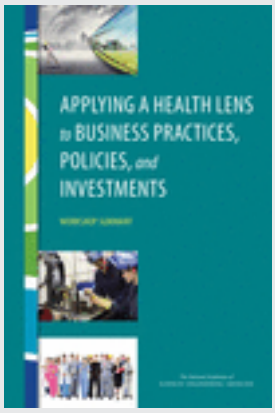

Applying a Health Lens to Business Practices, Policies, and Investments: Workshop Summary

DETAILS

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APPLYING A HEALTH LENS *to* BUSINESS PRACTICES, POLICIES, *and* INVESTMENTS

WORKSHOP SUMMARY

Theresa Wizemann and Darla Thompson, *Rapporteurs*

Roundtable on Population Health Improvement

Board on Population Health and Health Practice

Institute of Medicine

The National Academies of
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This workshop summary has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published workshop summary as sound as possible and to ensure that the workshop summary meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the process. We wish to thank the following individuals for their review of this workshop summary:

Kim Fortunato, Campbell Soup Company
Jeffrey Guzenhauser, Los Angeles Department of Public Health
Emma Hoo, Pacific Business Group on Health
Bill Purcell, Jones, Hawkins, & Farmer, PLC

Although the reviewers listed above have provided many constructive comments and suggestions, they did not see the final draft of the workshop summary before its release. The review of this workshop summary was overseen by **Harold Fallon,** Medical University of South Carolina. He was responsible for making certain that an independent examination of this workshop summary was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this workshop summary rests entirely with the rapporteurs and the institution.

Contents

Acronyms and Abbreviations

ACA	Patient Protection and Affordable Care Act
ACE	adverse childhood experience
BHC	Building Healthy Communities
BIW	Bath Iron Works
BTU	British thermal unit
CCNC	Community Care of North Carolina
CCO	Coordinated Care Organization
CDC	U.S. Centers for Disease Control and Prevention
CRA	Community Reinvestment Act
DEGA	Detroit Economic Growth Association
DEGC	Detroit Economic Growth Corporation
FNV	fruits and vegetables
GSK	GlaxoSmithKline
HUD	U.S. Department of Housing and Urban Development
IOM	Institute of Medicine
NGO	nongovernmental organization

PHA	Partnership for a Healthier America
REDF	Roberts Enterprise Development Fund
RWJF	Robert Wood Johnson Foundation
STEM	science, technology, engineering, and mathematics

1

Introduction[1]

The 2013 Institute of Medicine (IOM) Roundtable on Population Health Improvement workshop *Applying a Health Lens to Decision Making in Non-Health Sectors* discussed opportunities to foster a health in all policies approach in non-health sectors such as housing, transportation, defense, education, and others (IOM, 2014). Much of the discussion focused on public-sector organizations, and roundtable members saw the need for further discussion of the role of the private sector, as both stakeholder and partner. The Roundtable on Population Health Improvement sponsors workshops for its members, stakeholders, and the public to discuss issues of importance for improving our nation's health. On June 4, 2015, the roundtable convened a follow-up workshop focused on applying a health lens to the role and potential of businesses in improving economic well-being and community health outcomes.

[1] This workshop was organized by an independent planning committee whose role was limited to identification of topics and speakers. This workshop summary was prepared by the rapporteurs as a factual summary of the presentations and discussion that took place at the workshop. Statements, recommendations, and opinions expressed are those of individual presenters and participants, and are not necessarily endorsed or verified by the Institute of Medicine or the roundtable, and they should not be construed as reflecting any group consensus.

WORKSHOP OBJECTIVES

Businesses can consider health in their decision making in many ways, said Raymond Baxter, senior vice president for Community Benefit, Research, and Health Policy at Kaiser Permanente. The objectives of the workshop were to

- explore what businesses can offer the movement to improve population health;
- discuss areas of potential, as well as models for how businesses can impact the determinants of health; and
- provide a platform for discussing how to promote and support health in all business practices, policies, and investments.

An independent planning committee, chaired by Baxter, and including Catherine Baase, Maggie Super Church, David Dodson, George Flores, Mary Lou Goeke, George Isham, and Martín Jose Sepúlveda, was charged with developing a workshop to build on the 2013 workshop *Applying a Health Lens to Decision Making in Non-Health Sectors* and to focus specifically on the private sector (IOM, 2014) (see Appendix C). The workshop was also informed by a previous roundtable workshop on *Business Engagement in Building Healthy Communities* (IOM, 2015a). The committee developed a workshop that featured presentations and discussion focused on applying a health lens to decisions made in the private sector. In this context, applying a health lens refers to giving consideration to potential health effects in decision making in different sectors. The committee conceptualized this workshop as a way to bring attention to the huge array of levers that the private sector can pull to improve health and economic well-being in communities. They recognized the importance of moving beyond policy alone to the practices and investments in and by the private sector as important determinants of health. The presentations and discussions in this workshop are framed by an approach that looks for health and the promotion of health in all practices of businesses and other organizations.

There is rarely talk about health in all practices, said Baxter. By looking at their practices through a health lens, he added, businesses can see how they are either positively shaping their communities toward health, or undermining the factors that can improve and promote health. There are opportunities to help companies understand the impacts of, for example, their employment practices, supply chains, procurement practices, chemicals in the workplace, energy and water use, and investments. As employers, they can consider their contribution to the development of the local workforce, and if/how they provide opportunities for communities to be revitalized, with attention to equity and improving health for all.

This workshop was designed, he said, to put a spotlight on the potential for the private sector to leverage its tremendous resources and knowledge to improve the social and economic conditions of communities, and to intentionally affect the social determinants of health.

ORGANIZATION OF THE WORKSHOP AND SUMMARY

The workshop, titled *Applying a Health Lens II: The Role and Potential of the Private Sector to Improve Economic Well-Being and Community Outcomes*, consisted of a keynote presentation on strategies for the private sector to invest in improving population health (Chapter 2), and four panel sessions. The first panel provided examples of how businesses are changing their practices to produce health (Chapter 3); the second panel focused on developing human capital in communities (Chapter 4); the third panel shared two examples of major initiatives focused on revitalizing communities and addressing inequities (Chapter 5); and the final panel discussed examples of how companies are making the link between the workforce and community health (Chapter 6). In the final discussion, participants reflected on the presentations and highlighted key take-away messages (Chapter 7).

In accordance with the policies of the IOM, the workshop did not attempt to establish any conclusions or recommendations about needs and future directions, focusing instead on issues identified by the speakers and workshop participants. In addition, the organizing committee's role was limited to planning the workshop. The workshop summary has been prepared by workshop rapporteurs Theresa Wizemann and Darla Thompson as a factual summary of what occurred at the workshop.

2

Increasing Private-Sector Investment in the Nonmedical Determinants of Health

Private-sector solutions to health thus far have focused almost exclusively on addressing issues of inadequate health care, said Ian Galloway, senior research associate at the Federal Reserve Bank of San Francisco. However, among the main contributors to premature death, inadequate medical care accounts for only about 10 percent. The remaining contributors to early death are environmental exposure (5 percent), behavioral patterns (40 percent), genetic predisposition (30 percent), and social circumstances (15 percent) (McGinnis et al., 2002). In his keynote address, Galloway discussed expanding the role of the private sector beyond medical care exclusively. Although it is understood that affecting the social determinants of health through community interventions reduces the likelihood of downstream medical care, investing in such interventions involves risks, he noted. The key to involving the private sector is to find ways to mitigate those risks, and to demonstrate the benefits to businesses of investing in interventions upstream that can prevent or reduce the need to invest in expensive remediation downstream. He described three examples of strategies for the private sector to invest in improving population health: corporate philanthropy, social/health entrepreneurship, and pay for success contracting. Box 2-1 provides an overview of points from Galloway's presentation.

BOX 2-1
Overview of Points from Galloway Presentation and Discussion

- Private-sector investment in health is being driven forward on three fronts:
  1. Investors who have become enthusiastic about investments that both make money and do good (impact investing)
  2. Evidence-based social programs that solve problems
  3. End payers who are willing to pay for the full value of those problems being solved
- Pay for success, in its basic form, is the idea that an investment upstream will more than pay for itself downstream in terms of reductions in cost.
- The end payment is the sum of all of the criteria that go into a value calculation. It is not just the downstream cost savings that may or may not actually accrue to the coalition of beneficiaries, but what the outcome is worth, such as the value of having a neighborhood of concentrated poverty that does not suffer from lead poisoning.

STRATEGIES TO LEVERAGE CORPORATE GIVING

Galloway described a context-focused approach to corporate philanthropy that leverages the existing business of the corporation, and supports the long-term goals and profitability of that business (Porter and Kramer, 2002). Businesses can make corporate grants that affect their strength, competitiveness, and bottom line in a positive way. One area that corporate philanthropy can influence is "factor conditions." Investments in a common infrastructure, for example, enable business growth for all participants in that marketplace. More specifically, investment in a shared data infrastructure could help an insurer to support its bottom line, while also supporting the bottom line of the health industry as a whole, he explained. A second area strategic giving can influence is "demand conditions." This involves expanding product markets through philanthropy to ultimately increase paid demand for the products in the long run. Product donations, for example, can increase the chance of achieving a critical mass of people using the products, thereby helping to demonstrate to the public their efficacy and the value in purchasing them. Corporate giving can also influence the context for "strategy and rivalry," and help to ensure a common set of rules, incentives, and norms governing competitiveness in the local marketplace. For example, common health impact metrics to which every hospital system and health

provider is held accountable could be used by corporate philanthropy as leverage to make the industry and the marketplace more robust.

SOCIAL ENTREPRENEURSHIP

Social enterprises are businesses that have a social purpose, but are sustainable in the long run because they sell a product that consumers demand, Galloway explained. Social entrepreneurship is a consumer-driven approach to improve health. Sellers in social enterprises develop products that improve long-term health and reduce the need for health care. Buyers of these products are individual consumers, hospital systems, insurance companies, employers, and others. Investors provide the working capital to bring the products to market. These include banks, foundations, and impact and conventional investors. Impact investing is a relatively new concept, Galloway explained, and is estimated to account for about $46 billion in funds under international management (NAB, 2014). He described several examples of impact investing in social enterprises, including Starbucks' Ethos® water, which donates a significant portion of its profits to fresh-water projects around the world, and TOMS® Shoes, which donates a pair of shoes to a low-income family in a developing country for every pair purchased. Impact investors expect both a social return and a financial return, as these enterprises are sustainable and do generate cash flow.

PAY FOR SUCCESS CONTRACTING

The two main elements of pay for success[1] are a performance-based contract and bridge financing.

Performance-Based Contract

In a performance-based contract, a payer commits funding to a social enterprise for producing a successful outcome (e.g., an increase in kindergarten readiness, reduced childhood obesity in a neighborhood of concentrated poverty). The payer (e.g., governments, insurers, employers, hospital systems) is the consumer of the outcome. Payment is based on how much the consumer values that outcome, and the value assessment could be tied to projected cost savings for the payer. An independent impact auditor evaluates program effectiveness and determines whether

[1] Galloway noted that "pay for success" is also referred to as a "social impact bond," and the terms are used interchangeably.

the producer delivered the success as spelled out in the performance-based contract. The payer only pays for the result if it is successful.

Bridge Financing

Because payment is only made for success, this model creates a funding gap for the producer of the outcome. Typically, Galloway explained, when a problem is recognized, a request for proposals to solve that problem is issued to the social sector, and the best proposals are funded. Little discipline is built into this system, he said. Funding is for a limited time period and there is usually no follow-up to determine the success of the program in actually addressing the problem. In a pay for success model, the outcome producer needs working capital today to run its programs for however long it takes to produce the outcome. Bridge financing is provided by investors (e.g., impact investors' banks, foundations, pension funds, endowments) who fund the service provider in exchange for a future success payment. This shifts the risk off the end payer (hospital, insurance company, government) and onto a private-sector investor. The investors bear the risk that success will not be achieved (and that the success payment will not be triggered). The financing terms of these investments vary significantly depending on the context, including the difficulty of achieving success, the track record of the service provider, and the length of the contract. Galloway noted that the shorter the contract, the more appetite among the investors. A very long contract (e.g., efforts to reduce the rate of heart disease by starting in early childhood and tracking people through age 55) will garner little interest. Based on previous experience, he said, there is a "sweet spot" in the 5- to 7-year project range.

Structuring the Deal

As an example of a pay for success contract, Galloway described an early childhood education intervention in Salt Lake County, Utah (see Figure 2-1). Early childhood is critical to long-term development, and disparities as a result of poor early childhood development persisting over the life course (Halfon et al., 2000; IOM, 2000). Galloway noted that the typical approach to addressing early childhood development disparities would be to provide these children with special education upon entry into kindergarten. This is a very expensive remediation, he said, and it is not necessarily the best approach for these children who would otherwise be better suited to a mainstream classroom environment.

Six hundred low-income, 3- and 4-year-old children were enrolled in the Utah High Quality Preschool Program and will have their academic

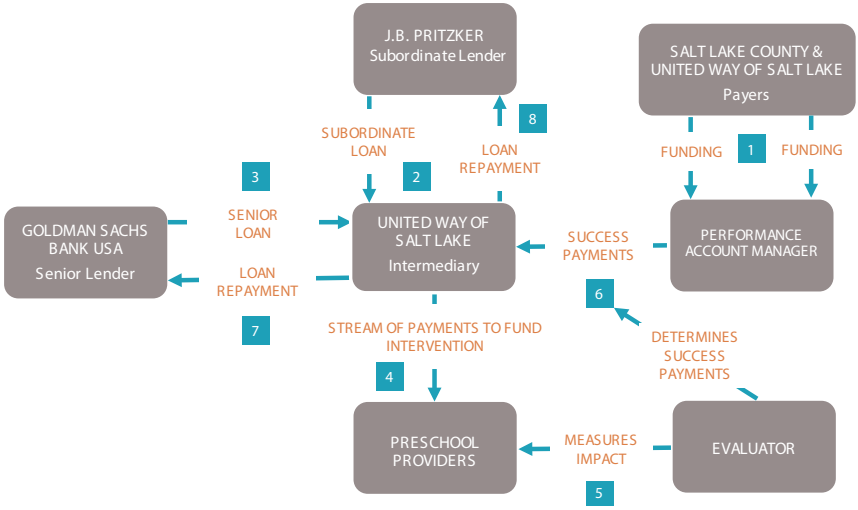

FIGURE 2-1 Early childhood education pay for success intervention, Salt Lake County, Utah.
SOURCES: Galloway presentation, June 4, 2015; Federal Reserve Bank of San Francisco.

progress tracked from grades kindergarten through 6. Children were given the Peabody Picture Vocabulary Test to predict how many were very likely to need special education due to an initial learning disadvantage, and those children who tested two standard deviations below the mean were assigned to the pay for success payment group.

To provide early childhood education to all 600 children (not just those likely to need special education), $1.1 million was raised through a senior loan from Goldman Sachs, and a subordinate loan from J.B. Pritzker, an individual high net worth investor. Galloway explained that the senior loan is paid back first. Then, if money is left over, the subordinate loan is paid back. This means the subordinate investor is taking on more risk relative to the senior investor. The United Way of Salt Lake serves as the intermediary, overseeing implementation of the project and managing investor repayments.

The cost of providing special education is about $2,500 per child per year in the state of Utah. The pay for success contract was structured so that every year of avoided special education, beginning in kindergarten and through sixth grade, triggers a success payment of $2,470 per child plus 5 percent interest to Goldman Sachs and J.B. Pritzker, until both the senior and subordinate debts are fully repaid. At that point, success pay-

ments drop to $1,040 per child through sixth grade. This means the investors receive roughly all of the government savings generated up until the point where they are fully repaid. After that point, the investors split the savings with the state through the end of the contract period. Galloway pointed out that the state of Utah was supposed to be the end payer from the start, but it was unable to pass the appropriation legislation in time. Salt Lake County and the United Way of Salt Lake stepped in to serve as the payer for 1 year, after which the state of Utah did take over and will act as end payer for subsequent cohorts of children going forward.

Moving Forward with Pay for Success

With only seven projects in the United States as of June 4, 2015, pay for success is very new and still unproven, Galloway said. The projects have been relatively limited in scope, targeting prison avoidance, special education, chronic homelessness, and foster care avoidance for children born to homeless mothers. There is, however, support in the United States for the pay for success concept. A $300 million bipartisan bill now pending in Congress would set aside federal funds for technical assistance to develop deals and identify federal agencies as end payers for success. The Corporation for National and Community Service (a federal agency) recently allocated $11.2 million for technical assistance from the Social Innovation Fund. Foundations have also awarded several large grants to support pay for success projects.

INCREASING PRIVATE-SECTOR INVESTMENT

In closing, Galloway said the private sector needs to be leveraged more effectively to accomplish health aims. We tend to be hostile or skeptical of the private sector's ability to address the social determinants of health, he said. He advocated for increased investment by the private sector in solving problems they have never had to solve before, and suggested that the tools discussed provide a roadmap to increasing the involvement of the private sector.[2]

DISCUSSION

In opening the discussion, moderator Baxter agreed with Galloway that business is often treated as separate when it comes to population

[2] For a broader discussion of community development, see *Investing in What Works for America's Communities*. http://whatworksforamerica.org/pdf/whatworks_fullbook.pdf (accessed July 31, 2015).

health. He emphasized that business is part of the social fabric, not something outside of it. Participants commented on what drives private-sector investment, adapting pay for success to longer-term health initiatives, and some of the barriers and risks associated with pay for success.

Driving Private-Sector Investment

Galloway said private-sector investment in health is being driven forward on three fronts: investors who have become enthusiastic about investments that both make money and do good (impact investing); evidence-based social programs that solve problems; and end payers who are willing to pay for the full value of those problems being solved.

Sanne Magnan of the Institute for Clinical Systems Improvement pointed out that while the health sector is very familiar with working with the performance-based contract partners (government, insurance companies, hospitals), it does not normally interact with the bridge financing partners (investors, banks, foundations, pension funds). The first step, Galloway said, is to have an actual, defined investable opportunity with a favorable return. The second step is to understand the factors that influence the different types of investors (e.g., social, regulatory, or reputational factors). Impact investors, for example, usually want to know that their money is accomplishing something good beyond just a return on their investment. A bank might be seeking Community Reinvestment Act (CRA) credit (which requires banks to invest in low-income populations in communities). Galloway acknowledged that the CRA is not particularly well equipped to reward investors in human capital projects. Baxter added that the San Francisco Federal Reserve, Kaiser Permanente, and others have been discussing how to combine the power of the CRA requirements for banks and the community benefit requirements for nonprofit hospitals around common needs/common assessments. He noted that it would be more effective to bring both to bear on a particular problem than to have them operating separately when the same determinants are at play for both.

Baxter asked whether investors are interested in randomized controlled trial designs that compare approaches. Galloway said investors are not necessarily interested in comparison studies. The end payer, however, needs to verify that the outcome promised has been delivered. In some cases this could be a straightforward before-and-after evaluation. It has to do with what they are most comfortable with and may require a high bar of proof such as a randomized controlled trial.

Adapting Pay for Success to Longer-Term Health Interventions

Baxter observed that many population health impacts take much longer to achieve than the 5- to 7-year time frame that pay for success investors seem to favor. Galloway responded that, thus far, pay for success has been used for relatively targeted interventions (e.g., a behavioral therapy program for recently released prisoners as a way to reduce recidivism). He agreed that there is a need to adapt and scale this strategy to longer-term health-related projects. He suggested that pay for success contracts could be used for neighborhood-scale comprehensive interventions in a master contracting sense. For example, New York City could enter into a pay for success contract with a large-scale nonprofit such as the Harlem Children's Zone on a set of outcomes. The Harlem Children's Zone is a cradle-to-college, neighborhood-based education and community-building initiative. It is expensive but effective, he said. The city could, for example, commit $50 million for every year that the childhood obesity rate in a defined community is below the city average, and crime is below the city average, and education outcomes are above the city average. On the basis of that financial commitment from the city, the Harlem Children's Zone could then subcontract with an array of nonprofit organizations and others to deliver those outcomes.

Another approach to scale that Galloway said he is currently researching with Neal Halfon at the University of California, Los Angeles, Center for Healthier Children, Families, and Communities, is the potential for linking together pay for success projects. Building a healthy, productive, successful individual begins in the prenatal period and extends through early childhood, adolescence, teenage years, high school, college, job training, and beyond. Galloway and Halfon are exploring if a linked pay for success contract could pay for the requisite investments along the life course, and allow for the time horizons needed to accomplish real cost savings to the system (many of which are not realized until later in adulthood).

Pay for Success: Barriers and Risks

Paula Lantz of The George Washington University raised concerns about the many administrative rules, regulations, and laws that impede pay for success efforts. She acknowledged that many of these rules are in place to prevent fraud and abuse in large public programs such as Medicare and Medicaid. One challenge, for example, is that investors cannot be paid back for items that Medicaid does not pay for as part of the program (e.g., housing). Another challenge is that in this capitated environment, there cannot be shared savings. As there is a cap of 105 percent, investors could not be paid back more than 5 percent on their

original investment. Lantz and Galloway agreed that a 5 percent return on investment is not an enticing incentive for most investors to engage in pay for success with Medicaid programs.[3] Galloway concurred that there are regulatory challenges across sectors in using public-sector dollars to invest upstream, and he added that moving forward will require thoughtful public-sector procurement reform. There are real opportunities for quasi-public/quasi-private entities to enter into pay for success contracts, he noted. He mentioned the coordinated care models that are coming out of the implementation of the Patient Protection and Affordable Care Act (ACA). In Oregon, for example, the Coordinated Care Organizations (CCOs) serving the Medicaid populations in their districts are owned by private-sector corporations (e.g., health insurance companies, hospital systems). The CCOs are given a global budget to manage their Medicaid populations and are accountable for outcomes. These new CCO structures provide an example of one way to potentially invest in upstream determinants that eliminates direct public-sector contracting (i.e., is free of much of the regulatory burden that prohibits direct government contracting).

Terry Allan of the Cuyahoga County Health Department noted the challenges of defining the benefits of a pay for success program, as they can be fairly diffuse. Pay for success, in its basic form, is the idea that an investment upstream will more than pay for itself downstream in terms of reductions in cost, Galloway said. The key to making it work is identifying who the beneficiaries are of those reductions in cost (e.g., government, a health insurance company, a hospital system), and convincing them to pay for the interventions that will keep those costs from occurring. He agreed that in many cases, the benefits are diffuse and there can be a very large coalition of end beneficiaries, each with a relatively small stake in making sure the intervention works. It is very difficult to organize them around a pay for success project, and to get them to contribute their fair share, Galloway said.

In engaging a broad coalition of potential beneficiaries, Galloway cautioned against describing the investment opportunity as primarily a mechanism to save money. In many cases, success is going to accrue in other, nonbankable forms, such as efficiency gains. For example, reducing a prison population by 15 percent would reduce prison overcrowding, which is a significant problem, but it would not translate into closing any prisons, laying off guards, or eliminating pension obligations. The cash savings per inmate for no longer incarcerating them may not materialize.

[3] States can apply for Medicaid Section 1115 Demonstration waivers that give them the authority to design their own experimental, demonstration, or pilot programs. See http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/Section-1115-Demonstrations.html (accessed October 12, 2015).

If an initiative is pitched as a way to save money, and at the end of the contract period success has occurred but there is no extra money, there will be disappointment in, disillusionment with, and abandonment of the pay for success mechanism. He encouraged participants to think about the end payment as the sum of all of the criteria that go into a value calculation. This means not just the downstream cost savings that may or may not actually accrue to the coalition of beneficiaries but also what the outcome is worth (e.g., the value of having a neighborhood of concentrated poverty that does not suffer from lead poisoning, or the value of a neighborhood that does not have a significant portion of low-income children with unnecessary asthma emergencies).

Claire Braeburn of America on Track asked about the financial benefits and risks for nonprofit service providers to enter into pay for success contracts. Galloway acknowledged that there is significant risk to nonprofit organizations participating in pay for success projects, and he encouraged nonprofits to be aware of the risks before entering into contracts. Pay for success is a market-based solution, and capital flows to the successful organizations and away from the unsuccessful ones. Failure can permanently affect the organization's ability to raise further funding, even from traditional philanthropic sources. The master contracting model, where a large organization with a lot of capacity enters into relatively straightforward contracts with smaller nonprofit organizations, said Galloway, is a better model for those nonprofits that do not have the evidence base or the capacity to participate directly in pay for success.

3

Business Practices to Produce Health

George Isham, senior advisor at HealthPartners, reiterated a theme of the keynote address by Ian Galloway that the relevant outcomes for business are not just financial gain, but social gain as well. The conventional definitions of business need to be enlarged so business is still about the creation of value for both individuals and organizations, said Isham, and also about social values that are important in terms of health outcomes. In this session, panelists discussed how the private sector can leverage its resources and expertise to improve population health. Larry Soler, president and CEO of the Partnership for a Healthier America (PHA), described PHA's approach to working with private-sector companies on initiatives to make the healthy choice the easy choice. Mark Weick, director of Sustainability Programs at The Dow Chemical Company (Dow), discussed the development and implementation of the company's collaborative blueprint for sustainability, and how health is a key component of that sustainability. Gary Cohen, president and co-founder of Health Care Without Harm, described the organization's issue-specific approach to transforming the health sector to be environmentally sustainable, and making hospitals and health systems anchor institutions in communities and leading advocates for environmental health and justice. Box 3-1 includes highlights from this session.

BOX 3-1
Highlights from the Session on
Business Practices to Produce Health

- Profitability leads to sustainability. Help businesses to be profitable and sustainable by driving demand for healthier products. If enough demand is created, the supply chain will respond (Cohen, Soler)
- The private sector was not motivated until Health Care Without Harm was able to make a strong business case that many of the sustainability measures also saved money (Cohen)
- The business case changes when the social, environmental, and economic impacts of business practices are incorporated in the cost of business (Cohen, Isham, Weick)
- Considerations of a company's footprint and handprint entail simultaneous changes in the market and a transformation of industry; a redefining of the role of business; and a transformation of society (Weick)
- Develop partnerships, create joint ownership of agendas and strategies, and build trust. Reach a mutual understanding of what each collaborator is getting out of the collaboration (Cohen, Weick)
- Clear metrics are essential. There should be a common understanding of the accountability process at the outset, and partners should understand that they will be evaluated and held accountable on that which they agree (Soler)
- Exerting pressure from inside and outside institutions is important to have healthier practices. Engage both the policy and the market realms. Policy is important; however, in many cases the market can move much faster (Cohen)
- Celebrating success is important because it shows by example that improvements can be made (Cohen)

NOTE: Presenter(s) to whom statements are attributed are indicated in parentheses.

MAKING THE HEALTHY CHOICE THE EASY CHOICE

Soler started his presentation by showing a video from the Designed to Move campaign, produced by Nike in collaboration with PHA and a number of other organizations.[1] The main message of the video is that if current trends continue, children today will be the first generation to live shorter lives than their parents. PHA focuses on ending obesity, and Soler shared several examples of how PHA is working with private-sector

[1] The video can be viewed as part of the complete video of Soler's presentation at http://iom.nationalacademies.org/Activities/PublicHealth/PopulationHealthImprovementRT/2015-JUN-04/Videos/Panel%20I/6-Soler-Video.aspx (accessed November 19, 2015).

companies, like Nike, on initiatives designed to make the healthy choice the easy choice for American families.

PHA is not a big organization, so it partners with large organizations whenever possible to scale its work, Soler said. Because PHA negotiates voluntary agreements with industry, the impact can begin immediately (unlike legislation, which can be difficult to pass and challenging to implement). It is important that these agreements are meaningful, said Soler, and are not just the easy way out (i.e., they should not be a replacement for regulation that would be more impactful, if the regulation is realistic). Ensuring accountability in the system is also important, and the PHA process was developed to try to ensure that commitments made are commitments kept, Soler said.

PHA takes its agreements with industry very seriously, and Soler noted that PHA meets with approximately 10 companies for every one that results in a signed commitment. PHA asks for significant business impact and meaningful change. To the extent possible (and he noted that it is not always possible), PHA tries to focus on communities most in need and communities of color. The process requires that clear metrics be agreed to by both parties. Negotiations with companies can sometimes be lengthy, and he said negotiations with one major partner took more than 18 months to come to agreement. After the PHA board approves the agreement, a Memorandum of Understanding is signed, and a public announcement is made. PHA strives for public accountability and transparency, and issues an annual report highlighting what each of PHA's partners has done (or has not done).[2] To ensure accuracy, the annual reports go through third-party outside verification.

PHA wants these initiatives to be successful and profitable for the companies, Soler said. If they are not profitable, they are not sustainable. PHA is not seeking charity as much as it is seeking sustainability and success for its partners, he said.

More than 150 private-sector partners are now working with PHA on a broad range of projects. Areas of focus include healthy food access, community engagement, health care (including a focus on health information technology), early childhood education, healthier marketplace (including reformulating foods and beverages), and healthy foods in hospitals, college campuses, affordable housing development, and physical activity. Soler shared examples of early childhood education and healthier marketplace commitments.

[2] See http://progressreports.ahealthieramerica.org/2014 (accessed November 19, 2015).

Early Childhood Education Commitments

Nearly 1 million child care settings are expected to be participating when PHA commitments are fulfilled in 2017. Partners include some of the largest providers, such as the YMCA, Bright Horizons®, KinderCare, the Learning Care Group, and others. As part of their commitment to PHA, child care centers are serving fruits and vegetables and healthier beverages at every meal and snack, having water available, encouraging family-style eating whenever possible, providing at least 1 hour of physical activity per day, and limiting screen time. Soler noted that getting the initiative going was difficult, but once the first private partner signed on, it became a competitive advantage for that company, and others became interested as well.

Healthier Marketplace: Walmart Commitment

Another example of PHA's work with large companies is the agreement with the retailer Walmart, which serves 140 million Americans weekly, including many low-income Americans. Aspects of the Walmart commitment include reformulating thousands of packaged everyday food items, making healthier choices more affordable, developing strong criteria for a simple front-of-package seal, providing solutions to address food deserts by building stores, and increasing charitable support for nutrition programs. Soler pointed out that Walmart is not only working to reformulate its own branded foods, but it is also working with its suppliers to change their recipes to lower sugar, fat, and calories in their products as well. This will impact not just Walmart, but other stores selling those products. Walmart is using its volume power to drive the change beyond Walmart, which is significant, he said.

Marketing the Message

Soler asserted that it has never been more difficult in Washington, DC, to get even some common-sense advances accomplished. More and more people are looking to non-legislative strategies to make policy change, he added. Soler referred participants to a recent newspaper article that highlights the work of First Lady Michelle Obama, including her Let's Move! campaign.[3] Having a very popular First Lady take up the cause of childhood obesity garners significant attention. The announcement of Nike's $50 million contribution in support for physical activity program-

[3] See http://articles.latimes.com/2014/feb/02/nation/la-na-obama-action-20140202 (accessed November 19, 2015).

ming, including $10 million in support of her Let's Move! Active Schools campaign, included athletes such as Gabby Douglas, Bo Jackson, Colin Kaepernick, and Serena Williams. Using the star power of the First Lady, athletes, and celebrities can help companies gain national attention, and a public relations boost can be an important incentive for companies to participate in these initiatives, Soler said.

Soler shared a video about the value of advertising in spreading the message of health.[4] Working with a host of diverse partners in health, produce, entertainment, advertising, and marketing, PHA has "branded" Fruits and Vegetables: "FNV." Following the marketing model of major companies (e.g., Apple, Nike), Soler explained, a multimedia campaign featuring endorsements of FNV by the First Lady and a host of celebrities was created to tell the American public about how fruits and vegetables are great.[5] At the time of the workshop, the advertising campaign had been launched in two pilot markets, Fresno, California, and Norfolk, Virginia, and Soler said the impact would be evaluated. He added that this type of marketing approach has been tried by the fruit and vegetable industries before, but has been difficult for them to do themselves. Having an organization such as PHA bring groups together has been helpful.

Soler noted that support from consumers has also been essential to bringing healthier foods to the marketplace. He suggested that 5 or 10 years ago, although companies might have been willing to make these types of changes to foods, people were not really interested in eating the changed (i.e., healthier) foods. Now, the millennial generation is driving changes in the market toward healthier foods.

Elements of Success

Soler summarized some of the common elements of success and lessons learned from PHA's work with the private sector. He reiterated that profitability leads to sustainability, and PHA wants its corporate partners to be profitable and successful with healthier choices. Having clear metrics outlined in the written agreements is absolutely necessary, he said. There should also be a common understanding of the accountability process at the outset, and partners should understand that they will be evaluated and held accountable for what they agree to do. Finally, support from the executive leadership of the company is essential. Signed agreements are important, as it can be difficult to keep momentum when

[4] The video can be viewed as part of Soler's presentation at http://iom.nationalacademies.org/Activities/PublicHealth/PopulationHealthImprovementRT/2015-JUN-04/Videos/Panel%20I/6-Soler-Video.aspx (accessed August 7, 2015).

[5] See http://www.fnv.com (accessed July 31, 2015).

CEOs, presidents, and other senior leaders move in and out of positions in companies. Soler added that companies often need help from PHA to get through the agreement process. PHA has had to develop a lot of technical expertise to help companies identify and overcome any internal roadblocks to making a commitment and successfully meeting the goals.

DOW: HEALTH AS A COMPONENT OF CORPORATE SUSTAINABILITY

Weick opened his presentation by quoting Ehrenfeld and Hoffman, who wrote that "sustainability is the possibility that humans and other life will flourish on Earth forever" (2013, p. 17). Dow is taking a positive approach to thinking about how the company will innovate, work together, and develop a blueprint for sustainability that involves technology advances, as well as public policy advances and behavioral changes, that will create a far more positive and flourishing world, Weick said. Dow sells advanced chemicals, specialty chemicals, and plastics in about 180 countries, delivering products and solutions in many sectors, including packaging, water, electronics, coatings, and agriculture. Sustainability drives Dow to make every decision with the future in mind, he said. Dow's 2025 Sustainability Goals introduce the notion of a collaborative blueprint for sustainability, which Weick said builds on previous 10-year commitments that were focused on the company footprint (1995-2005) and handprint (2006-2015).

2005 Environmental Health and Safety Goals

In the early 1990s, Dow set out to address some of the large problems it was facing as a business and to develop annual targets to solve them. The company soon realized that many of the issues that it was dealing with would not be solved using annual targets. A long-term approach was needed to justify capital investment when, for example, there was a need to build a new process or a new facility, release the product, observe the results, and improve. Each of the 10-year sets of goals has engendered a culture change within the company, Weick said.

The first sets of sustainability goals established in 1994 were called Environment, Health, and Safety Goals. These goals were focused on the corporate footprint, and how company operations impacted people directly through emissions, energy use, and safety, said Weick. The initial goals set achievable targets and saw some very significant results. He explained that solid waste was reduced by 1.6 billion pounds; energy efficiency was increased with a savings of 900 trillion BTUs (British thermal units); water usage was reduced by 183 billion pounds; and the worker

injury and illness rate was reduced by 84 percent. One billion dollars was invested toward the goals during that decade, Weick said, resulting in a $5 billion savings.

2015 Sustainability Goals

Dow continued to deliver economic value through its focus on sustainability with its 2015 Sustainability Goals. There was continued focus on its footprint (including spills, leaks, and injuries), with a new focus on what Greg Norris of Harvard University calls the handprint, that is, how Dow's products and services help its customers solve their sustainability challenges.[6]

Dow focused on supply chains and reducing the risks to communities and employees by reducing the volume of hazardous chemicals being transported to market. This meant redefining how the supply chains were working, and where plants needed to be placed. During this decade, there were 4.3 billion fewer ton-miles of transporting hazardous materials, and 175 fewer hazardous material transportation spills. There were also 275 fewer process safety incidents, and 6,000 fewer spills. There were 1,100 fewer injuries due to an enhanced focus on safety. According to recent rates from the Occupational Safety and Health Administration, Weick said, it is 20 times safer statistically to work at Dow than to work at the average local supermarket.

During that decade, Dow also focused its innovation energy on breakthroughs to world challenges. Inspired by the United Nations Millennium Development Goals, the company focused on breakthroughs in water, healthy oils, energy efficiency in vehicles, and making soap more affordable.[7] Dow has replaced 1.5 billion pounds of bad fats in the American diet through its omega-9 oils.[8] Through Dow's FILMTEC reverse osmosis elements, water can be cleaned to drinking standards that are 30 percent better, with 40 percent less energy.[9] Ten billion gallons of fuel can be saved using Dow BETAMATE structural adhesives in lightweight vehicle

[6] Handprints are good social and environmental impacts, as opposed to the more familiar concept of footprints, which are negative impacts. See, for example, Norris, G. n.d. *Doing more good than harm: Footprints, handprints, and beneficence*. http://isites.harvard.edu/fs/docs/icb.topic979867.files/Basic%20Beneficience%20Primer.pdf (accessed August 14, 2015).

[7] See http://www.dow.com/en-us/science-and-sustainability/sustainability-reporting/breakthroughs-to-world-challenges (accessed July 31, 2015).

[8] See http://www.omega-9oils.com (accessed July 31, 2015).

[9] See http://storage.dow.com.edgesuite.net/dow.com/sustainability/goals/Breakthrough-to-World-Challenges-White-Paper-FILMTEC-TM-ECO-RO-Elements.pdf (accessed July 31, 2015).

manufacturing.[10] A Dow collaboration with Unilever has developed a long-lasting, affordable bar of soap that will be sold for 10 cents per bar in developing economies, and because of the incorporation of POLYOX polymers, they last about 1 month.[11]

2025 Sustainability Goals

With its 2025 Sustainability Goals, Dow is maintaining its focus on both footprint and handprint, while incorporating a collaborative blueprint that will maximize economic, environmental, and societal value. The role of business needs to be redefined in society, Weick said. This means building cross-sector collaborations despite the many barriers that have been built up over the years, and the mistrust that has developed among sectors: academia, nongovernmental organizations (NGOs), civil society, governments, and business in order to create the flourishing society that we all envision.

Weick described Dow's goals for the next 10 years, which fall into three broad sustainability pillars: unlocking the potential of people and science (Goals 2, 6, and 7), valuing nature (Goal 4), and courageous collaboration (Goals 1, 3, and 5):

Goal 1: Leading the blueprint. Dow is developing a societal blueprint that integrates public policy, science and technology, and value chain innovation to facilitate the transition to a sustainable planet and society. Dow is issuing this as an invitation to have a dialogue and to collaborate, Weick said. The target goal is to have 100 significant dialogues and 10 impactful collaborations. Over many decades different people have considered how to develop a blueprint for sustainability. Now is the time, he said, to make it possible for businesses that are making a transition to short- and long-term sustainable business models.

Goal 2: Delivering breakthrough innovation. Dow invests more than $1.5 billion per year in research and development, Weick said. While producing breakthrough chemistry innovations that advance the well-being of humanity, Dow is committing to six times net positive impact on sustainable development. In other words, he said, for every unit of energy Dow uses, Dow returns six times that benefit back to society.

[10] See http://storage.dow.com.edgesuite.net/dow.com/sustainability/goals/BTWC-White-Paper-BETAMATE-TM-Structural-Adhesives-Web.pdf (accessed July 31, 2015).

[11] See http://storage.dow.com.edgesuite.net/dow.com/sustainability/goals/Breakthrough-to-World-Challenges-Dow-Unilever-on-Lifebuoy-TM-Soap-feat-POLYOX-TM-Polymers-White%20Paper-141009.pdf (accessed July 31, 2015).

Goal 3: Advancing a circular economy. Dow advances a circular economy by delivering solutions while conserving resources and improving efficiency in key markets. We need to move away from the "take, make, and dispose" linear economy, Weick said. Dow will be seeking partners in markets such as packaging, electronics, and agriculture to develop collaborations and demonstration projects. One example thus far is working with the community of Citrus Heights, California, to take previously non-recycled plastics and turn them back into fuel. The target is to deliver six major circular economy projects over the next decade.

Goal 4: Valuing nature. Dow applies a business decision process that values nature, and which will deliver business value and natural capital value through projects that are good for the company and good for ecosystems. Weick noted that Dow has had a collaboration since 2011 with The Nature Conservancy on analyzing the value of ecosystem services (water, land, air, oceans, plant and animal life),[12] and is beginning to see very positive business results that could be replicated and scaled over the coming decade. The target is to develop business-driven project alternatives that will enhance nature and deliver $1 billion in net present value for the company.

Goal 5: Increasing confidence in the safe use of chemical technology. Dow aims to increase confidence and support for the safe use of chemical technology through transparency, dialogue, unprecedented collaboration, research, and its own actions. The foundation for this will be predictive toxicology, Weick explained, where Dow continues to move from in vivo to in vitro to in silico testing.[13] The targets are to achieve 100 percent support for the use of chemical technology among key stakeholder groups, and to integrate predictive methods into 100 percent of new product assessments and reduce animal use in testing by 30 percent.

Goal 6: Engaging employees for impact. Dow employees worldwide directly apply their passion and expertise to advance the well-being of people and the planet. Dow will be expanding its outreach programs with the target of positively impacting more than 1 billion people worldwide. Ten percent of the workforce will serve as science, technology, engineering, and mathematics (STEM) ambassadors and give 600,000 hours to support better STEM education, and employee volunteers will complete 700 sustainability projects around the world.

Goal 7: Maintain world-leading operations performance in environmental health and safety, and natural resource efficiency. Target metrics

[12] See http://www.dow.com/en-us/science-and-sustainability/collaborations/nature-conservancy (accessed October 11, 2015).

[13] In silico testing is done by computer simulation. See http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3129017 (accessed October 12, 2015).

include zero unplanned safety and process safety events, 100 percent health rating, 10 percent improvement in resource efficiency, and 20 percent reduction in water intake.

In closing, Weick said this is an invitation to have a dialogue about how businesses can continue to help in developing a more sustainable future for our society.

The Evolution of the Blueprint

In response to a question about how Dow decided to develop the 2025 goals around the blueprint for sustainability, Weick said it was a progression. The company has a sustainability external advisory council that has been in place since 1992, which includes about 10 academic, government, and NGO leaders who advise Dow senior management in a series of semiannual meetings. In fall 2009 they tried to envision what a sustainable society would look like, as well as what Dow's place in that sustainable society would be, on Dow's 200th birthday, which is in the year 2097. Of course, it is impossible to predict all the technological and societal changes, Weick said, but it provides a framework for thinking beyond Dow and its current assets. Dow looked at the next generation approach to sustainability, starting in 2009 with a long-range visioning process, and looked at what was going to happen after the 2015 sustainability goals were finished. In 2013, the senior executives decided that they needed further engagement and input from employees and customers. Extensive interviews were conducted with employees across the company, particularly the Millennial population, to find out what kind of company they wanted to inherit and lead. What they learned really drove the thinking about taking care of the company's footprint and handprint, but also forging the blueprint for human sustainability. Weick noted that this strategy entails simultaneous changes in the market as a whole, and some of Dow's competitors are thinking along the same lines. The transformation needs to be not only of industry, but of society in general, and the role of business in society needs to be redefined, he said.

HEALTH CARE WITHOUT HARM

The health care sector is the one sector in the economy that operates within an ethical framework to "do no harm," Cohen said. Health care in the United States accounts for 18 percent of the economy and uses an enormous amount of energy (mostly fossil fuels) and creates an enormous amount of waste (see Box 3-2). Health Care Without Harm[14] was estab-

[14] See https://noharm-uscanada.org (accessed July 31, 2015).

BOX 3-2
Health Care's Environmental Impacts

- **Energy:** Health care is the second most energy-intensive sector in commercial buildings
- **Medical waste:** In 1995 medical waste incineration was the largest source of dioxin emissions in the United States, responsible for 10 percent of mercury air emissions
- **Pharmaceutical waste:** At least 250 million pounds of pharmaceutical waste is generated annually from hospitals and long-term care centers
- **Toxic chemicals:** Health care is one of the largest users of toxic chemicals in the U.S. economy
- **Indoor air quality:** Poor air quality has been identified as the most frequent cause of work-related asthma in health care workers
- **Unhealthy food:** Hundreds of hospitals have fast food restaurants in their lobbies

SOURCE: Cohen presentation, June 4, 2015.

lished in 1996 to transform the health care sector to be environmentally sustainable, and to serve as a leading advocate for environmental health and justice.

A Focus on Addressing Key Problems

Cohen shared several examples of the accomplishments of the coalition. In 1996, there were about 4,500 medical waste incinerators, which are a leading source of dioxin emissions. Over the course of a decade, the health sector has almost completely moved away from incineration, and now recycles a significant portion of its waste, he said. Reprocessing medical devices, for example, reduces waste and saves money in the process. This has had an enormous positive environmental impact.

Another major concern was mercury emissions. In the mid-1990s, the Centers for Disease Control and Prevention (CDC) said there was enough mercury pollution in the environment that it could impact brain development in utero. Just as Mercury was the messenger god, Cohen said, mercury use in health care was a clarion call for the need to address the environmental and health impacts of the hundreds of problematic chemicals that are in the system (in supply chains, buildings, medical devices, etc.). Health Care Without Harm started with one hospital in Boston, working to convince them to eliminate mercury thermometers and use safer alter-

natives. The change spread to all of the hospitals in Boston, then to other cities, and now 5,000 hospitals have committed to eliminate mercury, not just in thermometers, but also in blood pressure devices, fixatives, and other uses. All of the pharmacy chains in the United States have agreed to stop selling mercury thermometers. Mercury is being completely phased out of health care in the United States, and the European Union is taking similar action. In 2013, the Minamata Treaty was signed, focused on phasing out mercury-based measuring devices in health care by 2020. This is an example of how the health care sector can lead by example, Cohen said, by detoxifying its own supply chain and creating the momentum and the inspiration for other sectors to follow suit.

Health Care Without Harm staff members are also working with hospitals to remove toxic chemicals from buildings to make them healthier for patients and employees. One area of focus is achieving flame retardancy without using toxic flame retardants in furnishings. Kaiser Permanente, for example, is no longer purchasing furniture with toxic flame retardants, formaldehyde, or other toxic chemicals. Four other large hospital systems have followed the Kaiser example, and there is now a $50 million per year market demand for products that are safer for hospitals. Manufacturers are changing their practices to produce these safer products for hospitals, which Cohen noted helps to create a broad, industrywide momentum to transform the practices of a whole sector (e.g., drive the production of nontoxic flame retardants in school, home, and office furnishings). This also extends to flooring, lighting, and energy systems. Again, the health care sector can lead by example in the transformation toward a broader sustainable economy.

Climate change is another challenge for public health, Cohen said, and there is a lot of movement in health care to embed energy efficiency into operations, and to lead the transformation toward a renewable energy economy (Guenther and Cohen, 2014). Kiowa Hospital in Greensburg, Kansas, for example, was completely destroyed by a tornado and was rebuilt to run on wind power. Kaiser Permanente has recently announced one of the largest solar purchases of any company in history, and plans to have 50 percent of its facilities run on solar power within the next several years. That kind of transformation not only addresses price fluctuations in the energy market, he said, but is also good for the larger ecology of communities they serve.

Another area with a major transformation is food purchasing. Farmers' markets now operate in hundreds of hospitals around the country. Hospitals are using their purchasing powers to support more local and sustainable food production in the communities they serve. Better food purchasing strategies impact climate, environmental health, patient safety, and worker health. Cohen suggested that health care workers suffer from

the same rates of obesity, diabetes, and other issues related to food as the general community. Hospitals are starting to link up with the school systems in their communities to be anchors for transforming the entire food supply for the region (discussed further below).[15]

The Healthier Hospitals Initiative

The Healthier Hospitals Initiative is a collaboration of Health Care Without Harm, Practice Greenhealth, and 12 large health systems to create a series of clear, actionable steps to move the whole sector forward on environmental health and sustainability.[16] Initiatives were created around cleaner energy, safer chemicals, healthier food, less waste, and smarter purchasing, with clear metrics, guidance, and case studies for each. About 1,000 hospitals in 46 states are participating in the initiatives and contributing data. The program is voluntary, Cohen said, but requires commitment at the highest level, including a signed agreement from the CEO.

Examples of outcomes include 146 hospitals spent 18 percent of their food-purchasing budget on local and sustainable foods; 457 hospitals were able to achieve an aggregate 24 percent recycling rate, resulting in 445,000 tons of materials that did not have to go to the landfill; and reprocessing of single-use medical devices has dramatically increased.

Hospitals as Anchor Institutions for Improving Community Food Environments

The health care sector is second only to the military in terms of its enormous clout and presence in American society. In 200 different cities, the health care institution is the largest employer and the economic engine of those communities. Given its enormous presence in American society, the health care sector can have a huge catalytic impact on the rest of the economy, Cohen said. Health Care Without Harm is working with hospitals around the country to see themselves as economic anchor institutions for improving community food environments by modeling nutrition and improving environmental health inside and outside their facilities. Health Care Without Harm is also collaborating with community-based programs to support a healthy regional food system and increased access to healthy food. Initiatives are under way around the country, with hospitals, school systems, and universities working together to transform the

[15] Participating hospitals, health systems, and other organizations are listed at http://www.healthierhospitals.org (accessed October 12, 2015).

[16] See http://healthierhospitals.org/sites/default/files/IMCE/fnl_hhi_milestone_report_rev.pdf (accessed July 31, 2015).

supply chains in their communities, and to create jobs and an economy that supports health.[17] Health Care Without Harm is also working with health care professionals to be effective public policy advocates for environmental health and sustainable food systems.

Lessons Learned

In closing, Cohen highlighted some of the lessons learned from working with hospitals and health systems to transform the health sector. Educating the health profession about environmental health is critical, he said. To be able to address population health issues, providers need to understand how the environment (e.g., food, climate change, toxic chemicals) impacts people's health. Cohen and colleagues learned to appeal to the mission of the institutions, their mandate under the Patient Protection and Affordable Care Act (ACA), and also the money that sustainability measures can save. Cohen and colleagues also learned to provide practical solutions to hospitals to address their environmental performance and to create healthy collaboration as well as competition among sector players. They have also learned that because of the health care sector's economic power, aggregating hospital demand and purchasing power drives markets for safer products. Celebrating success is also very important, he said, showing by example how improvements can be made.

Cohen said it is important to create both inside and outside strategies, meaning exerting pressure from inside and outside institutions to have healthier practices. Engage both the policy and market realms, he said. Policy is important, but in many cases the market can move much faster. Build networks of collaborators instead of monolithic organizations, develop partnerships, create joint ownership of agendas and strategies, and build trust over time. It has also become clear that the movement needs to be international, he said, as most of the environmental issues we face now are global issues.

DISCUSSION

Participants discussed making the business case for engagement in healthier practices and taking a triple bottom-line approach (environmental, social, and financial outcomes). Participants discussed some of the internal organizational challenges, and the role of mandated engagement (i.e., regulation). There was also discussion of the role of anchor institutions in driving progress and helping to define shared goals among local partners.

[17] See http://www.healthierhospitals.org (accessed October 12, 2015).

Making the Business Case for Engagement

Panelists discussed some of the challenges of trying to promote a new strategic vision within the private sector. Soler said one of the earlier challenges was that PHA had not yet built trust among the community members with whom they were going to work. Advocates wondered if PHA would just be providing quick and easy wins for industry (i.e., not having substantive agreements). Companies, especially those in the food space, were wary of working with a nonprofit that they did not know and may have had concerns about motives.

PHA worked hard in the beginning to be very clear about what it would and would not do. In particular, PHA made it clear that it would not engage in governmental or regulatory policy advocacy. Soler noted that other organizations excel in that area, and PHA did not believe it could provide additional value. Furthermore, taking policy positions would not help PHA to develop trust with different private-sector and advocacy partners. PHA focused on voluntary commitments that were significant and meaningful, but had accountability. Once that trust was established, interactions were much smoother.

A challenge for Health Care Without Harm was making the business case to bring investor-owned hospital systems to the table. Cohen said the early adopters around sustainability issues in the health care sector were the not-for-profit organizations, including Kaiser, and the Catholic faith-based institutions with a core mission to be an overall healing ministry. The private sector was not motivated until Health Care Without Harm was able to make a strong business case that many of these sustainability measures also saved money. He added that the ACA has also played a role by changing the incentive system for the entire enterprise of health care in America. For industry, and for Dow in particular, Weick said, there are people who think in a short-term way. Those people are brought along by seeing the business case, and the triple bottom line of social, environmental, and economic benefits.[18]

Catherine Baase of Dow noted that the business community cannot thrive if the community around it is failing. Soler agreed that the business case goes beyond profit. Profit is an easier argument to make. He added that some companies aggressively market the work they have done with PHA, or with the First Lady's initiatives, with their employee base to show them what the company has done. Having an employee base that is proud to be part of the company is very important. Another component of the business case is having employees who are fit for the job. If nothing

[18] For more information on the triple bottom line, see, for example, http://www.ibrc.indiana.edu/ibr/2011/spring/article2.html (accessed September 10, 2015).

changes, one out of two Americans will be obese by the year 2030. This will have an impact on the ability of certain jobs to be filled, Soler said.

Weick said that within Dow and other companies, net present value is a key metric for business. One problem is that this can unwittingly project a path that no longer exists into the future. For example, 10 years from now, the price of water in areas that are water stressed will not be zero or minimal. The price of water used by company facilities in those areas (e.g., for production) needs to be incorporated into the net present value calculation. Explaining these types of future scenarios to corporate finance staff is necessary for building the business case for sustainability.

Cohen said that Health Care Without Harm engages many of the hospitals about their use of fossil fuels, and in particular coal. Together with the U.S. Environmental Protection Agency and U.S. Department of Energy, Health Care Without Harm developed a tool to show the direct health impacts related to the use of coal for every kilowatt hour used. The broader societal impact of coal use includes the costs of asthma cases and respiratory diseases. The business case changes when the social and health impacts of a particular business practice are incorporated, he said. Isham of HealthPartners concurred and emphasized the importance of incorporating the social and environmental bottom lines into the cost of doing business.

A participant pointed out the need to comply with international requirements with regard to environmental and health impact. Weick said that Dow has been doing environmental impact assessments on its projects for a very long time. The health impact assessment is a new tool that is now being used in many projects going forward.

Voluntary Versus Mandated Business Engagement

Isham asked panelists how much is done on a voluntary basis versus being driven by regulation or law. Weick said industry welcomes smart regulation. Government, academia, NGOs, civil society, and industry need to work in a coordinated way to solve the great sustainability challenges that are ahead of us, said Weick, and regulation is going to be a key part of that. Industry wants to be at the table for these discussions. He acknowledged that having industry at the table creates some distrust among some people who perceive industry as wanting to delay the process, or to maximize its own profits. Industry needs to earn back trust in some sectors, and inspire confidence in society. One example of success is the Montreal Protocol on Substances that Deplete the Ozone Layer. The problem was discerned by academia, and industry was involved in developing the framework that is solving that problem. In a sense, we need the Montreal Protocol for population health, Weick said.

Cohen added that regulation comes after the market has already moved. Twenty-five states passed regulations restricting mercury products after the health care sector had already created momentum and moved the market away from mercury-containing products. Conversely, a very strategic kind of regulation can have a significant impact. Health Care Without Harm worked with the Catholic Health Association and the Internal Revenue Service to change regulations so that nonprofit hospitals could use community benefits to support more upstream interventions around food systems, housing, and other elements that impact population health.

Redefining the Role of Business in Society

Isham observed that there is a perception that business is only "in it for money" and does not really care about sustainable population health. That is why it is important to redefine the role of business in society, Weick said. The classic economic model, that business is there to make money and philanthropy will take care of all the social issues, said Weick, is not a functional model for society. Corporations do have a fiduciary duty to their shareholders to be profitable, Soler said. One approach is to try to help them be profitable (and sustainable) by driving consumer demand for healthier products. Cohen agreed that a demand-driven approach can be successful. If enough demand can be created, the supply chain will respond. If people are demanding safer food, cleaner energy, and safer products, then the supply chain in health care will respond, and the broader supply chain will follow. As long as health care is rewarded for doing more procedures, more tests, and more interventions, Cohen said, there are no incentives for prevention and population health goals. Changes have begun around the incentive structure and financing in health care, but there is much more to be done to incentivize prevention. Health care should not occupy 18 percent of the entire economy, he said.

The Role of Anchor Institutions in Driving Progress and Defining Success

Victor Rubin of PolicyLink commented on urban hospitals, major medical centers, and the universities they are attached to serving as anchor institutions in the community (Schildt and Rubin, 2015). They are involved not only in driving procurement, but in supporting business development (including minority-owned, women-owned, and locally owned businesses), local hiring and job training, and local economic development. He observed that there is a movement toward more progressive anchor institution strategies, as evidenced in the work of the

Democracy Collaborative, where the institutions, local government, nonprofits, and community agree on a common set of goals and metrics for what would constitute progress (Kelly and Duncan, 2014; Zuckerman, 2013). He asked about lessons for local partnerships.

Cohen described Gunderson Health System in La Crosse, Wisconsin, as an example of an anchor institution engaging in community partnership. They have become the first system in the country to become energy independent, producing more renewable energy than they consume in fossil fuels. This was accomplished through community partnerships, for example, with Organic Valley on a wind project; with a local brewery to take its waste heat and run turbines; and with the local landfill to create methane gas. Partnering on these community energy projects powered their own facilities, and helps the community of La Crosse and other communities move toward renewable energy. Health Care Without Harm is also working with the Democracy Collaborative to get large employers, health care systems, and universities in Oakland and Richmond, California, to redirect their supply chains to create green, healthy jobs.

Weick said that Dow's sustainability goals include contributing to community success. In 14 of Dow's major locations, communities were asked what community success meant to them. What was learned guided Dow's development of education and health programs in the community.

Baase stressed that advancing population health will require the engagement of all sectors of society. She pointed out that many different partners were involved in the Gunderson Health System example described by Cohen. Cohen highlighted the value of having an independent and trusted third party in multistakeholder collaborations. In the anchor institution strategy being used in Oakland and Richmond, for example, the nonprofit organizations are the conveners, along with The California Endowment, which serves as the backbone organization and helps to bring collaborators to the table. Soler agreed and added that although many PHA activities are one-on-one with a partner, they are increasingly becoming involved in multistakeholder collaborations, which are often more complicated to manage. Everyone is coming in with a similar overall goal, but with slightly different outcomes that they hope to achieve. It is a balancing act to make sure that the initiative can achieve those outcomes for the partners who are supporting it. Weick noted that it is important to reach a mutual understanding of what each collaborator is going to get out of the collaboration. He added that a common language is needed because terms can have different meanings to different people and in different sectors.

4

Developing Human Capital in Communities

Without equity, we cannot achieve a truly healthy population at the scale needed to move toward a healthier nation overall, said moderator George Flores, program manager for The California Endowment's Healthy California Prevention team. In this session, panelists described two programs focused on bringing people into employment and giving them opportunities to break the cycle of poverty and unemployment. These programs show how businesses can create shared value, improving the economy for themselves as well as the community at large. Carla Javits, president and CEO of REDF (the Roberts Enterprise Development Fund), discussed REDF's portfolio of work with social enterprises that are dedicated to hiring people who face significant barriers to employment, and preparing them to enter the mainstream workforce. Farad Ali, president and CEO of The Institute,[1] provided an overview of Made in Durham, a public–private partnership designed to ensure that all young people in Durham achieve their high school diploma, attain workforce training and a post-secondary credential, and have a job that pays a living wage by the age of 25. Flores then described some of the human capital development initiatives of The California Endowment, including the Building Healthy Communities initiative. Highlights from this session are in Box 4-1.

[1] Formerly the North Carolina Institute of Minority Economic Development.

BOX 4-1
Highlights from the Session on Developing Human Capital in Communities

- The most competitive and successful businesses in the future will be those that contribute the most to society (Javits)
- When an opportunity to work is provided to people who have literally been excluded from the economy, there are economic and social benefits for the entire community (Ali, Javits)
- The business case for hiring workers who face barriers is that they tend to be a stronger, more loyal workforce. Employers have access to a larger pool of talent, greater employee diversity, equal or better employee performance, and greater employee retention (Javits)
- Social enterprises earn and reinvest their revenue by helping more people who are willing and able to work to get jobs that build skills and lead to a career (Javits)
- Disconnected youth facing barriers to employment are provided with multiple education pathways and work experiences that are responsive to local demand so that they can become citizens, workers, learners, and parents building healthy families (Ali)
- Creating a clear link between what is learned in the classroom and jobs reduces the cost of recruitment and establishes a diverse pipeline of talent (Ali)
- A place-based approach to health is in the interest of business because it takes into consideration the local people employed, the local resources used, and the local customers served (Flores)

NOTE: Presenter(s) to whom statements are attributed are indicated in parentheses.

REDF: A BUSINESS APPROACH TO EXPANDING EMPLOYMENT OPPORTUNTIES

Exclusion from the workforce has a deleterious effect on community health, Javits said. She quoted George Roberts, the founder of REDF and a key leader in the business community, who said, "If you don't have a job you don't have hope. If you don't have hope, what do you really have?"[2] Javits described this quote as the motto of REDF and illustrative of Roberts' dedication to the idea of an inclusive economy for everyone. REDF was designed specifically to create jobs and employment opportu-

[2] See http://redf.org/who-we-are/our-history (accessed September 15, 2015).

nities for people facing the greatest barriers to work.[3] Javits also cited the work of Michael Porter at Harvard on redefining the purpose of business to be the creation of shared value (i.e., not just profit). Porter has said that shared value will drive the next wave of innovation and productivity growth in the global economy, and reshape capitalism and its relation to society (Porter and Kramer, 2011). In other words, Javits said, the businesses that compete well and win in the future are going to be those that are contributing the most to society.

The Role and Value of Social Enterprise

Social enterprises leverage a business approach to address a social mission, Javits said. She explained that a nonprofit simply doing innovative work, or a business that has a charitable campaign, is not a social enterprise. A social enterprise leverages a business approach, while making a deliberate attempt to create social value. There are social enterprises with many different social missions, such as the environment, or health products and services.

The social enterprises REDF works with are mission-driven businesses focused on hiring people who are otherwise not likely to get hired, and providing support and a pathway into the mainstream workforce. These employment social enterprises hire people who face significant barriers, including people with histories of homelessness and/or incarceration, at-risk young people who are disconnected from work and school, people with mental health disabilities or addiction issues, and other high-unemployment populations. Employment social enterprises are often run by nonprofits, but not exclusively, Javits noted. As part of the social mission, the employment social enterprise provides wages, experiential learning, and on-the-job training. Employees learn hard and soft skills while on the job, and begin to build their identity as workers. Employment is often coupled with support services. On the business side, these are revenue-generating businesses where employees create a product or provide a service for customers of those goods or services. These businesses are a vital part of the local economy and of economic development, Javits said.

Javits summarized the distinctive features of an employment social enterprise:

- Earn and reinvest their revenue to help provide more people with jobs to build skills and a career path.

[3] See http://redf.org and http://webreprints.djreprints.com/3582030828345.html (accessed July 31, 2015).

- Help people who are willing and able to work, but have the hardest time getting jobs.
- Enable people to realize their full potential through a more financially sustainable and cost-effective model than many workforce development programs.
- Use a demand-driven approach to meet employer needs.

The employment social enterprise brings value to people and society in several ways. Fundamentally, chronic joblessness negatively impacts individuals, families, and communities, Javits said. Thousands of people are willing and able to work, but have a difficult time getting a job because of their background. They are literally excluded from the economy, she said. When an opportunity to work is provided to these individuals, there are economic and social benefits for the entire community. For example, these people pay taxes, bring their talent to the economy, participate in the community, foster the success of their children, change their personal behavior, and end their use of costly government programs. Employers have access to a dedicated, hard-working workforce.

Evidence of the Impact of Social Enterprises

Through the Social Innovation Fund (a federal government program that seeks to lift up promising practices and build the evidence base), REDF partnered with Mathematica Policy Research on a study of the REDF portfolio in California. The study found that of the people entering the social enterprises, 25 percent had never had a legitimate job, 85 percent had no stable housing, 70 percent had been convicted of a crime, and 71 percent of their monthly income came from government benefits (Maxwell et al., 2013). While they were in the social enterprise, support services used included assistance with food security (28 percent); avoiding relapse of behavior, such as drug use or criminal activity (25 percent); domestic abuse services (16 percent); physical health services (15 percent); substance abuse services (12 percent); and disability assistance (11 percent) (Maxwell and Rotz, 2015; Rotz et al., 2015).

In assessing employees' outcomes, the study found increased self-sufficiency as demonstrated by a 268 percent increase in income, and a reduction of income from government entitlements and other services, from 71 percent to 24 percent. The study also found a significant increase in job retention. After 1 year, 56 percent of those hired by social enterprises were still employed, versus 37 percent of those who had only received job support services. Housing stability tripled.

A cost–benefit analysis found that for every dollar spent by the social enterprises, there is a return on investment of $2.23 in benefits to society

(through reduced public benefits, avoided incarceration, etc.). Every dollar spent saves taxpayers $1.31, and the revenue generated by the social enterprises reduces the burden on government and philanthropy to pay for programs.

The REDF Portfolio

REDF, a California-based nonprofit organization, provides capital and technical assistance to social enterprises. REDF receives a combination of funding from the federal government, individual donors, and foundations. REDF is not a social enterprise itself, Javits said, but is an intermediary that moves capital from donors and investors to social enterprises, accompanied by advisory services. She suggested that REDF is like a venture capital firm that is looking for social rather than direct financial return.

REDF is a pioneer in measuring social impact, she said, and is committed to sharing lessons learned and building a vibrant ecosystem. As noted, the mission of REDF is creating jobs and employment opportunities for people who face barriers. REDF believes the opportunity to work should be available to everyone everywhere because of the power having a job can have in transforming lives and communities. Thus far, REDF has helped nearly 10,000 people get jobs, and assisted about 60 social enterprises that have generated nearly $150 million in revenue.

Javits listed some of the social enterprises in REDF's current and prior portfolio of investments, such as JUMA Ventures, which employs young people who face significant barriers to getting through high school and college to work ballpark concessions in partnership with Center Plate. Of those served by the REDF portfolio, the average age is 40 years, 78 percent are male, 8 percent are married, 27 percent have dependents, 4 percent are veterans, 25 percent have no high school diploma, and 57 percent are African American.

The Role of the Business Community

Javits listed elements that are needed to scale up social enterprise impact. First, there must be a market for the goods and services that the social enterprises are selling, and hiring of the people that are prepared for mainstream employment by the social enterprises. Also needed are funding for the capital costs, talent to run the social enterprises, policy to ensure a conducive environment, and "know-how" on what works best.

She highlighted some of the many companies that are already hiring from and supporting REDF's target population in the United States. Starbucks, for example, recently launched a new entity called Leaders

Up, to work with its supply chain explicitly on the employment of at-risk youth. One hundred youth were hired as part of a pilot in Columbus, Ohio, with SK Food Group, and 80 percent were retained for 6 months, compared to the industry average of 50 percent. Javits noted that they had a 2:1 interview-to-hire ratio, where the standard in the field is 18:1. Alliance Boots recently merged with Walgreens. The United Kingdom, where Alliance Boots is based, has had an ex-offender employment initiative and has brought together about a dozen other companies in the United Kingdom to target that population. She added that internationally, employers are bolder and do more to hire people who face barriers, particularly formerly incarcerated individuals.

Companies have used a variety of models for employing individuals who face barriers, said Javits. One typical model is partnerships with local service agencies. A company partners with a nonprofit or social enterprise to recruit and develop a pipeline of trained and prepared people for the company to hire. Another approach is an in-house social enterprise, where the employer manages most of the recruitment and employment of individuals facing barriers on its own. In an outsourced staffing model, Javits said, companies work with staffing agencies that in turn collaborate with community-based organizations. The last model can be a sector-focused employer group. A group of employers from the same sector collaborate to offer training and work opportunities for individuals facing barriers, partnering with nonprofit and public agencies. Javits said this approach helps to develop the infrastructure to move the whole sector forward.

The business case for hiring workers who face barriers is that they tend to be a stronger, more loyal workforce, said Javits. Employers have access to a larger pool of talent, greater employee diversity, equal or better employee performance, and greater employee retention. The primary positive financial impact, she said, is reduced recruitment and training costs. For some of the smaller companies, there are also hiring tax credits, and wage and training subsidies. Enhanced reputation for social responsibility is also a benefit for employers, said Javits.

Moving Forward

REDF estimates about 21 million people in the United States are able and willing to work, but due to barriers such as histories of homelessness, incarceration, or disabilities, are not in the workforce. The jobless rates in these populations are 50 to 80 percent. We are losing productivity and good health, and we know we can do much better, Javits said. There are approximately 200,000 people employed in these kinds of social enterprise businesses around the country. REDF has set an aspirational goal of an additional 50,000 people employed nationally through employer

partnerships around the country. We need an ecosystem with supportive laws, rules, and practices, so that more of the people who get jobs in these companies are able to move into mainstream companies, said Javits, and find a welcoming, supportive environment. This would have a profound impact economically, and certainly for health, she concluded.

MADE IN DURHAM: BUILDING AN EDUCATION-TO-CAREER SYSTEM

Durham, North Carolina, is rich in intellectual capital, Ali said. It is the home of major universities, including Duke University and North Carolina Central University, and Research Triangle Park, with corporations such as Cisco, IBM, and Lenovo. Duke is the second largest private employer in the state behind Walmart. Each year Durham creates thousands of jobs in entertainment and media, management, social entrepreneurship, manufacturing and service, and science and technology. Employment growth in Durham will outpace the state and the country by 2021.

Not all young people in Durham have access to the tools they need to succeed in school and attain gainful employment (e.g., credentials, work-readiness skills, transportation, career knowledge, social networks). The unemployment rate for young people between ages 16 and 19 is 37 percent, and for those between ages 20 and 24, it is 15 percent. African American and Latino young people in Durham are more likely to be in prison, receive unemployment insurance, and hold labor or service positions. About 60 percent of Durham's 44,000 youth and young adults are on track educationally (age group or advanced in path to graduate from post-secondary education and enter the workforce). Twenty-five percent are 1 or 2 years behind their age group in high school or post-secondary education. The remaining 15 percent are considered disconnected or "opportunity youth" who are far from achieving high school diplomas or work readiness, and face serious barriers to employment. Ali emphasized that low education levels are known to be linked with poor health and lower life expectancy. The challenge is to close this achievement gap and find a way to make sure those 44,000 young people are producers and not just consumers.

Made in Durham

Made in Durham is a public–private partnership to help Durham move from a patchwork of weakly aligned programs and policies to a

coherent, performance-driven, education-to-career system.[4] Ali pointed out that National Academy of Medicine President, Victor Dzau, led this effort when he was chancellor for health affairs and CEO and president of the Duke University Health System, bringing together key leaders from nonprofit organizations, government, education, and community development, and CEOs from Durham's health and life sciences, information technology, finance, and media companies.

The vision of Made in Durham is to provide all youth (on track, behind, and disconnected) with multiple educational pathways and universal work experience responsive to demand, so that they can become citizens, workers, life-long learners, and parents building healthy families in Durham (Strattan et al., 2012). The goal, Ali explained, was to create an education-to-career system where every young person completes a high school degree or equivalency, engages in work experience that will prepare each person for a career, enters post-secondary education and completes a credential, and secures a living wage by age 25. Schools have changed to meet these goals. For example, the City of Medicine Academy magnet school prepares students to graduate with their high school degree, and provides classes and field experiences that prepare them to continue their education for a career in health care.

Ali explained that Made in Durham is working to achieve its goal by embracing five principles of reform:

1. **Weave employment with quality education,** incorporating work experiences into learning from middle school through post-secondary study.
2. **Engage employers and youth** in the design and delivery of an education-to-career system.
3. **Track performance and be accountable** to partners and the community, by improving data collection, analysis, and reporting.
4. **Bend, blend, and leverage funding.**[5]
5. **Build a purposeful partnership** that strengthens Durham's existing programs and services with improved data, funding, and organizational capacity.

Employers have key roles in Made in Durham, Ali said. They serve as strategic leaders and board members, co-designers of career path-

[4] See http://www.mdcinc.org (accessed July 31, 2015).

[5] The goal is to achieve sustainability by relying less on new funds, to use the resources that they have more efficiently, and to prioritize where to reallocate funds. For more information on the five principles of reform, see *Made in Durham: Phase 1 Action Plan 2014-2016.* http://mdcinc.org/sites/default/files/resources/MID%20Action%20Plan%20Dec2014%20FINAL.pdf (accessed August 17, 2015).

ways, and critical partners in building a system that affords high-quality, applied learning and work experiences.

The basic model is a demand-led approach to connecting young people with good jobs. The programs were designed with the end in mind, starting with the business employer's objectives and working backward through the job requirements and training needed (see Figure 4-1). Work-based learning has many benefits that promote career readiness, Ali explained. For students, it helps them to make a clear connection between classroom activities and a successful career. There is also a reduction in dropout rates, and increased success rates of dropout recovery programs. For employers, work-based learning establishes a diverse talent pipeline, and reduces the cost of recruitment. Summer employment is also part of the process, helping students gain experience and make connections that can lead to full-time employment. Ali also emphasized the importance of building the soft skills that are needed to stay employed and build the relationships to get to the next level.

In closing, Ali highlighted several of the short-term outcomes from the first year of Made in Durham. The program secured 71 summer internships for young people, and established relationships with the employers to move the program forward. Employers' perceptions of disconnected youth and how to engage with this population have changed, and several local firms have changed or amended their human resources policies to enable younger students to work. The program has also gained an increased understanding of messaging that resonates with employers, and the ability to make a strong value proposition to the business community.

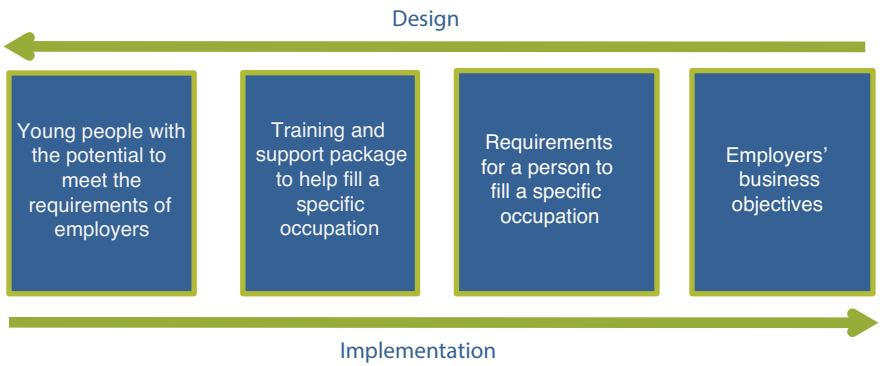

FIGURE 4-1 Demand-led approach to connecting young people with good jobs.
SOURCES: Ali presentation, June 4, 2015; Made in Durham, 2012.

THE CALIFORNIA ENDOWMENT

The California Endowment is investing more than $1 billion, over 10 years, in its Building Healthy Communities (BHC) initiative. Investing in human capital is the main strategy to address issues of inequities in health and society, Flores said. Resident engagement ("people power") and organizing are the roots of building human capital and the capacity for people to participate in society at large, he said. In a recent assessment, land use, safety, and school climate were the top three issue areas for resident-driven groups. Youth efforts are also extremely important to improving community health outcomes, Flores said. He referred participants to a previous Institute of Medicine roundtable workshop, which discussed the role of youth organizing, preparing youth for careers and leadership, and helping them find a pathway to participate in civil society (IOM, 2015b).

The California Endowment partnership with the Federal Reserve is bringing capital investments to BHC sites through convening stakeholders from different sectors, assessing community development needs and opportunities, and attracting and cultivating co-investors. The California Endowment is working with its long-standing partners in state and local public health and other private foundations to advance population health improvement efforts in low-income communities, including universal access to health care coverage, healthy nutrition and parks, youth development, and job training opportunities.

The California Endowment supports the California FreshWorks fund, a private–public partnership loan fund that has raised $272 million to invest in bringing grocery stores and other forms of healthy food retailers to underserved communities. Initiatives also help to support healthy consumer habits, create employment, and boost employee wages at FreshWorks-funded stores. In association with the National Executives' Alliance and the California Executives' Alliance, The California Endowment has led the creation of philanthropic alliances focused on lifting up men and boys of color. Partnerships with the Irvine Foundation and Atlantic Philanthropies aim to create health career pathways for underserved youth. The 14 BHC places also leverage funding for physical improvements, include building up communities and improving transportation systems so communities are more attractive to business, developing green space, and using infill development (developing vacant or underused properties in urban areas). Flores raised the issue of gentrification in terms of progress in human capital, and noted that new inequities can be an unintended result of change. Improving a community often leads to an increase in property values, resulting in higher rents that drive out some residents.

Another effort of The California Endowment is to ensure the implementation of California Proposition 47 (Prop. 47), which reclassifies cer-

tain non-serious, non-violent offenses from a felony to a misdemeanor.[6] The impact of Prop. 47 is potentially significant, Flores explained, as having a felony on one's record impacts the ability to get hired, secure housing, and receive public benefits, for example. Considering the disproportionately high rate of incarceration among young men of color and in some communities, the opportunity for them to return and be productive is a turning point for many families and neighborhoods.

Addressing Politics and Practices

In considering the breadth of ways that human capital development can be an opportunity to address inequities in communities, Flores cautioned that we cannot focus on the inequities alone, or on programs that solely compensate for inadequacies in the system. We must consider why those system inadequacies exist in the first place—politics and practices that contribute to economic inequality and the concentration of income, wealth, and power, he said. Flores asked participants to consider five questions:

1. What are the underlying factors that contribute to, for example, the fact that people are more likely to go to prison than to graduate from high school in many of these places?
2. Why are large portions of our population underemployed and underutilized?
3. Is excessive compensation of top executives, and the growing isolation of the wealthy living in enclaves, a human capital issue that bears on population health?
4. Are the proliferation of low-wage jobs and the declining bargaining power of employees human capital issues?
5. Ultimately, Flores asked, why can't "healthy business climate" mean overall prosperity shared by working people and the community at large?

DISCUSSION

During the open discussion, participants considered the association of employment with health outcomes, including mental health; funding for human capital development; the balance between education and job development training; and taking a place-based approach to health.

[6] For more information see http://www.nolo.com/legal-encyclopedia/resentencing-under-californias-proposition-47.html (accessed August 17, 2015).

Health Outcomes

Raymond Baxter of Kaiser Permanente observed that the connection is commonly made between economic development opportunity and health at the population level. He asked whether the individuals trying to gain access to the workforce are presenting with any particular health problems that need to be addressed, and whether successfully moving into the workforce has any impact on health at the individual level.

Javits responded that many people present with histories of addiction, mental health problems, posttraumatic stress, and, to some extent, developmental disabilities. There is often a lack of support to address these issues in the community, and because these health issues are often stigmatized, many people do not seek care. Sometimes being involved in the process of trying to get work makes people more willing to deal with these underlying health conditions that may be preventing them from succeeding in finding employment, said Javits. Evidence about the actual impact of work on health is limited and mixed, and she suggested it would be useful to study this.

Flores said there are correlations between individual health and employment in the literature, especially with jobs that have health coverage (RWJF, 2013). Employees give attention to illnesses that otherwise would have been neglected, health conditions can be addressed, and greater attention is paid to preventive care. Also, the incidences of violence and substance abuse are lower among the employed than the unemployed. Emotional health improves significantly, and rates of depression are lower among the employed. Chronic disease is also much lower among the employed than the unemployed (Oziransky et al., 2015; Witters, 2012).

A participant asked whether, at a community or population level, there is anything to suggest that the initiatives described will improve the health of the community in general. Ali said he has observed that when minority businesses are doing well, they tend to hire more minorities than any other group. Similarly, he said, women tend to hire women. People seem to have an affinity for understanding what is needed in their communal space. When there are employers who care about the community and invest in the community financially, Ali said, whether with resources or with time and commitment, there is more responsibility and respect. When there is disinvestment in communities, from grocery stores to banks and others, he added, there seems to be unrest in the communities. Javits said she has observed an impact on health from reduced incarceration, reduced homelessness, increased housing stability, increased connection to children and dependents, and the visibility of people who are working legitimate jobs in a community that has, in turn, encouraged others to get involved.

Participants discussed further the need to connect people to mental health services. Ali said that Made in Durham has no formal approach to address mental health. There is a structure to provide mentors for the young adults, and coaching to help them improve their social skills to help them stay employed. Giving them that social capital helps them to deal with some of the issues they face in getting to the next step. Javits observed that employment can provide a door to the services needed to deal with some of the issues people have in trying to get or keep a job. Because stigma persists, she said a lot more could be done so that people do not have to be marked as having a problem in order to get job development services.

Funding Alternatives

Referring back to Galloway's keynote address (see Chapter 2), David Kindig of the University of Wisconsin School of Medicine and Public Health asked whether the Community Reinvestment Act (CRA) or a pay for success model could be used for the development of human capital. Javits said both the CRA and pay for success offer substantial opportunities for capital to be invested in social enterprises. REDF believes that the CRA investments in social enterprises that employ people who face significant barriers to work should qualify for the CRA credit. It has been done once or twice, she said, but for the practice to spread more broadly, some banks need to be willing to take the risk to do it, and run it through the regulatory process. There are not any obvious hurdles, she said, and REDF is aware of several banks that are interested in investing in social enterprises.

Javits suggested that there are pay for success opportunities for those enterprises serving people for whom the cost and impact to government can be measured, and the success of the enterprise compellingly demonstrated in a relatively short time frame. REDF is working with the Center for Employment Opportunities, which has a pay for success agreement in New York State on the role of workforce development in preventing recidivism that builds on the findings of an earlier randomized controlled trial of the Center. Similar projects are in development elsewhere around the country.

Education Versus Employment

Sanne Magnan of the Institute for Clinical Systems Improvement asked about the balance between education and job development. Javits said there is no question that having a good education, and taking people as far as they possibly can go in the education system, is essential. How-

ever, many people struggle in the education system. For many of them, employment helps to address some of the dysfunction in their lives that makes it difficult for them to get through school. Some young people who are in school also have economic responsibilities to their families. These students can benefit from closer ties between school and employment (e.g., that being done by Made in Durham).

Javits noted that in addition to jobs, people also want dignity and respect. If we act as though some of the jobs that people have are not worthy of dignity and respect, those people have difficulty fighting for proper pay and benefits.

A Place-Based Approach to Health

Terry Allan from the Cuyahoga County Board of Health said we all pay for poor health, and he asked Flores what narrative resonates in making the case for change. Flores explained that The California Endowment takes a place-based approach with the slogan "health happens here," which signals the recognition that everything that goes on in a community matters to overall health through shared responsibility. This slogan lets people know that they can make health happen in their community, or impede health based on their practices and investments, or lack of those factors. If the community has failures or erupts into violence, all the people who live there suffer. Business is a part of the community, and is a very important piece of the place-based approach. Businesses' employees are in that place, use the resources in that place, and serve customers in that place. Flores concluded that business should therefore consider that its own interest is being served by the welfare of that place.

5

Revitalizing Communities

Professionals in medicine and public health have a great deal of awareness and have taken significant action around the relationship between community revitalization and population health. Moderator Victor Rubin, vice president for research at PolicyLink, observed that there are also parallel efforts under way in the fields of urban design and redevelopment, city and regional planning, architecture, landscape architecture, and property development that focus on the social determinants of health. Community leaders have recognized the same connections between the social determinants of health and the overall well-being of their constituents, mostly low income and mostly people of color, he said. They are getting involved in issue-based neighborhood organizing, and taking action on policies and practices. Health impact assessments and other analyses have shown the impact of community advocacy and organizing. Various types of business enterprises are also beginning to focus on the social determinants of health. Real estate developers, for example, are creating communities that allow for a healthier lifestyle. Health insurers and hospitals are also taking opportunities to include a focus on the built environment. Highlights from this panel are found in Box 5-1.

Social determinants of health are just that; they are social, Rubin emphasized. They are less about individual behavior and more about how communities are constructed and operate, and how residents are more or less healthy depending on the broader factors of equity and access to economic opportunity. Creating access to fresh food or the chance to exercise is not merely a design task that can be separated from the broader mission

BOX 5-1
Highlights from Session on Revitalizing Communities

- The deployment of private resources in partnership with local governments in place-based and citywide philanthropic initiatives can lead to systems change (Rubin)
- Businesses can have a positive impact by embracing strategic land use, making decisions and evaluating development options with an entire city in mind, supporting open-space networks, driving better employment and purchasing, supporting small firm development, and fostering supportive relationships with surrounding neighborhoods (Kinkead)
- Through the tax credit investment process, the private sector is one of the largest providers of resources for affordable housing (Griffith)
- Services should be delivered in innovative ways that address the needs of residents in areas such as public transit, health care, retail, and employment (Kinkead)
- Trauma impacts people's capacity to take advantage of available services. A trauma-informed approach to community building can aid in building safety, stability, resilience, and recovery (Griffith)

NOTE: Presenter(s) to whom statements are attributed are indicated in parentheses.

of creating a city that works for everyone, and that provides everyone the opportunity to work and prosper.[1]

This is an era of revival for some failing American cities, Rubin observed. There are large new investments in development, research on populations, new forms of commerce, and widespread appreciation of the health and social benefits of compact, less auto-dependent development. It is important to remember, he stressed, that, for the health benefits of this urban revitalization to be realized, the revitalization needs to be equitable and inclusive. He noted that PolicyLink refers to this as building healthy communities of opportunity.

In this session, speakers provided examples of the community building and economic revitalization that are under way in two major cities, what these initiatives mean for health equity, and in particular, the role of business in this process. Anne Griffith, senior program director at Enterprise Community Partners, Inc., discussed HOPE SF, a revitalization project in San Francisco, California. Dan Kinkead, director of projects for

[1] For more information on why place matters to building healthy communities, see, for example, http://www.policylink.org/sites/default/files/WHYPLACEMATTERS_FINAL.PDF (accessed October 12, 2015).

Detroit Future City, described the implementation of a strategic framework to stabilize and transform the city of Detroit.

San Francisco and Detroit are cities in very different circumstances, Rubin said. San Francisco is in the midst of a technology-driven growth boom. This has placed enormous pressures on the affordability of the city, and a rapid demographic change is under way that threatens the historic diversity and character of the city, he said. In contrast, Detroit is emerging from the end of an era of manufacturing employment that led to massive disinvestment, population loss, property abandonment, and physical stress. Despite the differences between these cities, there are similarities in the communities. For example, an isolated public housing development in San Francisco will present many of the same health, education, and safety challenges for children and youth as that same type of development does in Detroit. There are hipster coffee shops, and start-up business incubators for the creative class and the tech entrepreneurs in Detroit, just as there are in San Francisco, he said. In each city, there is a need to rebuild neighborhoods with health equity in the forefront of the plans, and create an inclusive strategy for both jobs and business development, Rubin said.

SAN FRANCISCO: HOPE SF

Enterprise Community Partners is a national, nonprofit organization that offers a range of financial products and programs to improve and increase the supply of affordable housing and to revitalize communities. Griffith discussed the HOPE SF revitalization project, of which Enterprise is a partner.[2] HOPE SF is a public–private partnership, led by the San Francisco Foundation, Enterprise, and the City of San Francisco. The HOPE SF project was launched in 2008 and is the nation's first large-scale public housing revitalization project that was designed to focus on the residents who live there.

Two Sides of San Francisco

As mentioned by Rubin, San Francisco is experiencing a boom in economic prosperity. One in six San Franciscans have graduate degrees, Griffith said. Eighteen percent of all patents are generated in the San Francisco Bay Area. It is home to 56 of 300 of the wealthiest people in the world. Starting salaries for coders (i.e., computer programmers) are between $115,000 and $200,000. Twitter alone has created 1,600 millionaires, she said. The average monthly rent for a two-bedroom apartment is $4,780, which requires an income of $230,000 to be affordable, Griffith

[2] See http://hope-sf.org/overview.php (accessed July 31, 2015).

added. Because of this wealth, there is increasing money coming into the city coffers, and the city itself is wealthy. San Francisco is also a service-rich city, offering a wide array of public services.

The southeast part of the city, however, is geographically isolated from the rest of the city, and lacks many of the retail and other services that exist elsewhere. In the Bay View and Hunters Point areas there are four public housing developments: Hunters View, Sunnydale, Alice Griffith, and Potrero Terrace and Annex. These are old, dilapidated, barracks-style public housing, originally designed and built as shipyard housing, Griffith said. They were built to last for 10 years, she added, but have existed for nearly 60. For the residents of these public housing developments, the average household income is less than $14,000, and the average household size is four people. San Francisco overall has a diabetes rate of less than 5 percent, but between 16 and 29 percent of residents of public housing report having diabetes. The chronic absenteeism rate in school is 8 percent for the city, but 53 percent in these four housing developments. There is considerably more violence in these developments. The unemployment rate among able-bodied adults is about 73 percent, and for young adults ages 18 to 24, it is 92 percent.

The HOPE SF Revitalization Project

In a typical revitalization project for public housing, the housing is torn down and residents are given vouchers and sent to find other housing, Griffith explained. After the new neighborhoods are built, the new residents are not necessarily the same type of people who had been living there before in poverty and isolated from opportunities that other more affluent and healthier residents can access. The new residents often have fewer barriers to employment and fewer overall challenges. The neighborhood itself is touted as a success, Griffith said, but that is not necessarily so for the residents who had lived there. For the HOPE SF revitalization project, San Francisco made a commitment to support the residents who already lived there. The original barracks-style units are being torn down and replaced with three times the density of public housing, additional affordable housing, and market rate housing. Griffith shared some of the lessons learned in three key areas: the impact of trauma; safe, healthy, well-managed affordable housing as a lever for change; and the catalytic role of private philanthropy.

Trauma-Informed Community Building

In 2006, the Human Services Agency conducted a study looking at usage rates of public services and found that 60 percent of the families in

crisis (e.g., those that had intersected with child welfare, food stamps, or the justice system) lived within walking distance of seven street corners in San Francisco. Four of those corners correlate with the four developments that are now part of HOPE SF.

HOPE SF began with a model that focused on community building, which is a widely respected form of engaging people in communities where they are isolated by the physical, economic, social, and service environments in which they live, Griffith said. It often involves gatherings and celebrations as ways to get people to know their neighbors. However, there was not the level of uptake in the typical activities that was expected. The next model tried was a service connection model, connecting people to the many existing services in the city. However, just making that connection did not necessarily lead people to actually participate in or take advantage of that service. People were also frustrated that the services did not always correlate to their needs. It was also found that the service providers at the sites were experiencing a great deal of burnout. The temptation is to ask what is wrong with the staff that they cannot stay and work at these sites, or with the residents that they will not use the services, she said. At this point, HOPE SF got a "crash course in brain science" that taught them about the impact of trauma, so they could begin to think about what was happening in the communities in a different way. Traumatic events, especially events that happened in childhood, can have continuing neurobiological effects on people. Traumatic events also impact health outcomes and behavioral issues. It also became clear that the staff were experiencing trauma vicariously from working with the families.

To better understand the impacts of trauma the residents had experienced throughout their lives, the adverse childhood experiences (ACEs) test was administered. Griffith summarized the 10 types of traumatic events that are measured as part of ACE assessment. There is screening for three types of abuse (physical, sexual, and verbal), two types of neglect (physical and emotional), and five family dysfunctions (mental illness, incarcerated relative, substance abuse, divorce, and mother treated violently). A person with four or more ACEs is 12.2 times more likely to attempt suicide, 10.3 times more likely to use injection drugs, 7.3 times more likely to be an alcoholic, 2.4 times more likely to have a stroke, 2.2 times more likely to have ischemic heart disease, 1.9 times more likely to have cancer, and 1.6 times more likely to have diabetes. Trauma also impacts the development of executive functioning skills in young people. Griffith noted that California is 1 of 25 states that has conducted a statewide study of trauma. The study found that 17 percent of Californians across the board have four or more ACEs.

With this new understanding, HOPE SF responded by conducting

staff trauma training at each of the housing sites. Training and support were provided to resident leaders, and a peer health leadership program was developed, facilitating resident support of one another. There is a pilot of onsite, nonstigmatized mental health counseling. A new "trauma-informed" community-building model was also implemented (Weinstein et al., 2014). The Department of Public Health responded by creating a trauma-informed system, and has been trauma training their entire workforce. The Department of Public Health also developed a set of basic principles for a trauma-informed approach, addressing five main practice areas: understanding trauma and stress; compassion and dependability; safety and stability; cultural humility and responsiveness; and resilience and recovery.

Housing as a Lever for Change

Most people think of public housing and affordable housing as a federal or other public subsidy, and it generally is, Griffith said. In fact, one of the largest providers of resources for affordable housing is the private sector, through the tax credit investment process. The federal government allocates low-income housing tax credits to states. State housing agencies allocate those tax credits to developers for development of affordable housing for qualified residents. Corporate entities invest in the developer, and receive a tax credit for 10 years. This has been incredibly successful, Griffith said. Since 1986, $2.5 million has been spent to develop more than 100,000 affordable units every year. There is rigorous state oversight to ensure that units are affordable for at least 30 years (many permanently). The housing credit program is a win-win situation, she said. The private sector has a stake in ensuring that the apartments are well done in order to continue claiming the tax credit, and the health benefits for residents that move from a place that is filled with vermin to a place that is beautiful and well-built is significant.

The Role of Philanthropy

More than $11 million in private-sector finding has been committed to HOPE SF, including a substantial gift from Kaiser Permanente of $3 million. This has allowed the funding of human capital programs that foster leadership at each of the housing sites, including the Peer Health Leadership Program, the Onsite Project-Based Employment Program, and the Educational Engagement and School Attendance Program. Philanthropic resources also allow HOPE SF to fund research, strategy development, and evaluation to identify best practices, and to implement them in a way that engages the residents.

In addition, philanthropic resources have funded research on non-stigmatized mental health care and the impact of peer leadership programs. The outcome of this research led to the pairing of the Peer Leadership Program with an onsite wellness center. A nurse was installed in a vacant residential unit to administer blood pressure checks and other routine procedures, with the goal of navigating residents to a medical home. As they talk about why their blood pressure is high, residents begin to talk about the traumatic events in their lives. This provides the nurse with the opportunity to make a "warm hand-off" to the behavioral health specialist sitting in the next room. A conversation is started that leads either to individual treatment, or to groups that are created at the housing sites. This approach has allowed the public health system to begin to move city resources differently, in a place-based fashion, Griffith said. With the grant from Kaiser Permanente, the program will be expanded from one pilot site to all four sites, and institutionalized within the public health system.

DETROIT FUTURE CITY

The vision of Detroit Future City recognizes the need for both immediate impact to improve current circumstances for Detroiters, and structural changes that will take decades and generations, Kinkead said. The 50-year strategic framework is broken down into four implementation horizons: stabilize (first 5 years), improve (years 5-10), sustain (years 10-20), and transform (years 20-50).[3] Detroit Future City launched in 2013, and is in the stabilization phase. Kinkead pointed out that several of the goals and activities related to achieving a stabilized population overall are tied to business and workforce. Currently, only 50 percent of the working age population in the city of Detroit is employed. The city has lost 60 percent of its peak population of 1.85 million, and is now home to about 700,000 residents. Targets for the stabilization and improvement phases are to establish a stabilized population; double the number of jobs available in the city; create an integrated regional transportation system; become a globally recognized leader in adaptive land reuse; and be enhanced and sustained by a broad-based and ongoing civic stewardship network. One of the most important and enduring pieces of Detroit Future City, he said, is that it is not just about physical space and place, but about people.

This moment in the city's history is very critical, Kinkead said. There is new governance; regional cooperation emerging where it has not existed in the past; and a dynamic economy emerging from within the city, including a much more diversified distribution of innovation and

[3] See http://detroitfuturecity.com/wp-content/uploads/2014/12/DFC_Full_2nd.pdf (accessed July 31, 2015).

technology firms, health-related enterprises, light-scale manufacturing, and other industries. There is also new transportation investment in light rail in the city, innovative infrastructure and partnerships, and public land coordination of land assets. Detroit Future City seeks to leverage these changes to stabilize, sustain, and transform the city for the long term.

Strategic priorities for reaching the first horizon (stability) are to have a real and immediate impact on residents' quality of life, and take substantial initial steps toward long-term fiscal sustainability. Kinkead noted that these two priorities can be diametrically opposed and balancing them is difficult; satisfying the former can undermine the latter, and vice versa. Finding a balance where both objectives are integrated and met is essential. Strategically, Detroit Future City will "pick low-hanging fruit" and will be bold and take risks, while advancing the more systemic changes necessary. There is a focus on fundamental policy reform, and on piloting innovation, as well as engaging people for action.

Detroit is beginning to turn the corner, Kinkead said. The international waterfront in Detroit is the site of a tremendous amount of reinvestment (tens of millions of dollars invested monthly, and tens of thousands of new jobs generated every quarter). There is also substantial growth in Detroit's central business district, and rapid growth in the overall greater downtown. However, Detroit also has 23.4 square miles of completely vacant land. For comparison, that is slightly larger than the island of Manhattan, he said. This land is distributed across the city, and concentrated in a few key places. This is seen as a tremendous liability, and Detroit Future City is working to identify ways in which this land can become an asset for the city, such as green infrastructure for air quality and recreation, blue infrastructure for storm water management, and urban agriculture.

Elements of the Strategic Framework

The strategic framework is grounded in community feedback and participatory planning. Stakeholders are not only contributors to the plan, they are also fully equipped to help implement it. The implementation office of Detroit Future City is housed in a storefront, Kinkead said, functioning as an access point for anyone in the city who wants to engage and help turn the city around. The five main planning elements for Detroit Future City are land use, city systems, land and buildings assets, neighborhoods, and economic growth. The element of civic engagement supports all of these components.

Land Use

In spite of all of the available vacant land, of the top 20 cities in the United States, Detroit ranks the lowest for available recreational park spaces per resident, Kinkead said. There are overarching unmet needs around service delivery, and a mismatch in the housing products offered. Historically Detroit has been a low-density city (i.e., single-family construction), even at its peak population. This is arguably unsustainable, Kinkead said. Current market demand for new housing is for multifamily structures. As mentioned, Detroit has more than 20 square miles of vacant land. To reuse this land, the Detroit Future City land-use strategy will drive greater density in key parts of the city, and support an open-space network. Maps of demographics, housing conditions, and other factors were used in an evidence-based approach to balanced land-use development. The plan promotes mixed-use and multifamily land use in key areas, drives greater density, creates open space, and redefines neighborhoods.

City Systems

Over the past 65 years, Detroit has lost 60 percent of its public revenues to support public systems, and has struggled on the delivery side for water, power, waste, and other services, Kinkead said. Public transportation systems have been underused and poorly maintained (e.g., only 9 percent of Detroiters use public transportation; only 35,000 of 88,000 existing street lights are working). There are numerous environmental impacts of failing city systems (e.g., unaccounted-for water system capacity from leaks and hydrant use; extensive "combined sewer overflow" discharges into the Detroit River in each year; lead poisoning). Nearly 20 percent of the population does not have health insurance of any kind. Death rates from heart disease are 50 percent higher than the national average, and childhood asthma cases are three times the national average. Detroit Future City hopes to impact these areas with more strategic decision making, and innovative investment that is tied to business opportunities and employment growth in the city.

We need to think differently about how we provide services, Kinkead said. The issue is not about removing services, but about being innovative in how service is delivered. For example, five-times daily bus service through a low-occupancy area of mostly older residents who are not part of the active labor force is not cost effective. However, residents will need to travel to the store or the doctor several times per month. One alternative approach developed is a paratransit network to bring residents to the doctor. This is an on-call service run by the local church, with a subsidy from Detroit Future City to cover the insurance for the bus.

The city is also taking a much more thoughtful approach to managing bigger systems, such as storm water management. Detroit, like many other cities of its vintage, has a combined sewer overflow system. Sanitary waste from buildings and storm water waste from the street both go to treatment facilities by the Detroit River. More than half an inch of rain over the course of 1 hour or less can overwhelm the system, and the overflow is directly discharged into the Detroit River. A comprehensive, citywide "blue infrastructure" system could prevent this, Kinkead said.

Land and Building Assets

Available land area can be used to develop green and blue infrastructure. The current land vacancy is a real asset that could be transformed into, for example, recreation or agricultural production. Kinkead shared several examples of current projects. As part of the Great Lakes Restoration Initiative, $1 million received from the U.S. Environmental Protection Agency was matched with $1 million from local philanthropic donors for a green infrastructure project across the lower east side of Detroit. Detroit Future City is also working with the U.S. Department of Energy on renewable energy production in the city (e.g., biomass energy production from switchgrass anaerobic digestion, solar photovoltaic energy production with pumped-storage hydro).

Neighborhoods

In places where there is the highest vacancy, and the biggest disinvestment and depopulation, residents simply cannot get what they need in the city. In fact, $1.5 billion of Detroit resident expenditures are made outside the city each year, Kinkead emphasized. The people with the least are traveling the farthest to obtain groceries and other needs. What is required is a place-based strategy for providing retail amenities, linking people to retail through transit, and providing employment. The crime rate in these communities is high, particularly the violent crime rate, which is the second highest in the United States. As noted above, health statistics in these areas are poor.

Improving quality of life is a focus of Detroit Future City's work with communities and neighborhoods. The city takes down about 240 homes per week in a blight elimination strategy that will remove 80,000 structures out of the 380,000-structure portfolio. As a result, there is more and more open land becoming available. Thinking differently about neighborhoods and available land use has led to a variety of programs, for example, community arts programs, or employing residents in the deconstruction efforts and selling salvaged materials for a profit.

Economic Growth

In Detroit, there is one private-sector job for every four Detroiters, Kinkead said, compared to a ratio of around 2.5 to 1 for most successful cities. Those in the city who are working face many types of challenges. The majority of employed Detroit residents (61 percent) are working outside the city, often in service-based jobs. Seventy percent of the jobs in the city are held by people who live outside the city. Opportunity is further limited by a poor mass transit system.

Again, this is about strategic land use, he said, locating businesses and new enterprises in the city, increasing job opportunities and the tax base, and reenergizing the economy. The place-based strategy supports four key economic pillars: industrial, education and medical, digital/creative, and small business. Local entrepreneurship and minority business participation are key, Kinkead said. There is also a need to improve skills and support education reform. The place-based strategy builds on existing assets and identifies those that previously have been underused, such as parcels of land in industrial areas. He noted that Detroit Future City was part of a team that helped to recruit the Goldman Sachs 10,000 Small Businesses Initiative to Detroit, which provides financial capital, tools, training, and professional support to new enterprises. Detroit Future City is also focusing on employment districts that have been overlooked in the past (i.e., areas outside of the greater downtown area), and working with schools to help with job preparedness.

In closing, Kinkead summarized what businesses need to do today to begin to have a positive impact on revitalizing their communities. Embrace strategic land use, make decisions, and evaluate development options with the entire city in mind, he said. Support an open-space network. Drive better employment and purchasing in the city, particularly at an institutional level. Foster supportive relationships with surrounding neighborhoods. Support small-firm development, including training and financing.

DISCUSSION

Rubin observed that San Francisco and Detroit are both working to redefine the public good, and the identity and vision of the city as a whole, and each is going about it in a different way. He noted that increasing wealth and growth overall do not solve the problem of pockets of isolation and poverty, and a growing city runs the risk of losing sight of its public responsibility. There are complex questions about how to maintain and grow a community that works for a given city. During the discussion, panelists provided further information on the structures and financing of their organizations, and discussed working with public health as a part-

ner, scaling up their organizations to create system change, and keeping partners and staff moving forward in the face of such challenges.

Organizational Structure and Financing

Paula Lantz of The George Washington University asked about the business and funding models for the organizations. Griffith responded that under the nonprofit parent organization of Enterprise Community Partners, there is an asset management arm and two financial arms (a nonprofit Community Development Financial Institution that makes loans and an investment subsidiary that brings in capital through activities such as low-income housing tax credits and new market tax credits). Enterprise also secures grants to support its work, including the U.S. Department of Housing and Urban Development (HUD) Section 4 grants that pass through the organization and are re-granted to community development corporations. She reiterated that HOPE SF is a phased development framework, with phases one and two under way. There are financing plans that are nearly finalized for the third and fourth phases. These include federal resources (e.g., a Choice Neighborhood Initiative grant of $30 million from HUD), and financial support from the city. Pulling together the capital for HOPE SF has been very challenging overall, she said.

Detroit Future City exists as an initiative nested within the nonprofit Detroit Economic Growth Association (DEGA), which is within the Detroit Economic Growth Corporation (DEGC), Kinkead said. DEGC is not part of the city government, but partners closely with it. The Detroit Future City Implementation Office has about 10 staff plus about 5 consultants. It is exclusively funded philanthropically, and is directed by a steering committee, with administrative and legal oversight from the DEGA board. Kinkead said he expected Detroit Future City to evolve into a 501(c)(3) nonprofit organization.

Rubin pointed out that these are examples of how private resources have led to systems change. In nearly every large city, and a number of small cities, there is a complex relationship (i.e., partnership) between place-based and citywide philanthropic initiatives, and the local government.

Public Health as Partner

Raymond Baxter of Kaiser Permanente emphasized that there is a great opportunity to promote health by design when revitalizing cities and building economic opportunity. He asked about the extent of the involvement of the professional public health community and local

universities in these initiatives. Griffith said the department of public health has been a very active participant in HOPE SF. As a public–private partnership and a Living Cities grantee, HOPE SF works with city departments and philanthropic organizations. In addition, one of the Master's of Public Health classes in the Health Equity Institute at San Francisco State University is conducting community-based participatory research at HOPE SF. There is also a HOPE SF Learning Center at San Francisco State University.

In Detroit, the public health implications are so obvious that a public health focus is ubiquitous, Kinkead said. However, there is no public health specificity in partnerships, policy, and approach. The health department was actually dismantled as the city went through bankruptcy proceedings, and was replaced by the private, nonprofit Institute for Public Health. Whether Detroit Future City is working with philanthropic partners or community-based partners, public health is the undergirding element, he said. Rubin added that the University of Michigan School of Public Health has the Detroit Urban Research Center, which partners with community-based organizations to do participatory research on a range of health issues.

Scaling to Change Systems

A participant observed that one of the frequent tensions in this work is the scale of intervention and the systems involved. To what extent can these initiatives change the broader systems in which they are embedded? A common critique is whether neighborhood, or even city-scale initiatives can really have an impact when the systems involved (e.g., educational, environmental) operate beyond the boundaries of that place.

Kinkead concurred, and noted that in issue-focused work, the power to effect policy can be orders of magnitude above the local initiative level. Detroit Future Health is very deliberate in moving among those levels, and bringing those working on the ground together with those in high-level policy-making positions. In cities that are recovering, it is important to constantly make those connections, he said.

Griffith said that, in the beginning, philanthropic money was used in small and innovative ways that bridged the gaps. For example, liaisons were created between the school district and the housing development sites because HOPE SF was not going to change the school system. Over time, HOPE SF has been able to show that the programs it pilots using philanthropic dollars are successful in the community, and the public education system has begun to think about adopting them. HOPE SF then moved to using private funding to help the public system work out how to adopt those programs.

One element now working in favor of HOPE SF, said Griffith, is the new administration. The mayor has appointed a high-level staff member to be the director of HOPE SF in the city. This director has the authority to call all of the city departments together, and require them to interact in a way that has not happened before, she said. HOPE SF is now in its second year of having a director at that level, and change is occurring.

Keeping the Momentum

Catherine Baase of The Dow Chemical Company noted the challenges of convening people effectively to address such overwhelming and daunting issues. How do initiatives generate the will among collaborators and partners, and how do staff stay motivated and committed in the face of such despair? Kinkead said that major challenges tend to galvanize people, including groups that might not otherwise agree on an issue. He observed that people have rallied around community revitalization. As the city went through the largest municipal bankruptcy in U.S. history and people were struggling, a new sense of community emerged. At the same time, however, the resurgence is happening more for some than for others. It is important to be mindful of that, and ensure that everyone has opportunity. On the personal level, he acknowledged that there are very difficult moments, but if you are committed to do this work a point comes where you have to step forward and do it.

6

Investing in People and Partnerships to Create Healthy Communities

The final panel session, moderated by Catherine Baase of The Dow Chemical Company (Dow), focused on engagement of the business sector in community health. Although the discussion on previous panels focused on applying a health lens to the business sector, Baase noted the need to also apply a business lens to the health sector. Jon Easter, senior director for public policy at GlaxoSmithKline (GSK), described how the company has redefined its philanthropic focus from access to health care, to access to health. Vera Oziransky, project manager at The Vitality Institute, discussed the findings from a forthcoming report on engaging businesses and community groups in effective cross-sector collaboration. Highlights from this session are provided in Box 6-1.

GSK: BUILDING HEALTHY COMMUNITIES

GSK is a global health care company that discovers and develops medicines, vaccines, and consumer health care products. GSK's mission is to help people do more, feel better, and live longer, Easter said. To achieve this mission, GSK recognizes that it must address health challenges where they start—and that is often outside the doctor's office and in the communities where people are born and raised, live and work. Easter described how GSK has moved upstream—beyond medicine and into communities—to address the complex and interconnected individual, environmental, and social determinants of health.

BOX 6-1
Highlights from the Session on Investing in People and Partnerships to Create Healthy Communities

- A major barrier to effective workplace promotion is the lack of wellness programs that link employee health to the community. Lack of attention to community health will undermine efforts in workplace health promotion (Oziransky)
- To transform the current landscape, where particular diseases correlate with employment in particular sectors, employers need to understand that the health of their workforce mirrors their communities and forms partnerships with community stakeholders to extend their corporate health strategies beyond their four walls (Oziransky)
- Leaders at GSK listened to and learned about what communities wanted and shifted their philanthropic focus to address upstream factors that impact health. Through a collective impact approach, GSK has deepened their interventions and partnerships through continuous learning, mutual reinforcement, and backbone support (Easter)
- Care coordination models, as a strategy of meeting people where they are, can help improve health care delivery for people with chronic diseases by broadening the services provided in neighborhood pharmacies (Easter)
- Broadening the health lens in the business community is a challenge when different parts of the company handle philanthropy, corporate social responsibility, or sustainability. Activities that contribute to improved population health may exist without recognition that stimulating engagements beyond health as health care would raise awareness and potentially broaden impact (Baase, Baxter)

NOTE: Presenter(s) to whom statements are attributed are indicated in parentheses.

Redefining GSK's Philanthropic Focus

To better understand what it means and what it takes to build a healthy community, GSK leaders set out on a national listening tour, hosting town halls in Denver, Colorado; Philadelphia, Pennsylvania; and St. Louis, Missouri; issued a national survey; and convened a national advisory council.

Easter shared some findings:

- The national survey found that Americans believe a variety of community factors are very important to their health, including parks, education, and healthy food options. People who valued these community factors the most had the least access to them.

- The community conversation in Philadelphia revealed the importance of committed leadership and broad engagement in improving community health.
- The community conversation in St. Louis made clear that successful collaborations start and end with data.
- The community conversation in Denver uncovered that there are already several successful interventions under way, but GSK and other businesses have an opportunity to help foster deeper collaboration and greater "collective impact."
- The national advisory council of health care leaders challenged GSK to go "beyond the check" and bring more business resources, such as the skilled volunteer service of GSK employees, to bear in charitable partnerships. Easter cited the GSK PULSE Volunteer Partnership as an example. This program provides up to 100 high-performing GSK employees each year with as much as 6 months of paid leave to serve as volunteers full-time at a nonprofit organization that is addressing health challenges.[1]

The lessons throughout the national survey, the listening tour, and the national advisory council confirmed for GSK this connection between health and community. Easter said the more GSK understands this connection between health and community, the more it can work to improve community health. Easter referenced the "What Works for Health logic model," developed by the Robert Wood Johnson Foundation (RWJF) and the University of Wisconsin Population Health Institute as part of the County Health Rankings and Roadmaps.[2] This logic model makes clear that 80 percent of our health is influenced by factors outside the physician's office, including factors upstream in communities.

Easter explained how all of these insights have influenced the dramatic redesign of GSK's philanthropic focus in the United States, from access to health care, to access to health. GSK is now committed to building healthy communities and is doing so through its GSK IMPACT Awards and Grants.

GSK IMPACT Awards and Grants

The GSK IMPACT Awards program is a long-standing charitable program, Easter said, that was initially focused solely on access to care. The scope of the program was expanded and suddenly the company was

[1] See http://gskpulsevolunteers.com (accessed September 17, 2015).

[2] See http://www.countyhealthrankings.org/roadmaps/what-works-for-health (accessed September 17, 2015).

working with organizations it had never worked with before, on new issues such as healthy eating, active living, and affordable housing. The company also set up a new charitable grant program, the GSK IMPACT Grant, to partner side by side with organizations on a shared vision of community health and to empower their work.[3] Easter emphasized that the grant program was designed not to layer new programming on nonprofits, but to broaden and deepen proven interventions already under way, and to foster greater collaboration. It is a bottom-up approach guided by the Collective Impact model[4] outlined in the Stanford Social Innovation Review by John Kania and Mark Kramer of FSG (Kania and Kramer, 2011).

Easter described the work of the first GSK IMPACT Grant winner, a network of organizations in Denver, Colorado, with a shared vision to drive healthy eating and active living for low-income youth in three Denver neighborhoods. The network worked in a mutually reinforcing fashion, and was continuously communicating, which Easter noted are hallmarks of the collective impact approach. What set this effort apart, he said, was the way they engaged the local teens in leadership development, letting them come up with ideas that would attract their peers into the recreation centers. With the grant from GSK, they were able to fund the teens' ideas and bring the programs to life. At several of the recreation centers, the participation rate has increased 1,000 percent. Denver Parks and Recreation is now exploring how to scale up this youth leadership approach across the city at other recreational centers.

Easter shared two key insights from this process. First, it is not merely about collaboration; it is about collective impact. There needs to be a structural framework that provides backbone support, continuous learning, and mutual reinforcement, he said. Second, a youth engagement strategy is essential. Instead of just serving young people, engage them as leaders in making their communities healthier.

Care Coordination

Although addressing community-based factors is critical for improving health outcomes, and GSK is doing that through its charity, said Easter, it is also important to address clinical care challenges, especially access to care and quality of care issues. Easter explained how GSK is working

[3] See http://us.gsk.com/en-us/about-us/us-community-partnerships/gsk-impact-grants (accessed September 17, 2015).

[4] The five conditions of collective success are (1) a common agenda, (2) shared measurement systems, (3) mutually reinforcing activities, (4) continuous communication, and (5) backbone support organizations. For more about the collective impact approach and philosophy, see http://ssir.org/articles/entry/collective_impact (accessed October 7, 2015).

on this clinical care front through a care coordination initiative. Easter noted the lack of coordination and the fragmentation of care in the current health care system. Care is reactive and episodic, and often leaves patients confused, he said. New health care models, including care coordination models, are being validated and implemented. He shared an example of one such model in North Carolina, where GSK has a corporate campus.

More than a decade ago, Community Care of North Carolina (CCNC) was building a medical home infrastructure before most people really knew what patient-centered medical homes were, Easter said. They built local community-based support functions across all 100 counties in North Carolina. Social workers, care managers, behavioral health experts, psychiatrists, pharmacists, and others were pulled together to support providers and hospitals in a care coordination network. An analysis by Milliman revealed nearly $1 billion in Medicaid cost savings for the state of North Carolina between 2007 and 2010 through this care coordination model (Cosway et al., 2011).

As a community partner in North Carolina, GSK decided to have its employees engage in a care coordination model. It has been nearly 5 years, and GSK has been very pleased with the impact on the quality of care for employees, Easter said. GSK employee participation is also helping to drive the critical mass for care coordination, and helping to define how to drive and improve care coordination.

CCNC approached GSK for help to proactively identify populations at risk for negative outcomes. Data scientists and statisticians from GSK worked with the CCNC population health experts, and built predictive analytics to identify at-risk patients, specifically, those at risk for significant drug therapy problems that would result in hospitalizations. The tool, called Care Triage, was tested in several care settings within North Carolina as well as other states, and its use continues to expand. Easter pointed out that the development of this tool was borne out of trust and mutual engagement.

Data generated using the tool showed that patients with chronic diseases were seeing their primary care physicians about twice per year, but were visiting their community pharmacy 30 times each year. Because a population health strategy should engage patients where they are, said Easter, this discovery led to the building of a community pharmacy enhanced services network. Pharmacists are used to dispensing medications, but are not regularly providing enhanced medication management services, he noted. CCNC was awarded a $15 million federal grant to study community pharmacy in the medical neighborhood, and to proactively identify vulnerable patients at risk to facilitate these new population health activities. The University of North Carolina Eshelman School of Pharmacy has now come on board as a partner, managing the

evaluation of this grant, helping to provide the best practices, and driving progress in the pharmacy networks.

Aligned objectives and trust are both critical for this kind of work, Easter concluded. This is a journey, he said, and "we must learn to walk before we can run."

BEYOND THE FOUR WALLS: COMMUNITY AND WORKFORCE HEALTH

Oziransky discussed the findings from a forthcoming report by The Vitality Institute.[5] Over the prior year, The Vitality Institute conducted quantitative and qualitative research, funded by RWJF, to make the linkage between workforce and community health, understand existing community–employer partnerships, and determine what strategies employers use to improve the health of communities and their long-term profitability.

Employers are struggling to meet the burden of rising health care costs, Oziransky said. The majority of chief financial officers (60 percent) and human resources professionals (70 percent) report health care costs as a main financial concern. For example, Starbucks recently reported that they spend more on employee health care than they do on coffee, while Chrysler, Ford, and General Motors reported that they spend more on the health care of their workforce than they do on the steel they use to make cars. More than 90 percent of large employers offer workplace wellness programs, but few link these programs to the community. This is a major barrier to effective workplace health promotion, she said.

Making the Linkage Between Workforce and Community Health

The Vitality Institute report includes case studies of companies that are making the link to community health promotion and investing "beyond the four walls." Bath Iron Works (BIW), a subsidiary of General Dynamics, is a ship manufacturer and is one of the largest companies in Bath, Maine. They understood that to promote the health of their workforce, they had to extend their health promotion strategies into the community. In partnership with L.L.Bean (another large employer in Bath, Maine), the two companies invested in diabetes prevention programs for their workforces, dependents, and community members. GE is another company, like BIW, that understands that the health of their workforce

[5] *Beyond the Four Walls: Why Community Is Critical to Workforce Health* was released on July 28, 2015. See http://www.thevitalityinstitute.org/projects/community-health (accessed July 31, 2015).

mirrors the health of their community. When interviewed by the Vitality team, Alan Gilbert, director of Global Government and NGO Strategy, GE healthymagination, said that "GE was spending upward of $2 billion on health care costs. We knew we had to go outside the workplace to create lasting change, and this meant partnering with stakeholders in Cincinnati, where we were spending a significant portion of our health care dollars and also had some of our largest manufacturing plants."

Community health promotion can address drivers of health beyond the workplace through community policies that promote health, address the social determinants of health and the built environment (e.g., housing, green space for exercise, access to healthy food), and drive social networks, norms, and values toward health, Oziransky said. Lack of attention to community health will work against any investments made in the workplace, and will undermine efforts in workplace health promotion.

Oziransky noted that while local health data are frequently used in discussions in the public health sector, they are rarely used when trying to engage employers. Health varies tremendously across U.S. counties (e.g., the prevalence of obesity). Health also varies across workforces. For example, workers in manufacturing, transportation, public administration, and health care sectors have higher risks for obesity and hypertension. Workforces in the arts, entertainment, recreation, and accommodations and food services have lower health risks for obesity. Although health clearly varies across counties and workforces, the relationship between workforce sectors and community health is not well understood.

For quantitative analyses, Oziransky and her colleagues looked at health data from more than 3,100 counties, including smoking rates, obesity, physical inactivity, and diabetes, as well as death rates from cardiovascular disease.[6] These data were then correlated with the percentage of employment across sectors in those counties. The data show that four employment sectors are more likely to be located in counties with poor health: manufacturing, transportation and warehousing, public administration, and retail trade. Oziransky pointed out that these are some of the same sectors that are known to have high-risk workforces, which she said demonstrates the linkage between the health of the workforce and the health of the community.

Overlaying a map of obesity prevalence across U.S. counties with a map of manufacturing sector concentration, for example, highlights the

[6] Oziransky and her colleagues used 2014 County Health Rankings data to specify the proportion of adult county populations who were obese, physically inactive, smokers, or diagnosed with diabetes. Because the prevalence of cardiovascular disease is not available at the county level, they relied on the 2008-2010 Centers for Disease Control and Prevention data on county rates of death due to heart disease for adults more than 35 years old as a proxy for the heart disease burden.

association (see Figure 6-1). Oziransky emphasized that correlation is not causation, and this cross-sectional analysis cannot determine whether these sectors are actually causing these outcomes in those counties. A study of longitudinal data is needed, she said, to elucidate these observed associations further so that targeted interventions can be developed.

Oziransky and her team also interviewed more than 70 business leaders and community groups over the course of the past year, and identified three non-mutually exclusive strategies that businesses are using to invest in the health of their communities and the sustainability of their business. Oziransky described three strategies relative to a company's profit and loss statement. On the low end relative to income is strategic philanthropy, which is tax exempt. On the high end relative to profit and loss is a shared value strategy. This is a core part of the business, she noted. In the middle of the profit/loss spectrum is a corporate social responsibility strategy. Oziransky elaborated on the shared value strategy.

Shared Value

Goals of shared value include boosting competitiveness and strategic market positioning (Porter and Kramer, 2011). The company is producing products and services that will benefit society, either through improving health or the social determinants of health. At the same time, said Oziransky, the company expects these products and services to be profitable and that they will drive savings in the form of lower employee health care spending.

One example of shared value is an extended corporate health strategy, such as that undertaken by BIW. They took their strategy to promote health within the four walls of the workplace and extended it to the community, investing where their employees live and work. As mentioned earlier, BIW also understood the overlap between L.L.Bean's population and their population, particularly because spouses often worked at each one. BIW partnered with L.L.Bean to invest in the health of their workforces, their dependents, and their networks in the wider community. BIW has calculated the net projected savings it hopes to accrue in the next 5 years from enrolling high-risk employees in the diabetes prevention programs. Although the initiative only started in 2014, BIW has already observed that employees enrolled in these programs have lost about 7 percent of their body weight, Oziransky said.

Challenges in Practice

The Vitality Institute report also describes the challenges identified in linking workforce and community health. Many companies interviewed

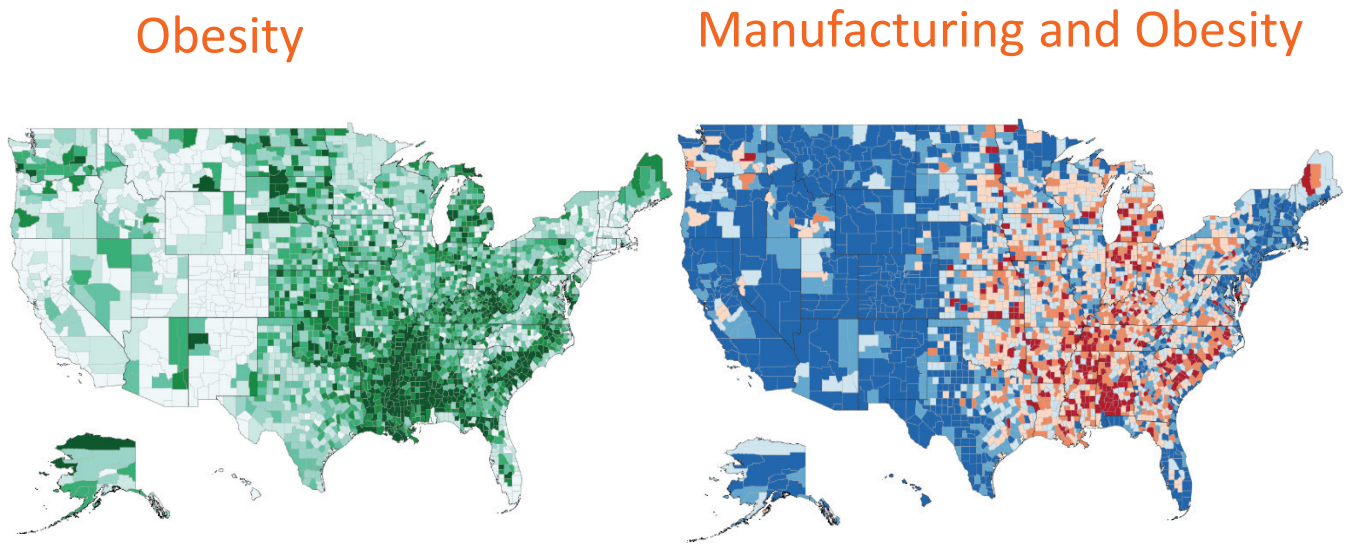

FIGURE 6-1 Relationship between manufacturing and obesity. On the right, a high prevalence of manufacturing and a high prevalence of obesity are shown in shades of red. Low prevalence of the manufacturing sector and a low prevalence of obesity are shown in shades of blue.
SOURCES: Oziransky presentation, June 4, 2015, citing Oziransky et al., 2015, pp. 15 and 29.

had business divisions that were operating in silos, which reduces opportunities for impact evaluation, Oziransky said. In some cases, one division was implementing the intervention in the community, while other divisions in the company actually had the health care, engagement, and productivity data. By not linking their datasets, the company divisions were unable to see the impact on the community, and how that translated to the workforce and the business.

The community groups interviewed were doing good work on engaging businesses on workplace health promotion, but they rarely engaged businesses in expanding beyond the four walls of the workplace. Oziransky said this impedes the creation of shared value between businesses and the community.

Another challenge is that many of the companies interviewed were only using short-term, process-oriented evaluation frameworks, resulting in a failure to attribute health improvement to interventions. Oziransky said it is critical to know whether the programs being implemented are achieving their goals, but it is also necessary to understand the impacts in the community and on the business so it can be determined what works, and scale up going forward.

Transforming the Current Landscape

In conclusion, Oziransky said that to transform the current landscape, employers need to understand that to a large extent, the health of their workforce mirrors the health of their communities. Employers need to partner with stakeholders in the community to extend their corporate health strategies beyond the four walls of the workplace. Oziransky said that employers also need to evaluate the impact of their initiatives. They can partner with local research institutions, universities, or nonprofit local hospitals that have conducted community health needs assessments, she suggested. If a community is already working with local employers on workplace health promotion, said Oziransky, the community should push to engage them beyond the four walls of the workplace.

DISCUSSION

Participants discussed further the engagement, or lack thereof, of companies in policy and advocacy. There was also discussion of health in all business practices, in particular, raising awareness of what activities can impact health, and bringing together the various parts of a company engaged in activities that impact health. Discussion also explored whether increased employee productivity might be part of the business case for a corporate focus on health.

Business Participation in Public Policy

George Flores of The California Endowment raised the issue of business representation in public policy. Although some companies choose not to actively participate in public policy debates for a variety of reasons, he said it would seem to be in the interest of business to have a point of view and, in many cases, to take a position on or advocate for those policies that would improve the health of their workforce and the communities they serve. Easter agreed, and said that GSK is active in public policy. The company is working upstream to ensure that, as the country moves toward value-based care, it is understood that cost has to be a component of achieving value, and that quality measures are essential in new models of care and payment. Other policy areas the company is focused on include how to best enhance delivery and prevention across large populations. He noted that there is also policy work done at the trade group level (e.g., Biotechnology Innovation Organization, Pharmaceutical Research and Manufacturers of America). Oziransky said the interviews conducted by her team revealed that for some multinational companies, the policies in some countries where they operate were actually opposed to the workplace policies the companies were trying to implement (e.g., policies about tobacco use). Baase added that Dow is involved with the advancement of population health in general, and with policy and advocacy. She suggested that many corporations might believe they are not sufficiently informed to participate in policy debates. A role for partnerships and collaborations could be to help partners understand the key issues and messages, and to develop policy advocacy strategies.

Rubin asked about the willingness of companies to put their money and their power behind various policy and environmental initiatives (e.g., ballot measures; administrative regulations; local, city, or state initiatives). Oziransky said that companies interviewed by her team were not asked specifically about any work on policies. Responses to other questions asked did reveal that companies are seeking to make an impact on policies. For example, some companies were working with local stakeholders on education issues, understanding the connection between education and their workforce pipeline.

Jeffrey Levi of Trust for America's Health observed that large pharmaceutical corporations such as GSK have reach across the entire health care system, including relationships with individual providers. He suggested that companies could invest in educating those within the health community, as well as the public, about population health and the value of business engagement in community health. Easter responded that pharmaceutical employees do work to educate providers, pharmacists, care managers, and others, but these activities are highly regulated by law. Promotion and education must remain siloed, and salespersons on

office visits cannot engage in discussions about issues such as policy development or philanthropic activities. GSK is certainly focused on the importance of policy, collaboration, and aligned objectives to create and drive upstream factors that lead to better health. This is why, he added, the company is participating in activities such as this Institute of Medicine workshop.

Health in All Business Practices

Raymond Baxter of Kaiser Permanente highlighted the need not just for a health in all policies approach, but a health in all practices approach (products, supply chain, conditions of employment, environmental impact on the community, impact of pricing, etc.). He recalled the presentations about businesses that are changing their practices to produce health (see Chapter 3).

Based on her interviews with companies, Oziransky said that a company's shared value strategy often comes together with its corporate social responsibility strategy. There are numerous ways in which businesses are looking within the four walls of the company to evaluate what they are doing or producing, and how that impacts their communities. Many of the companies interviewed were engaging with communities to help transform those communities, and some of those companies, particularly the manufacturing companies, were also trying to change their practices. Several food manufacturers, for example, were working to transform the community to create demand for healthier products, and at the same time, working to reformulate their products to be healthier and meet those demands. Technology companies interviewed were considering how to provide services that meet the health needs of the communities. For example, Qualcomm's Wireless Reach Initiative provides wireless access to people in rural and underserved areas, and the company has partnered with the National Institutes of Health to evaluate the outcomes of this new connectivity on health and health care.

In some cases there is a recognition across an organization that health is a broader construct, and that corporate strategy around health has numerous touch points, Baase said. Often, however, anything related to health is referred to whomever is in charge of health care for that company (e.g., human resources), while other parts of the company handle activities such as corporate giving, social responsibility, education, or sustainability. Companies may be engaging in activities that contribute to population health, but they may not be identified as such, or may not even be aware that they are contributing. There is an opportunity to stimulate cross-fertilization of these activities within companies, she said, and to raise awareness of what contributes to health (i.e., broaden the health

lens in the business community). Baxter agreed, and stressed the importance of putting somebody in charge within businesses of making sure that everybody who needs to be engaged is engaged. He also suggested that experts in population health have an obligation to help businesses understand what levers they can influence, and which levers would have the greatest impact on population health.

Health and Company Productivity

Maggie Super Church, an independent consultant, observed that much of the discussion about making the business case has focused on cost savings, either short or long term, through a variety of interventions. She asked if companies are also considering the relationship between health and productivity. She noted that a recent publication suggested that 20 minutes of walking outside during the middle of the day had measurable impacts on productivity for the balance of the day for that person. This requires, of course, that one have half an hour for lunch, and a decent place to go walking. Easter said the GSK initiative in Denver, for example, is a collective impact model looking at individual outcomes, organizational outcomes, and community outcomes. Community outcomes include holistic changes in the community, such as adding more sidewalks or recreation areas. Oziransky suggested that assessing the connection between health promotion activities and productivity should not be challenging. Companies could, for example, tie together data on employee engagement and productivity with data from wearable activity-tracking technology.

7

Reflections on the Day

A health in all business practices approach is an important avenue for engaging businesses, said George Isham of HealthPartners. The cases discussed show that some businesses are beginning to look at the triple bottom line of financial, social, and environmental impacts. Some companies are taking a shared value approach and aligning self-interest with social good, or are considering health as a component of corporate sustainability. David Kindig of the University of Wisconsin School of Medicine and Public Health concurred. He said he was encouraged by the examples of companies moving beyond the profit model to embrace social responsibility as a fundamental part of their business model, as well as the examples of shared value. He also noted that the phrase "health in all practices" may be something that the roundtable could encourage. If many workplaces, including businesses in health care, took a health in all practices approach, it would cover a lot of the population. As is often the case in the roundtable's workshops, Isham noted, the examples discussed showcase leaders in the forefront of the business community in transforming business practices. In moving forward, he highlighted the value of multisector conversations, and observed that different sectors operate within different cultures, beliefs, and values and thus use different terminology when talking about health, which is something that others need to consider when having cross-sector dialogue.

Isham called on participants to share their reflections and suggestions for how to move forward on private-sector involvement and engagement in population health. The following topics were highlighted by individual

roundtable members and participants as highlights from the presentations they heard.

COLLABORATION

Michelle Larkin of the Robert Wood Johnson Foundation (RWJF) observed that discussions often focus on what the private sector or business can do for advancing health, but the population health sector also needs to think about how it can be helpful to business in terms of accomplishing their goals and objectives. She was encouraged by the examples presented, which showed thoughtful collaboration among sectors that are creating value. She also noted that collaboration is coming from both directions in the community, from businesses engaging their employees, as well as employees and community members coming together to talk about their goals for the health and well-being of their community. This is how we empower communities, and create opportunities for them to be healthier and have a more robust economy, she said. Pamela Russo, also of RWJF, agreed with Larkin and said that in addition to thinking about what businesses are doing, there was also discussion of taking a business approach to thinking about population health. It is important for population health to understand what it takes to make an investment and to achieve health aims.

George Flores of The California Endowment noted the importance of remembering that other voices that represent business can be mobilized. He pointed out that generally the senior executives of a company or the owners of a business speak for the business sector. However, there are also opportunities for partnership through the voice of employees and organized labor. Flores said that in California, the trade unions are consistently in front of policy bodies, advocating for progressive change for improving health, education, and opportunities for communities.

Russo emphasized that health departments are also potential partners. Isham reiterated the need for engagement of multiple sectors, including health care delivery, public health, education, transportation, and others.

SUSTAINABILITY

Roundtable members discussed corporate sustainability (i.e., sustainable business practices, operations, supply chains, products/services, workplaces, etc.), and the ability to sustain the initiatives and the engagement of partners for the long term.

Russo observed that for some of the businesses, corporate sustainability was a major part of their sense of social good and impact, although sustainability was not an element of all of the examples. She was inter-

ested in having more discussion on the sustainability element of population health. She referred to an article by Hollender (2015) on net positive impact, which is the concept that a business needs to do more good than it does harm to be sustainable.

Thomas LaVeist of the Johns Hopkins Bloomberg School of Public Health noted that he was heartened by the presentations about the different ways that the power of private enterprise could be harnessed to improve the health of the population. At the same time, LaVeist had been thinking about the issue of sustainable engagement. As an example, he cited the practice of redlining, which was the practice of deliberately not investing in select communities such as West Baltimore from the 1920s through the 1970s. LaVeist wondered if there would be sufficient interest to sustain private efforts to overcome the impact of decades of disinvestment. LaVeist asked what the model for sustainability would be and if there are incentives strong enough to keep business engaged long enough to overcome the impact of disinvestment. He added that he would like to see a more systematic effort by the health sector to collect data on the health impacts on individuals of getting jobs in order to understand it at a population health level. Isham said social change on the scale that is needed in Baltimore, for example, will not come easily or quickly. Sustainability of these efforts may require a fundamental change in the way business leaders think about the function and purpose of business in society.

Sanne Magnan of the Institute for Clinical Systems Improvement said she would like to hear more about sustaining civic engagement such as that described as an element of Detroit Future City. The roundtable has discussed social movements, but less so, the contribution of civic engagement.

MEASURING IMPACTS

José Montero of Cheshire Medical Center/Dartmouth-Hitchcock Keene suggested that more discussion is needed on measuring the impacts of the many different initiatives and approaches. It is important to connect initiatives with outcomes so that funders, payers, or systems can see the changes occurring, and understand the social, environmental, and financial impacts. LaVeist also expressed the need for evaluation of these interventions to see whether they are actually improving population health. Isham reminded participants that the roundtable would be convening a workshop on July 30, 2015, to discuss "Metrics That Matter for Population Health Action."[1]

[1] See http://iom.nationalacademies.org/Activities/PublicHealth/PopulationHealthImprovementRT/2015-JUL-30.aspx (accessed November 15, 2015).

Larkin agreed that more work is needed on both measuring the contribution of the private sector to population health, and moving beyond return on investment as the primary measure. She reiterated the comment made throughout the workshop that it is not just about cost savings or financial gains, but about capturing the value of community development and a vibrant economy to individuals, families, and communities. There needs to be a better way to capture the value of the partnerships, collaborations, and coordination between business and the population health sector, said Larkin. Isham noted that in the business literature, return on investment is also used to refer to nonfinancial returns, including social returns on investment.

Russo raised the issue of tracking other social goods for their impact in a community as health status measures (e.g., education, employment). Isham agreed that health itself is a very important social outcome, but only one of a number of significant social outcomes to consider in thinking about the determinants of health and well-being.

THE PUBLIC INFLUENCE OF THE PRIVATE SECTOR

In considering the engagement of business in the policy arena, Montero said that businesses have a voice in the policy discussion by nature of the power that they hold and the economic impact that they have. Population health, community outcomes, and economic well-being involve policy and politics. He was encouraged by the examples of companies embracing the triple bottom line of social, environmental, and financial impacts. These companies face the critical challenge of becoming a consistent, unified system, he asserted.

Bobby Milstein of Rethink Health suggested that *private* is a misnomer when it comes to the private-sector role in population health. The private sector has massive public influence, and is also public in the sense that it needs people to support it and help do its public work well.

ENGAGING BUSINESSES OF ALL SHAPES AND SIZES

Montero also noted the need to scale initiatives appropriately for use across the country. The examples discussed at the workshop were from big companies, but a large portion of Americans are employed by smaller businesses. Montero asked how businesses with 15, 20, or 50 employees can be engaged. How do we provide them with technical assistance and help their CEOs to understand their role and tie into these efforts?

Larkin agreed that the businesses discussed at the workshop are influencers in the field, and have been champions for incorporating population health into their practices. With regard to engaging smaller businesses,

she said that RWJF recently embarked on a campaign with the U.S. Chamber of Commerce Foundation called Better Health Through Economic Opportunity. The campaign engages chambers of commerce across the country and businesses of all sizes and shapes, and provides toolkits to help them take action in their communities to address health and economic issues. The campaign is also conducting research focusing on the links among health, economic opportunity, and growth and development.

MAKING THE EXEMPLARS THE NORM

Milstein said that long before the work of Michael Porter, there was a rogue economic theory that great wealth flows to different actors through economic transitions. Moving from agriculture to the industrial age, the wealth flowed to those that built out the infrastructure of manufacturing and transportation. In moving from a manufacturing economy to an information economy, great wealth is flowing to the information technology and service sectors. The theory was that of a transformation economy, where great wealth flows to those entities that solve society's entrenched problems. He suggested that the examples shared at the workshop are attempts to move toward a transformation economy. These examples are far outside of the mainstream, he said. The question for the roundtable and for leaders in population health is how to use these exemplars effectively and share the practical lessons across fields and sectors.

Isham agreed that the current information revolution is changing our social, organizational, and institutional structures. This impacts the international flow of commerce and economic value, and he wondered how that might change institutional responsibilities for some of the social and environmental outcomes discussed.

Mary Lou Goeke of the United Way of Santa Cruz County, California, was inspired by the companies that are delivering on the triple bottom line, but shared a case that she believes shows the need to educate consumers and policy makers to value products that are "good all the way around" and not just select the lowest cost product. She shared that the manufacturer of a well-known organic snack food is an exemplar of a good corporation doing good for both the company and the environment (e.g., pays a living wage, built a park in an impoverished neighborhood, very generous in the community). However, the company is essentially being driven out of business by other companies in the region that do not pay living wages or care about the environment. Instead, she added, these other businesses are producing snacks that are more valued by the buyers for high-end grocery stores and big box stores, due to their perceived lower cost for consumers.

GENERAL IMPRESSIONS

Magnan observed that a theme of hopefulness ran throughout the presentations, even in the face of rising health care costs, poor national outcomes, and persistent inequality. The Institute of Medicine has a role to play by using its position to elevate the national conversation on economic well-being and health, and to legitimize the role of businesses in population health, she said.

Many participants were particularly impressed by the scale and ambition of the efforts presented. Milstein said that the Partnership for a Healthier America, for example, is working to change whole generations; Health Care Without Harm is working to change entire sectors; Future City Detroit and HOPE SF are transforming entire cities; and some of The Dow Chemical Company's initiatives will arguably impact the entire planet.

Echoing the sentiment of many members, Raymond Baxter of Kaiser Permanente said he was impressed by the range of approaches and the scope of the activities that were described. Businesses can pull many levers as a force for good, he said. He raised the issue of relying on voluntary action by businesses that choose to engage in population health. Baxter asked which levers could be pulled and what progress could be made, and whether they were adhering to a code of conduct or were motivated by the threat of regulation or other forces or if all businesses were conscious that they are a part of, not separate from, society? Baxter suggested that sharing success stories such as Detroit is a way to educate others about what the possibilities are with an ambitious agenda to engage people, businesses, the public sector, and others to take on the challenges of improving population health.

Appendix A

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Appendix B

Workshop Agenda

Roundtable on Population Health Improvement

Workshop: Applying a Health Lens II:
The Role and Potential of the Private Sector to Improve Economic Well-Being and Community Outcomes

June 4, 2015

AGENDA

Location: Beckman Center of the National Academies of Sciences, Engineering, and Medicine
100 Academy, Irvine, CA 92617

WORKSHOP OBJECTIVES:

1. Explore what businesses can offer the movement to improve population health.
2. Discuss areas of potential, as well as models for how businesses could impact the determinants of health.
3. Provide a platform for discussing how to promote and support health in all business practices, policies, and investments.

8:15 a.m. **Welcome and Overview of the Day**

David A. Kindig, emeritus professor of population health sciences and emeritus vice chancellor for health sciences, University of Wisconsin School of Medicine; co-chair, Roundtable on Population Health Improvement

Raymond Baxter, senior vice president, community benefit, research and health policy, Kaiser Permanente; chair, workshop planning committee; member, Roundtable on Population Health Improvement

8:30 a.m. **Keynote Address**

Ian Galloway, senior research associate, community development, Federal Reserve Bank of San Francisco

9:00 a.m. **Q&A/Discussion**

9:30 a.m. **Businesses Changing Their Practices to Produce Health**

Moderator, George Isham, senior advisor, HealthPartners, senior fellow, HealthPartners Institute for Education and Research; member, workshop planning committee; co-chair, Roundtable on Population Health Improvement
Larry Soler, president and chief executive officer, Partnership for a Healthier America

Mark Weick, director of sustainability offices, The Dow Chemical Company

Gary Cohen, president and founder, Health Care Without Harm

10:30 a.m. **Break**

10:45 a.m. **Q&A Discussion**

11:30 a.m. **Developing Human Capital in Communities**

Moderator, George Flores, program manager, The California Endowment; member, workshop planning committee; member, Roundtable on Population Health Improvement

Carla Javits, president and chief executive officer, Roberts Enterprise Development Fund (REDF)

Farad Ali, president and chief executive officer, The Institute (formerly NC Institute of Minority Economic Development)

12:30 p.m. **Lunch**

1:15 p.m. **Discussion Continued**

1:45 p.m. **Revitalizing Communities and the Challenges of Inequality**

Moderator, Victor Rubin, vice president for research, PolicyLink

Anne Griffith, senior program director, Enterprise Community Partners, Inc.

Dan Kinkead, director of projects, Detroit Future City

3:15 p.m. **Break**

3:30 p.m. **Investing in People and Partnerships to Create Healthy Communities**

Moderator, Cathy Baase, global director of health services, The Dow Chemical Company; member, workshop planning committee; member, Roundtable on Population Health Improvement

Jon Easter, senior director, delivery and payment reform, U.S. public policy, GlaxoSmithKline

Vera Oziransky, project manager, The Vitality Institute

5:00 p.m. **Reflections on and Reactions to the Day**

Moderator, George Isham, senior advisor, HealthPartners, senior fellow, HealthPartners Institute for Education and Research; member, workshop planning committee; co-chair, Roundtable on Population Health Improvement

5:30 p.m. **Adjourn**

Appendix C

Statement of Task

An ad hoc committee will plan and conduct a public workshop that will feature presentations and discussion of applying a health lens to decisions made in the private sector. Applying a health lens refers to giving consideration for potential health effects in decisions made in many relevant domains, such as education, transportation, and housing. This workshop will build on a 2013 workshop on *Applying a Health Lens to Decision Making in Non-Health Sectors*, but with a greater focus on policy, practices, and investments in the private sector and in public–private collaboration. The committee will identify specific topics to be addressed, develop the agenda, select and invite speakers and other participants, and moderate the discussions. A summary of the presentations and discussions at the workshop will be prepared by a designated rapporteur in accordance with institutional guidelines.

Appendix D

Speaker and Moderator Biographical Sketches

Farad Ali, M.B.A., is the president and chief executive officer of The Institute (formerly the NC Institute of Minority Economic Development). He has more than 25 years of experience in banking, small business development, and public service. Mr. Ali directs the Institute staff in the development and implementation of programs and strategies that work to improve the usage of historically underused businesses. Prior to becoming president, Mr. Ali led business development teams and helped Fortune 1000 companies develop supplier diversity usage programs and leverage procurement opportunities. As senior vice president, he led a team in providing strategic business consulting and technical support to help client companies build partnerships and maximize their access to markets. Mr. Ali serves on the boards of the National Minority Supplier Development Council and the Airport Minority Advisory Council; is chair of the Duke Regional Hospital Board of Trustees, a community hospital affiliated with Duke University Hospital; and is immediate past chair of the Carolinas Minority Supplier Development Council. He served on the Durham City Council from 2007 to 2011. Mr. Ali has a bachelor's degree in business administration from the University of North Carolina at Chapel Hill and an M.B.A. from Campbell University. He did postgraduate studies in Emerging Business Markets at Dartmouth College, Tuck School of Business.

Catherine Baase, M.D., FAAFP, FACOEM, is the global director of health services for The Dow Chemical Company (Dow), with direct responsibility

for leadership and management of all occupational health, epidemiology, and health promotion programs and staff around the world. Dr. Baase is a key driver of the Dow Health Strategy. Under her leadership, the health programs of Dow have been recognized extensively throughout the world for their innovation and achievement. In combination with her role at Dow, she is active in a number of organizations and associations. She is chair of the board of directors of the Michigan Health Information Alliance, a multistakeholder collaborative dedicated to improving the health of people in 14 counties of central Michigan. She is currently serving as a member of the Roundtable on Population Health Improvement of the National Academies of Sciences, Engineering, and Medicine; the Public Health–Health Care Collaboration Workgroup of the Advisory Committee to the Director of the Centers for Disease Control and Prevention; the Robert Wood Johnson Foundation Roadmaps to Health Advisory Board; and the National Quality Forum's advisory group for the *Multistakeholder Input on a National Priority: Improving Population Health by Working with Communities* project. In addition, she is co-chair of the Health Enhancement Research Organization (HERO) Employer–Community Committee. Dr. Baase served as a board member of the Partnership for Prevention for more than 10 years and the board of directors of the Patient Centered Primary Care Collaborative for 3 years. For several years she has been a member of the American College of Occupational and Environmental Medicine (ACOEM), Health and Productivity Committee, and was previously a member of the Clinical Research Roundtable of the Institute of Medicine. She is a fellow in ACOEM and in the American Academy of Family Physicians.

Raymond J. Baxter, Ph.D., is Kaiser Permanente's (KP's) senior vice president for community benefit, research, and health policy. As a member of Kaiser's National Executive Team, Dr. Baxter leads the organization's activities to fulfill its social mission, including care and coverage for low-income people, community health initiatives, health equity, environmental stewardship, and support for community-based organizations. He also leads KP's work in research, health policy, and diversity, and serves as president of KP International. Dr. Baxter has more than 35 years of experience managing public health, hospital, long-term care, and mental health programs, including heading the San Francisco Department of Public Health and the New York City Health and Hospitals Corporation. Dr. Baxter also led The Lewin Group, a noted health policy firm. He serves on the advisory boards of the University of California (UC), Berkeley, School of Public Health, and the Duke University Institute for Health Innovation; the Board of the Centers for Disease Control and Prevention (CDC) Foundation; and the Global Agenda Council on Health of the World Economic

Forum. In 2001 the UC Berkeley School of Public Health honored him as a Public Health Hero for his service in the AIDS epidemic in San Francisco. In 2006 he received the CDC Foundation Hero Award for addressing the health consequences of Hurricane Katrina in the Gulf Coast, and for his long-standing commitment to improving the health of communities. Dr. Baxter is a member of the National Academies of Sciences, Engineering, and Medicine's Roundtable on Population Health Improvement and Roundtable on Value & Science-Driven Health Care. Dr. Baxter holds a doctorate from the Woodrow Wilson School of Public and International Affairs at Princeton University.

Gary Cohen is the president and co-founder of Health Care Without Harm and Practice Greenhealth. He was instrumental in bringing together the nongovernmental organizations and hospital systems that formed the Healthier Hospitals Initiative. All three were created to transform the health care sector to be environmentally sustainable and serve as anchor institutions to support environmental health in their communities. Prior to his work at Health Care Without Harm, Mr. Cohen was executive director of the Environmental Health Fund. He helped build coalitions and networks globally to address the environmental health impacts related to toxic chemical exposure and climate change. Mr. Cohen is a member of the International Advisory Board of the Sambhavna Clinic in Bhopal, India, which has been working for more than 25 years to heal people affected by the Bhopal gas tragedy and to fight for environmental cleanup in Bhopal. He is also on the boards of the American Sustainable Business Council, Health Leads, and Coming Clean. His notable awards include the 2013 Champion of Change Award for Climate Change and Public Health from the White House, and the Game Changer in Healthy Living from *The Huffington Post*. Mr. Cohen has also received the Skoll Award for Social Entrepreneurship, the Frank Hatch Award for enlightened public service, and an Environmental Merit Award from the New England Office of the U.S. Environmental Protection Agency in recognition of exceptional work and commitment to the environment. He is also an Ashoka Fellow. Mr. Cohen received his bachelor's degree in philosophy from Clark University.

Jon Easter, R.Ph., is senior director of delivery and payment reform at GlaxoSmithKline (GSK). Mr. Easter leads a team that is focused on shaping the external health policy environment. Specifically, his team works to facilitate the adoption of evidence-based quality measures, and to improve the delivery of care through better coordination and medication management. The goal is to demonstrate the critical role of patient outcomes and quality within emerging value-based payment models. At

GSK, Mr. Easter has championed the company's involvement in North Carolina First in Health, one of the nation's leading patient-centered medical home projects. He also authored a prescriptive analytics pilot through a collaboration with Community Care of North Carolina that aims to improve patient care through better medication management. Mr. Easter was directly involved with replication of the Asheville Project, a recognized model for care coordination to improve patient outcomes for chronic disease. Mr. Easter has spent 20 years in the pharmaceutical industry. In addition to his public policy experience, he worked in GSK's care management division and covered the Pacific Northwest for the state government affairs organization. His experience also includes a stint in the health information technology industry, fueled by a passion for health care transformation, where Mr. Easter worked to advance the adoption of electronic health records and e-prescribing systems. Mr. Easter has a B.S. in pharmacy from the University of Georgia and is a licensed R.Ph.

George Flores, M.D., M.P.H., is program manager for The California Endowment's Healthy California Prevention team. His work focuses on grant making to improve health and equity through community-based prevention and a transformational health workforce. His strategies involve strengthening the public health system, linking primary care and community-based prevention, and fostering cross-sector collaboration to address the social and environmental factors that shape health outcomes. Dr. Flores previously managed grant making to develop models of health-supportive policies and community environments, including Healthy Eating Active Communities and the Central California Regional Obesity Prevention Program, two nationally prominent multisite, multisector programs to prevent childhood obesity that provided key lessons for the development of The Endowment's Building Healthy Communities strategy. Previously, Dr. Flores served as public health officer in San Diego and Sonoma counties. He is a founder of the Latino Coalition for a Healthy California. He is an alumnus of the Kennedy School of Government's Executive Program and the National Public Health Leadership Institute. Dr. Flores was recognized by the National Hispanic Medical Association as 2011 Physician of the Year for his work that addresses social and environmental inequities and the role of communities in advancing policy and systems change to improve health. He is a member of two National Academies of Sciences, Engineering, and Medicine committees that published landmark reports: *Preventing Childhood Obesity: Health in the Balance* and *The Future of the Public's Health in the 21st Century*. He is currently a member of the Academies' Roundtable on Population Health Improvement. Dr. Flores received his M.D. from the University of Utah and his M.P.H. from Harvard University.

Ian Galloway, M.P.P., is a senior research associate at the Federal Reserve Bank of San Francisco. Mr. Galloway researches and presents regularly on a variety of community development topics, including crowdfunding, investment tax credits, the social determinants of health, impact investing, and pay for success financing (Social Impact Bonds). He recently co-edited *Investing in What Works for America's Communities*, a collection of essays jointly published with the Low Income Investment Fund on the future of antipoverty policy. He also published the article "Using Pay for Success to Increase Investment in the Nonmedical Determinants of Health" in the November 2014 issue of *Health Affairs*. Previously, Mr. Galloway developed a social enterprise (virginiawoof.com) for the Portland, Oregon, homeless youth agency Outside In. He holds a master's in public policy from the University of Chicago.

Anne Griffith, J.D., is the senior program director of HOPE SF at Enterprise Community Partners in San Francisco. The program expands Enterprise's role as a key player in public housing revitalization and building on the momentum of the Campaign for HOPE SF in implementing strategic recommendations. Prior to this position, Ms. Griffith served jointly as the interim executive director of the Oakland Community Land Trust (OakCLT), and as a senior program associate at the Urban Strategies Council. As the interim director of OakCLT, she collaborated with many partners, including the City of Oakland, homebuyer education providers, real estate developers, lenders, philanthropies, community partners, and technical assistance providers to create and implement an affordable housing program in Oakland. As a senior program associate at the Urban Strategies Council, she facilitated and coordinated meetings in Bayview Hunters Point on behalf of various base-building groups to negotiate a community benefits agreement as a part of the large-scale development occurring there. Prior to this work in Oakland, she was a transactional real estate attorney focused in the area of affordable housing.

George Isham, M.D., M.S., is senior advisor to HealthPartners, responsible for working with the board of directors and the senior management team on health and quality of care improvement for patients, members, and the community. Dr. Isham is also senior fellow, HealthPartners Research Foundation, and facilitates forward progress at the intersection of population health research and public policy. Dr. Isham is active nationally and currently co-chairs the National Quality Forum–convened Measurement Application Partnership, chairs the National Committee for Quality Assurance's (NCQA's) clinical program committee, and is a member of NCQA's committee on performance measurement. He is a former member of the Centers for Disease Control and Prevention's (CDC's) Task

Force on Community Preventive Services and the Agency for Healthcare Research and Quality's U.S. Preventive Services Task Force and currently serves on the advisory committee to the director of CDC. His practice experience as a general internist was with the U.S. Navy at the Freeport Clinic in Freeport, Illinois, and as a clinical assistant professor of medicine at the University of Wisconsin Hospitals and Clinics in Madison, Wisconsin. In 2014 Dr. Isham was elected to the National Academy of Medicine. Dr. Isham is chair of the National Academies of Sciences, Engineering, and Medicine's Roundtable on Health Literacy and has chaired three studies in addition to serving on a number of Academies studies related to health and quality of care. In 2003 Dr. Isham was appointed as a lifetime National Associate of the National Academy of Sciences in recognition of his contributions to the work of the Institute of Medicine.

Carla Javits, M.P.P., is the president and CEO of the Roberts Enterprise Development Fund (REDF). She provides the leadership and vision that drive its mission to provide equity-like investments and business assistance to social enterprises and mission-driven businesses focused on hiring and assisting people facing barriers to work. Inspired by the leadership of REDF's founder, George R. Roberts, Ms. Javits focuses on achieving measurable results by leveraging the business community's knowledge, networks, and resources, and the mission of the nonprofit to create jobs and tackle the challenges of homelessness, incarceration, mental health, and addiction. In leading an expansion from the Bay Area to new horizons in Southern California, she has laid the foundation for REDF to impact the lives of many more people nationwide. REDF's national expansion is beginning now. Before coming to REDF, Ms. Javits was the national president and CEO of the Corporation for Supportive Housing, where she was responsible for providing grants, loans, and technical assistance to service-enriched housing initiatives that ended homelessness for tens of thousands. She was program analyst with the California Office of the Legislative Analyst and director of policy and planning for the San Francisco Department of Social Services. She serves on the board of directors of the Social Enterprise Alliance and the Melville Charitable Trust and as an advisor to the Center for the Advancement of Social Entrepreneurship at Duke University. She is a member of the advisory committee of The Philanthropic Initiative as well as the Insight Center for Community Economic Development National Advisory Board. Under Ms. Javits leadership, REDF was awarded two federal Social Innovation Fund grants by the Corporation for National and Community Service, and the Los Angeles Business Journal Nonprofit Social Enterprise of the Year award in 2013. *San Francisco Magazine* recognized Ms. Javits in

its list of innovative Bay Area philanthropists. Ms. Javits holds a master's in public policy from the University of California, Berkeley.

David A. Kindig, M.D., Ph.D., is professor emeritus of population health sciences and emeritus vice chancellor for health sciences at the University of Wisconsin School of Medicine. Dr. Kindig served as professor of preventive medicine/population health sciences at the University of Wisconsin from 1980 to 2003. His prior positions include vice chancellor for health sciences at the University of Wisconsin–Madison; director of Montefiore Hospital and Medical Center; deputy director of the Bureau of Health Manpower, U.S. Department of Health, Education, and Welfare; and the first medical director of the National Health Services Corps. He was a national president of the Student American Medical Association. He was an initial co–principal investigator on the Robert Wood Johnson Foundation (RWJF) MATCH grant under which the County Health Rankings were developed and was the founder of the RWJF Roadmaps to Health Prize. From 2011 to 2013, he was editor of the Improving Population Health blog. He completed residency training in Social Pediatrics at Montefiore Hospital. He served as chair of the federal Council of Graduate Medical Education, president of the Association for Health Services Research, a ProPAC commissioner, and senior advisor to Donna Shalala, then Secretary of Health and Human Services. He was elected to the National Academy of Medicine. He received the Distinguished Service Award, University of Chicago School of Medicine. He chaired the Institute of Medicine Committee on Health Literacy from 2002 to 2004; chaired Wisconsin Governor Doyle's Healthy Wisconsin Taskforce in 2006; and received the 2007 Wisconsin Public Health Association's Distinguished Service to Public Health Award. He is currently a co-chair of the National Academies of Sciences, Engineering, and Medicine's Roundtable on Population Health Improvement and co-directs the Wisconsin site of the Robert Wood Johnson Health and Society Scholars Program. He received his M.D. and Ph.D. from the University of Chicago School of Medicine.

Dan Kinkead, M.L.A.U.D., is director of projects of the Detroit Future City (DFC) Implementation Office. In this role, he provides leadership, strategic coordination, and technical expertise for the many projects that are led or supported by the DFC Implementation Office. Mr. Kinkead has worked with the DFC Implementation Office since its inception. He led the initial process to build the implementation team, secure operational funding, develop the organization's steering committee, and spearhead its first set of projects and initiatives. Prior to joining the DFC Implementation Office, Mr. Kinkead was a design principal with Hamilton Anderson Associates (HAA), where he led the design studio for architecture and

urban design, and managed the land use and neighborhoods research and planning for DFC. This included leading the team that assembled the 350-page DFC Strategic Framework report that serves as the platform for transformation in Detroit. Mr. Kinkead's work with HAA also included projects such as a new Language Arts Building for Michigan State University, master plans for The Children's Center and Pewbic Pottery, and the redesign and renovation of the Flint Mass Transit Authority's downtown commuter hub. Prior to working with HAA, Mr. Kinkead was an urban designer with Skidmore Owings & Merrill, LLP, in New York, where he worked on large-scale innovation district designs for continental Europe and China. Mr. Kinkead is a registered architect, and his work has been published in a range of national and international media, including *Architect*, *The Plan*, and *Architectural Record*. He graduated from Harvard University with a master's of landscape architecture in urban design.

Vera Oziransky, M.P.H., is a project manager at The Vitality Institute, where she leads work on employer-led workplace and community health promotion, design for health, and mental well-being. Prior to her work at The Vitality Institute, Ms. Oziransky was the senior policy analyst at the New York City Department of Health and Mental Hygiene's Office of External Affairs. She led the development of Take Care New York, the city's 5-year health agenda, and provided expertise in the development of the health department's priority policy initiatives. Prior to this role, Ms. Oziransky directed New York City's tobacco mentoring activities for the Centers for Disease Control and Prevention's Communities Putting Prevention to Work initiative, consulting with 12 health departments nationwide on tobacco control policy, media, and coalition building. She also served as the director of research and advocacy at the National Alliance on Mental Illness of New York City, where she directed the workplace mental health benefits project and designed and published the sole and largest qualitative evaluation of the mental health parity law in New York State, demonstrating the barriers faced by mental health consumers in accessing health benefits. She has a master's in public health from the Yale School of Public Health.

Victor Rubin, Ph.D., M.C.P., is the vice president for research at PolicyLink. Dr. Rubin leads, designs, and conducts knowledge-building activities to create a strong research base for PolicyLink. An urban planner with broad experience in community development, education, and social policy, he guides the PolicyLink analyses of issues in infrastructure, economic growth, healthy communities, youth development, and other areas. His research interests include transportation and infrastructure equity; impact of urban planning and the built environment on health; post-Katrina

rebuilding; community economic development; and community–university partnerships. Dr. Rubin previously directed the U.S. Department of Housing and Urban Development's Office of University Partnerships, and served as a director of community partnerships and adjunct associate professor of city and regional planning at the University of California (UC), Berkeley. He is the author of "Retail Development in Changing Neighborhoods: New Markets, New Investments, and the Prospects for Mixed Income, Racially Diverse Populations," a chapter in *Public Housing and the Legacy of Segregation* (2008, Austin, Popkin, and Rawlings, eds.) and "The Roots of the Urban Greening Movement," a chapter in *Growing Greener Cities: Urban Sustainability in the Twenty-First Century* (2008, Birch and Wachter, eds.). Dr. Rubin holds an M.C.P. and a Ph.D. in planning from UC Berkeley.

Lawrence A. Soler, J.D., is president and CEO of the Partnership for a Healthier America (PHA), which works with the private sector and First Lady Michelle Obama to reverse the childhood obesity epidemic. Since 2010, PHA has garnered more than 150 commitments to offer healthier options or increase physical activity with leading brands that include Nike, Sodexo, and Walmart. PHA also operates leading marketing campaigns promoting water (Drink Up) and fruits and vegetables (FNV) with fresh advertising that is popular with kids and families. Prior to joining PHA, Mr. Soler was chief operating officer for the Juvenile Diabetes Research Foundation (JDRF), a $200 million voluntary health organization. While leading JDRF, the organization was recognized by the *National Journal* as one of the most powerful interest groups in Washington, DC. *The New York Times* said, "Not since AIDS activists stormed scientific meetings in the 1980s has a patient group done more to set the agenda of medical research." *Time* Magazine called JDRF "one of the nation's most forceful disease advocacy groups." He serves on the board of directors of the JDRF. Mr. Soler received a B.A. with honors from Clark University and a J.D. from The George Washington University.

Mark Weick is director for Sustainability Programs at The Dow Chemical Company (Dow). In this role, Mr. Weick directs the coordinated planning and implementation of the 2015 Sustainability Goals as well as sustainability integration across the company and business units. He is also responsible for directing Dow's future sustainability strategy, as well as the company's Enterprise Risk Management efforts. He also leads Dow's global collaboration with The Nature Conservancy on valuing ecosystem services and biodiversity. Mr. Weick began his Dow career in 1982 as a research engineer in plastic foam technologies, and held various R&D and business leadership roles beginning in 1989. In 2002, he was named the

Global Product Stewardship Leader for the Dow Building Solutions business unit, and added responsibility for the Dow Automotive business unit in 2004. Mr. Weick was named to his current position in 2007. He received a B.S. in chemical engineering from Northwestern University.