

## Hospital Case Study

### Realistic Assignments

1. While reviewing the schedule, the project sponsor asked how many hours of non-project time you assumed in your plan. When you said 7 hours per day, she told you that 6 hours per day is more realistic for hospital staff. How would you adjust the schedule based on that information?

The task durations are based on a 7-hour day. When you change to a 6-hour day, you have to increase task durations. The percentage increase is 7 divided by 6, or 1.1666%. (For example, if a task has a 1-day duration, it represents 7 work hours. When you switch days to 6 hours, the new duration is 7 work hours / 6 hours per day.) To keep things simple, you could increase all task durations assigned to hospital staff by 20%.

2. Two senior technical writers are assigned to the “Prepare draft” tasks, which has an estimated duration of 1 month. After reviewing the specifications, the tech writers confirm that the task will require 160 hours of work. Before documentation work begins, one of the tech writers resigns and the newly-hired tech writer is assigned to your project. What adjustments might you make to the task and how would you determine the adjustments to make?

Before you make any changes, determine how the new tech writer compares to the one who resigned. For example, if the new tech writer has been on board for a few months, you could ask the person’s manager how the actual hours compare to estimated hours on other projects. If the writer joined the staff recently, you could ask for productivity estimates from the HR department, the person’s manager, or the other tech writers on staff. You could then adjust task duration based on those recommendations.

If the new writer doesn’t have a lot of experience, you might increase the assignment duration for the original tech writer assigned to the task. The original writer might have to spend some time helping the new writer to get up to speed.

Another approach is to increase the writer’s assignment durations by 20% as a precaution. Once you see how well the writer performs, you could readjust their assignment durations.

3. With the addition of the government-mandated cancer ward system, the tech writers are now responsible for two sets of documentation for your project, the training materials for both systems, and documentation for another project that runs concurrently with yours. What adjustments might you make to the tech writers’ assignments?

First, review the project schedule to see how many of these assignments occur simultaneously. If the tech writers have more than three simultaneous assignments, you could increase assignment durations by 10 to 20% to account for the decrease in productivity.

4. The IT department will provide technicians to install the scheduling client software on computers and devices. The initial installation estimate was a 2- weeks duration (that is 10 work days or 12 calendar days) at 6 hours per day (total 60 hours), because interruptions and meetings typically consume two 2 hours each day. The technician assigned to your project proposes an alternative approach: the

technician will work on the weekends and evenings to earn overtime pay. How might you adjust the installation task if the technician plans to work full days on the weekends and 2 extra hours on weekday evenings? What other factors must you consider before accepting this plan?

Working on the weekends and in the evenings will reduce or eliminate interruptions, so you could recalculate the task duration based on the technician's schedule. On weekdays, the technician would work 6 hours during the day and 2 extra hours in the evening for a total of 8 hours per day. On the weekends, the technician would also work 8-hour days. The new duration would be 60 divided by 8, or 7.5 calendar days.

Because the technician would earn overtime pay, you should estimate the new cost for this task. In general, you don't opt for overtime work until the project is underway and you are trying to shorten the schedule. In this example, you might keep this offer as an option if the project is behind schedule when the installation is due to take place.