

# Final Report- Osteoarthritis Prevention and Management in Primary Care (OACareTools)

## Osteoarthritis Action Alliance (OAAA)

**Project Period:** November 15, 2018-April 30, 2020

**Purpose:** The purpose of this project was to engage healthcare providers in primary care nationwide to recognize the signs and symptoms of osteoarthritis (OA) toward early diagnosis and provision of multimodal interventions known to delay the onset of pain and stiffness or to reduce their severity and promote quality of life. The OAAA set out to develop educational tools and resources for two principle groups:

- 1) primary care providers – to improve their ability to recognize, diagnose, and treat OA in the early stages of disease onset; and
- 2) their patients with OA – to equip providers with patient-facing tools and resources that will, in turn, empower patients to undertake self-management strategies to complement clinical care, such as physical activity, weight management, injury prevention, and education toward prolonged mobility and quality of life.



## Summary of services provided, accomplishments and work completed

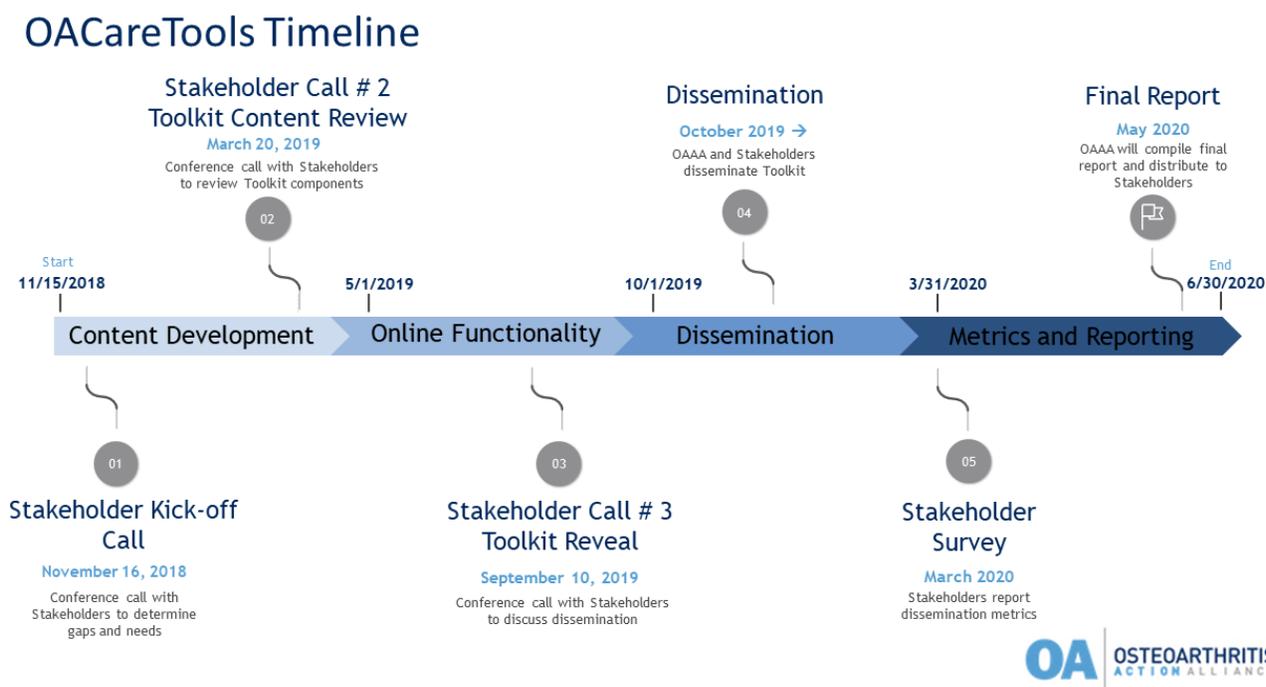
### I. OACareTools Process Overview & Project Timeline

The role of the primary care provider is integral in the care and management of patients with OA. Primary care providers often make the initial diagnosis of arthritis and are well-equipped to orchestrate effective management of OA. OACareTools takes into consideration a broad definition of “primary care provider,” to include family physicians, general internists, nurses and nurse practitioners, physician assistants, physical therapists/occupational therapists, sports medicine professionals, athletic trainers, and fitness professionals.

Relying on the partnership with our primary partner, United States Bone & Joint Initiative (USBJI), and the OAAA’s existing relationships with many national organizations, we convened a stakeholder panel of representatives from professional and patient advocacy groups to inform Toolkit development. In addition to USBJI, we had representation from the American Association of Nurse Practitioners (AANP), American Association of Physician Assistants (AAPA), American Council on Exercise (ACE), American Chronic Pain Association (ACPA), American College of Sports Medicine (ACSM), American Medical Society for Sports Medicine (AMSSM), American Physical Therapy Association (APTA), Association of Rheumatology Professionals (ARP), and National Athletic Trainers’ Association (NATA). The stakeholder panel also included additional experts: rheumatologists, physical therapists, OA researchers and 2 primary care physicians (internal medicine and family medicine).

By joining the stakeholder panel, these individuals agreed to help with content development and dissemination of the toolkit. Stakeholders were engaged for 18 months, as depicted on the project timeline in Figure 1, and they were offered a stipend for their contributions. In addition to providing feedback on 3 conference calls, stakeholders also made significant contributions to writing, editing, and formatting OACareTools content. Six patients with rheumatic disease were consulted during the project, providing valuable feedback on the 3 patient handouts that were developed.

Figure 1: OACareTools Project Timeline



On the first stakeholder kick-off conference call in November 2018, stakeholders answered 2 primary questions: What are the gaps in OA care that you would like to see covered in this toolkit? What types of resources for

providers and for patients would you want to have access to and what is the best format for these resources? Some key themes emerged about what content should be developed:

- Stakeholders thought it was important that the toolkit expressly describe osteoarthritis as a serious disease to underscore its significance in primary care.
- Providers wanted information about how to detect arthritis particularly early in the disease state.
- They asked for treatment guidelines and best practice interventions.
- They wanted to understand the role of different providers in osteoarthritis care.
- They wanted specific guidance on how to talk to patients about self-management techniques such as weight loss and increasing physical activity.
- And finally, they wanted information about and links to community resources.

Stakeholders also offered feedback on toolkit functionality, and themes around design and format were identified:

- Content should be laid out non-linearly and allow providers to select the material they review
- They suggested the content be multimodal in delivery and dissemination (printable, online/electronic, audio/visual).
- Toolkit should include resources that can be discussed with patients in the office or reviewed independently.
- Toolkit should include case studies.

Following the November 2018 kick-off conference call, OAAA staff spent the next 4 months outlining the identified toolkit sections, researching topics, and preparing drafts. As drafts were completed, OAAA staff solicited feedback and edits from small groups of stakeholders for each module. During the second stakeholder conference call in March 2019, stakeholders provided additional recommendations about content and format, notably suggesting the addition of “clinical take-home points” at the end of each module, including a chart describing the unique role of various providers in OA care, and providing links to provider/service locators. Discussion also covered the topic of dissemination, laying the groundwork for stakeholders and their respective organizations to consider how they might best reach their provider networks. After this call, OAAA staff continued to incorporate stakeholder feedback and further refine the module content. Over the summer of 2019, one-to-two additional rounds of edits and revisions were completed on each module through small groups of stakeholders (content overview can be found in Section II). A total of 22 stakeholders and partners reviewed and edited the toolkit content.

From April through August 2019, the OAAA engaged UNC Creative Services to create the layout and design of the online toolkit, create visually appealing graphics (see samples in Figure 2), and develop the downloadable PDF reports. Simultaneously, the OAAA contracted with UNC Digital Services to build out the OAAA website to include the toolkit; this involved building the toolkit landing page and module page template, creating several custom page features and navigation menus, and styling the 9 tiles on the toolkit landing page. OAAA staff later uploaded the content and styled the 9 module pages.

By the time of the third stakeholder conference call in September 2019, the online toolkit was largely complete and available for browsing. Stakeholders were given a week to review the online portion of the Toolkit and submit comments. The conversation on the September conference call focused on dissemination, with stakeholders committing to promote the toolkit to their respective provider groups and collect dissemination metrics over the next 6 months. Stakeholders also helped brainstorm vanity URLs, acronyms, and other memorable phrases that could be used in promotional efforts. “OACareTools” was ultimately selected as the shortened title, and the toolkit officially launched on October 1, 2019.

For the 6-month period following the launch of OACareTools, the OAAA, their member organizations, and stakeholders concentrated on dissemination. To help these groups with their promotion efforts, OAAA staff developed a [media kit](#), which was emailed to stakeholders and is also linked to at the bottom of the OACareTools homepage. The Media Kit includes:

- Ready-made Facebook, Instagram, and Twitter graphics
- Sample social media messages
- Sample newsletter entry
- Full-page flyers
- Power Point slides describing the toolkit (stakeholders requested this resource to use at professional conferences on screens between sessions)
- Metrics collection spreadsheet

During the month of April 2020, stakeholders and other organizations that helped promote the toolkit submitted their dissemination reports to OAAA; OAAA staff then compiled these efforts and analyzed projected reach (Dissemination results can be found in Section III).

## II. OACareTools Content & Design Overview

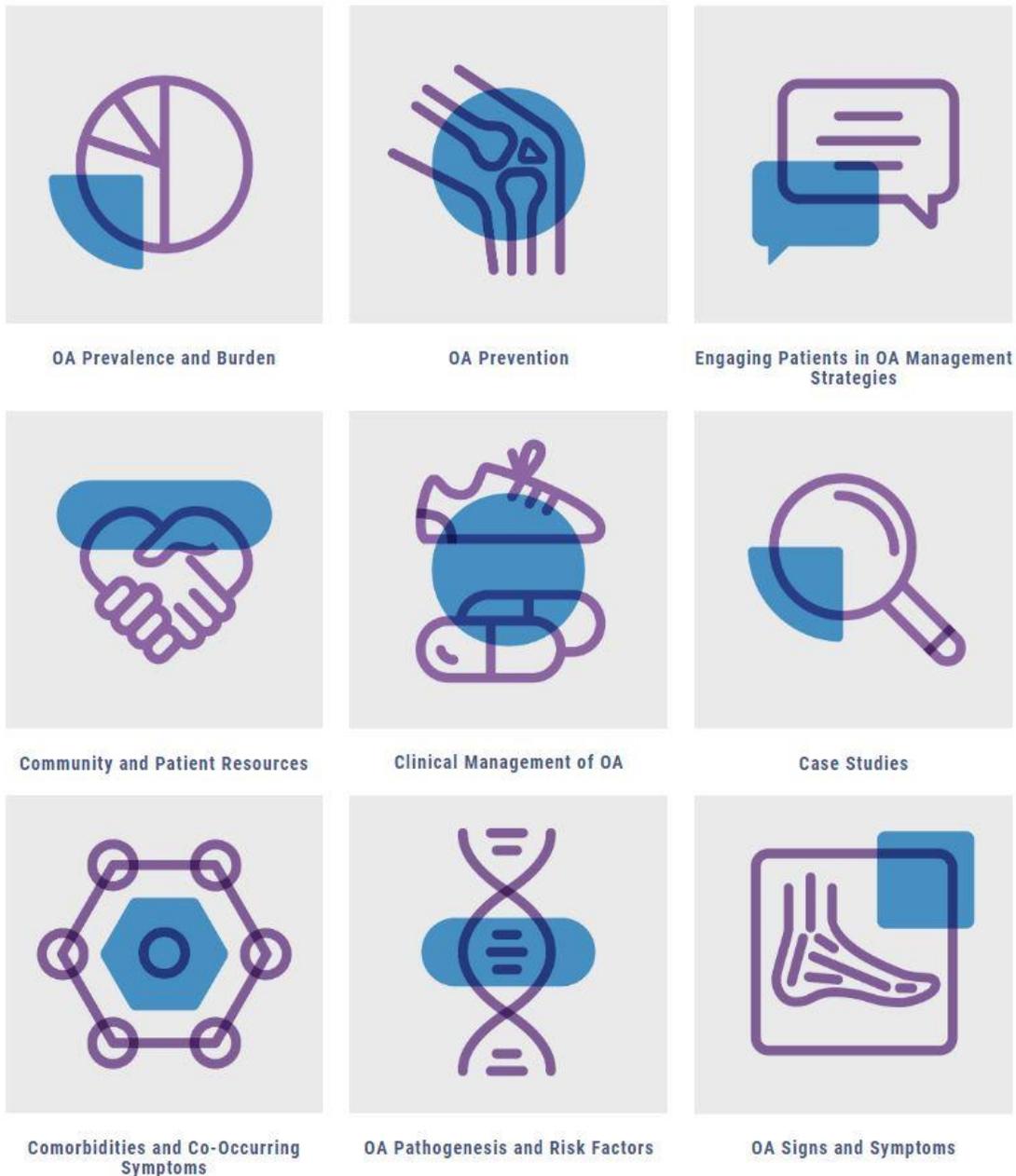
OACareTools includes a variety of educational resources that can be used for multiple purposes and by a variety of audiences. Based on stakeholders' feedback that providers would be coming to the toolkit with different backgrounds and experience with managing OA, OACareTools is divided into 9 self-paced online modules, which are independently designed so that providers can engage with the content as their own interests and knowledge gaps guide them. The modules are laid out on the toolkit landing page ([www.oacaretools.org](http://www.oacaretools.org)) as individual tiles and do not need to be viewed consecutively or in any particular order (Figure 2).

All of the content for a particular module is available on a single webpage with in-module navigation (Figure 3). The modules contain links to other relevant modules and to outside resources as well as to downloadable patient resources. Viewers also have the option to download a print-friendly PDF of each module, which includes identical information to that on the website (see example PDF module at the end of this report: Engaging Patients in OA Management Strategies). This feature was added at the recommendation of stakeholders, who suggested that many clinicians would be interested in consuming the material offline and/or being able to print it to later reference or share with colleagues.

Examples of specific materials in OACareTools include:

- **Education modules for providers—**
  - OA Prevalence and Burden: Not only does this material cover current statistics about the prevalence of OA, but it also sheds light on the personal, societal, and economic costs of OA, making the case for OA as a serious disease. Stakeholders recommended that the toolkit underscore the prevalence and burden of OA, which may often be overshadowed by other chronic conditions.
  - Comorbidities and Co-Occurring Symptoms: Stakeholders felt it was important to describe OA within the context of other chronic conditions both because people with OA often present with more than one comorbidity and because of OA's impact on a person's ability to engage in physical activity, which is a key treatment for diabetes, high blood pressure and heart disease. For example, because of joint pain, patients with OA may not engage in physical activity, and inactivity makes it harder to manage obesity, diabetes and heart disease. All of this can result in a vicious cycle where osteoarthritis and its related pain and disability can contribute to obesity and worsening of other conditions.
  - OA Pathogenesis and Risk Factors: This module dispels the myth that OA is simply caused by "wear and tear" and instead is a complex disorder that includes a variety of risk factors—both modifiable and non-modifiable. It is important for providers to recognize these risk factors in their patients to help reduce disease progression and burden and even prevent onset.

Figure 2: OACareTools Landing Page



- OA Signs and Symptoms: OA can be diagnosed and characterized through evaluation of patient symptoms and history, physical examination, and imaging. Understanding and detecting the signs and symptoms of OA, particularly early, can better equip providers and patients in selecting the most appropriate management pathway for both the OA symptoms and other comorbid conditions.
- **Clinical guidance for providers**— Founded in evidence-based management guidelines, namely the “2019 American College of Rheumatology/Arthritis Foundation Guideline for the Management of Osteoarthritis of the Hand, Hip, and Knee” (Kolasinski, et al., 2020), the clinical management recommendations are divided into two sections: nonpharmacologic management strategies and pharmacologic management strategies. The nonpharmacologic strategies emphasize patient self-management activities like education, physical

activity, and weight management. Resources include descriptions of and links to arthritis-appropriate, evidence-based interventions, downloadable information to assist with weight management, options for being active at home, and more.

- **Referral pathway**— Compiled from the expertise of our stakeholders, this table of the common specialties involved in the care of patients with OA describes the unique attributes and contributions of the various specialties.
- **Arthritis prevention**— Devoted exclusively to OA prevention, this module explains the rationale for arthritis prevention, focusing on weight management and injury prevention within the context of primary prevention (intervening before health effects occur) and secondary prevention (intervening in early stages of a disease, before the onset of symptoms).
- **Case studies**—Developed by clinicians, these 4 case studies highlight the take-home points of OACareTools and allow providers to test their knowledge of OA in the context of real-world patient scenarios, which span the content covered in the other eight modules.
- **Engaging patients in OA management strategies**— Because the most effective management of OA depends on patient behaviors like weight loss, increasing physical activity, and participating in self-management programs, this module equips providers with 4 frameworks for counseling patients with OA about behavior change.
- **Patient handouts**—Accessible from multiple locations within OACareTools, these 3 custom handouts can be downloaded and given to patients: 1) Prevention & Self-Management Strategies, 2) Overview of Osteoarthritis, and 3) Community Resources for People with Osteoarthritis.

**Figure 3: Example of Module Page in OACareTools**

Home / OA Modules / Engaging Patients in OA Management Strategies

**ENGAGING PATIENTS IN OA MANAGEMENT STRATEGIES**

Motivational Interviewing

Brief Action Planning

Physical Activity as a Vital Sign

5 As

Clinical Take-Home Points

**ALL MODULES**

Toolkit Homepage

OA Prevalence and Burden

OA Pathogenesis and Risk Factors

OA Signs and Symptoms

Comorbidities and Co-Occurring Symptoms

Clinical Management of OA

Engaging Patients in OA Management Strategies

Community and Patient Resources

OA Prevention

Case Studies

## Osteoarthritis Prevention & Management in Primary Care

# ENGAGING PATIENTS IN OA MANAGEMENT STRATEGIES

The most effective management of OA depends on patient behaviors like weight loss, increasing physical activity, and participating in self-management programs. This module describes 4 tools providers can use when counseling patients with OA about behavior change.

[DOWNLOAD PDF](#)

Because every patient with osteoarthritis (OA) is different, you will need to tailor your recommendations often using a multi-modal and individualized approach to address symptoms. The most effective OA treatments depend on patient behaviors like weight loss, increasing physical activity, and participating in self-management programs. Changing long-established behaviors is hard. Most Americans, even those without arthritis, would benefit from changes in their health habits. For example, fewer than one in four Americans meet both the aerobic and muscle-strengthening physical activity guidelines,<sup>1</sup> and more than 70% of adults are overweight or obese.<sup>2</sup>

Primary care clinicians are in a unique position to help patients with OA make behavior changes that will benefit not only their OA symptoms but other chronic conditions as well.

Physical activity is effective for decreasing arthritis pain, increasing physical function, and managing chronic comorbidities. Participation in evidence-based physical activity programs may also reduce healthcare costs nearly \$1,000 per person annually.<sup>4,5</sup> Nevertheless, 40% of adults do not receive counseling about physical activity.<sup>6</sup> Weight loss counseling is a key component of successful weight loss among patients. Adults with arthritis and overweight or obesity who receive provider counseling about weight loss are four times more likely to attempt to lose weight; yet, fewer than half of those adults are actually receiving such counseling.<sup>7</sup>

We will describe 4 tools you can use when counseling patients with OA about behavior change: [Motivational Interviewing](#), [Brief Action Planning](#), [Physical Activity as a Vital Sign](#), and [5 As](#). These approaches are not necessarily mutually exclusive.

## Motivational Interviewing

Motivational interviewing was first developed for use in addiction counseling. It has since been shown to be effective for chronic

### III. Dissemination Results

In addition to asking stakeholders to promote the toolkit through their/their organization's networks, they were also asked to measure their organization's reach as much as possible. Stakeholders were provided with a metrics collection spreadsheet, which allowed them to record metrics such as social media impressions and engagements, newsletter opens and links, webpage views, number of conference attendees, etc. The OAAA also collected this information for our own outreach efforts.

Tables 1 and 2 describe the types of dissemination efforts and the results from these activities. Across all organizations that promoted OACareTools to their networks, the most common type of promotional activity was social media posts (83) followed by newsletters (9) and then website posts (5). Other types of efforts included an Editor's Letter in the November 2019 edition of *Current Sports Medicine Reports*, live webinar presentation by OAAA staff (recording available on [OAAA YouTube channel](#)), and flyers in participants' welcome packets at the annual American College of Lifestyle Medicine conference (Oct. 27-30, 2019; Orlando, FL). Collectively, these activities reached a potential audience of over 367,000 people (Table 3).

All of the promotional materials for the toolkit directed providers to the OACareTools landing page ([www.oacaretools.org](http://www.oacaretools.org)). The OAAA website analytics are detailed in Table 4; a few points of interest are noted below:

- In total, there were almost 12,000 pageviews and almost 9,000 unique pageviews across all toolkit pages.
- After the landing page, the top 4 most popular pages (by both pageviews and unique pageviews) were Clinical Management of OA, OA Prevalence & Burden, OA Prevention, and Case Studies.
- Case Studies had the longest average length of stay on the page (3:42), followed by OA Pathogenesis & Risk Factors (3:34) and Nonpharmacologic Management of OA at (3:29).
- Some people accessed OACareTools through the process of publicly searching for OA information on Google:
  - In a Google search for "case studies about OA" or "OA case studies," the OACareTools Case Studies module comes up as the 1<sup>st</sup> result (as of 4/30/2020).
  - Over 30 clicks to OACareTools from Google resulted from a search for some variation of "osteoarthritis case study."
  - Other search terms from Google that resulted in people clicking on OACareTools included "osteoarthritis prevalence," "comorbidities of osteoarthritis," and "pathogenesis of osteoarthritis."
- The date with the most collective pageviews in OACareTools (617) was October 16, 2019. Several organizations sent newsletters or posted on social media around this time; however, there is a good chance this boost in pageviews resulted from ATOAC's (Athletic Trainers' Osteoarthritis Consortium) posts on Twitter & Facebook about OACareTools on October 16. The date with the second most pageviews (237) was February 4, 2020, likely correlated to OAAA's email announcing the OACareTools webinar.
- From October 1-March 31, pageviews for OACareTools (all pages) accounted for more than 30% of the traffic to OAAA's website.

**Table 1: OACareTools Social Media Metrics**

Organization	Number of posts	Potential Audience	Impressions	Engagements
<b>Facebook</b>				
OAAA	20	536	1904	105
AANP	2	94,000	7592	22
APTA	1	99,561	1904	22
ATOAC	3	661	*	13
USBJI	1	2,268	126	*
<b>Facebook Total</b>	<b>27</b>	<b>197,026</b>	<b>9,622</b>	<b>162</b>
<b>Twitter</b>				
OAAA	26	1,177	2,194	46
AANP	2	22,000	1,934	49
ACE	1	933	168	1
APTA	1	65,500	*	36
ATOAC	3	661	*	24
Bioventus	1	1,606	*	3
Healthy Living	1	243	*	*
Individuals (3)	3	1,175	*	36
PCPCC	1	4,758	691	*
USBJI	1	1,000	385	*
<b>Twitter Total</b>	<b>40</b>	<b>9,9053</b>	<b>5,372</b>	<b>195</b>
<b>Instagram</b>				
OAAA	8	880	*	125
AANP	3	7,400	*	179
<b>Total</b>	<b>11</b>	<b>8,280</b>	<b>*</b>	<b>304</b>
<b>Other Social Media</b>				
OAAA Pinterest	4	214	20	*
OAAA LinkedIn	1	952	1520	*
<b>Other Total</b>	<b>5</b>	<b>1,166</b>	<b>1,540</b>	
<b>Social Media Total</b>	<b>83</b>	<b>304,359</b>	<b>16,534</b>	<b>661</b>
OAAA= Osteoarthritis Action Alliance, AANP= American Association of Nurse Practitioners, ACE= American Council on Exercise, APTA= American Physical Therapy Association, ATOAC= Athletic Trainers’ Osteoarthritis Consortium, PCPCC= Person-Centered Primary Care Collaborative, USBJI= United States Bone & Joint Initiative *not collected				

**Table 2: Analytics for Other Dissemination Activities**

<b>Organization &amp; Type of Activity</b>				
<b>Newsletter</b>	<b># of Newsletters</b>	<b># of Subscribers</b>	<b># of Opens</b>	<b># of Clicks</b>
<b>OAAA</b>	<b>3</b>	<b>3,792</b>	<b>475</b>	<b>77</b>
AMSSM	1	4,254	2,007	85
APTA	1	95,000	*	*
NATA	1	46,000	12,788	142
USBJI	1	7,015	1,840	1,464
UNC School of Medicine	1	12,000	*	*
UNC Department of Medicine	1	1,400	*	*
<b>Newsletter Total</b>	<b>9</b>	<b>169,461</b>	<b>17,110</b>	<b>1,768</b>
<b>Webinar</b>	<b># of Webinars</b>	<b>Participants</b>	<b>YouTube views</b>	
<b>OAAA</b>	<b>1</b>	<b>38</b>	<b>20</b>	
<b>Website post</b>	<b>Number of posts</b>	<b># of Views</b>		
<b>OAAA</b>	<b>1</b>	<b>61</b>		
APTA	1	708		
NATA	1	*		
PCPCC	1	10		
USBJI	1	*		
<b>Website Total</b>	<b>5</b>	<b>779</b>		
<b>Other</b>	<b>Audience</b>			
ACLM conference booth and participant handouts	1,500			
Editor’s Letter- Current Sports Medicine Reports (ACSM)	3,260			
<b>Other Total</b>	<b>4,760</b>			
OAAA= Osteoarthritis Action Alliance, ACLM= American College of Lifestyle Medicine, ACSM= American College of Sports Medicine, AMSSM= American Medical Society for Sports Medicine, APTA= American Physical Therapy Association, NATA= National Athletic Trainers’ Association, PCPCC= Person-Centered Primary Care Collaborative, USBJI= United States Bone & Joint Initiative *not collected				

**Table 3: Potential Total Audience by Organization**

Organization	Potential Audience
OAAA	3,642
AANP	94,000
ACE	90,000
ACLM	1,500
ACSM	3,260
AMSSM	4,254
APTA	95,000
ATOAC	661
Bioventus	1,606
Healthy Living	243
Individuals (3)	2027
NATA	46,000
PCPCC	4,758
UNC School/Department of Medicine	13,400
USBJI	7,015
<b>TOTAL</b>	<b>367,366</b>

OAAA= Osteoarthritis Action Alliance, AANP= American Association of Nurse Practitioners, ACE= American Council on Exercise, ACLM= American College of Lifestyle Medicine, ACSM= American College of Sports Medicine, AMSSM= American Medical Society for Sports Medicine, APTA= American Physical Therapy Association, ATOAC= Athletic Trainers’ Osteoarthritis Consortium, NATA= National Athletic Trainers’ Association, PCPCC= Person-Centered Primary Care Collaborative, USBJI= United States Bone & Joint Initiative

**Table 4: OACareTools Website Analytics**

OACareTools Page	Total Pageviews*	Unique Pageviews*	Time spent on page
Homepage	5,350	3,683	1:13
Clinical Management of OA	964	777	1:37
OA Prevalence & Burden	957	713	3:28
OA Prevention	817	644	2:36
Case Studies	776	670	3:42
Community & Patient Resources	692	394	2:04
Engaging Patients in OA Management Strategies	686	522	2:51
Comorbidities & Co-Occurring Symptoms	610	541	2:58
OA Signs & Symptoms	439	364	3:04
OA Pathogenesis & Risk Factors	402	313	3:34
Nonpharmacologic Management of OA	199	134	3:29
Pharmacologic Management of OA	90	67	1:50
<b>Total</b>	<b>11,982</b>	<b>8,822</b>	<b>2:42 (average)</b>

\* Pageview= total number of views of a page; Unique pageview= user sessions per page

## Financial Status

A detailed Budget File is being submitted along with this report.

## Next Steps

The Pfizer Independent Grant for Learning & Change afforded the OAAA an opportunity to bolster our infrastructure as a leading national resource center for OA through the development of OACareTools, not only in the creation of the resource, itself, but also in the partnerships it helped the OAAA forge. Several of the stakeholder organizations involved in OACareTools were already OAAA members and/or partners (ex. USBJI, AANP, ACE, ACPA, AMSSM, APTA, NATA), but others were new to the OAAA (AAPA, PCPCC). These new and existing partnerships strengthen the OAAA's ability to continue in our mission of elevating OA as a national health priority and will serve us in the future as we develop and disseminate new materials for healthcare providers, community organizations, and individuals with OA.

OACareTools is a valuable tool and will continue to be maintained and updated as a living resource on the OAAA website. Many of our stakeholders remarked about the versatility of the toolkit, suggesting creative ways OACareTools might be used in a variety of settings, such as clinical training programs, supplemental learning opportunities for early career professionals, and Grand Rounds or other departmental presentations. The OAAA will continue to work with stakeholders and partner organizations to identify and develop new uses and resources for the toolkit, including:

- Companion pieces for providers, such as Power Point presentation/s and discussion guide/s
- Motion graphic and interview-style videos for healthcare providers on topics covered in OACareTools
- Additional materials for individuals with OA

OACareTools is today and will continue to be an innovative resource, and it positions the OAAA as a trusted and centralized resource center for both healthcare providers and patients.



# Engaging Patients in OA Management Strategies

Osteoarthritis Prevention and  
Management in Primary Care

# Engaging Patients in OA Management Strategies

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Primary care clinicians are in a unique position to help patients with OA make behavior changes that will benefit not only their OA symptoms but other chronic conditions as well. Physical activity is effective for decreasing arthritis pain, increasing physical function, and managing chronic comorbidities. Participation in evidence-based physical activity programs may also reduce healthcare costs nearly \$1,000 per person annually.<sup>4,5</sup> Nevertheless, 40% of adults do not receive counseling about physical activity.<sup>6</sup> Weight loss counseling is a key component of successful weight loss among patients. Adults with arthritis and overweight or obesity who receive provider counseling about weight loss are four times more likely to attempt to lose weight;

yet, fewer than half of those adults are actually receiving such counseling.<sup>7</sup>

We will describe 4 tools you can use when counseling patients with OA about behavior change: **Motivational Interviewing, Brief Action Planning, Physical Activity as a Vital Sign, and 5 As.** These approaches are not necessarily mutually exclusive.

## MOTIVATIONAL INTERVIEWING

Motivational interviewing was first developed for use in addiction counseling. It has since been shown to be effective for chronic disease management and behavior change in multiple diseases.<sup>8</sup> In the IMPAACT trial (Improving Motivation for Physical Activity in Arthritis Clinical Trial), Gilbert et al found that patients with knee OA who received MI related to physical activity in addition to brief physician counseling experienced improved self-reported function and a small improvement in pain.<sup>9</sup>

Providers can use MI to help guide patients—particularly those who feel stuck or are even ambivalent about changing their habits—through the process of setting and making health behavior goals, such as increasing their physical activity level, changing their diet, or participating in a self-management program.

Embracing the “spirit” of MI, providers assess patients’ readiness to change and call on patients’ personal motivations, strengths, and experiences. The “Spirit of MI” encourages providers to have conversations with patients that:

- Are “Collaborative”: Providers work with patients as partners rather than directing patients or telling them what they should do. Collaboration is fostered through rapport building.
- Are “Evocative”: Using open-ended questions and reflective listening, providers evoke from the patient what their goals, motivations, and strengths are, drawing out and reflecting back the patient’s own reasons and approaches for behavior change.
- “Honor the patient’s autonomy”: While providers may want patients to make healthy behavior changes, ultimately, it is up to the patient whether or not to act. Empowering the patient to make this decision can actually help enable the behavior change.<sup>8</sup>

**TABLE 1**

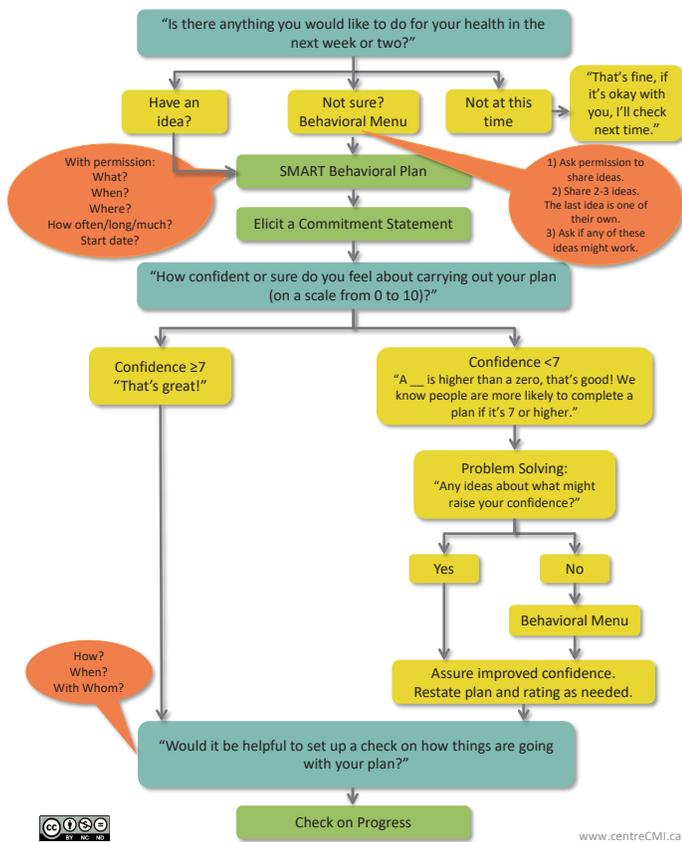
**Standard Approach v. Motivational Interviewing Example<sup>10</sup>**

STANDARD APPROACH	MOTIVATIONAL INTERVIEWING	COMMENTS
As your healthcare professional, I really think that you should exercise on a daily basis.	What are your thoughts about exercising?	Focus is on client’s concerns.
There are all kinds of ways you could exercise. You could walk, ride a bike, swim or go to a gym.	What kinds of activities do you enjoy?	Egalitarian partnership.
You say that you don’t have time to exercise, but exercise is so important for your joints, you should make time for it.	You say that time is a barrier for you to exercise, what ideas do you have to fit physical activity into your daily routine?	Focus is on client’s concerns. Match intervention to client’s level of motivation.
I’ve written some goals for you about increasing your exercise.	Tell me what you would like to work on for the next three months.	Emphasis is on client personal choice. Goals are set collaboratively.
You say you want to be more active, yet you don’t do the home exercise program I gave you. This tells me that you just are not interested.	Your ambivalence about exercise is normal. Tell me how you would like to move forward.	Ambivalence is a normal part of the change process.

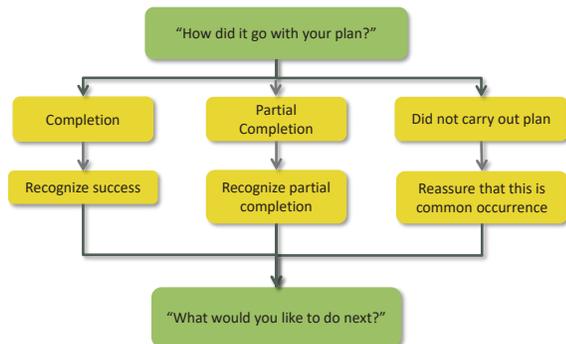
Ehrlich-Jones, L., Mallinson, T., Fischer, H., Bateman, J., Semanik, P. A., Spring, B., ... Chang, R. W. (2010). Increasing physical activity in patients with arthritis: a tailored health promotion program. *Chronic Illness*, 6(4), 272–281. [www.doi.org/10.1177/1742395309351243](http://www.doi.org/10.1177/1742395309351243) Reprinted by Permission of SAGE Publications, Ltd.

You can start to use some key MI questions and concepts in clinic visits right away even while you are working on perfecting your skills! For a thorough explanation and demonstration of MI in a primary care setting, including a sample provider-patient conversation about weight loss, refer to this article<sup>11</sup>: Kathleen G. Reims, MD, FAAFP, and Denise Ernst, PhD “Using Motivational Interviewing to Promote Healthy Weight,” *Fam Pract Manag.* 2016 Sep–Oct;23(5):32–38. Other resources on MI can be found at the end of this module.

## Brief Action Planning Flow Chart



## Checking on the Brief Action Plan



Developed by Steven Cole, Damara Gutnick, Connie Davis, and Kathy Reims

## BRIEF ACTION PLANNING (BAP)

Another model that some clinicians find helpful is Brief Action Planning (BAP). BAP is founded in the concepts of motivational interviewing with particular emphasis on the "spirit of MI" and is easily implemented in primary care settings. Gutnick et al conclude through their research that "BAP is a useful self-management support technique for busy medical practices to promote health behavior change and build patient self-efficacy for improved long-term clinical outcomes in chronic illness care and disease prevention" (p 17).<sup>12</sup>

In BAP, patients are assisted in developing an action plan to achieve a specific health behavior change that they feel is manageable and realistic. BAP is highly structured, using a combination of specific questions and provider-led discussion (called "skills"), all the while staying true to the spirit of MI. See figure at left.<sup>13</sup>

BAP can be implemented using different combinations of practice staff in order to make good use of clinic and provider time. For example, a provider may start the conversation during the patient visit, inquiring about the patient's health goals; if the patient has a health goal in mind, the provider may refer the patient to another practice staff member such as a medical assistant or nurse who has been trained in BAP, to complete the session. The patient can also be referred to Physical Therapy or a weight management clinic. Another approach is for a frontline staff person such as medical assistant to begin the process with the initial question to the patient, allowing the provider to continue the goal-setting part of the conversation with the patient during their visit.<sup>12</sup>

More information about training opportunities and resources, including videos and example conversations can be found at the Centre for Collaboration, Motivation, & Innovation website.

Counseling models that address specific behaviors within the OA management framework (physical activity and weight management) include Physical Activity as a Vital Sign and the Obesity Canada's 5 As of Obesity Management.

## PHYSICAL ACTIVITY AS A VITAL SIGN

For patients with OA, physical activity is particularly important, as it can help improve pain, stiffness, and physical function.<sup>14</sup> Patients with OA also often have other chronic diseases like obesity, hypertension, and diabetes. Refer to the Comorbidities and Co-Occurring Symptoms module for more information. When they engage in physical activity, patients can improve not

**Exercise is Medicine®** is a global initiative, started in partnership between the American Medical Association and the American College of Sports Medicine, to advance the use of exercise as a prescription for both disease prevention and health promotion. To help facilitate the widespread practice of prescribing physical activity as a regular course of treatment, Exercise is Medicine® has developed a comprehensive guide for physicians and other health care providers. Their Health Care Providers Action Guide incorporates the use of the PAVS questionnaire with motivational interviewing techniques and referrals to community-based physical activity programs.<sup>3</sup> This free guide and accompanying patient-facing materials, such as "Being Active with Osteoarthritis," can be found on the Exercise is Medicine® website.

only their arthritis symptoms but can also make headway on these other chronic conditions. Further, the American College of Rheumatology guidelines for the management of hip and knee OA strongly recommends physical activity as frontline nonpharmacologic management.<sup>15</sup> Thus, assessing patients' current level of physical activity is vital when treating patients with OA, just as measuring blood pressure at each clinic visit is vital to the treatment of hypertension.

There are several initiatives and health systems that encourage providers to assess patients' current physical activity level and prescribe physical activity for the prevention and management

## ASSESSING PHYSICAL ACTIVITY IN PATIENTS

### EVS: Exercise Vital Sign<sup>16</sup>

Used in the Kaiser Permanente Southern California health system, providers record patients' responses in the electronic health record.

Consists of two questions

1. On average how many days per week do you engage in moderate to strenuous exercise (like a brisk walk)?"
2. On average, how many minutes per day do you engage in exercise at this level?

*Scoring: Multiply the responses to get the number minutes per week of exercise and compare this to the PAGs (>150 minutes per week).*

of chronic diseases.<sup>3,14</sup> There is not currently a universal approach to this idea of "Physical Activity as a Vital Sign"; however, by using one of several Physical Activity as a Vital Sign measures, providers can quickly assess patients' current level of physical activity, and in some cases, even assess patients' readiness and motivation to become more physically active.<sup>14</sup> Examples of physical activity assessment tools include:

- Exercise Vital Sign (EVS)<sup>16</sup>
- Physical Activity Vital Sign (PAVS)<sup>17</sup>
- Speedy Nutrition and Physical Activity Assessment (SNAP)<sup>18</sup>
- General Practice Physical Activity Questionnaire (GPPAQ)<sup>19</sup>
- Stanford Brief Activity Survey (SBAS)<sup>20</sup>

Regardless of which measure is used, Physical Activity as a Vital Sign can serve as a conversation starter with the patient. After hearing the patient's answer about current physical activity level, it would be important for the provider to subsequently engage the patient in a conversation about increasing their physical activity level (as appropriate). This could then lead to a referral to another provider (ex. Physical Therapist) or community-based physical activity intervention or perhaps to future counseling sessions to help the patients develop a physical activity plan.

## 5 As

According to the CDC almost one-quarter of people who are overweight and 30% of people who are obese have arthritis.<sup>4</sup> Addressing OA symptoms through weight loss, particularly if a patient's weight is contributing negatively to other health conditions, could be particularly effective. Weight loss counseling is a key component of successful weight loss among patients. As noted previously, provider counseling is an underused but effective strategy for encouraging adults with arthritis and overweight or obesity to attempt to lose weight.<sup>7</sup>

The 5 As model was developed for use in smoking and tobacco cessation counseling.<sup>21-23</sup> It has since been validated in other areas of behavior change, particularly within the field of weight loss and obesity management.<sup>22,23</sup> Obesity Canada has developed an extensive toolkit on the use of 5As of Obesity Management in primary care settings. According to Dr. Arya M. Sharma, scientific director for CON-RCO, (Canadian Obesity Network) "Weight is a sensitive issue, and so conversations about weight must be sensitive and non-judgmental. The 5As tool is based on our understanding that obesity must be managed as a chronic condition, much like diabetes or hypertension, and that treatment goals as well as end results will be different for each patient. But, it all starts with a respectful conversation."<sup>24</sup>

**"Weight is a sensitive issue, and so conversations about weight must be sensitive and non-judgmental. The 5As tool is based on our understanding that obesity must be managed as a chronic condition, much like diabetes or hypertension, and that treatment goals as well as end results will be different for each patient. But, it all starts with a respectful conversation."**

**DR. ARYA M. SHARMA**

The primary steps of the 5 As are outlined at right. The 5As model can be used in the context of most behavior changes; this example is related to weight loss counseling.

## 5 As of Obesity Management<sup>22,24</sup>

### ASK

- Would it be OK if we talk about your weight?
- Do you have any concerns or questions about your weight?
- On a scale of 0 to 10, how important is it for you to lose weight?
- On a scale of 0 to 10, how confident are you that you can lose weight?

### ASSESS

- Determine patient's stage and level of obesity
- Review patient's history and records to help determine underlying causes
- Ask patient questions about diet, sleep, physical activity habits, and emotional health (depression, addiction, trauma, etc)

### ADVISE

- Discuss with patient the risks of excess weight
- Discuss with patient the benefits of losing weight
- Offer options of weight loss strategies (increased physical activity, nutrition counseling, food journal, sleep hygiene, surgery, etc)

### AGREE

- Help patient set realistic goals based on patient's preferences and abilities
- Using SMART goals, help patient develop a weight loss plan

### ASSIST

- Help patient think through potential challenges and personal supports
- Refer patient to other professionals (mental health, dietitian, PT, etc)
- Refer patient to community-based health programs
- Make a plan to follow up with patient at a specific time point



## Clinical Take-Home Points

- Patients who receive counseling from their providers about weight loss and physical activity are more likely to engage in and have positive outcomes from these behavior changes.
- Four tools you can use when counseling patients with OA about lifestyle changes include: Motivational Interviewing, Brief Action Planning, Physical Activity as a Vital sign, and 5 As.

## ADDITIONAL RESOURCES FOR PROVIDERS

### Motivational Interviewing

OAAA Lunch & Learn recorded presentation—“The patient will see you Now: Managing OA as a chronic disease” (Kim Bennell, PhD)  
[www.youtube.com/watch?v=IFFd5JBsutU&index=14&t=0s&list=PL-37d2MOjmtplMtgt7rv1TzXE2KTqAX0F](http://www.youtube.com/watch?v=IFFd5JBsutU&index=14&t=0s&list=PL-37d2MOjmtplMtgt7rv1TzXE2KTqAX0F)

OAAA Lunch & Learn recorded presentation- “Practical Applications for Motivational Interviewing” (Linda Ehrlich Jones, PhD, RN)  
[www.youtube.com/watch?v=Trfli9UCqRU&index=3&list=PL-37d2MOjmtplMtgt7rv1TzXE2KTqAX0F&t=0s](http://www.youtube.com/watch?v=Trfli9UCqRU&index=3&list=PL-37d2MOjmtplMtgt7rv1TzXE2KTqAX0F&t=0s)

Motivational Interviewing- Enhancing Motivation for Change in Substance Abuse Treatment (Chapter 3- Motivational Interviewing as a Counseling Style): [www.ncbi.nlm.nih.gov/books/NBK64964/](http://www.ncbi.nlm.nih.gov/books/NBK64964/)

Kathleen G. Reims, MD, FAAFP, and Denise Ernst, PhD “Using Motivational Interviewing to Promote Healthy Weight,” *Fam Pract Manag.* 2016 Sep-Oct;23(5):32-38. Available at [www.aafp.org/fpm/2016/0900/p32.html](http://www.aafp.org/fpm/2016/0900/p32.html)

### Brief Action Planning

Gutnick D, Reims K, Davis C, Gainforth H, Jay M, Cole S. Brief Action Planning to Facilitate Behavior Change and Support Patient Self-Management. *Journal of Clinical Outcomes Management.* 2014;21(1):17-29.

Brief Action Planning Guide: [centrecmi.ca/wp-content/uploads/2018/11/BAP\\_guide\\_2016-08-08.pdf](http://centrecmi.ca/wp-content/uploads/2018/11/BAP_guide_2016-08-08.pdf)

YouTube video- basics of BAP: [www.youtube.com/watch?v=w0n-f6qyG54](http://www.youtube.com/watch?v=w0n-f6qyG54)

YouTube video- sample BAP conversation with patient who has Rheumatoid Arthritis: [www.youtube.com/watch?v=c4cXGW2L1qc](http://www.youtube.com/watch?v=c4cXGW2L1qc)

YouTube video- sample BAP conversation with patient who is ambivalent: [www.youtube.com/watch?v=0z65EppMfHk](http://www.youtube.com/watch?v=0z65EppMfHk)

Centre for Collaboration Motivation & Innovation website: [centrecmi.ca/brief-action-planning](http://centrecmi.ca/brief-action-planning)

### Physical Activity as a Vital Sign

Exercise is Medicine®: Health Care Providers Action Guide [www.exerciseismedicine.org/support\\_page.php/health-care-providers](http://www.exerciseismedicine.org/support_page.php/health-care-providers)

OAAA Lunch & Learn recorded presentation- “Exercise is Medicine - The Importance of Connecting Fitness with Healthcare” (Robert Sallis, MD, FAAFP, FACSM)

[www.youtube.com/watch?v=pp8lkaHiF8A&index=3&list=PL-37d2MOjmtqd8ppkQsRQbMRowDV-Hh4K&t=1s&frags=pl%2Cwn](http://www.youtube.com/watch?v=pp8lkaHiF8A&index=3&list=PL-37d2MOjmtqd8ppkQsRQbMRowDV-Hh4K&t=1s&frags=pl%2Cwn)

### 5 As

Obesity Canada, including a Practitioner Guide: [obesitycanada.ca/resources/5as/](http://obesitycanada.ca/resources/5as/)



## **PATIENT RESOURCES**

The American Chronic Pain Association offers many resources and tools for patients to help them track their health and behaviors and talk productively with their healthcare providers such as [www.theacpa.org/pain-management-tools/communication-tools](http://www.theacpa.org/pain-management-tools/communication-tools).

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