Healthcare Data Analysis Report

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Objective: Share key findings from a review of patient data to improve healthcare decisions and patient care.

Summary of Key Insights

This report looks at patient records from 10 major hospitals to find ways to improve care, manage costs, and deliver better health outcomes. It highlights important trends and provides simple recommendations to help decision-makers.

Key Insights

1. Who are the Patients?

- Most patients are older adults (60+), with a mix of men and women, and a small number identifying as non-binary.
- The most common admitted blood types are A+ and O+.
- Admitted patients are admitted in a balanced way: emergency, urgent, and planned admissions each make up about one-third.

- **Takeaway:** We need to focus on older adults and make sure emergency admissions are kept in check.

2. Common Health Issues

- Diabetes and high blood pressure (Hypertension) are the most common diagnoses.
- Obesity is also a big issue, along with arthritis, cancer, and asthma.

- **Takeaway:** Focusing on prevention and management of these conditions can help reduce hospital visits.

3. How Long Do Patients Stay?

- Most patients stay averagely between 15 and 16 days, whether admitted as emergency, urgent, or planned.

- **Takeaway:** There may be opportunities to help patients go home sooner by improving discharge planning.

4. Treatment Costs

- Treatment costs are fairly consistent, usually between $25,000 and $26,000.
- Some hospitals and insurance companies have slightly higher or lower costs.

- **Takeaway:** Consistent costs mean we can look at other ways to improve efficiency without raising costs.

5. Hospital Performance

- Houston Methodist Hospital sees the highest patient volume but has a relatively higher proportion of abnormal outcomes compared to others.

- Hospitals like Mayo Clinic, Cedars-Sinai, and NewYork-Presbyterian report lower patient volumes with fewer abnormal outcomes, suggesting either a focus on specific treatments or better patient selection.

- There is a clear variation in outcomes across hospitals, with some achieving higher rates of normal outcomes despite handling fewer cases.

Takeaway: Houston Methodist and Johns Hopkins serve large volumes but may need to review clinical practices to address the higher abnormal outcome rates. Smaller hospitals like Mayo Clinic and Cedars-Sinai show potential for better outcomes with lower volume, indicating best practices that could be shared and scaled.

6. Medications
- The top 3 most common medicines across all hospitals are Aspirin, Ibuprofen, Lipitor, and others.
- Usage is similar across hospitals, showing standard treatment approaches.

- **Takeaway:** We can keep using these medicines but should also look for ways to improve consistency.

7. Insurance and Costs
- Medicare covers the most patients, followed by UnitedHealthcare and others.
- Costs are fairly similar across insurers, but outcomes vary more by hospital.

- **Takeaway:** Work with insurers and hospitals to find ways to keep costs low while improving care.

8. Regional Differences
- Hospitals are spread across different U.S. regions, and there are only small differences in costs and treatments.

- **Takeaway:** Local health issues may affect admissions, but we can keep standards consistent nationwide.

Simple Recommendations

1. Focus on preventing and managing chronic conditions like diabetes and high blood pressure.
2. Help patients avoid emergency visits by improving access to care.
3. Find ways to help patients leave the hospital earlier when it's safe to do so.
4. Use consistent medications across hospitals.
5. Work with insurance companies to keep costs down.
6. Share good ideas from one hospital to others.

Conclusion

By looking at this data, we can find ways to make healthcare better for patients, improve hospital performance, and manage costs. These simple changes can help everyone involved in patient care.