

## We Are Building A Hospital

You are the founder and CEO of a profitable hospital conglomerate. You own hospitals all over the US. You are going to create a new hospital. First, you need to find an area where there is a need for your hospital. Then you will need to figure out how big it is going to be. Then you will need to figure out how much it will cost to build. Then you will need to figure out how much staff you need. Then you will need to figure out how long it takes to make money in your new hospital, since your stock holders like to get a positive rate of return.

Key facts you will need to know:

- There are 1,465,828 hospital beds in the US
- There are 750,000 doctors in the US
- There are 3,900,000 nurses in the US
- The average is 300 doctors for every 100,000 people
- There are 1,181 nurses for every 100,000 people
- There are roughly 444 hospital beds per 100,000 people
- Roughly 2 hospital beds per doctor
- Roughly 2.66 nurses per hospital bed
- Hospital rooms are about 300 square feet
- Building cost is around \$100 per square foot
- Average profit per hospital bed is \$80,465 per year
- Hospital revenue per year per bed is \$886,188

### Location

You need to find a place with a population big enough to support your new hospital. It also needs to not have major competition. If there is competition, then you need to make sure that the amount of population in the area can support your hospital in addition to the other hospitals. For each area you are looking at, you need to find out how many hospital beds per person are already there. If the number is below 444, then you might be able to set up there. If the area is growing really fast, you might be able to set up there. If there are already more than 444 beds per 100,000 people, then you won't be able to make money there.

- Need figure for the beds per population where you are proposing your new site

- Need forecasted population growth for the area
- Need to know income figures for the area
- Need uninsured rates for the area

## Building

You will need a building. You need to have enough hospital rooms for the area. You want as many as the population will be able to support. You need enough square footage for each of your beds. Consider that however much square footage you need for your beds, you should add 20% to your total square footage for hallways, bathrooms, and such. If you want large open areas, then add that in also. Your number of beds should be based on how many beds per person the market already has and how many beds per person the market can handle, you are going to build this hospital to cover the difference.

- Need to calculate number of beds the market can handle
- Need to know the number of beds the market has
- Need to calculate how many extra beds the area can handle
- Then you need to calculate how much square footage you need in order to cover the difference
- Then you will need to calculate how much money it will cost to build your hospital

## Staff

You have already identified how many beds you need, so now we need staff. Based on how many beds you have, you need to find out how many nurses and doctors you will need on staff. Then you need to look at average salaries for doctors and nurses in your area to find out how much it will cost per year to have them working for you.

- Need to calculate total nurses based on number of beds
- Need to calculate total doctors based on number of beds
- Need to find salary numbers for both
- Need to calculate total annual cost for nurse and doctor salary
- Need to pay for our hospital executives. You need to pay yourself as CEO, and you need to pay your COO and CFO. You can get the salary info [here](#)

<https://www.beckershospitalreview.com/lists/230-hospital-benchmarks-2017.html>

## Revenue

We need to know how much money we are going to make. Profit is revenue minus expenses. Return on investment is profit/total investment. We need to know how long it will take to pay back our initial investment in this.

- Need to calculate annual profit
- Need to calculate annual return on investment
- Need to calculate the number of years before you have paid back the initial investment

## Finished product

You are going to create a word/google doc to describe your amazing hospital investment plan to your stockholders. All of the calculations need to be in there. You should explain to us how your numbers are amazing compared to industry averages. You should explain to us how your market is the perfect place to do this based on numbers. All of your arguments for how amazing an investment this is must be based on numbers. All of the stuff with bullet points needs to be included.

Rubric:

A

- All of the information is correct.
- The math and research is thorough and correct.
- The hospital is profitable.
- The layout of the paper is well organized and well written.

B

- Most of the information is correct.
- The math and research is thorough and correct (mostly).
- The hospital is profitable.
- The layout of the paper is reasonably well organized and reasonably well written.

C

- All of the information is mostly correct.
- The math and research is mostly correct.
- The hospital is.
- The layout of the paper is organized and written.