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Dramatic Performance Improvement™

Cycle Time Math

Calculating your Progress

Introduction

Cycle Time (CT) is the total elapsed time between the moment when the patient enters your facility—whether they are early or late, appointed or walk-in—to the time the patient leaves your facility. This is a tough definition of Cycle Time as it has nothing to do with a patient's appointment time and is inclusive of all time and services your center provides.

The easiest way to calculate Cycle Time is to pull it from your computer system so that you 'know it is accurate' and the calculations are done for you. However, oftentimes, for a variety of reasons, Cycle Time, or accurate Cycle Times are not available in either your Practice Management (scheduling) system or in your Electronic Medical Record. In these instances the best way to calculate Cycle Time is to grab pen and paper and start jotting down times.

To calculate Cycle Time, you do not need to record times that patients move around the clinic—just arrival and departure. Arrival is defined as the time they arrive at the clinic, not the time they check in. In some clinics arrival and check-in happen at virtually the same time and in some clinics there is a notable delay between arrival and 'check-in' at the front desk. If your clinic has a significant delay, work with your Coleman Coach to determine the most effective and least labor-intensive way of capturing the true arrival time.

It is also important to remember that CT is collected regardless of whether the patient arrives on time for an appointment, very early, very late or walks in without an appointment. The clock starts running when they walk through the door. Period. They are under your roof and it is your responsibility to take care of them effectively and efficiently--this is their Medical home. In the same way, the clock stops when they *leave* the clinic. This exit time is captured regardless of what other services they have, when the doctor finishes, etc. Your coach will work with you to be sure that these two times are clearly determined in your clinic process.

Cycle Time

Now that you have been reminded about what Cycle Time is, let's review how to calculate the time in minutes once you have the “in time" and “out time” recorded. If you can do two-digit addition and subtraction, you can become very proficient at calculating Cycle Times with just a bit of practice.

Time Math

To calculate the time math, there are two ways to do this. The quickest is to calculate your time using 60 as a starting point. Since an hour is equal to 60 minutes, each hour of time is based upon 60. If you have a patient that came in at 10:00 and left at 11:00 that would be a Cycle Time of 60 minutes for him/her. Do not write 1 hour because it’s harder to convert it to minutes and calculate the average in the end; for ease, convert all times to minutes as you calculate. Below are some examples:

1. *If the patient came in at 10:01 and left at 11:00 you would take the 1 away from 60 at the start time. Since they left at 11 am, you don’t have any arithmetic to do there, so the time is (60 – 1) or 59 minutes.*
2. *If the patient came in at 10:15 and left at 11:00. Subtract 15 from 60 and you get a CT of (60-15) or 45 minutes.*
3. *If the patient came in at 10:00 and left at 11:30 here's how to walk through this calculation: 10 –> 11 is 60 minutes, 11 am --> 11:30 is 30 minutes; 60 minutes + 30 minutes = 90 minutes. The total Cycle Time for this patient is 90 minutes.*
4. If your patient came in at 9:55 and exits at 10:45 am here's how to walk through this calculation: 9:55 -->10:00 = 5 minutes; 10:00-->10:45 = 45 minutes; 5 minutes + 45 minutes = 50 minutes so the total Cycle Time for this patient is 50 minutes.
5. *Let's try one. Let's say the patient came in at 9:55 am and the patient exits at 11:08 am. 9:55 --> 10:00 is 5 minutes; 10:00 --> 11:00 is 60 minutes; and 11:00 --> 11:08 is 8 minutes; 5 + 60 + 8 = 73 minutes.*
6. Let's say the patient arrives at 1:57 pm and exits at 2:37pm. Again follow the same steps 1:57 --> 2:00 is 3 minutes; 2:00--> 2:37 is 37 minutes; 3 + 37 = 40 minutes.

You can see now that you need to plan your data-gathering process to make sure you record valid and accurate start and end times for each visit. The arithmetic comes easy with practice, but you have to have accurate numbers to start. ***Review your plan with your coach to make sure you are on the right track.***

Average Cycle Time

Calculate Carefully. We are looking for the *average Cycle Time* of all patient visits over the course of the clinic sessions. Once you have your start and end times for the patient visits, you need to calculate the total elapsed time for each visit. Then add up times for all visits and divide by the total number of visits. This will give you the average visit Cycle Time.

Here is an example:

Let's say your Cycle Times for the 12 patients you saw this session were as follows:

62

71

48

53

49

76

42

108

91

78

54 and

42 minutes.

To calculate the average Cycle Time, you will add all twelve numbers together (which gives you 774 minutes) and then divide them by the number of entries (in this case 12 because there were twelve patients). So 774 divided by 12 = 64.5 minutes (which rounds up to 65 minutes) for an average Cycle Time of 65 minutes. (Looks like you are ready for some DPI™ help!)

Don't rush through these calculations. Make sure your work is of the highest quality.