So tonight we'll be discussing antipsychotic medication reduction. I'm happy to share some of my experiences with this challenging initiative and in nursing homes. I have no financial affiliations to disclose.

And for our objectives and our agenda today, we're going to assess and evaluate appropriate antipsychotic medication use in nursing home residents, and apply strategies toward behavior management and antipsychotic medication reduction. The first part of the program we'll look at current trends and rates of antipsychotic medication use. We'll discuss the CMS initiative and latest policy issues. And then we'll look at a couple case studies.

So first off, this first graph goes over the national progress in reducing the inappropriate use of antipsychotic medications in nursing homes. The taller red bar gives us the 2011 baseline number of 23.9%. That's a dotted red line indicates the start of the 2012 CMS initiative. That's the National Partnership to Improve Dementia Care in Nursing Homes.

The latest information all the way down at the end is from the third quarter of 2018, which shows that nationally we have a 14.6% use rate. Overall, this looks like a reduction of nearly 40% since the initiative began. Overall though, I think this is great progress.

Why should we be concerned with antipsychotic medications at all in this population? I have to say, that when I first exited my training from psychiatry and geriatric psychiatry, the black box warning had not yet come out. And it hit me that most of all the training that I learned was getting reversed when I entered the care setting.

But there are many issues with antipsychotic medications in dementia patients. The most common side effects include sedation and anticholinergic effects, [INAUDIBLE], it means constipation, worsened cognition and hypertension. There are psychomotor effects, with usually the typical and some of the atypical antipsychotics mimicking movement disorders, such as Parkinson's. And then later on, tardive dyskinesia.

There's metabolic syndrome, which can worsen hyperlipidemia and diabetes issues. There is, of course, neuroleptic malignant syndrome, which is quite rare, but it is the number two condition. If you need more information on that, we can give it. But the QT prolongation is prevalent in all of the antipsychotics.

I think this particular side effect led to these black box warnings coming out in 2005, and in 2007. The black box warnings tell us there's increased mortality in the elderly with dementia-related psychosis. Usually triggered by sudden cardiac deaths, strokes and particular infections, such as pneumonia and UTIs. Some cardiac deaths were twice as likely in patients receiving antipsychotics. We all should know that antipsychotics are not approved for the treatment of patients with dementia-related psychosis. All we'd use would be off label.

We've included a resource document that's available through TMF, on the web page. They'll give us a link to this. And this document was published in 2018 and gives details for every antipsychotic medication, the FDA-approved indications, the relative side effects comparisons, the good information. We're going in the appropriate use of antipsychotic meds. I find that daily
there's a lot of misinformation out there, from physicians, to family caregivers, to other care settings.

Long-term care has the most regulations regarding these medications. So CMS has defined only three approved uses for appropriate diagnosis. And these are schizophrenia, Huntington's disease and Tourette's syndrome. The rate calculations used for quality assurance.

Let me give this example. If a resident has the diagnosis of schizophrenia and dementia, and has an order for an antipsychotic, that resident is not counted in the numerator for the group rate calculation. There are other indications for FDA-approved indication for antipsychotics. And those included things such as bipolar disorder, major depression with psychosis, and some of the antipsychotics all have FDA implications as adjunctive meds for major depression.

The other indication we're going to go over in this next slide. So in 2017, a number of professional organizations-- listed on the right side of this slide-- including AGS, the American Geriatrics Society, the AAGP for Geriatrics Society, and AMDA, for long-term care practitioners. They came out with the same in 2017, about diagnosing late life or late-onset schizophrenia in nursing homes.

So they agreed that the diagnosis of this particular disorder should be done according to DSM-5 criteria for qualified mental health professionals. I have to say, that personally I've only diagnosed this illness late life, schizophrenia, in only a handful of cases in the past 10 to 15 years. And I've seen well over 5,000 cases-- I'm sorry, well over 5,000 patients. It's is very rare and difficult to diagnose.

There are no formal DSM-5 criteria for late-life schizophrenia yet. We should be careful about labeling patients with this diagnosis to justify the use of medications and treatments. The third point is that they acknowledge that dementia patients may need treatment with psychotropic, possibly antipsychotic medications, if their behaviors endanger themselves or others, and have not responded to non-pharmacological treatments.

Earlier this year there was a letter put out by Richard Neal, chairman of the House Ways and Means Committee, in Washington. It was a letter addressed to our CMS Administrator, Seema Verma. And it details concerns regarding the overuse, still, of antipsychotics in nursing homes.

Specifically, Mr. Neal's concern is that the progress that we have seen and to reduce antipsychotic use is actually due to some nursing homes falsifying psychosis diagnoses. This is obviously a huge concern. I'm not sure how much that actually impacts our overall reduction rates, but let's have a look.

We do have some sample data from Texas. So Texas, we have around 1,200 facilities. So, roughly 120,000 patients, or residents, in the state. Just last month, our Texas Health and Human Services Commission had a meeting to discuss this particular issue. They were tracking the incidence of schizophrenia diagnoses in nursing homes.
Let's go over the slide. The top line, which is blue, represents the incidence of schizophrenia diagnoses in the overall nursing home population. The red line on the bottom represents the incidence of schizophrenia diagnoses in residents with dementia, not previously diagnosed with schizophrenia. So these are new schizophrenia diagnoses in dementia patients.

The black vertical line represents the point in time, which is 2015, where the antipsychotic use rates were included in nursing facility five-star ratings. In the first half of both of these lines, the slope of them, usually not much of a big deal. You see that the slope, showing a dramatic rise in schizophrenia diagnoses. Both overall in nursing home patients, and simply, dementia patients.

This looks like a 50% to a 300% increase in incidence in schizophrenia within nursing homes. Frankly, if there's a 300% incidence of any particular disease, it looks like an epidemic. But this particular data is from Texas. I'm willing to bet that virtually all the other states are tracking similar information. So the bottom line of the past few slides is that we should not be making a diagnosis to justify new or continued use of an antipsychotic medication.

I'd like to move on to a couple of cases. The first case is an 87-year-old Caucasian woman, who came to me from an assisted living to a long-term care, live-in care unit. And she was on hospice, and previously diagnosed with Alzheimer's dementia.

What I'd like to point out, her case is that she came in on six different psychiatric medications. An SSRI, three benzos, anti-depressive being used as a hypnotic, then some Trazadone, and an antipsychotic. This particular patient was really very quiet. She's petite, just under 100 pounds, but very active. She was constantly pacing, had some sleep issues. And she had a little bit of adjustment resistance to care that has settled out.

She is usually non-verbal, but able to do a number of her ADLs with cueing. The FAST stage I want to go into a little further. I gauged her at FAST stage 5 to 6.

These next two slides I wanted to orient people to the common staging for Alzheimer's patients. 1, 2 and 3 are really fairly mild. And we start to notice symptoms of cognitive decline in stages 3 to 4. The diagnosis usually occurs in stages 4 and above.

What I want you to see, the behavior issues that we have to treat with antipsychotics often occur in stages 5 and above. What happens in stage 5 is that there's a marked apraxia. They're not able to, say, put on the appropriate attire, even put on, button their shirt correctly, or put it on not inside-out, that sort of thing.

Their verbal skills also start to decline markedly and noticeably in stage 5. The FAST staging was developed for Alzheimer's patients. I find it useful in other dementias, such as Lewy body dementia, frontotemporal dementias, and also marked infarct dementias. So, patients are often admitted into long-term care facilities in stages 5 to 6. That's usually when the families are most stressed with the ADL care, or other behavioral issues.
So, agitation often comprises of psychosis, aggression with carers, sundowning issues, wandering, and usually sleep-wake cycle disturbances, where it's like a day and night reversal. Families often tell me, and we see this in facilities as well, that disease progression is more rapid in the later stages, meaning stages 5 to 7.

And step-downs in function often occur in 3- to 6-month increments through these stages. Stage 7 is near an end stage. Usually these patients are bed-bound or in the Geri chair.

And they require total care. They're often sleeping 16 to 18 hours a day. Hospice is usually initiated in this stage. And usually, antipsychotics are never indicated in this stage.

So continue on with Case 1. I was concerned about this patient's polypharmacy. The staff was also telling me that she was napping frequently in the mornings.

So we adjusted her nighttime sleep meds, and also reduced her daytime benzodiazepine dosing. We did a gradual reduction of 25% to 50%, depending on how she was doing that particular week. After about a month, she is well-adjusted to the unit. And we can start the antipsychotic reductions. Abruptly discontinuing her antipsychotics could -- because behaviors tend to reemerge during these tapers. So you want to be careful and just add back the previous dose if needed.

At two months after admission, she was on really, a baby dose of Ativan, at a quarter milligram, twice a day. We were able to completely discontinue her antipsychotic. She's doing so well, her hospice service was discontinued. I did find that as we discontinued mostly sedating medications, her sundowning reemerged. So we had to adjust it back.

I want to give you my secret method for psych med GDRs. Not just antipsychotic GDRs. My baseline assumption is, start with the assumption that this antipsychotic is not needed. It's not necessary. Because there's so much overuse of these medications in the other care settings, that when they arrived to me, I really had to question, was this done appropriately in the first place?

My suspicion about this particular patient is that the Zyprexa was added on for refractory insomnia, and not necessarily aggression or true psychosis. So always questioning whether or not this medication is needed for this patient at this particular point in their lives, in this point of their disease.

Interestingly, she came to me with a diagnosis of Unspecified Dementia without Behavioral Disturbance. Which is clearly erroneous. Because even just her wandering qualifies as a behavioral disturbance for dementia.

And she was entered into a locked memory care unit. I diagnosed her with Alzheimer's Dementia with Behavioral Disturbance. And I did not transition her to schizophrenia, which would be inappropriate.

I get this question a lot, of why should physicians care about this initiative that CMS has done? Because nurses and the nursing facilities should be taking care of this. But as physicians, we are
the prescribers. Many of us are also medical directors. And as physicians, we set the standard of care for these patients, and in these facilities. So I think we should be very attentive to it.

These antipsychotics are calculated into the quality measures for these buildings, impacting in short and long-term-stay residents, in the five-star rating system. And families, frankly, look at these. They've researched now, given all that we can do with the internet. We also know that the antipsychotic reduction measures improved the five-star ratings. But also, in turn, referral sources from the community and hospitals.

Some strategies to continue the progress that we've done. I think the main thing has been establishing a regimen of monthly meetings. And these can involve your care team in this facility. Usually the nursing directors, a social worker, activities and wellness staff, the MDS coordinator, to help document, whatever mental health people you have available to you. Preferably a geriatric psychiatrist, and also, the consultant pharmacist.

I am in several buildings now. And we do these monthly meetings. I do about one week.

The team is not always the same. And it shifts across settings. But we really do find it's useful. This is the most effective measure you can do in your building to reduce antipsychotics.

In these meetings I review all psychiatric medications, both scheduled and PRN. We look at their diagnoses. And we go over behavioral interventions. Other things that we can do, we should also engage with families, regarding our measures. And there are tool kits and other resources available to TMF.

So things that could hinder our progress in reducing antipsychotics. With many of these buildings having Medicaid beds, I understand that staffing is always an issue. And high staff turnover particularly disrupts continuity of care, and our ability to do effective behavioral inventions.

So long-term care has these regulations for antipsychotic reduction. And unfortunately, other care settings from which we receive patients, such as hospitals, assisted living, group homes, other outpatient or community settings, lack these measures, and lack these regulations. More often, we get the question of well, they were doing fine on this medication before. Why do you want to mess it up now?

So there's a lot of education across the board. You know what I mean? You got to educate. You're a hospital, we're full of sources. And the families, so they understand our reasoning, being that we want to promote good care, less harm and improve function.

Sometimes I'll have families refusing to engage with our GDR initiative. In those cases, I educate regarding the black box warning and potential side effects. I want to reassure these families that really, the bottom line is looking out for their loved one's well-being.
And I do very slow reductions in these cases. I tell them, look, we're only going to reduce the dose 25%. 25% of the daily dose over the next three months. And we let it sit, and let the patient stabilize.

And you let us know, at any time, if you see an uptick in problematic behaviors. We'll adjust it. The other limitations for continued progress is, frankly, we have too few geriatric-trained mental health providers. I wish there were more of us.

I'd like to move on to our next case, which is more complicated and more lengthy. This woman is a 65-year-old Caucasian woman with early-onset Alzheimer's. She comes to me from home. But also, I think she also has [INAUDIBLE] in an assisted living. Luckily I have some records from a prior psychiatrist, who had been treating her. Those records indicated that she had various agitation behaviors, including yelling, profanity, combative behavior, hitting caregivers, lots of hallucinations. She'd be talking to herself, and probably visual hallucinations.

She was fairly intact with her ADLs. And she walked. Has some incontinence, but could toilet herself with assistance. She needed some setup for eating and dressing, but she was fairly physically fit, and had virtually no other medical issues.

She came to me on some Seroquel, some cognitive enhancers, and a sleep medication. I also diagnosed her in around stage 5 to 6 for her FAST. You see that, wow; this patient has a clear need for an antipsychotic. She is psychotic, as well as aggressive.

I think her psychosis is quite interesting. She had lots of bizarre paranoid content, and constantly muttering under her breath. So if you did not know that this patient had dementia, and you didn't know her prior life history, on the face of it you would have thought that she was schizophrenic. She had many of the symptoms that you typically see in schizophrenia, such as delusions, hallucinations, disorganized speech and thoughts, and a blunted aspect.

But her life history and social functioning did not corroborate that diagnosis. So I diagnosed her with Alzheimer's Dementia with Behavioral Disturbance. We continued this diagnosis through three years of surveys. What we did in our first couple months-- she had some trouble adjusting, frankly. I needed to schedule Seroquel for her. Because her psychosis is just so prevalent and distressing.

She had a lot of trouble sleeping. So we had to trazodone, as well as melatonin. So we're exploring alternative psychiatric medications, instead of necessarily increasing her antipsychotic.

But I did need to increase it for a short time period. We looked at behavioral interventions for her. She was allowed to get out of overstimulating environments, such as group activities or the dining room, when she needed to. She was very active with pacing. And we felt comfortable enough with her to take her outside with a chaperone, and allowed her to walk around outside the building. She never did try to escape, luckily.

Behavioral intervention wise, we would take the cues from this patient. The first few months of a patient entering a new long-term care unit is usually almost problematic. Usually the patients and
families need a lot of time to adjust. They're being thrust into a new environment with new people, a new care routine, possibly new medications. And it looks like 50 to 100 new people to them. It's very frightening.

I saw her very frequently for like, six months. Every two weeks, for six months. That's how frequently she needed medication adjustments to avoid having to go into an inpatient psychiatric unit. In the three-to-four-months' time period, the family actually had taken her out to her prior outpatient psychiatrist.

They were concerned about her Seroquel. So we reduced it at their request. But we found that some of her symptoms worsened, such as her verbal aggression.

So I added Depakote. Again, an alternative medication to an antipsychotic. She did well with it. She was definitely less angry, not sedated, and pacing less. With the addition of the Depakote, I could continue to reduce her Seroquel.

Insights about this patient. She was mainly non-verbal. She couldn't tell us her needs. In fact, if you asked her a direct question, she would either avert her eyes or walk away. So we had to approach her as we would a young child who doesn't have verbal skills.

You have to do a lot of observation. What is their facial expression? Are they moving towards you or away from you? Or what are they telling you that they need at this time? It takes a lot of time to develop this understanding of your patients. But I'm hopeful that we have teams, especially CNAs and nurse aides, and nurses to do this with.

With her non-verbal interventions, and her non-verbal nature, we had to assess her pain issues, sleep issues, and her appetite, without her being able to verbalize to us. Six months to a year after admission, she's finally able to bond with us. She comes to us for hugs, learned to be quite affectionate. She eventually allowed us to even color her hair. That's how good our relationship was.

Her spouse started tapering off his visits. We did not know why. We only knew he was visiting less and less. She became depressed. We added Zoloft, and she improved with that.

You see that even six months after this, she's not completely stable. We're still constantly having to adjust. I tried a further gradual dose reduction of her Seroquel dose in the morning. And she wouldn't tolerate it.

I want to stress to you that we should always continue to try these GDRs, and document our success or failure, in order to justify continuing this medication. So a year after admission, she's fantastic. She's even-tempered. There's no aggression. There's hardly any muttering under her breath, of her bizarre psychosis.

Two years after admission, we start to see ADL decline. And this is just the Alzheimer's progressing through her brain. She stops walking, has some falls. We had her evaluated for pain issues and weakness, did some PT. But she really was just progressing to needing a wheelchair.
As she progresses in dementia, we're able to further reduce sedating medication, such as her Depakote, and also her Seroquel, as well her sleep medications. Three years after admission, she is now past stage 7. And she's total care. Even with feeding.

She's pretty mute and inattentive. Started transition to outside of the memory care unit. And we were able to fully discontinue the medications that were previously used for agitation, the Seroquel and the Depakote.

Just to recap. I think that a lot of people question how I do my GDRs in my basic assumptions. But I'm hoping that you try it and get some success. Start with the assumption that the antipsychotic medications are unnecessary.

Evaluate the patient for need for this medication. Look at their records. Get family [INAUDIBLE] information. And have other staff document aggression through psychosis, so that you can put that, as well, into your note. Because you have to be able to justify to state surveyors why you're using this medication above all others.

Once the patient's stable, test your assumption that the antipsychotic is unnecessary. Try a GDR, and see how it goes. You may fail. And I've failed many times.

But I know my overall goal is by the time they reach FAST stage 7, they are off an antipsychotic. I would avoid abrupt discontinuation of these medications. Because there are withdrawal symptoms, and it's very unpleasant.

And essentially, you get a false failure for a GDR if you do it too abruptly. So keep trying these GDRs until you reach the patient's minimum effective dose, or you can fully discontinue it. I want to remind you that GDRs are not successful without family and staff involvement. Everyone needs to get on the same page, regarding low-hanging fruit, to target for GDR.

So these are easy things that we can do for GDRs. Any PRN antipsychotics can be quickly limited too, or discontinued. I know that we have a 14-day limit, currently.

Antipsychotics that are started for just one-off events, or transient agitation, or sleep issues, should be easily replaced with another medication. Such as low-dose benzodiazepine, or a hypnotic. And patients that often come to us from hospital settings, if they have an antipsychotic, it's usually initiated for delirium. So I encourage you to limit the day supply as you would for-- or fully discontinue. Again, antipsychotics in FAST stages 6 to 7 are usually not indicated.

Our take away messages. We always explore alternatives to antipsychotics. Antipsychotics should be used as the last resort for dementia-related behaviors. We should try several other classes, as well as non-pharmacologic interventions before resorting to an antipsychotic.

We should always look for function and comfort. So along the comfort line, always assess for pain, even if the patient can't verbalize it. Usually there's not a whole lot of harm in doing a scheduled Tylenol, or even a tramadol if you see that agitation improves first, before resorting to
a true psych med. As these patients progress through their dementia, continually re-evaluate the need for an antipsychotic.

When there are changes in their ADL, step down from ADL, or there's a brief delirium, when there are changes in renal, liver or cardiac function. And we have finished the bulk of all this information.