

In this handout we'll deconstruct the table of charges and costs for the Premier plan described in the Tech Assignments for the project.

	A	B	C	D	E	F	G
1	Premier Plan						
2	Total Medical Charges	Prescription Charges	Total Medical Cost	Prescription Cost	Total Out of Pocket	Premium Cost	Total Cost
6	2000	360	880	120	1000	6168	7168
7	5000	360	1480	120	1600	6168	7768
8	8000	360	2080	120	2200	6168	8368
9	11000	360	2680	120	2800	6168	8968
10	14000	360	3280	120	3400	6168	9568
11	17000	360	3880	120	4000	6168	10168
12	20000	360	4480	120	4600	6168	10768
13	23000	360	5080	120	5200	6168	11368
14	26000	360	5680	120	5800	6168	11968
15	27000	360	5880	120	6000	6168	12168
16	32000	360	6880	120	6000	6168	12168
17							

By understanding what is going on in this table and where the numbers come from, you can modify your table so that it models your insurance plans. This plan has copays for Primary Care Physician (PCP) visits. If yours does also, it will probably be very similar to this one. You'll need to make modifications to this table since your plans contain different charges for PCP and Specialist visits, different deductibles and out of pocket maximums.

First row:

Each generic prescription cost \$30 per month so the annual charges are =12*30.

This is the cost to the patient after the costs are split with the insurance company for prescriptions. In this case, it costs the insured \$10 per month for the generic or = 12*10

The Premium Cost is the cost of the monthly premiums, in this case \$514 per month. For the entire year, the total is = 12*514.

	A	B	C	D	E	F	G
1	Premier Plan						
2	Total Medical Charges	Prescription Charges	Total Medical Cost	Prescription Cost	Total Out of Pocket	Premium Cost	Total Cost
3	350	360	190	120	310	6168	6478

The lowest amount of total medical charges should be the charge for the 2 Primary Care visits and specialist visit. In this case = 2*100+150, since each primary visit is \$100 and the specialist visit is \$150.

The Total Medical Cost in this row is the sum of any copays and deductibles that must be paid. In this case, \$200 of the charges are covered by 2 copays of \$20. The specialist visit is subject to the deductible which has not been met so the entire \$150 is paid. This means the entry is = 2*20+150.

The total out of pocket is the sum of the Total Medical Cost and the Prescription Cost. It is what you would pay out of your own pocket (aside from the monthly premiums). In this case, it is =C3+D3.

The Total Cost the annual cost to the insured and is the sum of the out of pocket expenses and the premiums or = E3+F3 .

Your values will be different from these since your plans have different copays, charges for Primary Care Office visits, and charges of Specialist visits.

Next two rows:

Each generic prescription cost \$30 per month so the annual charges are $=12*30$.

This is the cost to the patient after the costs are split with the insurance company for prescriptions. In this case, it costs the insured \$10 per month for the generic or $=12*10$

The Premium Cost is the cost of the monthly premiums, in this case \$514 per month. For the entire year, the total is $=12*514$.

	A	B	C	D	E	F	G
1	Premier Plan						
2	Total Medical Charges	Prescription Charges	Total Medical Cost	Prescription Cost	Total Out of Pocket	Premium Cost	Total Cost
4	500	360	340	120	460	6168	6628
5	800	360	640	120	760	6168	6928

The charges are increased by an amount of \$150 and \$450 to get the deductible paid. In A5, the deductible has been paid with the additional \$450 in charges plus the \$150 for the specialist visit that is subject to the deductible ($\$450+\$150 = \$600$). The amounts you increase by will probably be larger since your deductible is larger than \$600.

Each of these entries includes two PCP visit copays and the entire \$150 charge for the Specialist. They also include the increase in medical charges since the deductible is still being met. In C4 we have $=2*20+150+150$. In C5 we have $=2*20+150+450$. Since we are paying \$150 + \$450, the deductible of \$600 is met in the row labeled 5.

The total out of pocket is the sum of the Total Medical Cost and the Prescription Cost. It is what you would pay out of your own pocket (aside from the monthly premiums). In this case, it is $=C4+D4$ or $=C5+D5$.

The Total Cost the annual cost to the insured and is the sum of the out of pocket expenses and the premiums or $=E4+F4$ or $=E5+F5$.

Once we have one row in the table, we need at least two more rows so that we will have three data points to graph later (the first row and these rows). These three rows give us the cost of the insurance up to when the deductible is met. The deductible is met in this case in the row labeled as row 5.

Rows after deductible is met but Out of Pocket Max has not been met:

Each generic prescription cost \$30 per month so the annual charges are =12*30.

This is the cost to the patient after the costs are split with the insurance company for prescriptions. In this case, it costs the insured \$10 per month for the generic or = 12*10

The Premium Cost is the cost of the monthly premiums, in this case \$514 per month. For the entire year, the total is = 12*514.

	A	B	C	D	E	F	G
1	Premier Plan						
2	Total Medical Charges	Prescription Charges	Total Medical Cost	Prescription Cost	Total Out of Pocket	Premium Cost	Total Cost
6	2000	360	880	120	1000	6168	7168
7	5000	360	1480	120	1600	6168	7768
8	8000	360	2080	120	2200	6168	8368

Since the out of pocket maximum is quite a bit higher than the deductible, the increments between charges are larger. If the difference between the deductible and out of pocket max is smaller, you might try smaller increments. If yours is very large, you could increase the charges by more. The key is to have at least three charges before the out of pocket max is reached in column E.

Since the deductible has been paid in all rows from here on down, the charges are now split according to the coinsurance percentages. Each of these entries includes the deductible of \$600, two PCP visit copays at a cost of 2*20, and 20% of all charges above and beyond the 2*100 PCP charge and deductible, 0.2*(A??-200-600). For instance, the formula in cell is C8 is = 600+2*20+0.2*(A8-200-600). This include the charge for the specialist visit in the last term.

The total out of pocket is the sum of the Total Medical Cost and the Prescription Cost. It is what you would pay out of your own pocket (aside from the monthly premiums). In this case, it is =C6+D6 through =C8+D8.

The Total Cost the annual cost to the insured and is the sum of the out of pocket expenses and the premiums or = E6+F6 through = E8+F8 .

Rows after the Out of Pocket Max has been met:

Each generic prescription cost \$30 per month so the annual charges are =12*30.

This is the cost to the patient after the costs are split with the insurance company for prescriptions. In this case, it costs the insured \$10 per month for the generic or = 12*10

The Premium Cost is the cost of the monthly premiums, in this case \$514 per month. For the entire year, the total is = 12*514.

	A	B	C	D	E	F	G
1	Premier Plan						
2	Total Medical Charges	Prescription Charges	Total Medical Cost	Prescription Cost	Total Out of Pocket	Premium Cost	Total Cost
15	27000	360	5880	120	6000	6168	12168
16	32000	360	6880	120	6000	6168	12168

At a medical charge of \$27000, the out of pocket maximum is reached. We can increase the charges more, but the insured party will only be responsible for the out of pocket maximum or \$6000. You can see that all entries in column E are \$6000 at this point.

Each of these entries includes the deductible of \$600, two PCP visit copays at a cost of 2*20, and 20% of all charges above and beyond the 2*100 PCP charge and deductible, $0.2*(A??-200-600)$. For instance, the formula in cell is C15 is = $600+2*20+0.2*(A15-200-600)$. Even though this cost continues to rise, the insured part is only to pay the out of pocket maximum. The insurance company picks up all excess charges.

In the row labeled 15, the total medical cost is \$5880 and the prescription costs are \$120. The sum is \$6000 so we know this is the most that the insured party will pay. All entries in this column below row 15 are automatically 6000 since we cannot exceed this max.

The Total Cost the annual cost to the insured and is the sum of the out of pocket expenses and the premiums or = $E15+F16$ through = $E16+F16$. Since the out of pocket max has been reached, the total cost does not change even though the medical charges are increasing in each row.