# Hospital Wards and Patient Numbers in Germany Data Analysis Project

## Data Analyst: Patrick Witczak Client/Sponsor: Patrick Witczak

## Purpose:

*The purpose of this project is to analyze the relationship between the number of hospital ward types in Germany and the corresponding patient numbers. The analysis aims to identify patterns in how ward availability aligns with patient demand. By comparing these ratios across different ward categories, the project seeks to uncover potential imbalances in the healthcare system. Specifically, the findings may indicate whether certain ward types are underrepresented or overrepresented relative to patient needs.*

## Scope / Major Project Activities:

|  |  |
| --- | --- |
| Activity | Description |
| Define  Primary Variables | + total number of available beds per ward type  + total number of patient admissions per ward type  + create initial ratios by comparing capacity with demand |
| Identify  Influencing Factors | + explore additional factors that may affect the balance of   capacity and demand.  + e.g. length of stay, regional differences, seasonal variation |
| Data Collection | + gather hospital ward and patient statistics from reliable   sources *(e.g. federal health reports, hospital databases)* |
| Data Preparation | + clean, structure and validate the dataset for analysis |
| Analysis | + calculate ward availability/patient numbers ratios  + compare patterns across ward types |
| Visualization | + visualize findings with charts for clarity and interpretability |
| Interpretation | + identify wards with potential under- or overrepresentation |
| Insights | + highlight areas where healthcare capacity does not align with   the patient demand |

## This project does not include:

*Specify the things that this project isn’t responsible for doing (out of scope). For instance, “this project does not involve a summation of 2019 data analysis”*

## Deliverables:

*A specific list of things that your project will deliver.*

|  |  |
| --- | --- |
| Deliverable | Description/ Details |
|  |  |
|  |  |
|  |  |

## Schedule Overview / Major Milestones:

*The expected schedule for the project. This can be defined by milestones (e.g. “all data is cleaned and processed”), periods of time (“Week 1 / Week 2”), or other ways based on the needs of the project.*

|  |  |  |
| --- | --- | --- |
| Milestone | Expected Completion Date | Description/Details |
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|  |  |  |
|  |  |  |

## \*Estimated date for completion:

*This is my “if all goes well and I have everything I need; this is when I’ll be done” date.*