

Business Model for Mercy ACE Unit

The file “Business Model for Mercy ACE Unit” is real life business model and proforma to build a business case for establishing an ACE Unit on a medical surgical floor in a 200 bed community hospital that is part of larger integrated delivery system. This is the first geriatric specific program being recommended for development in this hospital that was recently acquired by a larger health system that has had a long established ACE Unit in its main hospital (aka “Main ACE Unit”)

The spread sheets illustrate a comparison of the Mercy Hospital potential ACE patients and costs when compared to the performance of similar matched patients if they were cared for at the Main ACE hospital ACE Unit. The bottom line is illustrates and expected “savings” to the Mercy Hospital if the medical surgical unit was performing at similar levels to the established ACE Unit. The sample was comparison of the top 20 medical DRGs having to be admitted and discharged from the medical surgical unit or Main ACE Unit excluding critical care and telemetry transfers. The variables included Number of cases, Average Age, Average length of stay, total charges, deductions, total revenue, total direct costs, % contribution to overhead, total indirect costs, net revenue, % net revenue, and Case Mix Index. There are summary and averages at the bottom of columns.

There is calculation including and excluding heart failure patients.

The other tabs include itemization of ACE unit start up costs including oversight and contract management or ACE implementation by the health system senior service line.

Mercy Hospital
Senior Services Business Plan Summary

Summa Barberton Hospital ACE Model	Capture Rate = 75% ACE Eligibles with 15% Medical Director Program Oversight		
	Year 1	Year 2	Year 3
ACE Patient Volumes	1,543	1,543	1,543
ACE Patient Days	6,507	6,507	6,507
Mercy Variable Cost Savings Opportunity with ACE Model	681,111	681,111	681,111
<u>ACE Model Mercy Hospital Expenses:</u>			
Clinical Nurse Specialist	80,000	80,000	80,000
Program Training and Support Costs	11,000	6,500	6,500
Physician practice Subsidy/costs	<u>188,808</u>	<u>160,753</u>	<u>155,633</u>
Total Expenses	279,808	247,253	242,133
Net ACE Model Cost Savings Opportunity	<u>401,303</u>	<u>433,858</u>	<u>438,979</u>

**Mercy Hospital ACE Unit Eligible Patients
Comparison
to Main Hospitals ACE Unit Patients
Model Assumes 75% Capture Rate of Mercy Hospital ACE Eligible Patients
2009**

Main ACE Eligibles Excluding Heart Failure MSDRGs 291-293

Variable Cost per Patient Day:

	<u>Mercy ACE Eligible</u>	<u>Main ACE</u>	Difference
Labor Variable Cost per Patient Day - Adjustment for ACE Unit			
Costing Methodology & CNS	348	245	
M&S Variable Cost per Patient Day	64	84	
Total Variable Cost per Patient Day	412	329	83

Mercy Hospital ACE Eligible Patients:

2009 Mercy ACE Eligible Population - Age 65+ Medical MSDRG	1,355
Total Patient Days	5,899
ALOS SBH	4.35

Variable Cost Savings Opportunity with ACE Unit:

	<u>Mercy ACE Eligible</u>	<u>Main ACE</u>	Cost Savings Opportunity
Labor Variable Cost per Patient Day - Adjustment for ACE Unit			
Costing Methodology & CNS	412	329	
Mercy ACE-Eligible Population	1,355	1,355	
ALOS	4.35	4.16	
Total Variable Costs	2,431,302	1,854,591	576,711

**Mercy Hospital
Profit and Loss Statement
Medical MSDRGs Age 65+ Excluding Heart Failure MSDRGs 291-293
2009**

	\$		\$	\$		\$		\$	\$	
	Total	Deductions	Total	Total	Contribution to Overhead	Total	Net Income	Indirect Costs	Total	% of Net Rev
	Charges	Total	% of Chgs	Net Revenue	Direct Costs	Total	% of Net Rev			
P&L without ACE Unit Cost Savings	29,386,915	22,164,840	75.42%	7,222,075	4,858,546	2,363,529	32.73%	1,496,371	867,158	12.01%
ACE Unit Cost Savings Opportunity					576,711					
P&L with ACE Unit Cost Savings	29,386,915	22,164,840	75.42%	7,222,075	4,281,835	2,940,240	40.71%	1,496,371	1,443,869	19.99%

Mercy ACE Eligibles Heart Failure MSDRGs 291-293

2009 Heart Failure Patients MSDRG 291-293

Variable Cost per Patient Day:

	<u>Mercy ACE Eligible</u>	<u>Main ACE</u>	Difference
Labor Variable Cost per Patient Day - Adjustment for ACE Unit			
Costing Methodology & CNS	344	235	
M&S Variable Cost per Patient Day	60	74	
Total Variable Cost per Patient Day	404	309	95

Mercy ACE Eligible Patients Heart Failure MS DRG 291-293:

2009 Mercy ACE Eligible Population - Age 65+ Heart Failure	188
Total Patient Days	924
ALOS SBH	4.91

Variable Cost Savings Opportunity with ACE Unit:

	<u>Mercy ACE Eligible</u>	<u>Main ACE</u>	<u>Cost Savings Opportunity</u>
Labor Variable Cost per Patient Day - Adjustment for ACE Unit			
Costing Methodology & CNS	404	309	
SBH ACE-Eligible Population	188	188	
ALOS	4.91	4.62	
Total Variable Costs	<u>373,106</u>	<u>268,706</u>	<u>104,400</u>

**Main Hospital
Profit and Loss Statement
Heart Failure MS DRGs 291-293
2009**

	\$ Total Charges	\$ Deductions Total	% of Chgs	\$ Total Net Revenue	\$ Total Direct Costs	\$ Contribution to Overhead Total	% of Net Rev	\$ Total Indirect Costs	\$ Total Net Income	% of Net Rev
P&L without ACE Unit Cost Savings	4,400,887	3,234,138	73.49%	1,166,749	737,863	428,886	36.76%	228,354	200,532	17.19%
ACE Unit Cost Savings Opportunity					104,400					
P&L with ACE Unit Cost Savings	4,400,887	3,234,138	73.49%	1,166,749	633,462	533,286	45.71%	228,354	304,932	26.14%

Mercy All ACE Eligibles Including Heart Failure MS DRGs 291-293

**Mercy Hospital
Profit and Loss Statement
All ACE-Eligible Patients
2009**

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
Mercy Hospital Total ACE Eligible Patients	1,543	1,543	1,543
Total Patient Days - @ ACE ALOS	6,507	6,507	6,507
ALOS	4.22	4.22	4.22
Beds needed assuming 100% occupancy	18	18	18
Beds needed assuming 90% occupancy	20	20	20
Beds needed assuming 85% occupancy	21	21	21
ACE Unit Cost Savings Opportunity	681,111	681,111	681,111
CNS Labor Cost to SBH	80,000	80,000	80,000
Training & Support Costs Main Hospital Staff & SL Director	11,000	6,500	6,500
Physician Subsidy (includes Medical Director Oversight & NP (.50 FTE ea))	<u>188,808</u>	<u>160,753</u>	<u>155,633</u>
Net Cost Savings Opportunity	401,303	433,858	438,979

Original:

ACE Unit Cost Savings Opportunity	681,111
CNS Labor Cost to Mercy Hospital	80,000
Year 1 Training & Support Costs Main Hospital Staff (\$3,000 Y2 →) & SL Director	11,000
Physician Subsidy (includes Medical Director Oversight & NP(.50 FTE ea)) - Year 1	<u>188,808</u>
Net Cost Savings Opportunity	401,303

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	Total	Deductions		Total	Total	Contribution to Overhead		Total	Net Income	
	Charges	Total	% of Chgs	Net Revenue	Direct Costs	Total	% of Net Rev	Indirect Costs	Total	% of Net Rev
P&L without ACE Unit Cost Savings	33,787,802	25,398,978	75.17%	8,388,824	5,596,409	2,792,415	33.29%	1,724,725	1,067,690	12.73%
Net Cost Savings Opportunity					401,303					
P&L with ACE Unit Cost Savings	33,787,802	25,398,978	75.17%	8,388,824	5,195,105	3,193,718	38.07%	1,724,725	1,468,993	17.51%
Total Patient Days SBH ACE Eligible and Heart Failure MSDRGs	6,507									
Beds needed assuming 100% occupancy	18									
Beds needed assuming 90% occupancy	20									
Beds needed assuming 85% occupancy	21									

ACE Unit Support Cost Estimates	Yr 1	Yr 2 →
Staff Training & Annual Support by Main Hospital Geriatric CNS		
- Year 1 Estimate \$7,500 (160 hours); \$3,000 annually (60 hours)	7500	3000
Service Line Executive Director		
- Estimate \$3,500 annually (1 hour per week)	3500	3500
Physician Subsidy Practice Pattern Variations + / -		
Renovation Costs – if necessary		