PEER GROUPS, RATIOS, STATISTICS, INDICATORS and TERMS

The budget information includes a calculation of ratios, statistics and indicators that are to be used for evaluating and comparing the hospital budget submissions. State peer group data is compiled from the budget submissions and compared to regional and national peer groupings as cited below. Each hospital statistic is compared against median values.

GMCB compares each hospital’s ratios, statistics and indicators to the state, regional and national peer groupings. The statistics are grouped into categories that assess the hospital’s cash, productivity, costs, debt and capital investment, payer mix and profitability, per unit values, and utilization. The formulas used to calculate each statistic are listed below following the peer group descriptions.

PEER GROUPS

The peer group for the State will be based upon the acute care bed size of the hospital. The groupings will be beds from 25-99 beds, 100-249 beds and over 400 beds. Critical access hospitals will be considered their own Vermont peer group.

The bed groupings for the regional and national statistics are **100-199 beds and over 400 beds**. Bed size is determined by the IPPS impact file.

The regional comparative group will be **Northeast Critical Access hospitals** (US hospitals grouped by region with a special Medicare reimbursement designation based upon a 25 bed or less Inpatient daily census).

The national comparative group will be **other not-for-profit** hospitals not falling into the CAH, 100-199 or teaching category.

The University of Vermont Medical Center will also be compared to **all major teaching hospitals**.

Data Source for national and regional and teaching hospital comparisons:

*Almanac of Hospital and Financial and Operating Indicators (OPTUM)*
RATIOS, STATISTICS AND INDICATORS - FORMULAS

The actual formulas are also in the Adaptive tool though they may reflect a more technical syntax.

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Depreciation Rate  
\[ \text{Depreciation Rate} = \frac{\text{Depreciation & Amortization Expense}}{\text{Gross Prop, Plant & Equip}} \times 100 \]

Capital Expenditures to Depreciation  
\[ \text{Capital Expenditures to Depreciation} = \frac{\text{Capital Expenditures}}{\text{(Depreciation + Amortization)}} \]

Capital expenditure growth rate  
\[ \text{Capital expenditure growth rate} = \frac{\text{Capital Expenditures}}{\text{Gross Prop, Plant & Equip}} \times 100 \]

Capital Acquisitions as a Percent of Net Patient Revenue (NPR)  
\[ \text{Capital Acquisitions as a Percent of Net Patient Revenue (NPR)} = \frac{\text{Total Capital Acquisitions}}{\text{NPR}} \]

**REVENUE & PAYER MIX STATISTICS**

Deduction %  
\[ \text{Deduction %} = \frac{\text{Total Deductions}}{\text{Gross Patient Revenue}} \]

Bad Debt %  
\[ \text{Bad Debt %} = \frac{\text{Bad Debt}}{\text{Gross Patient Revenue}} \]

Free Care %  
\[ \text{Free Care %} = \frac{\text{Free Care}}{\text{Gross Patient Revenue}} \]

Operating Margin %  
\[ \text{Operating Margin %} = \frac{\text{Operating Surplus}}{\text{(NPR + Other Operating Revenue)}} \]

Total Margin %  
\[ \text{Total Margin %} = \frac{\text{(Operating Surplus & non-operating Revenues)}}{\text{(NPR + Other Operating Revenue + Non-Operating Revenue)}} \]

Outpatient Gross Revenue %  
\[ \text{Outpatient Gross Revenue %} = \frac{\text{Gross Outpatient Revenue}}{\text{Total Gross Patient Revenue}} \]

Inpatient Gross Revenue %  
\[ \text{Inpatient Gross Revenue %} = \frac{\text{Gross Inpatient Revenue}}{\text{Total Gross Revenue}} \]

SNF/Rehab/Swing Gross Revenue %  
\[ \text{SNF/Rehab/Swing Gross Revenue %} = \frac{\text{(Chronic/Rehab Gross Revenue + SNF/ECF Gross Revenue + Swing Bed Gross Revenue)}}{\text{Total Gross Rev}} \]

All NPR % of Gross Hosp Revenue with DSH & GME  
\[ \text{All NPR % of Gross Hosp Revenue with DSH & GME} = \frac{\text{NPR}}{\text{Gross Patient Revenue}} \]

All NPR % of Gross Hosp Revenue Without DSH & GME  
\[ \text{All NPR % of Gross Hosp Revenue Without DSH & GME} = \frac{\text{(NPR-DSH-GME Phys –GME Hosp.)}}{\text{Gross Patient Revenue}} \]

Medicare NPR% of Gross Rev incl Phys  
\[ \text{Medicare NPR% of Gross Rev incl Phys} = \frac{\text{(Medicare NPR+ Physician Medicare Net Patient Revenue)}}{\text{Medicare Gross Patient Revenue}} \]

Medicaid NPR% of Gross Rev incl Phys  
\[ \text{Medicaid NPR% of Gross Rev incl Phys} = \frac{\text{(Medicaid NPR+ Physician Medicaid Net Patient Revenue)}}{\text{Medicaid Gross Patient Revenue}} \]

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Commercial/Self Pay NPR% of Gross Rev incl Phys (Commercial/Self Pay NPR+ Physician Commercial/Self Pay Net Patient Revenue) / Commercial/Self Pay Gross Patient Revenue

**PRODUCTIVITY STATISTICS**

- Adjusted Admissions Per FTE: Adjusted Admissions/ Non-MD FTES
- FTES Per 100 Adjusted Discharge: Non-MD FTE / Adjusted Admissions * 100
- FTES Per Adjusted Occupied Bed: Total Non-MD FTE/ (Adjusted Pat Days/365)
- Return on Assets: Net Income/Total Assets
- Overhead Expenses, with Fringe Benefits, as a % of Total expenses: General services expense plus fringe benefit expense/Total expense.

**COST STATISTICS**

- Cost Per Adjusted Admission: Total Expenses/Adjusted Admissions
- Salary Per FTE (Non-MD): Non-MD Salaries & Wages /Non-MD FTE
- Salary & Benefits Per FTE (Non-MD): Non-MD Salaries/Wages & Fringe Benefits/ Non-MD FTE
- Fringe Benefit %-Non-MD: Total Non-MD Fringe Benefits / Non-MD Salaries
- Compensation Ratio: (Salaries + Fringe Benefits + Physician Fees/Salaries/Contracts/Fringe) / Total Operating Revenue
- Capital Cost % of Total Expenses: (Depreciation + Amortization + Interest)/ Total Expense
- Capital Cost Per Adjusted Admission: (Depreciation + Interest + Amortization) / Adjusted Admissions
- Contractual Allowance %: Contractual Allowances/Total Gross Patient Revenue

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**CASH STATISTICS**

- **Current Ratio**: \( \frac{\text{Current Assets + Funded Depreciation}}{\text{Current Liabilities}} \)
- **Days Payable**: \( \frac{\text{Current Liabilities}}{\text{(Total Expenses} - \text{(Depreciation + Amortization + Interest)}} \)
- **Days Receivable**: \( \frac{\text{Net Patient Accounts Receivable}}{\text{NPR} \times 365} \)
- **Days Cash on Hand**: \( \frac{(\text{Cash + Investments + Funded Depreciation}) \times 365}{\text{(Board Designated Assets) + Other Board Designated Assets) \times 365} / \text{(Total expense} - \text{(Depreciation + Amortization)}} \)
- **Cash Flow Margin**: \( \frac{\text{(Net income/loss + Current Depreciation Expense + Interest Expense + Amortization)}}{\text{NPR + Other Operating Income}} \)
- **Cash to Long Term Debt**: \( \frac{(\text{Cash + Funded Depreciation} + \text{Other Board Designated Assets})}{\text{Long term debt}} \)
- **Cash Flow to Total Debt**: \( \frac{(\text{Operating surplus} \& \text{Non-operating Revenues} + \text{Depreciation + Bad debt + Amortization)} / (\text{Current liabilities and Long Term Debt})}{\text{)* 100}} \)

**REVENUE UNIT STATISTICS**

- **Gross Price per Discharge**: \( \frac{\text{Gross Inpatient Revenues}}{\text{Total Admissions}} \)
- **Gross Price per Visit**: \( \frac{\text{Gross Outpatient Revenues}}{\text{Outpatient Visits}} \)
- **Gross Revenue Per Adjusted Admission**: \( \frac{\text{Total Patient Care Rev}}{\text{Adjusted Admissions}} \)
- **Net Revenue Per Adjusted Admission**: \( \frac{(\text{Total Patient Revenue} - \text{Total Deductions})}{\text{Adjusted Admissions}} \)

**PAYER STATISTICS**

- **Physician % of Net Revenue (less DSH)**: \( \frac{\text{Physician Net Rev}}{\text{Total Net Revenue (less DSH)}} \)

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<td>Commercial/Self % Total NPR (incl DSH)</td>
<td>Commercial Net Rev/Total Net Revenue (incl. DSH)</td>
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GLOSSARY

Accumulated Depreciation: A balance sheet account that records the decline in value of capital assets.

Acute Care: Inpatient routine care for patients admitted for greater than 24 hours. (exception – see Observation care)

Acute Admissions: The number of patients admitted to a hospital for care in a given time period.

Adjusted Admissions/Day: Calculation “adjusts” inpatient data to account for outpatient activity in a hospital. The statistic is an industry recognized measure to measure overall hospital utilization and is useful for comparisons among hospitals.

Ancillary Services: Inpatient and/or outpatient tests, exams, procedures that diagnose, treat or support patient care. These services include lab tests, radiology procedures, surgical procedures, etc.

Amortization: The process of retiring a debt, usually by equal payments at regular intervals over a specific period of time.

Available Bed Days: Number of days hospital beds can be used in a year. It is calculated by multiplying number of days in year by number of staffed beds.

Average Length of Stay: The calculated number of days per inpatient hospitalization.

Acute Average Daily Census: Measure of acute inpatient utilization. This is calculated by dividing number of acute inpatient days by number of days in a year.

Bad Debt: An expense billed and due but not received. Assumption is that individual has the ability to pay but will not pay or has disputed the bill. See free care definition that distinguishes bad debt from free care.

Charge master: A comprehensive listing of items billable to a hospital patient or a patient’s health insurance provider.

CON: Acronym for Certificate of Need. CON is a regulatory program designed to determine the need for certain capital projects.

Consumer Price Index: Measure of inflation and changes in the cost of consumer goods. (See the Bureau of Labor Statistics for more information)

Contractual Allowance: Difference between hospital’s full, established charge and amount due/received in payment from third party payers.

Co-payment: Cost sharing mechanism. A co-payment requires an individual to pay fixed amount at time of service, regardless of the cost of service.

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Cost Shifting: The practice of collecting revenue from one hospital payer to cover costs incurred by patients unable to pay (or whose costs are not fully reimbursed by other third party payers).

Deductions from Revenue: Accounting term used to describe reductions from gross revenues. Examples of deductions: contractual allowance, bad debt, free care. Bad debt, free care are sometimes referred to as “uncompensated care”.

Depreciation: An expense. Depreciation notes the decrease in value of an asset by allocating the asset costs over the useful life of the asset.

Free Care: Term used to recognize loss of revenue billed/due but not received. Considered “free” because individual has limited or no ability to pay, as established by the hospital or other provider. Charity care deductions are defined as the difference between gross charges and any subsequent reimbursement that may be received from, or on behalf of, those individuals determined eligible for “free care”. See bad debt definition that distinguishes bad debt from free care.

Fringe Benefits: An expense. Refers to benefits provided by employers as part of employee compensation. Examples of common benefits: health and dental insurance, FICA, pension plan.

Full Time Equivalent (FTE): The number of hours worked that add up to a full time employee - 2080 hours in one year.

Nurses – The number of direct services nurses will be reported. Nurses working in general services cost centers should not be counted as direct service staff. Direct service nurses do not include traveling or agency nurses.

Temps/Travelers – Temporary positions hired to meet staffing shortages should be separately identified.

Physicians - The number of active practicing physician employed at the hospital shall be reported.

Fund Balance: This is a balance sheet account. What an organization will have “left over” once it pays out all it owes. Assets less liabilities equal fund balance.

Global Budget: Budget or expenditure target for health care. Allocation of monies could be managed by a controlled entity, with broad policy direction provided from government.

Gross Charge Per Adjusted Admission or Day: A unit measure. Amount charged to payer for services in an average stay/day. Calculation factors amount of inpatient and outpatient care provided and is useful for comparisons among facilities.

Gross Patient Revenue: A hospital’s total billed revenue for providing goods and services to patients. This is the total revenue amount billed before contractual allowances, commercial discount agreements, bad debts and free care are deducted.

Inpatient: Hospital stay. Patient provided with room, board and continuous nursing care.
Inpatient Day: Each 24 hour day a patient stays in hospital.

Interest: Cost incurred for borrowing funds and usually expressed as a percentage of the total loan.

Investments: Balance sheet account. This refers to financial instruments that may earn income such as stocks, mutual funds, bonds, etc.

Liabilities (current): What an organization owes that will/should be paid within the year.

Long Term Liabilities: Refers to debt that will be paid over period greater than one year.

Medicaid: Federal and state funded program that provides health care benefits to persons meeting various eligibility requirements (low income, certain medical conditions).

Medicare: Federally funded program providing hospitalization and medical care services for individuals 65 years or over OR for individuals meeting other eligibility requirements. Income level is not a factor in eligibility.

Net Patient Revenue: Monies hospital will receive for services rendered. It is the amount resulting after contractual allowances, commercial discounts, and free care are deducted from gross charges.

Note: Hospitalist revenues should be recorded as “Other” under Inpatient Routine Services if it is not recorded in the other acute care cost centers.

Net Revenue: Total patient charges and “other operating income” minus all deductions (contractual allowances, bad debts, uncompensated care). The difference between this and Net Patient Revenue is the inclusion of “other operating income”.

Non-MD Salaries & Wages: All non-physician salaries and wages. Contractual costs should be reported as non-salary costs.

Non-operating Revenue: Revenue earned by hospital that is not related to patient care – income from investments, contributions, sales to other organizations, etc.

Observation Patients: Patients who are hospitalized overnight and expected to be discharged within 48 hours.

Occupancy: Percentage calculation of hospital beds in use. Represents number of patient days of service divided by number of available bed days.

Operating Expenses: All input costs required to provide goods and services to patients. This includes salaries, fringes, insurance, professional fees, depreciation, interest, etc.

Operating Expense/Adjusted Admission or Operating Expense/Adjusted Patient Day: Measurement of costs to provide services for average inpatient stay or day. Calculation factors in outpatient care so as to allow for comparisons among facilities.

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Operating Surplus: (sometimes called Operating Margin or Profit) Net revenues less expenses resulting in profit.

Other Operating Revenue: Revenue earned by hospital that is indirectly related to patient care. Examples: income from cafeteria, parking, physician office rentals, etc.

Outpatient: Individuals who receive services in the hospital but do not stay overnight.

Payers: State program or federal program or insurance company that pays the bill for health care services.

Providers: Hospitals, licensed health care professionals, or group of hospitals that provide health care services.

Rate: the amount of increase given to the charge master prices.

Revenue: See Gross Patient Revenue and Net Revenue

Self-pay: Individuals who pay for their own care without using an insurance plan.

Tertiary Care: Services provided by highly specialized providers (e.g. neurologists, neurosurgeons, intensive care units). Such services frequently require sophisticated equipment and support facilities.