

# CU25\_MODEL\_DEVELOPMENT\_04\_ejemplo\_mapa

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#

CU25\_Modelo de gestión de Lista de Espera Quirúrgica

## 1 IV. Model development

En este anexo se incluye el código utilizado durante el desarrollo de los modelos incluidos en el caso de uso.

### 1.1 Ejemplo mapa simulación

```
[1]: Sys.setlocale(category = "LC_ALL", locale = "es_ES.UTF-8")
```

```
'es_ES.UTF-8/es_ES.UTF-8/es_ES.UTF-8/C/es_ES.UTF-8/C'
```

#### 1.1.1 Paquetes

```
[2]: library(readr)
library(tidyr)
library(dplyr)
library(sf)
library(leaflet)
```

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':

filter, lag

The following objects are masked from 'package:base':

intersect, setdiff, setequal, union

Linking to GEOS 3.10.2, GDAL 3.4.2, PROJ 8.2.1; sf\_use\_s2() is TRUE

### 1.1.2 Datos

```
[3]: pred_h_personas <- read_rds("pred_h_personas.rds")
      zonas <- st_read("CU_25_05_03_areasgeo.json")

      ## Filtros de la app

      esp <- "Traumatología"
      f <- sample(pred_h_personas$.index, size = 1)

      dmap <- zonas |>
        full_join(pred_h_personas |>
          tidyr::separate(id, into = c("zona", "especialidad"), sep = "\\.",
            ↪) |>
          filter(especialidad == esp,
            .index == f),
        by = c("DESBDT" = "zona"))
```

Reading layer `CU\_25\_05\_03\_areasgeo' from data source  
`/Users/emilio.lcano/academico/gh\_repos/\_transferencia/citizenlab/CitizenLab-  
Research-and-Development/casos\_urjc/notebooks/IV\_model\_development/25\_listas\_esp  
era/CU\_25\_05\_03\_areasgeo.json'  
using driver `GeoJSON'  
Simple feature collection with 11 features and 3 fields  
Geometry type: MULTIPOLYGON  
Dimension: XY  
Bounding box: xmin: -4.580315 ymin: 39.88284 xmax: -3.054265 ymax: 41.16397  
Geodetic CRS: WGS 84

### 1.2 Mapa

```
[4]: qpall <- colorQuantile("Blues", dmap$.value, n = 4)
      dmap |>
        leaflet() |>
        addTiles() |>
        addPolygons(color = ~qpall(.value),
          fillOpacity = 0.8,
          weight = 1,
          popup = ~paste(round(.value), "personas"),
          label = ~DESBDT) |>
        addLegend("bottomright", pal = qpall, values = ~.value,
          title = "Pacientes (cuartil)",
          opacity = 1
      )
```

HTML widgets cannot be represented in plain text (need html)