

## Nursing Facility Cost Analysis

### Nursing Costs

2012 %Change in Total Cost	Average Change in Total Cost	Average Change in Direct Nursing Cost	Average Change in DON RN Wages	Average Change in DON RN Hours	Average Change in LPN Wages	Average Change in LPN Hours	Average Change in CNA Wages	Average Change in CNA Hours
>6	11.96%	6.64%	8.21%	5.65%	4.86%	0.80%	6.23%	2.12%
3>6	4.52%	2.95%	4.16%	6.41%	0.03%	-2.81%	3.97%	9.87%
0>3	1.60%	1.13%	9.48%	6.35%	-3.15%	-5.92%	0.97%	0.20%
<0	-4.42%	-4.32%	-0.26%	9.41%	-5.39%	-0.57%	-3.57%	-4.65%

- Providers who had year over year Total Cost increases of 6% or greater in 2012 averaged increases across all Nursing Categories, seeing increases in both hours and wages
- Providers who had year over year Total Cost decreases saw reductions across the board, except for a 9.41% bump in DON RN hours, but still saw a 0.26% decrease in DON RN wages
- As noted in previous analysis, there was a decrease in LPN hours for providers that experienced year over year Total Cost increases of less than 6%. These same providers saw increases in their DON RN hours
- There were across the board increases in DON RN wages (<0 were negative, but close to a 0% change) and hours
- Nursing mix appeared to have little impact on changes in Total Cost. The distribution of Nursing types were very similar across segments

### Therapy Costs

2012 %Change in Total Cost	Average Change in Total Cost	Average Change in Total Therapy Cost	Average Change in PT Wages	Average Change in PT Contract Svc	Average Change in Total PT expenses	Average Change in OT Wages	Average Change in OT Contract Svc	Average Change in Total OT expenses	Average Change in ST Wages	Average Change in ST Contract Svc	Average Change in Total ST expenses	Average Change in Category II	Average Change in Total Therapy Days
>6	11.96%	31.29%	45.77%	97.01%	34.93%	35.77%	77.77%	31.74%	17.77%	14.38%	27.82%	8.30%	19.55%
3>6	4.52%	3.45%	-7.59%	61.55%	6.90%	-15.97%	8.15%	-2.07%	21.52%	92.31%	35.47%	13.37%	7.65%
0>3	1.60%	5.43%	1.66%	196.11%	7.34%	-11.12%	178.87%	8.43%	-16.34%	57.09%	19.08%	17.43%	4.38%
<0	-4.42%	-7.41%	-9.02%	57.68%	-4.64%	-11.55%	56.70%	-8.63%	-3.79%	81.65%	-8.02%	-0.88%	-11.31%

- Providers >6 saw across the board increase in all therapy wages, hours, and service contracts. These providers also experience the largest year over year change in Total Therapy Days
- For providers from 3>6, 0>3, and <0 there was a shift from fulltime OTs to Contract Svc OTs
- For providers from 3>6, and <0 there was a shift from fulltime PTs to Contract Svc PTs
- For providers from 0>3, and <0 there was a shift from fulltime STs to Contract Svc STs

### Correlation Coefficients with Total Therapy Costs

Category I Total	Category II Total	Category III Total	Category IV Total	Category V Total	Category VI Total	Category VII Total	Category VIII Total	Impaired Cognition	Uncategorized	Total Therapy Units	Medicaid Acuity Ratio (Rate Sheet)	Average FW CMI (Rate Sheet)	Average Medicaid CMI (Rate Sheet)	Part A Costs
0.56381375	0.840442696	0.289528	0.2130257	0.3423427	0.356234	0.091907	0.317603	0.018181	0.363267	0.858641	-0.48699	0.652711	0.407404	0.398585

### Statistically Significant Regression Coefficients (fixed-effects model) with Total Therapy Costs

Category I Total	Category II Total
34.37	84.75

- Each number represents the change, on average, in Total Therapy costs due to a one unit change in their respective category
- One additional Category II day, on average, results in a \$84.75 increase in Total Therapy Costs

### Correlation Coefficients with Total Healthcare Costs

Patient Days	Medicaid Days	Medicare Days	Private Pay Days	Hospice Days	PACE Days	Insurance	Veterans	Other Days
0.92838774	0.673665132	0.678905	0.5338566	0.32783	0.130183	0.260463	0.157908	0.220315

### Statistically Significant Regression Coefficients (OLS model) with Total Healthcare Costs

Medicaid Days	Medicare Days	Private Pay Days	Hospice Days	PACE Days	Insurance	Veterans	Other Days
108.36	235.44	142.65	127.23	93.97	215.56	34.27	203.65

- Each number represents the change, on average, in Total Healthcare Costs due to a one day increase in each respective category
- One additional Medicaid day, on average, results in a \$108.36 increase in Total Healthcare Costs