Title: C1L4
Topic: Healthcare facility structure and environment
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So, in this lesson, we looked at healthcare facilities, structure, and environment. So, a few takeaways from that are just kind of knowing what a structure looks like, like layout and design elements, versus environment, which might be overall surroundings, cleanliness, air quality, noise levels. And some of the lesson objectives, as you've now gone through this module, just think about the principles of operating room design and the differences that you might see in different surgical operating, different, different facilities. And think about what some common items that you might find in a surgical suite could differ. Think about the functions of different work areas in that surgical, in particular, setup area, a cleanup area, and then also considering services and describing their functions, so things like housekeeping or delivery of certain surgical items.

And then, I also want you to be able to think about advantages and disadvantages of different types of surgical facilities, at anum, ambulatory in particular. So, ambulatory is basically another way of saying outpatient. And then, you also want to be able to identify different professionals in the preoperative space and what their roles might be.

So, when we go back to thinking about operating room design, the environment, the surroundings, and also the structure, we want to think about why those different design elements exist, right? So, an operating room, it's designed to be able to create and establish certain zones to prevent the transmission of infection and different kinds of microorganisms that could be infectious. So, when we think about our design, some of the main objectives that we wanna be sure that we're aware of, one is infection control, absolutely imperative. So, we always think in time that we're in the operating suite about physical separation between the surgical environment and any source of contamination. And then, think about what sources of contamination or infection might be present that we want to prevent from getting into the OR suite. So, thinking about, you know, things like when we get deliveries of certain surgical instruments, how do they need to be prepared, or maybe taken out of certain packages? Do they need to be sterilized? Kind of what is your hospital's policies and procedures there?

Another objective of designing an OR is environmental safety. There are certain standards that have to be met for things like electricity or gas, oxygen, lighting, other kinds of utilities there. And then, also, we want to consider one of the last objectives, which is efficient use of time and space. So, having certain resources or instruments available in certain areas because we are kind of having different zones, if you will, within each setting.

This is a great example of what we're talking about. So, if we think about kind of different areas in different rooms, we know right now we're talking about within a specific operating room. But if we zoom out a little bit further, we'll see that maybe there is one general OR, then you have a sterile supply room in between, and then maybe a different

OR. And then, if we zoom out even further, maybe you have a bigger setting where you have several ORs with sterile supply in between. And then, of course, you know, there's this restricted area, so that way, you know, not every staff member, or what have you, anyone is able to kind of walk in and out.

So, you know, continuing to scroll out here and zoom out, then we see things like, you know, scrub attire, the staff lounge, locker room for people to get changed, laundry for clean scrubs to be available for the OR. We see that there's equipment rooms, then there's sterile processing, there's a clean side and a dirty side, equipment supply and storage. And then, zooming out even further, we have to also consider design for things like the public lobby and outpatient waiting rooms. We have, you know, areas of surgical offices where patients can see their doctors either prior to or following up weeks later after their surgery. We have nursing stations, we have a prep area, holding area where we can maybe do some recovery. And then, we also have scanning capabilities in the radiology areas.

So, there's a lot of things to consider, and we have to also keep in mind, you know, the movement of people. So, not only patient and caregivers, and how we would move them or have them move throughout the facility, but then also how is each staff member, you know, kind of moving through each area and just considering if it's efficient or not. So, those really things that you want to consider when we're talking about, you know, different kinds of setups for an OR design. And then, of course, we do also want to consider some basic operating room equipment, perhaps even furniture that's in that area.

One thing that I would definitely make sure that you know the difference of, more so for your professional awareness, although it is possible that these could end up on your exam as well, is to know the difference of the different types of stands or tables that may be used because you will use these quite frequently. So, a mayo stand, for example, is one that, as a nurse, I am quite familiar with. These are frequently at every patient's bedside, and it's primarily used, especially in outpatient, for setting up any sort of equipment that we may use. So, for myself as a nurse, it's frequently for dispensing medication, maybe setting up for an IV insertion, maybe setting up some kind of fluids or for a particular procedure. So, it's basically a stand that could be adjusted in height. It's traditionally metal, you know, kind of a tray and a plate that sits on the inside, and then it's typically used for, like, a working area and over a patient working area.

But there are other kinds of stands, stand or prep stands, that are used more for, you know, surgical prep. There's things like a back table or a kick bucket. A kick bucket is typically used for, like, collection of dirty or saturated sponges that might be used in the OR. So, just kind of knowing the difference in those types of furniture.

And also, we want to consider, too, just, you know, how to use the operating tables, right? Because there may be two different kinds. One is more kind of like a bed, so the patient can lay on this during surgery. It can come in several types of types. It has different sort of weight limits, too, which is important to be aware of when you're preparing for surgical cases. And then, they're designed for specific types of access to

maybe difficult-to-reach surgical sites. And then, there's a standard OR table, which is pretty universal, which is, you know, mostly used for the supine position. And hopefully, you know what that is. If you don't, please be sure to look it up in your e-book. Supine position is used quite frequently.

So, yeah, just knowing kind of different kinds of operating tables that are available to you for use are helpful. There's also different kinds of boards or tables, for example, that can be used again, you know, for different kinds of surgical sites. So, this, for example, is called the diving board, and obviously, because it somewhat looks like that, and it is adjustable in height. That's what you're seeing kind of in the middle here. This is traditionally used for surgery on the lower extremities, so on the legs and below. There's orthopedic, kind of different kinds of fracture tables, something perhaps like this. But it kind of looks like two skis with attachments. So, those are used for orthopedic cases.

And then, there's also a bed, as well, which can be used for all-around access, really. But just knowing what different types of tables are available to you is really important in setting up your cases. And let's see what else is important in this for you. You know, we talked about the design of the suite and certain standards, like airflow, ventilation, and gas.

Alright, I hope you found that helpful, and I'll see you soon.