

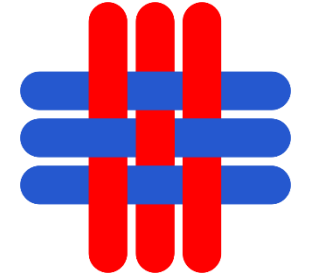


Web-based Technologies Employed in Integrated Data Visualisation



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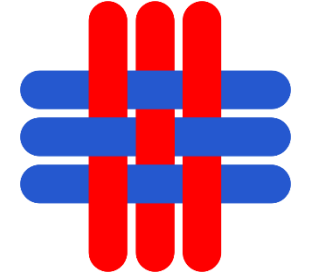
A Personalised Integrated Care Approach for Service Organisations and Care Models for Patients with Multi-Morbidity and Chronic Conditions



Data visualisation for clinicians

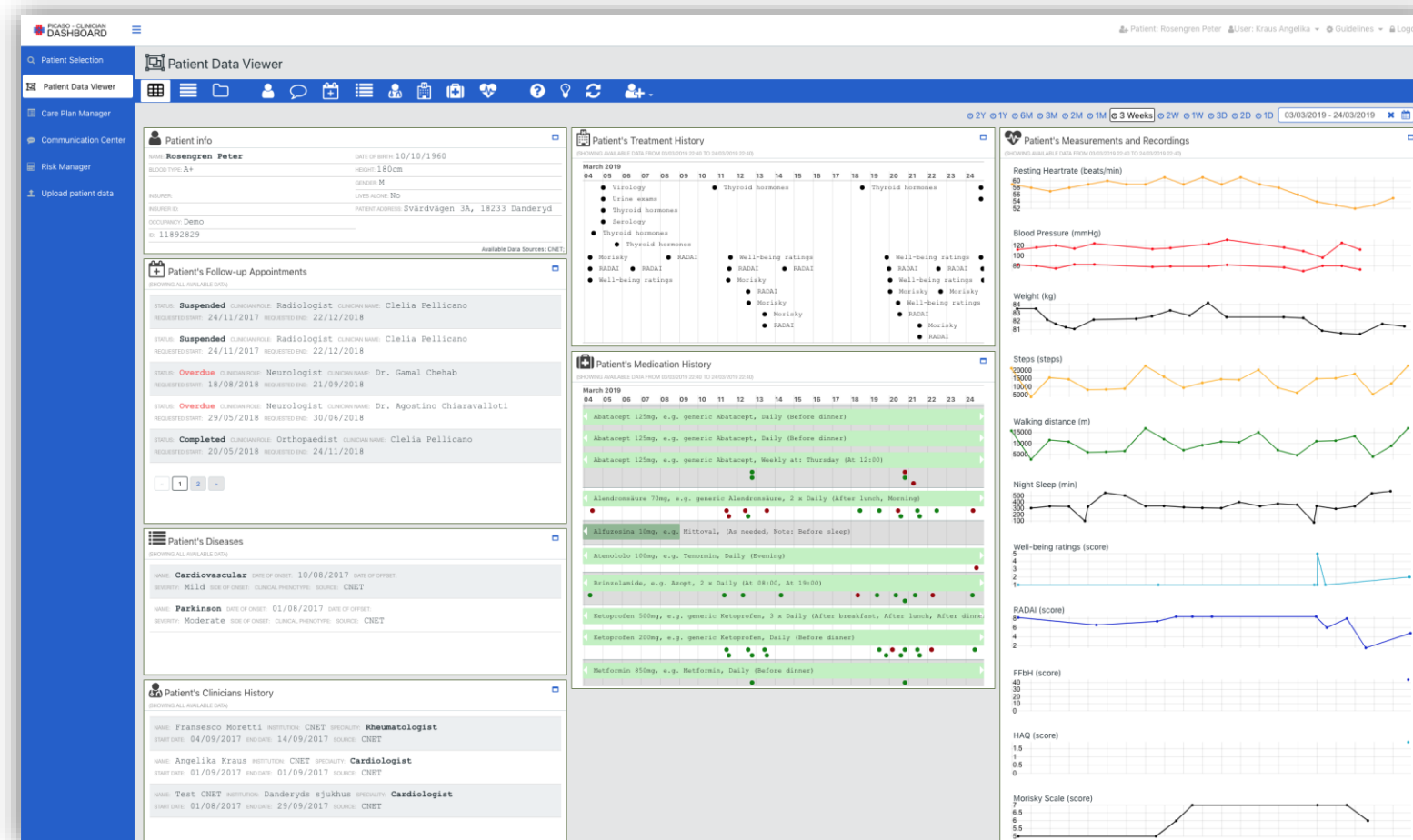
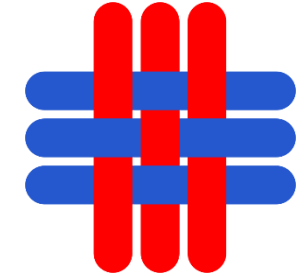
- Part of Clinician Manager
 - Patient Data Viewer
 - Data Resource Browser
- Overview of patient's status in a short time (time limited per patient's visit)
- Data from different sources
- Policy filtered, secure
- Compare different values on the same timeline
- Responsive
- Web based
- Data for different Time periods

Technologies, open source tools

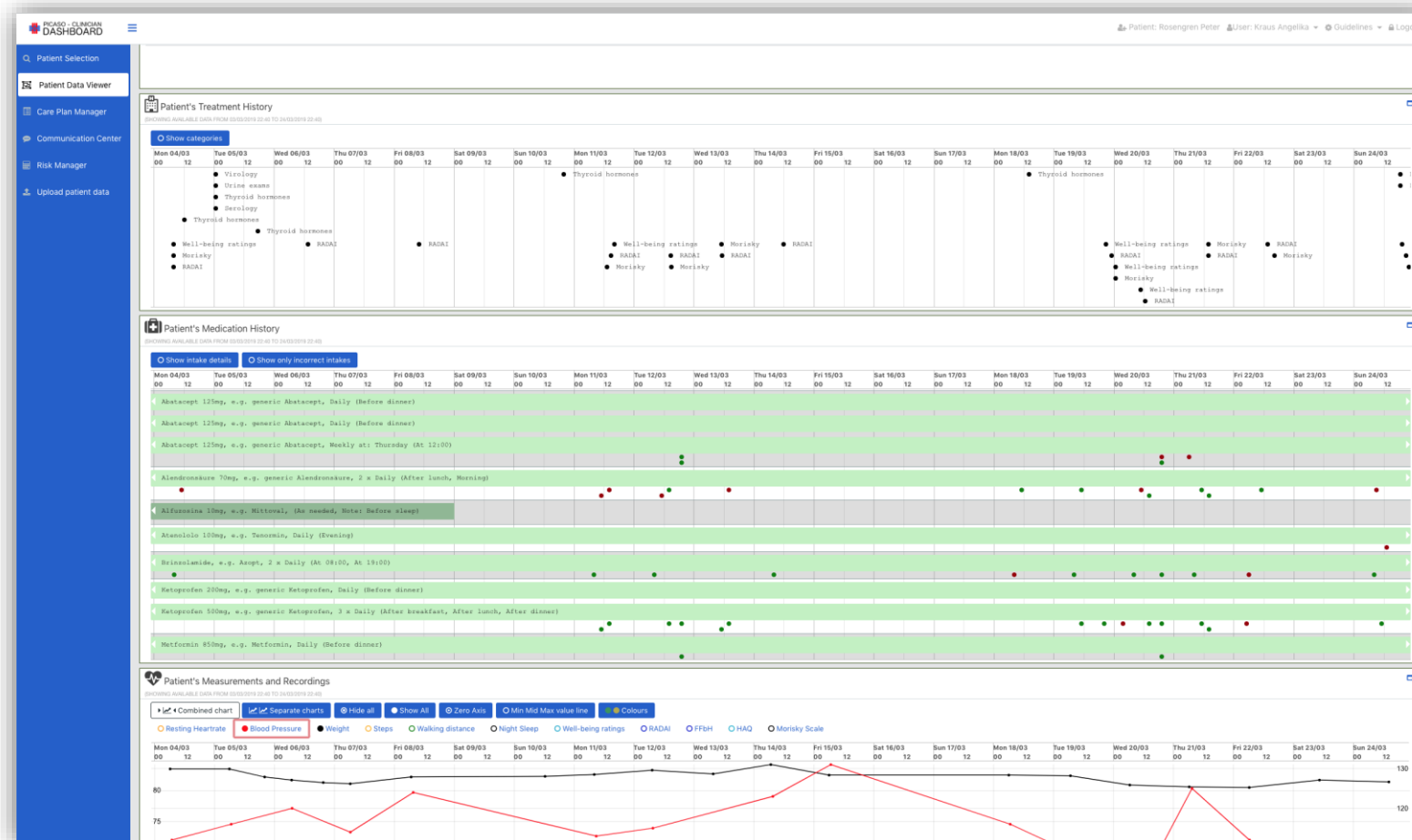
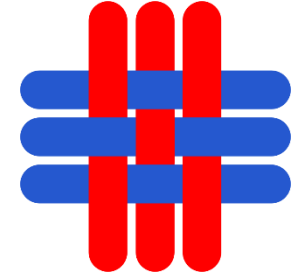


- Angular 4, TypeScript
- Vis.js, ng2-vis
- D3.js, NVD3, ng2-nvd3

Patient Data Viewer – Compact View

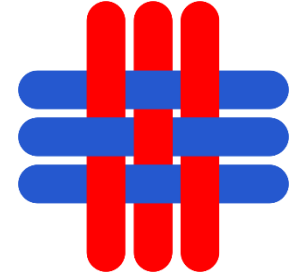


Patient Data Viewer – Full View



Tabular data

- Patient info
- Follow up appointments
- Leave of Absence
- Diseases
- Clinicians



Patient Data Viewer

Grid icons | Profile icon | Calendar icon | List icon | Person icon | Building icon | Hospital icon | Heart icon

Refresh icon | Add person icon

Patient info

NAME: Rosengren Peter	DATE OF BIRTH: 10/10/1960	INSURER:	LIVES ALONE: No
BLOOD TYPE: A+	HEIGHT: 180cm	INSURER ID:	PATIENT ADDRESS: Svärdvägen 3A,
ID: 11892829	GENDER: M	OCCUPANCY: Demo	18233 Danderyd

Patient's Leave Of Absence Messages

(SHOWING ALL AVAILABLE DATA)

Sort by: Ongoing status | From | To | Message | Requester Name | Requester Role | Source

STATUS: Past	FROM: 21/01/2019	TO: 24/01/2019
MESSAGE: Out traveling in Europe.	REQUESTER NAME: Peter Rosengren	REQUESTER ROLE: patient SOURCE: CNET
STATUS: Past	FROM: 08/10/2018	TO: 11/10/2018
MESSAGE:	REQUESTER NAME:	REQUESTER ROLE: patient SOURCE: CNET
MESSAGE:	REQUESTER NAME:	REQUESTER ROLE: patient SOURCE: CNET

Patient's Diseases

(SHOWING ALL AVAILABLE DATA)

Sort by: Name | Date of Onset | Date of Offset | Severity | Side of Onset | Clinical Phenotype | Source

NAME: Cardiovascular	DATE OF ONSET: 10/08/2017	DATE OF OFFSET:
SEVERITY: Mild	SIDE OF ONSET:	CLINICAL PHENOTYPE: SOURCE: CNET
NAME: Parkinson	DATE OF ONSET: 01/08/2017	DATE OF OFFSET:
SEVERITY: Moderate	SIDE OF ONSET:	CLINICAL PHENOTYPE: SOURCE: CNET

Patient's Follow-up Appointments

(SHOWING ALL AVAILABLE DATA)

Sort By: Status | Clinician Role | Clinician Name | Requested Start | Requested End | Follow Up Date | Source

STATUS: Suspended	CLINICIAN ROLE: Radiologist	CLINICIAN NAME: Clelia Pellicano	REQUESTED START: 24/11/2017	REQUESTED END: 22/12/2018
HANDOVER COMMENT: cloning	REQUESTED DIAGNOSTICS:	NOTE FOR PATIENT: bla1	SOURCE: CNET	
STATUS: Suspended	CLINICIAN ROLE: Radiologist	CLINICIAN NAME: Clelia Pellicano	REQUESTED START: 24/11/2017	REQUESTED END: 22/12/2018

Patient's Clinicians History

(SHOWING ALL AVAILABLE DATA)

Sort by: Name | Institution | Speciality | Start Date | End Date | Source

NAME: Francesco Moretti	INSTITUTION: CNET	SPECIALITY: Rheumatologist
START DATE: 04/09/2017	END DATE: 14/09/2017	SOURCE: CNET
NAME: Angelika Kraus	INSTITUTION: CNET	SPECIALITY: Cardiologist
START DATE: 01/09/2017	END DATE: 01/09/2017	SOURCE: CNET
NAME: Test CNET	INSTITUTION: Danderyds sjukhus	SPECIALITY: Cardiologist
START DATE: 01/08/2017	END DATE: 29/09/2017	SOURCE: CNET

Timeline Views

- Medication prescriptions and Intakes
- Treatments
 - Imaging
 - Lab tests
 - Psychological tests
 - Functional diagnostics
 - Patient reporting
 - Questionnaires
- Preview details
 - Questionnaire answers
 - Lab-test PDF
 - Imaging JPG, PNG
 - Downloadable attachment

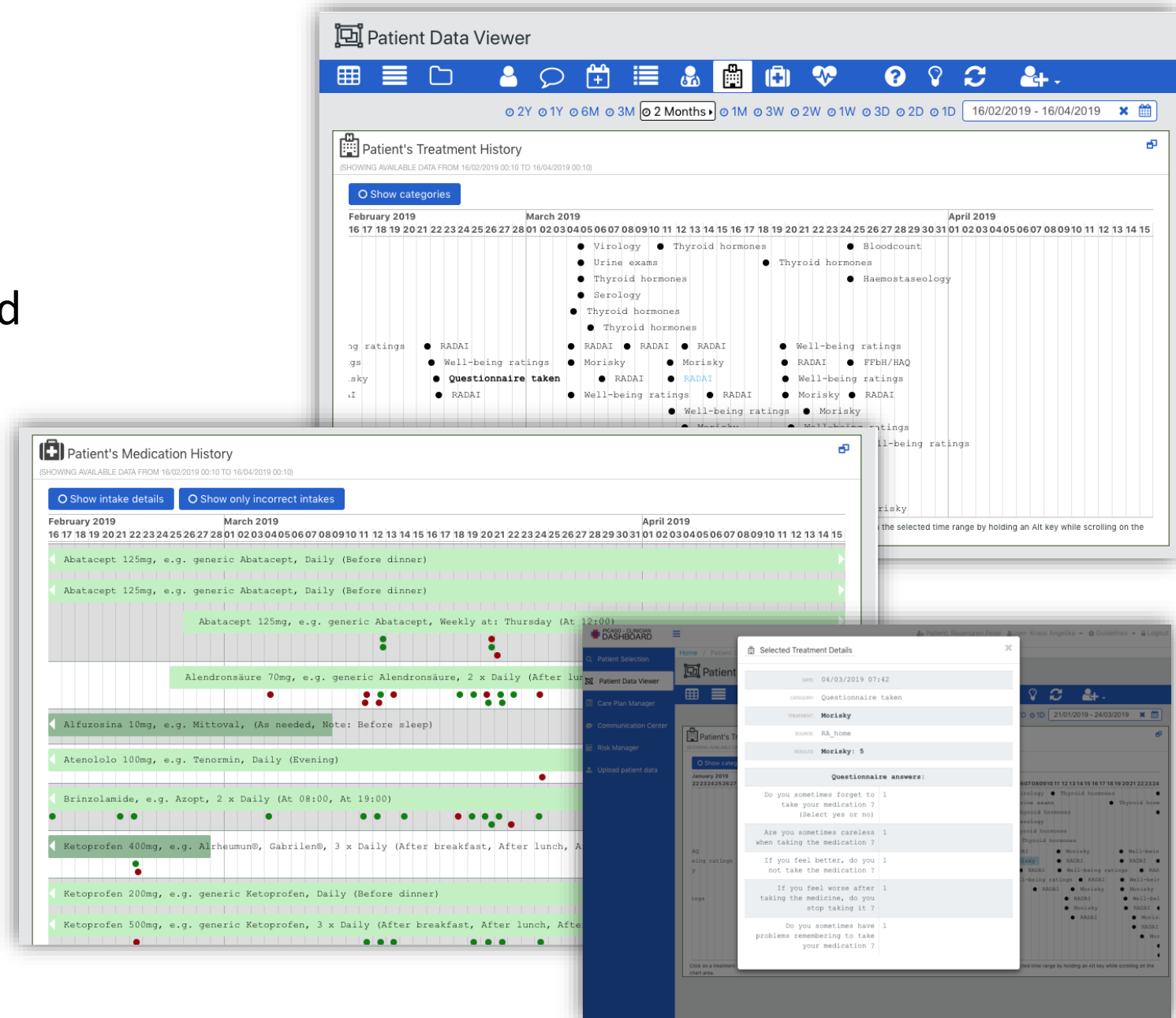
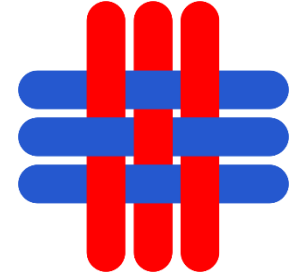
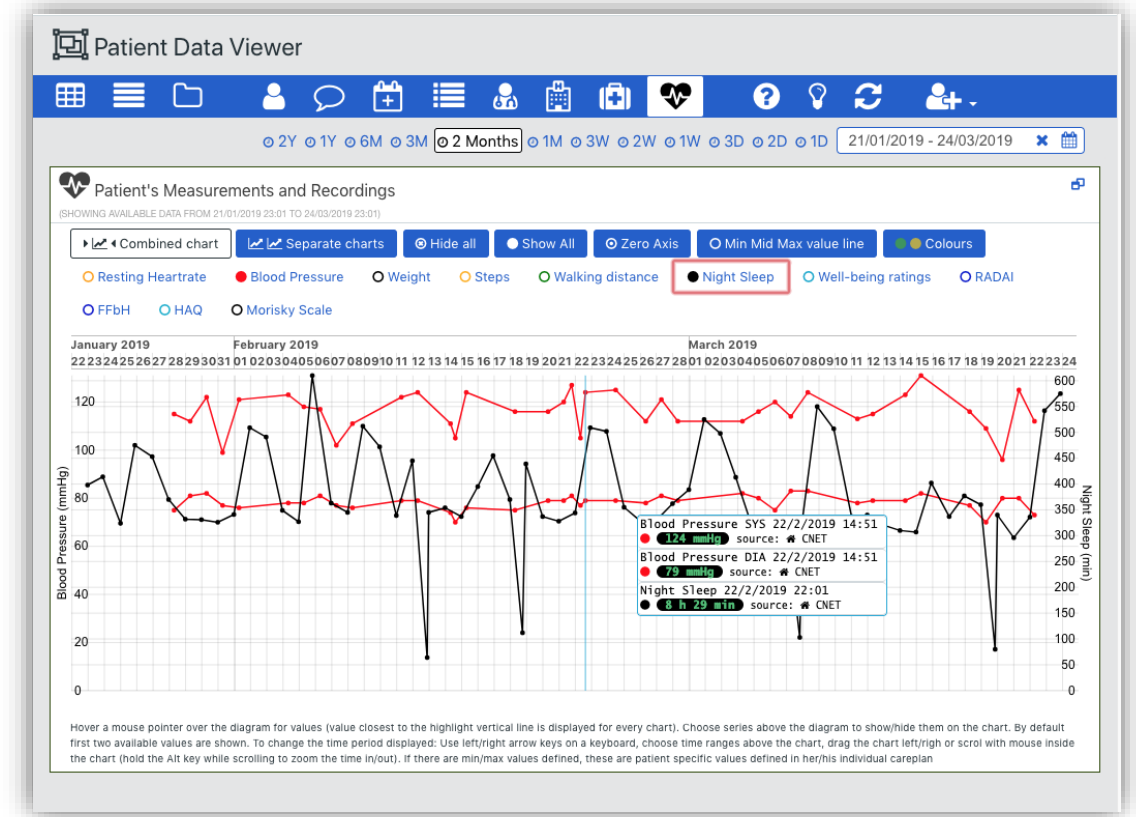
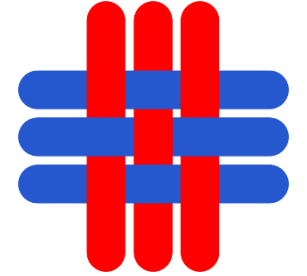


Chart views



- Comparison and Separate charts
- Home monitoring
 - Blood pressure
 - Resting heartrate
 - Activity
 - Weight
 - Night sleep
 - ...
- Questionnaires results
 - FFbH
 - RADA1
 - Morisky
 - HAQ
 - Well-being
 - ...

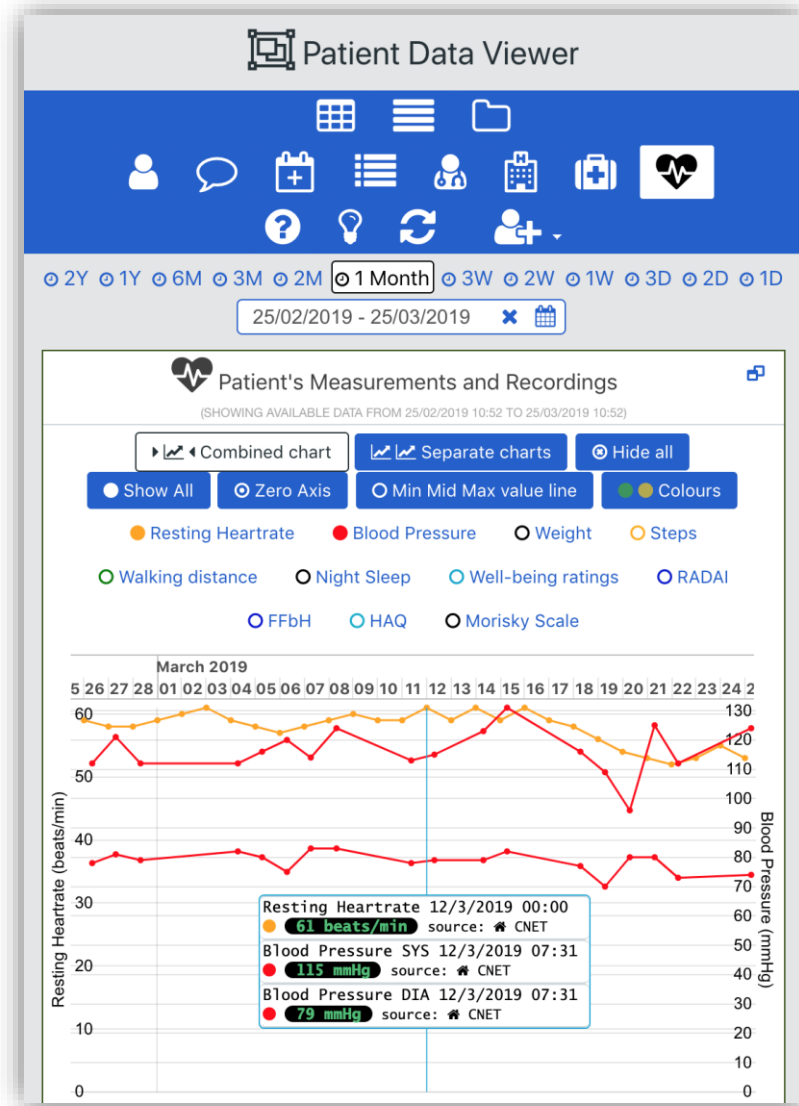
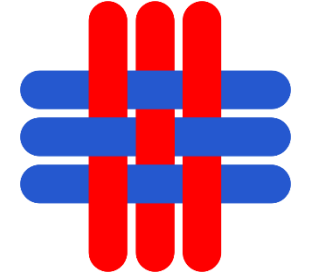




Future work

- Update to the newer Angular components
- Out of scope of the project
 - User profiles
 - Different default views for different roles
 - Internationalisation

Demo Time



Thanks for your attention!

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689209.

