Session 2: Opportunities in the Service Blueprint

OBJECTIVE: The overall objective of this session is to continue to brainstorm potential stakeholder involvement, identify the tools that each stakeholder has that might influence behavior change, review and add to the journey maps, and begin to surface opportunity areas to further explore.

TIME: Tuesday, February 14, 2023, 10:00am – 12:00pm ET

RECORDING LINK:
- Group discussion link
- Workgroups 1, 2 and 3 links available soon on the Expert Panel web page

MIRO BOARDS:
- Characteristics of Effective Screening Tools (Link)
- Stakeholder Mapping & Patient Journey (Group 1 link, Group 2 link, Group 3 link)
- Reflecting on the Process (Link)

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Overall Summary

The second human-centered design session focused on ways to increase involvement of care team members, identifying tools that each care team member has that might influence behavior change, and beginning to determine opportunity areas to further explore. Session activities included brainstorming characteristics of effective screening tools, mapping out stakeholder assets and limitations, and identifying opportunities to integrate care team members into the patient's care journey.

During the screening brainstorming activity, the Advisory Panel members indicated some characteristics of effective screening tools, including simplicity and flexibility in administration. Members also highlighted that a screening tool should prompt a further assessment, which can be more comprehensive.

The Advisory Panel members then broke into three groups to engage in a stakeholder mapping activity to identify opportunities and limitations of potential care team members. Key recommendations include:

- Consider the extent of a care team member's expertise and skillset.
- Provide arthritis-related education or additional resources to increase stakeholder impact.
- Streamline the approach to counseling.
- Leverage payer's organizational assets to provide opportunities for member engagement.

Continuing into the patient journey mapping activity, the three groups of Advisory Panel members identified challenges and missed opportunities in patient care journey examples and plugged in care team members that could participate in screening, counseling, and referral activities. The groups discussed leveraging care team members' existing assets—such as unique skillsets—and providing them with additional resources and education (e.g., credentialing and certifications). The groups also considered that some non-traditional contributors, such as community-based organizations, can fill clinical gaps and provide resources for people with arthritis.

Key Themes

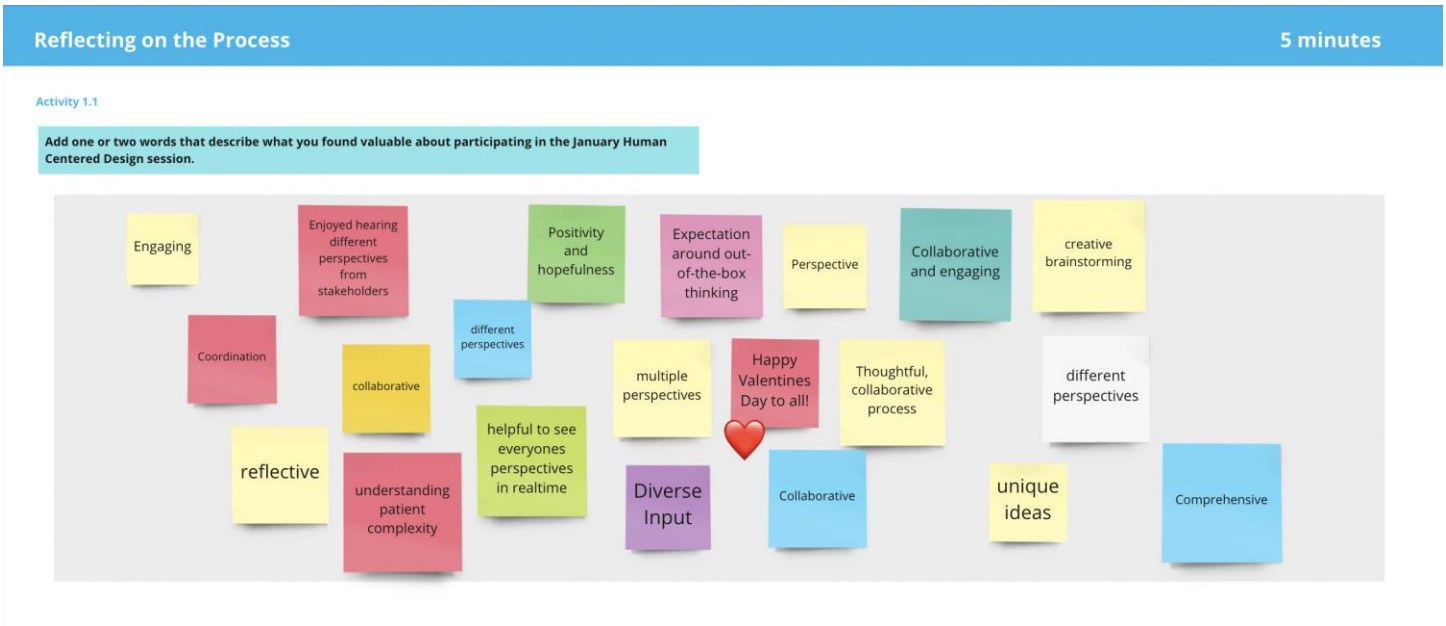
- Care team members should be evaluated to determine skillsets, training, expertise, and roles prior to integration into the arthritis screening, counseling, and referral process. After determining gaps or areas for improvement, providing stakeholders with resources and education could bolster existing competencies and facilitate the integration process.
- When integrating care team members, the context matters. Stakeholders' existing and potential assets will impact processes differently depending on where they are integrated. Medical assistants, for example, may be able to gather additional information before the primary care provider attends an appointment.
- There is an opportunity to integrate community resources and social services into the care pathway. Depending on existing resources, assets, and needs, communities can fill clinical gaps to support people with arthritis. This integration could decrease provider burden and allow providers to best utilize their time with patients.

Reflecting on the Process

The goal of the Reflection activity was to understand what participants found valuable in the January HCD Session. Common sentiments shared by Advisory Council members included:

- Enjoyed having multiple perspectives
- Enjoyed the collaboration
- Felt the process was thoughtful and comprehensive

See a full list of Advisory Council comments below:



Characteristics of Effective Screening Tools

The goal of the warm-up activity was to consider screenings for function, pain, and physical activity levels including, but not limited to, screening tools like the Patient Recorded Outcomes Measurement Information System (PROMIS) and Exercise Vital Signs (EVS).

Key Themes

- Keep it Simple: Screening tools should be short, prompt, and be easily administered.
- Flexibility around Administration: Screening tools should allow for flexibility around who administers the tool and where it is administered.
- Consider the Next Step: When implementing a screening tool, it is important to consider whether it will prompt more comprehensive patient assessment tools and counseling.

Summary

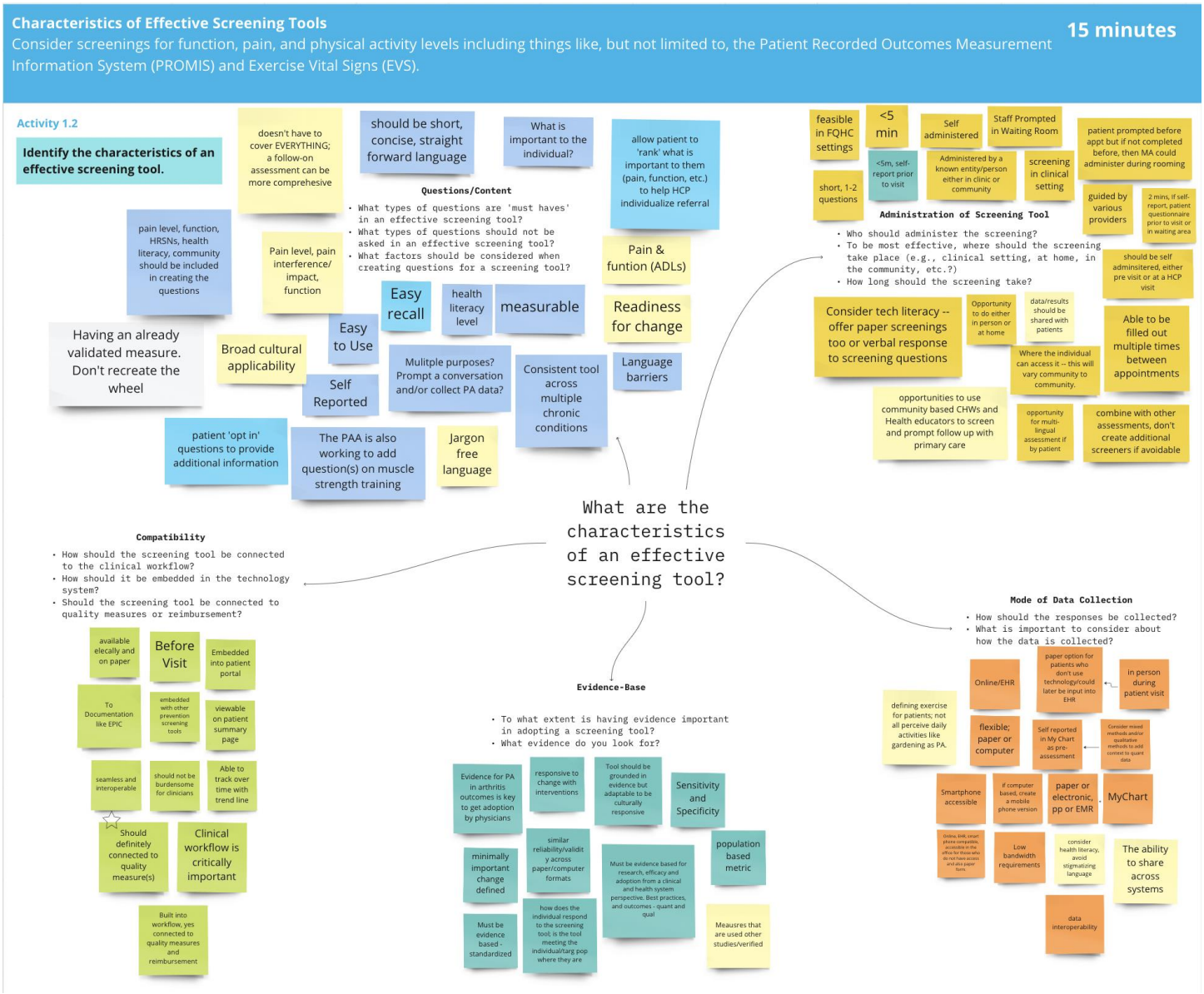
To promote brainstorming around effective characteristics of screening tools, five key areas were provided for discussion:

- Questions and Content
- Administration of the Screening Tool
- Mode of Data Collection
- Evidence Base for the Screening Tool
- Compatibility

The initial discussion was centered around considerations for administering a screening tool. Participants shared that an effective screening tool should take less than five minutes, have only one to two questions, and include flexibility in who administers it (e.g., self-administered or administered by a healthcare worker, community organization, or other known entity or person) and where (prior to appointment/at home or during appointment). The group discussed having a pre-visit questionnaire to help with limited provider-patient interaction time and prompt patient observation proactively. The group also discussed that often an effective screening tool doesn't need to diagnose a patient, but rather prompt additional assessment and identify areas for counseling and referral. For example, a simple blood pressure screening may

show an individual with high blood pressure, but it is up to the provider to conduct more comprehensive testing or follow-up.

Other characteristics of a successful screening tool noted in Miro included ensuring that the screening is measurable, easy to use or administer, has data interoperability capabilities, utilizes evidence-based standards, and can be easily adopted into a clinical workflow. See the full list of comments below:



Opportunities and Limitations of Stakeholders

The goal of the activity was for Advisory Panel members to determine potential care team member assets and opportunities, as well as potential limitations and barriers. Each breakout facilitator began the activity by providing a high-level review of care team members assigned to the group and allowed Advisory Panel members to exchange for other possible stakeholders from the full list gathered from HCD session 1. The facilitators then reviewed and walked through the priority list of care team members, which were unique to each workgroup. Advisory Panel members discussed whether it would be feasible to integrate the various stakeholders, where they could fit into the process, and input on potential assets and opportunities as well as limitations and barriers for each stakeholder.

Key Themes

- Level of Expertise and skillset
  - Assess stakeholders' unique skillset, training, expertise, and role when integrating them across the care continuum.
  - Consider the additional levels of training or support needed when integrating support staff (e.g., Health Coaches or Care Managers/Coordinators).
- Providing Additional Resources and/or Education
  - Educating stakeholders (e.g., receptionists) on materials relevant to arthritis and physical activity can facilitate the integration process.
  - Providing resources, such as credentialing and certification mechanisms, and central repositories of information can build self-efficacy skills among stakeholders and increase their impact on and access to people with arthritis.
- Consider the Context
  - The placement of a stakeholder in the screening, counseling, and referring process will influence their impact. It is important to consider the context and scenarios within which stakeholders operate to best maximize their assets and opportunities.
- Centralized Approach
  - Identifying inconsistencies and streamlining to a centralized counseling approach will be essential to successfully integrating stakeholders into an existing process. At present, varied approaches to counseling for physical activity are common across providers and will complicate the integration of stakeholders.
- Payer Considerations
  - Payers can leverage their organizational assets to create different channels for engagement with their beneficiaries. Promoting benefits proactively can benefit patients and help prevent or slow chronic diseases like arthritis.

Group 1 Summary

Group 1 considered care team members in the context of "Joe – Hard worker Persona" (see Appendix B: Personas). Participants started by discussing the assets and opportunities a health coach might have along the care continuum for people with arthritis, sharing that health coaches have insight into behavior change and can individualize a patient's behavior and lifestyle change process. Health coaches often have a deeper understanding around the modes of accountability and reasons for motivation, and a patient will likely have the opportunity to have a longer conversation with their health coach, versus with their providers. Though health coaches traditionally have lower costs associated with them, they still have a cost. Among other barriers and limitations for health coaches, the group added health coaches aren't often connected to the healthcare infrastructure and may require more training or support in order to be fully integrated. The group discussed certification concerns around a health coach, citing a variation in training. The group also raised concern around different approaches for behavior change. For example, if a patient is required to see a physical therapist and a health coach, the different professionals may have a different approach when counseling for physical activity, so ensuring a centralized approach is important. When considering the different approaches for behavior change, the group noted that each health coach will have a unique skillset, and their practices may not be consistent. Finally, the group noted the importance of distinguishing between a health coach and a lifestyle change coach.

The group also discussed the assets and opportunities, and the barriers and limitations for care coordinators/manager, healthcare leadership, and advocacy organizations. Care coordinators/manager can consider arthritis in the context of other unmet social needs, and they typically live within the population that they are serving. One participant noted that, in their experience, care managers often require a lot of training as they often have limited knowledge related to behavior change and evidence-based lifestyle change programs. The group discussed that though healthcare leadership could play a bigger role, they often don't see the arthritis-related burden a patient experiences, and may look to joint replacement surgery as a solution to arthritis rather than identifying long-lasting, sustainable solutions. Lastly, the group discussed that

though advocacy organizations are noncommercial and provide unbiased information, they have a relatively limited reach, with only a small number of people coming to these organizations for help.

Other ideas not mentioned in the discussion but addressed on the Miro board include:

- Behavioral Health Specialists can address arthritis related mental health comorbidities, and are trained to address depression, anxiety, fear of injury, interpersonal barriers, and trauma. However, the group noted that Behavioral Health Specialists generally do not focus on lifestyle change programs as a strategy to improve mental or behavioral health.
- Though Occupational Therapists are usually well integrated into the healthcare system, they may not have as much training as a Physical Therapist or Physician Assistant.
- Personal Trainers are local and accessible, but not typically connected to the care team and their services can often be costly to the patient.

To see a full list of the stakeholders and subsequent comments brainstormed by Group 1, see Appendix C: Opportunities and Limitations of Stakeholders.

Group 2 Summary

Group 2 considered additional care team members in the context of "Clara – Social RN Persona" (see Appendix B: Personas), and they added a rheumatologist to their list of care team members. The group then talked about how a receptionist's assets and opportunities include frequent touchpoints with patients before appointments in sending out reminders, but also touchpoints after an appointment like setting up follow-up visits. The group suggested one of the main limitations of a receptionist was their lack of formal medical education.

One participant brought up that physical therapists are trained in improving function and mobility and can develop specific goals leveraging interventions that align with what's important to Clara to help her meet those intentions. They added that physical therapy often lacks sufficient reimbursement and an onerous pre-authorization process that continually gets bogged down by changing regulations.

Another participant talked about how payers can create channels for engagement in promoting benefits, often with an emphasis on being proactive about preventing chronic disease like arthritis.

Other ideas not mentioned in the discussion but addressed on the Miro board include:

- Mental health therapists can help persons with concomitant anxiety and depression, which is common with chronic pain and arthritis. Barriers include mental health therapists requiring referrals and the stigma associated with seeing them.
- Social workers are an often effective, but underutilized resource for persons with arthritis to improve efficacy in self-management of symptoms. They also can alleviate certain barriers to participation such as transportation and childcare. However, barriers include a lack of funding for services and staff and the time required to train and engage social workers.
- Providing space and equipment, protected time, and covering wellness programs for employees are a few ways that employers can positively impact employees with arthritis. One barrier is that some employers do not have the ability to provide space or give time off to their employees.

To see a full list of the stakeholders and subsequent comments brainstormed by Group 2, see Appendix C: Opportunities and Limitations of Stakeholders.

Group 3 Summary

Group 3 considered stakeholders in the context of "Dorothy – Active Retirement Persona" (see Appendix B: Personas), and they added personal trainers and parks and recreation to their list of additional care team members. The group discussed the lack of regulation in the personal trainer landscape, and one member highlighted current efforts underway

to provide accreditation and requirements. One member, with extensive parks and recreation experience, noted that many of these departments serve older adults and could be a key contributor. The same member suggested adjusting "church staff and members" to "faith-based staff and members," to make the stakeholder category more comprehensive.

One member pointed out a common theme: some stakeholders have the expertise surrounding arthritis and movement, but limited access to people with arthritis, while other stakeholders have access, but limited expertise. The group agreed that defining stakeholders by these terms and focusing them in areas where they are best positioned to be involved would yield the most success. One member suggested creating mechanisms to certify stakeholders that could gain access to people with arthritis and build self-efficacy skills, and another member highlighted Exercise is Medicine's 15-hour course that could be repurposed to give tips on working with someone with osteoarthritis. Lastly, the group agreed that if there were a central repository of information that stakeholders could access via the internet, then not all stakeholders would need to be arthritis experts in order to assist people with arthritis to an entry point for screening, counseling, and/or referral.

Other ideas not mentioned in the discussion but addressed on the Miro board include:

- Faith-based staff and members have established a community of trust that meets regularly, provide resources now, and potentially have consistent access to people who may not be going to the doctor frequently. However, the group noted that this stakeholder generally has limited healthcare experience, privacy and HIPAA concerns, and lacks a connection to the health system.
- While community health workers have a variety of assets and opportunities in the space, other providers may need a better understanding of their roles and contributions to allow for improved integration into care teams.
- Some stakeholders, such as public libraries and senior centers, have broad access to communities, but would likely require additional resources in order to maximize potential impacts.

To see a full list of the stakeholders and subsequent comments brainstormed by Group 3, see Appendix C: Opportunities and Limitations of Stakeholders.

The Patient Journey

The goal of the Patient Journey activity was for Advisory Panel members to think through where incorporating different care team members could improve screening, counseling, and referral for self-management behaviors, including physical activity and lifestyle change. Each breakout facilitator began the activity by providing a high-level review of the workgroup's persona and Empathy Map from HCD session 1. The Advisory Panel members then read through the persona's Journey Map and marked barriers and missed opportunities within the patient's journey. The facilitators then supported the Advisory Panel members in building out opportunities for improvement and reflecting on where additional care team members could have an impact.

Key Themes

- Take advantage of opportunities before an appointment.
    - Health information technology can send out reminders, forms, general information, and screenings in advance of an appointment to be more efficient in caring for people with arthritis. Clinics and healthcare organizations can leverage these opportunities to improve the patient journey.
    - Patients could benefit from additional education and information before their visit based on the concerns mentioned during scheduling. Capitalizing on the time between when a patient feels motivated to make an appointment and before actual visit could increase opportunities for self-management.
- Time with a provider is limited.
    - Supplying patients with the necessary information to better self-manage their arthritis and symptoms, (e.g., self-management videos) could be an effective way for arthritis providers with limited time to incorporate care before and after a patient visit. Determining similar methods are essential due to a lack of providers.

    - Streamline processes that will ensure the clinician can most easily screen, counsel, and refer people with arthritis to proper locations.
    - Medical assistants (MAs) may represent an opportunity to gather additional information before the primary care provider even steps in the room. MAs can reduce the burden on primary care providers by asking additional questions and being perceptive while checking vital signs. To do this, patients must also feel empowered to share their top priorities during their initial clinical interactions.
- Engage in intentional communication.
    - Health literacy should be an important consideration for health systems as they create materials for patients so that sharing information is easy for the patient and the provider.
    - Consider other perspectives (e.g., cultural perspectives) and identify the right people to share physical activity messaging with so that it resonates with the target population.
- Integrate communities and social services into the care pathway.
    - Reimbursement pathways or bidirectional feedback loops are critical for social service agencies in order to ensure that the patient is able to complete the referral.
    - Communities—depending on existing resources, assets, and needs—can fill in clinical gaps to support people with arthritis. For example, there may be opportunities for community-based organizations to educate and potentially screen people with arthritis that need more assistance from clinicians.
- Provide whole-person care.
    - The care team should learn about the patient and understand what means most to them. This represents a whole-person approach, instead of a clinical, medical approach.

Group 1 Summary

Group 1 began by focusing on the persona's feeling in order to identify opportunities. For example, identifying how a person with arthritis feels around social engagement (e.g., anxiety when talking with a provider) may be an opportunity to address care or negative feelings in those situations. Other group members felt that the care team would generally spend more time than the provider talking with the person with arthritis about experienced disease burden. They added it would be beneficial to think about how these conversations could be more structured and captured to better address opportunities for care. The group discussed utilizing the time between when the patient is motivated to make their appointment and their actual visit as an opportunity for the care team members to provide more information or education before the patient's visit based on the concerns they mentioned when scheduling. Lastly, the group discussed the importance of health literacy, which is often overlooked by health systems. Health systems can take the opportunity to make it easier to share information with patients, while making materials more widely accessible so patients can easily share information back with the health system.

Group one began the final portion of the breakout activity discussing the importance of identifying the initial needs for the patient through completing a social needs assessment, and ensuring that someone, such as a family member or caregiver, is connected to the patient to support care coordination needs. During the time taken to identify the initial needs of the patient, care team members could work to confirm the benefits the patient has available to them and start looking for community connections that could complete those benefits. One participant noted that a wellness benefit literacy tool could ensure that all members of the care team understand the benefits a patient has.

The group focused on reimbursement capabilities at a local level and identifying social service agencies that would benefit from a reimbursement mechanism. The group indicated that providers or health systems can send referrals to social service agencies, but there needs to be a way to confirm reimbursement, so they aren't overwhelmed or put in a situation where they are unable to meet the patient's needs. Two participants noted that, in their experience, having an integrated web-based platform has greatly helped in identifying social needs and points of care within population health. These integrated platforms have a closed loop communication system where providers can see if the referral has been completed or not, and any relevant communication. The group agreed that establishing a bidirectional feedback loop and expanding on interoperability is key to seeing patient success.

The group also discussed how physical activity needs to be promoted as a normal occurrence in someone's day, rather than the "exception." To do this, cultural perspective needs to be added to the wellness and benefits space, and the message needs to be clearly identified. The way health systems are talking about physical activity versus media companies or employers needs to be consistent and unified to communicate the importance of physical activity. In thinking about who the right person or entity is to share this message, a participant mentioned that utilizing Community Health Workers (CHW) as one way that the work can be scaled from screening, referral, and even implementation of the programming that other professionals give. Other participants mentioned utilizing healthcare leadership, as they are key to creating an environment in which different care team actions can be successfully facilitated and/or implemented. Lastly, the group discussed the need to educate healthcare leadership on seeing the big picture, and the need to put more pressure on healthcare leadership to implement new technological advances that are easy to adapt and support care team members.

Other ideas not mentioned in the discussion but addressed on the Miro board include:

- Working with Healthcare Leadership to ensure that the care team is fully trained on their respective electronic health record (EHR) system, and identifying opportunities to ensure that the EHR system is affordable and equitable for all in the bidirectional/closed feedback loop.
- After an appointment, ensuring that employer/employer-based health plans do not block the recommended care due to cost, confirming bidirectional feedback capabilities, and confirm that the care coordinator or manager is participating in the bidirectional feedback with the clinician.
- Using employer/employer-based health plans, occupational therapists, close contact relationships, or community exercise facilities to help with identifying and communicating the needs of the patient before the appointment with the physician.

To see the entire Patient Journey activity for Group 1, see Appendix E. The Patient Journey.

Group 2 Summary

Group 2 focused the discussion on identifying a patient's needs before the appointment happens, specifically on what is going on behind the scenes. The conversation started with one participant mentioning there was a missed opportunity with utilizing postcard outreach. They described that an electronic health record (EHR) could be leveraged to look for osteoarthritis diagnoses and streamline the process to send targeted information to patients, like Clara, on arthritis self-management and appointment information. Similarly, the group also talked about how the period between scheduling an appointment and when Clara checks in presents an opportunity to leverage the EHR and patient portal to send out screenings, text reminders, and administrative forms. One group mentioned that the scheduler could offer to put Clara on a waitlist for potentially getting an earlier appointment. This could help Clara feel like someone is looking out for her and improve her anxiety before the appointment starts. Rounding out this portion of the discussion, another participant added that primary care offices could have TV screens that cycle through different medical information related to different ailments or diseases such as arthritis.

Group 2 also addressed how rheumatologists could be further incorporated in the screening, counseling, and referral processes that happen before, during, and after a patient visit. Guidelines for referring to and engaging with rheumatologists could be established to better utilize providers' time. Another way for rheumatologists to play a role in a patient's care pathway shortages could be to help provide and then prescribe videos on rheumatic topics like medication management, gardening with arthritis, and general information. The EPIC EHR system allows providers to prescribe such videos, signaling an opportunity for arthritis providers to be better incorporated into a patient's care pathway before and after their appointments. However, another participant mentioned that this process could be a barrier to smaller practices that aren't equipped with or do not have access to a capable EHR system, or don't have access to a paid library of videos. Thus, determining a process that takes both situations into account, and working toward creating an open-source library of information, could promote equitable access to arthritis-related videos for patients, and strengthen their ability to self-manage their disease.

Other ideas not mentioned in the discussion but addressed on the Miro board include:

- Payers taking a more active role in screening and engagement, helping members learn about benefits, providing educational materials, and sending out Health Status Assessments.
- Public Health Departments offering a local network of providers, providing educational contents for PCP offices, and helping to connect with CBOs/AAEBIs through their aging services
- Using non-traditional care team members such as social workers to support needs and address barriers and mental health workers to conduct motivational interviewing and screening for mental health challenges that can cooccur with arthritis pain.

To see the entire Patient Journey activity for Group 2, see Appendix E. The Patient Journey.

Group 3 Summary

Group 3 discussed missed opportunities throughout Dorothy's experience, including those occurring before, during, and after the appointment. Toward the beginning of the Patient Journey, members highlighted missed opportunities when staff calls to confirm Dorothy's appointment, during the waiting period before her appointment, and while the medical assistant (MA) is taking her vitals. One member noted the front office staff could provide a quick check-in while calling to confirm her appointment, while another member suggested someone in a secretarial position may create more confusion at times. A physician member highlighted the waiting period before her appointment, indicating there could have been an intervention to allow her to carry out her normal tasks and hobbies in advance of the appointment. Two members noted missed opportunities during the MA vitals check; one suggested they could have asked about her outward signs of pain—including difficulty standing and walking—and another suggested MAs could ask supplemental questions in addition to typical vitals. Both opportunities would supply additional information to the primary care provider and relieve some of their burden as well.

Later in the Patient Journey, members saw missed opportunities during the primary care provider check-in, as Dorothy was scheduling her next appointment with the front desk receptionist, and after the appointment had ended. One member mentioned the primary care provider should ask what is most important to the patient, potentially outside of physical activity, to learn about the patient and achieve a whole-person approach. One community health worker supported the whole-person approach, while another member noted that lack of time and reimbursement could be a barrier. A member working for a state health department suggested a new opportunity that would allow patients to add a reminder for something they didn't have time to talk to a provider about during their appointment, where the receptionist would capture the information for the next follow-up appointment. Lastly, one member suggested there may be an opportunity for follow-up support after the appointment, to get the patient connected to a program and address other social determinants of health, such as transportation.

Based on Dorothy's patient journey and missed opportunities, the group further built out stakeholder opportunities to improve the screening, counseling, and referring process. The group focused on their set stakeholder list to identify where and how they could participate in the process. Advisory Panel members mainly discussed opportunities toward the beginning of the screening process when identifying the need, as well as at the end of the patient journey during the referral process.

While acknowledging the role of other care team members, the group was wary of supplanting the role of the clinician. Members discussed potential opportunities while keeping in mind reimbursement challenges. Streamlined efficiencies or an overall framework could allow communities to fill in clinical gaps based on available resources, assets, and needs. Community resources could help people with arthritis to become more educated, encourage them to become an active participant in their care, and provide them with knowledge on questions to ask their providers. A physician member noted the need for medical and nonmedical screenings to determine when to use non-clinical resources in the community rather than licensed stakeholders for non-healthcare pieces. Patient navigators and health coaches could help to funnel patients to various interventions based on their needs, and MAs, as previously mentioned, could screen people with arthritis pre-appointment to maximize clinicians' time. The group also discussed risk stratification, including determining who needs more explicit medical interventions versus referral to physical therapy and other functional movement

programs and supports. One member cautioned that referrals to other clinical professionals, such as rheumatology or physical therapy, could result in delays of up to a year for a patient to schedule an initial consultation depending on geographical area, provider density, and payer mix.

Other ideas not mentioned in the discussion but addressed on the Miro board include:

- Faith-based staff and members could play a role in screening and referring, including providing transportation support, accompanying people with arthritis to their physical activity classes, and providing educational materials.
- Using community health workers to support people with arthritis after their appointments, such as reviewing recommendations and available community resources, assisting with registration and addressing barriers of attendance, and providing follow-up to referrals.
- Multiple stakeholders could identify and connect people with arthritis to services and encourage appointments with providers, including senior centers, hobby-based clubs, public libraries, assisted living centers, personal trainers, and non-traditional healthcare.
- A mix of healthcare stakeholders could support people with arthritis during their visit with their clinician, including rheumatologists, psychologists, exercise physiologists, and varied allied health providers.

To see the entire Patient Journey activity for Group 3, see Appendix E. The Patient Journey.

Opportunities & Prioritization

The workgroups then convened as a larger group to share what they discussed in their breakout groups and to collect opportunities that could be prioritized in Session 3. Common themes among these comments include:

- strengthening community partnerships
- providing more robust patient navigation
- collecting and disseminating resources
- rethinking screening
- overcoming reimbursement challenges
- focusing on patient-driven needs

After an initial poll, focus areas that got three or more votes were:

- How can you connect primary care providers with outside non-traditional care team members to alleviate time crunches? (6 votes)
- opportunities to support proactive follow up to help people navigate to services following appt. (4 votes)
- make it easy to use the EMR to screen patients and have patient handouts automatically disseminated if certain flags pop up (4 votes)
- innovative strategies for reaching patient populations that historically and/or are currently challenged by barriers to SDOH (4 votes)
- provide better educational resources (apps, handouts, web links) to providers to give to patients regarding ways to improve physical activity and reduce OA disease burden (4 votes)
- create educational materials, courses that community partners can provide/administer (3 votes)
- integrating arthritis screening questions into PCP appts (either through EHR or Medicare Wellness visit) (3 votes)
- intentional engagement with CBOs and similar partners (3 votes)
- streamlining referrals to AAEBIs+ based on community structure (3 votes)
- training for clinicians on how to engage community orgs and resources (3 votes)

For the full list of comments added by the Expert Panel, see Appendix F: Opportunities & Prioritization.

Appendix A: Attendees

Group 1

Name	Organization
Brooke Zollinger	LP
Morgan Wilson	LP
Heather Murphy	NACDD
Heather Kitzmanm Ph.D.	UT Southwestern Medical Center
Theresa Kreiser, MS (absent)	Comagine Health
Beth Fallon, MPH, Ph.D., CHES	Centers for Disease Control and Prevention
Elizabeth A. Joy, MD, MPH, FACSM, FAMSSM	Intermountain Healthcare
John Andrawis, MD/MBA (absent)	Torrance Memorial Medical Center & Harbor-UCLA Medical Center
Jennifer Raymond (absent)	AgeSpan, Massachusetts
Nick Turkas, MS	Arthritis Foundation
Heather Hodge, M.Ed	YMCA of the USA
Erica Anderson	Humana
Gregory J. Welk, Ph. D.	Iowa State University
Kirsten Ambrose (absent)	Osteoarthritis Action Alliance.
Travis Salmon	Patient Representative

Group 2

Name	Organization
Patricia Doxey	LP
Anthony De Cicco	LP
Shalu Garcha (absent)	NACDD
Lisa Erck	NACDD
Karen E. Schifferdecker, PhD, MPH (absent)	The Dartmouth Institute and Community and Family Medicine at the Geisel School of Medicine, Dartmouth College
Cheryl Schott, MPH	Centers for Disease Control and Prevention, Contractor
Erica L. Odom, DrPH, MPH (absent)	Centers for Disease Control and Prevention
Katrina Seipp-Lewington, MPH	Comagine Health
Anita Bemis-Dougherty, PT, DPT, MAS	American Physical Therapy Association
Clifton O Bingham, III, MD	Johns Hopkins Arthritis Center

Paul Woods, MD MS CCFP	Orcinus Health Solutions
Alisa Vidulich, MPH (absent)	Arthritis Foundation
Starla H. Blanks, MBA, MPH	American College of Rheumatology
Serena Weisner	Administration for Community Living
Lesha Spencer-Brown, MPH, CPH, PMP (absent)	Administration for Community Living
Lisa Gabel (absent)	Humana
Raquel Masco	SingleMoms Created4Change Advocacy & Empowerment Center

Group 3

Name	Organization
Kerstin Edwards	LP
Chloe Chipman	LP
Kathy Carluzzo, MS	Center for Program Design and Evaluation at Dartmouth (CPDE)
Heidi Milby	NACDD
Vish Vasani	NACDD
Tracy Carver, MPA	Comagine Health
Margaret Kaniewski	Centers for Disease Control and Prevention
Gail Hirsch	Massachusetts Department of Public Health
Adam Burch, DC, MPH	New Hampshire Department of Health and Human Services
Robyn M. Stuhr, M.A., ACSM-CEP, FACSM	Exercise is Medicine®
Jonathan S. Kirschner, MD, RMSK	Hospital for Special Surgery/ USBJI
Mamta Gakhar, MPH (absent)	YMCA of the USA
Tamara Huff, MD, MBA, FAAOS, FAAHKS (absent)	Vigeo Orthopedics, LLC.
Katie Huffman	Osteoarthritis Action Alliance.
Tiff Cunin	National Recreation and Park Association
Timothy P. McNeill	Freedmen's Health
Tonya Horton	Patient Representative

Appendix B: Personas

Persona 1: Joe the Hard Worker

Joe – Hard Worker

Seeking reduction of pain and weight, so he can earn income for the family and be around for fun with his family.

Brief Description

- Age: 45
- Gender: Male
- Race & Ethnicity: Hispanic
- Highest Education: Trade School; Construction Site
- Location: Rural New Mexico
- Living Situation: Lives in a duplex with his wife Maria and 4 kids (ages 8, 10, 15, 18)
- Income: $27,000 per year
- Insurance: Medicaid

Client Story (Personality/Hobbies)

- Joe has pain in his knees and it has gotten in the way of daily living (climbing stairs/chores around the house/playing sports with children) and has caused him to call in sick on multiple occasions at the construction site.
- He is worried about being able to provide for his family and relies on heavy doses of pain medications to get him through the day.
- Maria his wife cooks most of the food for the entire family. She cooks traditional food including homemade tortillas (with lard), beans, rice, and "the best desserts" for her family.
- Joe has been counseled on being overweight many times, but he does not know how to make a change.
- Maria is worried about her husband and encourages him to go to a primary care provider to talk about the pain.
- Joe is reluctant to go seek help, worried he may need surgery. He feels like he cannot afford to take time off work or pay for medical expenses.

Physical Activity

- Joe is disinterested in exercise, claiming he has "never been into it." He does not want time spent exercising to take away from his "regular life," and feels he is on his feet all day at work already.
- He likes being physically active with his family, which could be a motivator.
- He does not know that daily living and physical activity counts as movement.

Health Status

- Osteoarthritis of the knee (Repetitive Motion)
- Obesity
- Pre-diabetes

Pains

- He feels tired all the time.
- His family is worried about him.
- He's concerned about kids' future.
- He lives 30 minutes outside of town.
- Struggles with health literacy, and doesn't feel he could register for programs on his own.
- He has competing priorities, feeling his "real life" is more important.
- He doesn't want to come off his pain meds for fear of missing work.

Gains

- Wants to feel better
- Would like to reduce pain in his knees, so he can continue to work and play with his kids
- Joe could benefit from virtual evidence-based interventions such as a Chronic Pain Self-Management Program, Walk with Ease, or the National Diabetes Prevention Program
- Joe could make walking and stretching a family activity, which would benefit not only him but his family as well

Persona 2: Clara the Social RN

Clara – Social RN

Seeking increased mobility and decreased pain, so she may continue to do the activities she loves and stay active in life.

Brief Description

- Age: 62
- Gender: Female
- Race & Ethnicity: Non-Hispanic/Black
- Highest Education: Nursing
- Location: Urban New York
- Living Situation: Lives alone in in an apartment in the Bronx
- Income: $90,000 per year
- Insurance: Commercial Insurance through the FQHC

Client Story (Personality/Hobbies)

- Clara wakes up each morning for an early shift at the local federally qualified health center.
- She is on her feet for 12-hour shifts four days per week. Her shifts can change at a minute's notice, which has taken a toll on her physical and mental health.
- She is new to the area and is interested in meeting new people outside of work.
- Clara enjoys trying new restaurants, spending time at church, and being active in the community.
- She has not able to develop a social network in her new community given her long work days and the pain in her knees.
- She has started living a more sedentary lifestyle outside of work (binge watching TV and ordering in carry out), causing depression and increase in blood sugars.
- After a long day at work, it can be hard to wind down and fall asleep or stay asleep, and her pain sometimes gets in the way.

Physical Activity

- Clara enjoys the company of others when being active.
- Although she recognizes the potential benefits of physical activity, she is always on her feet and has a hard time feeling motivated to exercise. has not connected the need for physical activity to support her chronic diseases.

Health Status

- Osteoarthritis of the knee
- Depression
- Pre-diabetes

Pains

- Some days Clara gets home from work late and there isn't sufficient daylight to get outside for a walk.
- The area she lives is not always safe for a walk.
- She is sometimes called in to work on her days off to cover for other staff or is asked to be on-call from home on her days off.

Gains

- She could develop a friend circle through physical activity as a potential motivator, potentially with neighbors in her apartment community.
- Walk With Ease – Self Directed Enhanced (WWE-SDE) may help increase mobility at her own pace and provide social opportunities.
- The National Diabetes Prevention Program could help increase physical activity and improving nutrition.
- Program to Encourage Active Rewarding Lives (PEARLS) could help address depression.

Persona 3: Dorothy Active Retirement

Dorothy – Active Retirement

Increased energy and mobility, so she can best care for herself.

Brief Description

- Age: 78
- Gender: Female
- Race & Ethnicity: White
- Highest Education: Finance Degree
- Location: Suburban Oregon
- Living Situation: Lives in a house with her husband
- Income: $2,000 per month from social security
- Insurance: Medicare

Client Story (Personality/Hobbies)

- Dorothy used to love gardening and walking, but she gets too tired now. She feels so limited. She is nervous to do things because of how it might affect her health issues.
- Her husband, William, helps her out with meals and cleaning up around the house, but he too needs help and support.
- Dorothy worries about the pain in her hip and potentially falling.
- Dorothy is discouraged she must rely on others for help, especially because she doesn't feel comfortable driving.
- She has lost touch with her friend circle given her more sedentary lifestyle and she would like a way to regain control of her health and confidence to be active again.
- Her son and her grandkids live 30 minutes away, but they are busy with their lives. They stop by once of month to check in on their parents.

Physical Activity

- Dorothy loves to take walks outdoors but is afraid to do this given the fear of falling.
- She wants to feel less tired all the time.
- She would like to gain control of her health and be more active with her friend circle again.

Health Status

- Osteoarthritis of the hip
- Hypertension
- Falls risk
- Anxiety

Pains

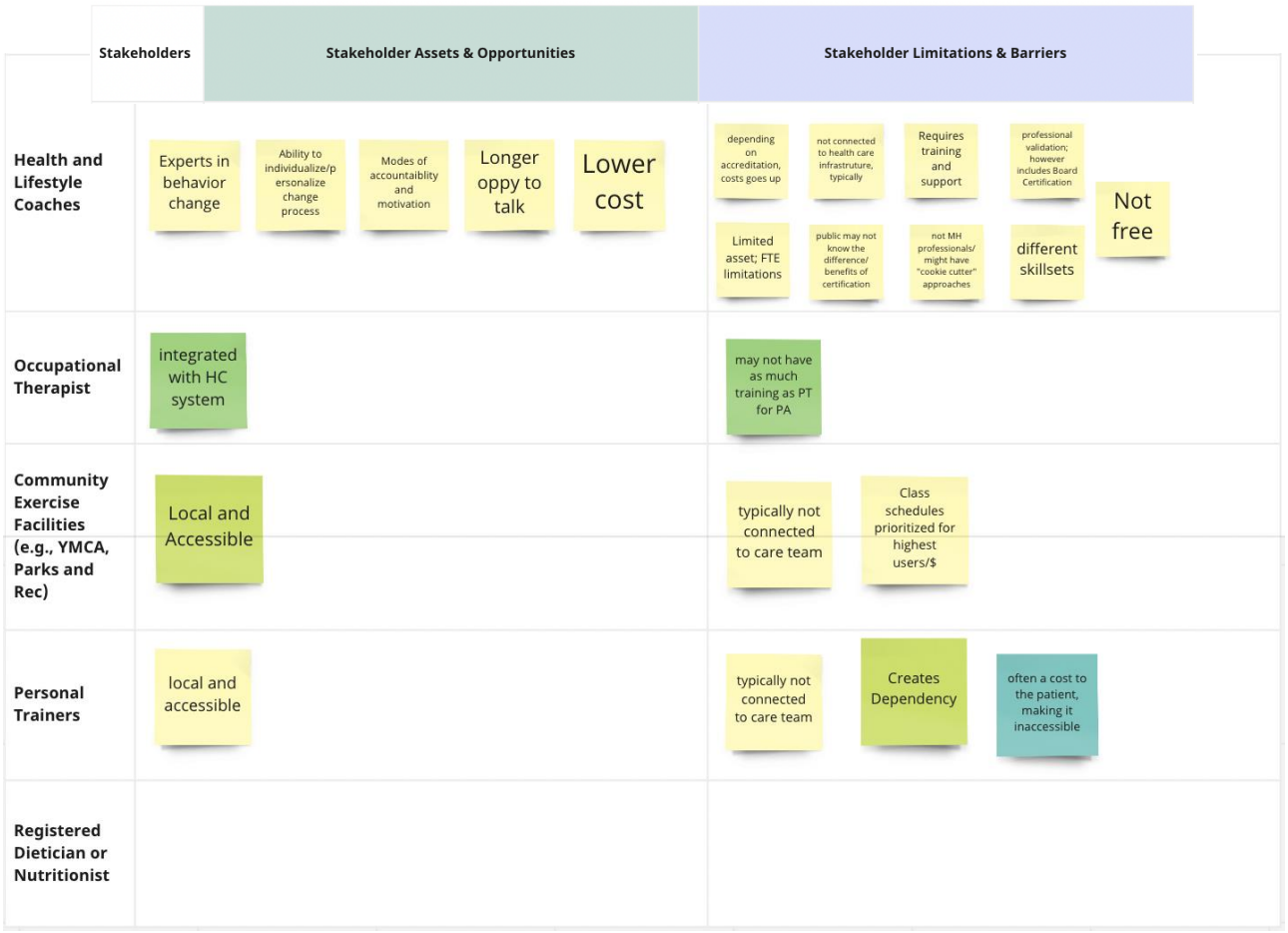
- Dorothy has aches, pains, and increasing anxiety.
- She doesn't like to drive, especially at night.
- She feels like a burden on others.
- She has a fear of physical activity due to the pain and potentially falling.

Gains

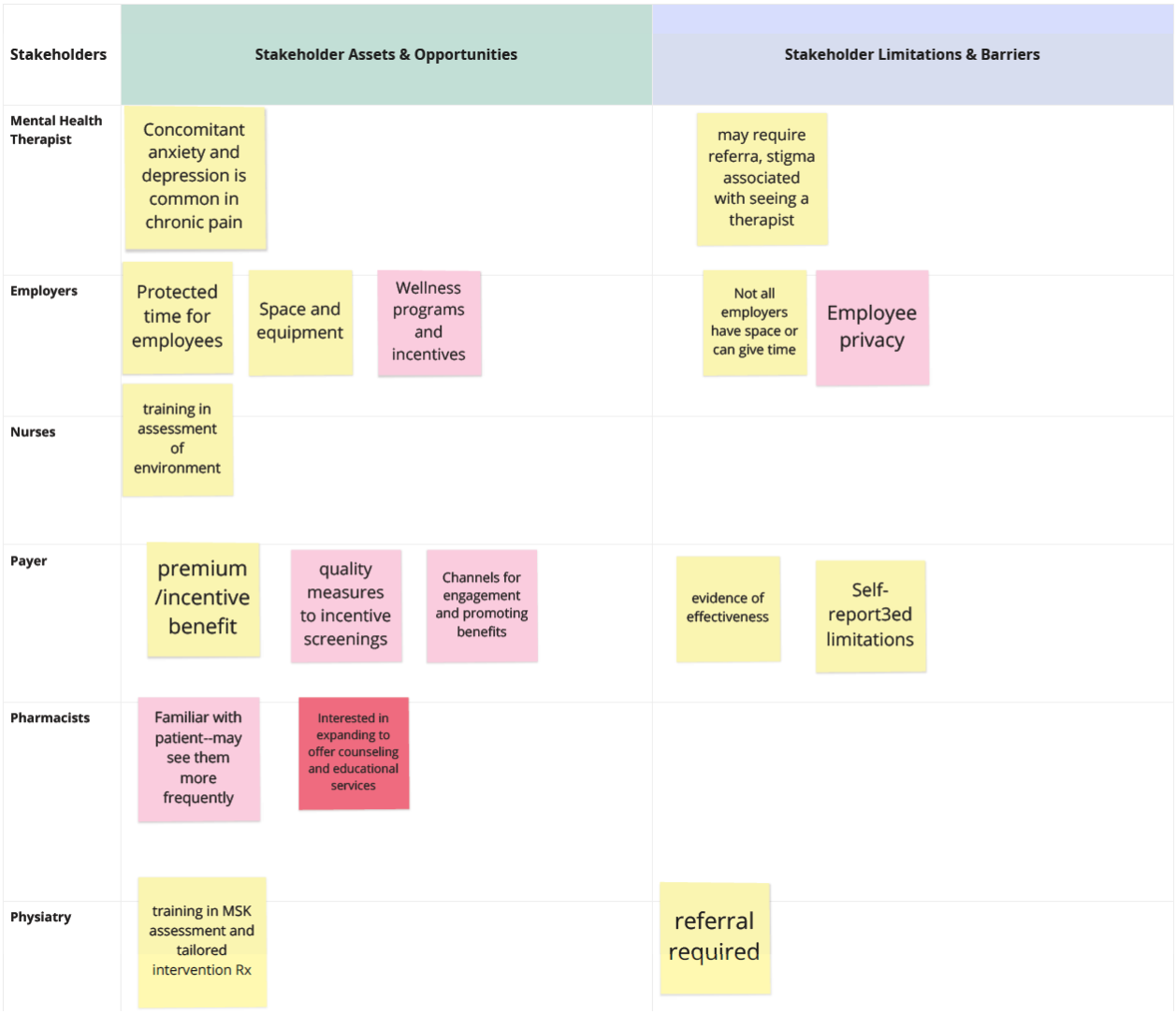
- Feeling less anxious about her health
- Not being a burden on family and caregivers
- Dorothy could benefit from a group class like Tai Chi for Arthritis and Falls Prevention or Tai Ji Quan: Moving for Better Balance, that provides an opportunity to increase physical activity while also providing a social connection
- Her caregiver, William, may benefit from Stay Active and Independent for Life (SAIL)

Appendix C: Opportunities and Limitations of Stakeholders

Workgroup 1

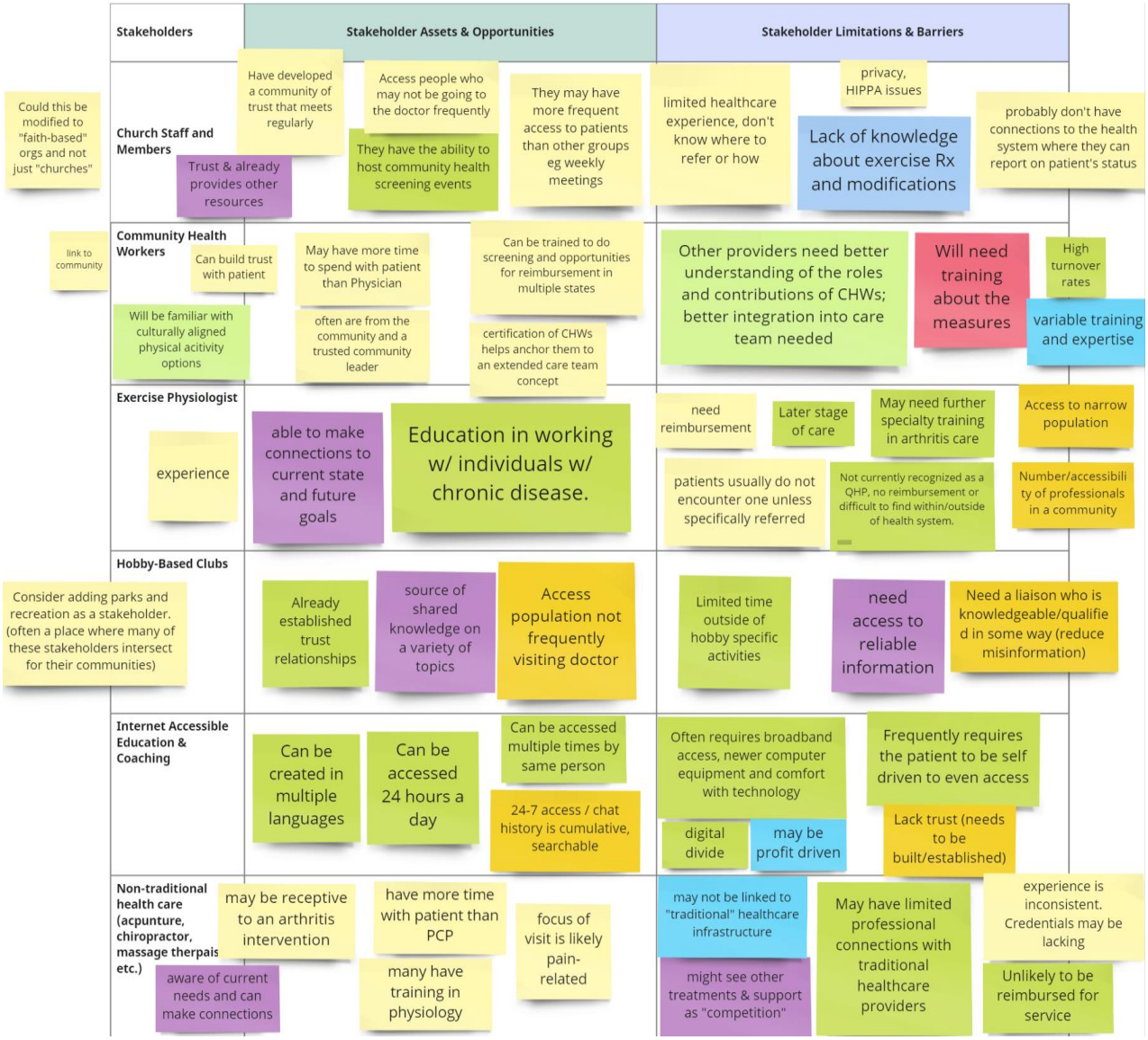

Stakeholders
Stakeholder Assets & Opportunities
Stakeholder Limitations & Barriers
Health and Lifestyle Coaches
Experts in behavior change
Ability to individualize/personalize change process
Modes of accountaiblity and motivation
Longer oppy to talk
Lower cost
depending on accreditation, costs goes up
not connected to health care infrastruture, typically
Requires training and support
professional validation; however includes Board Certification
Not free
Limited asset; FTE limitations
public may not know the difference/ benefits of certification
not MH professionals/ might have "cookie cutter" approaches
different skillsets
Occupational Therapist
integrated with HC system
may not have as much training as PT for PA
Community Exercise Facilities (e.g., YMCA, Parks and Rec)
Local and Accessible
typically not connected to care team
Class schedules prioritized for highest users/$
Personal Trainers
local and accessible
typically not connected to care team
Creates Dependency
often a cost to the patient, making it inaccessible
Registered Dietician or Nutritionist

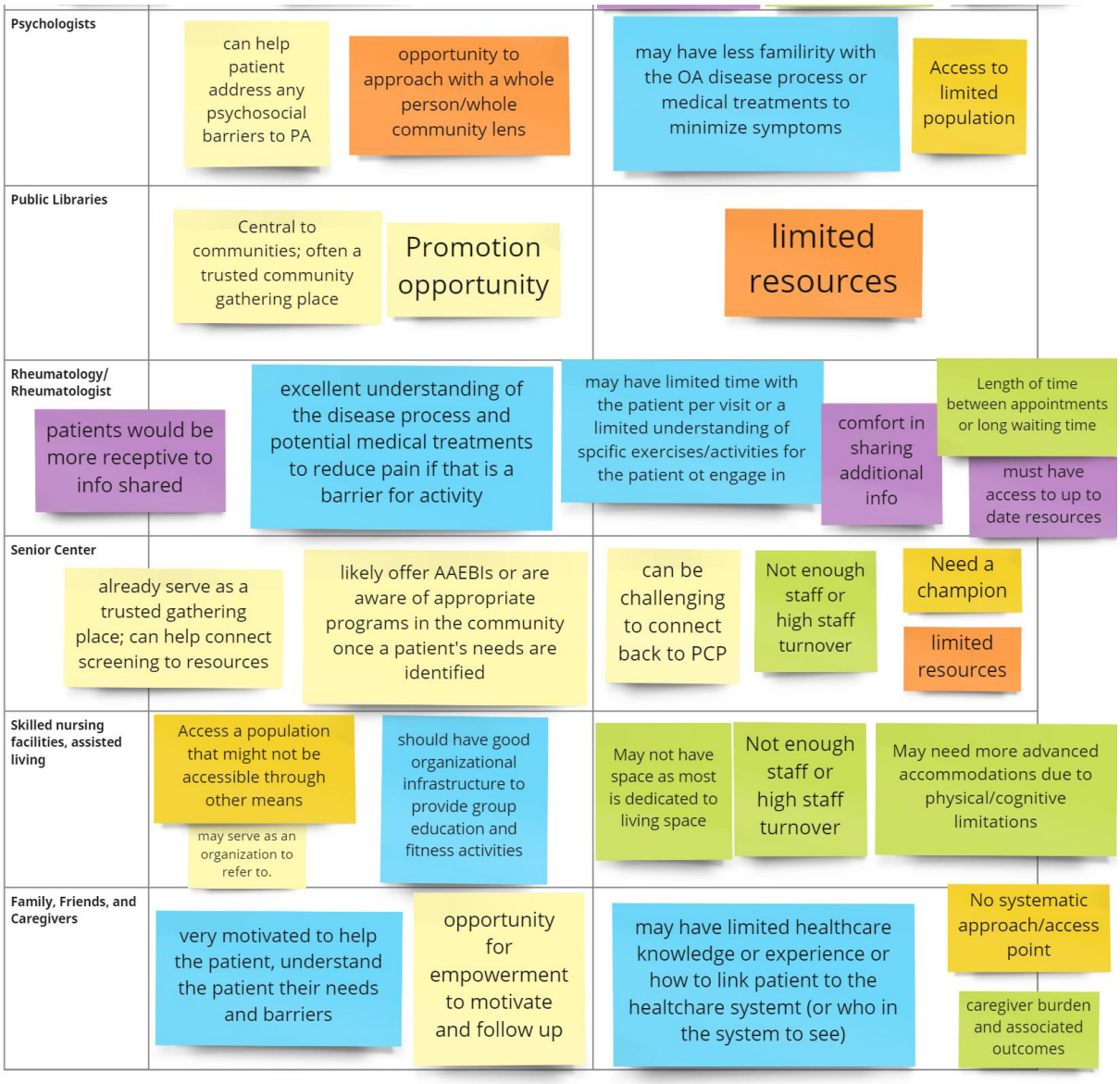
Workgroup 2


Stakeholders
Stakeholder Assets & Opportunities
Stakeholder Limitations & Barriers
Mental Health Therapist
Concomitant anxiety and depression is common in chronic pain
may require referra, stigma associated with seeing a therapist
Employers
Protected time for employees
Space and equipment
Wellness programs and incentives
Not all employers have space or can give time
Employee privacy
Nurses
training in assessment of environment
Payer
premium /incentive benefit
quality measures to incentive screenings
Channels for engagement and promoting benefits
evidence of effectiveness
Self-report3ed limitations
Pharmacists
Familiar with patient--may see them more frequently
Interested in expanding to offer counseling and educational services
Physiatry
training in MSK assessment and tailored intervention Rx
referral required


Physical Therapist
Focus on function and mobility
Development of specific goals important to the patient
Lack of payment for services
Onerous authorization processes
Policymakers
Can help make changes to increase accessibility to various providers
Public Health Departments
trusted partner for wide spread dissmination
limited access to insured populations
Receptionist
Multiple touchpoints with paitents
opportunity to hate non-clinical information such programs and educational opps offered by hosptial
No medical training
needs guidance on who is eligable, based on what data in what time
Social Worker
best underutilized resource for self managment
can address paitent barrier to participation such as transportation, childcare, etc
access to community programs and other supportive services
funding for services/staff
time for training and engagement
access outside of multispeciality practices
Family, Friends, and Caregivers
Can help carry out plan of care
limited time

Workgroup 3


Stakeholders
Stakeholder Assets & Opportunities
Stakeholder Limitations & Barriers
Church Staff and Members
Could this be modified to "faith-based" orgs and not just "churches"
Have developed a community of trust that meets regularly
Access people who may not be going to the doctor frequently
They may have more frequent access to patients than other groups eg weekly meetings
limited healthcare experience, don't know where to refer or how
privacy, HIPPA issues
probably don't have connections to the health system where they can report on patient's status
Trust & already provides other resources
They have the ability to host community health screening events
Lack of knowledge about exercise Rx and modifications
Community Health Workers
link to community
Can build trust with patient
May have more time to spend with patient than Physician
Can be trained to do screening and opportunities for reimbursement in multiple states
Other providers need better understanding of the roles and contributions of CHWs; better integration into care team needed
Will need training about the measures
High turnover rates
variable training and expertise
Will be familiar with culturally aligned physical acitivity options
often are from the community and a trusted community leader
certification of CHWs helps anchor them to an extended care team concept
Exercise Physiologist
experience
able to make connections to current state and future goals
Education in working w/ individuals w/ chronic disease.
need reimbursement
Later stage of care
May need further specialty training in arthritis care
Access to narrow population
patients usually do not encounter one unless specifically referred
Not currently recognized as a QHP, no reimbursement or difficult to find within/outside of health system.
Number/accessibility of professionals in a community
Hobby-Based Clubs
Consider adding parks and recreation as a stakeholder. (often a place where many of these stakeholders intersect for their communities)
Already established trust relationships
source of shared knowledge on a variety of topics
Access population not frequently visiting doctor
Limited time outside of hobby specific activities
need access to reliable information
Need a liaison who is knowledgeable/qualified in some way (reduce misinformation)
Internet Accessible Education & Coaching
Can be created in multiple languages
Can be accessed 24 hours a day
Can be accessed multiple times by same person
24-7 access / chat history is cumulative, searchable
Often requires broadband access, newer computer equipment and comfort with technology
Frequently requires the patient to be self driven to even access
digital divide
may be profit driven
Lack trust (needs to be built/established)
Non-traditional health care (acpunture, chiropractor, massage therpais etc.)
may be receptive to an arthritis intervention
have more time with patient than PCP
focus of visit is likely pain-related
may not be linked to "traditional" healthcare infrastructure
May have limited professional connections with traditional healthcare providers
experience is inconsistent. Credentials may be lacking
aware of current needs and can make connections
many have training in physiology
might see other treatments & support as "competition"
Unlikely to be reimbursed for service


Psychologists
can help patient address any psychosocial barriers to PA
opportunity to approach with a whole person/whole community lens
may have less familirity with the OA disease process or medical treatments to minimize symptoms
Access to limited population
Public Libraries
Central to communities; often a trusted community gathering place
Promotion opportunity
limited resources
Rheumatology/ Rheumatologist
patients would be more receptive to info shared
excellent understanding of the disease process and potential medical treatments to reduce pain if that is a barrier for activity
may have limited time with the patient per visit or a limited understanding of spcific exercises/activities for the patient ot engage in
comfort in sharing additional info
Length of time between appointments or long waiting time
must have access to up to date resources
Senior Center
already serve as a trusted gathering place; can help connect screening to resources
likely offer AAEBIs or are aware of appropriate programs in the community once a patient's needs are identified
can be challenging to connect back to PCP
Not enough staff or high staff turnover
Need a champion
limited resources
Skilled nursing facilities, assisted living
Access a population that might not be accessible through other means
may serve as an organization to refer to.
should have good organizational infrastructure to provide group education and fitness activities
May not have space as most is dedicated to living space
Not enough staff or high staff turnover
May need more advanced accommodations due to physical/cognitive limitations
Family, Friends, and Caregivers
very motivated to help the patient, understand the patient their needs and barriers
opportunity for empowerment to motivate and follow up
may have limited healthcare knowledge or experience or how to link patient to the healtchare systemt (or who in the system to see)
No systematic approach/access point
caregiver burden and associated outcomes

Appendix D: Exhaustive Stakeholder List

Easier to Integrate, Higher Impact

- Adult Day Health Program
- Arthritis Foundation
- Cardiac Rehab
- Care Coordinator/Manager
- Church Staff and Members
- Co-Workers
- Community Based Organization
- Community Health Workers
- Cooperative Extension or Local College/University
- Employer based resources
- Exercise is Medicine (EIM)
- Exercise Physiologist
- Faith Partners
- Friends and Caregivers
- Health and Lifestyle Coaches
- Local Fitness Professionals (local gym), CrossFit Club
- Massage Therapist
- MD or Extender Dietician
- Meals on Wheels
- Mental Health Therapist
- Nurses (listed 2x)
- Occupational Therapist (Listed 2x)
- Parks Staff during her [Dorothy – Active Retirement Persona] walks
- Physiatry
- Physical Therapist
- Promotoras (Spanish equivalent for Community Health Workers: Source)
- Psychologists
- Registered Dietician
- Rheumatology/Rheumatologist
- Senior Center
- Social Work (Listed 4x)
- Walk With a Doc
- For-Profit Gyms
- Public Health Departments

Harder to Integrate, Higher Impact

- Family members and caregivers (Listed 2x)
- Acupuncturists
- Behavioral health registered dieticians/nutritionists
- Chiropractors
- Church Family
- Clergy
- Complimentary/ Allied Health Professionals
- Electronic Health Record Vendors
- Employer Focus on Health (Access to Gyms, Exercise Groups)
- EMS providers/ ambulance
- Evidence-Based Program Peer/ "Lay" Leaders
- Exercise professionals (clinical exercise physiologists, exercise physiologists, certain personal trainers)
- Faith Leaders
- Garden Club (listed 2x)
- Health coach
- Healthcare Leaders; lead policy and provide resources through health delivery
- Industry and Commercial Partners
- Kids
- Mailperson
- Medicare Plan, either Medicare Advantage or Medicare Supplement
- Neighborhood watch and networking groups (i.e., NextDoor)
- Neighbors (listed 2x)
- Parks and Rec
- Pharmacists
- Policymakers
- Politicians or Community Leaders
- Religious Groups
- Schools- Partner with schools (i.e., PT programs) to facilitate evidence-based programs)
- Senior Centers, Area Agencies on Aging
- Skilled nursing facilities, assisted living
- Sorority Members
- TV or Radio Personalities

Easier to Integrate, Lower Impact

- Adult Learning Programs
- Barbershops and Beauty Salons
- Chambers of Commerce
- Chronic Condition management companies; health technology vendors
- Community Centers
- Fitbit
- Garden Clubs
- Group Fitness Instructors
- Internet Accessible Education and Coaching
- Local Park District Staff
- Parks and Rec Associations
- Public Libraries
- Social Club

Harder to Integrate, Lower Impact

- Bars
- Coffee Shop or Café Staff
- Convenience (i.e., 7-11) or Grocery Stores (healthy)
- EIM-On Campus Group
- Employers
- Farmers Market
- Hobby-Based Clubs
- Local Business Leaders
- Local Small Businesses
- Public Transportation Services
- Employer/Employers-Based Health Plans
- YMCA and Related

Appendix E. The Patient Journey

Workgroup 1

Mapping Out Opportunities to Integrate Care Team Members into the Patient's Care Journey — 45 minutes

Joe – Hard Worker

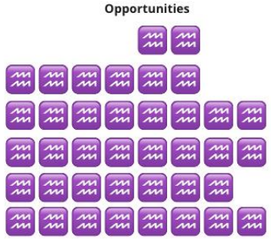
Seeking reduction of pain and weight, so he can earn income for the family and be around for fun with his family.

Activity 3.1

As you look at the patient's journey, identify pain points, challenges and missed opportunities by moving the icons below.

Challenges

Missed Opportunities



Joe was feeling down about missing work, missing opportunities to play sports with his kids, and his wife was worried about him. Even though Joe was reluctant to schedule an appointment with his PCP, he feels optimistic about the opportunity to relieve his knee pain.

Journey Map

Stage of Journey	Before an Appointment			During an Appointment				After an Appointment
	Identify Need	Scheduling	Waiting Period	Checking In	Vital Check	Visit With Clinician	After Clinician Visit	
	What prompted the patient to make an appointment? What was the patient hoping to achieve when they scheduled the appointment? What are the barriers and opportunities?	How was the appointment scheduled? Did the patient call? Was the appointment made online? What was the experience like?	After a patient makes an appointment, is there anything happening before their visit? Are there missed opportunities?	When a patient checks in, what is their experience? What is happening on the front and back end?	What is the patient experiencing when they are called back? Who are they interacting with? What processes are happening behind the scenes?	What is the experience like when they are are interacting with the PCP? What is the discussion like? What is the patient experiencing?	What happens after the visit with the PCP is over? Do they talk to scheduling or billing? Do they talk with anyone about specific issues (e.g. a dietician)? Do they leave with any resources?	What happens after they leave the appointment? Do they get labs? Do they pick up prescriptions? Do they set up an appointment with a specialist or connect with an AAEBI? Is there any follow-up with the PCP?
What is the patient doing?	Joe's wife encourages him to go see a PCP to talk about the pain he has been experiencing in his knees, and he decides to make an appointment to hopefully identify a way to be more physically active with his family.	Joe reluctantly calls a PCP to schedule an appointment for his knee pain, but they do not accept Medicaid. After several more calls, he finally finds a PCP that accepts Medicaid, but struggles to find a time that works for him and his work schedule. They finally find a time several months out.	Joe calls in sick a few more days to work because of the knee pain, and has not been able to play around with his kids outside.	Joe is early to his appointment because he's feeling a little anxious. He sits down and fills out the needed paperwork by hand, but there are some sections that he's unsure of and he doesn't understand some of the questions.	Joe is called back to see the PCP, where his vitals and weight are measured by an RN. Joe confirms the medications he is on to the RN, but is hesitant to go into too much detail.	Joe describes his knee pain and the impact it has had at work. Joe feels like the PCP is listening and communicating in a way he understands. The PCP gives Joe pamphlets on pain management programs and encourages Joe to join one. He also recommends he sees a physical therapist and has a referral in mind.	Joe gathers the pamphlets and puts them in his pockets. Joe is in a hurry to get back to work and plans to look over the pamphlets later. While Joe knows he should talk to the receptionist to get the physical therapist referral information, there is a line at the receptionist desk and Joe has to get back to work.	Joe rushes back to work and leaves the pamphlets in his car. Once home, he shares the pamphlets and information from the PCP with his wife, Maria. She insisted they go on walks together 2-3 times a week.
What is the patient feeling?	Joe worries that he will miss work if he goes to see his PCP; however, he is hopeful that he will be able to find a solution to his knee pain.	Joe feels exasperated as he tries to work with the scheduler to find a time that works for him and his work schedule. He also feels frustrated that it will be several months before he can see the PCP. Joe wishes there were more scheduling support available online	Joe is frustrated as he had to miss two more days of work because of the pain, and sad he is missing opportunities to play sports with his kids, and starts to feel more hopeful for the doctor's appointment	Joe is feeling anxious because it's been a while since he's seen a doctor. He feels lost trying to understand all the paperwork in front of him.	Joe is optimistic as he talks with the RN, however he feels a little confused with some of the health information the RN is repeating back to him.	Joe feels nervous to meet with the PCP, but he's interested in some of the options the PCP mentions.	Joe feels good about his conversation with the PCP. However he feels urgency to get back to work, and is unsure about scheduling another appointment. He's unsure if physical therapy is a covered benefit.	Joe feels a little discouraged as he was hoping for the PCP to help him with the knee pain right away. However, he is grateful for his wife's support, and has in the back of his mind that he should see a physical therapist.
How are the care team members and patients interacting?		The scheduler gathers the necessary intake information, but it is challenging to find a time that works.	A few days before the visit, Joe received an automated appointment reminder voicemail.	The receptionist checks him in and confirms his DOB, address, and insurance information.	The RN calls Joe back to take his vitals and take him to the exam room. The RN enters the data into the EHR, and tell Joe the PCP will be with him shortly.	The PCP listens carefully to Joe and encourages him to schedule an appointment with a physical therapist whom he feels is better equipped to support Joe.		
What infrastructure or method of interaction are they using?		Phone call Scheduling System	Phone call	Face-to-Face Handwritten Paperwork	Patient Chart/EHR	Face-to-face Pamphlets Patient Chart/EHR		
What is going on behind the scenes?		Scheduling department creates new patient record and ensures a PCP is available during Joe's limited appointment window.		The administrative staff print out the new patient intake forms and other standard patient questionnaires, while the receptionist notifies the RN of Joe's arrival.	The RN quickly preps the exam room and grabs necessary paperwork before calling Joe back. They then record his weight and vitals, and ask questions about the reason for the visit.	The PCP records visit notes in Joe's chart, including referral request for ortho follow-up. Instead of identifying an orthopedic surgeon based on Joe's insurance or location, the PCP refers Joe to a specialists they once worked with in the past.	The receptionist is alone in the office and is trying to keep up with the needs of the patients and the care team.	A medical scribe enters the visit information into Joe's patient portal.

Activity 3.2

Place a sticky where this type of individual could participate in the process. We have broken into screening, counseling, and referring, but it's okay if your idea doesn't fit neatly. Just get your idea down!

Workgroup 2

Clara – Social RN

Seeking increased mobility and decreased pain, so she may continue to do the activities she loves and stay active in life.

Activity 3.1

As you look at the patient's journey, identify pain points, challenges and missed opportunities by moving the icons below.

Challenges

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Missed Opportunities

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Even though Clara was nervous about joining the walking group, she found the exercise and social interaction invigorating, and she wanted to get some clinical insight into how she can best incorporate additional movement given her situation.

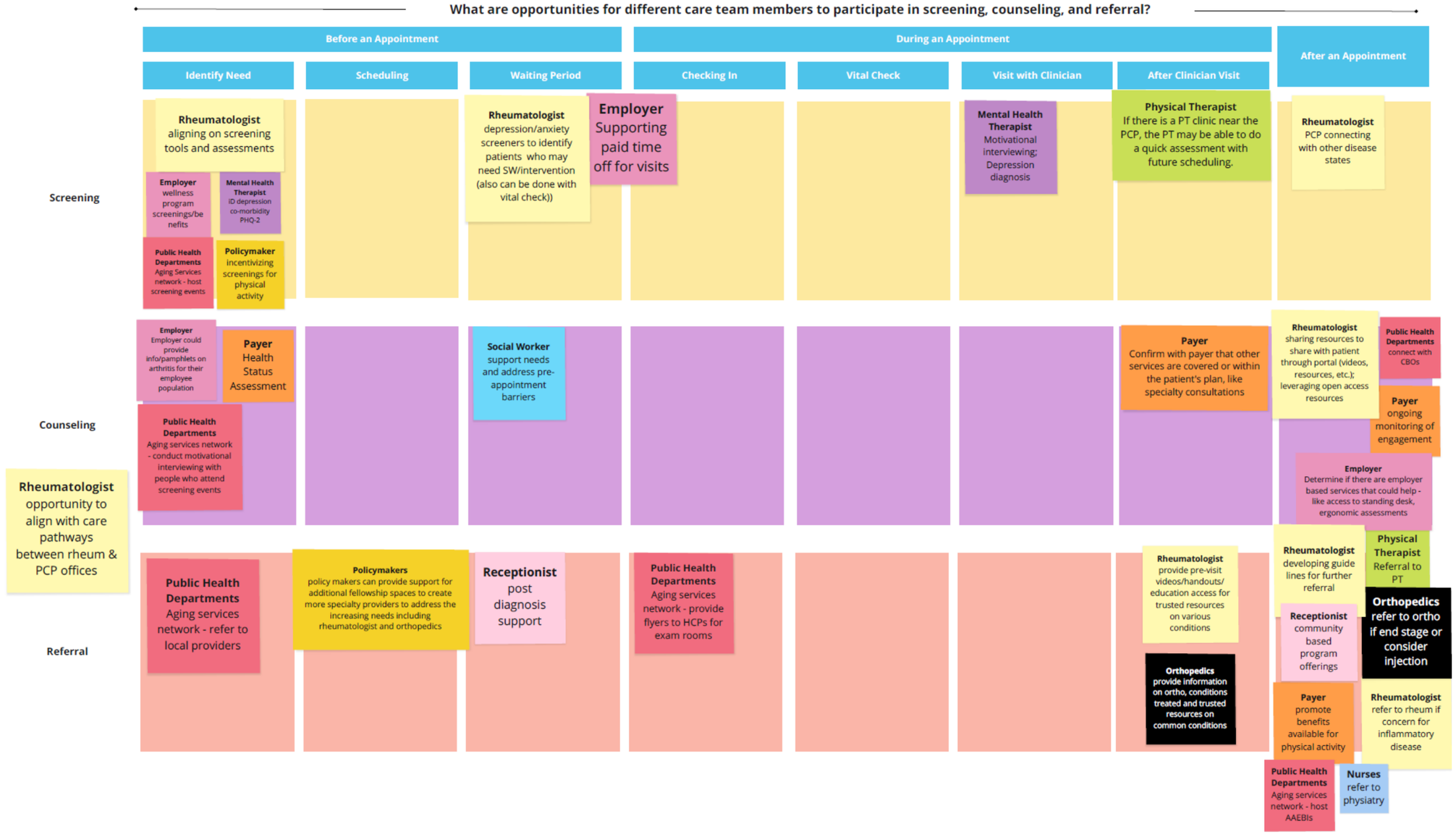
Journey Map

Stage of Journey	Before an Appointment			During an Appointment				After an Appointment
	Identify Need	Scheduling	Waiting Period	Checking In	Vital Check	Visit With Clinician	After Clinician Visit	
	What prompted the patient to make an appointment? What was the patient hoping to achieve when they scheduled the appointment? What are the barriers and opportunities?	How was the appointment scheduled? Did the patient call? Was the appointment made online? What was the experience like?	After a patient makes an appointment, is there anything happening before their visit? Are there missed opportunities?	When a patient checks in, what is their experience? What is happening on the front and back end?	What is the patient experiencing when they are called back? Who are they interacting with? What processes are happening behind the scenes?	What is the experience like when they are are interacting with the PCP? What is the discussion like? What is the patient experiencing?	What happens after the visit with the PCP is over? Do they talk to scheduling or billing? Do they talk with anyone about specific issues (e.g. a dietician)? Do they leave with any resources?	What happens after they leave the appointment? Do they get labs? Do they pick up prescriptions? Do they set up an appointment with a specialist or connect with an AAEBI? Is there any follow-up with the PCP?
What is the patient doing?	Clara gets a postcard from her PCP, and she decides she wants to make an appointment so she feels more comfortable introducing more movement and opportunities for social interaction.	Clara calls to make a wellness visit with her PCP, where she decides she wants to ask about the pain in her knees.	Clara walks a few times on her own, but it doesn't go as well. Her knees feel more pain.	There is a delay on the subway, and Clara hits traffic and is five minutes late to her appointment. She checks in and sits down to fill out her paperwork on an iPad.	Clara hears her name called and gathers her purse. She steps on the scale and then goes back to the exam room to have her blood pressure taken. She gives the MA updates on her medical history and confirms she isn't taking medication.	Clara has only seen her PCP once, as she is new to the area. She describes how she is largely sedentary but wants to be more active. They discuss a range of health behaviors, including physical activity.	Her doctor leaves her with a pamphlet on the Walk With Ease program and asks her to go downstairs to the lab to get her blood drawn.	Clara rushes to get her lab work done and puts the pamphlet in her purse, thinking she will read through it when she has time and energy. However, time goes on, and she loses motivation. She occasionally goes walking but isn't consistent.
	Clara realizes she had let fear of pain keep her from doing things she enjoyed. She is feeling hopeful that she can decrease pain.	Clara feels a little embarrassed. Because she is a nurse, she feels like she should already have the answers. But she still feels hopeful that she can find a path forward.	Clara is feeling more anxious about the appointment and is doubting her resolve. As her appointment gets closer, she feels overwhelmed by one more thing to do.	Clara is embarrassed she was late and a little anxious, but still somewhat excited that she can get some answers today.	Clara enjoys chatting with the medical assistant. Talking about clinical information puts her at ease, but she does not like seeing her weight.	She wants to come across as knowledgeable to the doctor, and appreciates how her doctor speaks to Clara like a fellow clinician. The doctor puts her at ease as they discuss options.	Clara feels hopeful and motivated to connect with others. She is curious about the WWE program, and she's feeling optimistic.	Clara feels guilty that she isn't taking action but feels more and more complacent. While she had really wanted to address her knee pain, she didn't feel there was a lot of time to discuss or make a plan.
What is the patient feeling?	🙂	😉	😟 a missed opportunity could be providing education in the waiting room	😳	😐	😊	🙂	😟
How are the care team members and patients interacting?	Clinic manager contacts past-patient Clara via general outreach campaign	The scheduler is juggling several phone calls and feels a bit rushed to schedule the appointment. She is able to find Clara's chart easily and make the appointment for a couple weeks out.		The receptionist checks Clara in for her appointment by confirming her date of birth, mailing address, and her insurance information on file. The receptionist provides Clara with digital intake forms and lets her know she has plenty of time as the PCP is running 15 mins behind schedule.	The MA calls Clara back and chats about how her day is going as she takes her weight. The MA brings her to the exam room and enters vitals information into the EHR.	The PCP is aware that she has patients waiting and is running behind. Rather than discussing at length Clara's options, the PCP gives her a pamphlet on the Walk With Ease program and encourages to participate.	Clara greets the receptionist at the lab, and she is checked-in. She waits 15 minutes before she is seen, but the phlebotomist taking care of her was nice and the blood draw is quick and she soon leaves the clinic.	Clara gets a message that her patient information has been updated with notes from the visit and her lab results.
What infrastructure or method of interaction are they using?	Post card outreach	Phone call Scheduling software	Text message	ipad could administer pain and physical function screeners Face-to-face iPad paperwork	EHR	Face-to-face Patient chart Pamphlets	Patient chart Order to lab requesting blood work	opportunity to "prescribe" aditional educational material--like video links Patient portal
What is going on behind the scenes?	EHR identified Clara as someone due for an annual wellness visit. Clinic manager confirms Clara's mailing address using patient intake data. ehr could also look for diagnosis of OA and send targeted info as well	Scheduling department ensures the appointment time is sufficient for conducting annual wellness visit with Clara's PCP.	An automated text message gets sent out reminding Clara of her appointment.	Receptionist enters Clara's patient record number to pre-populate digital intake forms with Clara's DOB, medication list, and personal/family medical history, for Clara to update.	The MA looks at Clara's record from the last visit to see how her current weight and blood pressure compare. She sees a significant increase and flags for the PCP to address.			Chart is entered into Clara's medical record.

Activity 3.2

Place a sticky where this type of individual could participate in the process. We have broken into screening, counseling, and referring, but it's okay if your idea doesn't fit neatly. Just get your idea down!

Mental Health Therapist
Employer
Nurses
Payer
Pharmacist
Physiatry
Physical Therapist
Policymaker
Public Health Departments
Receptionist
Social Worker
Family, Friends, and Caregivers
Orthopedics
Rheumatologist



Workgroup 3

Dorothy – Active Retirement

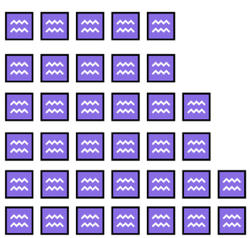
Increased energy and mobility, so she can best care for herself.

Activity 3.1

As you look at the patient's journey, identify pain points, challenges and missed opportunities by moving the icons below.

Challenges

Missed Opportunities



After being unable to play outside with her grandkids, Dorothy hopes to regain control of her health and confidence to be active again. She has an upcoming check-in with her PCP, where she plans to discuss her current challenges and ask about potential solutions.

Journey Map

Stage of Journey	Before an Appointment			During an Appointment				After an Appointment
	Identify Need	Scheduling	Waiting Period	Checking In	Vital Check	Visit With Clinician	After Clinician Visit	
	What prompted the patient to make an appointment? What was the patient hoping to achieve when they scheduled the appointment? What are the barriers and opportunities?	How was the appointment scheduled? Did the patient call? Was the appointment made online? What was the experience like?	After a patient makes an appointment, is there anything happening before their visit? Are there missed opportunities?	When a patient checks in, what is their experience? What is happening on the front and back end?	What is the patient experiencing when they are called back? Who are they interacting with? What processes are happening behind the scenes?	What is the experience like when they are are interacting with the PCP? What is the discussion like? What is the patient experiencing?	What happens after the visit with the PCP is over? Do they talk to scheduling or billing? Do they talk with anyone about specific issues (e.g. a dietician)? Do they leave with any resources?	What happens after they leave the appointment? Do they get labs? Do they pick up prescriptions? Do they set up an appointment with a specialist or connect with an AAEBI? Is there any follow-up with the PCP?
What is the patient doing?	Dorothy has a regular check-up coming up. She is planning to discuss her fatigue, hip pain, and concern with falling, all of which are preventing her from being active and maintaining relationships. Dorothy's husband offers to drive her, as she doesn't feel comfortable driving.	Dorothy scheduled the check-up with her PCP the last time she had an appointment. She was able to schedule it in-person with the receptionist on her way out.	Dorothy tries to garden before her appointment, but she gets tired very quickly. Her friend group invites her to go for a walk, but she declines because she is afraid of falling.	Dorothy's husband has something come up last minute, and she has to drive herself. She checks in and has the receptionist confirm her information. She is not accustomed to using an iPad and has trouble seeing the words on the screen.	Dorothy's name is called and she takes a moment to stand and walk to the back of the office. The MA has to repeat themselves a few times while they measure Dorothy's weight and vitals. She has a hard time remembering her medical history and various medications.	Dorothy has been seeing her PCP for years, and spends the beginning of appointment making small talk and asking about their family. The PCP coaxes Dorothy into discussing recent challenges, particularly her fatigue, hip pain, and concern with falling. Her PCP reassures her, and explains some potential opportunities to get more active and learn about falls prevention.	Dorothy schedules her next appointment with the receptionist at the front desk. Dorothy writes a reminder in her planner to pick up her prescriptions,	She realizes the time and that she will have to drive home in the dark. Dorothy thinks about having her son help her with the pamphlets the next time he visits her.
What is the patient feeling?	Dorothy is hopeful that her PCP can provide her with some solutions to her current pains and fears.	Dorothy is glad she already has an appointment scheduled. It is one less thing for her to worry about.	Dorothy is feeling limited and is sad she has lost touch with her friend circle due to her pains and fears. She is still hopeful about the appointment.	Dorothy is very anxious after the last minute change and having to drive herself. She is embarrassed she has to rely on the receptionist, but is grateful he is able to help her.	Dorothy is uneasy discussing her medical history and various medications. She has a hard time remembering them, and gets embarrassed. She dislikes this portion of the appointment.	Dorothy has a good relationship with her PCP and enjoys talking with them. She becomes a bit upset and embarrassed when having to discuss her recent pains and fears, but is eager to find solutions.	Dorothy feels more hopeful about the opportunity to join programs, but a bit unsure about what to do next. She is glad she got to see her PCP.	Dorothy is nervous about her drive home, which causes her to forget to make a plan for figuring out the programs.
How are the care team members and patients interacting?		The receptionist helped Dorothy to schedule her check-up during her previous appointment, and ensured it was entered correctly in the system.	The clinic's front office staff still call Dorothy to confirm her appointment time prior to the visit.	The receptionist checks Dorothy in and provides additional assistance. He tries to be patient but the waiting room is full and a bit stressful.	The MA calls Dorothy back and makes small talk about Dorothy's grandchildren. The MA checks her weight and then takes her to the exam room to take her vitals. The MA enters the information into the EHR.	The PCP is glad to see Dorothy again but only has a few minutes to talk, due to a busy schedule. The PCP gives Dorothy pamphlets, and encourages her to read them with her husband and son.	The receptionist helps Dorothy to schedule her next appointment. Dorothy takes a moment to schedule, as she is unsure of her husband's availability.	
What infrastructure or method of interaction are they using?		In-person scheduling Scheduling software	Phone call	Face-to-Face iPad paperwork	EHR	Face-to-face Patient chart	Pamphlets	In-person scheduling Patient Chart
What is going on behind the scenes?		Given Dorothy's clinical needs, her PCP likes to see Dorothy regularly (every 6-8 weeks). Dorothy and the front office staff are aware of this preferred cadence and schedule follow-up appointments following each visit.		Billing department checks Dorothy's Medicare. Receptionist enters Dorothy's patient record number to pre-populate digital intake forms with Dorothy's DOB, medication list, and personal/family medical history, for Dorothy to update. The receptionist pings the MA to let them know Dorothy has arrived and the MA preps the room and grabs necessary paperwork and equipment.	The MA looks at Clara's record from the last visit to see how her current weight and blood pressure compare. She doesn't notice any changes.	PCP reviews Dorothy's chart to see what medications she's already tried or to see if Dorothy's other conditions might exacerbate her fall risk.	The billing department sends Dorothy and Medicare the bill.	Dorothy's PCP updates her patient profile with details from the appointment.

Activity 3.2

Place a sticky where this type of individual could participate in the process. We have broken into screening, counseling, and referring, but it's okay if your idea doesn't fit neatly. Just get your idea down!

Church Staff and Members
Community Health Workers
Exercise Physiologist
Hobby-Based Clubs
Internet Accessible Education and Coaching
Non-traditional healthcare
Psychologists
Public Libraries
Rheumatology/ Rheumatologist
Senior Center
Skilled nursing facilities, assisted living
Family, Friends, Caregivers
Parks & Rec
Personal Trainer

Appendix F: Opportunities & Prioritization

Activity 4.1

Add sticky notes for the top opportunities that come to mind after our discussion about the Journey Map.

Patient and Care Team (Traditional and Non-Traditional) Interactions

- How can you connect primary care providers with outside non-traditional care team members to alleviate time cruches?
- provide better educational resources (apps, handouts, web links) to providers to give to patients regarding ways to improve physical activity and reduce OA disease burden
- Include patient advocate to help the patient through their journey
- need to figure out parameters for assessment and patient needs for appointment. This will help identify plan of care.
- Identify opportunities to engage with the community (e.g., listening sessions, town halls)

Internal Care Team Interactions and Coordination

- based on screener, the care team determines how to coordinate and interact with patient
- intentional engagement with CBOs and similar partners

Care Team Member Roles and Responsibilities

- screening embedded into MA role
- Keep all team members at the top of their capabilities as often as possible
- who on care team or through an external partnership is best positioned to address factors that may prevent or limit patient's ability to follow up/follow through with referral
- data shows that patients are more likely to be physically active if counseled by their care provider
- wrap around approach where screening could be done before PCP visit; PCP counsels; MA or other team member handles referral
- Task a member of the team to develop and populate a community-specific list of community-based PA resources: programs, places, professionals

Infrastructure, Resources, and Technology

- What is the minimum number of questions that could universally screen for arthritis quality of life outcomes? What overlap is there with screening for other chronic dieases?
- integrating arthritis screening questions into PCP appts (either through EHR or Medicare Wellness visit)
- risk stratification discussion
- build standard patient education handouts in the EMR
- Collect information that can be used to create automated clinical decision support flags
- Self-reported PA should be simple, easy to understand and before the clinic visit. Flags for whether meet minimum recs. Standardize questions.
- make it easy to use the EMR to screen patients and have patient handouts autmatically disseminated if certain flags pop up
- Unify screening methods to standardize time of collection, method of capture and ability to transmit
- supporting primary care in knowing the range of resources and interevntions depending on severity

Community Organizations and Resources

- Intentional ways to involve these groups that align with the patient needs
- create educational materials, courses that community partners can provide/administer
- central repository for arthritis resources
- opportunities to support proactive follow up to help people navigate to services following appt.
- intentional involvement / engagement with HCPs/HCOs
- advocating for liveable wages/reimbursement opps for non clinical partners being asked to implement components of this process; new opps will emerge for Medicaid through ILOS over next few years
- have vetted, approved youtube channel or other online repository for high quality evidence based self interventions (diet, exercise, nutrition, stress management etc).

Other

- streamlining referrals to AAEBIs+ based on community structure
- training for clinicians on how to engage community orgs and resources
- identify common opportunities to refer to and provide wrap-around services by the care team
- Support efforts to obtain QHP status for clinical exercise physiologists to ensure reimbursement and codes
- dig more into where we need to expand model to reach patients who may not engage with the primary care on the front end to get help
- innovative strategies for reaching patient populations that historically and/or are currently challenged by barriers to SDOH
- where do we need to build upon certification (e.g. CHW, health coaches) to anchor non clinical service partners to evidence based approach adn open doors for reimbursement