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A Simple Strategy to Transform Health, All Over the Place

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Interest in health and safety programs that directly change the places people live, work, and play has grown over the past decade. In many ways, these place-based programs are a departure from business-as-usual public health and medical practice, which has focused primarily on individuals and lifestyle modifications. Even when proven effective, individually based programs can lose sight of the bigger picture. Episodically treating small numbers of people, while ignoring the obviously unhealthy social and environmental surroundings within which people live, has stunted our treatments and moved the health of the nation forward at too slow a pace. 3

If done right, place-based programs have the potential to become truly transformational policies for the health and safety of large populations. Such programs are really nothing more than a reconstitution of thinking that has been with us for more than a century. The early 20th century saw great changes in health and safety brought about through collaborations that today would be viewed as odd or unusual—physicians and city planners, sanitarians and civil engineers. Although we are now seeing such collaborations rekindled in our cities and towns, 4 there remains a need for much more.

Electric power grids, water treatment plants, building codes, and roadway redesign did more to enhance the health of the public than many (maybe any) other programs, including medical care. 3,5-7 Early zoning laws in US cities were explicitly designed with health and safety in mind, including separating different forms of residential and commercial land and regulating where potentially hazardous facilities could locate. 8 These programs were widely successful because they focused on places or structural changes while being cost-effective and readily scalable to cover entire communities, thus impacting large numbers of people over multiple generations. 2

Structural, Scalable, and Sustainable

Today, guidance is needed to choose from a growing number of place-based health and safety programs. Street endorsements abound in terms of which place-based programs have been successful, but more, much more, scientific evidence is needed. A select few programs

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that directly change the places people live, work, and play have been shown effective at some of the highest levels of scientific evidence. Examples include smoke-free public places³ that first appeared in states such as Minnesota, a newly built light-rail system in Charlotte that lowered obesity and body mass index for users compared with car drivers,⁹ newly designed "breathe-easy" homes in Seattle that lowered asthma attacks and symptoms among children,¹⁰ and thousands of newly greened vacant lots in Philadelphia that reduced violent crime, stress, and inactivity for nearby residents (see the Figure).¹¹

Successful place-based programs should be quickly disseminated and unsuccessful ones retooled (or abandoned) as part of a larger rapid-cycle learning process. As a simple strategy in choosing which place-based programs warrant research investments at the highest levels, including randomized trials, we should consider programs that have 3 cardinal features:

- 1. They make basic *structural* changes to places.
- 2. They are *scalable* to large populations.
- **3.** They have reasonable *sustainability* over time.

Programs that focus on places or structural factors can influence more people for longer periods of time than those that focus on individually based interventions.² The Institute of Medicine has pointed out that it is unreasonable to expect peoples' health to improve when the basic environment around them is constantly, and by its very design, working against such improvements.¹² If the basic structures producing negative health in peoples' surroundings cannot be changed, the likelihood of truly transformational improvements is stunted right from the start.

Place-based programs should also be scalable to large populations and whole regions, widespread in their reach and offering universal health benefits to persons with a political voice and those without. Think chlorination of public water. Although such programs are undoubtedly ambitious, they should not be overly complex or expensive if they are to be scaled up and tailored to the needs of other regions in producing widespread returns on health. Scalability is thus defined by the likelihood of reproducing a program in additional places, another cardinal feature of truly transformational programs.

Finally, place-based programs also need a reasonable likelihood of sustainability. This may seem like an obvious recommendation, and one that is already achieved in not being overly complex or expensive, but simplicity and cost are only part of the sustainability equation. We have known for some time that the amount of effort required of individuals to improve their health is inversely proportional to the likelihood that they will get healthier and stay healthier. ¹³ As one author put it, filling in a brackish tidal pool is far more likely to reduce malaria years after funding has ended than expecting local community members to continue regular applications of larvicide. ¹⁴ A third cardinal feature of transformational programs, sustainability, is thus defined by reproducibility over time and ease of compliance by would-be beneficiaries.

Place-based programs that change basic structures, for large populations and with reasonable sustainability, have long been in existence. Although these programs are all around us,

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literally "all over the place," only recently have they seen a renaissance of interest as public health solutions, with accompanying studies showing the effectiveness of select place-based programs at some of the highest levels of scientific inquiry. The use of place-based programs to improve the health of the community writ large will only increase in the coming decades. It is therefore incumbent on public health scientists, physicians, and practitioners to work with groups implementing place-based programs to promote appropriate recognition and scientific study of these programs as solutions to some of our biggest public health challenges.

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FIGURE.

Place-Based Health Programs With Scientific Evidence Behind Them Include Light-Rail Systems, Vacant Lot Greening, Smoke-Free Places, and Breathe-Easy Homes (Left to Right, From Top)