

# CLINTON SAVIOUR HANOCH

HEALTHCARE PROVIDER FINANCIAL ANALYSIS REPORT



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# STATEMENT OF THE PROBLEM

**THE HEALTHCARE ORGANIZATIONS OFTEN STRUGGLE TO MAINTAIN FINANCIAL SUSTAINABILITY WHILE DELIVERING EFFICIENT, QUALITY CARE. LIMITED VISIBILITY INTO FINANCIAL METRICS AND PROVIDER PERFORMANCE CAN HINDER OPERATIONAL IMPROVEMENTS. THE LACK OF A CENTRALIZED ANALYTICAL TOOL MAKES IT CHALLENGING TO MONITOR BILLING PATTERNS, MANAGE HEALTHCARE COSTS, AND EVALUATE DEPARTMENTAL OR PROVIDER CONTRIBUTIONS . THEREFORE, A DATA-DRIVEN APPROACH IS NEEDED TO ANALYZE AND VISUALIZE KEY FINANCIAL AND OPERATIONAL INDICATORS WITHIN THE HEALTHCARE SETTING.**

# AIMS AND OBJECTIVES



## **AIM**

**TO ANALYZE AND VISUALIZE THE FINANCIAL AND OPERATIONAL PERFORMANCE OF A HEALTHCARE CENTER USING INTERACTIVE DASHBOARDS, WITH A FOCUS ON BILLING TRENDS, COST DISTRIBUTION, PROVIDER EFFICIENCY, AND GEOGRAPHIC INSIGHTS.**



## **OBJECTIVES**

- i. TO ASSESS THE OVERALL FINANCIAL HEALTH OF THE HEALTHCARE CENTER BY ANALYZING BILLING AMOUNTS, TREATMENT COSTS, AND PATIENT CHARGES.**
- ii. TO EVALUATE PROVIDER AND DEPARTMENTAL PERFORMANCE BASED ON BILLING CONTRIBUTIONS, PROCEDURE TYPES, AND SERVICE CATEGORIES.**
- iii. TO IDENTIFY KEY TRENDS AND PATTERNS IN HEALTHCARE DELIVERY BY EXAMINING TIME-BASED AND CATEGORICAL VARIATIONS IN DATA.**
- iv. TO UNCOVER GEOGRAPHIC DIFFERENCES IN BILLING BEHAVIOR AND SERVICE UTILIZATION ACROSS CITIES OR STATES.**
- v. TO DEVELOP AN INTERACTIVE DASHBOARD THAT ENABLES STAKEHOLDERS TO GAIN ACTIONABLE INSIGHTS FOR STRATEGIC DECISION MAKING.**

# RESEARCH QUESTIONS

- 1] WHAT ARE THE MAIN COST DRIVERS IN THE HEALTHCARE CENTER'S OPERATIONS(FOR EXAMPLE..., TREATMENT, MEDICATION, ROOM CHARGES)?**
- 2] HOW DOES BILLING VARIES ACROSS PROCEDURES, DIAGNOSIS AND DEPARTMENTS AND WHICH AREA GENERATE THE MOST REVENUE?**
- 3] WHAT TRENDS CAN BE OBSERVED IN PROVIDER PERFORMANCE BASED ON BILLING AMOUNT AND PATIENT SERVICE TYPES(INPATIENTS, OUTPATIENTS AND EMERGENCY)?**
- 4] ARE THERE GEOGRAPHIC DIFFERENCES IN TOTAL BILLING AMOUNT ACROSS CITIES OR STATES IN THE UK?**

# THE HEALTHCARE PROVIDER DASHBOARD

## LIGHT MODE

HealthCare Provider Dashboard

Open Filters



Go to Dark Mode

Billing Amount

£3M

Average Billing Amount  
per visit £674.86

Medication Cost

£546K

Average Medication  
Cost £109.21

Treatment Cost

£3M

Average Treatment  
Cost £526.08

Total Insurance

£2M

Average Insurance  
Coverage £456.04

Out-Of-Pocket

£1M

Average Out-Of-  
Pocket £227.26

Room Charges

£180K

Average Room  
Charges £36.12

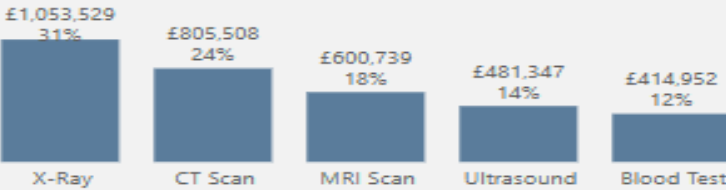
City

State

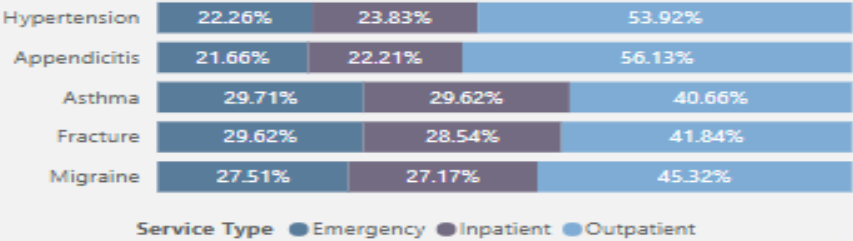
Total Billing Amount by State



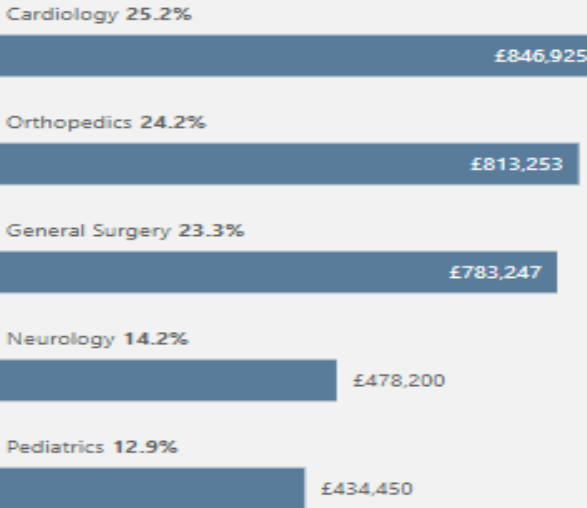
Total Billing Amount by Procedure



Total Billing Amount by Diagnosis and Service Type



Total Billing Amount by Department





# THE HEALTHCARE PROVIDER DASHBOARD

## DARK MODE

### HealthCare Provider Dashboard



Go to Light Mode

**Billing Amount**  
**£3M**  
Average Billing Amount per visit £674.86

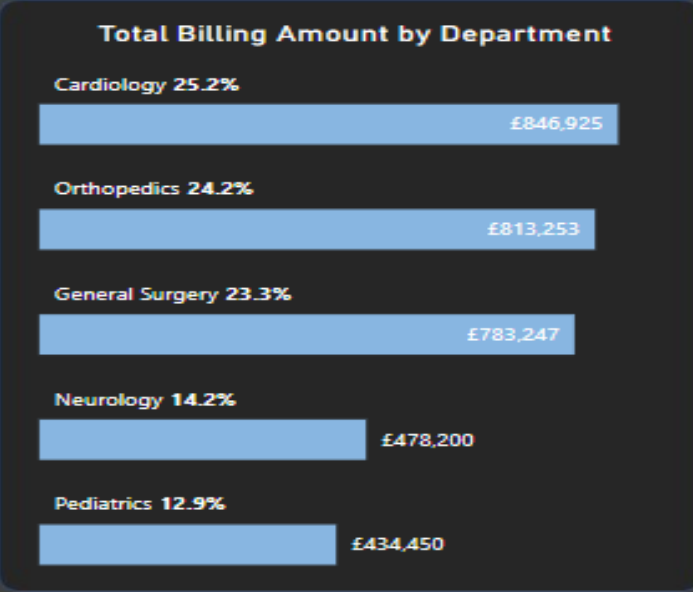
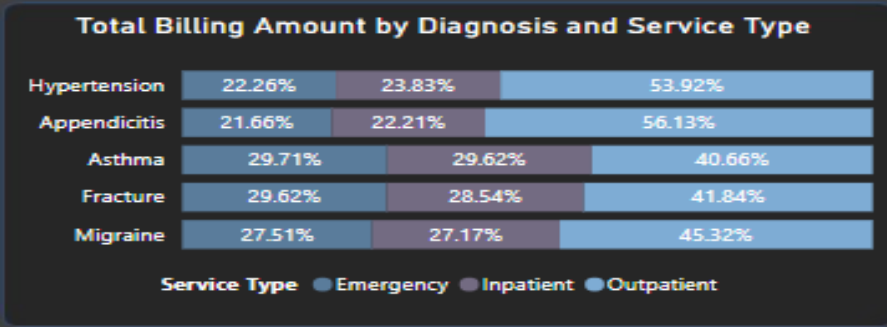
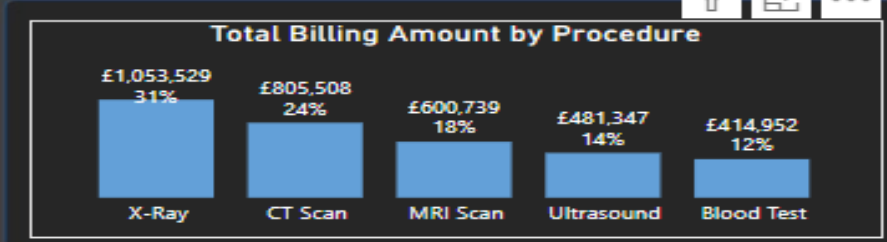
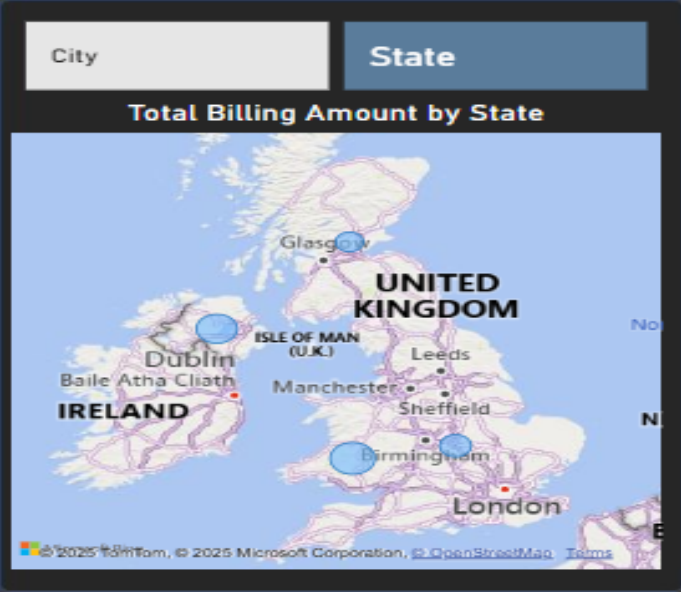
**Medication Cost**  
**£546K**  
Average Medication Cost £109.21

**Treatment Cost**  
**£3M**  
Average Treatment Cost £526.08

**Total Insurance**  
**£2M**  
Average Insurance Coverage £456.04

**Out-Of-Pocket**  
**£1M**  
Average Out-Of-Pocket £227.26

**Room Charges**  
**£180K**  
Average Room Charges £36.12



# KPIS ANALYSIS INSIGHTS AND INTERPRETATION

WHAT ARE THE MAIN COST DRIVERS IN THE HEALTHCARE CENTER'S OPERATIONS(FOR EXAMPLE..., TREATMENT, MEDICATION, ROOM CHARGES)?

Billing Amount	Medication Cost	Treatment Cost	Total Insurance	Out-Of-Pocket	Room Charges
£3M	£546K	£3M	£2M	£1M	£180K
Average Billing Amount per visit £674.86	Average Medication Cost £109.21	Average Treatment Cost £526.08	Average Insurance Coverage £456.04	Average Out-Of- Pcket £227.26	Average Room Charges £36.12

**INSIGHT: TREATMENT SERVICES ARE THE MAJOR COST AND REVENUE DRIVER. INSURANCE COVERS A LARGE PORTION, BUT PATIENTS STILL PAY A SIGNIFICANT AMOUNT OUT OF POCKET.**

**MEDICATION AND ROOM CHARGES ARE LESS IMPACTFUL BUT SHOULD STILL BE OPTIMIZED FOR EFFICIENCY.**



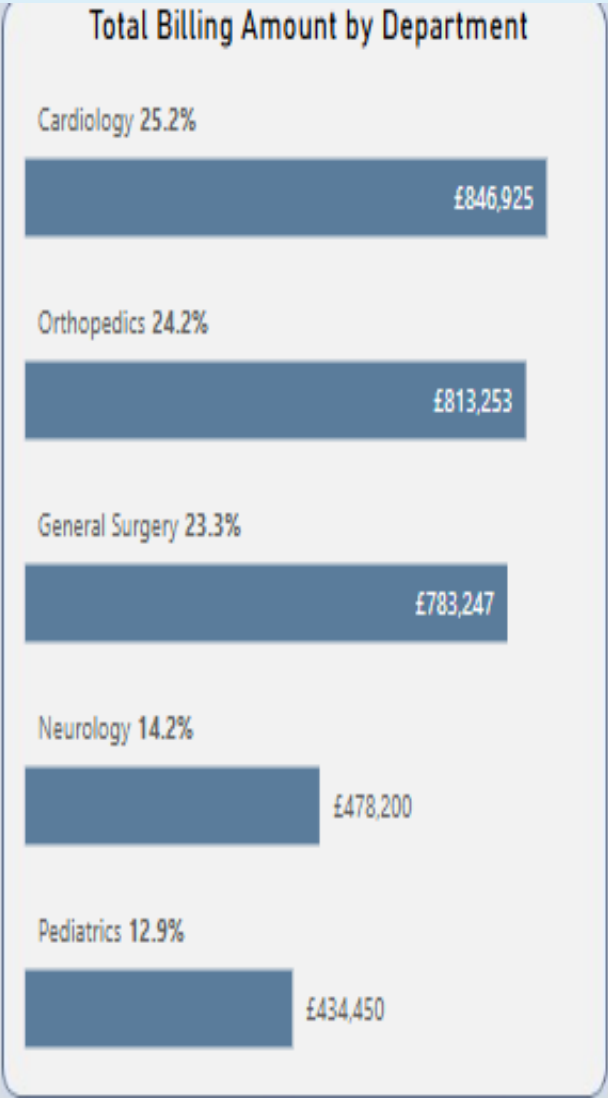
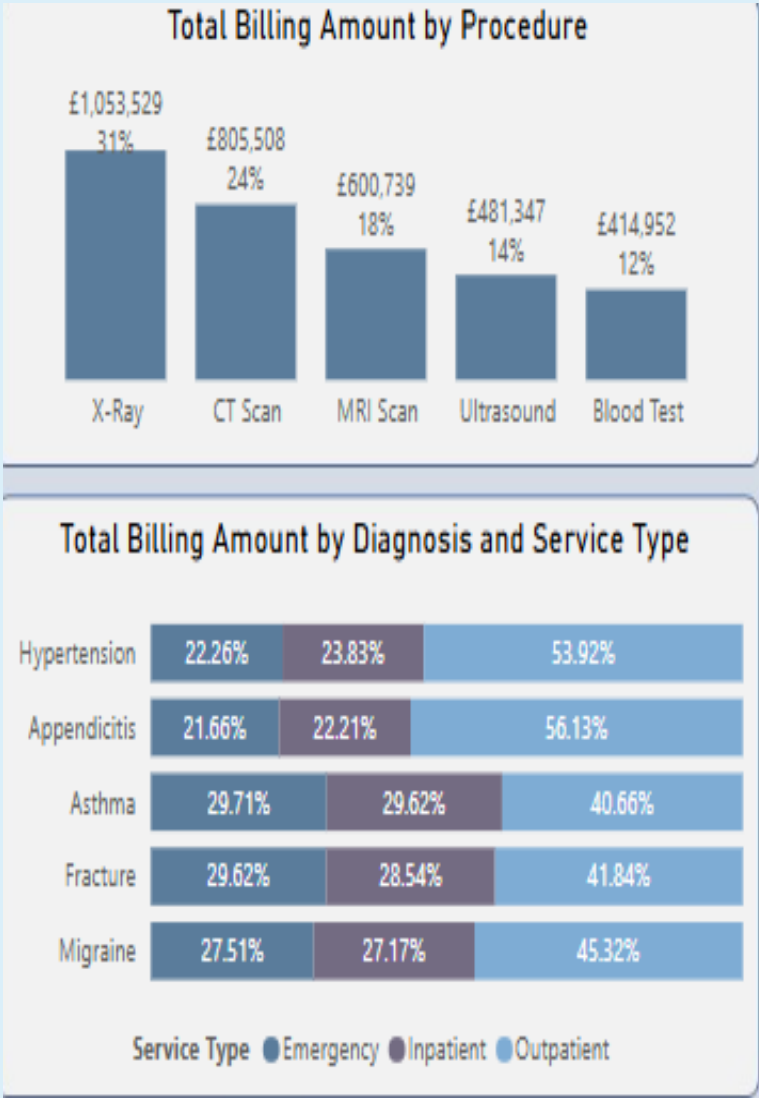
HOW DOES BILLING VARIES ACROSS PROCEDURES, DIAGNOSIS AND DEPARTMENTS AND WHICH AREA GENERATE THE MOST REVENUE?

INSIGHTS::

**PROCEDURE: THE X-RAY PROCEDURE ACCOUNTS FOR OVER ONE-THIRD OF THE BILLING, MAKING IT THE MOST REVENUE GENERATING SERVICE.**

**DIAGNOSIS: DIAGNOSIS LIKE HYPERTENSION, APPENDICITIS, AND MIGRAINE ARE MOSTLY BILLED AS OUTPATIENTS SERVICES.**

**DEPARTMENT: THE CARDIOLOGY DEPARTMENT LEADS IN TOTAL BILLING, REFLECTING A CONCENTRATION OF HIGH VALUE SERVICES IN HEART-RELATED CARE.**



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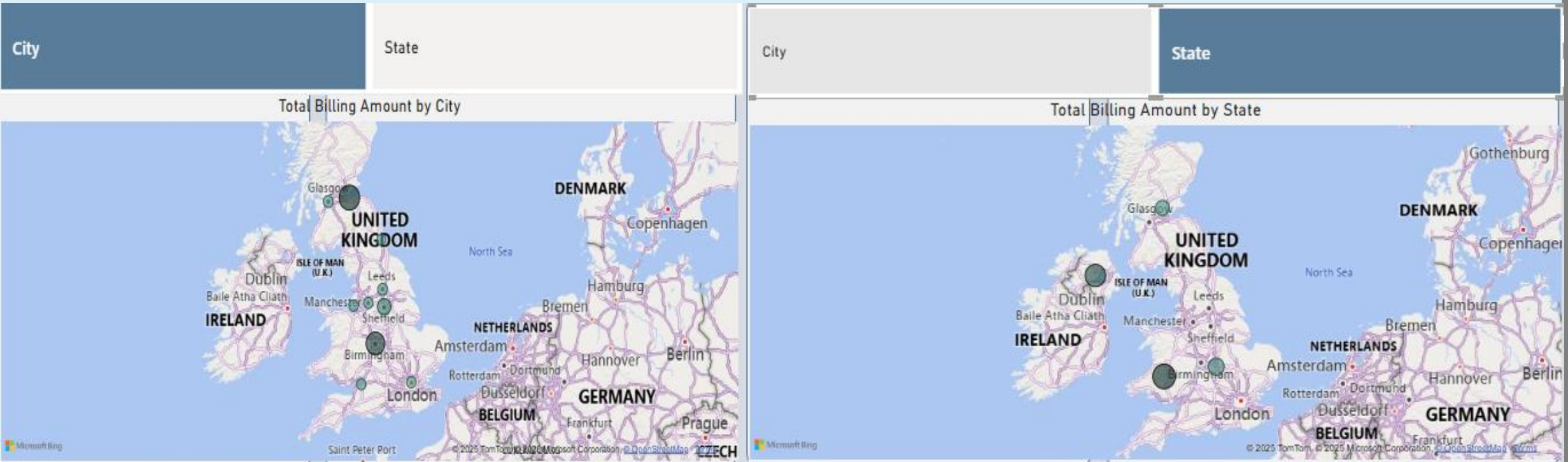
**WHAT TRENDS CAN BE OBSERVED IN PROVIDER PERFORMANCE BASED ON BILLING AMOUNT AND PATIENT SERVICE TYPES (INPATIENTS, OUTPATIENTS AND EMERGENCY)?**

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**INSIGHTS :**

**PROVIDERS ARE PRIMARILY ENGAGED IN OUTPATIENTS CARE, ESPECIALLY FOR CHRONIC AND MANAGEABLE CONDITIONS LIKE HYPERTENSION AND MIGRAINE. ACUTE OR TRAUMA CONDITIONS LIKE FRACTURE SHIFT MORE TOWARDS EMERGENCY AND INPATIENTS CARE.**

## ARE THERE GEOGRAPHIC DIFFERENCES IN TOTAL BILLING AMOUNT ACROSS CITIES OR STATES IN THE UK?



### INSIGHTS:

**CITY: EDINBURGH, BIRMINGHAM, AND SHEFFIELD CONTRIBUTE THE HIGHEST BILLING AMOUNTS, INDICATING A CONCENTRATION OF SERVICES OR LARGER PATIENTS BASES IN THESE AREAS.**

**STATE: NORTHERN IRELAND, WALES, AND SCOTLAND CONTRIBUTES THE HIGHEST BILLING AMOUNT WITHIN THE UK.**

# **SIMPLIFIED RECOMMENDATIONS**

**FOR HEALTHCARE PROVIDER FINANCIAL ANALYSIS**



# MAKE TREATMENT MORE EFFICIENT

- **WHAT THIS MEANS: RIGHT NOW, THE HOSPITAL IS SPENDING ALL ITS MONEY ON TREATING PATIENTS — THAT'S WHERE NEARLY ALL THE INCOME IS GOING. THIS COULD BE RISKY IF TREATMENTS AREN'T WELL MANAGED.**
- **WHAT TO DO: CHECK HOW TREATMENTS ARE BEING GIVEN. AVOID DOING THE SAME TEST OR TREATMENT TWICE. MAKE SURE DOCTORS FOLLOW CLEAR GUIDELINES SO PATIENTS GET WHAT THEY REALLY NEED.**
- **WHY IT MATTERS: THIS HELPS SAVE MONEY, TREAT MORE PEOPLE BETTER, AND AVOID WASTE.**



# DON'T RELY ONLY ON X-RAYS FOR INCOME

- **WHAT THIS MEANS: ALMOST 35% OF THE HOSPITAL'S INCOME COMES JUST FROM X-RAYS. THAT'S A LOT FROM ONE SERVICE. IF FEWER PEOPLE NEED X-RAYS TOMORROW, THAT'S A BIG LOSS.**
- **WHAT TO DO: START PROMOTING OTHER SERVICES LIKE CT SCANS, SURGERIES, OR ULTRASOUND TO BRING IN MORE MONEY FROM DIFFERENT PLACES.**
- **WHY IT MATTERS: IT SPREADS THE INCOME SO THE HOSPITAL DOESN'T LOSE TOO MUCH IF DEMAND FOR X-RAYS DROPS.**



# HELP DOCTORS IN EMERGENCY & INPATIENT DEPARTMENTS

- **WHAT THIS MEANS: SOME HEALTH ISSUES LIKE BONE FRACTURES NEED EMERGENCY OR HOSPITAL STAYS. THAT PUTS EXTRA PRESSURE ON THOSE DOCTORS AND NURSES.**
- **WHAT TO DO: MAKE SURE THESE TEAMS HAVE ENOUGH STAFF, EQUIPMENT, AND SUPPORT — MAYBE EVEN ROTATE STAFF SO NO ONE GETS OVERWHELMED.**
- **WHY IT MATTERS: IT IMPROVES THE QUALITY OF CARE AND AVOIDS STAFF BURNOUT.**

# REACH OUT TO CITIES WITH FEWER PATIENTS

- **WHAT THIS MEANS: BIG CITIES LIKE BIRMINGHAM BRING IN LOTS OF MONEY, BUT OTHER PLACES AREN'T USING THE HOSPITAL AS MUCH.**
- **WHAT TO DO: LET PEOPLE IN SMALLER CITIES KNOW WHAT SERVICES ARE AVAILABLE. MAYBE SET UP MOBILE CLINICS OR PARTNER WITH LOCAL CENTERS.**
- **WHY IT MATTERS: IT HELPS MORE PEOPLE GET CARE AND INCREASES THE HOSPITAL'S INCOME FROM NEW AREAS.**

# MAKE IT EASIER FOR PATIENTS TO PAY

- **WHAT THIS MEANS: EVEN THOUGH MANY PATIENTS HAVE INSURANCE, THEY STILL PAY A LOT FROM THEIR POCKETS — ABOUT £1 MILLION TOTAL. THAT CAN BE HARD ON THEM.**
- **WHAT TO DO: OFFER FLEXIBLE PAYMENT PLANS, DISCOUNTS, OR HELP PATIENTS GET BETTER INSURANCE OPTIONS.**
- **WHY IT MATTERS: MORE PATIENTS WILL BE ABLE TO AFFORD CARE, AND THEY'LL BE MORE LIKELY TO COME BACK IN THE FUTURE.**

**THANK YOU!**

**CLINTON SAVIOUR HANOCH**