

Care Coordination Series, Season 1, Episode 3: Strategies to Prevent UTI and Pneumonia-Related Hospitalizations

Speaker 1 (00:03):

Welcome to our Care Coordination, Quickinar Series. And we are very excited for our guest speaker, Eli De Lille, who is the corporate director of infection prevention for HSAG. And he is going to guide us through resources that your facility can use to address preventable hospitalizations related to HAIs. We are going to review the elements of the HSAG UTI and pneumonia assessments and toolkits. We're going to discuss how you can use the Care Transitions assessment as a tool to implement and drive change at your facility. We also have a new and improved webpage, specifically for how to access our QIIP or our online data portal. We recently updated the facility specific readmission data in the QIIP in the portal. So, if you haven't registered yet or if you have registered, but maybe you haven't logged in in a while, make sure to check it out as there is new updated readmission data available, including readmissions based on discharge disposition, readmissions based on demographic data, and even comparison data. And with that, I would like to turn it over to Eli for today's feature presentation. So, Eli, the floor is yours.

Speaker 2 (01:22):

Thanks, Lindsay. And I can't really talk about healthcare associated infections, UTI, pneumonia without talking about COVID-19. So, with the public health emergency, which we've all been dealing with for years now, at this point, we saw an increase in patient acuity. We've actually seen residents and patients staying longer than they ever have before. Unfortunately, we saw more Foley catheters being inserted, more patients being put on ventilators, and more central lines being put in as well. And when you couple that with the staffing shortages that I know probably each of you have experienced, it really hurt us on a bundle compliance. So, these are things that we know when they're done with every patient or resident, every time, we can virtually eliminate the chances of them getting an infection. So, we also had problems with resource availability. So, there were shortages of products for all of us to use to prevent these infections.

Speaker 2 (02:13):

And of course, staff burnout all led to things, to something that we refer to as drift. So, that's when we know what the policy is, we know what the best practice is, but unfortunately, we just can't meet that expectation. So, our goal with this webinar and with the tools and resources to show you how HSAG can help you meet the needs of your residents, your patients, and improve the care that's been provided. And I mentioned kind of the challenges and I have to say that I work with nursing homes and hospitals across the country. I think I'm assigned somewhere around 50 hospitals that I work with one-on-one. So, what I'm talking to you about today is really like in the weeds with these facilities just trying to struggle to make, you know, the best of a very difficult situation.

Speaker 2 (02:57):

And what we've seen with NHSN data, which is the National Health Safety Network, is data from 2019. So, pre-COVID for all of these healthcare associated infections that you see in front of you between 2019 and the same quarter in 2020, we saw tremendous increases. So, CLABSI, central line associated bloodstream infections up by almost 50%; CAUDI, 20%; ventilator associated events, 45%; and MRSA bacteremia, which is often tied to

CLABSI, is up by 35%. And you know, the struggle that we have, you know, as the HQIC, as CMS's partner, is how do we help you navigate through the challenges that you're experiencing, create tools and resources, and make sure that you have actionable information, which I'm going to show you some screenshots from the portal that Lindsey was mentioning and encouraging you all to access. So, this is actually comparisons over time which is available within the dashboard that we've blinded the hospitals and just made it so that it just shows the HQIC as a whole, which is 300 hospitals across 32 states.

Speaker 2 (04:01):

And then we compared that to the state of California in the purple line. And as you can see, when we look at those possible ventilator-associated pneumonia since the onset of COVID, we've seen nothing but this gradual increase. And then around the COVID surges, we saw these spikes. And with ventilator-associated pneumonia, we saw a lot of these patients that were COVID-positive that never came off the ventilator, or if they did, they had to go to long-term care for care. So, fortunately within the nursing home data, we've seen the hospitalized patients that are being discharged, going to the nursing home for aftercare, they're not coming back into the hospital as frequently as what we expected with pneumonia. But unfortunately, sometimes the pneumonia isn't diagnosed within the nursing home. It could be sepsis. The next one is the readmissions actually are admissions from short-stay residents.

Speaker 2 (04:53):

And you can see that this, you know, started off higher than what it is once again went down. But then we've got that upward trend for the California short stay. And I'm going to share some tools and resources and hopefully we'll help you identify when these residents need to be readmitted because, of course, we would prefer they go back into the hospital versus having their condition worsen and then potentially expire while they're in the nursing home. This same platform within the QIIP portal that HSAG offers. And you can see the 2019 performance of catheter-associated urinary tract infections for all the hospitals we work with. And then in comparison to California, and I mentioned before, the challenges with bundle utilization and especially not putting devices in if they weren't required. And what we saw was everyone expected the worst case situation with the people that required admission.

Speaker 2 (05:41):

So, everyone got a Foley catheter, everyone got a central line, and when they were put in, they didn't necessarily come out when they were supposed to or when they should have, you know, to optimize that patient's outcome. And you can see here when the pandemic began and then when we saw these spikes, it almost perfectly aligns with COVID. And I can say as we look into the data in 2022, when we [look at] 2023, the numbers are getting better. But we all have to be ready for that. Hopefully it never happens again. But if there is another surge of COVID, the tools and resources that we're going to show you today will hopefully help you, you know, navigate that. I've been an infection preventionist now for 10 years, and I would say that infection control can be incredibly complicated. The patient is supposed to be the center of everything that we do.

Speaker 2 (06:23):

But really, when you focus on the fundamentals performing hand hygiene, making sure that if you use something that you clean it, wearing personal protective equipment, you know, that N-95 respirator or that eye protection, it isn't, we're not asking you to wear that because we're trying to be difficult. It's generally meant to protect you and the residents. And staff are burnt out. And I think it's more important than ever to make sure

that we're not just telling people when they're doing something wrong. We're going in there and saying, Hey, you, you're doing an awesome job with how you're isolating that resident, how you're educating them, or how you're sticking to the compliance to make sure that you're keeping everyone else in the hospital or that nursing home safe. And we want to make sure that we're monitoring for signs of infection, working with the hospitals and nursing homes, often sepsis, you know, that's that last step in that process of infection where your body has like a huge response to that infection.

Speaker 2 (07:15):

And the earlier that you identify sepsis, the earlier you get fluids, antibiotics, that potential inpatient admission, the better the outcome is going to be. So, if you're in a nursing home, there's some great tools and resources out there about, you know, making sure that if they have a change in mentation, they're not as interactive as what they were before, that you escalate that to the provider to get, you know, an intervention earlier rather than late. And then for the hospital, non-res on admission, sepsis is something that everybody's struggling with, especially in the areas outside the critical care or the emergency room. And once again, HSAG has some great tools and resources that we think will help you. Staying up to date with vaccinations, as we look at COVID-19, where would we be if we didn't have the vaccinations for our residents, for ourselves, you know, for the healthcare providers out there.

Speaker 2 (07:59):

Same way with pneumonia vaccinations as well as the influenza vaccination. I always like to say, you know, I've done this for a few years now, trust but confirm. You can write the greatest policy in the world, but that doesn't necessarily mean that it's being followed. So, the doing audits you're going to notice is kind of a theme of the resources that I share with you. Hand hygiene and personal protective use, per personal protective equipment use, we know this is the fundamentals of care right now in the nursing home, the hospital, pretty much anywhere that a patient presents. Unfortunately, we see a lot of compliance issues with staff not just not using personal protective equipment or not washing their hands. They're just not doing it correctly. And these audits not just are a way to show your information over time, whether you have opportunity or you're doing great, but it also gives you the moment, you know, to just do that just in-time education, where you coach that staff member, you give 'em the opportunity to ask questions, you make yourself more of a resource than a police officer telling them what they're doing wrong.

Speaker 2 (09:01):

And I can tell you that most of the time when you're doing these audits, they definitely know who you are when you come up to the floor. That's not necessarily a bad thing 'cuz it gives, the more present you are, the more engaged you are, the more likely they're going to talk to you about their opportunities. And once again, this resource is available on our website and you can take it today and go out there and do an audit in your unit or in your floor, in your nursing home, or your hospital. This is one of my favorite tools that HSAG has. We have these for multiple healthcare associated infection, like device-associated events, so ventilator-associated as well as central line. And what this gives you is a tool that anyone can use as long as they're educated on the parameters you're looking for.

Speaker 2 (09:40):

And you go out and you select your, your patients or your residents within the unit that have a Foley and you can explore why is that Foley in, does it need to be in as there's documentation for it? And then if it does need

to be in, are we caring for this person patient the way that our bundle expectations are, which are those best practices I mentioned before. It asks you what location as well. And this isn't just, you know, a static tool. This is actually very dynamic. It provides feedback graphs that you can share immediately. So, as soon as you input that data, that compliance information into the tool, you're going to be able to go to your nursing partners, your clinical staff, your providers, and show, hey, you guys are doing a great job of keep maintaining a closed system. You're doing excellent to make sure that that, you know, that it has a stat lock or a device so that there's not urethral tension.

Speaker 2 (10:30):

But we really have a problem with, you know, making sure that that catheter is below the level of patient's bladder or that it's free of dependent loops. And what this is is just that great visual to show you and your partners, especially over time where you've done it, initial audit, you've educated, you've monitored again, and seen that improvement. Regardless of what surveillance definition you use, it's important to always do a little bit deeper dive into that case. So, we created exploration tools much the same as the audit tools. It's meant for all the device-associated events and it gives you an opportunity to say, okay, we've had an increase in infections within the unit. We want to do a root cause analysis, even if it's a small one, to look to see what the common factors are with our partners, with the medical record, with the providers to see is there something that's unique that's tying all these cases together that could be contributing to those events.

Speaker 2 (11:26):

Great example here was we worked with a hospital in South Carolina and they performed this process exactly what I'm describing to you. They did that deeper investigation and they found out that all of their catheter-associated urinary tract infections were from E. coli, which is an isolate that's typically found in stool. And then, they were all with elderly women that were incontinent of stool. Well, it seems like something that makes sense, you know, know they're at the highest risk of infection anyhow. But until they did that review, they didn't realize how important it was and then they could immediately put interventions in place that virtually eliminated all the infections that they were seeing. I know that I focused on ventilator-associated pneumonia, which is of course, very difficult with these complex patients. It has a very unique surveillance definition, but just pneumonia in general.

Speaker 2 (12:17):

We feel like HSAG has some great tools and resources that we've spent the last several years developing with our partners. And it starts with a good audit on why that person readmitted to the hospital. And if you don't audit that information, you're never going to really know what exactly is contributing to it. So, what we always do, at least the approach we take with our hospitals is, you know, get a report of who those patients are that are re-admitting and go through there and do a line-by-line comparison with the seven-day audit report in order to very quickly show you where the biggest opportunity for improvement is. Was it an actual change in condition or did they not have oxygen at home when they should have? Did they not make it to their provider? It's a really in-depth look at those factors that are contributing to it.

Speaker 2 (13:03):

And our nursing homes like it as a retrospective review because if they're transferring that patient to the hospital, it gives the charge nurse, the DON, the administrator a way to sit down with the team and say, "Hey, was there something that we could have done differently? Could we have notified the provider earlier? Could

we have, you know, got pharmacy on board and got them on antibiotics earlier, got them, you know, respiratory treatments to prevent that rehospitalization?" But once again, without the audit, you don't really know where to make, you know, those interventions at. And then with this, for our patients that do go home, or do go to the nursing home, or go to home care, we have these Zone tools which we've used at HSAG for years. We have this made for virtually every diagnosis you can imagine.

Speaker 2 (13:47):

And it's a really simple way for the patient, the family, the nursing staff, the home care staff to know your expectations on are they green, are they doing okay, is their condition stable? Yellow is, "hey, you know, I should be worried." I might want to call my physician, might want to call the on-call, you know, home care nurse, might want to get ahold of the provider at night, on weekend in the nursing home. And then red zone is we need to take, you know, action right now and we need to call 9-1-1. This person, you know, trying to prevent a readmission at this point is not what we're trying to do. We're trying to save the patient's life. So, them going to the hospital and getting that treatment is really necessary when they get to this stage. So, these are just some tools, resources, approaches that we've spent some time developing.

This material was prepared by Health Services Advisory Group (HSAG), a Quality Innovation Network-Quality Improvement Organization under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. Pub No. QN-12SOW-XC-03022023-02