

**Q1. Create factors for AgeGroup, Race, Completed, Location.**

**This listing shows all the factors. Even though you did not ask for this,  
I include factors for some of the other variables as well.**

Obs	Age	AgeGroup	Race	Shots	Completed	InsuranceType	MedAssist	Location	LocationType	PracticeType
1	21	18-26 years	white	3	yes	military	no	Odenton	suburban	family practice
2	21	18-26 years	white	3	yes	military	no	Odenton	suburban	family practice
3	20	18-26 years	white	1	no	private payer	no	Odenton	suburban	family practice
4	14	11-17 years	white	3	yes	military	no	Odenton	suburban	pediatric
5	17	11-17 years	other/unknown	2	no	military	no	Odenton	suburban	family practice
6	11	11-17 years	black	1	no	medical assistance	yes	Odenton	suburban	pediatric
7	17	11-17 years	white	1	no	military	no	Odenton	suburban	family practice
8	15	11-17 years	other/unknown	3	yes	private payer	no	Odenton	suburban	pediatric
9	13	11-17 years	other/unknown	3	yes	private payer	no	Odenton	suburban	pediatric
10	18	18-26 years	white	3	yes	hospital based	no	Odenton	suburban	family practice

**Q2. Report which variables have missing data and how many of these values are missing.**  
**None of the variables have missing values.**

**The MEANS Procedure**

Variable	N	N
		Miss
Age	1413	0
AgeGroup	1413	0
Race	1413	0
Shots	1413	0
Completed	1413	0
InsuranceType	1413	0
MedAssist	1413	0
Location	1413	0
LocationType	1413	0
PracticeType	1413	0

**Q3. What proportion of patients completed all three shots?****xx% of the patients completed all three shots.****The FREQ Procedure**

Completed	Frequency	Percent	Cumulative Frequency	Cumulative Percent
no	944	66.81	944	66.81
yes	469	33.19	1413	100.00

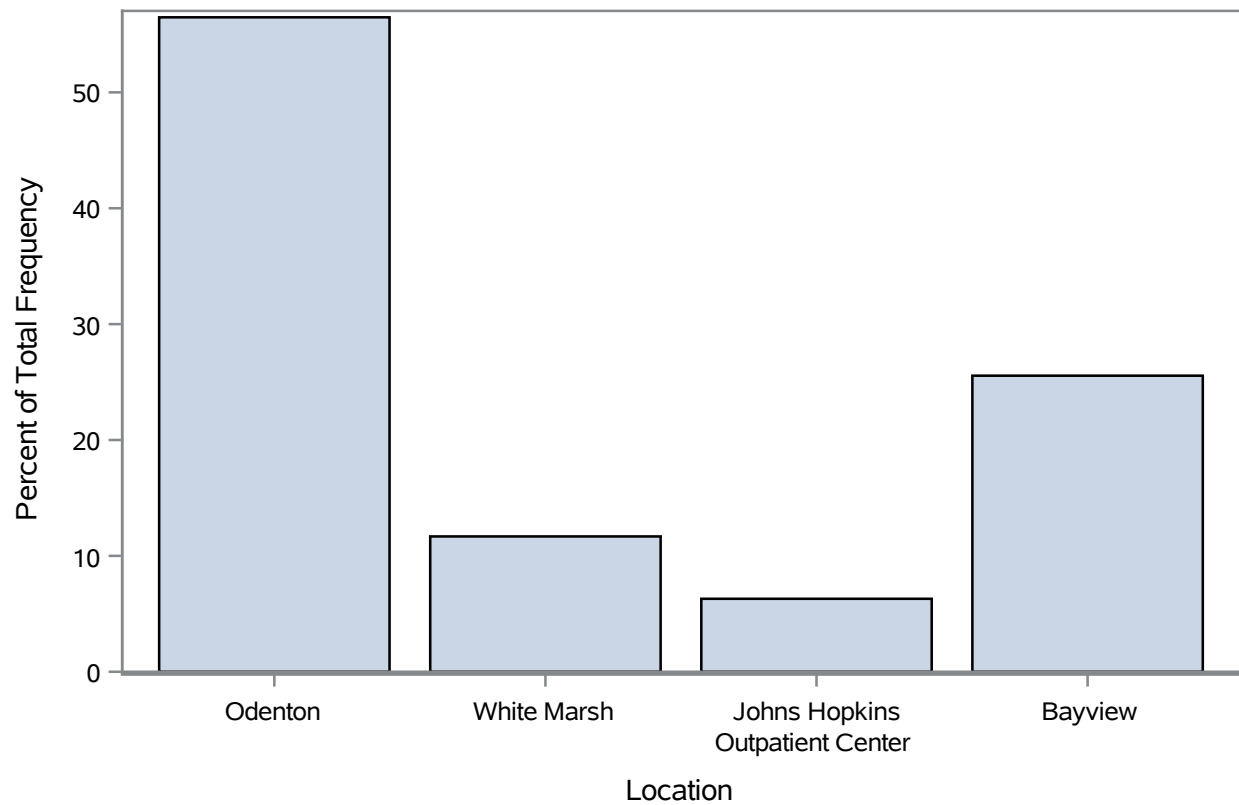
**Q4. Draw a bar chart showing the percentage of patients at each of the four locations.**

**First, I had to create a new data set with percentages.**

Obs	Location	COUNT	PERCENT
1	Odenton	798	56.4756
2	White Marsh	165	11.6773
3	Johns Hopkins Outpatient Center	89	6.2987
4	Bayview	361	25.5485

**Q4. Draw a bar chart showing the percentage of patients at each of the four locations.**

**The bar chart appears below.**



**Q5. Use a crosstabulation to compare Age to AgeGroup, and Location to LocationType.  
Are the recodings into AgeGroup and LocationType done properly?**

Here are the crosstabulation. There is indeed something unusual about this data...

**The FREQ Procedure**

Frequency	Table of Age by AgeGroup			
	Age	AgeGroup		
		11-17 years	18-26 years	Total
	11	30	0	30
	12	75	0	75
	13	83	0	83
	14	85	0	85
	15	110	0	110
	16	134	0	134
	17	128	0	128
	18	56	43	99
	19	0	105	105
	20	0	92	92
	21	0	83	83
	22	0	64	64
	23	0	80	80
	24	0	77	77
	25	0	86	86
	26	0	82	82
	Total	701	712	1413

Frequency	Table of Location by LocationType			
	Location	LocationType		
		suburban	urban	Total
	Odenton	798	0	798
	White Marsh	165	0	165
	Johns Hopkins Outpatient Center	0	89	89
	Bayview	0	361	361
	Total	963	450	1413

**Q6. Create a new variable that combines the race categories into white, and non-white.  
Calculate the proportion of white patients at each of the four locations.**

**Quick quality check.**

**The FREQ Procedure**

Frequency	Table of Race by binary_race			
	Race	binary_race		
		Other	White	Total
<b>0</b>		0	732	732
<b>1</b>		443	0	443
<b>2</b>		52	0	52
<b>3</b>		186	0	186
<b>Total</b>		681	732	1413

**Q6. Create a new variable that combines the race categories into white, and non-white.  
Calculate the proportion of white patients at each of the four locations.**

**This is the percentage of white patients at each location.**

**The FREQ Procedure**

Location	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Odenton	402	54.92	402	54.92
White Marsh	132	18.03	534	72.95
Johns Hopkins Outpatient Center	26	3.55	560	76.50
Bayview	172	23.50	732	100.00



**Q6. Create a new variable that combines the race categories into white, and non-white.  
Calculate the proportion of white patients at each of the four locations.**

**Or maybe this is the percentage.**

**The FREQ Procedure**

Frequency Row Pct	Table of Location by binary_race			
	Location	binary_race		
		Other	White	Total
	<b>Odenton</b>	396 49.62	402 50.38	798
	<b>White Marsh</b>	33 20.00	132 80.00	165
	<b>Johns Hopkins Outpatient Center</b>	63 70.79	26 29.21	89
	<b>Bayview</b>	189 52.35	172 47.65	361
	<b>Total</b>	681	732	1413