In the NASHP dataset, several columns are critical for evaluating and recommending the best hospital based on financial performance, cost efficiency, and patient care quality. Here are the key columns from the NASHP dataset that are particularly important:

1. Cost Efficiency and Financial Stability

- Net Patient Revenue: Reflects the total revenue generated from patient care services, excluding discounts. It’s important to evaluate a hospital's ability to generate income from services while maintaining affordability.

- Operating Expenses: Represents the total expenses associated with hospital operations. Lower operating expenses relative to revenue may indicate efficient cost management.

- Cost-to-Charge Ratio: Indicates the relationship between hospital operating costs and charges. A lower ratio suggests the hospital is managing costs efficiently while charging reasonable prices.

- Operating Profit Margin: Shows the percentage of revenue retained as profit after covering operating expenses. A higher margin indicates better financial performance.

- Net Profit Margin: Similar to the operating profit margin but includes all income and expenses. This provides a comprehensive picture of a hospital's financial health.

2. Quality of Care and Outcomes

- Hospital Charges: The total charges for inpatient and outpatient services. This column is essential to compare how different hospitals price similar services.

- Adjusted Patient Discharges: Represents the adjusted number of inpatient and outpatient discharges. Higher discharges with better outcomes can indicate a hospital’s capacity and performance.

- Net Patient Revenue per Adjusted Discharge: Shows revenue per patient, adjusted for both inpatient and outpatient volume. This is useful for evaluating how hospitals manage costs relative to the number of patients.

- Value of Care Measures (from other related datasets): While not a specific column in the NASHP dataset, understanding outcomes (like mortality and readmission rates) is critical for assessing care quality.

3. Patient Demographic and Accessibility Indicators

- Payer Mix (Medicaid, Medicare, Commercial, Charity Care): These columns reflect the distribution of patient insurance types. A hospital with a diverse payer mix, including Medicaid and charity care, might be more accessible to different patient demographics.

- Charity Care Payer Mix: Percentage of services provided to charity care patients. A higher percentage indicates a hospital’s commitment to serving low-income or uninsured populations.

- Uninsured and Bad Debt Cost: Shows the hospital’s exposure to unreimbursed care costs. A lower cost might indicate better strategies for managing patient payments and uninsured care.

4. Operational and Cost Management

- Hospital Operating Costs per Adjusted Discharge: Shows the average cost per patient discharge, adjusted for volume. Lower costs may suggest better operational efficiency.

- Hospital Operating Labor Costs: Includes direct patient care labor costs. High labor costs can indicate a focus on quality care, but efficiency must also be considered.

- Direct Patient Care Labor Cost: Costs related to direct patient care labor, including both hospital staff and contracted labor. Lower costs may suggest efficient labor management, while still ensuring quality care.

- Direct Patient Care Labor Cost per FTE (Full Time Equivalent): Provides insight into how much a hospital spends on direct patient care labor relative to staff levels.

5. Accessibility and Resource Utilization

- Bed Size: The number of available beds for inpatient care. Larger hospitals may handle a higher volume of patients, but bed size alone doesn’t ensure quality.

- Inpatient Occupancy: Shows the percentage of beds occupied. High occupancy may indicate high demand, but extremely high levels can suggest potential overcrowding.

6. Charity and Financial Assistance

- Net Charity Care Cost: Reflects the financial assistance provided to patients under the hospital’s charity care policy. Hospitals with a higher percentage of charity care might be more accessible to low-income patients.

- Net Charity Care Cost as % of Net Patient Revenue: Indicates the proportion of revenue allocated to charity care. A higher percentage could indicate a hospital’s commitment to serving financially disadvantaged patients.

7. Capital and Operating Efficiency

- Capital Related Costs: Includes costs related to depreciation, leases, and other capital expenses. Efficient management of these costs can reflect the hospital’s sustainability.

- Hospital Operating Costs per Adjusted Discharge: A key efficiency metric indicating how well a hospital manages its operational costs per patient discharge.

Conclusion: Key Columns for Suggesting the Best Hospital

Based on the objectives of cost-efficiency, financial stability, and patient care quality, the most relevant columns in the NASHP dataset are:

1. Net Patient Revenue and Operating Expenses: To evaluate cost management and financial health.

2. Cost-to-Charge Ratio: For understanding pricing efficiency.

3. Operating Profit Margin and Net Profit Margin: To assess financial performance.

4. Net Patient Revenue per Adjusted Discharge: To compare revenue efficiency.

5. Payer Mix (Medicaid, Medicare, Commercial, Charity Care): To assess accessibility and patient demographics.

6. Direct Patient Care Labor Costs: For understanding care quality through staffing.

7. Net Charity Care Cost and related percentages: To evaluate financial accessibility and support for low-income patients.

8. Hospital Operating Costs per Adjusted Discharge: To measure operational efficiency.

These columns will allow a comprehensive evaluation of hospitals, considering both financial metrics and care quality, supporting recommendations for the "best" hospital based on the patient's financial and care needs.

Formula

reoccurring metric

Costs for Running a Hospital

Hospital Expenses

(Inclusive of All

Services)

Operating

Expenses

+

Adjustments for

Hospital Operating

Cost Increases

Operating

Profit (Loss)

Hospital Patient Care Services Profits

3

Net Patient

Revenue

Revenue recelved for hospital

patient care, after accounting for

certain discounts and allowances.

and other deductions.

2

Hospital

Operating Costs

HOSPITAL PATIENT CARE

Hospital Operating Costs

HOSPITAL PATIENT CARE

COST COMPONENTS

NOT RELATED TO HOSPITAL PATIENT CARE

Additional Operating Expenses

Known as Medicare Disallowed Expenses

Examples:

- Physician service costs billed

separately from hospiral bills

. Home office or affiliated expenses

not related to petiene care

. Research

Net Income from All Hospital Revenue and

Expenses

3

Net Income

(Loss)

Revenue

Hospital Operating

Labor Costs

Other Hospital

Operating Costs

Examples:

. Supplies

Medications

. Equipment

Technology

Capital Related

Costs

Examples:

. Depreciation

. Inturance

. Asser financing

interest

Leases

LABOR COST

COMPONENTS

Net Patient Operating

+

Expenses

Examples:

- Grants such as govemment or research grants

Additonal public funding such as COVID rellef

fund

Retal pharmacy and medical supply sales

. Investment eamings (losses)

Rent revenue from hospital space

Donadions, gifts, and revenues from cafetera,

perking ete.

Other Income

and Expenses

Direct Patient Care Cost

Examples:

. Nursing

· Laboratory

. Pharmacy

. General physician services in the

emergency room, intensive care, ere, but

excludes physician services that are

billed separately from the hospital bill

Management and

Administrative Cost

Examples:

. Executive and management

positions

. Accounting and purchasing

Informadion systems staff

Overhead Cost

Examples:

. Housekeeping

Dletary

- Cafeteria

Central services

pharmacy

Home Office and Affiliates Cost

Allocated costs for labor provided by

parene system or affliated organizations to

support hospital operations.

Examples:

. Wages

. Payroll tares

Benefits