

Disease: Asthma

RMSE and Predicted values

<u>Person Count</u>	<u>Age Groups</u>	<u>Sum of the four years (from 2008-2011)</u>		<u>Difference</u>	<u>RMSE</u>	<u>Predicted values for the upcoming years:</u>		
		<u>Predicted</u>	<u>Actual</u>			<u>2012</u>	<u>2013</u>	<u>2014</u>
Hospitalization	20-24	15,023.57	15,590.00	566.43	141.61	4,186	4,358	4,530
	55-59	25,596.43	25,840.00	243.57	60.89	6,969	7,197	7,425
	75-79	38,804.29	36,480.00	- 2,324.29	581.07	10,096	10,254	10,412
Physician	20-24	457,485.00	483,430.00	25,945.00	6,486.25	134,140	142,047	149,955
	55-59	266,531.40	263,250.00	- 3,281.40	820.35	76,292	80,156	84,020
	75-79	158,182.90	147,910.00	-10,272.90	2,568.23	43,519	45,108	46,697
General Physician	20-24	437,629.30	460,400.00	22,770.70	5,692.68	128,138	135,630	143,122
	55-59	258,887.10	254,710.00	- 4,177.10	1,044.28	74,065	77,803	81,540
	75-79	155,544.30	145,270.00	-10,274.30	2,568.58	42,810	44,380	45,950
Specialist	20-24	208,865.00	224,950.00	16,085.00	4,021.25	61,077	64,621	68,165
	55-59	196,674.30	195,930.00	- 744.30	186.07	56,114	58,892	61,670
	75-79	139,949.30	131,620.00	- 8,329.30	2,082.33	38,572	40,006	41,440

RMSE and Predicted values - model with polynomial regression

<u>Person Count</u>	<u>Age Groups</u>	<u>Sum of the four years (from 2008-2011)</u>		<u>Difference</u>	<u>RMSE</u>	<u>Difference between Multivariate Linear RMSE & Polynomial RMSE</u>	
		<u>Predicted</u>	<u>Actual</u>				
Hospitalization	20-24	15,072.62	15,590.00	517.38	129.35		12.26
	55-59	22,874.00	25,840.00	2,966.00	741.50	-	680.61
	75-79	27,056.86	36,480.00	9,423.14	2,355.79	-	1,774.71
Physician	20-24	492,524.80	483,430.00	- 9,094.80	2,273.70		4,212.55
	55-59	251,735.23	263,250.00	11,514.77	2,878.69	-	2,058.34
	75-79	150,045.71	147,910.00	- 2,135.71	533.93		2,034.30
General Physician	20-24	469,713.10	460,400.00	- 9,313.10	2,328.27		3,364.40
	55-59	244,121.43	254,710.00	10,588.57	2,647.14	-	1,602.87
	75-79	147,940.48	145,270.00	- 2,670.48	667.62		1,900.95
Specialist	20-24	225,055.47	224,950.00	- 105.47	26.37		3,994.88
	55-59	187,150.47	195,930.00	8,779.53	2,194.88	-	2,008.81
	75-79	134,075.01	131,620.00	- 2,455.01	613.75		1,468.57