
2. Lost Decade, Lost Health	46%	7%
3. Primary Care that Works for All	30%	68%
4. "I am my medical home"	25%	50%

In terms of preferability, Scenario 3 and 4 are visionary or "surprisingly successful" futures for primary care. Obviously, the future is uncertain and it would be wise to consider the challenges depicted in Scenarios 1 and 2, but strategy needs to be directed toward the more successful and visionary pathways that are found in Scenarios 3 and 4 to enhance primary care in the years to come. Planning only for the most likely future tends to reinforce that future. Such planning is a suboptimal use of energy and resources. The role of visionary scenarios is to identify potential pathways to better futures. The discussion of robust strategies below gives a better sense of strategies that would yield better futures for primary care.

What Surprising Success in 2025 for Primary Care Could Look Like

Having considered the scenarios for Primary Care 2025 participants finished the first day by reflecting on their preferred future for primary care, identifying what surprisingly successful primary care would look like. The reflections were discussed and then synthesized overnight into the following statement:

SURPRISINGLY SUCCESSFUL PRIMARY CARE 2025

Primary care providers feel they are making a difference in community based health care. While advanced knowledge, technology, and virtual care proliferates, community members feel a part of a system they value as it consistently benchmarks and incentivizes communities for health gains. The communities know the numbers as they work in economic regions to align incentives around their infrastructures. Health becomes the national interest and a part of community resilience. This is a wellness economy in which health is a community asset.

Recommendations and Robust Strategies

The following recommendations for strategies and actions to pursue beginning in 2011 will direct the momentum in primary care beyond the most likely future to more successful futures. The recommendations focus on four areas related to primary care: Health Professional Education, Individual & Community Capacity and Accountability for Health, Technologies of Health, and Population Health. A

fifth area, prompted by the challenging yet all too possible scenario of Lost Decade, Lost Health, focus on larger political and cultural recommendations.

One benefit of considering this wide range of alternative futures is that some strategies emerge that will be effective no matter what the future holds. These "robust" strategies are listed below because they will advance primary care in multiple scenarios:

Health Professional Education

1. **Re-Prioritize current governmental funding of health professions education.** Currently, funding is all in the form of graduate medical education (GME) focused on physicians (residencies and internships). GME funding must be expanded so that the present level of primary care physicians can be maintained or expanded, while supporting the training of an expanded number of nurse practitioners, physician assistants, and others. Funding is funneled through CMS (Medicare) and some states fund through Medicaid; HRSA provides grant funds to MODVOPP schools (medicine, osteopathic medicine, dentistry, veterinary medicine, optometry, podiatry, and pharmacy) and CHCs. There is little or no funding from CMS for physician assistants, nurse practitioners, nurses, and others. Thus the specific recommendations are to:

    - Change the distribution of expanded funds to support the full range of primary care team members and vary training location to include primary care settings.

    - Identify opportunities to reduce the costs of medical school and other health professions schools.

    - Remove regulatory barriers to executing flexible GME training programs and expand training venues. Address several of the limitations that currently exist within CMS rules for expanding applications of Medicare GME funds to non-hospital care sites. Also, invite CMS to use its authority to fund innovative GME demonstration projects.

    - Explore adding additional payers who benefit from having an increased supply of primary care providers, including foundations, public and private organizations, private insurers, partnerships, and corporations.

The funds that are now concentrated for GME training in hospitals need to be redirected to give priority to the nation's needs in terms of the primary care health professions workforce. The Teaching Health Center program, administered by HRSA exemplifies this recommendation, but the funding ends in 2015. The time limitation and restrictive eligibility requirements make the program difficult to administer. This type of program should be expanded.

Approximately 0.1% of Americans in an average month receive health care at an academic referral center, yet the training is concentrated there. Meanwhile, 11.3% of Americans visited a primary care physician's office each month. Outpatient primary care is vastly different from that given in tertiary

academic centers.[1] This reallocation toward primary care training requires addressing GME training requirements, admission criteria that favor students oriented to primary care in rural and inner city settings, and altered faculty and infrastructure designs for residencies (e.g. allow physicians to be taught and supervised by nurses, midwives and/or pharmacists in clinical settings).

Changes to the health professions education curriculum

2. **Implement a team-based and team-oriented curriculum**. Develop and implement guidelines for a new, clarified model of care that covers leadership, roles, "boundary busting", necessary skills and evidence-based competencies for interdisciplinary and patient-centric training approaches. The accreditation and standard setting organizations related to medicine, osteopathic medicine, chiropractic, nursing, and physician assistants must enable and require these approaches so that relevant deans can implement such a curriculum and get support from professional organizations.

    - This inter- and intra-profession focused training must provide all health professionals the capacity to deal with the current and emerging information environment and technologies (including active electronic medical records, personal health records, biomonitoring and new vital signs, digital health coaches, outcome measures and transparency of outcomes and results.)

    - Develop funding that supports inter-professional education.

The role of the health professions in the community

3. **Expand role of health professions in the community in health professions curriculum** to include aspects of population health as described in recommendations 5 (Support "community resilience), 14 (Community health solutions) and 15 (Regional health systems) below. The goal is to tie health professions education to community health and pipeline issues, including teaching health professions students how to best engage the community and how to leverage the social determinants of health.

Individual & Community Capacity and Accountability for Health

4. **Enhance Self-Management** – We want to create an environment in patient-centered medical homes and primary care settings where patients are actively involved in self-management and shared decision-making with providers ("no decision about me, without me"). To encourage a sense of ownership on the part of patients and improve health outcomes we recommend:

    - **Enhancement of consumer education at an early age** – We need enhanced health education self-efficacy in the primary schools (grades K-12) to expand consumer health assessment capabilities in order to improve their choices. This will be tied to advanced technology that provides personalized support and will democratize the knowledge (see community resilience).

[1] Erik J. Lindbloom, MD, MSPH,* Bernard G. Ewigman, MD, MSPH,† and John M. Hickner, MD; The Laboratories of Primary Care Research, Medical Care • Volume 42, Number 4 suppl, April 2004. http://www.ohsu.edu/orprn/about/director/articles/MedCare04_PBRN.pdf. Accessed: 10/10/2011

- **Self-management plans** – Encourage patients and primary care providers to develop and track self-management plans together.

- **Measuring decision quality** – Develop, validate, and deploy "decision quality assessments" for all preference-sensitive decisions. It is not possible to manage and promote good decision-making if we do not have sufficient and adequate decision quality metrics. We need much greater and faster transparency across quality of outcomes at the medical service level, not at the health insurance premium level. These metrics are currently lacking.

- **Patient Activation Metrics** – Develop, validate and deploy patient activation assessments for key health risk behaviors. The patient plays an important role both in determining care (e.g., involvement in care plans and treatment decisions) as well as in terms of lifestyle and health behaviors. Primary care should be able to provide effective support in both arenas, including tracking and measuring, not just attitudes toward behavior change, but the behavior change efforts themselves. For example, we know that success in behavioral change is greatly dependent upon having a goal and someone to monitor how well the patient is progressing toward that goal. Some metrics are already available for this activation, but they need to be validated and enhanced.

- **Value-based and consumer-directed benefit designs** – Insurers and employers should develop and deploy value-based and consumer-directed benefit designs which identify and reward self-management and care engagement behaviors such as setting and reaching goals for health improvement, chronic disease management and shared decision-making with providers across the care continuum. According to a survey conducted by the National Business Group on Health of employers for 2012 benefits, 73% of large employers will deploy a consumer-directed health plan and 17% will have or move to a total replacement consumer-directed health plan.

5. **Support "community resilience**" by implementing community-based, community-focused health education

    - **Health education in K-12.** Health education in primary through secondary education should educate students about health, healthy eating, self-care, and physical activity as well as community health factors such as complete streets, community engagement, community supported agriculture and elimination of food deserts, reduction of social isolation, violence prevention, and civic engagement.

        - Directly bring health professional students and their faculty in contact with the K-12 population to partner in building healthy communities and to create informal and formal mentorship activities.
        - Develop community boards to make basic decisions about priorities and empower them with the ability to allocate some aspect of health care funding to providers, hospitals, and other institutions to support those goals.

- **Promote recruiting health professionals from the community.** The health professions pipeline should be more widely used to increase health professionals who will serve their community. Local communities should become the source of health professionals who care for members of those communities. Area Health Education Centers (AHECs) and related organizations should promote this pipeline cycle and mindset.

Technologies of Health

High Tech for Personal Health Informatics

6. **Fund small business innovation research processes (merged with DARPA-like visioning) devoted to innovation in technology** to provide new vital signs, biometrics, dynamic personalization, virtual visits, automated coaching, genomics personalized medicine, and personal health informatics platforms. Innovations that allow providers to maximize patients' self-care can in turn help them provide health care services at lower cost and increase the competitiveness of the businesses where those healthier workers are employed.

7. **Provide portable personal health records and related health education and choice services for all.** Incentivize through employers, health plans, and delivery system the creation and ownership of a core personal health record by all Americans of all ages (similar to the existing "continuous care document" used to transmit patient clinical summaries from one provider to another). This will better inform, engage, empower, and hold accountable consumers and patients to improve their health. New technologies that will allow Americans to share information from their personal health record with their provider-based electronic medical record will more rapidly improve health and could help lower cost.

8. **Advances in information technology should be evidence based, designed to be safe and easy to use for patients, as well as ethical and applicable to a variety of primary care settings.** For community health centers, for example, innovations need to take into account that these organizations serve a culturally diverse and low-income population. Developers must also ensure that avatars or digital health coaches are culturally appropriate, ethical, and provide the most effective and age appropriate information. And development of these technologies will need to balance high touch and high tech, between human relationships and effective technology for primary care to create successful models.

Low Cost Genome & Epigenetics, and What It Means to You

9. **Accelerate the trend toward low-cost genome and epigenetic testing and educate the public on their value and use**. The genome and epigenetic knowledge will be an important component of self-care as they will help patients know their risks and manage them. One's genetic information is the blue print for risk of many illnesses, the list of which continues to grow. We are already on track for mapping of the genome to cost less than $300 in the next 3-5 years. As the cost declines and it is shown to be effective, it will be possible to make that kind of testing available to all patients.

Patients and the public will need to be educated on the use of this information particularly in knowing one's probable risks.

Interoperability and Portability

10. **The federal government should accelerate and assure data portability and interoperability by creating a standard platform that can support research and innovation** (e.g., the application programming interface underlying Google maps and its ease for developers to build on it). Individual care and empowerment requires access to integrated and portable data, and population health requires a population level view of all these data.

11. **The federal government, state government, health care providers, and vendors must assure security and discrimination protections related to emerging personal health information.** While there are some protections in place, particularly GINA (Genetic Information Nondiscrimination Act), they lack enforcement mechanisms and related resources. GINA needs enforcement "teeth" to gain power and authority for validation and enforcement. As genomic data enters medical records, it may become harder to have de-identified data for certain applications. This makes security and discrimination protections more urgent.

Population Health

Resources for working in population health and includes the social determinants of health

12. **Leverage potential new resources under the Affordable Care Act (ACA) for population health work.** Population health considerations must inform primary care in order to begin to improve outcomes. Population health refers to the health of the community – not simply the health care provider's panel. The resources made available by the ACA for population health, and the growth of the Triple Aim that counts increased population health as one of the 3 major aims of health care, are part of a growing trend toward a broader focus for health care quality. The resources included in the ACA should be leveraged for the benefit of the community and public health, including portions from profit margins of Accountable Care Organizations and insurance companies. Funds may also be available from the population health focus of the CMS Innovation Center.

13. **Advance informatics should include more data that reflects population health.** There is an opportunity in information technology to use data from Electronic Medical Records and public health to enhance population health. Additionally the patient-centered medical home model can be used to integrate community health records to advance population health metrics. This integration process has begun, however, it is necessary to build infrastructure, expertise, assurance and policy for conscious and effective integration of population health data and its interpretation along with patients' privacy, security and discrimination protections. Innovations are needed in design and development of these systems as well as business models and policies to sustain the process.

Expanding and exploring population health activities

14. **Support "communities of solution" collaboratives.** Borrowing a phrase from a 1966 report by the National Commission on Community Health Services, this is a recommendation for supporting profound and authentic community engagement. "Communities of Solution" are essentially large, community-wide collaboratives including primary care, healthcare, public health and other key community stakeholders (including business, community based organizations, academia, and media) to engage in issues around how to improve the health of the community. The community health center should be a leader in these efforts to get foundations, community health centers, health systems, and public health working together. The federal government should continue providing resources to communities, including funding and related policies.

    Community transformation grants and sustainable community efforts can become vehicles for community health centers to pursue and innovate around population health activities and share the information with all primary care stakeholders.

15. **Support reforming regional health systems that leverage the broader determinants of health to lower costs and achieve better outcomes.** There are financial incentives for health care providers to go upstream to "leverage the broader determinants of health" in their communities (i.e. in capitated systems incentives to lower overall demand among the patient population; also hospitals have incentives to move upstream to increase health and prevent readmissions). This is a movement that should be encouraged and supported, especially by defining, monitoring, and reporting on community health outcomes.

Political and Cultural Change

The high likelihood of the Lost Decade, Lost Health Scenario prompted a proposal for a very large effort going well beyond primary care in order to improve health in America. When this proposal came as a recommendation from the group addressing the most desperate of the scenarios, its ambitious scope prompted people from the other groups to support the idea and add ideas for a larger effort beyond the traditional boundaries of primary care.

Maintaining our Global Edge

16. **Maintaining Our Global Edge and Securing Our Children's Future by Enhancing Health** – We need to connect with the public in an emotionally meaningful way to mount a social movement and galvanize political will for improved primary care and overall health. For example, U.S. citizens are currently concerned about the economy and the country's world status both for their own well-being as well as that of their children. Many no longer anticipate that their children will be better off than they were. This presents an opportunity for a long-term campaign to promote social consciousness and reset cultural norms toward health and more effective health care. Political, public, media, and medical establishments can be focused to a new national agenda – striving for improved primary care and overall health in the name of "maintaining our global edge, and securing our children's future." This effort may be more successful when approached from the local and state level first.

To achieve this change, we must:

- **Recruit key leaders from different sectors and levels to communicate critical but complementary messages.** This includes leaders in sports, business, religion, education, and medicine, as well as senior states people, women and families, local health leaders both-federal and civilian, and others such as popular talk show hosts and respected public school teachers.

- **Foundations funding population health should form a consortium.** Organizations such as the Kresge Foundation, Robert Wood Johnson Foundation, Gates Foundation, and Pew Foundation have the credibility to bring together key thought leaders to start working on this issue.

- **The White House should elevate the role and authority of the National Committee on Public Health, Prevention, and Integrative Medicine** to coordinate across all of the federal agencies and programs, including health, education, housing, agriculture, and other related areas to establish "health in all policies".

- **Use consistent and clear messaging.** The objective is to create a mindset across society akin to "It's patriotic to be healthy. Ask not what your country can do for your health – ask what you can do for the health of your country." For this purpose, it is important to have leaders and the public speak in the same simple and clear terms. This effort should be a national, bipartisan messaging campaign, much of which may also go under the radar screen for increased effectiveness. For effective messaging:

    - Create and use a nationally reported, publicly understood "American Health Index" with a limited number of easy to understand and meaningful summary statistics that are made available for community, state and national levels. This can help unite the public and stakeholders in primary care in making overall health a shared goal necessary for maintaining our global edge, and securing our children's future.

    - Clearly articulate the link between health and economic prosperity for the public, and use Community Health Rankings to attract businesses. Community health status rankings and "score cards" such as the County Health Rankings, should be used for attracting businesses and innovations into communities.

- **Have the healthcare system support the messaging with concrete actions.**

    - Major health funders and health insurance plans should provide incentives that promote personal and community health.

    - Health professional education should instill this mindset as well as accountability among the current and future healthcare workforce.

    - Provide sufficient healthcare funding to support and promote prevention.

Implications of Recommendations for Each Scenario

Scenario 1 Many Needs, Many Models – The area of recommendation that would have the biggest impact is "Political and Cultural Change", and could potentially move Scenario 1 to 3. "Population Health" is also important and would be accelerated by a disaster scenario like global warming. Changes in GME on a local level can build capacity in the community, and be a door for change in politics and potentially accelerate change. "Individual Capacity and Accountability" is also important but when focusing on the individual and not the population you potentially can exacerbate the disparity issues. "Technology" did not seem like a driver of this scenario and the intervention may cost more than it saves. In some ways, Scenario 1 and 2 are similar in that the system will go broke because we do not have the needed cost controls. What is notable is that Scenario 1 can move into Scenario 2 ("jump off the cliff") or it can move to Scenario 3 ("it can fly").

Scenario 2 Lost Decade, Lost Health – This is a bleak scenario, but when one considers another stressful economic era in our history some answers arise. During the Great Depression ultimately most people supported the common good and contributed to constructive projects. Perhaps we can have a 21st century WPA program were people can be used in new roles and eliminate waste. If smart phone technology becomes ubiquitous, the sexy apps will entice people to follow healthy lifestyles and take better care of their health. When the federal government cuts health spending the state and local leaders have the opportunity to fill that health void with creative ideas: time banking, exchange of services-bartering, "cabbages for CABGs", awards to encourage businesses and other agencies to successfully promote health in their communities. Changing the health education system will promote more efficient and effective use of limited resources.

Scenario 3 Primary Care that Works for All – All the recommendations will be required to create Scenario 3, and with implementation of these recommendations this Scenario will become the most likely future. But are these recommendations sufficient? What is missing is the right type of leadership to bring about transformation. How can we find and train this leadership?

Scenario 4 "I am my medical home" – All these recommendations and more would be needed to get to Scenario 4. The health education component would be needed as related to avatar coaching of patients. For "Individual Capacity and Accountability" we need integrated decision support where the provider and patient have the same data base with checks and balances on data input. Regarding the political culture there were issues of accepting the avatar. We will need to reprogram investment from health providers back into the community. On the "Technology" recommendations, the genomic and proteomic analysis needs to be brought up to the cellular and physiologic level and we need the acceleration of the ethical and legal analysis that goes with these pieces.

Conclusion

The Primary Care 2025 Scenarios identified expectable, challenging and visionary paths for primary care. Participants stepped into these futures, explored their implications and considered their own sense of

what needs to be done to get to their preferred futures. That is what the recommendations represent and they deserve support to build better primary care.

These scenarios and their related forecasts and signposts should be checked periodically to see in which directions primary care is headed. The signposts for each scenario are the beginnings of a list of events to monitor. Typically organizations scan their environment looking for changes. The signposts give particular changes to look for. Every six months or so, it is relevant to ask which of these scenarios appear to be advancing.

The scenarios can become a living tool for strategy formulation, using them to see if current strategies will be effective in the different scenarios. Using these scenarios can help leaders and their organizations adapt to the changing environment more effectively.

The recommendations represent steps to better primary care futures. We encourage organizations and individuals to pursue these and to ensure that you are aware of your preferred future and that you're effectively creating it.

Appendix

Participants

The Institute for Alternative Futures would like to thank the following individuals who participated in the Primary Care 2025 National Workshop in Alexandria, VA, September 19 and 20, 2011.

Michael J. Barry, MD
Medical Director
John D. Stoeckle Center for Primary Care Innovation
Massachusetts General Hospital

Ann Batdorf-Barnes, DO, MPH
Consultant
The Kresge Foundation

Jacqueline Barnett, MSHS, PA-C
Assistant Professor of Health Care Sciences
Physician Assistant Program
The George Washington University School of Medicine and Health Sciences

Andrew Bazemore, MD, MPH
Assistant Director
The Robert Graham Center

Jo Ivey Boufford, MD
President
The New York Academy of Medicine

Fred Cecere, MD
Executive Director
Thought Leadership & Innovation Foundation

David Fukuzawa, M.Div, M.S.A.
Program Director
The Kresge Foundation

Lt. General Bruce Green, MD
Air Force Surgeon General
United States Air Force

Penny Kaye Jensen, DNP, FNP-C
President
American Academy of Nurse Practitioners

Wayne Jonas, MD
President and CEO
The Samueli Institute

Samuel Jones, MD
Director of Residency Program
Fairfax Family Practice- Virginia Commonwealth University

Donald Kemper, MPH
Chairman and CEO
Healthwise

Barbara Krimgold
Director
Center for Advancing Health
Kellogg Health Scholars
Kaiser Permanente Burch Leadership Programs

Joseph C. Kvedar, MD
Director
Center for Connected Health
Partners HealthCare Systems, Inc.

Maryjoan Ladden, PhD, RN
Senior Program Officer
Robert Wood Johnson Foundation

John Mattison, MD
Chief Medical Information Officer
Assistant Medical Director
Kaiser Permanente
Southern CA Permanente Medical Group

William Meeker, DC, MPH
President
Palmer College of Chiropractic – West Campus

Karen J. Nichols, DO, MA, MACOI
Dean
Professor of Internal Medicine
Chicago College of Osteopathic Medicine
Midwestern University

Michael Parkinson, MD
Principal
P3 Health, LLC

Lynn Quincy, M. Econ.
Senior Policy Analyst
Consumers Union

Barbara Redman, PhD
Dean
Wayne State University College of Nursing

Lewis G. Sandy, MD
Executive Vice President for Clinical Strategies and Policy
UnitedHealth Group

Pamela Shaheen, DrPH
Adjunct Professor
University of Michigan School of Public Health
President
Delta Collaborative LLC

Steve Shannon, DO, MPH
President and CEO
American Association of Colleges of Osteopathic Medicine

David Stevens, MD
Associate Chief Medical Officer and Director of Office of Quality
National Association of Community Health Centers

Eric Weil, MD
Associate Chief for Clinical Affairs, General Medicine Unit
Massachusetts General Physician's Organization / PartnersHealth

We would also like to acknowledge the following individuals in their role as technical advisors:

Ahmed Calvo, MD, MPH
Senior Medical Officer
Office of Health IT and Quality, Office of the Administrator, HRSA

Kathleen Klink, MD
Director
Division of Medicine and Dentistry,
Bureau of Health Professions, HRSA

INSTITUTE FOR ALTERNATIVE FUTURES STAFF

Clement Bezold, PhD
Chairman and Senior Futurist

Jonathan Peck, MA
President and Senior Futurist

Eric Meade, MBA
Vice President and Senior Futurist

William Rowley, MD
Senior Fellow

Linda Berry, MD, MPH
Researcher

Yasemin Arikan
Researcher

Patricia Reid
Meeting Organizer