

Moving Public Health Agendas to Action: Pitfalls, Challenges and Opportunities

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Dr. Julie Keysor: Greetings colleagues, students, and staff, and our attendees who are joining by webcast from across the US. I am Dr. Julie Keysor, Director of the BU Center for Enhancing Activity and Participation among Persons with Arthritis, or ENACT, and an associate professor of physical therapy and athletic training at Boston University. ENACT is based at the College of Health and Rehabilitation Sciences on the BU Charles River campus, and ENACT is a highly interdisciplinary program with faculty and investigators from the School of Public Health, the School of Medicine, the College of Health and Rehabilitation Sciences, and the School of Communication.

It is my pleasure to introduce Dr. Patience White, Vice President of Public Health at the Arthritis Foundation, Professor of Medicine in Pediatrics at the George Washington University School of Medicine and Health Sciences, and a consultant to the Health and Human Services Bureau of Maternal and Child Health's Medical Transition National Center. Dr. White is joining us today as a visiting professor and a member of ENACT's Scientific Advisory Board. Her talk today is titled "Moving National Public Health Agendas to Action: Pitfalls, Challenges, and Opportunities". Specifically, she will talk about the OA public health agenda and ongoing interagency activities to bring the agenda to reality in the community. Dr. White has a Master of Science degree from Dartmouth Medical School, a Doctor of Medicine Degree from Harvard Medical School, and Master's in Education from George Washington University's Graduate School of Education and Human Development. Dr. White joined the Arthritis Foundation in 2004, and ever since she has been an advocate for people with arthritis, and increased the Arthritis Foundation's Public Health visibility nationally. She led the Arthritis Foundation to obtain two multi-million dollar CDC Cooperative Agreements to assist the Arthritis Foundation in reaching people with arthritis. She is facilitating two public health strategic activities for the Arthritis Foundation, having arthritis recognized as a major public health issue in the United States, and leading new strategic objectives to reduce arthritis-related disparities in health and health care. Again, we welcome our virtual attendees, and we have a great representation across the US from public health departments, public health schools, practitioners, and consumer organizations.

Dr. Patience White: Thank you very much, Julie. It's a really great pleasure to be here today, and I had the chance to come here and spend the day with ENACT. I really appreciate being invited and being a part of the scientific committee.

So today, I have the chance to sort of tell you the story of how the Arthritis Foundation, with lots of partners and help, are trying to sort of move a national public health agenda to action around arthritis. So I'm going to be telling you that story today, but starting a little bit with some other components here. Just to have people be familiar with arthritis, I'm going to talk about arthritis, and a little bit why it's a public health issue. Many people ask me that question. And then, learn about the arthritis Foundation's approach to using the national public health agenda for osteoarthritis, the OA Action Alliance, the Ad Council Campaign, the Environmental and Policy Strategies, and the Institute of Medicine's Living Well with Chronic Illness Report. All of these things, to really approach this crisis and be in to make a difference in the public health arena. I'll be talking about some of the challenges and many of the opportunities that we've had moving this forward.

So, I'm always asked, "What is arthritis?", and the word arthritis really means joint inflammation, and it comprises lots of different diseases. People are often surprised about that, as well as many other conditions. The most common are osteoarthritis, gout, many people are familiar with gout and osteoarthritis, as well as rheumatoid arthritis. The common symptoms include pain, aching, stiffness and swelling in and around the joints.

It has a tremendous impact on the United States as well as in business. There are 50 million people diagnosed with arthritis, so that means 1 in 5 of the people in this auditorium and listening here are likely to have arthritis, and that by 2030, it's going to climb to 67 million people. Two thirds of these people with arthritis are under the age of 65. That usually surprises people that so many younger people have arthritis.

And it's the second most frequently reported chronic condition. It is the leading cause of disability, and it has significant activity limitations. Twenty-one million report activity limitations, and that will also grow to 25 million by 2030. There are 8 million (1 in 3) report work limitations. So it has a significant impact on the workplace. And it's a more frequent cause of activity limitation than many of the other chronic illnesses that people always refer to: heart disease, diabetes, or cancer.

It has an enormous cost, as you can see here, when you add it all up it's \$128 billion. And we know that figure is low because it needs to be updated, but it's still a tremendous cost to society in terms of financing it.

It also affects all racial and ethnic groups. As you can see here, the prevalence seems to be a little bit less in the African American and Hispanic/Latino, but there's some question about whether or not any of those people are in the system to get involved in these kinds of wonderful surveillance that the CDC does. Certainly that is what the Hispanic community tells me: since two-thirds are undocumented and probably not getting involved in the calls and the ways that they look for people with arthritis.

But you can see, despite this, that the activity limitation, work limitation, and pain are more common in these groups. We don't know why this is, but clearly this is another issue within the United States as the population shifts and the Hispanic/Latino population becomes the leading group that's growing in this country. We need to be thinking about that, along with our other minority groups.

So, physical activity in general is a proven benefit for arthritis. People with arthritis often say, "Really? I don't want to move my joints, it actually increases my pain." But a lot of the studies that have been done show that it can decrease pain when the physical activity is done appropriately. It can delay and prevent some disability, improve function, and increase independence. It improves aerobic capacity, muscle strength, and overall quality of life. Yet, people with arthritis still have higher rates of physical inactivity than those without. Forty-four percent are inactive, that means they have less than ten minutes of aerobic activity/physical activity a week, compared to 36% inactive without arthritis.

So, the barriers are pain, fatigue, lack of mobility and motivation, and I think fear of pain. Arthritis is a very painful condition, and that's the number one issue that people with arthritis speak about.

It does have co-morbidities. The highest rates of physical inactivity are also among adults who have arthritis that come along with heart disease, diabetes, and obesity. The hope here is that physical activity done safely with arthritis will help those other diseases. So if people with diabetes become more physically active who are not because of their co-morbid arthritis that they'll be able to improve their disease outcome as well around diabetes.

So, actually, how many people with diabetes and heart disease have arthritis? As you can see here, that 59% of people with heart disease have arthritis. About 11 million people here, 54% of people with diabetes have arthritis, about 7.3 million people. And about 37% of people who are obese have arthritis. So you see it marches along with these other major public health issues in the country.

Now, this is an example, just showing you from diabetes here, looking at people who have diabetes alone versus arthritis with diabetes, arthritis alone, and neither condition. So when you're looking at neither condition, you can see that the percent inactive, and then you move to the next column, arthritis alone, then diabetes alone, but when you have that column on the right, as you look at this, arthritis with diabetes is by far the highest percent of inactive.

So thinking about arthritis becomes very important when you're looking at these other diseases. If you don't really address the arthritis, you're not going to be able to address the other chronic illnesses. So, I think it's important. We almost look at arthritis as sort of the backbone issue here that you really need to be thinking about that, and if you don't address it you're going to have trouble addressing many of the people with heart disease and diabetes.

So, the challenge is this triple threat in the United States, of obesity, arthritis, and physical inactivity. There is data, and it always really can motivate some people, that being just 10 pounds overweight can increase the force on the knee by 30-60 pounds with every step. And so just a little bit of weight loss can make a huge difference in arthritis of the knee.

And you can see the cycle of pain here, that people with arthritis, they have pain, they tend not to be physically active, they then gain weight, increasing the pressure on joints, and this is sort of a vicious cycle. And when you look over here, you can see that the prevalence increases with body weight pretty directly here from healthy weight at 16.9%, overweight at 19.8%, and obese at 29.6%. So the public health crisis around obesity also ties in arthritis as we're looking at this.

So what do people with arthritis want? They want their pain to be relieved. The Arthritis Foundation has done a lot of work looking around at asking people with arthritis what they want. Not only do they want their pain relieved, they want their quality of life to improve. They want the public and the federal government to recognize arthritis as a key issue. They want to increase funding to find that cure, so arthritis will be gone. And they want to focus the public's attention on what they can do to improve their lives and potentially prevent it.

Now the challenges are, well, exactly this. Arthritis is not well understood by the public or the policymakers. There is a high morbidity, but low mortality, and that sometimes makes people think there is a lack of urgency here. The emerging co-morbidities are the major focus in public health, and we want arthritis to join those other diseases that are constantly mentioned: heart disease, diabetes, cancer, and obesity.

The common myths that people have out there are "arthritis pain isn't serious, not a problem" and "anyway, it's just part of aging, you just have to live with it", and finally, when people say

“living with arthritis” they don’t actually find out what kind of arthritis they have and what they can do about it.

So, there is an opportunity here, and today we’re talking about the public health approach here, that something really can be done to get people active and feeling better across the lifespan.

And I wanted to let you know a little bit about the Arthritis Foundation before we get looking at what we’re doing in this arena. We are the only nationwide agency addressing arthritis and the related conditions. We’re a volunteer health organization with about 60 years of experience. We now are organized in ten regions with great community presence, and it serves as a national resource that people can turn to when they are diagnosed or have arthritis, and it is one of the largest private non-profit contributors in arthritis research in the US. We’ve given about \$360 million to support more than 2100 scientists over the past many years.

Our mission is to improve the lives of people with arthritis through leadership and prevention, control, and cure of arthritis and related diseases. We’ve set a goal just to reduce by 20 percent the number of people affected by arthritis-related physical activity limitations by 2030.

We have good presence in the community around our evidence-based programs. We have a program with the YMCA: an aquatics program, we have an exercise program and a new walk with ease program that is given and put out by our local offices and our partners across the United States along with the public health departments.

And the new Signature Program, Walk with Ease, I just wanted to let you know about it. It’s a physical activity and self-management program designed for people with arthritis and other chronic conditions. It’s been evaluated by Dr. Leigh Callahan at the Thurston Arthritis Research Center at the University of North Carolina. It’s been approved by the CDC as an evidence-based intervention. It’s available in English and Spanish. It focuses on motivational strategies: action plans, goal setting, and social support. It can be done by individuals (self-directed) or groups led by a trained leader, and it’s a 6 week program. You can see the workbook here that comes along with the program.

So when you’re thinking about public health, let’s just be on the same page. So, what is a public health intervention? This comes from the National Public Agenda for Osteoarthritis. A public health intervention is an activity that prevents disease, injury, or disability or promotes

health in a group of persons. These activities are distinguished from individual clinical interventions.

And when we're thinking about having a public health approach at the Arthritis Foundation, we really turned to this wonderful CDC Health Impact Pyramid and began to think about where we are active in these different levels. You can see here, we're looking at from the smallest impact at the top of this triangle down to the largest impact, and you're starting at the lower part, the socioeconomic factors.

We all know that poverty, education, housing, and equity affect health. The next step is changing the context to make individuals' default decisions to be healthy. One of these classic examples is smoke-free laws and tobacco tax, those kinds of approaches.

Then, there are long-lasting protective interventions, such as immunizations. Clinical interventions; these are the things that we do at our academic health centers across the country and at physicians' offices: treating for high blood pressure, high cholesterol, these kinds of diseases, and finally counseling and education. We want people to eat healthy, be physically active, but it often takes a lot of effort and has not as much impact as some of these other policy areas on the lower part of this triangle.

Now, we have enjoyed a wonderful relationship with the CDC Arthritis Group, and together, they have helped us to be thinking about how to address arthritis as a public health issue. And they do tremendous surveillance data to really make the case about arthritis as a public health issue. Together, we have worked on the National Public Health Agenda and the other areas here that I'll be speaking about.

Together, we want to continue to expand evidence based programs such as the Walk with Ease Program and some of the self-management programs. And the CDC has an arthritis program in many states that also works in all these areas.

So I took that wonderful triangle here and sort of said "where are the arthritis tools leading to outcomes in these areas?" And clearly for many years we worked hard with our evidence-based programs, our community programs and services, conferences, websites, our tools and newsletters; these are excellent modalities. We are really focusing on educating persons with arthritis.

In clinical interventions, we have had a long-standing research program I mentioned earlier. We advocate for more arthritis research and prevention, access to biologics and pediatric rheumatologists. What we really wanted to do is begin to think about how we could change the context to make individuals choose the healthy approach and perhaps delay and decrease

the disability from arthritis. Many of the things I'm going to talk about today are in red here and fit into this area.

So that's where we begin to turn our focus. So then we turned and thought that the first thing we need to do is to think about osteoarthritis. It was really the most common form of arthritis. The prevalence is truly rising; we have 27 million Americans with osteoarthritis, and this is doctor-diagnosed arthritis as done by the CDC. Half of all adults will develop OA of the knee. Sixty percent of people who are obese will develop OA.

So you can see where we're headed; this country is not getting lighter. There's been a recent report released that we're going to have many states having more than 60% of their population being obese in the next ten years. It's the leading cause of pain, loss of function, and disability among adults in Western countries, and in the US more than 700,000 hip or knee replacements are carried out each year. And about 80% of people with OA have limitations in movement, and 25% cannot perform major activities of daily living. You can see some of these major activities here, from the Framingham cohort, 34% have trouble doing heavy home chores, 30% or so walking a mile, housekeeping, stair climbing. So a significant morbidity for people who have this form of arthritis.

So we thought, back in 2010 with the CDC that we needed to garner attention, so this is the beginning of our process to be thinking about how to make arthritis recognized as a public health issue. So, the National Public Health Agenda for Osteoarthritis: we pulled together 75 stakeholders who collaborated on making this national public health agenda for osteoarthritis. It's really a call to action around the areas that make a difference in public health, and you can see this circle here: weight management, self-management education, physical activity, and injury prevention. And we really want it to influence this systemic change to improve the lives of Americans with arthritis, and in particular, osteoarthritis.

Now, the recommendations: what we really wanted over the next five years is to establish supportive communication initiatives, public health policies, and strategic alliances for OA prevention and management; continue to ensure the availability of evidence-based public health interventions, and initiate public health research to better understand osteoarthritis, its risk factors, and effective strategies for prevention.

I'll list some of these here so we can look at the top ten. So self-management education should be expanded as a community-based intervention for people with symptomatic OA. Low-impact, moderate intensity aerobic physical activity and muscle strengthening exercise should be promoted widely as a public health intervention. We want to decrease joint injury by increasing existing policies and interventions that have been shown to reduce OA related joint

injuries. Many people don't know that if you have a major injury and have to have surgery on your knee, even as a high school student, that you're going to develop knee osteoarthritis at a high prevalence ten years later. You're seeing this increase particularly around injury for women in soccer and baseball as well as basketball.

Weight management should be promoted for the prevention and treatment of osteoarthritis, and national nutrition and dietary guidelines should be followed by adults with arthritis so they select the right things to eat while staying within their caloric requirements. Also, a national policy platform for OA should be established to improve the nation's health through evidence based clinical and community prevention and disease control activities, including core public health infrastructure improvement activities. Also, to expand systems to deliver evidence-based interventions and to make sure there's access to these, that they're there and everybody actually has an opportunity to take them.

Improve workplace environments by adopting policies and interventions that prevent onset and progression of osteoarthritis. Have a well-designed communication strategy that should be initiated and sustained to enhance the understanding, and hopefully change the attitudes and behavior of everyone: consumers, healthcare providers, policy makers, employers and the business community, and community organizations as well.

Last but not least, research and evaluation should be pursued to enhance surveillance, better understand risk factors, refine recommended intervention strategies, evaluate workplace interventions, and examine emerging evidence on additional interventions.

This is a tall order, these ten recommendations, and you can see we have a lot of work ahead of us. So, what are the next steps for us to change the context? We actually launched the OA Agenda on Capitol Hill in February of 2010 and delivered it to all the Federal and many Administration offices. We often see going back to visit them today as they talk about federal budgets that they bring up this OA agenda, sometimes not knowing it was us with the CDC that created it, for examples.

We are building and are beginning to work with the OA Action Alliance to keep those partners engaged that came together. And we want to communicate with consumers. We partner with the Ad Council to do a campaign, which I'll show you. We also developed, in conjunction with our partners and the CDC, environmental and policy strategies to increase physical activity among adults with arthritis. And we wanted to think about switching the attention overall to morbidity from arthritis and how to lessen it.

I think we tend to measure how we're doing in public health by measuring people who don't die. I think we need to begin to think about it, and we want to have people start to think about how you live well with chronic disease. So with the CDC we helped fund an Institute of Medicine Report which I will also speak about.

So what about this OA Action Alliance? Its mission is to prevent and control osteoarthritis by promoting effective programs, policies, and communication strategies. We initiated it in April of 2011, and we have workgroups. You can see it's no surprise; these workgroups follow very closely to the agenda itself. Please, if you want to learn a lot more about this, visit www.oaction.org. This is just giving you the broad based network of organizations. As you can see, ENACT is a member here of the OA Action Alliance.

And this is growing, so this is already outdated. We have a new member that joined us today, and we're very excited about this. Each of them has chosen one of those areas to work in as we're going forward. So these workgroups: the injury prevention workgroup really is promoting evidence-based policies and strategies. They're really focusing on ACL tears at the moment and are going to be working very focused on that area, and then we will be thinking about falls in the older age groups.

The physical activity workgroup is increasing physical activity and reducing physical inactivity among adults. The self-management education workgroup goal is to promote evidence-based arthritis self-management education programs for all adults with arthritis. The Weight Management group is promoting policies, initiatives, and partnerships to help all people achieve and maintain a healthy weight.

A lot of this is getting folks in the obesity arena to be thinking about arthritis as associated with obesity and perhaps you don't have to get arthritis if you reduced your weight and became a little more healthy in terms of what you're eating.

Another component, and we released this the same day we released the Osteoarthritis Agenda, was the Ad Council Campaign. This was an exciting effort to work on, this has been a three-year effort working with the Ad Council and developing a campaign that would really create a sense of urgency and compel boomers (we're looking at 55 and up) with arthritis to realize that they can take simple steps to change the course of arthritis. Many of you may have heard some of these radio ads. I'll show you some of the posters and so forth. The goal was to drive adults with arthritis to a website. The Ad Council campaign primarily works through the web in terms of their campaigns where they can learn simple steps to reduce the pain and increase their mobility. And, as I said, it's adults 55 and up who have arthritis, living with it or at risk.

So, the main message was that you can stop arthritis pain from taking over your life. The reason you have to think about this and was portrayed really nicely in these ads going forward is that there are simple actions you can take. The more you move, the more you can move, and for every pound lost there is a 4 pound reduction in the load exerted on each knee. That latter message really spoke to many people, and at all the focus groups it would really be a showstopper. We did a lot of focus groups around these messages.

There are TV ads you can see here; we did a variety. The first one was a group pop-locking, which is a fun, very movement-oriented activity. It made people smile in the early parts of this campaign. We made it a little more hard-hitting with the latter part of the campaign, talking about your weapon to fight arthritis.

You can see here the print ads. The most popular print ad by far is this one; it was a lot of fun to try to find a generic sneaker to make it fit here. And you can see here, it says "Use daily to improve your health". Obviously moving is the best medicine, and obviously swimming as well as walking your dog is other approaches as well.

We had an active website that you can see here, this was fightarthritispain.org. It's still up there, and you'll know we developed a risk assessment tool with our colleagues at the NIH as well as the University of Pittsburgh that was evidence-based so people learn a little bit of their risk of knee osteoarthritis here.

It has evidence based questions that was developed and validated from NIH OIA database, the questionnaire was put on the Ad council campaign website. We had about 5 thousand people take the assessment to date and then become engaged in the process. It obviously assists us in being able to reach back out to this group and see how we can get them engaged in the programs and services that the foundation offers.

These are some of the sample questions, as you can see it is pretty straight forward. During the past year have you had any pain, aching, or discomfort in or around your knee while squatting? At any time during the past year have you had knee swelling that lasted more than one day? At any time during the past year have you felt grinding or heard clicking or any other type of noise when either knee moved? So you can see there are more questions there, and what happen when people take this? They then get a rating of low, moderate, or severe risk. And then they can choose information that can receive to help them think about what they can do to help them with regards to their low, moderate, or high risk.

So then we began to think we need to think about policy, systems and environmental change that can be applied to arthritis. There has been a lot of data that yes if you are trying to stop

people from smoking that doing policy and environmental change is extremely important but actually how do you get people to do something positive. What policy change do you make to have people do physical activity for instance?

So when you are thinking about this what are the advantages? Well it has potential for obviously systemic change, impacting many elements of an organization. Changing infrastructure, it has broad reach ideally leveling the playing field for that group so they have availability. Flexibility thinking about the unique characteristics and needs of your community to implement these initiatives, and it is sustainable over the long run, even when the champion leaves and the funding is gone.

So where you live affects how you live, I think everyone feels this in public health. You certainly can't make healthy decisions if healthy options aren't available. So a lot of this is thinking what we can do to improve physical activity.

So just reminding us we have a daunting task in front of us the "Prevalence of No Leisure Time Physical Activity among Adults with Arthritis" from the CDC. You can see this wonderful dark belt down here where more than 40% of people don't do anything. There are a couple of very healthy states I can quiz you here on which one those are, but you can see we have a daunting task to try to make a difference in this process.

So we started the process by developing a policy and environmental strategies to increase physical activity. This is a report that focuses on the unique role of physical, social and environmental factors in making physical activity accessible, convenient, and effective for adults with arthritis. That's a tall order and we pulled together excellent experts from many of the sectors that would help us think through what would be arthritis specific. There are many good policies around disability programs and so forth but we really focused on what would be particular for people with arthritis.

It was funded by a CDC grant, brought together these experts, it reviewed the strategies to assist people with arthritis, and developed a report in six sectors for professionals you can see these sectors will be no surprise, it mirrors the HHS approach as well so it fit together well. The six sectors are: community and public health; health care, transportation, land use, and community design; Business and industry; park, recreation, fitness, and sports; mass media and communications.

The recommendations had to be practicable and doable. Likely to have the greatest impact on adults with arthritis, able to be initiated in 1-2 year but clearly would take many years to fully

complete and sustainable over time. These are the tall order things we had to be thinking about when these recommendations were pulled together.

So here are some of the top priority recommendations in these different sectors. In community and public health, invest resources to deliver evidence-based physical activity programs for adults with arthritis; make them available to as many people as possible. In health care one of the top ones that people felt was to ask arthritis patients about physical activity levels at every visit. Make it a vital sign, make it something that people focus on. For transportation, land use, and community design promote active living environments that can support adults with arthritis being physically active. Is that park or area conducive for someone with arthritis to become physically active? For that matter is there a park, is there a place for you to be physically active nearby?

Business and industry incorporate the needs of adults with arthritis into worksite wellness programs without requiring disclosure. A lot of people do not want to disclose that they have arthritis so it is important to have these programs available to them and they do not have to disclose. Park, recreation, Fitness, and sport; make certain that parks and rec, fitness and sport professionals are trained on how to adapt and modify physical activity programs and exercises for people with arthritis. Use mass media and communication to promote evidence-based physical activity interventions through signage, media promotion and public outreach.

So you have a sense of the top but there are many more recommendations, there are many that people can do quickly that aren't so daunting. So I commend people to look at the report it can be found at www.arthritis.org/physical-activity.

We had a Capitol Hill briefing and it did not take more than one minute to get all of these people to jump on board. We basically announced that we had this available and people just called us and said, "Can we co-sponsor this with you?" So we have a lot of interest around this issue and trying to get people with arthritis to become physically active.

So what are the next steps here? Much of the implementation efforts of this report are led by the OAAA Physical Activity Workgroup. There is a large group of organizations that have come together that are going to think about where should they focus and one of the leaders in this is the National Park and Rec Association who is going to work very hard to think about incorporating some of the arthritis evidence based programs across the nation.

Collaborate with these 6 sectors to institute many of the strategies by reaching out to some of these sectors to say: how can we work together? The answer is with some insurance companies and other employers as well as many of the other sectors.

We are creating an implementation guide to help our regions as well as others and state health departments to think about what are the next steps to make a policy change (a daunting task) and to find additional partners.

How are we going to know we have made a difference here? We want to see how many recommendations we can enact in the next 5- 10 years, and the numbers of people with arthritis who are actually more active. The CDC is going to be our person looking over our shoulder and telling us how we are doing.

Finally one of the things I mentioned here is that we wanted to change the attention on to morbidity not mortality. How could one do that? That is a daunting approach as well. And I think many of you are familiar with the entity of medicine. They did the quality chasm; they actually raised the issue of how many people are dying in hospital, and how lethal hospitals can be. So they have a voice out there and it is really one that everyone listens to.

So with the CDC, we funded the Institute of Medicine to really look at this. To look at how we can make living well with chronic illness the focus not on who is dying, but we are stopping death a little bit. They actually took a very broad view which is very exciting. And I commend people to look at this report. They took nine months and published "Living Well with Chronic Disease" in February of 2012.

They actually had a very inclusive definition of chronic illness. And they included many illnesses of all causes, but really brought out exemplary diseases and arthritis was one of them. We were pleased that it rose to that level. Bringing attention to the disadvantaged and minority populations was one of these underlying themes. The need to understand the natural history of chronic illnesses across the life course brought out the complex interface of public health and clinical chronic disease management. Time and time again people mention that we spend very little time in our doctors' office you spend most of your time in the community. And we should be thinking about those things loud and clear to help people to continue what they are learning when they see their health care provider, and obviously a greater inclusion of quality of life measures and national outcome measures.

Now I am not going to go over it but there is this wonderful pyramid about what they recommend when they talk about the whole population of the lower part of the pyramid. They talked about developing an environmental population based policy interventions. We can see we are beginning that with the environmental and policy strategies to increase physical activity. So that is one of the things we are beginning to do.

And looking at persons with high risk of chronic conditions and diseases, looking at community wide strategies that link health care to support self-care and provide risk factor treatments and prevention of complications.

Those who are impaired or disabled have intensive strategies aligning health care and non-health care sectors that's linked to the community. And finally, I love the aged; it's a word that makes all of us baby boomers feel very old. But the aged and disadvantaged in minorities, having high in density intervention designed to address the unequal burden of chronic diseases in this group.

So this is a beginning of the IOM report, it is a very exciting report for us to think broadly about what we should be doing and linking the many aspects that someone with chronic disease interfaces within the community and healthcare delivery system.

So just to review, you can see where we headed with the help of the CDC and many of our partners. We began to move to change the context. That's really where we were beginning to think we needed to take that opportunity and move in that arena, at that same time trying to keep our presence with community based programs, evidence based programs, and the research and other wonderful things that the foundation does.

So what about the observations and the process so far? Well we are actually pleased that recent MMWR stated that people with arthritis actually increased walking. We thought that was exciting, we hoped that our add-council campaign and the things we did made a difference. Though that came in the ladder part of this, and note that people with diabetes did not increase as much as people with arthritis as well in this recent MMWR.

So what about the other observations? There are clearly collaborative strategies that are more creative than any single organization, and I really learned firsthand. I became very involved in the obesity organizations and I learned a great deal about how they view this problem, and how people who are challenged with being overweight and obese think about this issue, and how we can communicate how and where arthritis plays a role there. I don't think if I hadn't gotten involved in the coalition I would be involved in this aspect of it. It has taught us at the foundation a great deal, just as an example, in one of the areas.

The issue is always to clearly focus on the target. We can often get side tracked; there are many wonderful things to do, we are always having to say what is our goal here? And focus back on that OA agenda and see where we are headed and see, is it really what we want to do?

The partnerships work best when they mobilize assets and respond to common opportunities. And this took some thinking, and working together. How can I approach the obesity societies and make it in their interest to become involved with us? And that took some creative thought and working with people that would help us to think about that. We wanted to keep them aligned and keep them engaged.

Now we are beginning to focus, I think at first everybody is developing their education sheets and the communication sheets and now people are beginning to think about how they can move in the policy and advocacy arena as they are moving forward in many areas of the coalition.

And finally, sustaining this seems to be harder than forming it. I say that personally, I think you have got to find a structure that really works because sometimes it is this structure that can really bring the house down. And you really have to think that through and make sure it continues to be the right structure. So reevaluating that structure, we just had a steering committee meeting with the OA action alliance and said is it still working? Are these the right work groups? Do we need to have more or less? And then we are all nervous that oh gosh do we need more? Luckily they didn't think that but we have to have that on the table to think about. And obviously continuing to recruit and engage active organizations. And thinking about where we are going to get funding. And making sure we keep focused on the OA agenda. And we bring it out and report it constantly because people have fantastic ideas, and you would like to just do them all but we have to remember to stay focused.

So I want to end here I really appreciated everyone's attention. Coming together is just a beginning; keeping together is progress; working together is success. I think Henry Ford said it best. I really have this on my wall, above my desk, thinking about this everyday as we go forward as we think about making these public health endeavors a key issue here. And I hope that you feel we talked a little bit about arthritis, and had an opportunity to hear the story behind the Arthritis Foundation approach to this crisis. And certainly with all of our partners we have developed all of these ways of thinking how to make arthritis a key public health issue. And you have heard the challenges of really engaging the public, policy makers and sometimes people with arthritis. And that we have had some great opportunities to move forward.

So I really want to thank the many people: health care professionals, arthritis foundation staff and the many organizations who have brought their energy, funding and expertise to people with arthritis it has really made a huge difference. And I have had the privilege of being

involved in that in these past many years, so thank you very much. I am happy to answer any questions and I hope you are not as confused as this young lady looks. So thank you.

Questioner #1: My name is Eugenius Smith and I am the chair person for the community committee for health promotion. My question is that, the population that we serve is the underserved, which are public housing residence in the city of Boston. How is your outreach strategy going to reach the folks most in need? My second question is that arthritis does affect many people a lot, it is unreported in the population that I serve because there are so many other bigger issues that they think are bigger and so arthritis sometimes goes under the table and therefore untreated because there is no cure. So why complain? Take a couple of pain pills and call it a day. So how do you get that information out to that population and say there is some alternative there is some pain management, what is your strategy for that?

Dr. Patience White: Well thank you for your questions, they are both great ones. So a lot of what we are doing is working through different organizations. So we would love to work with your organization and think together how to reach those underserved populations. We work heavily with the National Alliance for Hispanic Health and African American Churches. Foundation does nation-wide. But clearly we want to get as many people as we can to get involved to think of the best avenue because I don't have the answer, but together we can certainly think of ways to do that. And your second question is the question. How can we get people to pay attention to their health? And people always worry about the things that's going to kill them. When they don't realize that arthritis is right there making it harder for them to take care of their diabetes or heart disease. So a lot of the Ad council campaigns and things we are starting to do, we are working very closely with the American Diabetes Association to bring the arthritis message to their advocates and their population. So it is really through partnerships that we are starting to think of this, but you bring very good questions to the table. That's what keeps all of us going every day; so no I do not have an answer but we certainly are starting a process to try and make a difference. So thank you for your questions.

Questioner #2: Hi I am Mary Jane England, I am chair of one of the Public Health Departments here at Boston University; we are the Community Health Sciences. We do a lot of social and behavioral work in the communities. One of BU's claims to fame is that we tend to do things at the local level with the consumer, just as you have been talking about, to find out how you work with the consumers. One program that has been brought to our attention is Silver Sneakers. Silver Sneakers is a program that is funded by Medicare Vantage Program so it is fully funded for the seniors. It was very smart because they went to health clubs in the middle of the day when people who work would not be there and found it very effective. But some of these things I want your opinion on this. One of the reasons it is effective not only is it

appropriate for age 65 people and older with a lot of chronic illnesses and arthritis, but also was the socialization people coming together and all wearing those sneakers. We still call them sneakers; I don't think the young people call them sneakers anymore! The silver sneakers they felt an identity. I don't know if you have done any work with the consumers about how they can manage together in groups with their illnesses.

Dr. Patience White: Well that is a great question. Clearly the evidence based programs that we work together with the CDC are on a group model so people do come together. We actually have to trouble people to leave the program they want to stay in our Aquatics program at the Y or our exercise programs so forth. So yes, we are working hard at that. We have been very cognoscente that we want to have clear evidence that our programs work. We raise all of our money from donors, and they ask us that. And so we have worked with the CDC. So that is why we have been very careful to make sure that they have been shown to make a difference, and that all of the programs that we offered with the CDC do that. So yes there are group models as I mentioned or you can just get the book and do it on your own. Men like to do that as opposed to women who like to get together. So yes working in the community is a key part of this, but when you are thinking of the broad issues here you can try to reach as many people as you can. It takes a huge amount of effort and time so you also want to do these things that effect environmental policy that are really going to change the context. So you really want to do these together. So that is really what we talked about today with not only the community programs that we work very closely with the CDC and the State Health departments to deliver along with the Y and many other partners, but really trying to change the contexts. Because we all know that people smoked and that there were a lot of programs that people went to, but the real game changers is when you change those laws and said you couldn't smoke in hospitals and couldn't do things. So we are trying to work from both end of that public health pyramid. Thank you for your question

Dr. Julie Keysor: Thank you all for joining us and we have a reception for you outside. Thank you.