

Family First Care Finder

Visualizing Quality Care Homes in Dudley



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We aim to create an unbiased, open-source tool for families to find suitable care homes in the Dudley Borough. Unlike commercial websites, our tool eliminates bias from paid promotions and includes all care homes. We visualize care homes on an interactive map to aid in decision-making.

Interactive Map:

- Filterable care homes by needs.
- User-added home address marker.
- Marker reveals contact details, CQC rating.

Visualizations:

- Matplotlib: Commissioning and care home info.
- Java Leaflet: Interactive map of care home locations.
- Streamlit: Interactive table of care homes.

Streamlit App:

- Input home address and patient age.
- Sorted care homes by driving distance.
- Live bed availability and CQC ratings.

Data Sources:

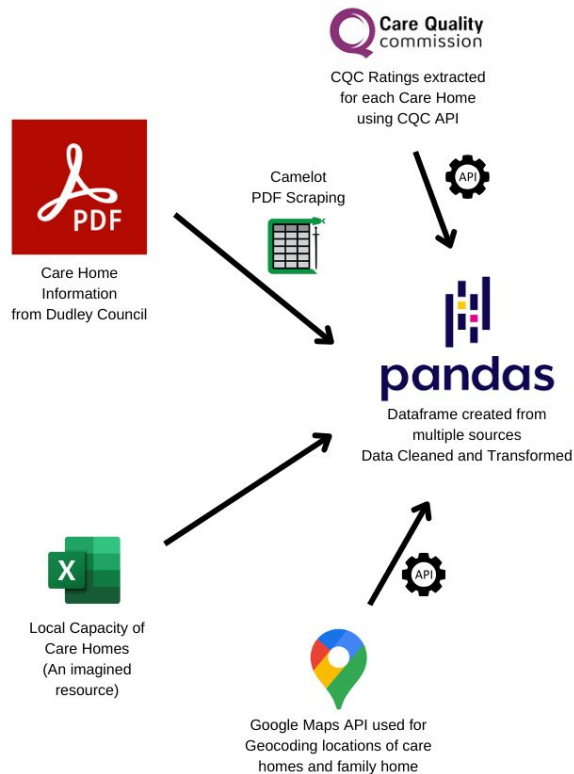
- Dudley Borough Council: PDF of council-funded care homes.
- CQC API: Latest care home ratings.
- Combined and cleaned data.

Ethical Considerations:

We use public data without storing personal information and comply with the Open Government License.



EXTRACT



TRANSFORM



LOAD

Manual CSV upload to MongoDB



mongoDB

Transformed Dataframe uploaded to Mongo DB Database

VISUALISE



Interactive Map created using Leaflet and Javascript. JSON files read through D3



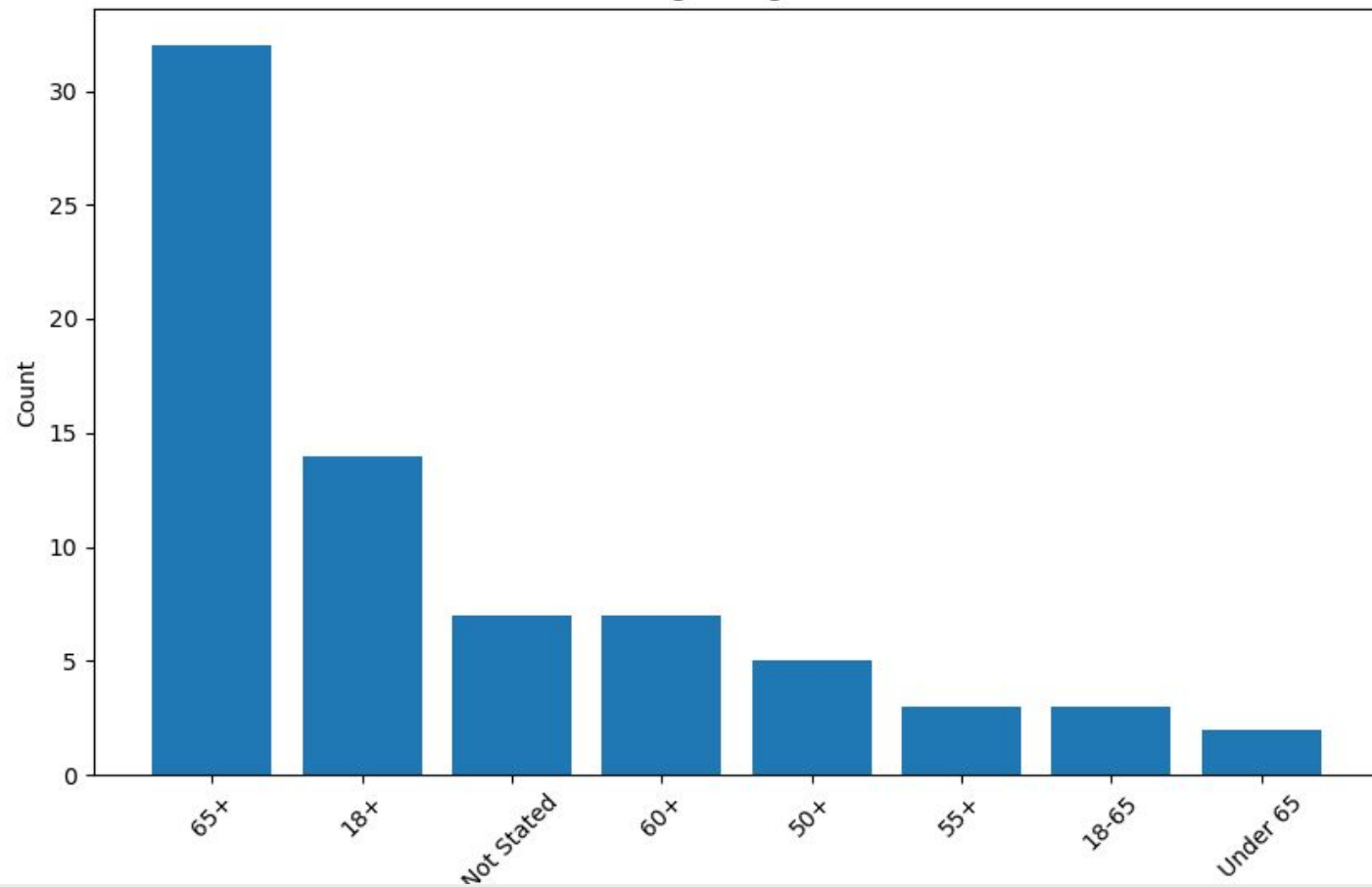
Streamlit

A web App was created to bring the visualisations together in one place and make it interactive

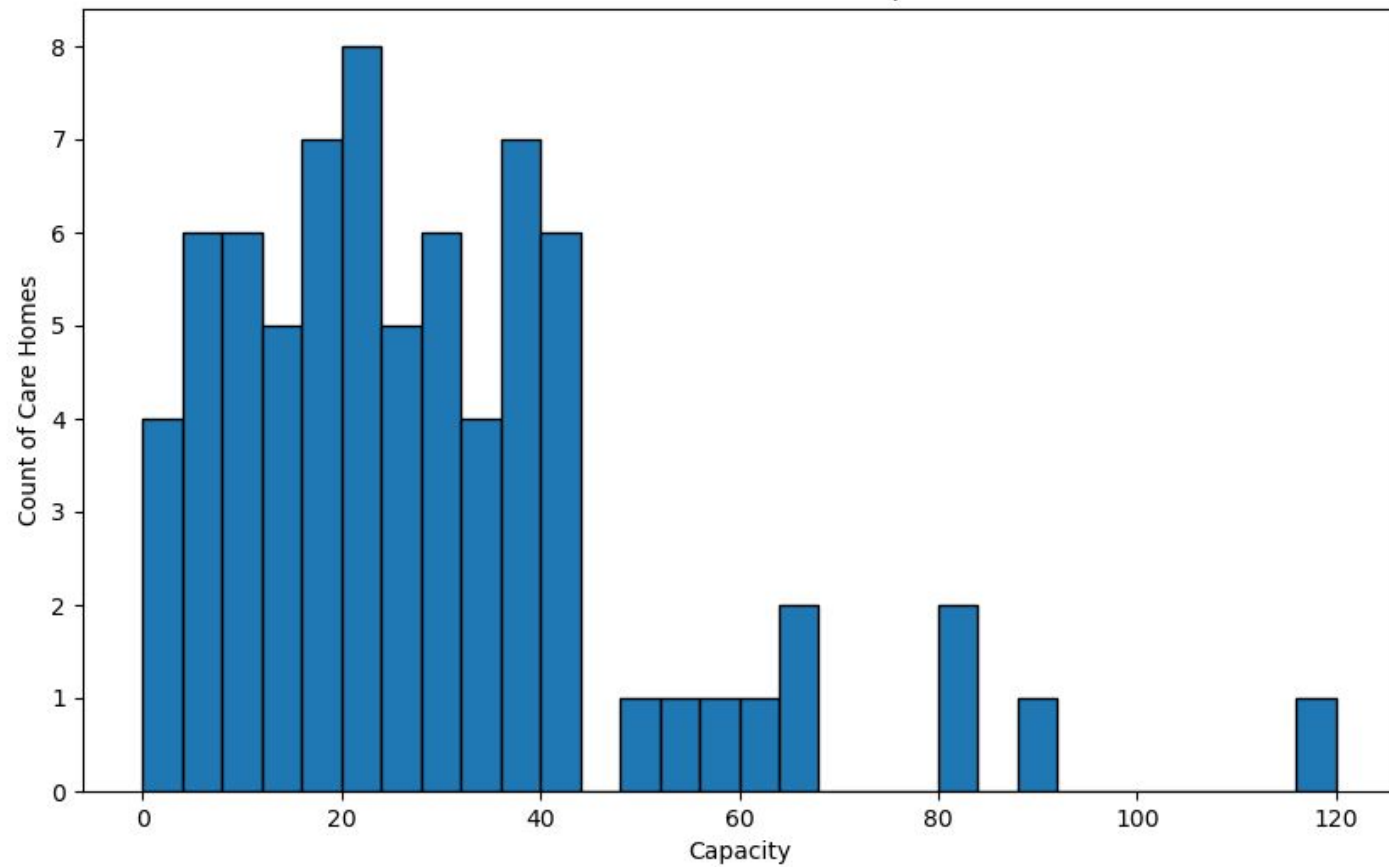
matplotlib

Charts created using Matplotlib

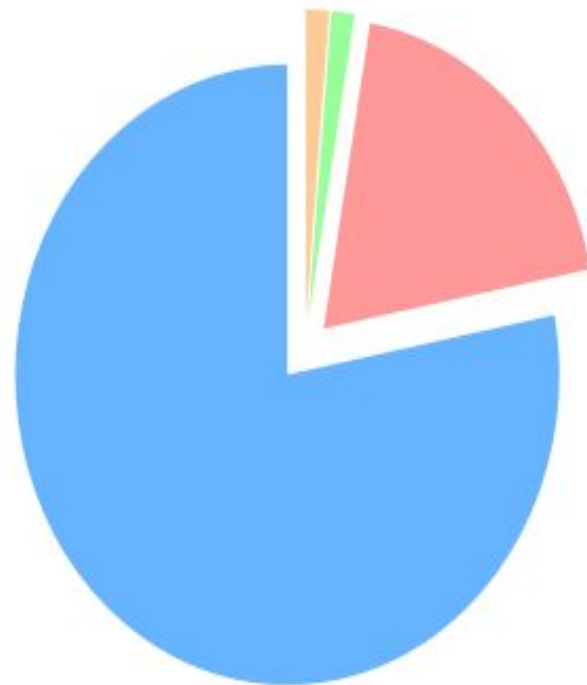
Distribution of Age Ranges in Care Homes



Distribution of Care Home Capacities



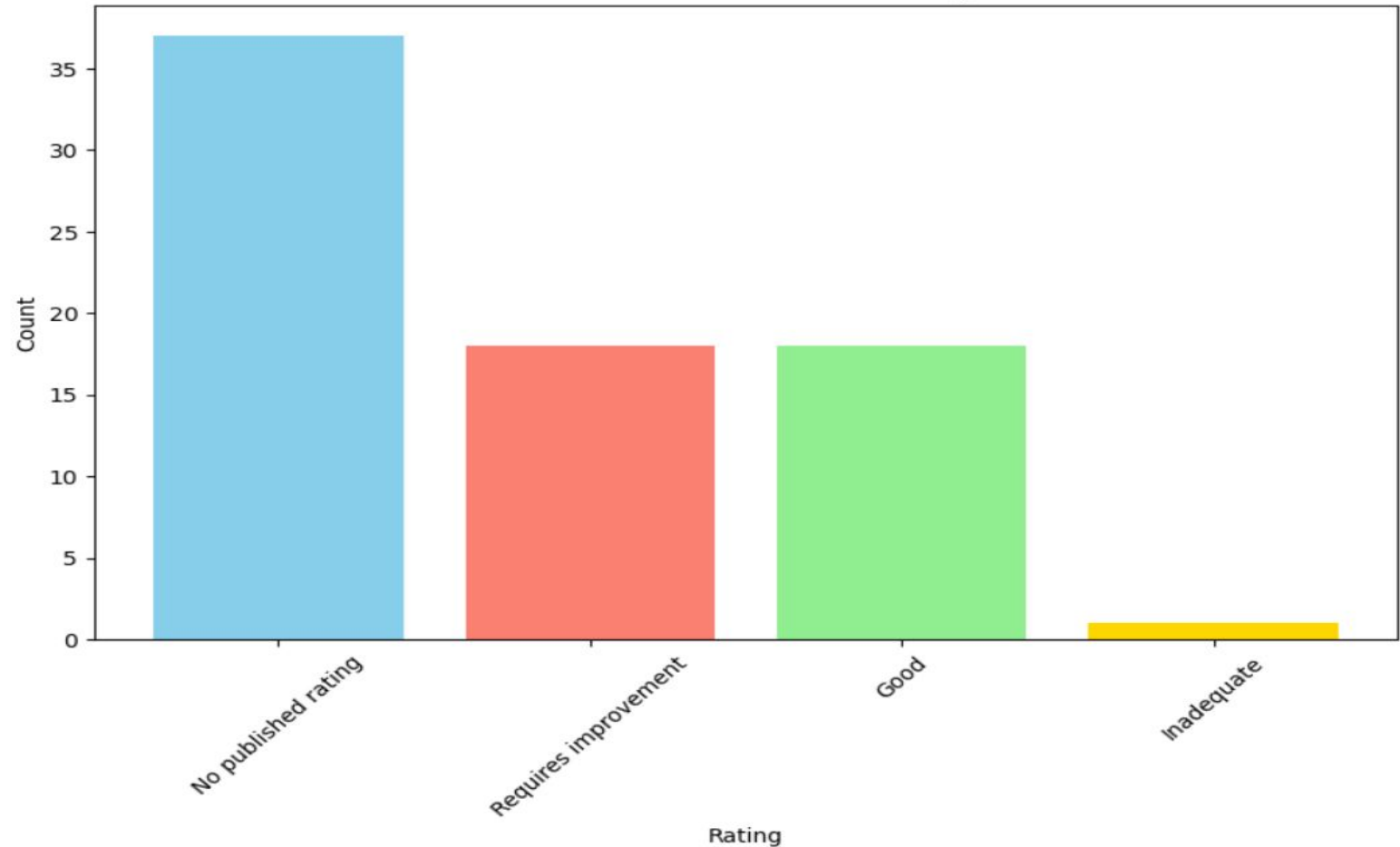
Proportion of Care Homes Providing Nursing Care



Categories

- No: 57 (78.1%)
- Yes: 14 (19.2%)
- Yes ADULT MENTAL HEALTH UNIT ONLY: 1 (1.4%)
- Yes (NHS Only): 1 (1.4%)

Distribution of Care Home Ratings



Live Demo