Tracie walks slowly up the walkway behind a patient in a walker entering the hospital. She remarks to herself, *Wow. My third day-shift. I didn’t think I would miss the changeover time to nights.* "Here, let me get the door for you," Tracie says as she opens the door for an elderly patient who then asks directions to the Ultrasound Department. Tracie points him in the direction of the Diagnostics Department and explains that he can follow the blue line right to the check-in desk.

Tracie turns in the opposite direction and enters the elevator that takes her to the seventh floor. The doors open, and she is greeted with the familiar disinfectant smells. Walking quickly to the staff room, she shrugs out of her coat and puts on her duty clogs. Looking in the mirror, she moves errant hair strands behind her ears and runs her hands over her uniform. “I guess I am ready. Let’s go see if anything has changed overnight.”

Walking out of the staff room to the main nursing station, Tracie finds Jim finishing off his night’s charting.

Jim looks up. “Wow, I am glad to see you.”

“Ok, that answers my first question. I have the same assignment as yesterday?”
Jim smiles. “Yes you do. I asked specifically to keep you with the same group of patients as you know them and it will provide some consistency.”

“Are you ready to hand over to me?”

“Just give me a minute to finish this last note and chart my meds that I just gave to Room 5. It has been very busy and I have not really had a chance to sit down all night.”

“Ok, I am going to grab a glass of water. I’ll be right back.”

A few minutes later, Tracie sits down beside an obviously exhausted Jim to get the handover report.

“Where to start? Let’s start with Mrs. Erin Johns if that is ok?”

“Sure. I am hoping she had a quiet night.”

“Yes, she had a better night than her roommate and some of the other patients on the floor. Last night we needed to adjust her oxygen up as her sats went to 90% and even dropped further with movement. The RTs saw her a number of times, but elected to not do an ABG at this time.” Jim points at the vital signs flow sheet. “Her heart rate, temp, and BP are up slightly from what you recorded yesterday. Ins and outs are even balance. She was a bit happier at visiting time when her son and dog visited, but then became quite tearful when they left. She is due for lab work this morning, a CXR and potentially an ABG, especially if you can’t decrease her oxygen.”

“If I remember correctly, the Physio will also assess her. Is she still on IV antibiotics?”

“Yes, it’s only day two and we have no results from the sputum sample in the system. We could be changing them tomorrow if we get the culture/sensitivities then. Her next antibiotic is due at 10 and she has some other meds at 08h00.”

“Great, who is next?”

Jim then goes through the rest of the patient assignment.

Leaning back in his chair, Jim rubs his hand through his closely cropped hair. “That’s it for me. I’m going to change into my gear and cycle home in time to take the kids to school. Any questions?”

“Nope. Have a good sleep.”

“See you tonight. I’m scheduled to come in.”

“Awesome.”

Jim walks quickly to the staff room and disappears through the door. Meanwhile, Tracie takes a quick look through her patient charts to plan her priorities for the day.

“Bed 5 is ready for discharge, so should be ok for the next little bit. Beds 6 and 7 had a rough night. I will see them and then be off to check on Mrs. Johns.”
Sighing a little as she stands, Tracie heads off to Bed 6.

**Time: 08h15**

“Good morning Mrs. Johns, how are you doing?”

Tracie looks towards Erin and sees a very sleepy elderly woman. *Wow, she looks like she has aged even more since yesterday.*

Erin looks up and attempts to say something but it comes out as “Argg argg.” Her voice muffled by the mask and the sound of the bubbling from the humidifier.

Tracie furrows her brow. *Hmm. I wonder. That does not sound right.*

She pulls the vital sign machine up to the bedside and hooks Erin up. Immediately she notes that Erin’s oxygen saturation is down again to 90%, then thinks to herself, *Ok, I am going to have to call the RT. May need to adjust her FiO2.* About a minute later the machine beeps and the vitals are displayed on the small screen. Tracie records them on the vital sign flow sheet.

<table>
<thead>
<tr>
<th>Day: 3</th>
<th>Pulse Rate</th>
<th>Blood Pressure</th>
<th>Respiratory Rate</th>
<th>Temperature</th>
<th>O2 Saturation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time: 08h00</td>
<td>96</td>
<td>170/90</td>
<td>22</td>
<td>36.5°C</td>
<td>90% on FM</td>
</tr>
</tbody>
</table>

“Mrs. Johns, I am going to listen to your lungs and heart.”

Erin nods her head, “So tired.”

Tracie places the stethoscope in her ears and the bell against the Erin’s chest. She quickly moves the bell around on Erin’s chest in a systematic manner. Standing up straight, and stretching her arms out after leaning over the bed, she thinks, *There seems to be a bit more coarse sounds mid to lower field bilaterally. A few wheezes on expiration. Heart sounds are normal.*

“Mrs. Johns, I am going to give you some Ventolin and ask the RT to come and see you to make sure you are on the right oxygen setting.”

Erin looks up and just nods.

Tracie heads over to the nursing station and asks the unit coordinator to page the RT for her.

A few minutes later, the RT, Herman calls back.

“Hey, this is Herman, I am the RT covering the floors today.”

“Thank you for calling back so quickly. Did you get report on Mrs. Erin Johns?”

“She the lady on the seventh floor with pneumonia and COPD, and on high flow face mask?”
“Yes, that is Mrs. Johns. This morning when I assessed her she complained of being tired. Sats are around 90%, RR is up slightly along with HR and BP. Breath sounds are a bit coarser in the lower fields with wheezes on expiration in the upper. I have just started her on some Ventolin. I am not sure about adjusting her FiO\textsubscript{2} further or whether her COPD is getting worse which is causing her to feel tired. There is an order for an ABG if there is a change in patient’s condition. I would like you to come and see her.”

“Sounds like I should pop up there. I am seeing a patient on the fourth floor right now and titrating his oxygen. Can you wait about 10 minutes?”

“I can. I am pretty sure Mrs. Johns will be ok as well. I will recheck her saturations after the Ventolin treatment.”

“That’s an excellent idea, I will be up as soon as I can.”

“Thanks.” Tracie hangs up the phone. Pushing back the errant hair strands behind her ears, she stands up and heads down the hallway again to Mrs. Johns’s room. Entering the room she finds a very tall, fit woman leaning over the bedside of Mrs. Johns.

“Can I help you?” Tracie asks.

“Hi, my name is Gladys. I am a Physio student doing a preceptorship, and Mrs. Johns’s name is on our list of patients to see today. I thought I would come by and see Mrs. Johns to see what physio she needs and then plan a time to come back to do physio with her.”

“Oh, ok. Sorry, I didn’t see your name tag. My name is Tracie, and I am the nurse caring for her. I don’t think this morning is a good time. Mrs. Johns’s oxygen saturations are down a bit and her breath sounds are a bit coarser than yesterday. Last night she required an increase in her FiO\textsubscript{2}. She has been complaining of feeling tired and she seems a bit sleepier than normal.”

Gladys looks down at Erin who is propped up with a few pillows at 45 degrees.

“Tracie, would you have a few minutes to help me reposition Mrs. Johns? I think I can help improve her saturations with better position for expansion and maybe lead her to do some deep breathing exercises and coughing exercises to help move her secretions out.”

“I can help.”

“Ok, I am just going to get a bolster, can you find a couple more pillows for me?”

“Yes, I think so. There is always a shortage of pillows. Most are like placemats, and patients are always hoarding them as one is never fluffy enough.”

Gladys smiles and moves out the door to the storeroom to find a bolster.

A few minutes later, both Gladys and Tracie are standing together at the end of the bed looking at Erin.

“Ok Gladys, what are we going to do?”
“I would like to position Mrs. Johns more upright in bed with her arms resting on pillows on the overbed table. I am not familiar with these beds but I believe we can move the foot of the bed so Mrs. Johns is in more of a sitting position.”

“Sounds good. Let’s get started.”

Both Gladys and Tracie work together to move Erin into a chair-like position while in bed. They place the bolster at Erin’s back to ensure correct body alignment. After positioning Erin, both step back to admire their work.

“I’m going to check Mrs. Johns’s vitals again to see if this movement helped. I’ll go get the machine to do that.”

“I am going to see if I can get her to deep-breathe and cough. Maybe moving or clearing those secretions will help.”


“That is very good Mrs. Johns. I want you to take a slow deep breath to the count of three then breathe out to the count of three.” Gladys demonstrates what she is asking. “Do you understand?”

Erin nods her head. “Ok, breathe in, 1, 2, 3. Hold. Breathe out 1, 2, 3. Very good.” Erin begins coughing and making frantic motions with her hands to remove the O2 mask. Gladys removes the mask and hands a tissue to Erin. Erin coughs a moderate size amount of greenish/yellow sputum into the tissue.

“Oh my. I am so sorry. I can’t believe I coughed that up. Yuck.”

“Mrs. Johns, this is what we want you to do. Let’s do the breathing and coughing exercises some more, and see if we can clear your lungs a bit.” Gladys then leads Erin through five more deep breathing and coughing exercises. At the end of each deep breath, Erin coughs out more greenish/yellow sputum.

At the end of the fifth attempt, Tracie walks into the room with the vital sign machine. “Sorry, I had to answer Bed 6’s call bell. Did I miss anything?” Tracie walks to Erin and attaches the machine to her arm and finger.

Gladys smiles, “Do we need a sputum sample? Mrs. Johns has coughed out quite a bit of stuff.”

“No, I don’t think so. One was sent from Emergency that we are still waiting on. If she is coughing now we can always have you come back and assist us to get another specimen.”

The vital sign machine beeps and displays the vital signs on the screen. Saturations are up quite a bit and HR and BP are back to normal for Erin. Temperature is still low grade fever. Tracie records the vital signs.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Time: 09h00</td>
<td>86</td>
<td>150/85</td>
<td>18</td>
<td>36.5°C</td>
<td>95% on FM</td>
</tr>
</tbody>
</table>

“Wow, great improvement Mrs. Johns. Getting you up in bed and breathing better has certainly helped.” Erin smiles weakly.

Tracie stares at Erin for a moment longer and thinks, *She looks more alert, eyes are open, better eye contact, overall*
she looks much better than when I first came on shift.

The RT, Herman, arrives in the room and looks at Mrs. Johns, Gladys, and Tracie. “Hi, I’m Herman. You paged me earlier to come and see Mrs. Johns.”

“Hi, Herman, I’m Tracie and this is Gladys. She’s a physiotherapist.”

“Happy to meet you all. So, what can I help with for Mrs. Johns here?” Herman moves closer to Erin, checks her mask then works his way back to the humidifier and checks the flow meter on the wall. He nods his head, thinking, Exactly like I was told. No real changes in therapy.

Tracie then gives a quick report including changes overnight and what happened thus far this morning.

Herman rubs his chin. “Ok, she is improved with physio but is still on high flow. We know she is a CO₂ retainer which may explain her being sleepy this morning, and she has not had an ABG since being in Emergency. Doctor orders give me some leeway on taking an ABG. I would like to do an ABG and see where we are and if there are really any changes since Emergency. From her saturations here it looks like we could drop her FiO₂ a bit. So let’s do this: I will drop her FiO₂ a bit to bring her sats to 93% and then go gather the stuff for an ABG radial stab. We will let her rest for a few more minutes and then I will do a gas.” Herman adjusts the FiO₂ while keeping an eye on the saturations displayed on the vital sign machine. He makes a couple of more adjustments and sees the sats stabilize at 93%. He gives the FiO₂ to Tracie who records it in the nurses’ notes and flow sheet.

Herman leans closer to Erin. “How does that feel with the oxygen decreased a little?”

“I feel a little better than earlier. I am still short of breath.”

“Ok, that may not change very quickly. I am going to listen to your lungs. Is that ok?”

Erin nods her head. “Sure, why not? Everyone else has had a listen.”

Herman pulls his stethoscope out and systematically auscultates Mrs John’s chest. “Not too bad. A bit decreased to the bases with coarse sounds and no wheezes.”

Tracie smiles at Gladys. “That does sound better than what I heard this morning.”

Herman says, “Ok, she seems ok right now. I am going to get my stuff to do the ABG and will be back in about 10 minutes.”

Both Tracie and Gladys nod. Tracie moves to Erin. “Do you need anything right now?”

“Can you hand me the TV remote so I can watch The View?” Tracie finds the remote on the bedside table and hands it to Erin.

Gladys pats her hand “I will come back in about 30 minutes and see if you need to be repositioned or if you feel strong enough to get into a chair.”

Erin waves a hand at both of them, dismissing them as she stares up at the TV.
Tracie and Gladys move out of the room.

“Thank you Gladys for your help. You did a great job in there.”

“Thanks Tracie. It was really nice to see that I made a difference. I’m going to talk with my preceptor about what I did and see another patient. I will come back in about 30 minutes to see how Mrs. Johns is doing.”

“Awesome. Let me know if you need my help. I am going to see my other patients and hand out my 10am meds and antibiotics.”

**Time: 10h00**

Herman comes up to the desk and sees Tracie charting. “Hi Tracie, I’ve done the ABG on Mrs. Johns and have sent it to the lab. We should be getting the results in about 30 minutes or less. I’m going to see a patient on the tenth floor. I will check the system for the results and I may come back and make additional changes to her FiO₂.”

“Thank you Herman. I really appreciate your help.”

**Time: 11h00**

Tracie logs into the clinical system in the hallway outside Erin’s room. “Ok, let’s find the ABG result. Wow, that ABG result looks much better, O₂ and sats better, CO₂ is high but looks normal for her. Nice. Looks like Herman can bring her FiO₂ down.” Next, Tracie checks to see if the culture and sensitivity is back. “C/S is still pending. Gram stain shows gram positive cocci. Ok, not sure what that means. I will have to ask Dr. Hunicutt.”

Tracie signs off the system, turns around and runs directly into Herman, “Oh, I am so sorry.”

“No problem. Did you see the ABG result?”

“Yes, it looks better than even in Emergency.”

“Yes it is, but you have to remember she is on a higher amount of O₂.”

“Yeah, I never considered that. Good point.”

“I am going to go in and adjust her FiO₂ down a bit more. If she continues to improve we can probably move her later today or tomorrow to Optiflow again.”

“Excellent. I will come in with you and do a focus assessment.”

“Sure, no problem.”

Both Herman and Tracie enter Erin’s room to find her watching the TV intently.

Erin looks at them both, noticeably sighs, and asks herself silently, *What do these two want? I am trying to watch my*
“Hi, Mrs. Johns. Herman here is going to make some adjustments to your oxygen level. And with the test we did earlier, we may be able to move you to a more comfortable type of mask.”

Tracie moves the vital sign machine to Erin’s bedside and attaches it to her left arm and right finger.

Herman checks the pulse ox saturation and then begins to adjust the FiO₂. He thinks, *It’s now below the toxic level of oxygen, which should help.*

The oxygen saturation stays stable. Tracie listens to Erin’s chest and finds that the air entry is decreased to her bases, with a few crackles, and no wheezes noted. Vital signs are unchanged from the morning.

“You are looking pretty good, Mrs. Johns.”

“If I was really doing that well, you would ask me to leave.”

“Not quite asking you to leave; probably in another few days. Dr. Hunicutt will come by today to update you.”

“Ok Tracie, I have decreased the FiO₂ below .50 and she looks to be holding her saturations really well at 93%. I will come by towards the end of the shift and if things are good, move to Optiflow.”

“Thanks Herman.”

Just then Gladys enters the room. “Hi Tracie. Hi Mrs. Johns, how are you doing?”

“They say I am better.”

“Good, would you like to sit in a chair or move to a different position?”

“Chair would be much better.”

Gladys then directs both Tracie and Herman to assist her to move Erin to a bedside chair. Erin transfers easily.

“Oh, that is so much better on my behind.”

“Yes, we need to be careful that you do not get any bed sores. Plus, moving around helps your lungs out. Tomorrow I will come by and get you walking the hallways.”

“Great, not looking forward to that.”

Gladys and Tracie smile. Tracie leans forward and adjusts the blanket on Erin. “All good. Need anything right now?”

“No, is lunch coming soon?”

“Yes, it should be here in the next half hour.”

“Ok, then I am good.”
Gladys and Erin leave the room together. Tracie heads to the nursing station to complete her charting, and Gladys heads off to find her preceptor.

Time: 19h00-shift change

“Hi Jim, how are you this lovely evening?”

“Hi Tracie, I am doing well. I had a great sleep.”

“Awesome. You have the same patients as last night.”

“Cool. Should be a quick report.”

Tracie then describes the status of each of the patients. Coming to Erin’s chart, Tracie explains, “Mrs. Johns is doing much better, up in a chair today. Deep breathing exercises and cleared a lot of sputum. FiO$_2$ less than .5. Gram stain came back gram positive, but Dr. Hunicutt says not too helpful for adjusting her antibiotics. C&S should be available tomorrow. The RT did not want to move quite yet to Optiflow and they may do so tomorrow. She is still comfortable on the mask, and the humidity may help clear secretions.” Tracie then goes through the rest of the assessment.

“Looks good, thanks Tracie. I guess tomorrow is your last day shift?”

“Yes, see you in the morning.”