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GERIATRIC CARE FOR ADULTS LIVING WITH HIV

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10/18/2023

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[video transcript]

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Dr. Condo is a board-certified internist and geriatrician. She completed her internal medicine training in primary care at Weill Cornell in New York Presbyterian Hospital. She then went on to complete a two-year geriatric fellowship at Icahn School of Medicine at Mount Sinai. She currently works at Mount Sinai as Assistant Professor of geriatrics. She has her own outpatient primary care geriatric panel at Mount Sinai downtown Union Square. She also teaches medical students and internal medicine residents and precepts geriatric fellows, with great support from the Keith Haring Foundation, Dr. Condo started the comprehensive program of integrated care for older adults with HIV at Mount Sinai is Peter Cooper clinic. The program takes an interdisciplinary team approach to caring for older adults with HIV. She enjoys the complexity and caring for older adults and the teamwork required to do it successfully. Thank you for joining us today, Dr. Content, I will now turn it over to you.

01:09
Thanks so much, Jessica. And thank you, everyone for joining this afternoon. Today we're going to talk about geriatric care for adults living with HIV. I have no financial disclosures. And I just want to start by talking about, you know, why are we here today? And why am I talking about this today? Well, we're in a very different place than we were at the start of the AIDS epidemic. I don't know I would say even a very different place than just 10 years ago. We're hearing many stories. And as a geriatrician, I love to hear stories, and patients often start by telling me their story. And here's some quote the graying of AIDS, which was a campaign to increase awareness of HIV among older adults. It combined portraits and oral histories of both long-term survivors and older adults who contracted HIV later in life, in order to draw attention to the aging demographics of HIV. Bill is one of these persons who shares his story. And he is a 77-year-old man living in Chicago, who was diagnosed with HIV in 1985. And he recounts, as you can see, here, in the beginning, it was terrible. Nobody knew what was going on. Communities were scared, and people suffered, we lost magnificent people. And we don't have to lose those beautiful people today, because we have drugs to hold them and give them a little bit better health. HIV care has really changed dramatically. And he goes on to say that I only take one pill a day now for my HIV, the rest are for all my aging issues. And it's great that I've been able to live this long to take aging issue, drugs. And because this really wasn't always the case. And so now I'm happy to be

here today, because aging with HIV has become the norm. And geriatricians can help with all of these aging issues. So here are our actual objectives. For today, we're going to discuss the changing demographics of HIV, describe the challenges of aging with HIV, identify the principles of Geriatric Medicine, and review some of the common geriatric assessment tools that we have. I'd like to start by sharing the case of an 82-year-old man with HIV who was referred to me for a comprehensive geriatric assessment. You can see his multiple comorbidities listed here. And his main goal for our visit was to get an increase in home care hours. He started the visit by saying that he really wasn't doing well. He mentioned his worsening vision, his chronic dizziness, his fear of falling, and trouble arranging appointments. I had actually seen him two years ago, and despite his multiple comorbidities at the time, he was functioning quite well. He talked about how his mobility has declined over the past two years, that he now requires assistance with both his activities of daily living like dressing and bathing and instrumental activities of daily living, such as shopping and preparing meals. He is a long-term survivor diagnosed with HIV in 1993. Yet none of his current concerns were directly related to his HIV infection. So where are we now we'll get back to Mr. D throughout the presentation. But let's first discuss the changing demographics of HIV. And so the care of HIV is really improving all over the world. This graph depicts deaths from HIV AIDS from 1990 to 2019. You can see in the early 2000s, global death rates reached their peak at almost 2 million per year, and driven mostly by antiretroviral therapy, global death rates have halved since then. So across all age groups, as you can see, by these very colors here, the number of people dying from HIV AIDS is decreasing. And so as done continue to decline from HIV AIDS, the number of people living with HIV is increasing all over the world. In 2020, there were about 38 million people living with HIV. And what's good news is that not only is the number of people living with HIV increasing, but the number of people living with HIV who are accessing treatment is increasing. In 2019 25 point 4 million people were receiving HIV care. That's about 66%. Of the 38 million of those living with HIV globally. So we definitely still have work to do. But as you can see from this figure, over time, we've made significant improvements in the number of people receiving treatment, as depicted by the increase in the green figures. And while we're doing better with treatment, we're also doing better with prevention. You can see here that the number of new HIV infections is decreasing in most parts of the world. There were 1.5 million people newly infected globally, in 2020. And this is a decrease of about 31%. Since 2010. In western and central Europe and North America, you can see a decrease in new infections of 37%. So putting this all together, you can see on this graph that both as the number of deaths, and the number of new infections of HIV are decreasing, the number of people living with HIV is increasing, indicating that people all over the world are aging with HIV. Looking closer to home, this

graph depicts the HIV epidemic in New York City. And it shows a similar trend from 1981 to 2019. HIV related deaths are decreasing, as depicted by this green line here. New AIDS and new HIV diagnoses are also decreasing as depicted by the black and the red lines here. And the number of people living with both AIDS and HIV are increasing as depicted by the blue bars. And this really coincides with the advent of antiretroviral therapy in 1996. People with HIV are now dying from non-HIV related causes. You can see this trend in New York City that's depicted here in 2005 59% of deaths and people with HIV were HIV related. This is compared to 25% in 2019. So currently about 75% of deaths and people with HIV are non-HIV related. What are these causes of death, these are cardiovascular disease, non-HIV related cancers, and accidents. These are the same top three causes of death in New York City in individuals without HIV. So people with HIV are now dying from the same exact causes as people without HIV. So what does this mean fewer people are dying from HIV, fewer people are becoming newly infected with HIV. More people are aging with HIV. And so in fact, the number of people living with HIV, who are 50 years of age or older is increasing really all over the world, but especially in Western and Central Europe, as depicted by this blue line here. In fact, in 2018 51%, of people living with HIV in the United States were aged 50 and older. And nearly three quarters or 72% were aged 40 and older. So older adults are now making up the majority of those living with HIV. And this is remarkable not only highlighting an improvement in care, but hopefully also calling attention to the need to focus efforts and funding on the unique experiences of aging with HIV. This slide highlights the density of people living with HIV who are 55 or older by state. And you can see the deep maroon states are those with the highest percentage of older adults living with HIV. And New York State, not surprisingly, is one of those states. This trend is similar if we zoom in to New York City, so in 2020, there were slightly over 100,000 people living with HIV 69% were aged 45 or older. This is about 70,000 people living with HIV age 45 or older, and about 30% or 30,000 were age 60 or older. And what's important to know is that this trend is not going away, so people are going to continue to age with HIV. This is a projection study of adults living with HIV in the United States. And as we reach the year 2035 adults aged 50 and older will make up nearly 70% of adults living with HIV. So we're certainly going to be taking care of older adults with HIV. And as people age they will develop more and more comorbidities. So this is that same projections study of people living with HIV in the United States that shows by 2035, the majority of people living with HIV will have two or more comorbidities of non-communicable diseases, as depicted by these light green and yellow bars here. And though this is an older article, I like how it highlights the history and change in HIV care over time, during the opportunistic infection error, when HIV was first discovered, we were in a crisis management phase, where HIV primary care providers were providing really palliative care

for those diagnosed with HIV. And then in the early 1990s, we moved into this antiretroviral error when there was the rise of HIV specialist to help manage the disease of HIV. And we've done a pretty good job here. And we moved into this new error, this chronic disease or where HIV is now a chronic disease, compounded by lots of aging comorbidities. So let's move on now to describe some of the challenges of aging with HIV.

11:09

I'd like to look back to Mr. De, so there's no question that his multiple comorbidities are currently affecting his functioning and quality of life. And he's experiencing challenges associated specifically with aging, rather than just HIV itself. And so I want to highlight that the care of older adults with HIV is much more than just viral suppression. And in fact, older adults with HIV tend to do better than their younger counterparts in terms of viral suppression, and retention in care. Here you can see for every 100 people diagnosed with HIV, age 55 and older 75 received some care 60 were retained in care, and 67 were virally suppressed. These numbers are a little bit better than those individuals with HIV who are younger. So what are some of the unique challenges of aging with HIV that people like Mr. D have experienced? Well, you can see there the changes associated with normal aging. There are lifestyle factors, which tend to have a higher prevalence in the HIV population, such as Active tobacco use, and alcohol or drug use. There's persistent immune dysfunction and inflammation that's associated with the disease of HIV itself, whether well controlled or not. And there's drug toxicity, especially for those who have aged with HIV, and been on multiple drug regimens. So there are certainly unique challenges associated to aging with HIV that contribute to a controversial term of premature or accelerated aging. Here you can see a model of accelerated aging, whereby individuals with HIV experience comorbidities at younger ages than those without HIV. And this is despite HIV treatment, and undetectable viral loads. It's hypothesized that this may be related to HIV, immune dysfunction, and inflammation. In contrast to the model of accelerated aging, there's also a model of accentuated aging, which hypothesizes that the risk of comorbidities in adults with HIV is elevated at every age range compared to those without HIV. And in essence, whether he in this essence in this situation, HIV is merely a risk factor for chronic conditions. Here you can see the models overlapping. So, this is a model of both combined accelerated and accentuated aging, where comorbid conditions develop both at an earlier stage and at a higher rate in those with HIV compared to those without HIV. And in real life. Whether HIV accelerates or accentuates aging, or both, is likely organ and disease specific. Consistent with the model of accentuated aging, you can see that older adults with HIV have increased risk of multimorbidity. At each age range, adults with HIV have increased probability of

multimorbidity, defined as two or more non communicable diseases, compared to age matched controls without HIV. And this probability increases with increasing age, as depicted by the red line here, you can see those with HIV duration of 20 years or more had the highest probability of multimorbidity at each age range. This slide highlights some of the specific comorbidities that develop at younger ages are higher frequencies in those with HIV versus those without HIV. So older adults are depicted by the solid line and those older adults with HIV are depicted by the solid line and those without HIV, the dashed line, and you can see each of these conditions renal failure, diabetes, He's bone fractures, hypertension, and cardiovascular disease confirms to the model but the accelerated or accentuated aging, or both? Let's look at a specific example. Dementia. So in this observational cohort study of adults over 50 years old, the risk of dementia at each age was increased in individuals with HIV, you can see the solid line here, versus those without HIV the dashed line. In fact, those with HIV are two times more likely than age matched controls without HIV to develop dementia. And the other interesting point from this study was that the average age of a dementia diagnosis was 67 years for patients with HIV versus 78 years for those without HIV. So dementia is not only more common in older adults with HIV, but also is diagnosed at younger ages in patients with HIV compared to those without. So again, this confirms to that model of both accelerated and accentuated aging. Older adults, they also experience higher rates of depression, up to five times that of adults without HIV and some studies in the research on older adults with HIV study of about 900 New York City, HIV positive men and women over 50, about 40% exhibited symptoms of depression. And modeling studies showed that this was significantly related to increased HIV associated stigma, increased loneliness, decreased cognitive functioning, and reduced levels of energy. And older adults with HIV are experiencing geriatric syndromes. So in this cross-sectional study of HIV positive adults age 50 or older, over 50%, were considered pre frail. Nearly 50% had cognitive impairment, and difficulty with at least one instrumental activity of daily living 40% had depression and about 25% had mobility impairment, and falls. Older Adults with HIV are also more likely than age match controls without HIV to experience polypharmacy. And that's defined in most studies as five or more medications other than antiretroviral therapy. So in this cohort of patients aged 65, and older 43% of patients with HIV for greater than or equal to 20 years experienced polypharmacy compared to 24% of patients without HIV. And there wasn't any statistical difference between HIV duration and polypharmacy, meaning those patients with HIV for any duration of time, are more likely to experience polypharmacy compared to age matched controls without HIV. And this impact might be an underestimate, especially what I'm seeing in my practice, as other studies document the prevalence of polypharmacy in older adults with HIV to be anywhere from 74 to 94%. And you can see that

in this cohort study of older adults with HIV, so the median number of medications was 13 96% of participants were taking five or more medications. When you excluded antiretroviral therapy, 74% of participants were taking five or more medications 70% had at least one category D drug interaction, which means that we should consider a therapy modification 52% had at least one inappropriate medication based upon the American Geriatric Society, beers criteria. 17% had an anticholinergic risk score of greater than three, which contributes to our higher risk of cognitive impairment. So from this study, and from what I've seen in practice, polypharmacy is a huge problem in older adults with HIV. So now that HIV is a chronic disease, there's this continuum or cascade of events from HIV infection, and treatment to the associated immune dysfunction, and treatment toxicity. This leads to non-HIV morbidity and mortality and geriatric syndromes, as I just showed you. And so, our health care system is just not set up to care for these really complex multimorbid patients. So we have an overburdened health care system, and I would add inadequate care and really dissatisfied patients. Our system is really just not set up to care for these patients with multimorbidity and geriatric syndromes. So a 15 minute or even a 20 minute follow up visit is just not enough time to address all of these issues. And I saw this article a few months ago that if a primary care provider were to adhere to guideline directed medical care for their patients, it would require them greater than 24 hours per day. It's really it's just not possible. And so my hope is that geriatric care can step in here. Um, and really helped to mitigate this burden for primary care providers and improve not just quality of health care, but the quality of life for older adults with HIV. And I showed you this slide before highlighting the distinct errors of HIV care, and I'm not quite sure we're still in this chronic disease are here. I think we're now in an aging error. And in addition to primary care, we need to add geriatric care into this error.

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And I don't think this is new thinking. This article titled geriatric HIV medicine is born, was written over five years ago, in 2017. I think it takes clinical medicine just a little bit of time to catch up, but I do think it is. This was an article that was published last year in December of 2020, in JAMA, and the authors highlighted the recommendations from the 2022 International antiviral society, USA panel on antiretroviral drugs for treatment and prevention of HIV infection in adults. And they had a specific section on older adults with HIV, and I was happy to see recommendations on screening for geriatric syndromes. Here you can see a recommendation to assess for polypharmacy. A recommendation to screen for comorbidities impair cognitive function, Port mobility, frailty, and falls risk and a recommendation to consider integrated care models like ours at Mount Sinai, where myself as a geriatrician is

embedded in the HIV primary care clinic. But not every site will have the advantage of a geriatrician, so I want to take a little bit of time to talk about the principles of geriatric medicine. So the geriatric approach to care can really be boiled down to the interaction among three things, and that is comorbid disease, functional ability and psychosocial factors. Seems pretty simple. Anyone can handle three things, right? But each circle is like an atmosphere filled with tons of tiny particle that's actually quite complex. So when I think about my patients' diseases, I'm often thinking about many different diseases, such as atrial fibrillation, diabetes, dementia, chronic kidney disease. And when I think about function, I asked about activities of daily living, like bathing and dressing. I asked about instrumental activities of daily living like managing medications and finances. I think about what Durable Medical Equipment my patient might have four need is their gait instability, or recurrent falls. And when I think about my patients, psychosocial state, they wonder is their depression or anxiety? What is his or her social support, or their financial stressors, and what is their housing situation? We go back to look at Mr. D. From this perspective, you can see that he clearly has multiple chronic diseases, but it's more than that. He has impaired function, right, so he does require assistance with his activities of daily living, and his instrumental activities of daily living due to his vision impairment, his chronic dizziness, his pain from osteoarthritis, neuropathy. And because of this, he feels really unsteady on his feet, and has a fear of falling. He uses both a rollator and a scooter for longer distances. And all of this is really affecting his psychosocial state. So he lives alone, he needs an increase in home care hours in order to feel safe there. And he's just really anxious and depressed about all of this. And the only way to tackle this complexity is by working in an interdisciplinary team, right, so specialists are going to have to help us manage advancing chronic disease. Physical therapists can help us maintain and restore function. Home health care agencies can provide support at home. Social workers, help us find resources in the community, psychotherapist, help us manage mental health conditions, and many more individuals are involved in the care of older adults. And each team member really just makes the weight of these spheres much easier to bear. So you see, as you can see, geriatric medicine encompasses a lot and it's a lot to think about and a lot to discuss with patients. But how can we reframe this in a more conversational way? The geriatric five M's were really created as a way to communicate to others what geriatricians actually do, and these are the domains of Geriatric Medicine, so we use the five M's to frame our evaluations. We think about patients multi complexity, the problem list the chronic illnesses. We evaluate the mind for both cognitive impairment and mental health disorders. We assess mobility and risk for falls. We review patient's medications and the indication for each. And we talk about what matters most. What does the patient need to talk about today? What do they value and what kind of care do they want to receive? Now as the

field of Geriatric HIV medicine has expanded, an article published on HIV and aging in 2018, introduced a six M for older adults with HIV, and that M is modifiable. The thought behind this is that although we cannot change the historic impact, that more toxic antiretroviral therapy and immune suppression have had on the aging process of older adults with HIV, we really can and should focus on contributing factors that are modifiable, what are these things? These things are lifestyle factors that really maximize healthspan and decrease medication burden. There are things like smoking sensation, other substance use counseling, routine physical activity, healthy diet, all things that can improve comorbidity burden, mood, inflammation, the immune system and life expectancy among older adults with HIV. And this requires a really team based approach to care, right, because as medical providers, we don't have much time to talk about some of these things that are modifiable. Also, included in moderate modifying modifiable factors is thinking about somebody's environment, to support patients Independence at Home. And so using the five or the six M's as a framework, will often conduct a comprehensive geriatric assessment. So what is that, as you can see here, and it's an assessment of more than just a patient's medical issues. It includes eight different domains, medical, functional, psychological, sexual, spiritual, social, environmental, and goals of care or advanced care planning. And just thinking about your own life, you can see how each domain is really important to well-being and quality of life. And these domains really do coincide with the five and framework. So based upon assessment of all of these conditions, and all of these areas, we create a problem list, prioritize those problems based upon a patient's goals, develop a personalized care plan, and with interventions to really help achieve those goals, and then provide close follow up to review the progress. Now, both in the assessment and the action phases of this process. The IDT, or interdisciplinary team is really crucial to getting this all done. So how do you go about taking all this information and really assessing a patient using a geriatric approach. So we don't have the time to go into all of the different geriatric assessment tools today, but I want to share this really great resource from the New York State Department of Health AIDS Institute, clinical guidelines programs, titled guidance for addressing the needs of older patients in HIV care, you'll find multiple tables that are really neatly divided into the five M framework with various different geriatric assessment tools that you might find helpful in assessing older adults with HIV. So let's go back to Mr. D and think about how did we help him with his medical, functional, and psychosocial concerns. We use the six M's to frame our evaluation and completed multiple different geriatric assessment tools. And we're going to go into some of these assessment tools here. But you can see, we first multi complexity addressed patient priorities care, we did some cognitive assessments reviewed his functional status, false screening, medication review, and talking also about what matters most in health care proxy. So let's review some of

the common geriatric assessment tools that we have that we can use in caring for older adults with HIV. So again, going to Mr. D, you can see by his medical history, he's certainly multi complex. So how do we think about patients with multi complexity? If you look to the American Geriatric Society, they have this guide on decision making for older adults with multiple chronic conditions. And here are some guiding principles from this article. You really want to elicit it incorporate patient preference, it sounds intuitive, but sometimes, something we do not always focus on as medical providers recognize the limitations of our evidence base for this population, right, this aging population with multiple comorbidities including HIV, these patients are often excluded from clinical trials. You want to frame decisions within the context of harms, burdens, benefits and prognosis. Consider treatment, complexity and feasibility. And really use strategies that optimize benefit, minimize harm, and enhance quality of life. And in order to do this, you need to identify a patient's priorities and their health trajectory. Then decide on a care plan together be to find those priorities and align those decisions among all care providers, and honestly, aligning their care is probably the most difficult part.

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In addressing multi complexity, you're also addressing another m, which is what matters most. This is a really crucial step in caring for complex patients like Mr. G. I really like patient priorities care. It's a great toolkit for aligning patient's priorities with their health care. This was created by a team at Yale led by geriatrician, Dr. Tinetti. And this infographic couldn't be more true. Patients see multiple specialists, providers, and often get different opinions from each. So I come across this all the time, here I am as the primary care provider saying, Oh, no need to start insulin. And the endocrinologist says, Oh my gosh, let's start insulin. The cardiologist says increase the beta blocker, and the psychiatrist says stop the beta blocker. Each clinician is really focused on treating their individual condition, not communicating with other providers. And sort of what the patient really wants gets missed in all of these conversations. I love this tool, because it highlights something so true, but often forgotten, which is that patients are really the experts in what they want to achieve from their health care, while medical, while the medical team members are supposed to be the experts in how to get them there. And so I think it's just really important to keep that in mind. What does this process look like? The first step is really identifying patient's health priorities. So you can ask questions about their values. What are some actionable specific and realistic health outcome goals? What are the patient's health care preferences? So for example, what do they find helpful within the healthcare system are what do they find maybe too burdensome to do, and try to pinpoint pin down the patient to identify one thing, and that's the health outcome

goal that they most want to address to help achieve what matters most. And then we need to align care with these priorities. And it's really important to use the patient's priorities in order to prioritize care decisions, especially when patients are seeing multiple providers, and differing perspectives exist among those providers. Also included in the discussion of what matters most is advanced care planning. advanced care planning is really a process about understanding and sharing patient's personal values, their life goals and their preferences regarding future medical care. It's not a one time conversation. It's really a process over time. And specifically, because patients values and patients, decisions change over time, especially as their health changes. So really just highlighting that this is not a one time conversation, but a process to understand what patients value and what kind of care they want to receive. advanced care planning may include the completion of advanced directives, such as a health care proxy for a living will, though, that's really not the main goal of these discussions. And in order to help facilitate these conversations, it's often helpful to share prognosis. So we can use online calculators like the VAX index, or E prognosis to help estimate prognosis for patients. And I think it's really important that everyone have a health care proxy. So I do try to initiate that conversation with every patient that I see in the geriatrics practice. And if appropriate, we can talk about completing a MOLST, which is a medical order for life sustaining treatment, that really documents end of life care preferences, such as resuscitation, hospitalization, and some other decisions. And so going back to Mr. D, in addressing his multi morbidity and what matters most, he was very clear on his one thing, and that was to obtain an increase in home health aide hours so that he could remain safely in his home. How did we help Mr. G achieve his one because one thing has one goal. It was really documenting his worsening functional status and his care needs. And this really focused on his mobility. So he had a positive fall Screening Questionnaire, which includes Have you had a fall in the past year? That was yes, for Mr. D. And do you have a fear of falling? Again? Yes, for Mr. D, a positive response to either of those questions is considered a positive screen. And then we can look to the CDC study website on stopping elderly, accidents, deaths and injuries. And they have this nice pocket card on fall risk screening, right? If someone's screen positive, what do you actually do next? What are some things you evaluate maybe their gait speed, you look at some medications that might be contributing to their gait instability. You might want to measure orthostatic blood pressure if they're experiencing dizziness when standing, checking their vision, and then what are some interventions that we might be able to offer patients to help reduce this fall risk. So this is a really nice pocket card they have on their website, on screening, assessment. And then interventions we can think of to help people keep people safe in the community. Moving on to talk about function, which can either be related to mind or mobility, Mr. D did mention that he required assistance with his

activities of daily living. And you can see those here. These are things like eating bathing, dressing, transferring, toileting, and ambulating. Things we just do and take for granted. Right, that becomes some challenging for some older adults, or patients independent or dependent in each of these areas. But it's also important to ask not only if they're independent in these tasks, but are they having any difficulty doing these things on their own. So again, Mr. D did report requiring assistance, bathing, dressing, and ambulating. Due to his mobility issues, and assessing function, we can also ask about a little bit more complex, daily activities known as instrumental activities of daily living. These include things like cooking, cleaning, managing medications, communicating shopping, traveling and managing finances. Again, it's important to ask not only if patients are doing these things on their own, but whether or not they're having difficulty doing these things independently. So for example, a patient with mild cognitive impairment might be managing their own medications, but not doing so well. So sometimes we have to do a little detective work to figure out how well a patient is managing in the community. And so sometimes we'll call pharmacies or obtain collateral information from family or friends. Now, Mr. D did report that he required assistance with cooking and cleaning, taking his medications, shopping and traveling. And this was mostly related to his osteoarthritis, his vision impairment, and his chronic dizziness. And so it's not only important to review a patient's functional status, but also explore why they're having difficulties with their tasks. And that's so that we can try to come up with different tools to really support them in the community and maintain their independence as long as much as possible. Part of assessing overall function includes an assessment or frail of frailty or a state of increased vulnerability. I document the frail scale on each patient that I see. And I find this scale very clinically easy to use, you can ask the patient have you felt fatigued over the past month? Do you have difficulty climbing a flight of stairs? Do you have difficulty walking one city block? Have you do you have greater than five illnesses, and have you lost more than 5% of your weight over the past year. By this scale, Mr. D was considered frail as he met four of the five criteria here. And this is important because we know that frailty is associated with poor outcomes such as hospitalization, nursing home placement and mortality. Moving on to our fourth end, we can assess mind. So we use the PHQ four as our screening tool for anxiety and depression. On each sub scale for anxiety or depression, a score of three or greater is considered a positive screen. If either subscale is positive, we then complete a PHQ nine or get seven, respectively. And so Mr. D had a positive screen both on his depression and anxiety subscales. His PHQ four his gad seven, were consistent with moderate depression, and mild anxiety. We can also assess mind by performing cognitive screening tests. So I will use either the mini cog or the mocha. The mini cog is a brief screening tool that can be administered in less than five minutes. So when I'm short on time

will often start there. The Mocha is a little bit longer screening tool takes about 10 to 15 minutes to administer. It's more sensitive for picking up mild cognitive impairment, and has been studied in a broader range of patients, including those patients with HIV. So screening for cognitive impairment is really a whole nother lecture in itself. But Mr. D had a normal mini column during our visit. Moving on to our fifth, we assess medication so we're really lucky to have a clinical pharmacist on our team who reviews patient's medications, the indication for each medicine, really trying to educate the patient why they're taking certain medications because it's surprising patients often are not aware of why they're taking specific medicines. He reviews patients creating clearance and liver function to ensure medications are dosed appropriately. He assesses for drug interactions for drug patient interactions, will document how many medications are on the American Geriatric Society beers criteria, which was actually just updated in 2023. And these are potentially inappropriate medications for older adults who review the stop start criteria and calculates an anticholinergic burden score. which can contribute to cognitive impairment if patients are on many anticholinergic medications. Mr. D spent a lot of time with our pharmacist reviewing his 14 daily medications.

40:13

The six M is modifiable. So how do we go about dressing modifiable factors, but we have to discuss a patient's lifestyle. What is their diet, their activity level is their substance use? What is their environment, we can use motivational interviewing to really impact positive change. The modifiable factors that we addressed with Mr. D were more related to his environment because his mobility was such an issue. We talked about having adequate lighting in his apartment, given his vision impairment, and the use of grab bars to assist with his mobility throughout the apartment. So though, we can boil down the geriatric approach to five or six M's, it's certainly a lot of information to gather and assess. And so we can't address everything at initial visit. And we often need to rely on our interdisciplinary team to help us out. So what was the plan for Mr. D. So you can see his problem list on the left each corresponding to one of the five M's in the plant on the right, so we talked about having a follow up visit with his ophthalmologist to address his vision impairment. He has both glaucoma and cataracts which have been monitored, and we discussed that maybe it's time to have that cataract surgery, but obviously, we'll need the specialist input on that. Again, we talked about lighting in his apartment, we mentioned the lighthouse skilled as a resource for patients with vision impairment. We educated him on the falls prevention, and mitigating the risks associated with his chronic dizziness, which has not yet had a clear etiology, but could in part be due to orthostatic hypotension given his labile blood pressure, he was not orthostatic during our visit, but we did discuss the importance of hydration and changing positions

slowly. In order to help mitigate his fall risk. He has been falling with the cardiologists versus dizziness but was interested in a referral to a neurologist to further figure out what what's contributing to his symptoms. We discussed screening for osteoporosis with a bone density scan given his impaired mobility and risk for falls. We talked about the personal emergency response system in case he were home alone when he had a fall that he could push a button to get help. You wrote a letter advocating for an increase in home care hours, we coordinated with social worker regarding a lot of these issues. We encouraged that he had continued follow up with his psychotherapist for his depression, anxiety. And we talked about continuing to assess the risks and benefits of his multiple daily medications. But we didn't have the time to talk about D prescribing at our initial visit. And so again, since we didn't have the time to address everything, we arranged a follow up appointment to continue these discussions. So based upon all of that, what are the take home points for today. So a few things to highlight the majority of those living with HIV are age 50, or older and adults are just going to continue to age with HIV. So we will all be taking care of adults, older adults with HIV. The adult adults with HIV experience both accelerated and accentuated aging, the five to six M's highlight the principles of Geriatric Medicine. And there are multiple different geriatric assessment tools corresponding to these five to six M's that can be used in the care of older adults with HIV. So that is the end of the presentation. And I'm happy to take any comments or questions that anyone might have.

43:40
Thank you so much Dr. Condo. And like Dr. Condo mentioned, we can open it up for questions. So please feel free to add your questions into the q&a box at the bottom of your screen.

43:58
And of course, I will pause Dr. card I think while we're waiting for, for folks to enter their questions, I know that I noticed that we have a wider array of disciplines on the call on the webinar today. And you mentioned the importance of working with an interdisciplinary team. So I'd be curious if you could maybe just talk a little bit about that experience and kind of any recommendations that you've seen from your first hand experience about how to work well in that regard?

44:30
Sure. Yeah, so our team at Mount Sinai includes myself as a geriatrician, we have a pharmacist, like I mentioned, we have multiple nurses, mainly two nurses that work with our

team who are embedded in the HIV practice. So know many of the patients very well. We have a community health worker, and we have a social worker. So that's really our core clinical team. And I think that it's really important to have a diverse team so we all come with a little different perspective and different backgrounds. And like I said, some of us, like myself or own have only been here for three years, but other of our team members have been here for decades. And it's so important because we each connect with patients on a different level and in a different way. And so patients might feel comfortable disclosing some information to, let's say, the nurse, rather than to me specifically. But if that's information isn't important enough to share, you know, then we can talk about that have a discussion and figure out how best to help the patient. So I think so important to have a diverse team to have people interacting with patients, not just during the visit, but we tried to have like our Community Health Worker engaged patients, both before the visit and in between our visits, just to let them know that we're available. And here to support them throughout not just you know, during their 30 minute or their our appointment with us. And I think the other thing that's really important is our team, we usually huddle in the morning, you know, to look at our schedule and see what patients are coming in. And oftentimes the nurse will provide information and say, Hey, like this has been going on with this patient, or I'm concerned, you know, they're calling a lot asking the same question, I'm concerned that maybe there are some memory issues going on. So getting input from all the different team members that are, again, are interacting with patients at different points, but can really provide a good background, to just do a good general assessment of their conditions and how really, we can really best support them in the community.

46:36

Great, thank you for sharing that. It's always great to see how teams work together that way and bring all of their diverse expertise and experience. Let us know what questions you have for Dr. Condo again, you can type them into the q&a box. I know a lot of information was shared. So sometimes it's a little takes a little time to process the information and know your questions. I would just be curious to hear from participants, though, if you don't have any questions, if you want to share any comments in the chat about your own experience, you know, working with people with living with HIV who are aging and kind of what that has looked like I know a lot of you have probably been working with patients for a long time. And I've seen that trajectory that Dr. Condo mentioned, towards not just a chronic care model, but a geriatric model. So I'd be curious if anyone wants to share any experiences to type in any experience they have working with aging populations?

47:37
Yeah, or just curious if anyone has any. You know, I saw people coming from a lot of different states like Florida, Chicago, if you are working with a geriatrician, or any barriers that you foresee, incorporating some of these geriatric principles into the care of older adults with HIV. I think those are becoming more popular, you know, HIV, geriatric medicine is not so much a new thing anymore. And I think they're these models are sort of springing up in different places, usually in the larger cities. But I'd be curious to hear if anyone has any experience with a similar model, or if not some barriers or excitement about incorporating some of these geriatric principles.

48:28
Absolutely. And I think we have some big questions. So we'll also be patient, allowing folks to chat in their comments or questions if they have them.

48:54
I know that also. CEI is funded by the New York State Department of Health AIDS Institute, and the aging population is a real priority for the AIDS Institute. So we really want to make sure that we're getting this information out there to everyone, especially as we talked in the beginning about health equity, and making sure that we're reaching all groups, and that includes, of course, elders. So if anyone here also wants to pass along this information to their colleagues, we'll be recording this and we'll be able to post this on the CEI website later. And we'll also be sharing the slides and we encourage everyone here to share this information with their colleagues as well.

49:39
Yeah, and I would say that New York State Department of Health, eighth Institute has that clinical guidelines program on caring for older adults with HIV. And it's a really, really great resource. One of my colleagues worked on that Dr. Siegler and I think it's just really well organized and put together and has a lot of resources. If you're interested in you know, assess us doing some of these geriatric assessment tools.

50:02
Absolutely. And we can include that in the follow up email as well, just to mention. So it looks like we do have a comment. I think I see a lot of cases of patients with diabetes and prediabetes diagnoses, or claims at least, but the patients aren't expressed understanding of the diagnosis. And the comments about that doctor, condo or experience with that, yeah,

50:25
I think that that's highlights the importance of what an interdisciplinary team, I think physicians have the responsibility to educate patients on their diagnoses. But I think it's a lot of information thrown at patients in like a short period of time. So they may not grasp everything that they're hearing. But part of our goal for our community health worker is to help educate patients on their chronic conditions, you know, like, what does pre diabetes mean? Or what does diabetes mean? Besides these medications that I'm taking, what else can I do? Like? What is that, that modifiable? And right? You know, what are things that are modifiable that I can do? Maybe, you know, opt for whole grain or whole wheat rather than white bread or white rice, right things in their diet that they might be eating, that can be contributing to these conditions. So I do think patients needed a lot of education. I do agree, I think patients come in and they oftentimes, you know, don't understand their chronic conditions are really for sure they're on so many medications, and they don't understand what each medication is for. And we use our team members to help educate patients at each point. So you know, like I said, the pharmacist really reviewing, you know, the indication, I think that's huge. Just indicating, reviewing, why do you take this medicine, you know, and okay, see from your chart, this is why you're taking that medicine and letting patients know, you know, why they're taking 15 medications every day is so important. And then like I said, having the nurse, you know, the nurses a fingerstick Oh, your blood sugar today is high, you know, what does that mean? Was what should it be? You know, and why is it high today? What did you eat this morning? Or what did you eat last night? Or did you miss your medications? Right, so each point in the person visit with each of our team members really educating patients on their chronic conditions?

52:17
A great point. Yeah, there's also doing a health literacy check sometimes for what people are people are, you know, learning and doing that kind of teach back is super important.

52:28
Yeah, and I say, you know, we, we see a lot of patients for a cognitive evaluation. And so if there's some cognitive impairment, if there's early dementia, you know, really asking about support in the community, family, friends, other people that we can bring into the visit, so that patients have support and can be reminded of their medical conditions or what's important or medication changes and figuring out you know, how best we can support patients. I think that's one of the biggest barriers in our practice is patients are coming in for

cognitive evaluations often coming by themselves and trying to identify people in their lives that they feel comfortable with, and feel supported by that we can sort of have an open discussion about their chronic medical conditions and their memory impairment and figure out how best to keep them safe at home.

53:29

It's a great point. Well, I don't want to take anyone else's time if I can give it back to them today. So, I want to thank all of the participants for joining us today and I especially want to thank Dr. Condo.

[End Transcript]