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National Initiative on
Mixed-Income Communities

Recognizing and Incentivizing Mixed-Income Communities Designed for Health

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In the United States, low-income communities and communities of color have disproportionately high rates of chronic disease, such as heart disease, cancer, depression, and asthma,[1] and the long-term implications of these disparities can be dire. Nationally, non-Hispanic Blacks[2] have an average life expectancy of about 75 years—four years less than the average for non-Hispanic Whites—largely due to an increased prevalence of preventable chronic diseases.[3] The Latinx population is nearly 90 percent more likely to experience diabetes than the White population. And adults in families earning less than $35,000 per year are more than five times more likely to experience serious psychological distress than those with family incomes of $100,000 or more. Clearly, race and socioeconomic status play a key role in health outcomes.[4]

In order to truly address these health disparities, investment in high-quality, health-promoting housing is particularly important for communities facing the greatest health challenges. Housing is one of the leading social determinants of health, and simply increasing access to high-quality, affordable housing can positively impact health outcomes and reduce healthcare costs.[5] All people should have an opportunity to achieve an optimal quality of life, and the design and operations of housing can serve to bolster health.

At the Center for Active Design (CfAD), we strive to stimulate systemic change through financial incentives, certification programs, recognition, and advocacy that increase access to healthy environments. To that end, we work with organizations like Fannie Mae to spur

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[1] Thomas Bodenheimer, Ellen Chen, and Heather D. Bennett, "Confronting the growing burden of chronic disease: Can the U.S. health care workforce do the job?." *Health Aff*airs 28, no. 1 (Jan-February 2009):64-74

[2] Editors' Note: We have recommended that essay authors use the term "African American" when referring specifically to descendants of enslaved people in the United States and the more inclusive term "Black" when referring broadly to members of the African diaspora, including African Americans, Caribbean Americans, and Africans. In this way, we seek to acknowledge the unique history and experience of descendants of enslaved people in the United States and also the diversity of backgrounds within the larger Black community. Though both are labels for socially-constructed racial categories, we join organizations like Race Forward and the Center for the Study of Social Policy in recognizing Black as a culture to be respected with capitalization and White and Whiteness as a social privilege to be called out. All references in this essay to Black/African-American, White, or Asian populations refer to non-Hispanic/Latinx individuals unless otherwise noted.

[3] National Institutes of Health. "NIH Establishes New Research Program to Address Health Disparities of Chronic Diseases," news release, August 24, 2016, https://www.nih.gov/news-events/news-releases/nih-establishes-new-research-program-address-health-disparities-chronic-diseases.

[4] U.S Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. *Health, United States, 2016: With Chartbook on Long-term Trends in Health*. (Hyattsville, MD: Centers for Disease Control and Prevention, 2017).

[5] Lauren Taylor, "Housing and Health: An Overview of the Literature," *Health Affairs*, 2018.

widespread change and to use housing as a mechanism to tackle health disparities across the nation. In this essay, we address why seemingly minor shifts in housing design can have a profound impact on physical, mental, and social health (defined as the capacity to create and foster meaningful relationships with others). We first explore the role housing plays in health, before examining the evolution of the healthy design movement. We then discuss how incentivizing health-promoting, mixed-income communities that are designed for health can enhance health outcomes.

Housing as a Social Determinant of Health

A growing understanding of how the place in which someone lives can influence health status has drawn attention to the social determinants of health. Defined by the U.S Health Resources and Services Administration as "conditions in the social environment in which people are born, live, learn, work, and play that affect a wide range of health functioning, and quality-of-life outcomes and risks," social determinants encompass a breadth of environmental conditions such as housing, green space, air quality, local transit and food access.[6]

Health disparities faced by low-income and minority populations often are related to negative conditions in residential communities, often caused by a lack of consistent investment within and across neighborhoods. In urban housing for low-income families, for example, environmental conditions such as mold, poor ventilation, and pests have been linked to poor health.[7] At a neighborhood level, safe street infrastructure, walkability, and access to affordable fruits and vegetables, parks, and public transportation are some of the ways the built environment is tied to health.[8] Many of these elements are not consistent across communities, with low-wealth areas and neighborhoods that are occupied by people of color experiencing the less-favorable conditions.[9] Improving these conditions is one step toward supporting healthy communities and promoting a country in which everyone has the opportunity to attain their highest level of health possible—a condition commonly referred to as health equity.

Studies suggest that moving from a low-income to middle-income community can have a powerful impact on health outcomes. An evaluation of benefits and disadvantages of living in

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[6] Health Resources and Services Administration, *Health Equity Report 2017.* (Rockville, MD: Health Resources and Services Administration, 2018), https://www.hrsa.gov/sites/default/files/hrsa/health-equity/2017-HRSA-health-equity-report-PRINTER.pdf.

[7] Gary Adamkiewicz et al, "Environmental Conditions in Low-Income Urban Housing: Clustering and Associations with Self-Reported Health." *American Journal of Public Health* 104, no. 9 (September 2014): 1650-1656.

[8] Mary Northridge, Elliot D. Sclar, and Padmini Biswas "Sorting Out the Connections Between the Built Environment and Health: A Conceptual Framework for Navigating Pathways and Planning Healthy Cities." *Journal of Urban Health* 8, no. 4 (December 2003): 556-568.

[9] Penny Gordon-Larsen et al, "Inequality in the Built Environment Underlies Key Health Disparities in Physical Activity and Obesity." *Pediatrics* 117, no. 2 (February 2006): 417-424.; Nicole I. Larson, Mary T. Story, and Melissa C. Nelson, "Neighborhood Environments: Disparities in Access to Healthy Foods in the U.S." *American Journal of Preventive Medicine* 36, no. 1 (January 2009): 74-81.

one of Chicago's new mixed-income developments found that relocated public housing residents had less stress and more self-esteem after fewer than two years of living in the new environment.[10] These positive changes can be attributed to a variety of factors, ranging from increased stability and safety of the surroundings to increased access to neighborhood amenities.

The relationship between health and the design of our buildings, streets, and neighborhoods is not speculative. Over more than a century, our understanding of the connection between the built environment and health outcomes has continued to expand. In the 19th century, rapidly urbanized cities like New York faced a significant rise in communicable diseases such as tuberculosis, cholera, and yellow fever. At the time, these conditions were thought to be linked to individual moral failings, but the spread stopped after policy and infrastructure changes were implemented.[11] By reducing overcrowding, improving sanitation, and implementing housing policies to increase access to fresh water, light, and air, cities finally were able to control and reverse the spread of disease. These learnings reemerged and regained traction when the COVID-19 pandemic began in 2019.

Just as design strategies such as increasing access to light, improving indoor ventilation, and installing comprehensive sewer systems help to control infectious diseases in cities, tactical changes to the built environment have the potential to decrease the prevalence of chronic disease and promote health equity. Chronic health conditions have taken center stage as leading contributors to death and disability in the United States, with rates of type 2 diabetes, obesity, asthma, coronary heart disease, and hypertension rising to epidemic proportions. Thanks to an ever-growing body of research, the connection between the design of the built environment and physical, social, and mental health outcomes has never been clearer. In residential settings, a range of design decisions—from the inclusion of green space to the development of safe bike lanes—as well as operations decisions, such as setting mixed-income requirements and implementing an Indoor Air Quality policy, have the power to positively influence individual and community health.[12]

Evolution of the Healthy Design Movement

Two developments, the meteoric rise of sustainable or green development practices and the popularization of active design practices, have driven the success of the healthy building movement.

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[10] Joseph, Mark L. and Robert Chaskin. "Living in a Mixed-Income Development: Resident Percpetions of the Benefits and Disadvantages of Two Developments in Chicago." *Urban Studies* 47, no. 11 (March 2010): 1–20.
[11] James Krieger and Donna L. Higgins, "Housing and Health: Time Again for Public Health Action." *Public Health Matters* 92, no.5 (May 2002): 758-768.
[12] James F. Sallis et al. "Co-benefits of Designing Communities for Active Living: An Exploration of Literature." International Journal of Behavioral Nutrition and Physical Activity 12, no.1 (February 2015): 30.

Sustainability and Green Development. The environmental sustainability movement began to impact development practices in earnest in the late 1990s and early 2000s. Since then, green or sustainable building has become a commonly accepted best practice. This rapid expansion over the past two decades shows how social impact measures and incentives can incite a movement and truly transform the market.

The sustainability movement deepened engagement with stakeholders in the real estate industry who are responsible for designing and managing the built environment. Instead of simply considering financial gain, leading companies began to focus on the triple bottom line of *people*, *planet*, and *profits*. The notion of the triple bottom line was popularized by green building certification systems, whose standards focus on minimizing environmental impacts through reduced energy and water use and on diminishing environmental disturbances at the building site. Despite not explicitly addressing health promotion, green standards have been shown to improve indoor environmental quality, which is associated with diminished asthma rates and enhanced mental health.[13] Green building certification systems include the Building Research Establishment Environmental Assessment Method, commonly referred to as BREEAM, launched in 1990; Leadership in Energy and Environmental Design (LEED),[14] originally launched as a pilot program in 1998; BOMA BEST; Energy Star; and Enterprise Green Communities, among others.

Building on the work of the green building community, the healthy building movement has resulted in new health-specific certification systems in response to growing demand. Fitwel®, described later, is a building certification system focused directly on promoting health and well-being. These certification systems are strengthening awareness about the importance of improving residential environments and increasing access to healthy housing, as the demand for healthy development continues to rapidly expand.

Active design. Between 2010 and 2020, demand for health-promoting spaces—both indoors and outdoors—grew significantly, gaining momentum after the city of New York released its *Active Design Guidelines* in 2010.[15] Active design is an evidence-based approach to development that uses urban planning and architecture solutions to support healthy communities. The term "active design" was coined by the New York City interagency collaboration that produced the *Guidelines*. The *Guidelines* were developed in response to the growing realization that physical activity has largely been designed out of our daily lives. In most parts of the

[13] Joseph G. Allen et al. "Green Buildings and Health." *Current Environmental Health Reports* 2, no.3 (July 2015): 250-258.
[14] Today, BREEAM has certified more than 2.2 million buildings across 77 countries and LEED has reached more than 92,000 buildings in 165 countries.
[15] New York City Departments of Design and Construction, Health and Mental Hygiene, Transportation, and City Planning. *Active Design Guidelines: Promoting Physical Activity and Health in Design.* (New York, NY: New York City Departments of Design and Construction, Health and Mental Hygiene, Transportation, and City Planning, 2010).

country, transportation to activities of daily living—including commuting to and from sedentary office jobs and schools—often occurs by car, not by walking. Leisure time has become increasingly sedentary with each new generation, as "play time" has been replaced with "screen time." This reality has had shocking physical, mental, and social health effects, with an estimated 250,000 deaths per year in the United States being attributed to physical inactivity alone.[16] As one part of his commitment to addressing physical inactivity within New York City, former Mayor Michael Bloomberg signed an executive order requiring that active design be incorporated within all city-funded buildings and street construction projects.

The benefits of "activity-friendly environments" go much deeper than simply increasing physical activity, however. Active design also positively influences physical health, mental health, social health, safety, environmental sustainability, and economic well-being. A study led by James Sallis, a leading researcher of the built environment and health, found that features such as park proximity, mixed land use, trees and greenery, street connectivity, and building design were especially likely to offer multiple co-benefits.[17]

Healthy building. Using the sustainability framework as a model, the "healthy building movement" emerged with a framework of design and operations strategies aimed specifically at (a) meeting the holistic health needs of people living in neighborhoods, especially in mixed-income communities, and (b) educating the real estate industry on how it influences community well-being. This movement holds that mixed-income housing that is designed to support residents' health can benefit tenants and building owners alike. Specifically, health-promoting housing has been shown to increase tenant retention, resulting in lower costs for both building owners.[18] Reduced turnover results in cost savings for building owners, while increased housing stability can strengthen neighborhood social ties and can positively influence mental health, when housing is in good condition.[19,20]

Consumer interest in health-promoting home environments is growing, and the demand currently outstrips the supply. A market report published by Dodge Data and Analytics (formerly McGraw Hill Construction) found that 71 percent of homeowners cited proximity to walking paths, sidewalks, and trails to be very or somewhat important in their decision of where to live;[21] however, the average walk score of U.S. cities with populations over 200,000 is only 47 out of

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[16] Frank W. Booth et al. "Waging War on Modern Chronic Diseases: Primary Prevention through Exercise Biology." *Journal of Applied Physiology* 88, no.2 (February 2000): 774-787.
[17] James F. Sallis et al. "Co-benefits of Designing Communities"
[18] Terry Lassar et al., *Building for Wellness: The Business Case.* (Washington, D.C: Urban Land Institute, 2014), https://uli.org/wp-content/uploads/ULI-Documents/Building-for-Wellness-The-Business-Case.pdf.
[19] Linsey Isaacs and Derek Mearns, "Keeping Turnover Costs Low," *Multifamily Executive*, February 11, 2013.
[20] Catherine E. Ross, John R. Reynolds, and Karlyn J. Geis, "The Contingent Meaning of Neighborhood Stability for Residents' Psychological Well-Being." American Sociological Review 65, no. 4 (August 2000): 581-597.
[21] McGraw Hill Construction, *The Drive Toward Healthier Buildings: The Market Drivers and Impact of Building Design and Construction on Occupant Health, Well-Being and Productivity.* (Hamilton, NJ: McGraw Hill Construction, 2014).

100.[22] In addition, a survey distributed by the Harvard Joint Center for Housing Studies found that nearly one in four homeowners was concerned about the impact their home has on their health or the well-being of other occupants.[23] By boosting the supply of housing designed with health in mind, the healthy building movement aims to meet this growing demand and increase access to health-promoting environments for all people, regardless of income level.

Incentivizing Mixed-Income Communities Designed for Health

Since its founding in 2012, the Center for Active Design (CfAD) has focused on developing practical, implementable design strategies that promote health and create equitable access to public and private spaces. This mission has expanded to explore how design and development practice can affect the civic health of communities by inspiring greater trust, participation, and stewardship.[24]

Our strategy for incentivizing inclusive, equitable mixed-income communities that are designed for health has two core components: (1) working with actors across the real estate industry to implement the Fitwel® Certification System as a framework for optimizing health within commercial and residential buildings and sites; and (2) partnership with Fannie Mae to advance the Healthy Housing Rewards™ (HHR) financial incentive program. The two strands of work complement each other because certification systems like Fitwel® provide the evidence-based foundation and guidance necessary for developers, building managers, and building owners to design housing that supports, rather than detracts from, resident health. However, certification systems tend to primarily reach market rate properties, as the desirable features can be used to garner rental premiums. In order to equitably impact health disparities, health-promoting strategies like those within Fitwel® should be incorporated into housing for people of all income levels—a goal that Healthy Housing Rewards is designed to achieve.

The Fitwel® Certification System. Fitwel® was developed in 2011 by the Centers for Disease Control and Prevention (CDC) and the General Services Administration (GSA) as a means to embed active design principles into standard practice. We have found, however, that by translating the public health research into concrete, implementable strategies, Fitwel® has successfully engaged property owners, facility managers, architects, and others in the quest to improve holistic population health.

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[22] Mariela Alfonzo, "Making the Economic Case for More Walkability," *UrbanLand*, May 8, 2015.
[23] Mariel Wolfson and Elizabeth La Jeunesse, "Challenges and Opportunities in Creating Healthy Homes: Helping Consumers Make Informed Decisions." (working paper, Harvard Joint Center for Housing Studies, Harvard University, Cambridge, MA, March 2016).
[24] See CfAD's publication, Center for Active Design, *Assembly: Civic Design Guidelines.* (New York, NY: Center for Active Design, 2018).

Fitwel® is rooted in a strong evidence base, supported by more than 3,000 research studies, and based on input from experts in public health, design, and development.[25] After thorough pilot testing, Fitwel® was launched for public use in March 2017 by CfAD, which serves as the licensed operator of the certification program. Fitwel® was initially created for workplaces but was subsequently modified for application to residential settings, because populations around the world spend a majority of their time in and around their homes. In November 2017, CfAD released the Fitwel® scorecard for multifamily residential buildings, which was developed in partnership with the Centers for Disease Control and Prevention.

Fitwel® for multifamily residential use encompasses 70+ evidence-based design and operational strategies, divided across 12 sections that promote health through enhancing the built environment. Each section focuses on different aspects of the residential environment, including neighborhood siting as well as exterior and interior spaces. Each strategy addresses one or more of Fitwel®'s seven health impact categories:

1. Physical activity;
2. Occupant safety;
3. Morbidity;
4. Social equity for vulnerable populations;
5. Feelings of well-being;
6. Community health; and
7. Healthy food options.

Through these categories of impact, Fitwel® promotes physical, mental, and social well-being, treating health as an interconnected system. All resources can be accessed at Fitwel.org/resources.

Fitwel® was designed to offer users a straightforward and educational experience. In support of this goal, Fitwel® is accessed and administered through a web portal, which provides comprehensive information on implementing each of the strategies, sample evidence behind the strategies, and documentation required for certification. The Fitwel® Portal also allows teams to complete an initial assessment of their project to better understand the existing strengths and opportunities to further the building's impact. Each opportunity is paired with information on how the strategy connects to health, clarifying the specific benefit. For example, project teams will learn that by providing a sufficient number of dedicated lactation rooms or stations in their workplace, they can increase productivity while also decreasing health claims and absenteeism rates. This information allows project teams to better understand how each enhancement can maximize the health of occupants.

The Fitwel® Portal also enables users to track a range of data points and evaluate the impact their projects are having on the seven Fitwel® Health Impact Categories. For example,

[25] "About Fitwel: Who We Are", Center for Active Design, 2019, https://www.fitwel.org/about.

project teams can see the impact that improved indoor air quality has on morbidity and absenteeism and the importance of access to daylight for instilling feelings of well-being among occupants. Through the benchmarking and certification process, companies can use the Fitwel® Portal to demonstrate to other vested parties, such as tenants, employees, residents, and investors, how they are working to address some of today's most pressing health concerns.

Since launching publicly in 2017, awareness of Fitwel® and the importance of health-promoting buildings has expanded. As of February 2020, more than 1,000 projects were registered, more than 400 of which were certified or pending certification. Through these efforts, over 830,000 individuals across more than 40 countries have been affected.

The Healthy Housing Rewards™ Incentive Program. Healthy Housing Rewards™ (HHR), a program designed by Fannie Mae in partnership with CfAD, aims to incentivize affordable housing developers to invest in designing with the health of their residents in mind, an approach that can help to promote and sustain mixed-income communities. Through the HHR program, developers of affordable housing properties that meet or exceed the minimum certification standards of Fitwel® are eligible for below-market-rate loan pricing from Fannie Mae.

The framework behind Healthy Housing Rewards™ grew out of a multi-year effort that included establishing an industry-wide standard for healthy housing. With support from The Kresge Foundation and the Robert Wood Johnson Foundation, CfAD used its core knowledge and expertise in health-promoting design and leveraged the expertise of its network of partners to define healthy housing. This effort involved delineating relevant health categories that would be impacted; conducting an in-depth analysis of peer-reviewed publications and case studies that link design and operations strategies to health impacts; reviewing related verification and certification programs; and consulting with experts in the public health, real estate development, and finance communities.

The model on which HHR was based, Fannie Mae's multifamily green finance program, began in 2012 with $58 million in loans to multifamily property owners and reached $27.6 billion in new financing by 2017. That same year, Fannie Mae launched HHR to provide financial incentives for borrowers who incorporate health-promoting design and operations features in their newly constructed or rehabilitated multifamily affordable rental properties. Borrowers must meet or exceed Fitwel® for multifamily residential certification standards in order to qualify for HHR incentives. (The box on the next page offers an example of HHR in action.)

Incentive programs like HHR are important because mixed-income housing developments are not well-subsidized and capital stacks are often difficult to put together, which limits their feasibility in the very communities that experience the most severe income segregation. Fortunately, other entities are following Fannie Mae's leadership on this approach. Massachusetts Housing Partnership launched its Healthy Housing Financing program, modeled

on Fannie Mae's incentive, in 2019, and CfAD is in discussions with other financial institutions about creating similar financial incentive programs for affordable housing.

USING HEALTHY DESIGN TO REDEVELOP AMANI PLACE

Like many cities across the United States, Atlanta, GA is in the midst of an affordable housing crisis driven by a mix of significant population shifts, economic growth, and rapidly changing communities. According to the Harvard Joint Center for Housing Studies, 31 percent of households in the Atlanta Metropolitan Area were cost-burdened in 2017.[26]

The former Edgewood Court development, now known as Amani Place, is located 10 minutes east of downtown Atlanta in Kirkwood-Edgewood, an area that has experienced a rapid influx of investment in recent years leading to new condos, apartments, restaurants and retail establishments. The area experienced a 9.5 percent rent spike in 2016, and the median sale price for a home in Edgewood tripled between 2015 and 2020. While the neighborhood is becoming more economically affluent, the need to maintain a mix of affordability has become even more important.

Two developers Jonathan Rose Companies and Columbia Residential, teamed up to turn Edgewood Court into Amani Place, a garden-style development. The original development, built in the 1950s, contained 204 U.S Department of Housing and Urban Development Section 8 units that needed maintenance and modernization. Both developers were experienced in green building certifications, and when they acquired the property in December 2017 they saw an overlap between their efforts to promote sustainability and Fitwel®'s focus on health promotion. Using the Healthy Housing Rewards™ program for financing they redeveloped the property into 222 units, all designated for households at or below 60% of area median income.

Amani Place has several amenities designed to promote physical, mental, and social health, including:

- **A pedestrian network and safe street infrastructure** throughout the development;
- **Indoor air quality and integrated pest management** policies that feature environmentally friendly products and contribute to improved indoor air quality;
- **An outdoor fitness circuit** with permanent fitness equipment and compelling signage, encouraging residents to engage in regular physical activity;
- **A communal kitchen** with space for residents to attend cooking classes and healthy eating demonstrations;
- **A central community center** with space for residents to socialize and participate in on-site health and wellness programs; and
- **A community garden** where residents can access fresh produce and social interaction.

The redevelopment process was guided by feedback from residents, who shared their major pain points during a series of community meetings. One of the most common complaints was fear of crime within the development and surrounding area.[27] Fear of crime is associated with negative physical and mental health outcomes. In response, the community center was strategically placed in an area known as a hotspot for criminal activity, signaling to residents that the property management was stepping up to increase safety. And, in response to air quality concerns, the renovation replaced all flooring, windows, and appliances; sealed buildings; installed new HVAC; and replaced all duct work. The financing for this project included funding for a full-time resident services coordinator to help ensure that residents have an on-site contact to share feedback with, even after the redevelopment is completed.

[26] Harvard Joint Center for Housing Studies tabulations of U.S Census Bureau, (2006-2018) American Community Survey 1-Year Estimates using the Missouri Data Center, https://www.jchs.harvard.edu/many-renters-are-burdened-housing-costs.

[27] Mai Stafford, Tarani Chandola, and Michael Marmot, "Association between Fear of Crime and Mental Health and Physical Functioning." American Journal of Public Health 97, no. 11 (November 2007): 2076-2081.

Conclusions

Building on the success of the sustainability movement, the Fitwel® certification system and Healthy Housing Rewards™ program have introduced incentives for designing and building health-promoting affordable housing. If HHR grows similarly to the program on which it was based, CfAD's partnership with Fannie Mae has potential to have a major impact on multifamily affordable housing across the United States.

However, there is more work to be done, and in the face of rising chronic disease rates and intensifying economic disparities—deeply aggravated in 2019-20 by the COVID-19 pandemic—this is a crucial time to prioritize health by designing and creating health-promoting, mixed-income communities. Just as the sustainability movement transformed real estate development over the past few decades, the industry now is on the brink of a full-fledged market transformation oriented toward promoting human health. In 2018, Fitwel® alone saw an 80% increase in certifications when compared with the previous year.[28]

Without financial intervention, the mixed-income and affordable housing sector is at risk of being left behind. Through the continued dissemination and expansion of incentive-based programs, CfAD is committed to bringing healthier environments to all populations. By advancing a systematic approach to revolutionize how multifamily affordable housing is designed, constructed, and located, we can decrease the health disparities plaguing our nation and continue to work toward a healthier future for us all.

Implications for Action

The following implications for action can operationalize our ambition for healthier, more equitable communities.

Implications for Policy.

- State housing finance agencies (HFAs) should incorporate credits for implementation of individual health-promoting design and operations strategies and/or application of holistic health-promoting certification systems into their affordable housing Qualified Action Plans (QAP). Many states, including California, Georgia, and Illinois, have already started integrating health-promoting strategies into their QAPs. However, a more coordinated approach is needed across the state HFAs.
- Given the connection between health and housing, Medicaid should allow expansion of reimbursement policies to cover housing-related costs. Access to affordable housing is one of the leading social determinants of health, and without a high-

[28] Center for Active Design, "Fitwel® Announces an 80% Increase in Certifications in One Year, Showing a Surging Trend in Building for Health," news release, February 14, 2019 https://www.businesswire.com/news/home/20190214005098/en/Fitwel%C2%AE-Announces-80-increase-Certifications-Year-Showing.

quality, safe place to live, it becomes difficult to pursue economic opportunity and achieve an optimum quality of life.

Implications for Research and Evaluation.

- Multi-sector stakeholders, including academic research partners, should identify metrics that clearly demonstrate how the implementation of health-promoting strategies within mixed-income communities positively impacts health and financial returns. Investors need to understand how health-promoting mixed-income communities affect their bottom line, and which metrics they should be tracking to determine impact. For example, is tenant turnover diminished in these developments, or are maintenance costs reduced due to an increased sense of ownership from residents?
- Academic research partners should work with vested parties to gather baseline information about residents' health behaviors and perceptions before moving in and then throughout their time living in a health-promoting mixed-income development. This will improve understanding of hypothesized connections that are not yet fully supported by research. Knowledge of the health impact of mixed-income communities is growing, and there is an opportunity to expand our understanding further through strategic evaluation.

Implications for Development and Investment.

- The healthcare sector—including hospitals and health insurers—has an opportunity to invest in mixed-income community development as a way to further its mission. At its core, the healthcare sector is focused on improving patients' health while maintaining profitability. Investing in strategic community development has the power to bring those two motivations together, and several leaders have already seen a return on their investment by doing so. UnitedHealthcare, Bon Secours Mercy Health, and CommonSpirit Health have all integrated community development into their broader strategy, realizing that in order to truly impact the health of all patients, they must influence social, environmental, and economic conditions.[29]
- Financial institutions should continue to explore collaborative efforts, such as that between the Center for Active Design and Fannie Mae, to develop innovative incentives to motivate developers, private investors, and state financing organizations to prioritize mixed-income development.

Implications for Residents and Community Members.

- Community members should advocate for involvement throughout the development process. To amplify their voices, community members should join forces with community-based organizations that can ensure their health-related needs are incorporated into development plans.

[29] Center for Active Design, Healthcare: A Cure for Housing. (New York, NY: Center for Active Design, 2019).

About the Volume

This essay is published as part of a volume titled, *What Works to Promote Inclusive, Equitable Mixed-Income Communities*, edited by Dr. Mark L. Joseph and Dr. Amy T. Khare, with developmental editing support provided by Leila Fiester. Production is led by the National Initiative on Mixed-Income Communities (NIMC) at the Jack, Joseph, and Morton Mandel School of Applied Social Sciences at Case Western Reserve University, with lead funding provided by The Kresge Foundation. The volume aims to equip a broad audience of policymakers, funders, practitioners, community activists, and researchers with the latest thinking and tools needed to achieve more inclusive and equitable mixed-income communities. This is the fifth volume in the Federal Reserve Bank of San Francisco's What Works series, which has sought to analyze a variety of key themes in urban development.

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Readers can view this essay, the framing paper for the volume, and all currently posted essays on NIMC's website where new pieces are being uploaded every month. Essays will be compiled and released in a final print volume, with an anticipated release in 2020.

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