Indicator Definitions - Acute Care Hospitals

	Indicator	Elements of the Indicator	Element Definitions	Historical Filing Data Elements	Indicator Description
1.	Gross Patient Revenue / Adjusted Admission	a.) Gross Patient Revenue / b.) Adjusted Admissions (adjusted for outpatient services, case-mix and wage price index)	a.) Total Gross Patient Revenue b.) The sum of inpatient admissions and equivalent admissions attributed to outpatient services, all then adjusted for case-mix and wage price index Outpatient adjusted admissions is the sum of admissions and equivalent admissions attributed to outpatient services. The number of equivalent admissions attributed to outpatient services is derived by multiplying admissions by the ratio of total gross patient revenue to gross inpatient revenue. Outpatient Adj. Admissions = Admissions * (Total Gr. Patient Rev. / Gr. Inpatient Rev.) Case-mix adjustment is made by applying 3M's All Patient Refined DRG case-mix formula to all inpatients, computing an index for all patients, and then multiplying it by outpatient adjusted admissions. Wage price index is the Medicare Wage-Price Index (WPI). Adj. Admissions (adjusted for case-mix and outpatients) = Outpatient Adj. Admissions x Case-Mix.	$(1.3 / WPI) / (5.4e * (5.2f + (1.2f / 1.1f) * 5.2f))$	Average full charge per admission

Indicator Definitions - Acute Care Hospitals

	Indicator	Elements of the Indicator	Element Definitions	Historical Filing Data Elements	Indicator Description
2.	Net Patient Revenue / Adjusted Admission	a.) Net Patient Revenue / b.) Adjusted Admissions (adjusted for outpatient services, case-mix and wage price index)	a.) Total Net Patient Revenue b.) See 1b	$(1.8 / WPI) / (5.4e * (5.2f + (1.2f / 1.1f) * 5.2f))$	Average net charge per admission
3.	Cost / Adjusted Admission	a.) Cost / b.) Adjusted Admissions (adjusted for outpatient services, case-mix and wage price index)	a.) Total Operating Expenses b.) See 1b.	$(1.15 / WPI) / (5.4e * (5.2f + (1.2f / 1.1f) * 5.2f))$	Overall cost per admission
4.	Labor Cost / Adjusted Admission	a.) Labor Cost / b.) Adjusted Admissions (adjusted for outpatient services, case-mix and wage price index)	a.) Total Labor Costs b.) See 1b.	$(1.10f / WPI) / (5.4e * (5.2f + (1.2f / 1.1f) * 5.2f))$	Labor cost per admission
5.	Non-Labor Cost / Adjusted Admission	a.) Non-Labor Cost / b.) Adjusted Admissions (adjusted for outpatient services, case-mix and wage price index)	a.) Total Non-Labor Non-Capital Costs b.) See 1b.	$(1.11f / WPI) / (5.4e * (5.2f + (1.2f / 1.1f) * 5.2f))$	Non-labor cost per admission
6.	Capital Cost / Adjusted Admission	a.) Capital Cost / b.) Adjusted Admissions (adjusted for outpatient services, case-mix and wage price index)	a.) Total Capital Costs as defined by Medicare b.) See 1b.	$((1.12f + 1.13c + 1.13d + 1.13e - 1.23) / WPI) / (5.4e * (5.2f + (1.2f / 1.1f) * 5.2f))$	Capital cost per admission

Indicator Definitions - Acute Care Hospitals

	Indicator	Elements of the Indicator	Element Definitions	Historical Filing Data Elements	Indicator Description
7.	Full Time Equivalents / Adjusted Occupied Bed	a.) Full Time Equivalents / b.) Adjusted Occupied Bed (adjusted for outpatient services and case-mix)	a.) Full Time Equivalents / b.) The sum of occupied beds and equivalent occupied beds attributed to outpatient services, all then adjusted for case-mix. Outpatient adjusted occupied bed is the sum of inpatient occupied beds and equivalent outpatient occupied beds attributed to outpatient services. The number of equivalent occupied beds attributed to outpatient services is derived by multiplying inpatient days by the ratio of total gross patient revenue to gross inpatient revenue, all divided by days in fiscal year. Outpatient Adj. Occupied Bed = [Inpatient Days * (Total Gr. Patient Rev. / Gr. Inpatient Rev.)] / days in fiscal year. Case-mix adjustment is made by applying 3M's All Patient Refined DRG case-mix system to all patients, computing an index for all patients, and then multiplying it by outpatient adjusted patient days. Adj. Occupied Bed (adjusted for case-mix and outpatients) = Outpatient Adj. Occupied Bed x Case-Mix.	5.5g / [(5.2f patient days * (1.3/1.1f) * 5.4e) / days in fiscal year]	Number of full-time staff for each occupied bed

Indicator Definitions - Acute Care Hospitals

	Indicator	Elements of the Indicator	Element Definitions	Historical Filing Data Elements	Indicator Description
8.	Paid Hours / Adjusted Admission	a.) Paid Hours / b.) Adjusted Admissions (adjusted for outpatient services and case-mix)	a.) Total hours paid b.) See 1b. One FTE equals 2080 hours per year. Hours per year divided by days in fiscal year = 5.69863014.	(5.5g * 5.69863014 * days in fiscal year) / [5.2f admissions * (1.3/1.1f)] * 5.4e	Paid hours per admission
9.	Staffed Beds Occupancy	a.) Total Inpatient Days / b.) Staffed Bed Days	a.) Total Inpatient Days b.) Staffed Beds multiplied by days in fiscal year	5.2f patient days * 100 / (5.1n staffed beds * days in fiscal year)	Occupancy of staffed beds
10.	Licensed Beds Occupancy	a.) Total Inpatient Days / b.) Licensed Bed Days	a.) Total Inpatient Days b.) Licensed Beds multiplied by days in fiscal year	5.2f patient days * 100 / (5.1 licensed beds * days in fiscal year)	Occupancy of licensed beds
11.	Special Services Utilization	a.) Special Services b.) Utilization	Special Services Utilization is an average score of utilization for all special services. For each hospital, a special service that is provided is measured for percentage utilization against the CON standard. All of the percentages are totaled. This total is then divided by the number of special services provided. a.) Special Services are those patient care procedures, treatments, and cases that are now subject to CON. This includes services provided by a subsidiary that is at least 25% owned by the hospital. b.) Utilization for each special service is the actual number of units of service divided by the available staffed beds or the Medical Facilities Plan CON standard service utilization.	(See Special Services Utilization sheet attached)	Average percentage utilization of high capital-cost services

Indicator Definitions - Acute Care Hospitals

	Indicator	Elements of the Indicator	Element Definitions	Historical Filing Data Elements	Indicator Description
12.	Case-Mix Adjusted Average Length of Stay	a) Average Length of Stay/ b) Overall Case-mix	a) Average Length of Stay is equal to the total patient days divided by the number of admissions. b) Overall Case-Mix is the case-mix for the entire facility.	(5.2f patient days / 5.2f admissions) / 5.4e	Average length of stay adjusted for case-mix
13.	Cash Debt Coverage	a.) Cash Flow from Operations + Interest Paid / b.) Current Debt Service	a.) Cash Flow from Operations + Interest Paid b.) Current Debt Service	(4.1 + 4.7) / (4.7 + 4.8)	Ability to repay long-term debt
14.	Total Margin	a.) Revenue and Gains in Excess of Expenses and Losses / b.) Total Net Operating Revenue + c.) Net Non-operating Gains d.) Net extraordinary gains e.) Cumulative effect of accounting changes	a.) Revenue and Gains in Excess of Expenses and Losses b.) Total Net Operating Revenue c.) Net Non-operating Gains d.) Net extraordinary gains e.) Cumulative effect of accounting changes	1.20 * 100 / (1.8 + 1.9 + 1.17 + 1.18 + 1.19)	Operating and non-operating profit
15.	Return on Assets (cash)	a.) Cash Flow from Operations / b.) Total Assets less Patient Personal Funds Accounts	a.) Cash Flow from Operations b.) Total Unrestricted Assets	4.1 * 100 / (2.4 - 2.8)	Financial return from investment in assets in cash terms
16.	Fixed Asset Financing Ratio	a.) Long Term Liabilities / b.) Net Fixed Assets	a.) Long Term Liabilities b.) Fixed Assets Net of Accumulated Straight Line Depreciation	2.6g / 2.2	Amount of long-term debt

Indicator Definitions - Acute Care Hospitals

	Indicator	Elements of the Indicator	Element Definitions	Historical Filing Data Elements	Indicator Description
17.	Charity Care, Bad Debt and Taxes	a.) Uncompensated Care as a Proportion of Total Expenses + b.) Taxes Paid as a Proportion of Total Expenses	a.) [(Expenses required to provide charity care to people with incomes <= 100% of the federal poverty level) + (Expenses required to provide charity care to people with incomes > 100% and <= 200% of the federal poverty level) + (charity care > 200% of the federal poverty level) + charity care for which parital payment is received) + (bad debt expenses) + (payments to/from the Disproportional Share Program)] all divided by Total Expenses b.) Taxes Paid divided by Total Expenses	[(1.5 + 1.6+1.61+1.62) * (1.15 / (1.3 + 1.9)) + 1.14 + 1.7 + 1.13i] * 100 / 1.15	Charity care, bad debts and taxes paid
18.	Medicaid Participation	a.) Medicaid Patient Days Adjusted for Outpatients / b.) Total Patient Days Adjusted for Outpatients	a.) Medicaid patient days adjusted for outpatients x 100 / b.) Total patient days adjusted for outpatients	[5.2b patient days + (5.2b patient days) * (1.2b/1.1b)] * 100 / [5.2f patient days +(5.2f patient days * 1.2f/1.1f)]	Medicaid participa-tion

<u>Special Services Utilization Calculations</u>

The methodology for acute care hospitals includes indicator #11 Special Services Utilization. This is designed to measure the productivity and efficiency of hospitals' capital-intensive services, such as MRI scanners and ICU beds. The indicator is an average of efficiency measures for any and all of the `special services' that a hospital provides. The formula to calculate efficiency for each of the ten special services is given below.

<u>a. ICU/CCU</u> = ((Adult ICU patient days + Pediatric IÇU patient days] / (Adult ICU licensed beds + Pediatric ICU licensed beds)) * (number of days in fiscal year * 65%)
Data for this are in line 5.1b & 5.1c of the Hospital Historical Filing.

<u>b. OB</u> = Obstetric patient days / (Obstetric licensed beds * number of days in fiscal year * 65%)[1]
Data for this are in line 5.1e of the Hospital Historical Filing.

<u>c. Neonatal ICU</u> = Bassinet patient days / (Bassinet staffed bassinets * number of days in fiscal year * 85%)[1]
Bassinets as used in this calculation excludes normal newborn activity.
Data for this are in line 5.1n of the Hospital Historical Filing.

<u>d. MRI</u> = MRI procedures both stationary and mobile and both inpatient and outpatient / (Number of machines, both stationary and mobile * 5,000)[2]
Data for this are in line 6.3 of the Hospital Historical Filing.

<u>e. CT</u> = CT procedures both stationary and mobile and both inpatient and outpatient / (Number of machines, both stationary and mobile * 7,400)[2]
Data for this are in line 6.2 of the Hospital Historical Filing.

<u>f. Lithotripsy</u> =[2] Lithotripsy visits both inpatient and outpatient / (Number of ESWL machines both stationary and mobile* 1,250)
Data for this are in line 6.6 of the Hospital Historical Filing.

<u>g. Cardiac Catheterization</u> =[2] Cath adult visits + (Cath pediatric visits * 2) / (Number of cath laboratories both stationary and mobile * 1,200)
Data for this are in line 6.5 of the Hospital Historical Filing.

<u>h. Therapeutic Radiology</u> = Total number of TR visits both inpatient and outpatient /(Total number of TR machines * 8,000)
Data for this are in line 6.4 of the Hospital Historical Filing.

<u>i. Cardiac Surgery</u> = (Cardiac surgery - adult cases + (Cardiac surgery - pediatric cases * 2)) / (Cardiac rooms including Operating, Procedure, and Exclusive use both adult and pediatric * 400)[2]
Data for this are in line 7.1d and 7.1e of the Hospital Historical Filing.

<u>j. Other Surgery</u> = (number of procedures both inpatient and outpatient * 1.600)[2] / (# of rooms * 1,600)[2] Data for this are in line 7.1a and 7.1f of the Hospital Historical Filing.

[1] This percentage is a CON standard for occupancy in the 2009 Edition Virginia State Medical Facilities Plan, prepared by the Office of Licensure and Certification, Virginia Department of Health

[2] This figure is a CON standard for workload in the 2009 Edition Virginia State Medical Facilities Plan, prepared by the Office of Licensure and Certification, Virginia Department of Health
(Note: Most results are multiplied by 100 in order to arrive at compatible values.)