

The six-element process in action:

How a population health approach is helping people manage arthritis

The six Elements are aligned with Evidence Based Public Health, and although the steps can be sequential it is best to consider all six Elements throughout the entire process. An illustration of how this can be done is evident in the plan developed by the Washington Healthy and Active for Arthritis Management (WHAAM), a state arthritis program funded by the [Centers for Disease Control and Prevention](#) (CDC) to address arthritis health outcomes.

Assess the Community and Population:

According to the [Washington State Health Assessment](#), by 2030 more than one in five Washingtonians will be 65 or older. And according to the [Centers for Disease Control and Prevention](#) (CDC), half of people 65 and older have an arthritis diagnosis. The WHAAM project team analyzed [Behavioral Risk Factor Surveillance System](#) (BRFSS) data from 2016 and found:

- In Washington, one in every four individuals is impacted by arthritis.
- Arthritis disproportionately affects racial and ethnic groups in Washington, with prevalence estimates highest among the American Indian/Alaska Native (AIAN) population (35%), followed by non-Hispanic white (28%), multi-ethnic (27%), and non-Hispanic black (23%) individuals.
- Arthritis is highest among people age 65 years or older (52%) and 45 to 64 years (32%).
- Geographically, non-metropolitan respondents tend to have a higher prevalence (30%) than metropolitan respondents (25%). Suburban (28%), large town (29%), and small town (30%) residents also have a higher burden.
- Severe joint pain is compounded by chronic disease with a significant burden in individuals who were obese (32%), have heart disease (33.4%), have a diagnosis of diabetes (41%), and have serious psychological distress (56%).
- Someone with arthritis is more likely to experience fair or poor health (30%) compared to people without a diagnosis (11%). They are more likely to also have a diagnosis of diabetes (48%), coronary heart disease (CHD) or myocardial infarction (56%).

Define the Problem:

The project team's analysis helped them more narrowly define the problem and what exactly they wanted the project to address.

- Physical activity is a powerful way to reduce arthritic pain. Studies have shown that regular physical activity can help relieve adult arthritis pain as effectively as over-the-counter medications. Physical activity has many additional benefits, including improved physical function and mood and reduced anxiety. Walking, biking, swimming, and other water-based activities (such as water aerobics or aqua jogging) are all effective ways to ease arthritis pain and are safe for most adults.
- However, Washington's data show that people with arthritis report less physical activity than people without arthritis. Among people diagnosed with arthritis, 25% report no exercise in the past 30 days, compared with 17% of people without a diagnosis.

Develop Interventions:

The project team chose to support and promote a portfolio of evidence-based programs including both self-directed and community-led, with the added dimension of provider education and referrals. This approach illustrates what is often referred to as clinical-community linkages. The CDC Arthritis Program recommends implementing and supporting evidence-based programs that are proven to improve the quality of life of people with arthritis. Recommended programs are those that have shown improvements in arthritis symptoms, such as pain or limitations in function, and that have some level of support for program oversight and organized, wide scale delivery.

Washington State Department of Health, funded through CDC's Arthritis Program, chose to support and promote the following to help people with arthritis manage arthritic pain:

- [EnhanceFitness](#): This is a low-cost, evidence-based group physical activity class taught by a certified instructor. Classes are often taught in senior centers, YMCAs, or other local organizations focused on physical activity or senior health. Classes include:
 - 5-minute warm-up to get the blood flowing to the muscles
 - 20-minute aerobic workout that gets participants moving to (optional) lively music that the class chooses
 - 5-minute cool-down
 - 20-minute strength training workout with soft cuff weights on the arms and legs (0 up to 20 pounds)
 - 10-minute stretching workout to keep the muscles flexible
 - Dynamic and static balance exercises throughout the class

- [Walk With Ease](#): This is a 6-week walking program developed by the Arthritis Foundation offered in two formats — self-directed or instructor-led. Both versions of the program use a Walk with Ease guidebook that helps members assess needs, customize a walking schedule and track progress. The guidebook is available from the Arthritis Foundation or on Amazon in e-book or hard copy. Walk with Ease is evidence-based for arthritis-related pain management.

- [Chronic Disease Self-Management Programs](#): The Chronic Disease Self-Management Program (CDSMP) is a small-group workshop where people with different chronic diseases, including arthritis, attend together. [Better Choices, Better Health](#) is an online version of the program. Subjects include:
 - Techniques to deal with problems such as frustration, fatigue, pain and isolation
 - Appropriate exercise for maintaining and improving strength, flexibility, and endurance
 - Appropriate use of medications
 - Communicating effectively with family, friends, and health professionals
 - Nutrition
 - Decision making
 - How to evaluate new treatments

- Provider counseling and referrals for physical activity among people with arthritis: Provider counseling and referrals are powerful tools to encourage people with arthritis to increase

physical activity. [Exercise is Medicine](#) and [ParksRx](#) are two programs that providers can access to provide education.

Implement Interventions:

The project team plans a three-pronged approach to implementation, ensuring that health care, the broader community, and structures to link the two are involved in carrying out the interventions.

Health care systems can:

Develop protocols and counsel patients with arthritis on engaging in appropriate physical activities. Resource: [Physical Activity Vital Signs](#); [Exercise as Medicine](#); [Park Rx](#).

Offer WWE, EF, CDSMP or other evidence-based programs to patients free or at a low cost; either by hosting onsite or by covering or reimbursing programs.

Community organizations can:

Host a Walk With Ease walking group.

Become an affiliate for EnhanceFitness.

Host CDSMP workshops.

Work to integrate arthritis and disability considerations into built design and transportation systems.

Linking clinic and community:

Organizations can work with local health care systems to establish referral systems to Walk With Ease, EnhanceFitness, and CDSMP.

Health care providers can conduct routine referrals to community resources (Walk With Ease, EnhanceFitness, and CDSMP).

Healthcare providers can use [Community Living Connections Provider Referral Tool](#) to refer patients to Area Agencies on Aging, who link patients with appropriate community resources.

Evaluate and Measure Results

Specific metrics have been selected to evaluate project outcomes, including both health outcomes (reduction in arthritis patients reporting poor health) and process outcomes (increase in arthritis patients being counseled by provider to be physically active.)

To measure the effectiveness of Washington Health and Active for Arthritis Management, the Washington State Department of Health is looking at the following five-year outcome measures (data from Behavioral Risk Factor Surveillance System).

Decreased percent of adults (18 and older) diagnosed with arthritis within the state, AIAN, and rural populations, who report being physically inactive by 1%.

Increased percent of adults (18 and older) diagnosed with arthritis within the state, AIAN, and rural populations, who report being counseled by a physician/other health professional to be physically active to help manage their arthritis or joint symptoms by 1%.

Decreased percent of adults (18 and older) diagnosed with arthritis within the state, AIAN, and rural populations, reporting fair or poor health status by 1%.

Increased percent of adults (18 and older) diagnosed with arthritis within the state, AIAN, and rural populations, who report they have ever taken an educational course or class to teach them how to manage problems related to their arthritis or joint symptoms by 1%.

Increased percent of adults (18 and older) diagnosed with arthritis within the state, AIAN, and rural populations, reporting walking for exercise among their top two forms of exercise, by 1%.

Communicate What is Learned

Recognizing the importance of multiple communication avenues, the WHAAM project has engaged diverse partners and developed plans to use a variety of methods. Importantly, their communication plan includes a campaign that will reach the broader population as well as strategies targeted to specific groups such as providers and patients.

The state Department of Health and partners involved in the WHAAM program will communicate program progress and outcomes to stakeholders such as health care administrators and providers, senior services professionals, community organizations, public health, and other interested parties throughout the length of the program.

- Success stories will be targeted toward stakeholders to help them learn about programming and lessons learned.
- The Department will present or host educational tables at professional conferences, such as Washington State Public Health Association, Washington Recreation and Parks Association, WA Physical Therapists Association and Washington State Association of Senior Centers to disseminate programming.
- We are planning a social media campaign aimed at people with arthritis to inform them that physical activity, when done safely, can reduce their pain. Throughout the program, the Department will host teleconferences and webinars for partners involved in implementing the program to ensure connectedness.