Ever been white water rafting? You're floating along a brisk river admiring the beautiful scenery. There is a lot of water flowing, but it is calm. Then all of a sudden there are rapids. The water gets turbulent, the ride is not as calm, blood pressure rises, stress level rises and you are not admiring the scenery anymore. Ever feel like this in your surgical facility?

The reason for the stressful feelings is the same as in the river, the volume of water (patients) is the same, but things have gotten in the way of the flow and caused it not to be as smooth. Just as the narrowing of the river, rocks, boulders and trees cause turbulence in the river, appointment schedules, equipment /supplies not being ready, communication systems and staffing models can cause turbulence in your surgical facility. To remove these obstacles and get your surgical facility flowing smoothly follow this process:

Understanding Basic Concepts of Leverage Points and Flow

What is a leverage point? This is the point in a process that dictates the rate of throughput/output. In your surgical facility leverage points are the surgeon and the operating room. To set up good flow concepts you need to understand that maximizing these leverage points is what will allow your surgical facility to get the most volume of patients moved through as smoothly as possible.

Maximizing the nurse, controller, or receptionists' time does not increase throughput/output. Not to say their time is not important, it is. But this will only get the patient to the operating room and surgeon faster. If the surgeon or operating room is not ready, you have only moved the logjam not removed it. As operational decisions such as number and type of staff, amount of equipment/instruments/supplies is determined, and the amount of space needed are made, maximizing the operating room time and the surgeon's time should be used as the basis for these decisions.

Identify/Measure the Logjams to Flow

How do you know if your operating room or surgeons are not being utilized to their fullest? How do you know if you have logjams, complaints from surgeons, staff and/or patients? If you are not hearing complaints does that mean you do not have obstacles that are restricting the flow? Probably not. To assess your surgical facility spend time observing the flow and timing what happens. Tracking the time each event such as surgeries, operating room turn-around, instrument cleaning, pre-op, checking in and registration take is very important so you know how long each takes, not just the amount of time is being allotted.

When observing and timing your surgical facility start with the operating rooms and the surgeon, then move up the patient flow stream. While observing note the start and stop time for each event, later you can see how long they take and start to develop a list of things that are causing logjams. Things to look for while observing:
How quickly does the staff start cleaning the operating room once the surgery is complete?

Does getting supplies/instruments/equipment ready slow the prepping of the operating room for the next case? Would more supplies/instruments/equipment speed this process up? If so, by how much and how many more cases would this yield?

Is the next patient ready to be moved into the operating room as soon as the operating room is ready?

Is the surgeon there and ready when the patient is ready in the operating room? If not, what is needed to make this happen? How much time would this save?

How are the nurses notified a patient has checked in and are ready to be prepped? Is there a delay in the nurses being notified? Does this process require the receptionist to leave their area?

Is the check in and registration process efficient?

Is there always a ready patient in the waiting room for the nurse when the nurse is ready for another?

It is important to observe and time each area of the facility, developing a list of all obstacles impeding flow before you begin solving those problems. Solving flow problems in one area can affect or change another, for either better or worse.

Solve Flow Problems – Remove logjams

When assessing your facility and identifying logjams we started at the point you want to maximize, then moved upstream. When solving those flow problems and removing the logjams you start upstream (at reception) and move down stream (to the operating room and surgeon). The reason for this process is while assessing your facility you are trying to determine the potential capacity of the operating room and surgeon to then determine the need upstream. If we begin solving those issues at the surgeon, then they gain more capacity but we have not removed the logjams upstream to allow more flow to reach them. This will only frustrate the surgeon more and not improve the throughput of the facility.

The following are flow problems and general solution concepts. Not all facilities have the same problems and the same solution does not work for all surgical facilities. As you begin to assess your facility and remove the logjams use these as a starting point and adjust and create ones to address your specific surgical facility.