WAYS TO ENSURE YOUR RESIDENTS GET A GOOD NIGHT'S SLEEP

LITTLE THINGS THAT MAKE A DIFFERENCE

AN E-BOOK BY

McKnight's

SPONSORED BY

Omnicare®

a CVSHealth company

TABLE OF CONTENTS

THIS MCKNIGHT'S E-BOOK IS SPONSORED BY

Omnicare®
a CVSHealth company

DON'T LET THIS CHALLENGE KEEP YOU UP ALL NIGHT

Few things make us feel more energized than a good night's sleep. But for many reasons, that can be a real challenge for your residents.

Sometimes, the problem lies with the facility itself. Conversations among staff, paging systems, rolling carts and other things that go bump in the night can certainly disrupt sleep.

Other times, aging-related challenges are the cause. Issues here may include an underlying medical or psychiatric condition, or possibly the medications used to treat them.

In the pages that follow, we hope you will find tools and answers that help you provide optimal sleep management. After all, you probably have enough other problems keeping you awake at night.

Nancy Losben
R.Ph., CCP, FASCP, CG

Senior Director, Quality
Omnicare, a CVS Health Company

A GOOD NIGHT'S SLEEP: JUST WHAT THE DOCTOR ORDERED

By Kimberly Marselas

Seniors might think feeling tired is an unavoidable part of getting older.

The truth is, good quality sleep — not just more sleep — is the key to feeling energetic during waking hours.

But good sleep doesn't just happen on its own. It's made. And, despite some inherent challenges, nursing facilities can be a great place to make good sleep happen.

"Factors associated with long-term care facilities may be disruptive to sleep, but these facilities are also typically well-equipped to implement structure that improves sleep for individuals with dementia," reported Jennifer L. Martin, Ph.D., board member for the American Academy of Sleep Medicine, in a 2018 research review of sleep and aging. "Offering and encouraging residents to engage in exercise and social interactions and setting up a routine for residents with regularly scheduled meals and activities may improve a number of sleep measures, including reducing insomnia and regulating and shifting circadian rhythm."

What else can you do to ensure residents are getting the kind of rest they really need to take advantage of daytime programming and therapy? Here's what neurologists, geriatricians and other sleep experts recommend.

REDUCE SLEEP DISTURBANCES

When consulting and education firm Empira set out to establish a restorative sleep program, it first identified the main sleep disturbances in the nursing facilities being studied. The top offenders included:

NOISE

A Harvard University study found noise on a nursing floor — electronic alarms, staff footsteps, conversation, paging systems, rolling carts — can disrupt sleep and increase memory problems. Shared rooms with TVs or low-volume music can prevent a resident from falling asleep or wake them later. Empira's interventions included monitoring sound levels with meters; eliminating all residents' personal alarms; reducing noisy times in the daily schedule, such as shift change, meals, rounds; identifying specific loud speaking staff; and turning off unused TVs or suggest the use of private headsets.

LIGHT

Exposure to enough light during the day — and limiting it at night — is critical for maintaining circadian rhythm in the elderly. Getting the right kind of light matters too. A study published in 2014 found that adding blue-white, 300

to 400 lux lights to the rooms of dementia residents for four weeks improved sleep quality and duration, while decreasing depression and agitation. One easy fix: Ask overnight staff to trade full hallway lighting for amber flashlights they use only when on the move.

SLEEPING ENVIRONMENT

The bedroom should be dark and quiet, with a maintained temperature below 75 degrees Fahrenheit, according to findings of a 2017 review of sleep disorder management.

NAPPING

Nodding off during the day can make it harder to settle down for quality sleep at night. Daytime sleep further disrupts circadian rhythms. According to Empira's research, one 30– to 40-minute nap at midday is rejuvenating, but consistently napping for longer periods increases illnesses and reduces life expectancy. Consolidated nighttime sleep is best.

MEDICATION

Common medications that may inhibit or disrupt sleep include diuretics for high blood pressure or glaucoma; anticholinergics for COPD; antihypertension drugs; corticosteroids for arthritis; antidepressants; H2 blockers, including over-the-counter brands, for reflux or ulcers; levodopa for Parkinson's disease; and bronchodilators for chronic respiratory conditions. Likewise, some drugs recommended for sleep disorders can cause other sleep disorders or affect mood and activity levels during the day, creating a vicious sleep-wake pattern. Benzodiazepines, for instance, can aggravate sleep apnea syndromes, and selective serotonin reuptake inhibitors can cause or worsen REM sleep behavior disorder.

IMPLEMENT GOOD SLEEP HYGIENE FACILITY WIDE

Helping residents get their best night's sleep means reducing the disruptions. To make a difference, providers need to examine clinical, pharmaceutical, operational and environmental practices.

Some commonly prescribed medications can inhibit or disrupt sleep.

As sleep disorders vary by the individual, so, too, do the solutions.

Mrs. Smith might fall asleep faster knowing she's had a toileting opportunity as late as possible in the evening; Mr. Jones might be better able to stay asleep if he gets a new, pressure-redistributing mattress.

For residents with restless leg syndrome, new research shows something as simple as leaving the top sheet untucked at night might reduce symptoms by allowing the foot to flex.

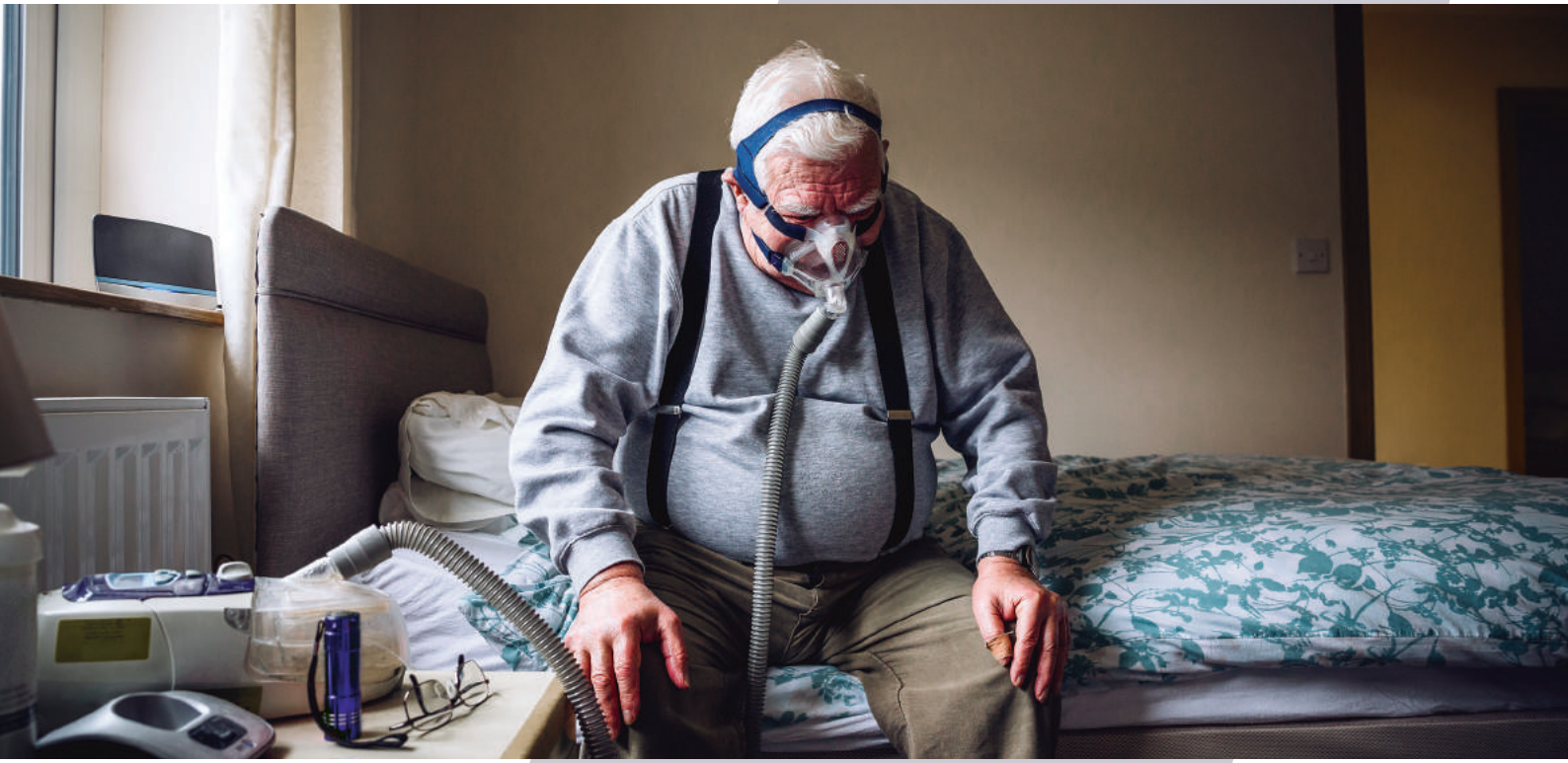
Medication review and de-prescribing should also be part of the sleep-solution search.

"It doesn't always take a drug," said Nancy L. Losben, R.Ph., CCP, FASCP, CG, senior director of quality for Omnicare. "It may take changing fluids and exercise and other interventions, but we've got to do things for the patient's comfort too."

Martin points to cognitive behavioral therapy — including good sleep hygiene — as an evidence-based treatment for insomnia in older adults.

Sleep restriction, for instance, reduces time in bed to the average amount of time the resident is currently sleeping as way to increase sleep drive. After sleep improves, time in bed is progressively increased. As an alternative for older adults who are more susceptible to daytime sleepiness, consider sleep compression to gradually reduce the time spent in bed.

"Making and maintaining changes consistent with these recommendations can be challenging, so motivational techniques may be useful in increasing adherence," Martin wrote. "Other interventions include addressing inaccurate and unhelpful beliefs about sleep and offering strategies to reduce physiological arousal, including progressive muscle relaxation, guided imagery and meditation." ■



WHEN SLEEPING IS A NIGHTMARE: RECOGNIZING AND TREATING SLEEP DISORDERS IN THE ELDERLY

By Kimberly Marselas

Some 50% of older Americans report having sleep difficulties, but the incidence might be even higher among seniors living in long-term care settings.

Natural age-related changes in sleep patterns can be compounded by comorbidities, medication use, psychological stressors, the nursing home environment and poor sleep behavior.

In one study, 2.5% of people reported they always or often experienced excessive daytime sleepiness, but sleep issues are also chronically underreported among the elderly.

Persistent sleepiness may lead to disengagement, reduced physical activity and increased napping — factors that can further reduce quality sleep and lead to depression or other mood disorders.

The 65-plus demographic remains underdiagnosed and undertreated for a variety of sleep disorders, according to several recent studies.

"When daytime sleepiness or sleep problems are present in older people, it is essential to assess whether sleep duration, quality and timing are adequate," neurologist Keisuke Suzuki, M.D., Ph.D., reported in a 2017 review published by the *Journal of General and Family Medicine*. "Comprehensive assessment and management of medical conditions may improve the patient's quality of sleep as well as of daytime life."

Here, we outline four types of sleep disorders common among seniors, how to recognize them and ways to approach treatment.

OBSTRUCTIVE SLEEP APNEA

Patients with sleep apnea experience loss of breath for 10 seconds or longer as their throat collapses during sleep. Symptoms include loud snoring, observation of gasping for air while sleeping, dry mouth, a.m. headache, insomnia, excessive daytime sleepiness and irritability.

A 2018 University of Michigan study of Medicare beneficiaries found 56% of people 65 and older have a high risk of OSA, but only 8% have been tested for the

condition. It is typically diagnosed through an overnight sleep study.

Residents who are obese, have diabetes or a history of stroke or heart attack are at higher risk.

"Missing a diagnosis could ultimately lead to a higher risk of conditions like hypertension, stroke, heart disease, diabetes and depression, as well as cognitive impairment, which is especially important for older individuals," said co-first author Tiffany Braley, M.D., assistant professor of neurology. "These conditions have serious impact, and lead to expensive medical care."

More than 40% of older people experience insomnia-related symptoms each week.

While a continuous positive airway pressure mask is the gold standard for treatment, it isn't always a solution for seniors with cognitive impairment.

The treatment can decrease daytime sleepiness, reduce snoring and push back against cognitive impairment.

Tuck, a sleep resource network, reports some home health patients with dementia have been shown to tolerate up to five hours of CPAP nightly. But the promise of improved quality of life won't be enough to convince the most impaired residents to use the bulky, unfamiliar mask.

Surgical intervention is often recommended for younger patients, but geriatric sufferers may be too frail to withstand a tonsillectomy or soft palate procedures. Oral devices — similar to mouthguards — or newer devices may be an alternative for some residents.

Drugs are typically not part of the treatment regimen, except in combination with CPAP use.

Modafinil is an FDA-approved medicine for residual daytime sleepiness. Although other pharmacological interventions have been recommended in the past, many led to the same symptoms — insomnia, headache, dry mouth — as apnea itself.

For mild cases, Medscape suggests using behavioral interventions. Coordinating with nutrition staff to achieve a 10% weight loss can reduce apnea symptoms by 26%. Positioning a resident on his or her side to sleep and supplying a contoured pillow also can help achieve moderate sleep improvements.

INSOMNIA CAN INCLUDE DIFFICULTY FALLING ASLEEP, STAYING ASLEEP OR GETTING HIGH-QUALITY SLEEP.

INSOMNIA

According to a National Sleep Foundation poll, 44% of older people experience one or more of nighttime symptoms of insomnia at least a few nights per week. The condition is often related to underlying medical or psychiatric conditions or the medications needed to treat them.

Insomnia can include difficulty falling asleep, staying asleep or getting high-quality sleep. Older adults are most likely to report problems sleeping through the night or early waking. Sufferers experience daytime symptoms such as fatigue and are at higher risk of falls and cardiovascular problems.

Insomnia is often exacerbated by nocturia or incontinence in the nursing home setting. Nearly two-thirds of those ages 70 to 80 need to void two or more times a night, according to a 2017 study published in the *International Journal of Clinical Practice*.

The authors, a multidisciplinary group of nocturia experts, recommended reducing evening fluid intake; medical therapies including low-dose, gender-specific desmopressin; better timing of diuretics; and specialist management.

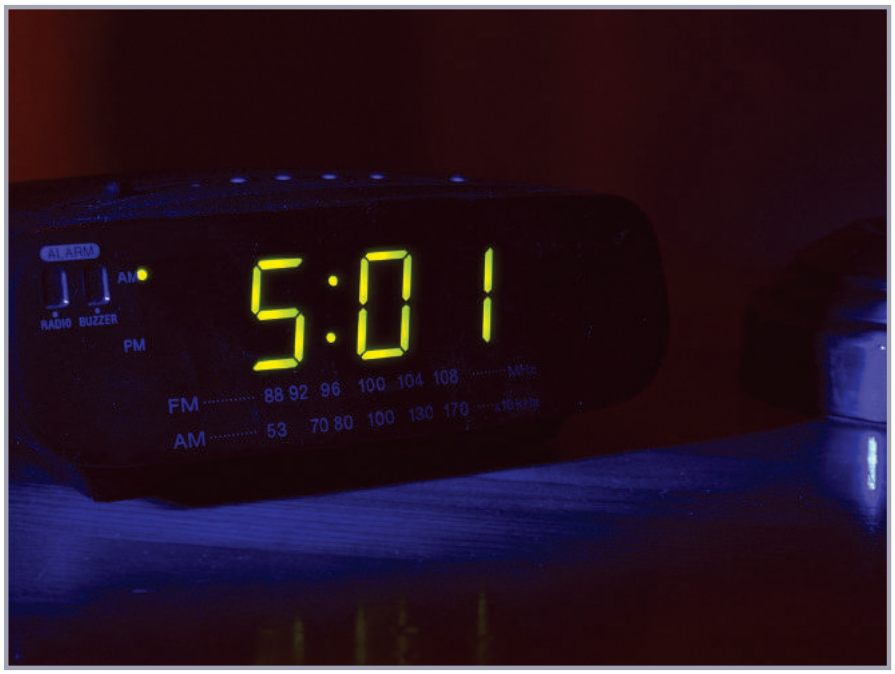
A toileting program tailored to residents' unique schedules — even

adjusting shifts to accommodate night owls' needs — also can deliver the confidence they need to fall asleep and stay asleep.

Sleep hygiene also plays a major role in the treatment of insomnia. Encourage regular exercise and meals, avoid stimulants such as caffeine and create a comfortable sleeping environment.

Traditional vinyl mattresses can make residents hot and uncomfortable. Investing more in those that offer breathability and other features that reduce turning requirements also can limit night-time interruptions that degrade sleep quality.

Suzuki and co-authors point out that resident beds should be used only for sleep; they should have a regular wake time regardless of a bad night's sleep; and avoid naps to create good habits.



Circadian rhythm changes and lack of natural light exposure can affect sleep.

Biological indicators including melatonin levels and body temperature can indicate when residents have problems with their circadian clock. But symptoms often overlap other disorders. Physicians should conduct a full screening to rule out other disorders including insomnia, OSA or depression.

RESIDENTS WITH IRREGULAR SLEEP-WAKE DISORDER GET CHUNKS OF SLEEP OVER 24 HOURS, RATHER THAN IN ONE, EIGHT-HOUR BLOCK.

CIRCADIAN RHYTHM DISORDERS

Circadian rhythms coordinate the timing of bodily functions like sleep.

Many older adults struggle with advanced sleep phase syndrome, in which the sleep rhythm advances by several hours. Residents might still get a full night's sleep, but they go to bed and get up extremely early.

Residents with irregular sleep-wake disorder get chunks of sleep over 24 hours, rather than in one, 8-hour block. It is common in the elderly due to circadian rhythm changes, lack of natural light exposure and decreased physical activity.

PARASOMNIA

Parasomnia, or irregular activity during sleep, can include physical or emotional outbursts. Two of the most common forms in the elderly are rapid eye movement behavior disorder and restless leg syndrome.

REM disorder can lead to violent physical movement during dream states, and it is often associated with Parkinson's disease, Lewy body dementia or Shy-Drager syndrome. It can be especially concerning in situations where a resident could hurt himself or herself, or in independent living when an elderly individual may still be sharing a bed with a spouse.

In addition to making the sleeping environment safe by removing any sharp or breakable objects, REM disruptions in otherwise healthy residents should lead to a broader heath screening. Research has shown that nearly 40% of healthy people with this particular sleep disorder will go on to develop Parkinson's.

In severe cases, medication can help. Clonazepam, a benzodiazepine, reduces symptoms ins about 90% of cases, according to the National Sleep Foundation. But clonazepam also can increase daytime sleepiness and dizziness in the elderly. Some antidepressants or melatonin (3-12 milligrams at bedtime) may also curtail violent activity

Restless leg syndrome is most commonly described as an urge to move the legs or an abnormal sensation, typically worsening at night. According to Suzuki's review, iron replacement therapy shows promise for some patients, as do low-dose dopamine agonists, including a rotigotine patch. ■

MANAGING SLEEP DISORDERS IN PATIENTS WITH DEMENTIA

By Nancy Losben, R.Ph., CCP, FASCP, CG

All categories of senior living and long-term care facilities are providing services to persons with dementia, and as the numbers grow, so does the conundrum of sleep disorders that can affect half of these residents. A lack of nighttime sleep causes the quality of life to nose-dive and can lead to falls, leg movements during sleep and while awake, agitation, anger, loss of physical function, reduced involvement in activities and even complaints from a roommate.

More than 40% of seniors complain about not getting a good night's sleep, but one-quarter to one-half of older adults with Alzheimer's disease and other dementias, including Parkinsons's dementia and Lewy body dementia, suffer from sleep disruptions. (1) The physiological causes include changes in neurons in the brain, changes in circadian rhythm and changes in the brain stem, resulting in the inability to regulate sleep-wake cycles, frequent night time awakenings, more day time naps and a decrease in rapid eye movement sleep (REM). (2) Different areas of the brain are affected by different types of dementia. As neurodegenerative changes progress in the brain, melatonin secretion can be disrupted, affecting circadian rhythm. Symptoms will increase with the progression of dementia. In the elderly, the most common complaint is the inability to fall asleep or sleep-onset insomnia. (3) Adjustment disorders, depression, pain, difficulty breathing, gastroesophageal reflux (GERD), obstructive sleep apnea, medication adverse effects, and other diseases and conditions also confound sleep disorders in patients with all types of dementia.

Lewy body dementia is the third most common type of dementia in persons older than 60 years. It is caused by a synaptic protein that causes abnormal neurotransmitter levels and neuronal pathways, and patients experience excessive daytime drowsiness and sleep behavior disorders characterized by sleepwalking, vivid dreams that are sometimes acted out (REM sleep behavior disorder)), causing potential injury to self and to others. Patients with Lewy body dementia have impaired alertness that is more similar to delirium than dementia. An assessment of delirium should be performed with a focus toward medications, dehydration, and infection. Lewy bodies also occur in patients with Parkinson's disease. Parkinson's dementia, observed in about 40% of Parkinson's patients, usually begins after the age of 70 and about 10 to 15 years after diagnosis. Parkinsons's psychiatric symptoms such as hallucinations are

less frequent than in Lewy body dementia,

The assessment of a sleep disorder should include a resident's sleep/wake schedule, changes in the resident's environment or dwelling, physical and psychosocial stressors, medications and underlying illnesses. These contributing factors which should be evaluated first. This assessment may reveal depression, apnea or restless leg syndrome. Nighttime hypoglycemia and other endocrine disorders also should be ruled out. Tools such as the Mini Mental Status Exam (MMSE) and the Geriatric Depression Scale (GDS) should be completed before any treatment is initiated. Evaluate and score activities of daily living because residents who do not have bed mobility and cannot turn in bed or get out of bed may suffer from fragmented sleep.

MEDICATIONS THAT MAY CAUSE DISRUPTIONS IN SLEEP*

MEDICATION TYPE	EXAMPLES	EFFECT
Stimulating antidepressants	Buproprion, selective serotonin uptake inhibitors, venlaxfaxine, Monoamine oxidase inhibitors	Reduced REMs Sleep; shortened sleep time
Antihypertensives	Beta Blockers, Alpha Blockers	Insomnia, nightmares, vivid dreams, daytime tiredness
Bronchodilators	Albuterol	Inability to fall asleep, waking during the night
Steroids	Prednisone	Daytime tiredness, inability to fall asleep, waking during the night
Antihistamines	Diphenhydramine	Daytime sleepiness
Analgesics	Opioids, Non-steroidal anti-inflammatory drugs	Decreased sleep efficiency, sedations, decreased REMs sleep
Antiparkinson's drugs	High dose levodopa/carbidopa Dopamine Agonists	Insomnia, daytime sleepiness
Antipsychotics	Clozapine, Olanzapine, Quetiapine	Sedation

**Rose K., Fagin C., Lorenz R. Sleep disturbances in dementia; what they are as what to do. J Gerontol Nurs. May, 2010; 35(5):9-14*

Non-pharmacological sleep hygiene should be the cornerstone for improving sleep habits. Because there is no scientifically proven way to treat sleep disorders in the presence of dementia, care planning should include a mixed number of approaches and methods that include increasing exercise, increasing social activities and music, and engagement in simple games that can improve nighttime sleep in persons with dementia and cognitive impairment. Exposure to bright light or sunlight in the morning and later in the day can contribute to more daytime wakefulness. Daytime muscle stretching may reduce the effects of restless leg syndrome. Other non-pharmacologic approaches include avoiding caffeine, alcohol, chocolate and smoking. Provide a comfortable sleeping environment at the right temperature, in a dark room, and with good air circulation while minimizing light and noise. Steer clear of heavy evening meals, limit evening liquids, keep regular day- and nighttime schedules. For patients in the need of stress management, offer an opportunity to discuss worries before bedtime and promote muscle relaxation techniques appropriate to the patient's level of cognition. (4) Patients with dementia who have hallucinations should have unnecessary objects such as plants and figurines removed from the room in which they sleep to avoid the visual disturbances when they wake in the dark.

A LACK OF NIGHTTIME SLEEP CAUSES THE QUALITY OF LIFE TO NOSE-DIVE.

Often, as the fear of sleep deprivation arises, the family or staff may wish to turn to hypnotic medications to aid sleep. But before adding any medications, the staff should consult with a pharmacist about any current medications the patient is taking that can contribute to or exacerbate sleeplessness. Many medications, both over-the-counter and prescription, can cause vivid dreams, nightmares and the inability to fall asleep.

There is little scientific evidence that serotonin supplements, anxiolytics or hypnotics are efficacious in the treatment of dementia-related sleep disorders due to the changes in neurons and neuron pathways in the brain of affected patients. Often a multifaceted care plan to help a patient (and their roommate) sleep well outweighs the potential adverse effects and consequences of additional drug therapy. ■

Nancy Losben, R.Ph., CCP, FASCP, CG, is a consultant pharmacist and Omnicare's Senior Director of Quality.