CDC ARTHRITIS PROGRAM

GRANTEE TOOLKIT

USING COMMUNICATION STRATEGIES FOR INCREASING PROVIDER PHYSICAL ACTIVITY COUNSELING AND REFERRALS

NATIONAL ASSOCIATION OF CHRONIC DISEASE DIRECTORS
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The National Association of Chronic Disease Directors
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EXECUTIVE SUMMARY

Participation in evidence-based physical activity interventions recognized by the Centers for Disease Control and Prevention (CDC) can reduce pain and improve quality of life among patients with arthritis. This toolkit is designed to assist CDC Arthritis Program grantees in their efforts to increase health care providers' (HCP) physical activity counseling and referrals to evidence-based interventions among their patients with arthritis. The toolkit guides grantees through the process of creating a communication plan to achieve these efforts, including defining their audience, identifying partners, developing a dissemination plan, and communicating with HCPs. Additionally, the toolkit includes communication assets and resources that grantees can use to reach and encourage HCPs to increase counseling and referrals. Communication assets and resources can be found in the NACDD Dropbox. All content is based in scientific evidence and formative research.

INTRODUCTION

BACKGROUND

Between 2013-2015, the prevalence of doctor-diagnosed arthritis among adults in the United States was 22.7 percent (54.4 million),[1] and is expected to increase to 26.0 percent (78 million) by 2040.[2] Physical activity can delay the onset of arthritis-related disability and help manage other comorbidities, such as diabetes, heart disease, and obesity.[3] However, in 2014, only 60 percent of patients with arthritis received physical activity counseling from their HCP.[4] The CDC recognizes that HCPs using evidence-based interventions reported positive changes among people with arthritis, including improvements in fatigue, pain, balance, strength, physical functioning, and self-efficacy.[5-11]

In this toolkit, we define "HCPs" as primary care providers (PCP), specialists, physical therapists, physician assistants (PA), nurses, pharmacists, and other medical professionals who see patients, prescribe medications, and/or counsel or refer patients to behavioral interventions for chronic illnesses such as arthritis.

ABOUT THIS TOOLKIT

The CDC Arthritis Program funds 13 state programs through cooperative agreement DP18-1803, State Public Health Approaches to Addressing Arthritis. The agreement encourages increased availability of and participation in arthritis-appropriate evidence-based interventions (AAEBI); adoption of innovative and systems-based approaches to help establish or enhance HCPs' patient counseling on physical activity for arthritis management (e.g., walking); increased referrals to AAEBIs for physical activity; and promotion of walking initiatives/ programs addressing the unique needs of adults with arthritis.

This toolkit was developed to help CDC Arthritis Program grantees (hereinafter "grantees") implement a state-specific communication plan to promote (1) HCP counseling on the benefits of physical activity for reducing arthritis pain and limitations, and (2) HCP referrals of patients with arthritis to recognized evidence-based interventions (i.e., AAEBI). Recognized evidence-based interventions reduce pain and improve quality of life of adults with arthritis and are available across the United States, as are promising interventions that have some evidence of effectiveness.

The toolkit content was developed based on formative research results with HCPs, including a focus group, online survey, and usability sessions. All participants, except focus group participants from the state of Georgia, were active HCPs practicing in one of the 13 grantee states. HCPs included primary care physicians and specialists, including providers working in rheumatology, physical therapy, internal medicine, pediatrics, and pharmacy. All HCP participants either currently treat or have previously treated patients with arthritis. Moreover, content was reviewed by subject matter experts (SME), including HCPs, educators, and community health workers (CHW), with professional knowledge in physical activity and arthritis. Details on formative research and SME activities are provided in Appendix A.

HOW TO USE THIS TOOLKIT

For the purpose of this toolkit, "communication plan" is defined as a practical outline of a program's communication strategies for effectively increasing HCP physical activity counseling and referrals to evidence-based interventions that may be used during campaign development or message planning. Four broad areas have been identified and are listed below as the essential components of a communication plan for grantees to consider as they expand or refine their efforts.

Grantees can form their own communication plan using this toolkit as a guide. Toolkit sections are designed to be freestanding so that grantees may use this toolkit during any stage in their efforts to increase HCP physical activity counseling and evidence-based intervention referrals. Furthermore, each section describes various tools, included within Appendix B, that grantees may use in their efforts.

SECTION ONE

DEFINING YOUR AUDIENCE

Before implementing a communication plan, it is important to identify HCPs and HCP access points for focusing your efforts and determining what health topics may be a priority for HCPs in your state. This section discusses considerations and resources for identifying HCPs, how to determine the top priorities of HCPs in your state, and considerations for HCPs' preferred approach to counseling and referring patients with arthritis to evidence-based interventions. The tools included in this section are described below.

TOOL 1.1 HCP TRACKING TABLE — Use this tool to keep track of the HCPs your team identifies.

TOOL 1.2 STATE-SPECIFIC FACT SHEET — Use this tool to list and describe state-specific health issues that might be a top priority for HCPs you identify, and how these priorities relate to arthritis and/or physical activity.

CONSIDERATIONS FOR IDENTIFYING HCPs

Identify an appropriate HCP audience with the capacity to support patients with arthritis, such as HCPs and health care organizations that already serve or treat adult patients with arthritis or chronic disease (e.g., family, internal, and general medicine practices).[12] Having a pre-existing relationship can help you gain access to HCPs.[12] Therefore, start with HCPs and health care organizations that your organization is working with, and then expand to those your organization does not have a relationship with. Below, we describe HCP types and access points to consider when identifying your audience.

Types of HCPs

1. **HCPs who treat patients with arthritis.** This includes various types of HCPs who see patients with arthritis, including HCPs who specialize in other chronic conditions (e.g., heart disease, diabetes, obesity, etc.). The goal is to identify HCPs who can integrate physical activity counseling and referrals to evidence-based interventions into their time with patients with arthritis. HCP types to focus on may include, but are not limited to, PCPs, rheumatologists, pharmacists, family practitioners, PAs, physical therapists, and occupational therapists.

2. **Health care support staff and partners.** Health care staff and partners, including nurses,[13] case managers, medical assistants, athletic trainers, and health coaches, often influence health care visits because they spend more time with patients during check-in, home visits, and intervention meetings. Additionally, these professionals may have more time to organize physical activity resources in a patient's file prior to or during their visit.

3. **Professionals who interact with patients with arthritis.** Consider other medical professionals who interact with patients with arthritis and may have more one-on-one time with patients, including CHWs, mental health professionals, and professionals in the complementary medical field (e.g., health and wellness coaches, chiropractors, massage therapists, acupuncturists). People with arthritis frequently encounter multiple providers and seek a variety of health care sources. Overlooked sources of care for people with arthritis may include OB/GYNs, cardiologists, osteopaths, pulmonologists, and endocrinologists.[16]

CHWs are trusted community members who often conduct health promotion and advocacy outreach as part of health care teams[14] and social service programs.[15] CHWs are familiar with the resources in their communities and effectively contribute to promoting positive health outcomes. Most CHWs are trained on illness and conditions that affect their community.

CHWs who receive physical activity trainings are more likely to engage their clients in physical activity exercises.[14] Clients who receive physical activity information and/or interventions from CHWs experience increased physical activity participation and social interactions and decreased blood pressure.[14; 15] CHWs can be a useful resource for supporting state grantee efforts to increase participation in evidence-based interventions.

Access points for identifying HCPs

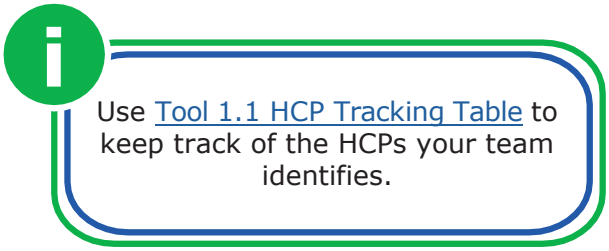
1. **Health care organizations.** Organizations that deliver health care services to patients with arthritis or chronic disease are potential audiences to reach. For example, Federally Qualified Health Centers and arthritis-specific practices can serve as partners and provide access to HCPs and their support staff. Once you identify your target organization, identify a champion within the organization who can influence change among their peers. Champions should be high-impact leaders who make things happen, drive results, motivate and focus their peers, encourage change, persevere, and can develop feedback mechanisms for evaluating and monitoring progress.[17]

2. **HCPs in training.** HCPs in training may be an additional access point for identifying HCPs. First, identify a potential health program, such as physician assistant, nursing, pharmacy, occupational therapy, or physical therapy student program. Then, reach out to program directors to educate students about counseling and referring patients

to evidence-based interventions. Consider contacting health program accreditation and licensing agencies such as state medical boards for information about HCP outreach and to establish potential partnerships.

3. **State and national associations.** Membership associations and organizations are likely to make resources available to their HCP members if you contact their program directors or member services specialists. Alternatively, these associations can help you identify and connect with your audience or those who can serve as champions. State and national associations' conferences can be opportunities for HCP outreach and education as well. When searching for conferences, consider national organizations in Section 2 and Medical Education Resources (MER).

RESOURCES TO IDENTIFY HCPs



Multiple resources are available for obtaining HCP contact information in your state, including the free and for-purchase databases listed below. In addition to these resources, consider state-specific research organizations, medical associations, licensure agencies, or any potential or established partnerships that may have an HCP contact database to share. Section 2 provides further information on partnerships including a list of potential national partners in Table 1, which may be leveraged to identify HCP partners. Additionally, you can use the communication assets provided in Section 3 to conduct HCP outreach through social media, HCP conferences, and other communication channels.

Free resources

The following resources are primarily for patients to search for HCPs but may be useful in your search for new HCPs to target. All resources below are free and provide HCP specialty information, addresses, and phone numbers.

- **WebMD Physician Directory**
- **Healthgrades**

Mailing lists for purchase

Datasheets of HCP mailing lists can also be purchased. These can be purchased specific to your state and include mail and email lists. Purchasing costs vary.

- **Healthcare Mailing**
- **Doctor Database**
- **Blue Mail Media**
- **Physician Download**
- **E-Healthcare Lists**

DETERMINING HCP HEALTH PRIORITIES

Formative research results demonstrate that when HCPs have more pressing health priorities to discuss with patients, such as diabetes, heart disease, and/or obesity, they are not considering physical activity counseling and referrals for arthritis. Therefore, it is imperative to consider HCP priorities to help you integrate discussions on physical activity for arthritis with the health priorities they are most concerned with. Although a HCP's priority may rely on their specialty or individual interests, they are likely motivated by the top health issues in their state or community. For example, if opioid addiction and overdose is a problem in your state, it is likely a top priority for HCPs and an issue they encounter frequently. HCPs in your state may struggle with balancing pain management for patients with arthritis while trying to reduce the number of opioid prescriptions. By understanding these priorities, you can frame communication with HCPs around how physical activity counseling and evidence-based interventions influence the issues they care about most. As such, in the previous example, you could discuss how physical activity benefits arthritis patients by reducing arthritis pain without the use of drugs.

Many of the leading causes of death in the United States are comorbidities of arthritis. As of 2017, the leading causes of death in the United States are (1) heart disease, (2) cancer, (3) accidents/unintentional injury, (4) chronic lower respiratory diseases, (5) stroke, (6) Alzheimer's disease, (7) diabetes, (8) influenza and pneumonia, (9) nephritis, nephrotic syndrome, and nephrosis, and (10) intentional self-harm.[18] Comorbidities of arthritis include heart disease and diabetes, as well as obesity and depression.[19] Given that most of these chronic conditions may be prevented or improved through increased physical activity,[20] you can focus your discussions with HCPs on the benefits of physical activity for common chronic conditions in addition to its benefits for arthritis and arthritis comorbidities.

TO FURTHER UNDERSTAND THE STATE- OR COMMUNITY-LEVEL NEEDS THAT MAY BE A PRIORITY FOR HCPs, CONSIDER THE FOLLOWING DATA AND INFORMATION SOURCES.

- **State-specific public health plan.** Your state-specific public health plan includes public health priorities and leading causes of morbidity and mortality in your state that may be a priority for HCPs.
- **Chronic Disease Indicators (CDI) Surveillance Data.** You can retrieve state and selected metropolitan-level data for chronic disease and risk factors that have a substantial impact on your population's health from CDI surveillance data.
- **Disability and Health Data System (DHDS).** DHDS provides information on six functional disabilities: cognitive, hearing, independent living, mobility, self-care, and vision. You can use the data system to access information on adults with disabilities in your state, including arthritis, and to assess other chronic conditions that may impact your community and may be a priority for HCPs.
- **Behavioral Risk Factor Surveillance System (BRFSS).** BRFSS is a nationwide system of health surveys that collects health-related information about United States residents, specifically behavioral and chronic disease prevalence. BRFSS data may be useful for encouraging referrals to evidence-based interventions because it shows the prevalence of arthritis-attributable activity limitations, social participation restrictions, and severe joint pain.
- **State-specific needs assessment studies.** State-specific information may be available through local, state, or national databases (e.g., state health department data, national surveillance data).
- **HCPs.** Consider the overarching priorities that HCPs have communicated with you. These priorities likely affect HCPs and health care organizations in the same and/or similar communities.

When assessing the needs of your state, document the number of patients with arthritis, age range of patients with arthritis, percentage of arthritis patients who are physically active, and types of activities in which patients with arthritis participate. Use Tool 1.2 State-specific Fact Sheet to list and describe state-specific health issues that might be a top priority for HCPs you identify, and how these priorities relate to arthritis and/or physical activity. You can provide this document to HCPs to demonstrate the need for counseling patients with arthritis and referring them to evidence-based interventions. Additionally, assessing state-specific data may help determine geographical focus areas as health status and evidence-based intervention availability vary across a state.

HCP COUNSELING AND REFERRAL PREFERENCES

Formative research suggests that HCPs have different approaches when it comes to counseling patients on physical activity and referring them to evidence-based interventions. Some prefer a more passive approach while others prefer an active approach.

Passive counseling means HCPs, or their support staff, are more likely to give patients resources than to have active discussions with patients. HCPs may use passive counseling when they are less knowledgeable about arthritis and the interventions available in their community, have fewer resources available to support active discussions, or face time constraints.

Active counseling means that HCPs, or their support staff, are likely to have active discussions about physical activity with their patients. HCPs may use active counseling when they have a greater counseling skill level, are more knowledgeable about arthritis and the interventions available in their community or state, and work in an organization structure that supports active discussions and referral opportunities.

Although an HCP's approach depends on individual preferences, it is also influenced by other constraints (e.g., limited time to counsel). Tool 4.1 Solutions to HCP Barriers addresses common barriers HCPs experience when counseling patients on physical activity, such as lack of resources or information. Consider counseling approaches as you communicate with and disseminate resources to HCP audiences. Understanding an HCP's approach allows you to (1) better recommend the resources that will be most useful for them and (2) highlight how the resources may complement their counseling style.

To support your efforts for HCPs with different counseling preferences, the resources included in this toolkit are categorized by counseling approach (see Table 2). Keep these approaches in mind as you conduct outreach and communicate with HCPs. Although it is not essential to identify an HCP's preferred approach as you are defining your audience, it may be beneficial to identify this during initial contact to help focus communication efforts.

CONCLUSION

Defining your audience is an essential step toward (1) increasing HCP physical activity counseling and evidence-based intervention referrals, and (2) encouraging HCPs to pursue appropriate routes of communication. Use the information and tools in this section to identify HCPs and determine potential health priorities to integrate within your arthritis discussions. The following section will guide you through identifying potential partners to include in your efforts.

SECTION TWO

IDENTIFYING PARTNERS

Partnerships are useful to effectively reach and communicate with HCPs. Local and state organizations may already have existing relationships and avenues of communication with HCPs. Additionally, national organizations commonly serve as trusted purveyors of information to HCPs. This section provides recommendations for partnerships and suggestions for potential partner organizations. The tools included in this section are described below.

TOOL 2.1 EMAIL TEMPLATE FOR PARTNERSHIPS	Use and customize this email template to contact potential partners.

DEVELOPING PARTNERSHIPS

During our formative research, HCPs indicated that they are more likely to read materials and messages from trusted sources they recognize and sources with whom they already have an established relationship. Potential partners may be useful to collaborate with on multiple activities, including participating in promotional events, conducting HCP outreach, distributing resources or information to HCPs, sharing databases, releasing communication assets, and/or distributing incentives. By developing partnerships with organizations that HCPs trust and recognize, you can also increase the circle of HCPs who receive your messages.

Contacting potential partner organizations, building relationships, and establishing partnerships will take time. You may want to consider starting with organizations with whom you currently or have previously collaborated with on other projects that have contact with HCPs. You should also consider establishing relationships with internal state health department chronic disease colleagues, such as those working in diabetes prevention or heart disease and stroke prevention, who might also work with HCPs and have a similar goal around increasing physical activity. Tool 2.1 Email Template for Partnerships includes a customizable email template that your program can use when initially contacting potential partners.

POTENTIAL LOCAL AND STATE PARTNERS

Local and state organizations often have established relationships and avenues of communication with HCPs and health care organizations. Partnering with these organizations may help you better reach HCPs in your area.

POTENTIAL LOCAL AND STATE PARTNER ORGANIZATIONS INCLUDE:

- Local public health departments with units related to arthritis or physical activity (e.g., chronic disease, aging, fall prevention, rural health, veterans health)
- Area Health Education Centers
- Hospitals
- Nonprofits
- State-based medical associations
- State-based allied health professional associations
- State-based chapters of national organizations
- Medical schools or academic institutions
- State medical credentialing and licensing boards
- HCP organizations and independent practice associations
- Long-term care facilities
- Professional society state chapters
- Media (e.g., television, radio, newspaper)

POTENTIAL NATIONAL PARTNERS

National organizations have a large reach with HCPs, and often have state and local affiliates that can help increase the visibility of your messages. Additionally, HCPs frequently use evidence-based resources and information provided by national organizations with their patients. By collaborating with national partners and their affiliates, you can also increase the level of trust of your messages to HCPs in your state. Table 1 lists suggested national partner organizations.

Table 1. National Organizations

Organization	Description
American Academy of Family Physicians (AAFP)	AAFP is a medical organization that works to solidify family medicine as the cornerstone of the health care system through lobbying government, negotiating with payers, partnering with employees, educating patients, and championing family medicine on the national stage.
American Academy of Orthopaedic Surgeons (AAOS)	AAOS provides continuing medical education activities focused on musculoskeletal education for orthopaedic surgeons and other HCPs.

Organization	Description
American Academy of Physical Medicine & Rehabilitation (AAPM&R)	AAPM&R is a national medical specialty organization of physician specialists in physical medicine and rehabilitation.
American Academy of Physician Assistants (AAPA)	AAPA is a national professional society of PAs that ensures professional growth, personal excellence, and recognition of PAs, and enhances their ability to improve care.
American Association of Nurse Practitioners (AANP)	AANP is a national professional membership organization for nurse practitioners of all specialties.
American Chiropractic Association (ACA)	ACA is the largest professional chiropractic organization in the United States.
American College of Preventive Medicine (ACPM)	ACPM is a professional medical society for preventive medicine physicians.
American College of Rheumatology (ACR)	ACR is a national professional membership organization that provides education, research, and advocacy support to physicians, health professionals, and scientists.
American College of Sports Medicine (ACSM)	ACSM is a membership organization with regional chapters collaborating to combine research, practice, education, and policy to promote health and fitness.
American Council on Exercise (ACE)	ACE is a nonprofit organization committed to enriching the quality of life through physical activity, including providing fitness certifications, education, and provider training.
American Dance Therapy Association (ADTA)	ADTA provides dance and movement therapy to promote emotional, social, cognitive, and physical integration of the individual.
American Medical Association (AMA)	AMA is a professional association that promotes the art of science and medicine to the betterment of public health.

Organization	Description
American Medical Society for Sports Medicine (AMSSM)	AMSSM is a membership organization working to build professional relationships among sports medicine physicians to advance the discipline of sports medicine through education, research, advocacy, and excellence in patient care.
American Occupational Therapy Association (AOTA)	AOTA is a national professional association that provides information, resources, and evidence-based practices on occupational therapy relating to children, mental health, older adults, disabilities, etc.
American Orthopaedic Society for Sports Medicine (AOSSM)	AOSSM is a professional society that cultivates evidence-based knowledge, provides educational programming, and promotes research to advance sports medicine.
American Pharmacists Association (APhA)	APhA is a professional society that provides resources for students, new practitioners, and pharmacists. Resources include continuing education and training programs, scientific publications, patient care resources, and advocacy information.
American Physical Therapy Association (APTA)	APTA is a professional organization representing physical therapists, physical therapy assistants, and physical therapy students.
Arthritis Foundation	The Arthritis Foundation is a nonprofit organization dedicated to the prevention, control, and cure of arthritis in the United States.
National Association of Community Health Workers (NACHW)	NACHW is a national association of CHWs encouraging collaboration to promote a common professional identity.
National Board for Health & Wellness Coaching (NBHWC)	NBHWC is a volunteer team of United States leaders that has pioneered science-based training, education, and research of health and wellness coaching.
North American Spine Society (NASS)	NASS is a global multidisciplinary medical organization that promotes evidence-based spine care education, research, and advocacy.
Osteoarthritis Action Alliance (OAAA)	OAAA is a coalition working to promote and support people with osteoarthritis at an individual and national level.

Organization	Description
Osteoarthritis Research Society International (OARSI)	OARSI is an international medical society for scientists and HCPs focused on prevention and treatment of osteoarthritis through the promotion and presentation of research, education, and dissemination of knowledge.

If your program needs additional support in establishing national partnerships, the NACDD can provide guidance.

CONCLUSION

Partnerships with organizations, such as those suggested in this section, can open many doors for added communication channels or incentive opportunities. Use the information and tools in this section as you consider developing local-, state-, or national-level partnerships. The next section guides you through creating a dissemination plan for included communication assets and resources.

SECTION THREE

DISSEMINATING ASSETS AND RESOURCES

To increase HCP physical activity counseling and referrals to evidence-based interventions, we recommend disseminating communication assets and helpful resources for HCPs. Communication assets are evidenced-based fact sheets and messaging related to arthritis and physical activity to promote HCP physical activity counseling and referrals to interventions. This section introduces communication assets and resources, discusses considerations for dissemination, and provides a dissemination plan overview. The tools included in this section are described below.

TOOL 3.1 COMMUNICATION ASSET DISSEMINATION TRACKING	Use this tool to organize and track communication asset release.
TOOL 3.2 EMAIL TEMPLATE FOR HCP OUTREACH	Use this tool as a template when emailing HCPs, or as inspiration when planning your discussions with HCPs.
TOOL 3.3 DISSEMINATION PLAN TEMPLATE	Use this tool as a template when creating a dissemination plan for communication assets and/or resources.

COMMUNICATION ASSETS

This toolkit includes customizable communication assets to promote HCP physical activity counseling and referrals to evidence-based interventions. These communication assets were developed based on feedback from HCPs and are designed to grab HCPs' attention with an evidence-based fact related to arthritis and physical activity, and introduce them to physical activity recommendations, evidence-based interventions, and physical activity counseling resources. Appendix C includes additional communication asset components, including the selected facts and sources of information. You may customize communications assets using Adobe InDesign and/or Microsoft Word templates provided in the NACDD Dropbox to meet your state-specific needs.

Organization

COMMUNICATION ASSETS CONTAIN THE FOLLOWING COMPONENTS THAT YOU CAN ADJUST AND CUSTOMIZE:

- **Facts:** An evidence-based fact related to arthritis and physical activity, along with its appropriate citation. The citation is important to include because it shows that this fact is evidence-based, and that HCPs can trust the information.
- **Message:** A message and link to where HCPs can learn more about counseling resources and/or local evidence-based interventions that they can recommend to their patients. This includes a link to the website where they can find this information.
- **Logos:** The NACDD logo and a placeholder to insert your organization or program logo.

Images 1 and 2 display how these assets are designed and will appear as an 8.5" x 11" printable and downloadable flyer and Facebook post, respectively.

Image 1. Communication asset design as a flyer

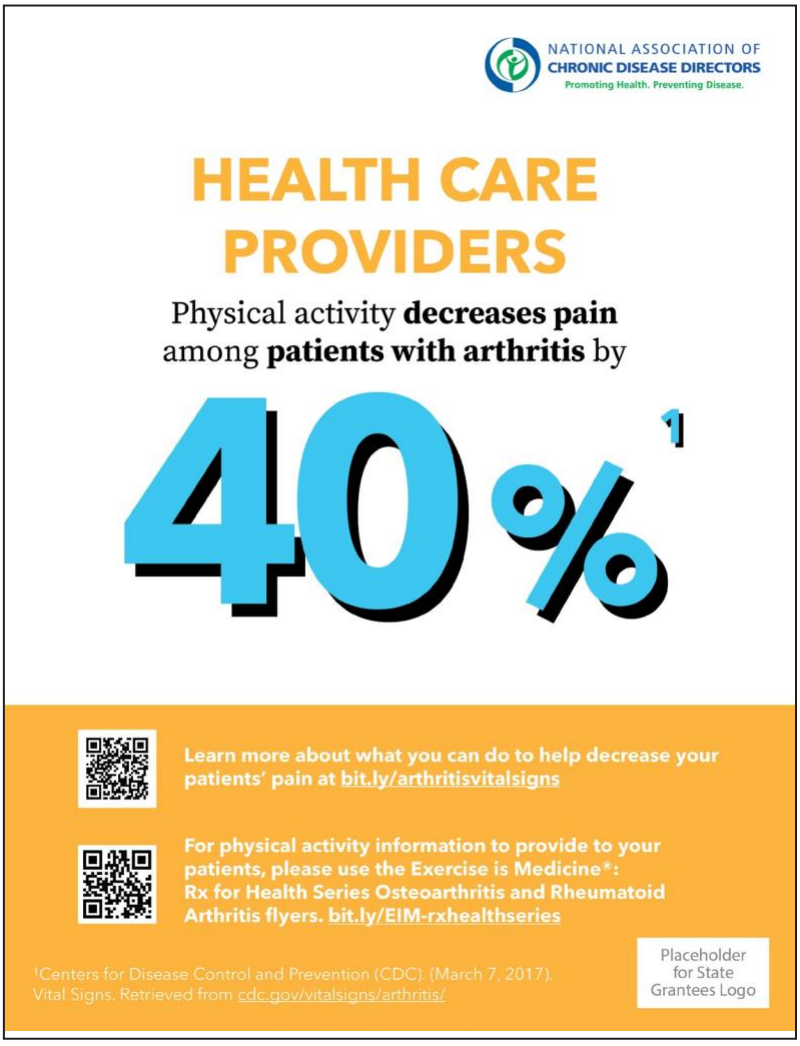
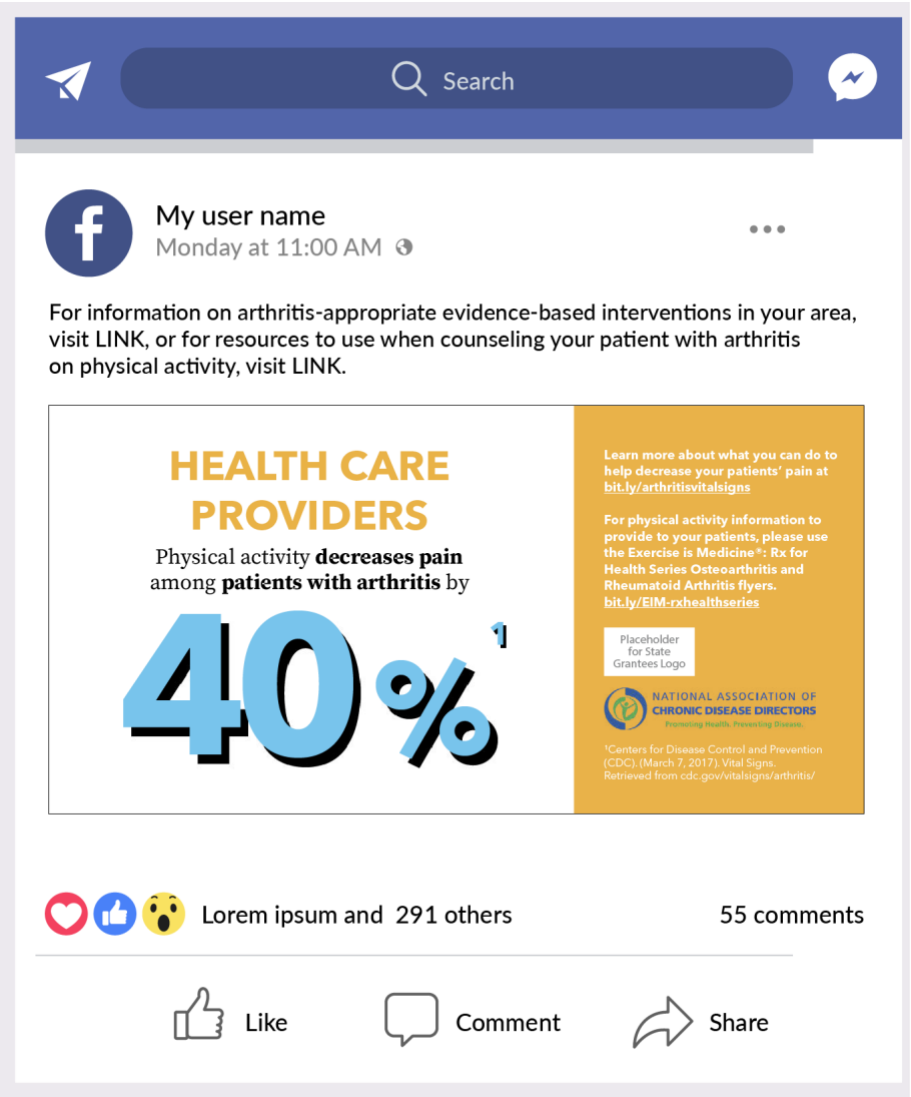


Image 2. Communication asset as a social media post



Facts

The selected communication assets facts and references are provided in Appendix C.

FACTS ARE ORGANIZED INTO THREE MAIN CONCEPTS:

1. Explaining the **added value** of prescribing physical activity to patients with arthritis.
2. Addressing **challenges** HCPs might experience when prescribing physical activity to patients.
3. Dispelling **negative perceptions** HCPs might have about prescribing physical activity to patients.

Sources of evidence for these facts include CDC, ACR, and scientific journals such as *Arthritis & Rheumatology*, *Journal of Physical Activity and Health*, and *Preventive Medicine.* When you are selecting appropriate facts, consider your audience, health priorities for the HCPs in your state, and the individual community you are releasing to. For example, "lack of a safe built environment" messaging should be utilized in communities where it applies (e.g., rural areas rather than walkable or activity-friendly communities).

Customizing assets and messages

You can customize the communication assets with messages, logos, and shareable hyperlinks. Start by considering your formatting capabilities and which facts relate most to your audience. Next, choose the message and related links you want to include. We recommend including the following features within your message section:

1. A link to pages on your program or organization's website that describes evidence-based interventions in your state and resources that HCPs can use to introduce physical activity during counseling. We recommend including the following features on your website, either combined or separate:

    a. A page that introduces HCP physical activity resources and provides a direct link to patient resources in an HTML, downloadable, and printable format. To be 508- compliant, each resource should have an accompanying HTML page that also allows the resource to be printed. Resources in the NACDD Dropbox are 508- compliant and ready to use by HCPs. They are available in both English and Spanish. You can use Table 2 as a guide for describing each of these resources on your program or organization's website.

    b. A page that introduces and describes evidence-based interventions available in your state, the evidence behind each program, and links to the program websites. The APTA *Evidence-Based Community Programs: Physical Activity Programs At a Glance* resource provided in this toolkit can be used as a guide when creating a state-specific table.

2. A link to the CDC Vital Signs infographic, which describes the added value of physical activity for arthritis and how HCPs can take action.

Ensure that all URLs included on electronic communication assets are clickable and link directly to your website page. For hard-copy documents, shorten these URLs so that HCPs can easily type them into their browser, and include a QR code that HCPs can scan to access the link. You can shorten URLs using programs such as bitly.

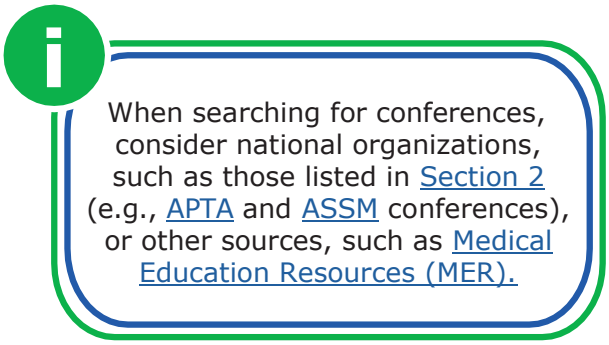
If 508 compliance is necessary for your organization to utilize these messages or resources, please visit acf.hhs.gov/digital-toolbox/accessibility/making-files-accessible for information on how to make these accessible.

Formatting

Based on formative research with HCPs, we recommend disseminating communication assets using the following formats and channels:

1. **Emails**
   HCPs are more likely to pay attention to emails sent from a trusted source. Consider using any national or state partners to distribute emailed assets. HCPs consider state health departments and familiar state-level organizations as trusted sources. Therefore, if your program disseminates assets through email, use an email address that is clearly associated with your program or organization.

2. **Hard-copy flyers and turnkey materials at conferences**
   HCPs are receptive to communication assets during conferences because they are open to learning and have more time during conferences than their daily routine. HCPs recommend that grantees host a conference booth to allow for the opportunity to learn more about passive resources and evidence-based interventions they can share with patients. Further, they recommend posting or distributing hard-copy flyers and turnkey materials at multiple types of conferences, including conferences for PCPs, specialists, PAs, nurse practitioners, and physical therapists, or conferences related to chronic pain, geriatrics, orthopedics, and sports medicine.



3. **Hard-copy flyers during HCP outreach**
   Distributing a hard copy of communication asset flyers during your in-person meetings with HCPs, or their organizations, may help remind HCPs to refer patients to evidence-based interventions or to take advantage of the resources. This channel may be especially beneficial if you are meeting with a health care staff member who can pass flyers along to HCPs you do not meet.

4. **Social media**
   Facebook and Instagram are the two most popular platforms among HCPs. Receptivity to social media messages varies by HCP as some do not use social media or primarily use it for personal purposes. However, HCPs are motivated to learn about what their patients see on social media because patients frequently ask about health-related information they see on social media. Therefore, we recommend disseminating social media messages primarily focused on added-value facts to demonstrate the benefits of physical activity to patients with arthritis, prompting them to have a discussion with their HCP. Although indirect, this method will likely motivate HCPs to learn more so they can prepare for these conversations.

Additionally, consider leveraging other online platforms that HCPs use, including online medical journals, Medscape, Doximity, and UpToDate, to disseminate messaging. You can use these platforms' social media channels, and other communication channels your organization uses.

Asset dissemination

To understand and measure reach, remain consistent and keep track of when, where, and how you disseminate assets. Use Tool 3.1 Communication Asset Dissemination Tracking to organize and track the messages you release. According to the CDC's 1.2.3 Approach to Provider Outreach: Marketing Chronic Disease Interventions to Primary Care Practices, you should follow up regularly after HCP outreach to establish long-term partnerships. The approach suggests sticking to a regular schedule with a plan that includes frequency and type of contact. Within the first few months of initial contact, aim to reach out at least three times. For example, you can call the office two weeks after an initial in-person visit to see if HCPs have any followup questions, mail personalized cards with physical activity intervention schedules, or email new research findings published on physical activity interventions. Lastly, recommendations are for in-person visits at least once a year. Visit the webinar in the NACDD Dropbox for communication asset technical assistance.

PHYSICAL ACTIVITY COUNSELING RESOURCES

Multiple resources are available for HCPs to use as they counsel patients with arthritis and refer them to evidence-based interventions. Table 2 describes all resources included in this toolkit, including Exercise is Medicine® (EIM), APTA, and United States Department of Health and Human Services (USDHHS) resources. All resources are included in the NACDD Dropbox. The table defines each resource's intended audience (i.e., HCP or a patient) and whether the patient-facing resources better serve an active or passive counseling approach.

HCP resources help guide HCPs through improving their physical activity counseling and evidence-based intervention referral efforts, and patient resources are those that HCPs can either provide to patients or use with patients as they counsel them on physical activity.

"Passive" resources are more suitable for HCPs who are more likely to give patients resources versus having active discussions with patients. "Active" resources are more appropriate for HCPs who prefer having active discussions about physical activity with their patients.

Table 2. HCP and Patient Resources

Title	Description	Audience	Approach
EIM *HCP Action Guide*	This guide describes how HCPs can (1) integrate physical activity counseling into their practice, (2) assess physical activity levels, (3) determine patient physical activity readiness, (4) prescribe physical activity, (5) refer patients to programs, (6) promote physical activity throughout their health care organization, (7) involve their staff throughout these processes, and (8) become a champion for this cause. Grantees can introduce this guide to HCPs after initial communication to provide a broad overview of how HCPs can integrate counseling and referrals to evidence-based interventions into their interactions with patients with arthritis.	HCP	N/A
EIM *Coding and Billing Tips*	These tips guide HCPs through selecting appropriate diagnostic and billing codes for physical activity assessments, prescriptions, and counseling. Grantees can provide this resource to HCPs and/or their health care organization's billing department to allow billing for and tracking of physical activity counseling.	HCP	N/A
EIM *Physical Activity Vital Signs (PAVS)*	PAVS provides a snapshot of whether patients meet the physical activity guidelines and allows HCPs to track patients' physical activity habits over time. PAVS can be integrated within electronic health records, allowing HCPs to "flag" noncompliant patients.	Patient	Active
EIM Exercise prescription form and pad	The prescription form/pad allows HCPs to easily prescribe physical activity to patients. Grantees may consider reformatting these to resemble regular HCP prescription pads (i.e., HCPs write a prescription and tear it from the prescription pad to give to the patient).	Patient	Active
EIM *Exercise Prescription for Osteoarthritis*	This resource describes how patients with osteoarthritis can safely exercise. Additionally, it provides a website link to exercise examples, and a weekly exercise plan template. View Spanish version of this resource.	Patient	Passive
EIM *Exercise Prescription for Rheumatoid Arthritis*	This resource describes how patients with rheumatoid arthritis can safely exercise. Additionally, it provides a website link to exercise examples, and a weekly exercise plan template. View Spanish version of this resource.	Patient	Passive

Title	Description	Audience	Approach
EIM Physical activity promotional flyers	These flyers promote physical activity in general. HCPs can display these to start a conversation with patients about physical activity.	Patient	N/A
EIM *Sit Less, Move More*	This form describes how patients can integrate physical activity into their daily routine (e.g., at work, home) and helps patients set a weekly goal for improving their physical activity habits. View Spanish version of this resource.	Patient	Both – HCPs can walk through the form with patients, or patients can complete themselves.
APTA *Evidence-Based Community Programs: Physical Activity Programs At a Glance*	This decision aid can help HCPs and patients with arthritis engage in evidence-based interventions. The chart describes multiple nationwide evidence-based interventions (i.e., Active Living Every Day, Arthritis Foundation Aquatic and Exercise Programs, EnhanceFitness®, Fit & Strong!, and Walk With Ease), including program audiences, benefits, content, intensity of activities, instructor qualifications, patient baseline activity level, program length, class size and length, and a link to local program availability.	HCP and Patient	Both – HCPs can educate themselves on interventions and discuss the options with patients or can provide the form to patients so they can decide on a program.
APTA *Learn About: Walk With Ease Group and Self-Directed*	This handout describes Walk With Ease (both group and self-directed). It includes a description of the program, its benefits, and links to where patients can sign up for a class or learn more.	Patient	Passive
APTA *Evidence-Based Community Programs: Walk With Ease (WWE) Group and Self-Directed*	This handout describes Walk With Ease, including instructor qualifications, program benefits, and evidence of the benefits. HCPs can use this as a decision aid when deciding whether they would like to recommend the intervention to their patients.	HCP	N/A
USDHHS *Physical Activity Guidelines for Americans*	These guidelines discuss evidence-based physical activity interventions, including physical activity guidelines for all age ranges, and considerations that HCPs should keep in mind when prescribing physical activity to patients with arthritis.	HCP	N/A

When discussing resources with HCPs, introduce their purpose, benefits, and how HCPs can integrate them into their practice. Although your resource dissemination method relies on the communication approach you take with HCPs, we recommend choosing one, or a combination, of the following approaches:

1. **In-person**
   Provide hard-copy samples of these resources during in-person meetings with HCPs and then send a followup email including printable and downloadable copies. This will allow them to integrate the resources into future patient visits and/or their EHR system.

2. **Email**
   Email the resources to HCPs and/or their organizations. We provide an email template in Tool 3.2 Email Template for HCP Outreach, which can support your initial outreach efforts and guide your in-person discussion plan with HCPs (see Section 4).

3. **Online**
   Include the resources on your program's website in an easily accessible format so that HCPs can access the resources at any time. View more information about making your website easily accessible. You can also include your website link on communication assets or other promotional materials.

DEVELOPING A DISSEMINATION PLAN

Below, we describe key considerations for developing a dissemination plan for the communication assets and/or resources included in this toolkit.

The materials you plan to disseminate

- Consider which communication assets and/or resources are most important and relevant to your audience.

Communication channels

- HCPs are receptive to emails, specifically from organizations they trust, including state health departments.
- Consider setting up a booth at state conferences HCPs may attend because conferences offer HCPs time to listen and learn about new resources.
- Disseminate communication assets or links to resources through any monthly newsletters (electronic or mailed) that your program distributes to HCPs or health care organizations.

7 Social media and online platforms for HCPs are great ways to share communication assets with large audiences.

- Take advantage of the champions you identify within health care organizations to help disseminate resources among their staff.

Responsible parties

- Consider the members of your program team who will disseminate assets/resources, or any partners who communicate with HCPs and can disseminate these materials. If possible, choose a source whom HCPs trust and regularly communicate with.

- If you plan to disseminate resources via email, be sure to send emails through an email address that HCPs recognize (e.g., state health department, familiar medical organization).

Your message

- HCPs prefer simple and concise facts to encourage patients to participate in physical activity. Provide information specific to your state's needs, and HCP priorities you have identified (see Section 1).

- If possible, schedule a face-to-face appointment with HCPs to describe your program, encourage counseling, and provide HCP and patient resources.

- When disseminating resources to HCPs, be sure to discuss what the resources are, that they are evidence-based, how they can be useful for HCPs and/or patients with arthritis, and how HCPs may integrate them within their practice. Additionally, use Table 2 to introduce resources to HCPs based on their counseling approach (i.e., passive vs. active resources).

Evaluation plan

- Integrate the communication assets and resources into your program's evaluation plan. For program evaluation steps and standards, visit the CDC's Framework for Program Evaluation website.

- The easiest way to evaluate the effectiveness of your efforts is to ask patients who participate in the evidence-based interventions how they heard about the intervention.[12]

Use Tool 3.3 Dissemination Plan Template to develop a dissemination plan for communication assets and/or resources.

CONCLUSION

The communication assets and resources provided in this section can help increase HCP counseling and referrals by grabbing HCPs' attention and providing them with useful information and tools to integrate into their practice. Additionally, the information and tools provided in this section can help you create a dissemination plan for these assets and resources. The next section serves as a guide for communicating with HCPs.

SECTION FOUR

COMMUNICATING WITH HCPs

To effectively increase HCP physical activity counseling and referrals to evidence-based interventions, it is essential to plan for how you will communicate with HCPs. In this section, we provide tips and recommendations for developing your talking points with HCPs, how to best communicate with HCPs, and considerations for incentives to offer to increase HCP counseling and referrals. The tool included in this section is described below.

TOOL 4.1 SOLUTIONS TO HCP BARRIERS

Use this tool as you prepare to communicate with HCPs so that you can best address their concerns.

DEVELOPING YOUR MESSAGE

HCPs are aware of the added value of physical activity for arthritis pain management, but face barriers when counseling, such as lack of resources or information. Many HCPs rarely, if ever, receive messaging about the benefits of physical activity as it relates to arthritis. Therefore, we recommend including the following in your conversations with HCPs, whether it be electronic communication, in person directly from your program, or in person indirectly through your partners.

- State your program goals and the overall value of physical activity related to arthritis. Highlight how the resources and evidence-based interventions are related to their health priorities and discuss state-specific statistics on arthritis, comorbidities, etc. See Tool 1.2 State-specific Fact Sheet.
- Describe the evidence-based interventions locally available, their benefits, etc. as described in the APTA *Evidence-Based Community Programs: Physical Activity Programs At a Glance* resource.
- Introduce and explain the resources included within this toolkit and how they will help encourage patients and assist HCPs in overcoming barriers related to counseling. See Tool 4.1 Solutions to HCP Barriers, which addresses barriers identified by HCPs in formative research.
    7 List options for how HCPs can use these resources within their practice and how they can support their counseling approach (see Table 2).

- Mention the coding options for physical activity counseling, including those provided in the EIM Coding and Billing Tips resource and Category III Health and Well-Being Coaching Codes.

- Discuss any incentive options that your program offers to encourage HCPs to counsel and refer their patients with arthritis to evidence-based interventions.

Use Tool 3.2 Email Template for HCP Outreach as inspiration when developing your communication strategy.

- Describe where HCPs may find information on the resources and/or evidence-based interventions, or how you plan to disseminate these (e.g., email, website).

CDC'S *1-2-3 APPROACH TO PROVIDER OUTREACH* OUTLINES A THREE-STEP APPROACH TO BUILDING RELATIONSHIPS WITH PROVIDERS, INCLUDING:[12]

- **Step 1: Make initial contact over the phone.**
  - Have your contact information and script ready.
  - Call the provider office and introduce the purpose of your visit.
  - Schedule a day and time for an in-person visit.
  - Confirm the visit 24 hours in advance.
- **Step 2: Conduct an in-person outreach visit.**
  - Arrive on time with all materials.
  - Use the script and leave materials to explain interventions and provider recommendations.
  - Leave materials for the HCP and patients.
  - Inform HCPs and office staff that you plan to follow up on a regular basis.
- **Step 3: Follow up.**
  - Note dates for followup on your calendar.
  - Contact HCPs on a regular basis using phone calls, mailers, and additional in-person visits.
  - Build ongoing relationships with local providers.

ADDITIONAL COMMUNICATING TIPS

Below are additional tips to keep in mind when communicating with HCPs and/or health care organizations.

- Identify the clinic or organization champion. See Section 1.
- Avoid telling HCPs specifically what to do and how to do it. HCPs prefer freedom in how they integrate these resources into their routines. Instead, provide suggestions and give examples of how HCPs may utilize these resources in their practice.
- Prepare to answer concerns about counseling patients with arthritis on physical activity. Tool 4.1 Solutions to HCP Barriers provides a table of common concerns HCPs may have about counseling patients and how the resources in this toolkit provide solutions.
- Keep in mind that all health care organizations function in different ways and have different preferences. Discuss with administrators and support staff the ways the organization functions, including their communication preferences and whether a chain of command is used for communication purposes.
- Focus your efforts on the system, not just PCPs, such as nurses, case managers, medical assistants, health coaches, and CHWs.
- Champions can help disseminate resources and information to HCPs and staff through staff meetings, emails, or other internal communication channels. For example, nurse case managers could prepare a patient's file (electronic or hard-copy) with related resources to allow for smoother and more timely patient visits.
- Assure HCPs that you understand the need for patient accountability when it comes to physical activity and discuss ways the HCP and support staff can hold the patient accountable.
- Provide information on what continuing education units (CEU) related to arthritis and physical activity are available for HCPs, such as a health and wellness coaching certification for health professionals.
- Place phone calls to HCPs or practices during regular weekday business hours and avoid calling during lunch hours.[12]
- Be willing to meet face to face with any available HCP or champion at their convenience.[12]
- Plan for a brief five-minute meeting, or less, with HCPs. Prepare a folder with all resources, local evidence-based interventions, introductory information, your business card, etc.[12] Consider creating packages to give HCPs with all resources needed. See Appendix D for examples of resource packages created by grantees.

7 Highlight the evidence-based benefits of physical activity for arthritis and how the evidence-based interventions stand out from other local programs.[12]

INCENTIVIZING HCPs

Incentives are often a consideration when trying to encourage HCPs to provide physical activity counseling and referrals to evidence-based interventions for patients with arthritis. However, formative research indicates that most HCPs are highly likely to promote physical activity and evidence-based interventions without an incentive, and HCPs' opinions on counseling do not change once an incentive is introduced. If your program is considering incentives to encourage HCPs to counsel and refer patients, the two incentives that most HCPs recommend are (1) evidence of the intervention's effectiveness and (2) patient giveaways. An additional incentive that may promote HCP physical activity counseling and referrals is feedback on patient participation in physical activity as a result of counseling and referrals. Exercise is Medicine® offers free handouts that HCPs and exercise professionals can use to track patient physical activity and support physical activity recommendations. HCPs can give the free handouts to patients to complete, and completed handouts can be scanned into EHR for HCPs to use as feedback on patient participation in evidence-based physical activity interventions.

Evidence of intervention effectiveness

According to HCPs, proof that evidence-based interventions are effective at improving arthritis symptoms and outcomes would best incentivize them to refer their patients. Not only would this incentive encourage HCPs, but it is a feasible and timely incentive that state health departments can implement into their efforts. HCPs report strong preferences for evidence-based information presented as infographics, fact sheets, brief educational videos, or online platforms linking to the evidence.

WE RECOMMEND PROVIDING THE FOLLOWING INFORMATION WHEN DEVELOPING AN EVIDENCE-BASED INCENTIVE:

1. Information on the instructor leading the intervention (e.g., credentials, trustworthiness, participant approval)
2. How the intervention helps patients overcome social isolation with exercise
3. Functionality and pain benefits related to activities patients want to participate in (e.g., how physical activity allows patients to spend more time playing with grandkids)

4. National support by organizations HCPs are familiar with (e.g., CDC, American Medical Association)
5. Success stories from intervention participants.
6. How HCPs influence a patient's likelihood to participate in interventions

If your program has not already, create an inventory list of all recognized evidence-based and promising interventions in your state. It may be useful to highlight which interventions are available in your state, where they take place, and success stories from local participants. Appendix E contains an evidence table of intervention benefits that you can use as a starting point when searching for evidence of intervention effectiveness. We recommend including this information, or similar information, on your website so that it is easily accessible to HCPs. You can also use the APTA resources in this toolkit to promote the evidence behind the interventions.

- **Recognized evidence-based interventions include:**
  - Arthritis Foundation Aquatic Program (AFAP)
  - Active Living Every Day (ALED)*
  - EnhanceFitness® (EF)
  - Fit & Strong!
  - Walk with Ease (WWE) - Group
- **Promising physical activity programs include:**
  - Arthritis Foundation Exercise Program (AFEP)
  - WWE - Self-directed*
- You can locate state-specific programs using the Evidence-Based Leadership Council's Map of Programs.
- The CDC provides information on being physically active while social distancing.

*Participants can purchase self-guided course books on the program website and do not need any equipment. For information on obtaining a free WWE book visit the Osteoarthritis Action Alliance at https://oaaction.unc.edu/resource-library/living-with-osteoarthritis/wwe/.

Patient giveaway incentives

According to HCP feedback obtained through formative research, patient giveaways can support HCPs and encourage patients to engage in evidence-based interventions. Incentives including pedometers, recipe books, store gift vouchers, sweepstakes, and other financial incentives can improve patient recruitment to evidence-based physical activity interventions,

target behavior changes such as physical activity and sitting time, and health outcomes such as body mass index (BMI) and blood pressure.[21,22,23] However, confirm any regulations your organization or funding sources may have on patient giveaways.

Consider the extent to which a giveaway incentive can be successful, sustained, stored, tracked, and encouraged prior to discussing the incentives with HCPs or their organizations. Also, think about your budget and the potential effectiveness of incentives before implementing an incentive plan. Partners, such as physical therapy clinics, hospitals, health care organizations, insurers, YMCAs, local gyms, or other organizations that could offer evidence-based interventions might provide funding for incentives. Additionally, consider these organizations or other local foundations as sources for donating giveaways. If your partners include health care organizations such as university clinics, keep in mind that the university may have policies prohibiting incentives.

FORMATIVE RESEARCH SHOWS HCPs SUGGEST PATIENT GIVEAWAYS RELATED TO PHYSICAL ACTIVITY AND HEALTH, WHICH MAY INCLUDE THE FOLLOWING:

- Fruit and vegetable gift cards
- Compression socks
- Footwear
- Gym towels
- Stretch bands
- Activity journals
- Pedometers or other fitness trackers

Giveaways are more effective when provided to patients during their initial counseling session rather than rewarding patients throughout their progress.

Further, consider potential resources your program can develop and distribute to HCPs to remind and incentivize them to counsel and refer patients – for example, a state-specific prescription pad with all local evidence-based interventions listed.

CONCLUSION

Effectively communicating with HCPs involves a lot of thought and planning. The tips, information, and tools in this section can help you reach out to HCPs to increase the physical activity counseling and evidence-based intervention referrals. Appendix D contains resources developed by several state arthritis programs that can be adapted and used. Appendix F contains additional resources that may be useful for your program to review as you develop your communication plan.

CONCLUSION

The content and tools in this toolkit can help grantees promote physical activity counseling for arthritis and evidence-based referrals among HCPs in their state. Whether grantees are in the beginning or advanced stages of their efforts, they can use this toolkit when defining their audience, identifying partners, disseminating assets and resources, and communicating with HCPs. Grantees can revisit each component of this toolkit throughout their efforts. For access to additional resources, including communication assets, HCP and patient resources, and a technical assistance webinar, grantees can visit the NACDD Dropbox.

APPENDIX A

Formative Research Descriptions

Between May and November 2019, research and consulting activities to support this toolkit were conducted. Below, each activity, including overall goal(s), eligibility requirements, completion dates, participant descriptions, and results highlights are described.

Activity	Goal(s)	Eligibility	Completed	Participant Descriptions	Key Findings
In-person Focus Group	Understand HCPs' knowledge and opinions of evidence-based interventions, incentives to counsel and refer patients with arthritis, and areas of improvement for the EIM resources and the overall communication plan	Active HCPs, defined as PCPs and specialists, including rheumatologists, who see patients, prescribe medications, and/ or counsel or refer patients for behavioral interventions for chronic illnesses such as arthritis	05/20/19	9 total participants. Most participants were female, white, non-Latino/ Hispanic, practiced in an outpatient clinic and an urban setting, and specialized in physical therapy.	• Evidence of an intervention's effectiveness was the preferred incentive. • HCPs prefer resources that are straightforward, easy to integrate into their practice, and will encourage them to remain persistent with patients. • Support staff should be considered as additional sources for patient counseling and referrals. • HCP conferences are a great way to deliver messages and resources to HCPs.
Online Survey	Obtain feedback from HCPs on incentives to counsel patients with arthritis on physical activity and refer them to evidence-based interventions	Active HCP status (as defined above) practicing in a CDC Arthritis Program grantee state	04/23/19 – 07/02/19	8 total participants from 6 states (NY, NC, OR, RI, UT, VA)	• Giveaways are one of the most appealing incentive options for HCPs. • HCPs suggested grantees provide evidence on improved patient outcomes after participating in interventions. • Credentialing/certification incentives were the least appealing because they do not impact patients.

					• 87.5% of HCPs indicated they would counsel patients and refer them to evidence-based interventions without an incentive. • The biggest barriers that HCPs face with counseling are push-back from patients, competing tasks/priorities, and lack of time.
SME Panel, Wave 1 Review	Obtain feedback on communication plan components	Experts in arthritis, physical activity, or related field	06/25/19 – 07/08/19	6 SMEs from 6 states (CO, IL, NM, NC, RI, VA), including pharmacists, university professors of medicine, physical therapists, and CHWs	• Use patient-first language. • Include how grantees can create their own communication plan. • Suggest grantees provide HCPs with details on which evidence-based interventions are locally available for their patients.
CDC Grantee Telephone Interviews	• Assess the extent to which grantees are using EIM resources in their state • Obtain expert opinions on appropriate incentives for HCPs • Collect insight on grantees outreach and communication methods with HCPs	CDC arthritis program grantees; program leaders	07/29/19 – 08/05/19	9 participants from 5 states (MA, MN, NY, UT, WA); arthritis program managers, or similar positions	• Some states are using EIM while others have developed their own resources. • Most states communicate indirectly with HCPs though their partnerships, and usually via email, phone, and occasional in-person meetings. • Grantees were in favor of giveaways and evidence-based incentives. • Some states have already included local evidence-based intervention information on their websites.

Arthritis Council Advisory Panel	• Assess the extent to which our communication assets are appropriate for implementation and are likely to succeed • Determine what technical assistance grantees need to implement communication assets	CDC state arthritis program grantees; program leaders; did not participate in the previous grantee telephone interviews	08/27/19 - 09/11/19	5 participants from 5 states (KS, NH, NC, OR, VA); arthritis program managers, or similar positions	• Use action-oriented messages (solutions to the challenges and negative perceptions). • Use professional and simple asset designs. • Enlarge citations so that HCPs can easily read. • Include placeholders for links to local evidence-based intervention information. • Include communications staff on the technical assistance webinar. • No panelists regularly coordinated with the CDC or NACDD communications offices at the time of these interviews.
Usability Sessions	Obtain feedback on the usability and acceptability of communication assets	Active HCP status (as defined above) practicing in a CDC arthritis program grantee state	11/04/19 – 11/12/19	9 HCPs from UT. All participants had experience treating patients with arthritis; most participants were female, white, non-Latino/non-Hispanic, had a PA degree, specialized in family practice, practiced in a primary care office, and practiced in an urban area.	• The selected messages are important, relatable, and motivating. • Asset designs are appealing and attention-grabbing. • Flyers at HCP conferences, some social media platforms, and email are dissemination formats that would reach HCPs. • Use shorter language when describing arthritis-appropriate evidence-based interventions. • Stress that HCPs are not alone in the barriers they face. • Create a short URL for hard-copy assets. • Disseminate assets across Facebook, Instagram, medical journals, Medscape, Doximity, and UpToDate platforms.

					• Use recognizable and trusted email addresses when disseminating assets.
SME Panel, Wave 2 Review	Obtain feedback on toolkit content	Experts in arthritis, physical activity, or related field	11/12/19 – 11/20/9	6 SMEs from 6 states (CO, IL, NM, NC, RI, VA), including pharmacists, university professors of medicine, physical therapists, and CHWs	• Include more national organizations as potential partners. • Create a dissemination plan tool for grantees. • Add pharmacists and CHWs as potential target audiences.

APPENDIX B

Tools

Tool 1.1 HCP Tracking Table

Use this table to organize contact information for HCPs and/or health care organizations that your team identifies.

Tool 1.2 State-specific Fact Sheet

Use this tool to develop a state-specific fact sheet that you can distribute to HCPs during outreach.

Tool 2.1 Email Template for Partnerships

Use this template to reach out to organizations that might be able to help disseminate communication assets across your state.

Tool 3.1 Communication Asset Dissemination Tracking

Use this spreadsheet to track dissemination of communication assets.

Tool 3.2 Email Template for HCP Outreach

Use this template as you, or your partners, reach out to HCPs to schedule a meeting.

Tool 3.3 Dissemination Plan Template

Use this template to create a plan for disseminating communication assets and/or resources to HCPs.

Tool 4.1 Solutions to HCP Barriers

Use this tool as you communicate or prepare to communicate with HCPs. The table includes (1) popular HCP concerns with counseling patients and referring them to evidence-based interventions, and (2) how the resources included in this toolkit may be potential solutions to these concerns.

Tool 1.1 HCP Tracking Table

HCP or Contact Person	Practice	Location	Contact Information	Type of HCP *(e.g., specialty, degree, training level)*	Date Contacted	Notes
Dr. James Smith	*Northside PT*	*123 Northside Drive STE 01*	*(123) 456-789* *jsmith@email.com*	*PT*	01/01/20	*Is familiar with our partner organization*

Additional notes:

Fact sheet: Arthritis and physical activity

- The prevalence of arthritis in [state] is ___.
- Most arthritis patients in [state] are [describe demographics of patients with arthritis in your state].
- Low-impact and joint-friendly physical activity has many benefits for patients with arthritis, including:
  - Decreasing pain by about 40 percent[1]
  - Improving quality of life[1]
  - Preventing other chronic disease,[1] including [state-specific health priorities that physical activity may prevent]
- Additionally, participating in an evidence-based intervention can help reduce health care expenses[2] and improve function, self-efficacy, perceived control, balance, and strength among patients with arthritis.[3]
- Although the CDC recommends that HCPs counsel arthritis patients to engage in physical activity,[1] 2 out of 5 patients are not receiving HCP counseling.[4]

Further information on recognized and promising evidence-based interventions can be found at bit.ly/cdc_arthritis_interventions. Additionally, please visit bit.ly/arthritisvitalsigns for information on what you as a health care provider can do to help your patients with arthritis.

Resources

[1]CDC. (March 7, 2017). Vital Signs. Retrieved from cdc.gov/vitalsigns/arthritis/

[2]Ackermann, R. T., Williams, B., Nguyen, H. Q., Berke, E. M., Maciejewski, M. L., & LoGerfo, J. P. (2008). Healthcare cost differences with participation in a community-based group physical activity benefit for medicare managed care health plan members. Journal of the American Geriatrics Society, 56(8), 1459–1465. doi:10.1111/j.1532-5415.2008.01804.x

[3]Callahan, L. F., Shreffler, J. H., Altpeter, M., Schoster, B., Hootman, J., Houenou, L. O., Martin, K. R., Schwartz, T. A. (2011). Evaluation of group and self-directed formats of the Arthritis Foundation's Walk With Ease Program. Arthritis Care Res (Hoboken). 63(8), 1098-107. doi: 10.1002/acr.20490.

[4]Hootman, J. M. M. L., Omura, J. D., et al. Health Care Provider Counseling for Physical Activity or Exercise Among Adults with Arthritis — United States, 2002 and 2014. MMWR Morbidity and Mortality Weekly Report 2018. 2018;66(5152):1398-1401.

Tool 2.1 Email Template for Partnerships

From: CDC Arthritis Program grantee program director

To: [Potential partner]

Subject: [Arthritis program title] efforts to increase physical activity counseling and evidence-based intervention referrals

Body: Hello,

I am writing from the [arthritis program title].

Our arthritis program is a CDC-funded program aiming to improve arthritis management and quality of life for people with arthritis. Our strategies include increasing health care providers' (1) patient counseling on the benefits of physical activity for reducing arthritis pain and limitations, and (2) referrals of patients with arthritis to physical activity evidence-based interventions.

Our program has accomplished [program-specific accomplishments].

Our next step involves sharing communication messaging with providers via email and social media to increase their knowledge and willingness to prescribe physical activity to patients with arthritis and increase provider recommendations to evidence-based interventions.

Although our state plans to disseminate these messages through our own outlets, we also look to incorporate assistance from outside organizations during this process. Research has shown that providers would be most receptive to these communication messages if disseminated by a trustworthy organization, such as yours.

We would love to discuss these communication assets and our dissemination process with you further. [List contact person or available times for a phone call]

We look forward to hearing from you.

[Signature]

Tool 3.1 Communication Asset Dissemination Tracking

Practice/HCP Information					Communication Asset Dissemination		
Practice/HCP Name	Type of Practice	Phone	Email	Address	Date Assets Distributed	Communication Asset Dissemination	Distribution Method

Tool 3.2 Email Template for HCP Outreach

From: CDC Arthritis Program grantee program director*

To: [HCP or practice]

Subject: CDC-funded [arthritis program title] physical activity for arthritis visit

Body: Hello,

I am writing from the [arthritis program title].

Our arthritis program is a CDC-funded program aiming to improve arthritis management and quality of life for people with arthritis by increasing health care providers' physical activity counseling, and referrals to physical activity evidence-based interventions among their patients with arthritis.

We would like to visit your practice to (1) discuss the benefits of physical activity counseling and referring patients to interventions, (2) provide information on local interventions you can recommend to your patients, and (3) introduce you to resources to assist you during counseling.

If you are interested in scheduling a brief visit from our staff to learn more, please contact [contact information] with the day/times that work best for you.

Additional information about our program may be found at [link to program website, if available].

Thank you for your time! We look forward to hearing from you.

[Signature]

* If possible, we recommend sending from an email address that is noticeable as an arthritis program, state health department, or partner organization that is recognized by HCPs to encourage HCPs to open the email.

Tool 3.3 Dissemination Plan Template

Materials	Target Date	Method	Audience	Lead Contributor	Status	Notes
EIM HCP Action Guide	*December 2020*	*In-person (hard copies)*	*National HCP Conference*	*Arthritis program manager*	*In progress*	

Template components:

- **Materials:** The specific communication assets or resources you plan to disseminate to HCPs
- **Target date:** The date(s) you plan to disseminate the materials
- **Method:** The method of dissemination you plan to use (e.g., email, hard copies, social media)
- **Audience:** A description of the audience you plan to disseminate among (e.g., conferences, individual HCPs, health care organizations)
- **Lead contributor:** Who is responsible for dissemination (e.g., arthritis program staff, partners)
- **Status:** The status of dissemination (e.g., in progress, complete)

Tool 4.1 Solutions to HCP Barriers

HCP Concerns	Possible Solution
HCPs are unsure of how to integrate physical activity counseling into their practice.	The EIM HCP Action Guide guides HCPs through integrating physical activity counseling within their practice and describes how their practice staff may be used through this process.
HCPs are unsure of how to assess a patient's physical activity levels.	HCPs can use the EIM Physical Activity Vital Sign (PAVS) handout to assess patients' physical activity levels.
HCPs are unsure of how to determine patient readiness to change physical activity habits and how to successfully counsel patients who are in different readiness stages.	The EIM HCP Action Guide – Exercise State of Change (page 4) provides an outline of the five stages of change and recommendations for how HCPs may discuss physical activity during each stage.
HCPs are unsure of how to prescribe physical activity.	The EIM HCP Action Guide provides recommendations from the American College of Sports Medicine for physical activity pre-participation screenings (page 5). Additionally, HCPs can use the EIM prescription pad/form as a prescription tool.
HCPs feel discouraged to counsel patients on physical activity because they do not consider themselves an appropriate role model.	The EIM HCP Action Guide describes how HCPs can promote physical activity in their practice (page 8).
HCPs feel like the burden of physical activity counseling is solely their responsibility.	The EIM HCP Action Guide describes how health care staff can also promote physical activity counseling with patients (page 9), including senior health care administrators, practice managers, front desk staff, clinical/ medical assistants, and physician or advanced practice providers.
HCPs are unsure of how to be the champion for physical activity in their practice.	The HCP Action Guide provides tips for how HCPs can become the champion in their practice (page 10).
HCPs do not consider physical activity counseling as billable work.	The EIM Coding and Billing Tips form describes how physical activity assessments, prescriptions, and counseling can be integrated into ICD10 and CPT codes for billing purposes.
HCPs are unaware of safe physical activity habits and tips specific to osteoarthritis and rheumatoid arthritis patients.	EIM resources include handouts that HCPs can give to patients with osteoarthritis or rheumatoid arthritis describing safe physical activity habits specific to their condition.
Patients with arthritis infrequently initiate a conversation with HCPs about improving their physical activity habits.	HCPs can display EIM flyers so patients will be encouraged to discuss physical activity.

Tool 4.1 Solutions to HCP Barriers

HCP Concerns	Possible Solution
HCPs are unsure of how to keep track of a patient's physical activity habits.	HCPs can use the EIM Sit Less, Move More handout to set weekly goals for patients, then can refer back to the handout when patients return to make sure they are keeping up with their goals.
HCPs are unsure of which evidence-based intervention would be best for their patient.	The APTA decision aid table provides details of specific evidence-based interventions, including the intended audience, benefits, content, intensity, format, instructor qualifications, patient baseline activity levels, length, size, and availability. Additionally, 1-2-3- Approach to Provider Outreach (pages 16-27) provides an overview of evidence-based interventions and informative handouts that HCPs can give to patients (pages 185-270).

APPENDIX C

Below are the selected facts and suggested messages for grantees to include on their customized communication assets.

	Added Value
1	Health care providers:* Physical activity improves pain and quality of life for patients with arthritis.[3] Learn more about what you can do to improve your patients' pain and quality of life at bit.ly/arthritisvitalsigns.
2	Health care providers: Physical activity delays arthritis-related disabilities and prevents other chronic disease.[3] Learn more about how you can help prevent other chronic disease for your patients with arthritis at bit.ly/arthritisvitalsigns.
3	Health care providers: Physical activity decreases pain among patients with arthritis by 40 percent.[24] Learn more about what you can do to help decrease your patients' pain at bit.ly/arthritisvitalsigns.
4	Health care providers: Resistance training decreases inflammation and improves muscle strength among patients with arthritis.[25] Learn more about health care provider resources for counseling patients with arthritis on physical activity, including safe resistance exercises, at [link to resources on program website].
5	Health care providers: Participating in 150 minutes of moderate-intensity aerobic and muscle-strengthening physical activity per week improves pain management, function, and quality of life for patients with arthritis.[26] Learn more about the benefits of physical activity for arthritis and your role as a provider at bit.ly/arthritisvitalsigns.
6	Health care providers: Participating in a physical activity intervention reduces health care costs for patients with arthritis.[27] Learn more about local evidence-based interventions to recommend to your patients at [link to evidence-based intervention information on program website].
7	Health care providers: Physical activity interventions improve function among patients with arthritis.[28] Learn more about local evidence-based interventions to recommend to your patients at [link to evidence-based intervention information on program website].

Added Value	
8	Health care providers: Physical activity interventions improve symptoms, self-efficacy, perceived control, balance, and strength among patients with arthritis.[5] Learn more about local evidence-based interventions to recommend to your patients at [link to evidence-based intervention information on program website].
Challenges	
9	Health care providers: Would improving your counseling skills encourage you to counsel your patients with arthritis on physical activity? You're not alone.[29] Improve your skills by taking advantage of counseling resources. Learn more at [link to resources on program website].
10	Health care providers: Does limited time prevent you from counseling patients with arthritis on physical activity? You're not alone.[29; 30] Learn more about resources to assist you in physical activity counseling at [link to resources on program website].
11	Health care providers: Do you feel like other chronic conditions affect a patient with arthritis' compliance with physical activity prescriptions? You're not alone.[31] Learn more about resources to help prescribe physical activity to patients with arthritis [link to resources on program website].
12	Health care providers: Do you feel unprepared to counsel patients with arthritis on physical activity? You're not alone.[32] Learn more about resources to assist you in physical activity counseling at [link to resources on program website].
13	Health care providers: Do you feel like your patients with arthritis lack a safe built environment to exercise, discouraging them to engage in physical activity? You're not alone.[33; 34] Learn about evidence-based interventions available for your patients at [link to evidence-based intervention information on program website].
Negative Perceptions	
14	Health care providers: Does a patient's lack of interest prevent you from providing physical activity counseling for arthritis? You're not alone.[32] Combat this negative perception by learning about the evidence-based interventions available for your patients at [link to evidence-based intervention information on program website].
15	Health care providers: Does a patient's lack of motivation prevent you from providing physical activity counseling for arthritis? You're not alone.[30] Combat this negative perception by learning about resources to motivate patients to exercise, visit [link to resources on program website].

*For added-value messaging posted on social media, we recommend adjusting the language to be more directive toward a general audience rather than HCPs to grab the patient's attention and prompt them to ask their HCP about the information.

APPENDIX D

Examples of state-specific and organization resources

Grantee programs often create state-specific resources or use resources provided by another organization (e.g., EIM). The Utah Arthritis Program (UAP) and the New York State Arthritis Program (NYS AP) shared patient and HCP resources they have created or incorporated within their program. You can use these resources as inspiration when creating and organizing your own state-specific resources.

The Utah Arthritis Program (UAP)

The Utah Arthritis program developed and distributed the following patient connect and recommendation cards to HCPs and clinics in their state. The cards connect HCPs and patients to evidence-based interventions in Utah and provide the link to the UAP Living Well Utah website. The cards are HCP-facing but can be distributed from HCPs to their patients.

Connect Patient cards –

Recommendations cards –

Living Well

A variety of workshops for people with long-term health concerns

Free classes are starting near you!

To register:

livingwell.utah.gov

888-222-2542

UTAH DEPARTMENT OF HEALTH
Arthritis Program

Physical activity classes available

- Arthritis Foundation Exercise Program
- EnhanceFitness
- Walk With Ease

Self-management classes available

- Better Choices, Better Health® (online)
- Living Well with a Disability
- Living Well with Chronic Conditions
- Living Well with Chronic Pain
- Living Well with Diabetes
- Programa de Manejo Personal de la Diabetes
- Tomando Control de su Salud

"Now I have more energy than I've had in years. I'm calm and more confident about my health."

Free classes are starting near you!

Friends and family are welcome!

To register:

livingwell.utah.gov

888-222-2542

Our programs do not replace existing treatment.

UTAH DEPARTMENT OF HEALTH
Arthritis Program

Living Well

with Chronic Conditions

A six-week workshop for people with long-term health concerns

Free classes are starting near you!

To register:

livingwell.utah.gov

888-222-2542

UTAH DEPARTMENT OF HEALTH
Arthritis Program

Weekly 2.5-hour classes will provide discussions on

- Weekly goals
- Effective problem-solving
- Working with your health care team
- Symptoms management
- Medication usage
- Dealing with difficult emotions
- Relaxation

"Now I have more energy than I've had in years. I'm calmer and more confident about my health."

Free classes are starting near you!

Friends and family are welcome!

To register:

livingwell.utah.gov

888-222-2542

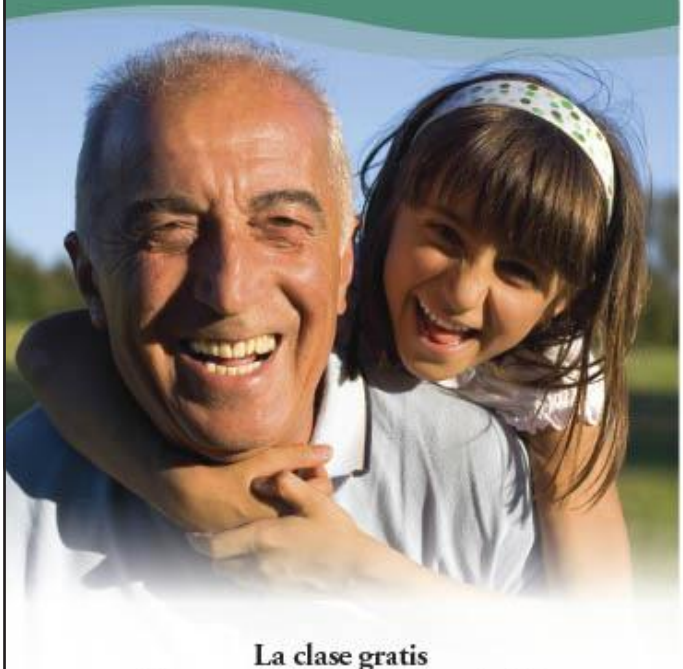
This program does not replace existing treatment.

UTAH DEPARTMENT OF HEALTH
Arthritis Program

CDSMP is a Self-Management Resource Center Program

Tomando Control de su Salud

Una clase de seis semanas para las personas con condiciones médicas crónicas



La clase gratis "Tomando control de su salud" se enseña completamente en español.

Para registrarse:

livingwell.utah.gov

888-222-2542

UTAH DEPARTMENT OF HEALTH
Arthritis Program

Una reunión semanal de dos horas y media consistirá de temas como

- Manejo los síntomas
- Uso apropriado de los medicamentos
- Trabajo con su médico
- Objetivos semanales
- Resolución eficaz de problemas
- Manejo de emociones difíciles
- La relajación

"Tengo más energía de la que he tenido en años pasados. Estoy más tranquilo y seguro de mi salud."

La clase gratis "Tomando control de su salud" se enseña completamente en español.

Para registrarse:

livingwell.utah.gov

888-222-2542

Este programa no sustituye tratamiento existente, sino ofrece apoyo.

UTAH DEPARTMENT OF HEALTH
Arthritis Program

Tomando Control de su Salud es un programa de Self-Management Resource Center

EnhanceFitness

A class that focuses on stretching, flexibility, balance, low impact aerobics, and strength training

Free classes are starting near you!

To register:

livingwell.utah.gov

888-222-2542

UTAH DEPARTMENT OF HEALTH
Arthritis Program

In a typical class, participants will experience

- 5-minute warm up
- 20-minute aerobics workout
- 5-minute cool down
- 20-minute strength training
- 10-minute stretching workout
- Opportunities to make new friends

"The women and men in the group are a great support system to keep me motivated to continue to exercise. EnhanceFitness has become a necessary element in my life."

Free classes are starting near you!
Friends and family are welcome!

To register:

livingwell.utah.gov

888-222-2542

UTAH DEPARTMENT OF HEALTH
Arthritis Program

[The New York State Arthritis Program (NYS AP)]

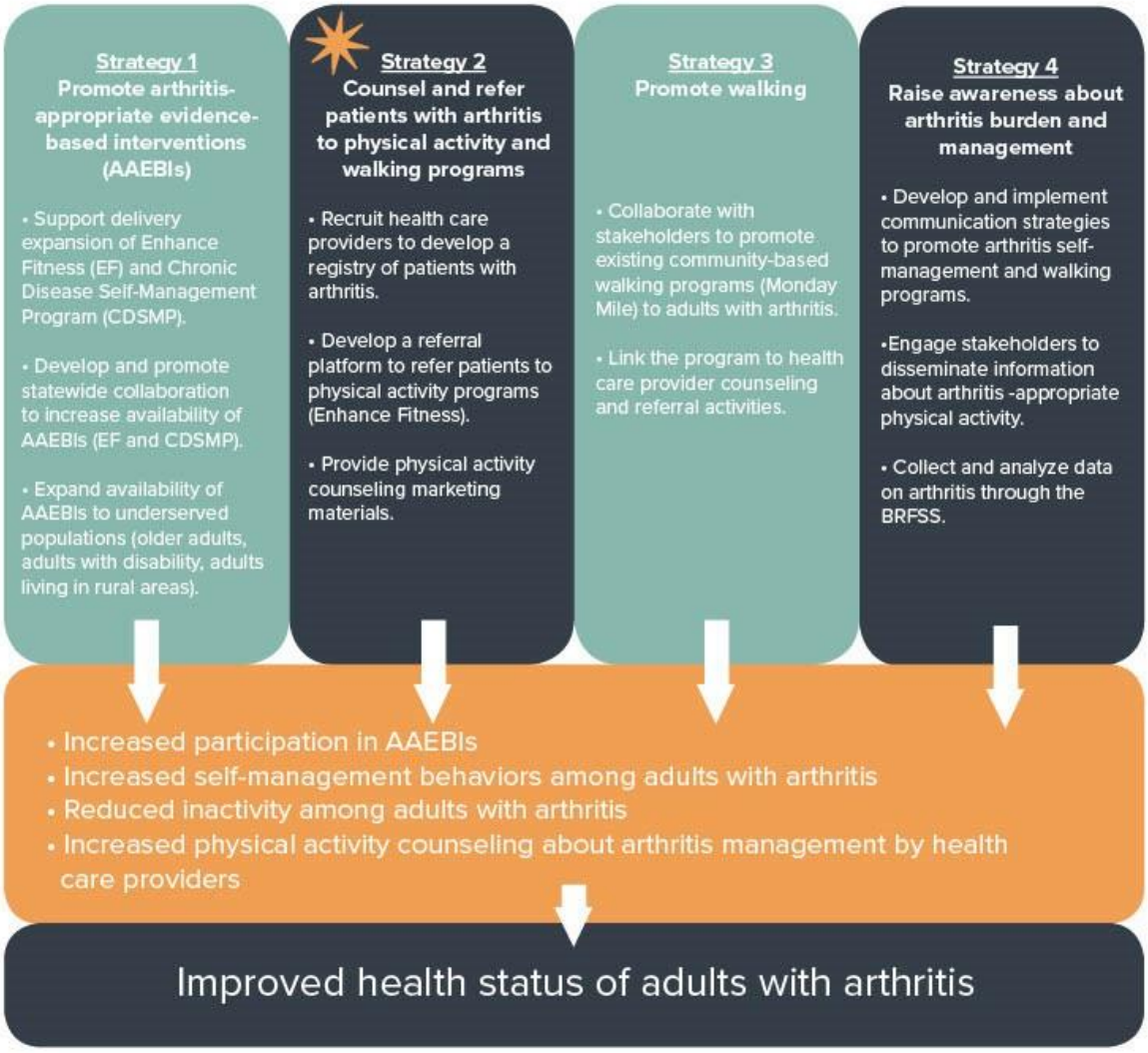
The NYS AP developed packets for both HCPs and their patients.

HCP packet

The HCP packet consists of informative resources that promote the purpose of the NYS AP, explain the added value of physical activity, and provide electronic health record (EHR) information and codes, plus physical activity guidelines, including the following resources:

1. Arthritis Provider Two-Pager: The purpose of this document is to give context for HCPs by providing general background on NYS AP work and how HCP physical activity counseling contributes to the overall goals of their program.

The purpose of the grant is to increase self-management behaviors, including physical activity, and improve quality of life for adults with arthritis. This work is accomplished through four main strategies:



HealtheConnections

For more information, please contact
Susan Fox at **315-671-2241 ext. 190**
or **sfox@healtheconnections.org**

2. Arthritis Measure: This is a measure developed to identify patients with arthritis within the EHR. NYS AP includes this within their HCP packet, but their contractor uses a practice facilitation approach to assist practices in pulling registries. This measure is not a CDC standard measure.

Arthritis Registry Specification

Overview. In 2018, the New York State Department of Health (NYSDOH) Arthritis Program received a 5-year grant to improve health status of adults with arthritis by promoting arthritis appropriate physical activity and community walking initiatives. As part of the promotion of these strategies, the NYSDOH Arthritis Program is collaborating with HealtheConnections to pilot an arthritis registry and a referral system to refer patients with arthritis to EnhanceFitness; and counsel patients on the importance of physical activity as an arthritis management strategy. The following document provides the specifications to define the arthritis registry.

Arthritis registry specifications. The registry should be based on the [system name] and include all patients 45 year and older with an outpatient visit recorded in the past 12 months with a diagnosis of osteoarthritis or rheumatoid arthritis. For patients with osteoarthritis the registry should include patients with diagnosis of polyosteoarthritis, osteoarthritis of hip, osteoarthritis of the knee, osteoarthritis of first carpometacarpal joint, and other and unspecified osteoarthritis. For rheumatoid arthritis the registry should include patients with diagnosis codes for rheumatoid arthritis with rheumatoid factor and other rheumatoid arthritis. The table on pages 2 – 3 includes an exhaustive list of all required ICD-10-CM codes for your reference. These codes contain all existing ICD-10 codes for the two identified conditions, i.e., osteoarthritis and rheumatoid arthritis.

Registry definition approach. Depending on your [system name] and data analytics capabilities there are three different ways to extract the registry.

a. Query your [system name] to extract patients with codes that include the following strings 'M15.' or 'M16.' or 'M17.' or 'M18.' or 'M19.' or 'M05.' or 'M06.'
b. Query your [system name] to extract patients with codes equal to [copy paste list of codes from the detailed numerator on the table on page 2-3]
c. Filter by each ICM-10 code defined in detailed numerator on the table on page 2-3 to define the necessary registry inclusion parameters.

Measure specification	Diagnosed osteoa rthritis (OA.) or rlhe uma to id arth ritis (RA.)
Defi11ition	Cu rre nt patie nts age 45 and olde r w it h an outpat ie nt vis it reco rd ed i n t he past 12 months , wit h **a** d iagnos is o f **OA** or RA
De nom in ator	All cu rre nt patie nts age 45 and older wit h an out patfe nt visit reco rded i n he past 12 **m** ont hs
Numerator	Pat ie nts 45 years of age a nd older wlho ha ve one of t he following OA o r **RA** codes listed on their proble m list or associated wit h an e ncoun te r in t he past 12 mon ths : • Diagnos is for osteoa rt hrit is (OA) (ICD-lOcCM): **M**15.XXX (Pol yosteoa hritis); M16 .XXX (Osteoart hrit is of hip); M17.**XXX** i Ost eoa rt hrit is of k nee); M18.X XX (Osteoarthritis of first ,ca pometacarp al joint); M19.XXX (Ot lhe r an d unspe cified ost eoar t hritis) • Diagn osis for rheu mat oid art hrit is (RA) (lCD-10 -CM): M05.XXX (Rhe uma toid art hritis wit h r heuma toid facto r); M06.XXX (ot ihe r rhe umato id a rt hrit is)
	Numerator (detailed): M15.0, M15.l, M15.2 , M15 .3, M15. . 4, MlS.8, Ml S.9, Ml6.0, M1 5.10, M16...ll, M16. 12, M15 .2, M1 6.3 0, Ml 6 .31, Ml6.32, M16 .4, M16..5 0, M16.51 , M1 6.52, M16 .6, M16.7, M16.9, M1 7.0 , M17 .1 0, M17..ll , M17. 12, M17.2 , M1 7.3 0, M17.3 1, M1 7.32 , M1 7.4, Ml7.5, Ml7 .9, M18 .0, M18.10, Ml B.11 , MlB..1 2, M18.2, M18.3 0, Ml B.31, Ml B.32 , M18.4, M18.5 0,M1 8. 5l , M18 .52, Ml B.9, M19.0ll, M19 .012 , M19.019 , M19.021, M19.02 2, M19 .029, M19.031 , M19 .03 2, M19.039 , M19.041, Ml 9.04 2, M19.049 , M19..071, M19.0 72, M1 9..079, M19.1 11, M19..11 2 , M19.119, M19. 121, M1 9.1 22, M19.129 , M19 .131, Ml 9.13 2, M19.139, Ml 9.141, M19.142 , M1 9.149, M19.1 71, M1 9.172, M19.179 , M19 .211, M19.212, M19. 219, M1 9.2 21, M19.222, M19. 229, Ml 9.231 , M1 9. 232, M1 9. 239, M19.24 1, M19.242, M19. 249, M1 9..271, M19. 272, M19..279, M19.9 0, M19 .91, M1 9.92, M19. 93, MOS.DO, M05. 0ll , M0S.012, M05 ..0l9, MOS.021, M05..022, MOS.029, M05..03 1, M0 5.03 2, MOS.039, M05.041, MOS.042, MOS.049, MOS.05 1 , MOS.052, M05.059, MOS.061, M05 .0 52, MOS.069, MOS..071, MOS.072, M05..079, MOS.09, MOS.111, MOS.112, MOS.119, MOS .1 21, MOS.122, MOS. 1 29, M05.131, MOS.132, M05 .139, MOS.141, M05..142, MOS.149, M05. 1 51, MOS.15 2, M05 .159, M0 5.16 1, MOS.16 2, MOS.1 69 , MOS.171 , MOS. 1 72, MOS.179, MOS .19, MOS.20, M05.211, MOS.212, MOS .219, MOS.22 1, MOS . 222, M05.229, MOS.231, MOS.232, MOS. 239 , MOS.241 , MOS.242, M05 .249 , MOS.251, M05 . 252, MOS.259, M05.261, MOS.262, M05 .269, MOS.271, M05.272, M0 5.279, MOS.29, M05.30, M05.**3ll,** M0 5.3 1 2, MOS.319, M0 5.321, MOS.322, M0S.3 29, MOS.33 1 , M0S .33 2, MOS.339, M0S.341, M05.342, M0S.349, MOS.351 , MOS.35 2, MOS.359, MOS . 361 , MOS.362, MOS.369, MOS.371, MOS.372, MOS..379, MOS.39, M05.40, MOS..411 , M05.4 1 2, MOS.419, MOS.421, MOS .4 22, MOS.429, MOS.431, M05. 432, MOS.439, M05 .44 1, MOS.442, M05..4 49, MOS.45 1, M05..452, MOS.459 , MOS..46 1 , M0 5.46 2, MOS.469, M OS.471 , MOS.472, MOS.479, M05. 49, MOS.50, MOS.511, M05.5 1 2, MOS.519, M OS.5 21, MOS.522, MOS . 529 , M05 .531, MOS.532, MOS.539, MOS . 541 , MOS.542, MOS . 549, M05.55 1, MOS.552, M05 . 559, MOS.561, MOS.562, MOS.569, MOS.571, MOS.572, MOS..579, M0 5.59 , MOS.60, M05.611 ,. MOS.612, MOS ..619 , MOS.621, M05..622, MOS.629, MOS. .63 1 , M0 5.63 2, MOS.639, M05. 641, MOS.642, MOS.549, MOS.65 1 , MOS.652, MOS.659 , MOS.66 1 , MOS . 56 2, M05.669, MOS.671, M05 . 672, MOS.679, M05..69, MOS.70, M05.7 11 , MOS.712, M05 .71 9, MOS.721, MOS.722, MOS . 729, MOS.731 , MOS . 73 2, M05.739, MOS.741, M05 . 74 2, MOS.749, MOS.751, MOS.752, MOS.759, MOS.761, MOS..762, M05.769,
	MOS.77 1, MOS.772, MOS.779, MOS . 79, MOS.SO, M0 5.811, MOS.812, M05.8 19, MOS.821, MOS . 822, MOS.829, MOS..831, M05.832, MOS.839, MOS.84 1, M OS . 84 2, MOS.849, MOS.851, M05.852, MOS.859, M05 . 851, MOS.862, M05..869, MOS.871 , MOS. .872, MOS.879 , MOS..89, M0 5 .9 , M06.00 , M0 6.0 11 , M06.012, M06..D19, M06.021, M06..022, M06. 0 29, M06..D31, M06.032, M06 .039, M0 6.041 , M06.042, M06 .049 , M06.05 1 , M06.05 2, M 06.059, M06.06 1 , M 06.062, M06.059, M 06.071, M06 .0 72, M06.079, M06..08, M06.09, M06. 1, M0 5.2, M 06.20, M06. 21, M06.2 11 , M06. 212, M 06.219, M06.22, MOfi.221, M06.222 , M06.229, M06.23, M06.231, M06.232, M 06.239, M06.24, M06.241, M06.242 , M06 .249, M06.25, M0 6.25 1 , M06.252, M06.259, M06.26, M0 6.261, M06 .262 , M06.269, M06.27, M06.271, M06.272, M06.279, M06.28 , M06.29, M06 .30, M06.311 ,. M06.3 12, M06...31 9, M06.321, M06..322, M06.3 29, M06..331, M06.332, M06 .339 , M0 6. 341, M06.34 2, M06.349, M06 .351 , M06.352, M 06.359, M06.36 1 , M06.362, M06..369, M 06.371, M0 6. 3 72, M06.379, M06..38, M06 .39, M06.80, M06..811, M06.812 , M06..819, M06.821, M 06.822, M06.829, M06.831, M06.832, M06.839, M06 .841, M06.84!2, M06..849, M06.851, M06..852, M06.859, M06..86 1 , M0 6.86 2, M06.869, M 06.871, M06.872, M 06.879, M06.88 , M06..89, M06 .9

3. EIM Summary: This resource includes an EIM summary giving a basic overview of physical activity guidelines and allows HCPs to complete physical activity assessments.

The Miracle Drug: Exercise is Medicine®

Your Prescription for Health
ExeRxcise is Medicine®

Rationale

In an era of spiraling health care expenditures, getting patients to be more active may be the ultimate low-cost therapy for achieving improved health outcomes.[1] Studies show that regular physical activity (PA) has health benefits at any body weight and that it's critical for long-term weight management. In fact, recent work has shown that exercise is as effective as prescription medications in the management of several chronic diseases.[2] Consequently, PA promotion should be the foundation of clinical therapy and public health policy, whether to promote health or control weight. Just as weight and blood pressure are addressed in some manner at nearly every healthcare provider visit, so should attention be given to exercise prescription and the accumulation of [150 minutes of moderate intensity PA per week.[3]]

The Exercise is Medicine® (EIM) Solution

Assessment – Using the *Physical Activity Vital Sign* to Calculate Weekly PA Levels

1. On average, how many days/week do you engage in moderate to vigorous PA (like brisk walking)?
   _____ **days**
2. On average, how many minutes do you engage in PA at this level?
   _____ **minutes/day**
3. Total activity = days/week x minutes/day =
   _____ **minutes/week**

Prescription – Basic Exercise Recommendations

Sedentary adults should be encouraged to engage in low to moderate PA with a gradual progression to the recommended 150 minutes per week of moderate to vigorous PA.

Insufficiently active adults should be encouraged to achieve 150 minutes of moderate to vigorous PA each week.

Children and adolescents should obtain up to 60 minutes per day of moderate to vigorous PA each day including a mix of aerobic activity, muscle strengthening, and bone loading.

National Physical Activity Guidelines[4]

Age	Aerobic Activity Recommendations	Muscle Strengthening Recommendations
6-17	60 minutes of moderate to vigorous physical activity (PA) per day	As part of their 60 or more minutes of daily PA, children and adolescents should include muscle-strengthening PA on at least 3 days of the week
18-64	150 minutes of moderate PA or 75 minutes of vigorous PA a week	Activities that are moderate or high intensity and involve all major muscle groups on 2 or more days a week
65+	150 minutes of moderate PA or 75 minutes of vigorous PA a week	Activities that are moderate or high intensity and involve all major muscle groups on 2 or more days a week

Resources and References

- Consider reaching out to a health and fitness professional to work with you and your patients. Together, you can establish realistic goals and design a safe, effective and enjoyable program.
- Lifestyle activities count! Encourage patients to take up gardening or take a brisk walk with their dog.
- Physicians who are more physically active, are more likely to counsel patients regarding physical activity. It's not enough to just "talk the talk," you have to literally "walk the walk."
- For future reference, you and your patient can visit the EIM website at http://exerciseismedicine.org.

Notes

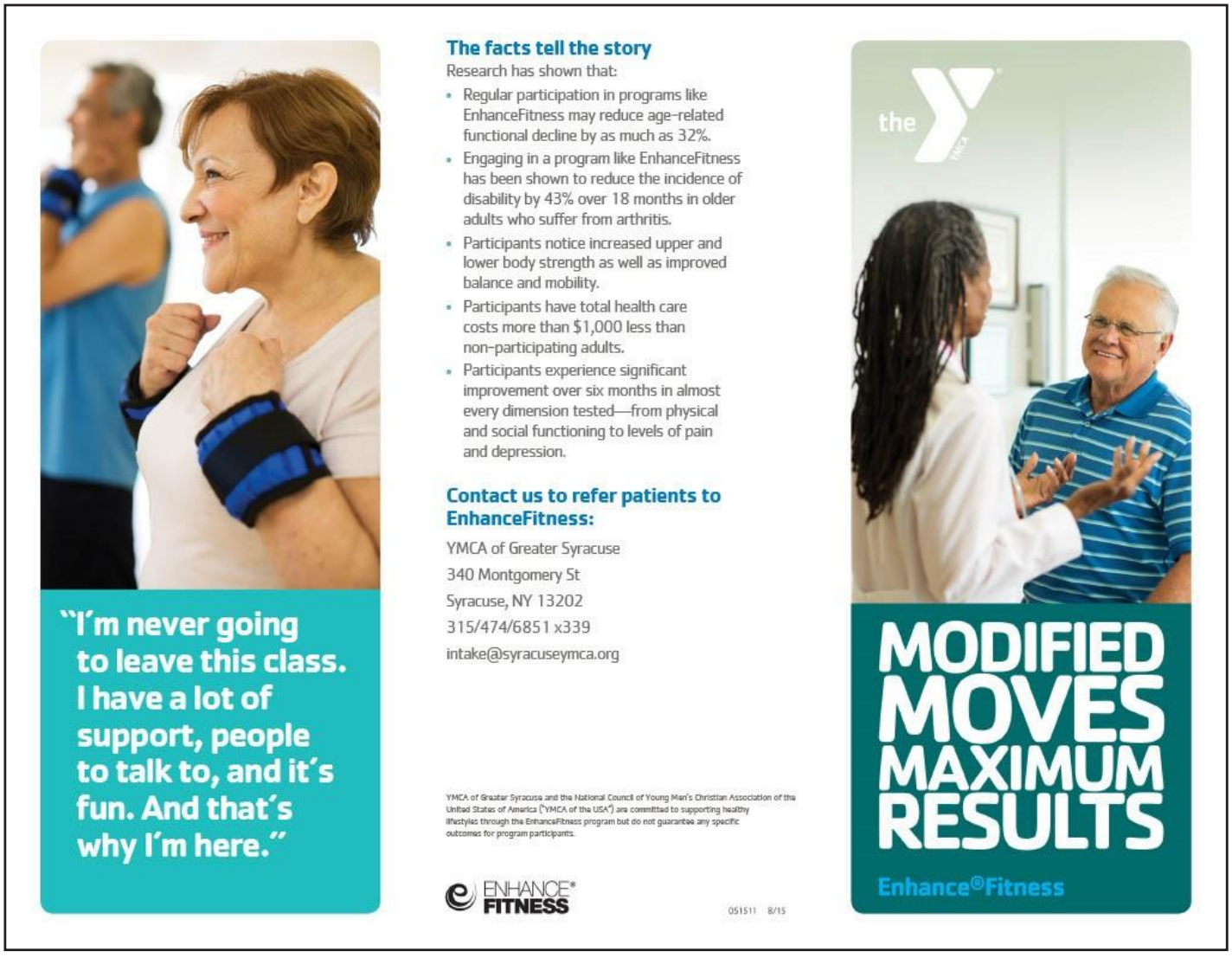
1. Blair. et al. (2004). The Fitness, Obesity, and Health Equation: Is Physical Activity the Common Denominator? JAMA; 292(10), 1232-34.
2. Naci et al. (2013). Comparative Effectiveness of Exercise and Drug Interventions on Mortality Outcomes: Meta-epidemiological study. BMJ; 347, 1-14.
3. Boden et al. (2013). Physical Activity and Structured Exercise for Patients with Stable Ischemic Heart Disease. JAMA; 309(2), 143-4.
4. 2008 Physical Activity Guidelines for Americans. http://www.health.gov/paguidelines/guidelines/

4. Exercise is Medicine® Rx Pad: The packet includes the EIM prescription pad that is also included within this toolkit.

5. Exercise is Medicine® Health Care Providers Action Plan: This plan provides tools for HCPs to implement physical activity recommendations into their daily practice.

6. Exercise is Medicine® Rx for Health Series: Provides handouts for HCPs and exercise professionals to support physical activity recommendations for patients.

7. Enhance® Fitness Provider Brochure: The NYS AP customized this ready-made Modified Moves Maximum Results brochure with Enhance® Fitness information from Y-USA.



LOW IMPACT CLASSES, HIGH IMPACT RESULTS

CONNECTING YOUR PATIENTS TO BETTER HEALTH

Patients look to you—their trusted health care provider—for information on maintaining health and managing their chronic diseases. You can feel confident referring patients to Enhance®Fitness as an older adult fitness and arthritis management solution. Ys are licensed EnhanceFitness providers and classes are led by certified EnhanceFitness instructors.

IT'S A FACT:
99% say they'd recommend the program to a friend.

Nationally recognized and available in your community

The evidence-based EnhanceFitness program has been nationally recognized as a safe and effective physical activity program for older adults by the Centers for Disease Control and Prevention, US Department of Health and Human Services, US Administration on Aging and the National Council on Aging.

Research has shown that among older adults who participate in EnhanceFitness, **health care costs were lowered each year by close to $1,000.** It's no wonder 9 out of 10 people stay with the program.

The program benefits a wide range of patients because they are encouraged to move at their own pace. The program meets them where they are in terms of their physical ability and helps them gain strength, flexibility and balance.

Our aim: To help your patients feel better

EnhanceFitness is geared toward older adults, and those with a chronic condition, such as arthritis, need not worry; they will never have to do anything that hurts. Chairs can be used for support, if necessary. Soft, adjustable wrist and ankle weights allow each participant to perform the strength training exercises at a level that is appropriate for them.

Participants set their own goals. The Y will help them meet those goals. We measure their success with a personal fitness assessment every four months that is logged into a tracking system so that progress can be observed over time.

We also provide a comfortable, welcoming environment where participants can support each other and engage socially. This level of group support can break the social isolation that is detrimental to the health of many older adults.

What participants can expect:

- Classes meet three times per week for 60-minutes each.
- Some people will be standing, some will be seated—and some will use the chairs to hold onto for support.
- Participants move at a pace that's comfortable for them.
- The class focuses on strength, flexibility, movement and balance.
- Participants will make friends who will support them and cheer them on.

Here are some of the changes our participants have noticed in their bodies and minds:

- More energy
- Better balance
- Increases in upper body and lower body strength
- More flexibility and range of motion
- Better sleep
- More feelings of happiness
- Sense of independence

Participants will feel energized—physically, mentally and socially. But don't take our word for it. Here's what some EnhanceFitness participants are saying about the program.

"The energy in the room is fantastic. The instructors are all wonderful. It's definitely a keeper."

"It's a little bit of everything."

8. Monday Mile Handout: The Monday Mile is a community-based walking program that NYS AP frequently promotes. This handout introduces HCPs to the program so they can refer their patients to participate.

What is the Monday Mile?

The Monday Mile is a part of Move-It Monday, an international campaign that encourages physical activity, wellness, and community. The Monday Mile is a one-mile route mapped out as a fun way to get in your daily exercise and helps to jumpstart your week. There are 18 Monday Miles to choose from in, giving you plenty of opportunity to explore Onondaga County while getting in your daily physical activity!

All of our Monday Mile locations are marked with signs that contain maps, directional arrows, and distance markers so all you have to do is follow the signs. How easy is that?

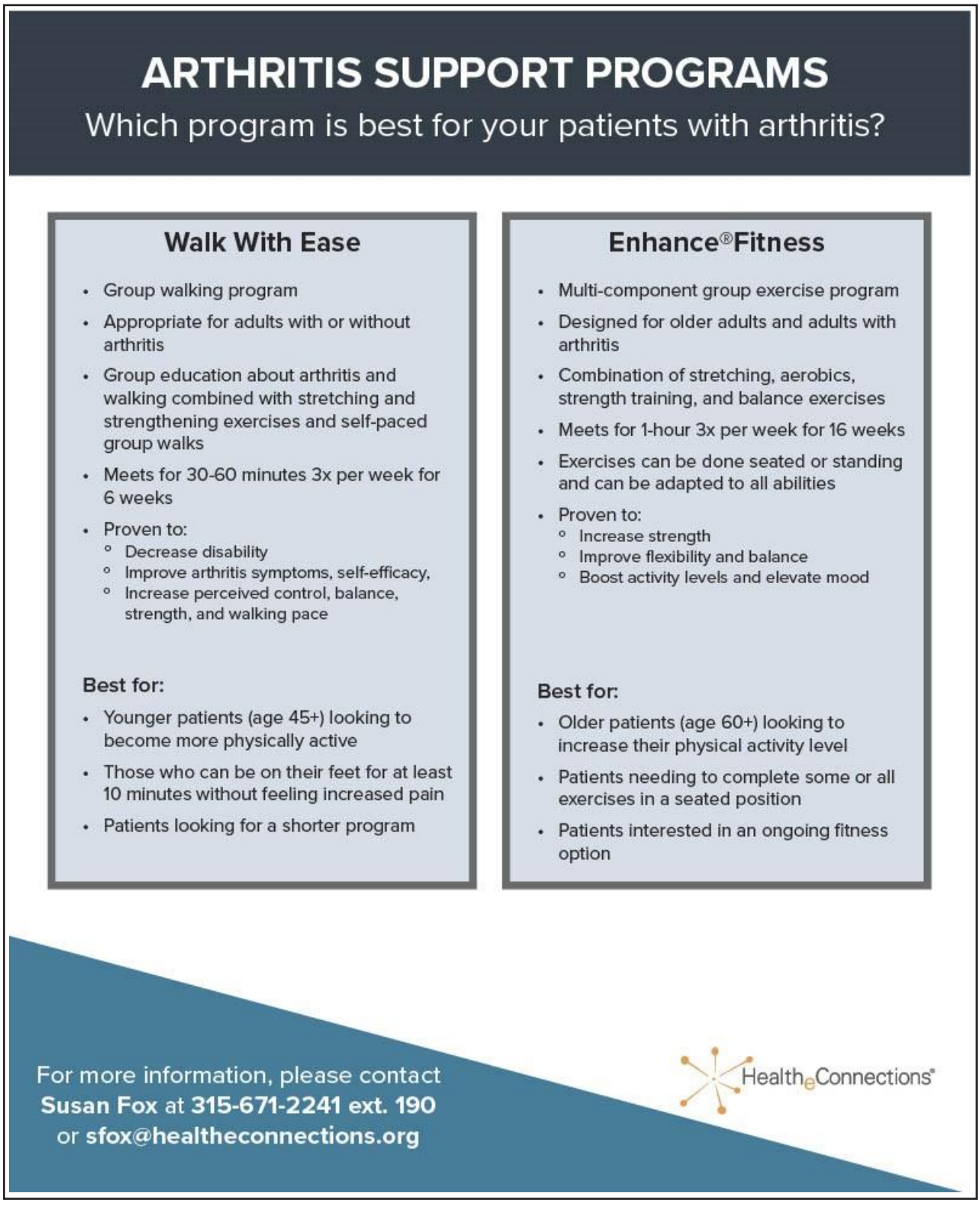
Onondaga County Monday Miles:

- Syracuse University North (Main) Campus
- Syracuse University South Campus
- Downtown Syracuse City-County (City Start)
- Downtown Syracuse City-County (County Start)
- Barry Park
- Burnet Park
- Thornden Park
- Schiller Park
- Sunnycrest Park
- Onondaga Creek Parkway (Kirk Park)
- Upstate University Hospital (Downtown Campus)
- Upstate University Hospital (Community Campus)
- St. Joseph's Hospital
- Near Westside
- Beaver Lake
- Highland Forest
- Jamesville Beach
- Onondaga Lake Park

For more information on the Monday Mile, including route details and other tips, visit: http://lernercenter.syr.edu/healthy-monday-syracuse/programs/move-it-monday-monday-mile

Syracuse University
Maxwell School of Citizenship and Public Affairs
Lerner Center for Public Health Promotion

9. Arthritis Support Programs Handout: This handout helps HCPs decide between the Walk with Ease and Enhance® Fitness programs when referring their patients.



ARTHRITIS SUPPORT PROGRAMS

Which program is best for your patients with arthritis?

Walk With Ease

- Group walking program
- Appropriate for adults with or without arthritis
- Group education about arthritis and walking combined with stretching and strengthening exercises and self-paced group walks
- Meets for 30-60 minutes 3x per week for 6 weeks
- Proven to:
  - Decrease disability
  - Improve arthritis symptoms, self-efficacy,
  - Increase perceived control, balance, strength, and walking pace

Best for:

- Younger patients (age 45+) looking to become more physically active
- Those who can be on their feet for at least 10 minutes without feeling increased pain
- Patients looking for a shorter program

Enhance®Fitness

- Multi-component group exercise program
- Designed for older adults and adults with arthritis
- Combination of stretching, aerobics, strength training, and balance exercises
- Meets for 1-hour 3x per week for 16 weeks
- Exercises can be done seated or standing and can be adapted to all abilities
- Proven to:
  - Increase strength
  - Improve flexibility and balance
  - Boost activity levels and elevate mood

Best for:

- Older patients (age 60+) looking to increase their physical activity level
- Patients needing to complete some or all exercises in a seated position
- Patients interested in an ongoing fitness option

For more information, please contact
Susan Fox at **315-671-2241 ext. 190**
or **sfox@healtheconnections.org**

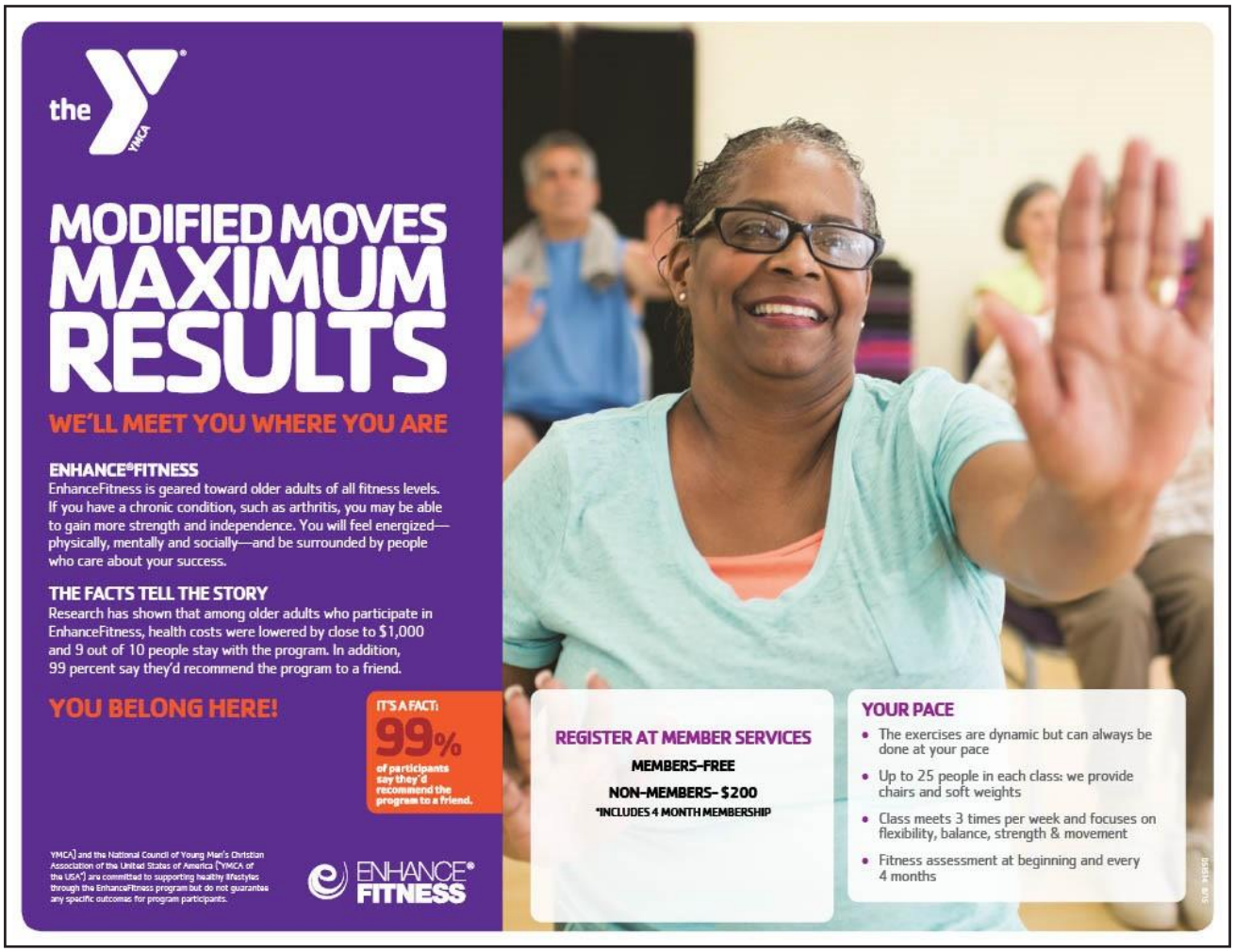
HealtheConnections®

Patient packet

The patient packet provides information on the added value of physical activity for arthritis, activity suggestions, and evidence-based intervention information.

1. CDC Vital Signs Infographic: This infographic describes the benefits of physical activity for those with arthritis.

2. Arthritis Support Programs Handout: This handout helps HCPs decide between the Walk with Ease and Enhance® Fitness programs when referring their patients.



3. Monday Mile Handout (as described above)

APPENDIX E

Intervention benefits evidence table

Scientific evidence surrounding evidence-based interventions is beneficial to have on hand during your HCP outreach efforts and can serve as an incentive for HCPs to refer patients to these interventions. Multiple study results demonstrate the effectiveness of evidence-based interventions, including the information below.

Intervention	Reference	Summary
Walk with Ease (WWE)	Callahan, L. F., Shreffler, J. H., Altpeter, M., Schoster, B., Hootman, J., Houenou, L. O., et al. Evaluation of group and self-directed formats of the Arthritis Foundation's Walk with Ease Program. *Arthritis Care & Research*. 2011; 63(8):1098–1107. Available at onlinelibrary.wiley.com/doi/10.1002/acr.20490/full.	A one-year observational study with 462 participants investigated performance outcomes of participants in instructor-led WWE groups compared to self-directed WWE. Participant outcomes increased from baseline to six weeks, showing improvements in fatigue, pain, balance, and strength. At one-year, self-directed participants showed greater improvement than instructor-led group participants. Overall, participants who completed WWE showed significantly positive changes in their physical health.
Chronic Disease Self-Management Program (CDSMP); Arthritis Self-Management Program (ASMP)	Brady, T. J., Murphy, L., O'Colmain, B. J., Beauchesne, D., Daniels, B., Greenberg, M., et al. A Meta-Analysis of Health Status, Health Behaviors, and Health Care Utilization Outcomes of the Chronic Disease Self Management Program. *Prev Chronic Dis* 2013;10:120112. DOI: dx.doi.org/10.5888/pcd10.120112.	A meta-analysis of the CDSMP and the ASMP looked at 24 studies analyzing the extent to which both interventions improved patients with arthritis' health behavior and status. Overall, both interventions had positive effects on self-efficacy and health behaviors, especially with long-term participation.
Fit & Strong!	Hughes, S. L., Seymour, R. B., Campbell, R. T., Huber, G., Desai, P., Chang, J. H. Fit and Strong!: Bolstering maintenance to physical activity among older adults with lower-extremity osteoarthritis. *American Journal of Health Behavior*, 2010; 34; 6: 750-763. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4034468/.	A study of an eight-week physical activity program, Fit & Strong!, (n=419) examined the effects of the program on participants at multiple stages (2, 6, 12, and 18 months of participation). Participants showed significant improvements, including an increase of physical activity maintenance and lower extremity strength, and a decrease in lower extremity pain and stiffness.

Intervention	Reference	Summary
Active Living Every Day (ALED)	Baruth, M., Wilcox, S., Wegley, S., Buchner, D. M., Ory, M. G., Phillips, A., et.al, Changes in physical functioning in the active living everyday program of the active for life initiative. *International Journal of Behavioral Medicine*. 2010; 18:199–208. Available at https://doi.org/10.1007/s12529-010-9108-7.	ALED participants had significant improvements in physical functioning over a four-year period. ALED programs have resulted in increased physical activity and physical functioning. ALED participants showed increases in physical functioning, regardless of their baseline impairment or BMI.
Arthritis Self-Management Toolkit	Goeppinger, J., Lorig, K. R., Ritter, P. L., Mutatkar, S., Villa, F., Gizlice, Z. Mail-delivered arthritis self-management tool kit: a randomized trial and longitudinal follow-up. *Arthritis and Rheumatism*. 2009; 15; 61(7):867–875. Available at onlinelibrary.wiley.com/doi/10.1002/art.24587/pdf.	This study examined the effectiveness of a mailed Arthritis Self-Management Toolkit in improving self-efficacy, health behavior, medical care utilization, self-rated health, and health status among middle-aged English and Spanish speakers. After four and nine months, all participants showed improvements in all areas – except medical care utilization and self-rated health.
People with Arthritis Can Exercise (PACE)	Callahan, L. F., Mielenz, T., Freburger, J., Shreffler, J., Hootman, J., Brady, T., et al. A randomized controlled trial of the People with Arthritis Can Exercise Program: symptoms, function, physical activity, and psycho-social outcomes. *Arthritis Care & Research*. 2008; 59:92–101. Available at onlinelibrary.wiley.com/doi/10.1002/art.23239/pdf.	An eight-week evaluation of the PACE program found that participants (n = 346) who completed 50% of the eight-week program experienced improved upper and lower extremity functioning, self-efficacy for arthritis management, and overall symptoms.
EnhanceFitness	Belza, B., Shumway-Cook, A., Phelan, E. A., Williams, B., Snyder, S. J., & LoGerfo, J. P. (2006). The effects of a community-based exercise program on function and health in older adults: The EnhanceFitness Program. Journal of Applied Gerontology, 25(4), 291-306. Available at: https://journals.sagepub.com/doi/abs/10.1177/0733464806290934.	This study examined the effectiveness of older adult participation in EnhanceFitness. 2,889 participants experienced improvements in performance at both four and eight months. Older adults can maintain and/or improve physical function through participation in EnhanceFitness.

APPENDIX F

Additional resources

Below are additional resources that may be useful during your program's efforts to increase HCP physical activity counseling and evidence-based intervention referrals.

- 1.2.3 Provider Outreach Guide
  The 1.2.3 Approach to Provider Outreach serves as a marketing guide and can help you plan and conduct HCP outreach.

- CDC Division of Nutrition, Physical Activity, and Obesity (DNPAO): Active People Healthy Nation tools
  The DNPAO Active People Healthy Nation tools describe strategies for increasing physical activity, include resources to promote physical activity, and provide shareable media and tools for promoting physical activity.

- Osteoarthritis Action Alliance (OAAA) Health Care Provider Toolkit
  The OAAA HCP Toolkit includes educational information and resources to help HCPs empower patients to engage in self-management strategies.

- OAAA Pharmacy Toolkit
  The OAAA Pharmacy Toolkit guides pharmacists in assuming an active role in detecting, preventing, and treating osteoarthritis.

- OAAA Weight Management Educational Webinar
  The OAAA Weight Management Educational Webinar assists HCPs in recognizing the connection between obesity and osteoarthritis toward better management of comorbid chronic conditions.

- American Medical Association (AMA) Physician Resource Guide to Patient Self-Management Support
  The AMA guide introduces patient self-management support concepts, resources, and tools to build on patient self-management information.

- US Bone and Joint Initiatives' Experts in Arthritis (EIA) program
  EIA is a free public education seminar that provides English and Spanish information and educational videos for patients with arthritis of all ages. EIA holds sessions around the country with expert support for patients with arthritis.

- National Recreation and Park Association (NRPA) Increasing Referrals to Community-Based Programs and Services: An Electronic Health Record Referral Process
  This guide describes implementation of EHR referral processes for HCPs to identify and refer patients with arthritis to evidence-based interventions offered through local parks and recreation.

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