Mobilizing Healthcare to Help More Americans Achieve Physical-activity Guidelines to Improve Health Outcomes and Reduce Health Disparities

PRESCRIPTION for ACTIVITY TASK FORCE

www.prescriptionforactivity.org
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Executive Summary

The Prescription for Activity (PfA) Task Force is comprised of volunteer national stakeholders who gathered in 2016 and early 2017 to examine the following questions:

- How can the healthcare industry mobilize people from communities across the U.S. to achieve recommended levels of physical activity—with a focus on those populations at greatest need?
- What steps might healthcare take to pursue the priorities and execute the strategies recommended by leading authorities such as the Physical Activity Guidelines for Americans, the American College of Sports Medicine’s Exercise is Medicine, the National Physical Activity Plan Healthcare Sector and the U.S. Preventive Services Task Force?
- What steps would be required for clinical care and that which surrounds and supports it to become a force for a cultural shift leading to a healthier, more active U.S.?

The PfA Task Force developed a systems-change map illustrating how to mobilize healthcare to help more Americans achieve physical-activity guidelines, leading to better health outcomes and reductions in health disparities. This white paper describes that map and offers recommendations to achieve each milestone.

Health equity is not only an outcome of this work, but a lens through which the PfA Task Force viewed each of the chains of the map and all of the outcomes that fall within those chains.
The Theory of Change Approach to Strategic Planning

The American Council on Exercise recruited a range of experts from academic, healthcare and community settings to join the PfA Task Force and pursue a shared goal—to develop a detailed 20- to 30-year outcomes-focused “map” for transforming the healthcare system so that physical activity-based behavior-change interventions become more integral and, as a result, far more people achieve recommended levels of physical activity.

The PfA Task Force used the theory of change (TOC) approach to strategic planning to guide its work. TOC is an innovative approach to addressing highly complex social or system-level problems. It explains how a long-range goal can be reached through the attainment of a sequence of early and intermediate accomplishments. Full implementation of the TOC approach articulates the assumptions about the change process and details the ways in which the early and intermediate outcomes relate to the achievement of the ultimate outcome.

The PfA Task Force Systems-change Map

To create the systems-change map, the PfA Task Force:
• Identified the long-term goal, or “Ultimate Outcome”
• Developed a pathway of change, including measurable outcomes that would be necessary “incremental outcomes,” or stepping-stones toward achieving the Ultimate Outcome
• Arranged those incremental outcomes into sequences of cause-and-effect preconditions, the result of which have evolved to represent “chains” of necessary categories of work
• Described the stakeholders that might logically be involved, or are already involved, in the pursuit of each precondition within each chain
• Identified approaches, interventions and other strategies that might be deployed in pursuit of each precondition

The TOC process begins with determining the Ultimate Outcome:

Culture Transformation:
Across diverse population groups within the U.S., being physically active is prioritized, feasible and enjoyable.

As Measured By:
50 percent or more of Americans in every community, demographic and age group achieve recommended levels of physical activity.

Target Year:
2035

The achievement of this outcome requires an ongoing focus on health equity, as the pursuit of a more physically active America, and the belief that every American must have an equal opportunity to achieve his or her best health, are fundamentally intertwined. This outcome will be achieved only when environments and opportunities support and empower individuals of all backgrounds to increase their personal level of physical activity. Health equity is not only an outcome of this work, but a lens through which the PfA Task Force viewed each of the chains of the map and all of the outcomes that fall within those chains.
The PfA systems-change map features three “core paths”:

- Care Delivery Chain: Prescribing physical activity as a path to enhanced patient outcomes
- Community Chain: Recruiting communities to make physical activity not only a priority, but also a source of fun, enjoyment and socialization
- Clinic-Community Integration Chain: Building a bridge of trust and collaboration between healthcare providers and community resources to encourage physical activity

These core paths are bolstered by four “supporting paths”:

- Education & Training Chain: Equipping healthcare professionals to be true physical-activity advocates
- Funding & Payment Chain: Funding affordable, universal access to physical activity
- Informatics Chain: Evolving the information architecture underpinning care delivery so physical-activity monitoring and counseling become supported and routine for care providers
- Communications Chain: Creating engaging and targeted messaging that persuades people across all walks of life to see physical activity not only as a health imperative but integral to a life of fulfillment and happiness

Finally, the systems-change map begins with a series of “sparks” designed to unleash transformation and facilitate the initial outcome in each of the seven chains just described.

Alignment with Existing Efforts

The members of the PfA Task Force recognized that many initiatives are already underway to support integration of physical activity into the healthcare setting. In fact, the leaders of many of these initiatives are members of, or advisors to, the PfA Task Force. As a result, the PfA Task Force aspired to build upon existing efforts and develop a framework and implementation plan to help align and accelerate them.

Key Next Steps

The PfA Task Force identified a series of key next steps to catalyze the tremendous body of work required to implement a change of this magnitude. These steps include:

- Building a highly organized nationwide implementation initiative
- Identifying and recruiting individuals and organizations to serve leadership, support, coordination and implementation functions
- Developing an identity for the initiative, as well as a message platform, communications strategy and awareness-building campaign
- Crafting written materials for academic, funding and other prospective partners, as well as lay audiences, describing the work and vision of the PfA Task Force
- Identifying how stakeholders across healthcare and in communities nationwide can answer the Call to Action detailed in this paper
- Recruiting the critical stakeholders and gathering the funding and human capital necessary to pursue the most urgent preconditions on the PfA systems-change map
Introduction
Physical activity, which encompasses all activities that require bodily movement, such as play, work and exercise, is associated with improved quality of life and a reduced risk of developing chronic disease (e.g., hypertension, coronary heart disease, stroke, diabetes, several forms of cancer and depression). However, only one in four adults globally is considered sufficiently physically active, with physical inactivity identified as the fourth leading cause of death worldwide. A lack of regular and sufficient physical activity contributes to many of the most prevalent noncommunicable diseases (NCDs), such as cardiovascular disease, cancer, diabetes and neurodegenerative diseases. There are profound benefits to performing any amount of physical activity. A person who increases his or her activity level, whether from a sedentary lifestyle to the performance of small amounts of exercise or from a moderately active lifestyle to one with more intense levels of movement, will see improvements in both quality of life and overall health. That said, individuals who fail to engage in sufficient cardiorespiratory activity, defined for adults as at least 150 minutes of moderate-intensity exercise or 75 minutes of vigorous-intensity exercise per week, have a ~20 to 30 percent increased risk of premature death versus those who meet the physical activity guidelines. In addition, insufficient population levels of physical activity lead to a substantial economic burden, recently quantified as 11 percent of the total healthcare expenditures in the United States (U.S.), or about $120 billion per year.

On the other hand, regular physical activity reduces the risk of these NCDs and the associated risk factors. Specifically, engagement in regular physical activity has been associated with maintenance of a healthy body weight, decreased risk of falls and fractures in older adults, and perceived improvement in quality of life. As such, physical activity is a critical and effective component of the treatment plan for many of these and other diseases.

Unfortunately, less than 15 percent of U.S. adults meet both aerobic-activity and muscle-strengthening guidelines, as defined in the Physical Activity Guidelines for Americans. Further, fewer than three out of 10 high school students get the recommended 60 minutes per day of physical activity, and only one in three children engage in physical activity every day. Physical inactivity is contributing to the obesity epidemic in the U.S., with approximately seven out of 10 adults and one out of three children and teenagers classified as overweight or obese in the U.S.

The integration of fitness with healthcare is a promising strategy to increase physical activity across communities of all demographics, achieve improved population health and lower the cost of care. Advice from health professionals has been shown to significantly influence the adoption of healthy lifestyle behaviors, including regular physical activity, and can increase patient satisfaction with medical care. Because of the number of lives it affects, healthcare has the capacity to be a catalyst to not only empower individuals to choose a more physically active lifestyle, but more, to be a catalyst for U.S. culture to evolve to one that prioritizes and celebrates being physically active.

Today, doctors, nurses and other care providers share health information and help patients set priorities for improving their health. For example, the U.S. Preventive Services Task Force’s recommendations for intensive behavioral counseling to prevent cardiovascular disease could benefit an estimated 33 percent of the adult U.S. population, particularly the 20 percent of adults who fail to meet the aerobic physical-activity guidelines. Even then, many adults who are counseled in clinical settings about physical activity may not have access to parks, recreation centers or safe areas for walking. In addition, they may lack the confidence, knowledge or skills to act on that guidance.

Imagine a new paradigm for physical activity where healthcare providers routinely assess physical-activity levels, encourage physical activity among their patients, counsel on its necessity and then refer patients to appropriate community partners based on the patient’s interests and readiness to change. Further, envision that the community programs are effective, affordable and delivered by community-based health and fitness providers trained in science-based physical activity and behavior-change strategies and trusted by both clinicians and healthcare consumers. The health and fitness providers then track and assess how their clients were doing with their physical-activity goals and adjust care plans accordingly. Imagine all of this was a routine part of healthcare, contributing to improved health outcomes and reducing downstream preventable healthcare costs.

The PIA Task Force believes that this future is attainable by the year 2035, and set out a roadmap to help this vision come to fruition.
The PfA Task Force developed a roadmap to mobilize healthcare to help more Americans achieve recommended levels of physical activity to improve health outcomes and reduce health disparities. Specifically, it identifies a stepwise path of changes that must occur so that by the year 2035, being physically active will be feasible, prioritized and enjoyable across diverse populations throughout the U.S. The goal will be attained when 50 percent or more of Americans in every community, demographic and age group achieve and sustain physical-activity guidelines.7 This white paper describes that roadmap and offers recommendations to achieve each milestone.

The Prescription for Activity Task Force

The PfA Task Force is comprised of volunteer national stakeholders who gathered in 2016 and early 2017 to examine the following questions:

- How can the healthcare industry mobilize people from communities across the U.S. to achieve recommended levels of physical activity—with a focus on those populations at greatest need?
- What steps might healthcare take to pursue the priorities and execute the strategies recommended by leading authorities such as the Physical Activity Guidelines for Americans, the American College of Sports Medicine’s Exercise is Medicine, the National Physical Activity Plan Healthcare Sector and the U.S. Preventive Services Task Force?
- What steps would be required for clinical care and that which surrounds and supports it to become a force for a cultural shift leading to a healthier, more active U.S.?
CALL TO ACTION

With the release of the systems-change map for how healthcare might better mobilize to its full potential to help vastly more Americans achieve recommended physical-activity levels, the PfA Task Force issues a call to action to:

• Leaders in healthcare delivery, infrastructure, policy, payment and support
• Leaders in public health, health advocacy, disease prevention, health communications and health investment
• Trusted influencers and practitioners in communities nationwide, communities where health and well-being already are deeply linked to the healthcare experience

To Healthcare Providers and Administrators

Call to Action

• Make regular assessment and monitoring of physical activity a standard practice in healthcare settings.
• Provide physical-activity interventions based on evidence-based best practices, delivered directly where people live, learn, work, play and pray, so that it will be integral to care delivery for all.
• Forge pilot projects to test exactly how that becomes possible, partnering with community programs, and including models deployed by payers testing the transition to value-based care.

To Health Professionals Outside Traditional Care Delivery, and Healthcare Workforce Experts

Call to Action

• Become part of a seamlessly integrated extension of care to serve healthcare beneficiaries beyond clinic walls.
• Be part of forging a new, nontraditional workforce of trusted, qualified providers and programs, and a new network of trusted places and processes that integrally link them to clinical care.

To Care Delivery Infrastructure and Process Owners

Call to Action

• Develop the information architecture, processes and workflows necessary to assess and prescribe physical activity, and to enable referrals by clinicians to programs, providers and places that deliver physical activity–based interventions in the community.
• Ensure those interventions are community-driven, documented, tracked, assessed, seamlessly integrate patient data and are incorporated into care plans.

To Local Community Leaders

Call to Action

• Press tirelessly for policies, practices, programs and environments in local areas that make physical activity accessible, safe and appealing through diverse and committed local coalitions in partnership with local healthcare.
• Insist that every community and every person within it has accessible, safe and appealing places and ways to become and remain physically active for individual and whole-community health.
To the Business of Healthcare

Call to Action

• Forge payment, financing, delivery and evaluation systems to support and sustain medically necessary physical activity across the preventive care spectrum (primordial, primary, secondary and tertiary).
• Update current procedural technology and diagnostic codes, forge alternative payment models that include value-based incentives and invest in shared savings programs.

To Health Funders and Investors

Call to Action

• Co-invest in the pursuit of the systemic changes mapped in this document.
• In line with organization missions, leverage influence to break through systemic inertias and incentivize needed action, at national, state and local levels, so people in all communities and populations can become measurably more physically active; this should be prompted by healthcare.

To Health Equity Experts and Advocates

Call to Action

• Guide the body of work depicted in the systems-change map so it optimally creates community-sourced health improvement through physical activity regardless of age, ethnicity, geographic location or income, and with a particular focus on those with greatest need.

To Education and Training Institutions

Call to Action

• Establish the policies, guidelines, competencies, best practices and curricula that ensure all healthcare providers know how to facilitate physical-activity interventions within their scope of practice.
• Train a new, but highly qualified and trusted workforce of health coaches and behavior-change practitioners who can extend the reach of the clinic and are prepared to deliver medically necessary physical-activity interventions.

To Health Communicators

Call to Action

• Co-invest in vastly more compelling messages about the appeal of regular physical activity (and the efficacy and cost-effectiveness of physical-activity interventions as an integral part of health promotion and disease prevention and management).
• Spur a shift in culture that increases enthusiasm and support for physical activity among all Americans so that healthcare can prompt more individuals and families to adopt and maintain healthy lifestyles.

To Public Health and Disease-prevention Advocates and Organizations

Call to Action

• Commit influential national and local leaders, as well as resources, grassroots and organizational networks, quality initiatives, professional education, research and scientific guidelines to the outcomes specified in the systems-change map.
• Invest in the potential of healthcare, for all the people it directly touches and for all the people who trust it, to help all Americans avoid preventable disease through increased physical activity.

To Healthcare Employers

Call to Action

• Set a new standard for increasing a workforce’s number of healthy days by investing deeply in comprehensive, best practices–based health-promotion programs, policies and environments.
• Commit to developing and maintaining a physically active healthcare workforce.

To Public Officials with Jurisdiction over Health

Call to Action

• Establish policies and infrastructure to equip communities to meet the physical-activity needs of their residents, support a well-trained workforce to deliver community-based physical-activity interventions, advocate for the integration of such interventions into clinical care, unlock greater funding for physical activity in communities and incentivize innovation in support of these aims.

To Participants in the PfA Task Force, Now and in the Future

Call to Action

• Recruit ever more stakeholders to embrace and participate in this body of work.
• Identify and recruit resources and collaborators, at national, state, and local levels, who are already catalyzing, or are well positioned to catalyze, outcomes in the systems-change map.
• Recognize that this is a long-term body of work; stay diligent but maintain patience and relentless optimism for what is possible.
As of 2012, close to 50 percent of U.S. adults had one or more chronic health conditions (i.e., conditions lasting three months or more and which cannot be prevented by vaccines, cannot be cured by medication and do not simply disappear), and one of four adults had two or more chronic health conditions. In 2014, two chronic diseases—heart disease and cancer—together accounted for nearly 46 percent of all deaths. Additionally, obesity is a serious health concern. In 2015, it was estimated that 36.4 percent of adults 20 years of age and older had obesity [body mass index (BMI) ≥30 kg/m²] and nearly one of five youths aged 2 to 19 years had obesity (BMI ≥95th percentile).

Considering that a staggering 86 percent of all healthcare dollars are spent on people with one or more chronic health conditions, there is a clear need for evidence-based approaches to health improvement. Regular physical activity is one such proven intervention for the prevention and treatment of many of the most prevalent, costly and preventable chronic diseases. While physical activity is an effective approach for the prevention and treatment of myriad diseases, few people are sufficiently active to achieve its benefits. If the healthcare sector supported healthcare providers in assessing and discussing physical activity as part of routine care, and referring to community resources to fulfill the activity prescription, vastly more people would regularly engage in physical activity.
In fall 2015, the American Council on Exercise (ACE), a national nonprofit organization based in San Diego, Calif., began to conceptualize the best ways to help more people in the U.S. achieve the many benefits of a physically active lifestyle, most critically the prevention and treatment of disease. ACE believed a fundamental, systemic evolution of healthcare at its core was likely required, as well as an expansion and coordination of the many existing efforts, such as the Exercise is Medicine initiative by the American College of Sports Medicine,32 the Physical Activity Vital Sign spearheaded by Kaiser Permanente,33 and the National Physical Activity Plan14 (see pages 18–19). ACE theorized that if it convened a structured, think tank–style planning process involving a wide array of national thought leader–level stakeholders, that group could map out its evolution.

ACE asked a range of experts from academic, healthcare and community settings, in private, public and non-profit sectors, to join the PfA Task Force and work toward a shared goal of formulating a detailed 20- to 30-year outcomes-focused “map” for transforming the healthcare system so that physical activity–based behavior-change interventions become more integral, and thus far more people achieve recommended physical-activity levels.

The PfA Task Force ensured the integrity of its work by requiring that participants disclose all potential conflicts of interest, including relationships with government entities, not-for-profit organizations and commercial concerns. Working with the strategic planning and facilitation consultancy Wolfe Kinkennon, the PfA Task Force used the TOC approach to strategic planning to guide its work. TOC is an innovative approach to addressing highly complex social or system-level problems. It involves explaining how a long-range goal can be reached through the attainment of a sequence of early and intermediate accomplishments. Full implementation of the TOC approach articulates the assumptions about the change process and identifies the ways in which the early and intermediate outcomes are related to the achievement of the ultimate outcome. In addition, there must be ongoing documentation of the process.34

Through three in-person planning retreats—in May 2016, September 2016 and March 2017—plus extensive work outside those convenings, the PfA Task Force completed the sequential steps required by the TOC planning methodology. Specifically, the PfA Task Force:

- Identified the long-term goal, or “Ultimate Outcome”
- Developed a pathway of change, including measurable outcomes that would be necessary “incremental outcomes,” or stepping-stones toward the Ultimate Outcome
- Arranged those incremental outcomes into sequences of cause-and-effect preconditions, the result of which have evolved to represent “chains” of necessary categories of work
- Described the stakeholders that might logically be involved, or are already involved, in the pursuit of each precondition within each chain
- Named approaches, interventions and other strategies that might be deployed in pursuit of each precondition

Figure 1 on page 20 presents a simplified version of the PfA Task Force systems-change map.
A Sampling of Existing Efforts and an Opportunity for Greater Alignment and Impact

The members of the PfA Task Force recognized that many initiatives are already underway to support integration of physical activity into the healthcare setting. In fact, the leaders of many of these initiatives are members or advisors to the PfA Task Force. Therefore, the PfA Task Force aspired to build upon existing efforts and develop a framework and implementation plan to help align and accelerate them. The following is a brief overview of some of the most extensive and organized efforts with a vision similar to the PfA Task Force. The PfA Task Force is aligned with, and is engaging, each of these initiatives and aims to provide critical coordination to help achieve a shared vision.

The following list is in no way intended to be exhaustive, but rather provides several examples of existing efforts that align with the goals of the PfA Task Force. There are countless other high-quality programs and initiatives not included here. A more comprehensive sampling can be found at www.prescriptionforactivity.org.

Centers for Disease Control and Prevention’s Division of Nutrition, Physical Activity, and Obesity (DNPAO)
www.cdc.gov/nccdphp/dnpao/index.html
The DNPAO takes a comprehensive approach to fighting against chronic disease by focusing its efforts in four key areas: epidemiology and surveillance, environmental approaches, healthcare system interventions, and community programs linked to clinical services. The DNPAO’s Active People, Healthy Nation initiative supports delivering effective community-based physical-activity programs, mobilizing physical-activity partners, creating engaging messaging regarding active lifestyles, training community-based physical-activity leaders and developing technology tools and data-tracking resources.

Diabetes Prevention Program (DPP)
www.cdc.gov/diabetes/prevention
The DPP is a partnership of public and private organizations working to reduce the growing problem of prediabetes and type 2 diabetes. Their efforts aim to make it easier for people with prediabetes to participate in evidence-based, affordable and high-quality lifestyle-change programs to reduce their risk of type 2 diabetes and improve their overall health. In addition to providing a framework for diabetes-prevention efforts, the partner organizations share the following goals:
• Deliver lifestyle-change programs approved by the Centers for Disease Control and Prevention
• Ensure quality and adherence to proven standards
• Train community organizations to run these programs
• Increase referrals to, and participation in, these programs
• Increase coverage by employers and public and private insurers

Exercise is Medicine (EIM)
www.exerciseismedicine.org
EIM was developed by the American College of Sports Medicine and the American Medical Association in 2007. Its three aims are to:
• Prompt healthcare providers to assess physical-activity levels of each patient at every clinic visit
• Provide patients with exercise “prescriptions” that can be tailored for their specific needs and disease conditions
• Refer patients to a trusted network of local evidence-based physical-activity programs led by qualified professionals

Every Body Walk!
www.everybodywalk.org
Every Body Walk! is an initiative of Kaiser Permanente advocating for walking as a major solution to the physical inactivity epidemic. In combination with the Surgeon General’s recent Call to Action to increase walking and walkability in communities, such initiatives lay out the plan to help patients go from a prescription to move more, to actually doing it. In many cases, having a place to walk (and a program to support walking) may be a viable solution.

Lifestyle Medical Education Collaborative (LMEd)
www.lifestylemedicineeducation.org
LMEd offers leadership, guidance and resources to advance the adoption and implementation of lifestyle medicine curricula throughout medical education, as physicians must themselves be educated on the vital role that lifestyle interventions play in preventing, treating and managing disease. Subjects included in these curricula include exercise/physical activity, nutrition, behavior change and self-care.
Million Hearts
www.millionhearts.hhs.gov
This initiative was established by the U.S. Department of Health & Human Services and is co-led by the Centers for Disease Control and Prevention and the Centers for Medicare & Medicaid Services. It focuses partner actions on a small set of priorities selected for their impact on heart disease, stroke and related conditions.

Reaching the following goals will result in 1 million fewer heart attacks in the next five years: 20 percent reduction in sodium intake; 20 percent reduction in tobacco use; 20 percent reduction in physical inactivity; 80 percent performance on the ABCS Clinical Quality Measures; and 70 percent participation in cardiac rehabilitation among eligible patients.

National Coalition for the Promotion of Physical Activity (NCPPA)
www.ncppa.org
NCPPA unites the strengths of public, private and industry efforts to empower all Americans to lead more physically active lifestyles. NCPPA advocates for the following policies and practices in the healthcare sector:

- Provide tax incentives and reimbursement policies that cover health/fitness counseling
- Create linkages between healthcare providers and community resources for physical activity and physical-fitness promotion
- Support exercise prescriptions in healthcare delivery
- Increase professional education and medical school training to healthcare providers to increase their knowledge of physical activity and physical fitness and increase their willingness to write exercise prescriptions
- Integrate quality measures on physical activity/physical fitness into electronic health records

Physical Activity Vital Sign (PAVS)
www.share.kaiserpermanente.org/article/exercise-as-a-vital-sign/
PAVS calls upon all healthcare systems and providers to routinely assess physical activity at each clinic visit through the medical assistant/licensed vocational nurse asking the following two questions as other vital signs are taken, and then documenting the patient response in the medical record:

- On average, how many days per week do you engage in moderate or greater physical activity (like a brisk walk) lasting at least 10 minutes?
- On those days, how many minutes do you engage in activity at this level?

SHAPE America: 50 Million Strong
www.50million.shapeamerica.org
This initiative is a call to action for all of America’s health and physical education providers to focus on the common purpose of getting the approximately 50 million students enrolled in America’s elementary and secondary schools to become physically active, enthusiastic and committed to making healthier lifestyle choices. Today’s youngest students will graduate from high school in 2029. The objective of 50 Million Strong is to ensure that all of America’s youth will be empowered to lead healthy and active lives through effective health and physical education programs by that date.

SilverSneakers
www.silversneakers.com
SilverSneakers is a fitness program for seniors that is provided at no cost by more than 60 health plans nationwide. The program includes unlimited access to the more than 13,000 participating gym and fitness center locations in its network.

Step it Up! The Surgeon General’s Call to Action to Promote Walking and Walkable Communities
This program provides strategies that communities can use to support walking, with the goal of driving long-lasting changes to improve the health and healthcare of Americans now and in future generations.

The Call to Action:

- Focuses on promoting optimal health before disease occurs
- Is applicable to the health of people at all ages and stages of life
- Recognizes that everyone should have access to spaces and places that make it safe and easy to walk or wheelchair roll

U.S. National Physical Activity Plan
www.physicalactivityplan.org
The Plan aims to help identify ways in which communities and individuals can implement the Physical Activity Guidelines. The Plan consists of a comprehensive set of policies, programs and initiatives that aim to increase physical activity across all sectors, including business and industry; education; healthcare; mass media; community recreation, fitness and parks; sport; public health; faith-based settings; and transportation, land use and community design.

Walk with a Doc
www.walkwithadoc.org
Walk with a Doc is a national grassroots initiative in which doctors and other healthcare providers lead a brief health education session followed by a walk. What started with a movement by Ohio cardiologist Dr. David Sabgir in 2005 after he became frustrated with his inability to effect behavior change, has spread to include 300+ chapters across the U.S. Walk with a Doc has partnered with the National Recreation and Park Association to expand its impact and help build the bridge between clinic and community parks.
Figure 1. Simplified Prescription for Activity Task Force Systems-change Map

**The Sparks**
Igniters that catalyze the systems-change map toward achievement of the Ultimate Outcome

- **Supporting Path**
  - **Communications Chain**
    - Creating engaging and targeted messaging that persuades people across all walks of life to see physical activity not only as a health imperative but integral to a life of fulfillment and happiness
- **Core Path**
  - **Community Chain**
    - Recruiting communities to make physical activity not only a priority, but also a source of fun, enjoyment and socialization
  - **Clinic-Community Integration Chain**
    - Building a bridge of trust and collaboration between healthcare providers and community resources to encourage physical activity
  - **Care Delivery Chain**
    - Prescribing physical activity as a path to enhanced patient outcomes
  - **Informatics Chain**
    - Evolving the information architecture underpinning care delivery so physical-activity monitoring and counseling become supported and routine for care providers
  - **Funding & Payment Chain**
    - Funding affordable, universal access to physical activity
  - **Education & Training Chain**
    - Equipping healthcare professionals to be true physical-activity advocates

**Assumptions**

In developing the TOC map, the PIA Task Force made a series of assumptions that guided the development of the preconditions and how attainment of each sequential precondition will eventually lead to attainment of the ultimate outcome by 2035. The assumptions made by the PIA Task Force are as follows:

- If individuals—regardless of socioeconomic status, geographic location, race, ethnicity, age or ability—had ample opportunities and incentive to engage in enjoyable physical activity, most would.
- In order for the healthcare system to effectively influence large-scale improvements in physical activity across diverse populations, critical changes must occur in clinical settings to inspire and motivate patients to become more physically active.
- If clinicians assess patient physical-activity levels, they will be more likely to identify patients who are insufficiently active, support them in increasing readiness to change and recommend an individualized “treatment/prescription” of increased activity that will build on a person’s strengths and help him or her to overcome barriers.
- If a patient works together with a clinical team to develop a feasible action plan, he or she will be more likely to increase his or her activity level and experience the associated physical and mental benefits of regular physical activity.
- It is difficult for a person to fulfill a prescription for physical activity if his or her community lacks relevant resources and supports. Such physical-activity resources and supports are needed, and the assumption is that community members will take advantage of them if they are affordable, accessible and engaging.
- The PIA Task Force recognized that communication between clinical and community settings is fragmented at best. While seamless referral processes from clinicians to community health and fitness providers and programs are rare, if better, more seamless systems were in place, and clinical and community providers could communicate with one another regarding community members’ progress, more people would be likely to begin and continue an activity plan.
Given these assumptions, the PfA Task Force identified clinical, community and clinic-community integration chains as the Core Path toward achieving the Ultimate Outcome. Taken together, these chains will create a healthcare system in which providers routinely assess physical-activity levels, counsel patients to optimize activity and seamlessly refer patients to community-based physical-activity resources and opportunities. The PfA Task Force assumed that these efforts would be bolstered through parallel work in the education and training of healthcare professionals, funding and investment from stakeholders and partners, health informatics and communication supports (each of which was given a “supporting chain” in this TOC).

The full TOC, including the steps in each of these chains to reach the Ultimate Outcome, is detailed below.
III. An In-depth Look at the Prescription for Activity Systems-change Map
Ultimate Outcome

CULTURE TRANSFORMATION:
Across diverse population groups within the U.S., being physically active is prioritized, feasible and enjoyable.

AS MEASURED BY:
50 percent or more of Americans in every community, demographic and age group achieve recommended levels of physical activity.

TARGET YEAR:
2035
Health Equity

Creating the opportunity for everyone to achieve better health through widely accessible physical-activity interventions

The pursuit of a more physically active America, and the belief that every American must have a fair chance to achieve his or her best health, are fundamentally intertwined. Health equity exists when everyone has the opportunity to fulfill their full health potential, and when no one is at a disadvantage from doing so because of social position or any other circumstance. Unfortunately, that is not currently the case in America, as the burdens of ill health and the benefits of good health are inequitably distributed. As healthcare evolves to reach its capacity to help vastly more Americans achieve recommended physical-activity levels, the compelling opportunities to become physically active that emerge must be equitable across age, ethnicity and socioeconomic status.

Health equity was the first topic discussed by the PIA Task Force as being a prerequisite to all of the work that follows. While the efforts outlined by a TOC map move from left to right on the map, the thinking process behind its creation moves from right to left. This means that rather than all of the chains flowing into the Health Equity outcome, they grew from it. Health equity is not only an outcome of this work, but a lens through which each of the component chains of the map, and all of the outcomes that fall within those chains, are viewed.

H.E.1: The widespread expansion of movement opportunities is abundant and compelling, building on community assets and culture to achieve optimal health across the lifespan and regardless of age, ethnicity or income, with particular focus on those with greatest need.

DISCUSSION

The communities where people live, learn, work, play and pray have the ability to promote health equity, but the collaboration of diverse stakeholders (as outlined in the PIA Task Force’s TOC map) is essential to make that possible.

WHO IS AND SHOULD BE INVOLVED

Individuals and organizations already in place include parents, youth, educators and social justice advocates (e.g., churches, community organizations, non-profit organizations, foundations and other philanthropic organizations, issue-specific advocacy groups and disability advocates).

Sponsors and investors include/should include local governments and health departments, as well as healthcare systems.
People will move more when they have ample opportunities to be active in an enjoyable and safe way as part of their daily lives; believe in the benefits and rewards of a physically active lifestyle; feel ready and able to take the first steps; and feel supported by their loved ones, workplaces, communities, and trusted community resources such as healthcare providers and their teams.

Individual empowerment is an essential step between creating the opportunity for people to be active and realizing a culture of activity where at least 50 percent of people from all backgrounds achieve activity recommendations.

I.E.1. People of all backgrounds feel empowered to move more.

DISCUSSION
Communities and healthcare environments play an important role in supporting the change process as people move from sedentary lifestyles to active ones. The healthcare team can serve a particularly important role in showing empathy, helping people set achievable goals and develop action plans, and considering a person’s readiness to change and social determinants of health when making recommendations.

WHO IS AND SHOULD BE INVOLVED
Individuals and organizations already in place include all people who already have adopted a physically active lifestyle, in particular new adopters; communities and groups that provide support and resources to help community members become and stay active; healthcare teams, in particular those that have training and practice in behavior-change principles and goal setting, such as patient-centered medical homes; health plans, especially those that offer or support health coaching and other programs that help people make behavioral changes; behavior-change training programs such as motivational interviewing and health coaching organizations; and researchers and scientists focused on positive psychology and behavior change.

Sponsors and investors include/should include public and private healthcare systems and payers, public health departments, cities and towns, and patient advocacy organizations.
To achieve Health Equity and the Ultimate Outcome, the PfA Task Force developed a Core Path that includes a care delivery chain, a community chain and a clinic-community integration chain that come together to create a healthcare system in which providers routinely assess physical-activity levels for all patients, help those patients most in need to develop a plan to optimize activity, and seamlessly refer patients to opportunities for community-based physical activity. Community-based organizations support the healthcare system with ample and equitable physical-activity opportunities, and share progress and outcomes with healthcare partners.

An evolution of healthcare delivery is essential, such that clinicians across healthcare assess, prescribe and monitor patients’ physical activity. This process should become as integral to the clinical experience as tracking weight change or measuring blood pressure. The systems that guide and support clinical work—standards of care, best practices, information architecture, protocols, benefit structures and the like—must evolve to support and incentivize that goal. In addition, priority should be placed on creating opportunities and incentives for clinical staff to model adoption of a physically active lifestyle. The relevance of this needed evolution is vast; achieving the quadruple aim—improving health outcomes, improving the patient experience, cutting costs, and improving the experience of health providers—hangs in the balance. While the epidemic of physical inactivity will not be solved in the doctor’s office, with concrete steps the clinic can become a catalyst for more active populations.
An evolution of healthcare delivery is essential such that clinicians across healthcare assess, prescribe and monitor patients’ physical activity.

1. C.D.1: A physical-activity assessment is part of routine clinical care (e.g., Physical Activity Vital Sign).

**DISCUSSION**
Because standards of care drive clinician behavior, a critical building block for long-term change will be broadly accepted standards of care for assessing, prescribing and monitoring physical activity.

**LINK TO OUTSIDE CHAIN**
I.1: Standards relative to physical-activity assessment are incorporated into the electronic health information architecture.

**DISCUSSION**
Standardization must be achieved for how "physical activity" is defined for purposes of data gathering, which will require collaboration among specialists from different areas of expertise.

2. C.D.2: Providers and healthcare systems are incentivized to provide physical-activity assessment, counseling and follow-up (surveillance). Metrics for success are clearly delineated.

3. C.D.3: Systems are in place to support a team-based approach to physical-activity assessment, counseling and follow-up, and the role of each care-team member is clearly defined.

**DISCUSSION**
The role each clinical team member plays in interventions designed to improve patient physical-activity levels must be precisely defined and understood by care-team members so that such interventions become an integral part of care delivery. Importantly, this approach to care delivery should be used with children and adolescents as well as adults, as establishing healthy habits during childhood forms an essential foundation for a more active lifestyle later in life.
C.D.4: Within an evolved and functional value-based healthcare system, there exists an aligned set of value-based codes, measures, goals and standards to incentivize providers to assess, counsel and monitor physical-activity status and support related interventions.

**DISCUSSION**
Healthcare is evolving from fee-for-service to value-based payment. While the way healthcare interventions will be paid for takes shape, a natural opportunity exists to provide robust financial incentives for clinicians to help patients become more physically active, which will improve their health status while lowering per-patient costs.

C.D.5: Evidence-based physical-activity interventions have become part of standard insurance benefits for all populations.

**DISCUSSION**
Ultimately, physical-activity interventions must be affordable and accessible for both insured and uninsured patients. This requires sustained commitment by healthcare payers and other funders.

C.D.6: Providers and care teams utilize evidence-based and evidence-informed behavior-change tools, strategies, processes and policies to increase physical-activity levels.

**DISCUSSION**
The Health Equity outcome that precedes the Ultimate Outcome will be within reach when the clinic fulfills its potential to be a catalyst for more physically active patients and communities.

**WHO IS AND SHOULD BE INVOLVED**
Individuals and organizations already in place include major health-professional and medical societies and organizations, healthcare-delivery groups, health-focused governmental agencies, and nonprofits and other programs committed to getting people more active.

Sponsors and investors include/should include major health-professional and medical societies and organizations, health-focused governmental agencies, leading health-focused philanthropies, industry, payers and legislators.

Legitimizers for work on the Care Delivery Chain include/should include Exercise is Medicine, the National Physical Activity Plan, Centers for Medicare & Medicaid Services, major commercial health insurance plans, employers/hospitals, major health-professional and medical societies and organizations, health-focused governmental agencies, professional organizations for other members of the care team and the Office of the United States Surgeon General.
Community Chain

Recruiting communities to make physical activity not only a priority, but also a source of fun, enjoyment and socialization

The PfA Task Force calls for all communities to become pivotal purveyors, translators and celebrators of physical activity, helping their members understand and contextualize the necessity and profound benefit of becoming and staying active. Becoming physically active cannot be a mandate. It must be a cultural priority in all communities, and that requires community leaders to help members associate regular physical activity with joyful living as part of rich community life. Communities must create safe and compelling places to get and stay active, which will require local coalitions that include residents as active participants.

C.1.a: The healthcare sector has become a role model for investing in and creating a physically active workforce. Healthcare workplaces provide comprehensive, best practices–based health-promotion programs, policies and environmental supports for their employees.

DISCUSSION

Among the largest employers in many communities, healthcare organizations can lead by example as promoters of physical activity, encouraging and incentivizing their care givers to engage enthusiastically in regular physical activity during the workday, at the worksite or away from it. Physicians can assume a leadership role by living physically active lifestyles.
C.1.b: Across the U.S., local coalitions of residents, community leaders, businesses and nonprofits are increasing physical activity in their communities.

DISCUSSION
Coalition building in a community requires an "all hands in" approach that includes the health community and healthcare systems in addition to local non-profits, government agencies and businesses.

C.2.a.: A majority of employers in the U.S. are investing in comprehensive approaches to wellness that include physical-activity interventions.

C.2.b: Healthcare professionals are partnered with local coalitions that address community needs, including policies, practices and infrastructures that support active communities.

DISCUSSION
Neither clinic nor community leaders alone can solve the physical inactivity epidemic, but they both play a critical role. Alongside local employers, they must work together to create a community-level culture that prioritizes and celebrates being physically active.

C.3: Community-level demand has increased for local environments, policies and practices that make physical activity accessible and enjoyable for all.

DISCUSSION
Empowering communities to become more active creates intrinsic motivation to enjoy these newfound opportunities, which then increases the demand for additional programs and interventions.

Communities must create safe and compelling places to get and stay active, which will require local coalitions that include residents as active participants.
C.4: Health, including physical activity, is prioritized and resourced in all community decisions related to policies, practices and environments, with a particular focus on equity.

**DISCUSSION**

Concepts like “walkable and rollable communities” can draw diverse aspects of a community together in a way that benefits those who may be underserved, as well as local merchants and the broader business community. Bringing together various elements of a community so that they are talking, moving and enjoying life together can yield widespread benefits.

C.5: Infrastructure and systems are developed and in place in communities across the nation to make physical activity an integral part of most Americans’ days.

**DISCUSSION**

If done well, infrastructure such as public walkways or green spaces, as well as community art projects focused on creative placemaking, can create beautiful, yet practical, places for community members from diverse backgrounds to get outside and move together in a way that strengthens the community as a whole.

**WHO IS AND SHOULD BE INVOLVED**

Individuals and organizations already in place include the media, schools, businesses, churches, sports leagues/clubs, local health departments and other government agencies, parks and recreation departments, and individuals including social workers, clinicians, researchers, policy makers, city planners, developers and residents.

Sponsors and investors include/should include the health/fitness industry, foundations and nonprofit agencies, local public health agencies, local government, health insurers and systems, parks and recreation departments, hospitals, employers, schools, researchers and developers.

Legitimizers for work on the Community Chain include/should include local officials, community leaders and decision makers (faith leaders, coaches, teachers, healthcare professionals, students, employees and voters), local athletes and celebrities, healthcare executives, community activists and the local government and chamber of commerce.
For health clinics to realize their full potential as catalysts to help vastly more Americans meet physical-activity guidelines, the traditional “wall” between the clinic and surrounding communities must be lowered. Physical activity–based behavior-change interventions must become affordable and widely available directly in the community as an extension of clinical care. Interventions prescribed and monitored by the clinic must be delivered beyond clinic walls by members of an extended care team who meet people directly where they are—in the home, at school, at work and even in places of worship. To accomplish these goals, the clinic and the community-based providers and programs surrounding the clinic must become seamlessly linked. Referrals must take place, trust must be high and information architecture must be secure. Finally, the behavior-change interventions delivered in the community must be as important to the overall plan of care as the care administered in the examination room.
C.C.I.1.a: The key resources necessary to deliver widespread physical-activity interventions in the community—trusted providers, programs and places—are identified, verified and readily accessible.

C.C.I.1.b: Referral processes and workflows between the clinic and community-based providers, programs and places are established, verified, functional and trusted.

DISCUSSION
In communities across the country, physical activity–based behavior-change interventions and their component parts must be forged into place, and be trusted by the clinic and healthcare consumers. They must also be tightly linked to the clinic by standards, processes and other workflow so that referral, fulfillment, tracking and monitoring may happen seamlessly.

C.C.I.2: Referrals by clinicians to community-based programs, providers and places of physical-activity intervention regularly occur and are documented, and the tracking and assessment data and outcomes are fully incorporated into the electronic health information system.

DISCUSSION
Once the structures to deliver community-based behavior-change interventions are in place, the clinic must broadly utilize and incorporate them seamlessly into broader plans of care.

C.C.I.3: The healthcare system is connected and integrated with community systems and resources, such as referral networks, patient-feedback systems, workplace wellness programs, electronic health information, payment mechanisms, school systems and park networks.

DISCUSSION
The turning point will occur when community-based, physical-activity resources are seen by both clinical-care providers and the consumer as integral components of healthcare delivery.
C.C.I.4: Payment models that support physical-activity interventions are widely available for voluntary implementation and evaluation.

**DISCUSSION**
As physical activity–based behavior-change interventions delivered beyond clinic walls become a seamless component of healthcare delivery, and as they increasingly contribute to the quadruple aim (improving health outcomes, improving the patient experience, cutting costs and improving the experience of health providers), there will be more ways to pay for such interventions.

**LINK TO OUTSIDE CHAIN**
C.D.6: Providers and care teams utilize evidence-based and evidence-informed behavior-change tools, strategies, processes and policies to increase physical-activity levels.

**DISCUSSION**
This is the final outcome of the Care Delivery Chain and the immediate predecessor to the achievement of health equity. As such, multiple chains in the systems-change map lead to this outcome, including the Clinic-Community Integration Chain, the Informatics Chain, the Funding & Payment Chain and the Education & Training Chain.

**LINK TO OUTSIDE CHAIN**
C.5: Infrastructure and systems are developed and in place in communities across the nation to make physical activity an integral part of most Americans’ days.

**DISCUSSION**
This connection to the Community Chain highlights that sustainable funding support through innovative payment models is required to develop community-level infrastructure and effective physical-activity programs.

**WHO IS AND SHOULD BE INVOLVED**
Individuals and organizations already in place include certified community health and physical-activity professionals, private health plans, medical and scientific societies, population health management organizations, America’s Health Insurance Plans, fitness organizations and other exercise advocates, patient advocacy groups, manufacturers of wearable physical-activity tracking devices, National Quality Forum, National Committee for Quality Assurance, Diabetes Prevention Programs, businesses/employers and insurance companies.

Sponsors and investors include/should include the Centers for Medicare & Medicaid Services, healthcare community-benefit providers, federal and local governments and health departments, electronic health record companies, population health systems, manufacturers of wearable devices, nonprofit organizations, the medical fitness and fitness industries, and technology companies.

Legitimators for work on the Clinic-Community Integration Chain include/should include the Office of the United States Surgeon General, federal health-focused agencies, public health leaders, healthcare public-policy think tanks and advocates, data aggregators, chambers of commerce, local government and organizing bodies, and state health departments.
Education & Training Chain

Equipping healthcare professionals to be true physical-activity advocates

Education & Training is the first of four supporting chains in the TOC map. The efforts reflected in the Care Delivery, Community and Clinic-Community Integration Chains are supported through education and training of providers and allied health professionals, funding and investment from stakeholders and partners, health informatics and communication supports.

Regular physical activity is a potent medicine that should be widely prescribed to prevent and treat a long list of chronic diseases, as well as to promote optimal health and quality of life. In order to make this possible, education on the importance of physical activity to overall health, as well as on how to guide someone through a safe and effective exercise program, must be incorporated into the curricula for all health professionals. For physicians, education should be ongoing, beginning in medical school, continuing through residency and throughout one’s career via continuing medical education. In fact, this paradigm should be integrated into the curricula of all health-care professions (e.g., nursing, physical therapy, dentistry and pharmacy). All healthcare professionals should have the educational training that would allow them to competently discuss the importance of exercise and physical activity with all of their patients. The healthcare professionals with whom consumers interact every day must become equipped to understand, recommend, support and track physical-activity interventions.
E.T.1: Published policy statements and clinical guidelines supporting physical activity–based behavior-change interventions are in place.

E.T.2: Core competencies and best practices related to physical activity and exercise assessment have been developed, identified and endorsed.

E.T.3: Curricula in physical activity–based behavior-change interventions are mandated or otherwise incentivized.

E.T.4: Core competencies have been adopted across a majority of training institutions and incorporated into entry-level and continuing education.

DISCUSSION
Training healthcare providers (e.g., medical doctors, doctors of osteopathic medicine, nurse practitioners and physician assistants) and the extended team (e.g., medical assistants, licensed vocational nurses, registered nurses, registered dietitians, physical therapists and fitness professionals) to help people become physically active is a key chain of work. It requires standardized competencies for determining which health conditions can benefit from physical-activity interventions based on best practices and guidelines that are followed across the healthcare training and education spectrum. This is the key to a future in which all care professionals encourage patients to become more physically active. What is needed is some “scope of normal” for integrating physical-activity counseling into the clinical environment. Healthcare providers should serve as role models for their staff, patients, family members and community by living active and healthy lifestyles.

How will that happen? Learnings from initiatives like Exercise is Medicine about equipping care providers to think about physical activity must be expanded. Providers must know when and how to intervene and when to refer. Accrediting, certifying and licensing bodies must ensure that practicing professionals have an essential understanding of physical-activity intervention, which will incentivize committed learning. Because providers tend to learn and practice what is reimbursable, deep engagement by payers is critical in order to sustain the impact of physical-activity education and training.
Regular physical activity is a potent medicine that should be widely prescribed to prevent and treat a long list of chronic diseases.

E.T.5: All healthcare professionals acquire the fundamental knowledge and skills for counseling on, and referral to, physical-activity interventions during their academic and/or professional training.

DISCUSSION
These healthcare professionals include physicians, extenders, support and fitness professionals and anyone else involved in health promotion and disease prevention and treatment. All members of the healthcare and allied health professions can receive specific levels of training to match their role. Accrediting, certifying and licensing bodies must be engaged in this effort.

E.T.6: All healthcare providers possess the knowledge, skills and tools to effectively assess, counsel and refer patients to optimize physical-activity levels.

DISCUSSION
There is an opportunity to leverage existing programs addressing the integration of physical activity–based behavioral coaching into the working environment of a doctor’s office.

LINK TO OUTSIDE CHAIN
C.D.6: Providers and care teams utilize evidence-based and evidence-informed behavior-change tools, strategies, processes and policies to increase physical-activity levels.

E.T.7: Competencies related to physical-activity interventions are fully integrated into practice guidelines and clinical care.

DISCUSSION
The approach and curricula used to educate and train healthcare and allied health professionals must be significantly revised to include essential information on physical activity–based behavioral interventions.
WHO IS AND SHOULD BE INVOLVED

Individuals and organizations already in place include major health-professional and medical societies, professional associations, health-focused government agencies, all key healthcare practitioners, health profession academic accreditors, key academic and other institutions innovating in the realm of physical-activity care-provider education, policy makers at the state and federal levels, certifying and licensing bodies, and schools, colleges and universities.

Sponsors and investors include/should include funders and foundations, schools and individual certificants and licensees.

Legitimizers for work on the Education & Training Chain include/should include standard-setting bodies in health provider education and training, the U.S. Department of Education, schools and education-focused organizations, textbook publishers, professional associations, organizations that give awards/recognition, payers and employers.
Increased physical-activity levels lead to improved health outcomes, which lead to reduced healthcare costs, increased healthy days, reduced sick days and higher productivity. For these reasons, the PFIA Task Force calls for the unleashing of significant investment in diverse, affordable and compelling physical-activity opportunities. While the PFIA Task Force calls for growing the evidence base linking physical-activity interventions with reduced costs and enhanced patient and provider experiences, it believes that broad-scale funding of physical activity could return billions of dollars to the U.S. economy and significantly advance health equity.

F.P.1a: There exist seamless, accessible payment/funding systems that cover medically necessary physical-activity counseling and interventions, including current procedural terminology and codes, alternate payment models with value-based incentives and shared savings programs.

F.P.1b: More funds are invested in community-level physical-activity and prevention programs by governments, philanthropists, nonprofits, hospitals, businesses and more.

DISCUSSION
Funding of physical-activity interventions should be initiated through collaborative efforts among key influencers in the clinic and community environments. This will best be achieved through collaborative, ongoing partnerships, rather than through separate “clinic” and “community” efforts.
F.P.2: Sustainable funding for physical activity–based behavior-change interventions is broadly in place and connected to measurable outcomes and evidence for diverse populations.

**DISCUSSION**
The achievement of the first two preconditions in this chain lead into sustainable funding for physical activity. This will require moving beyond the philanthropic giving that often drives the early stages of this type of work to an ongoing model that addresses who pays for it, who benefits from it and how it is sustainable. Establishing measurable outcomes is essential to help demonstrate both cost avoidance and a positive return on investments.

F.P.3: All people have affordable, universal access to community-based, multilevel opportunities to become physically active.

**DISCUSSION**
Physical-activity interventions must be affordable and accessible if they are to reach significant portions of the population, remain an integral element of people’s lives and help facilitate the larger goal of achieving true health equity.

**LINK TO OUTSIDE CHAIN**
C.D.6: Providers and care teams utilize evidence-based and evidence-informed behavior-change tools, strategies, processes and policies to increase physical-activity levels.
WHO IS AND SHOULD BE INVOLVED

Individuals and organizations already in place include major health-professional and medical societies, the Centers for Medicare & Medicaid Services, nonprofit hospitals and community-based organizations.

Sponsors and investors include/should include insurers, health-focused government agencies, health philanthropies, private industry, and state and local governments.

Legitimizers for work on the Funding & Payment Chain include/should include the major health-professional and medical societies, academic organizations, chambers of commerce, employers, the media, local and state governments, insurers and the Congressional Budget Office.
Informatics Chain

Evolving the information architecture underpinning care delivery so physical-activity monitoring and counseling become supported and routine for care providers

Health information architecture must equip the sector to become a motivator of physical activity across income levels, ethnicities, age and other boundaries. The PIA Task Force calls for the development, acceptance and widespread use of standards for how physical activity is defined across the information architecture that increasingly underpins healthcare delivery. Providers must more seamlessly assess, counsel and monitor physical-activity levels. Currently, that happens only when there is a consistent, reliable way to enter, access and analyze the data. Workflows must be created and put in place, interoperability across the entire electronic health architecture must be achieved and analytics must be robust.
I.1: Standards relative to physical-activity assessments are incorporated into the electronic health information architecture.

**DISCUSSION**
Standardization must be achieved for how “physical activity” is defined for the purposes of data gathering, which will require collaboration across a diversity of key actors.

I.2: Electronic health information systems and workflows are in place to ensure adequate interoperability of health-care consumer data on physical-activity levels.

**DISCUSSION**
The data sets that will be generated will be large and cumbersome. Steps must be taken to ensure that the information gathered is valid, reliable, secure and easily interpreted.

**LINK TO OUTSIDE CHAIN**
C.C.I.2: Referrals by clinicians to community-based programs, providers and places of physical-activity intervention regularly occur and are documented, and the tracking and assessment data and outcomes are fully incorporated into the electronic health information system.

**DISCUSSION**
This connection to the Clinic-Community Integration Chain highlights that evolved systems and new workflows will be required to facilitate referrals from clinicians to community-based physical-activity interventions. The tracking of these referrals must be incorporated into the electronic health information system.

I.3: Electronic health information systems track and report physical-activity levels and referral outcomes, and they facilitate two-way communications with the healthcare consumer.
The PfA Task Force calls for the development, acceptance and widespread use of standards for how physical activity is defined across the information architecture that increasingly underpins healthcare delivery.

I.4: Electronic health information on physical-activity assessment, counseling, surveillance and related interventions is fully, seamlessly incorporated into care plans.

DISCUSSION
The tipping point will come when data from monitoring, counseling and assessing begin to drive care plans because aggregated data have demonstrated that regular physical activity can not only prevent or treat specific lifestyle diseases, but also improve quality of life and reduce healthcare costs.

LINK TO OUTSIDE CHAIN
C.D.6: Providers and care teams utilize evidence-based and evidence-informed behavior-change tools, strategies, processes and policies to increase physical-activity levels.

WHO IS AND SHOULD BE INVOLVED
Individuals and organizations already in place include standardization organizations, government regulators, professional associations, population health companies and healthcare implementation specialists.

Sponsors and investors include/should include health-focused government agencies, electronic health records companies, policy makers, wearable technology manufacturers and technology platform companies.

Legitimizers for work on the Informatics Chain include/should include standardization organizations, Logical Observation Identifiers Names and Codes (LOINC), Integrating Healthcare Enterprises and the National Business Group on Health.
Communications Chain

Creating engaging and targeted messaging that persuades people across all walks of life to see physical activity not only as a health imperative but integral to a life of fulfillment and happiness

Thoughtful and effective communications, carefully tailored to audiences across communities, demographics and ages, will be key to many of the preconditions in the systems-change map. Thus, communications could have been woven into each of the chains where it will play a role. However, the PIA Task Force determined that communications warrants its own distinct path of work. Without a fundamentally new message about physical activity that persuades people across all walks of life to see physical activity not only as a health imperative but also as enjoyable and integral to a better quality of life, a significant number of preconditions across the entire systems-change map will not be realized.
COM.1: Evidence-based, highly customizable, community- and demographic-specific messages have been developed and deployed across healthcare and allied health professions in a way that makes scientific information about physical activity accessible and highly compelling to the general public, linking being physically active to happiness and well-being.

DISCUSSION
The PfA Task Force determined that an all-new way of talking about physical activity is a necessary prerequisite if its ambitious goals are to be reached. What is needed is a revolutionary set of messages, rooted in both sound science and current message research, that are implemented via a comprehensive campaign at the points where healthcare and allied health professionals interact with the general public. It must also:

• Be appropriate within each community’s unique context and be sensitive to the cultural and infrastructure realities in which people live, learn, work, play and pray
• Motivate and enable people to be physically active
• Use imagery that is relatable

COM.2: Americans of every demographic and population report that they view physical activity more favorably than was reflected by previous benchmarks.

DISCUSSION
Implementation of an all-new way of talking about physical activity is a precondition to the outcome of more Americans viewing physical activity favorably. The PfA Task Force determined that the key to reaching the Ultimate Outcome is to help Americans associate physical activity with the pursuit of happiness, a universal driver of human behavior. That will require new framing of the role of physical activity, movement and exercise in the pursuit of fulfillment, as well as a wide-ranging, highly concerted implementation effort across healthcare, allied health stakeholders and physical-activity promoters.

LINK TO OUTSIDE CHAIN
C3: Community-level demand has increased for local environments, policies and practices that make physical activity accessible and enjoyable for all.

DISCUSSION
The Communications Chain and the Community Chain are inextricably linked. For the preconditions in the Community Chain to be realized, culturally relevant messaging must be in place to increase community-level demand for environments and practices that encourage physical activity.
WHO IS AND SHOULD BE INVOLVED

Individuals and organizations already in place include health-focused government agencies, disease-focused advocacy groups, medical fitness and other exercise promoters, and professional communicators and social-change drivers.

Sponsors and investors include/should include major funders and health philanthropies, schools, major public information and marketing firms, the AdCouncil, the education sector, the healthcare sector, the pharmaceutical industry and the fitness industry.

Legitimizers for work on the Communications Chain include/should include the major health-focused federal-government agencies and major health-professional societies.
The Sparks
Igniters that catalyze the systems-change map toward achievement of the Ultimate Outcome

The Sparks are the earliest preconditions upon which the transformation suggested by the systems-change map are set into motion. They include (1) critical-mass belief in the power of investment in a more physically active population, (2) evidence that physical activity–based behavior-change interventions improve health outcomes while reducing healthcare costs, and (3) policies that make it easy and compelling to invest and innovate in service of a more active America. The “Spark” preconditions are the initial stepping-stones toward a future in which vastly more Americans meet physical-activity guidelines, a culture that values such priorities and a healthcare system that plays a significant role in catalyzing those changes.

S.1: A core of stakeholders in and around healthcare and in communities nationwide are convinced that all share responsibility for increasing physical-activity levels because they have seen the value of significant collaborative investment to that end.

DISCUSSION
A culture of shared responsibility across healthcare and community systems is the fundamental building block of the work called for in this map.

S.2: There exists a compelling body of evidence that investment in physical activity–based behavior change is highly efficacious and cost-effective, particularly in the context of what is spent annually on “sick care” in the U.S.

DISCUSSION
Existing evidence must be collected and widely shared, and any gaps in that evidence base must be identified and addressed.

The “Spark” preconditions are the initial stepping-stones toward a future in which vastly more Americans meet physical-activity guidelines.
S.3: There exists a thorough, authoritative inventory of the full array of existing work across the nation that supports the preconditions depicted on this map.

**DISCUSSION**
The case for the value of physical-activity programming as part of healthcare must become clear through data and scientific evidence showing that investments in physical activity–based behavior-change interventions do in fact reduce healthcare costs and improve health status.

S.4: Public policies are in place that (a) better equip communities to meet the physical-activity needs of their residents, (b) support the development and sustainability of a well-trained community-based workforce to deliver physical-activity interventions, (c) spark broad integration of physical-activity intervention and tracking into clinical care, (d) unlock greater funding for physical activity in the community and (e) incentivize the business sector in healthcare and more broadly drive innovation in support of the above aims.

**DISCUSSION**
Healthcare policy changes at federal, state and local levels will be necessary to incentivize and drive innovation and investment in preventive services, make physical-activity assessment, counseling and monitoring a routine part of care delivery, and equip and enable more Americans to become more active where they live, learn, work, play and pray.

**WHO IS AND SHOULD BE INVOLVED**
Individuals and organizations already in place include spokespeople (e.g., athletes, celebrities and key influencers), researchers, multimedia outlets, healthcare systems, payers, health-focused government agencies, the Surgeon General, policy advocacy groups and policy experts.

Sponsors and investors include/should include health-focused government agencies, for-profit companies (e.g., athletic apparel and pharmaceutical companies) and government payers, including the Centers for Medicare & Medicaid Services.

Legitimizers for work on the Sparks include/should include health-focused government agencies, researchers, for-profit companies, local community leaders, multimedia outlets, publications, white papers and legislators.
IV. **Key Next Steps**

The PIA Task Force crafted a systems-change map that represents more than 15 years of coordinated multisector work. This White Paper contains a Call to Action (pages 12–13) for key players across a broad array of sectors to join an implementation initiative to bring the map to life. As such, the PIA Task Force now turns its attention to implementation. It is rapidly building the foundation for a large, diverse collaborative of local, state and national stakeholders to work across sectors and follow the systems-change map. As the PIA Task Force makes its transition from theory to implementation, early tactical action items include the following. These items also represent opportunities for external funders to support the ongoing work of the PIA Task Force.
Building a nationwide implementation initiative with a diverse leadership council, backbone support “program office” and “captains” for each of the major areas of work depicted as chains on the systems-change map. The backbone office will coordinate, communicate, facilitate, measure and evaluate the work specified in the systems-change map through its Ultimate Outcome date of 2035.

Identifying and recruiting individuals to serve in the leadership, support, coordination and implementation functions in that unfolding initiative. This will likely be a relatively small group of volunteers at the outset. In-time, it will become a virtual army of coordinated, accountable stakeholders—local, state and national—that have answered the Call to Action depicted in this paper.

Developing a brand identity for the initiative, a message platform, a communications strategy and an awareness-building campaign so more stakeholders become convinced that all share responsibility for leveraging the healthcare system’s full potential to be a primary agent for increasing physical-activity levels. That is a precursor to a much larger, broadly coordinated, multiyear health-communications effort to systematically reframe the way people perceive physical activity. (See Communications 1 [COM.1].)

Crafting written materials detailing the work and vision of the PfA Task Force. This would include this White Paper and a series of articles for peer-reviewed publications, journals and other media outlets describing the creation of the PfA Task Force, detailing the systems-change map developed at the PfA retreats and clarifying the PfA Task Force’s Call to Action to various sector and stakeholders.

Constructing a process by which stakeholders across healthcare and in communities nationwide can answer the Call to Action detailed in this paper, become formally involved with the initiative to implement the systems-change map, align with others working in that area, understand what they might do or already are doing that supports preconditions on the systems-change map, and provide or find resources to be part of the broad coordinating effort advancing the work.

Recruiting the critical stakeholders and gathering the funding and human capital necessary to begin pursuing the most urgent preconditions on the PfA systems-change map. For instance:

- Assembling a comprehensive, living inventory of relevant work that supports preconditions on the systems-change map, and making that inventory known, widely accessible and searchable to inform decisions about where resources are being invested. (See Spark 2 [S.2].)

- Compiling the available evidence and filling gaps with new research as needed on the efficaciousness of physical activity–based behavior-change interventions and their cost-effectiveness. (See Spark 2 [S.2].)

- Recruiting enthusiastic local and/or state leaders to test the function and feasibility of a locally led, locally sourced policy-, systems-, and environmental-change approach to increasing physical-activity levels in communities. They can also find where it has already been tested and what models can be replicated. (See Spark 4 [S.4].)

- Recruiting and supporting health systems in pilot projects to make assessment, monitoring and counseling on physical activity a routine part of clinical care, utilizing the Physical Activity as a Vital Sign (PAVS). (See Care Delivery 1 and 2 [C.D.1 and C.D.2].)

- Partnering with key stakeholders to develop needed competencies around physical activity for the education and training of health professionals. (See Education & Training 2 [E.T.2].)

DISCLAIMER
The findings and conclusions in this report are those of the authors and do not necessarily reflect the official position of the organizations and agencies represented by the Prescription for Activity Task Force participants.
References


