

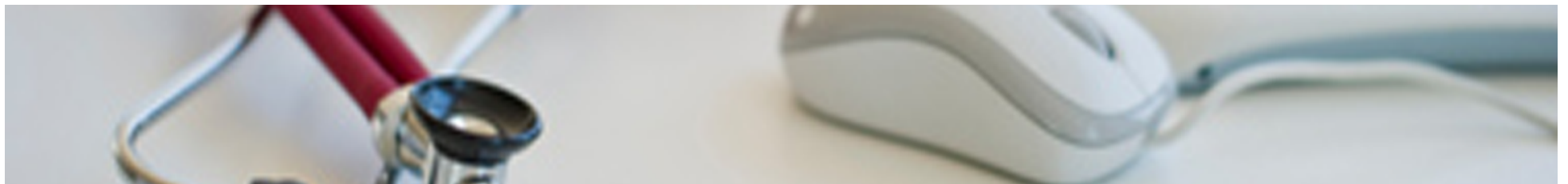


Stephen Hope
Business Development Manager
Docobo Limited



Evolving
Telehealth
Technology


**Data, Information and Optimised Care
Delivery**



Docobo Company Overview

- UK company formed 2001 – Digital Health Company
- Docobo Digital Health Solutions
 - ArtemusICS – Population Health Analytics
 - Identification and management of the Integrated Care needs of population
 - doc@HOME Telehealth
 - Remote Monitoring of patients inside/outside of hospital
- Safe, Secure and Robust Digital platform
 - Telehealth System is a Class I Medical Device, CarePortal is Class IIa
 - N3 (NHS Intranet)
 - Information Governance ITK – 100% Level 3, CAG Approved
- NHS Procurement
 - GCloud 7&8 and ESCO Frameworks
- UK Design and Manufacture – UK jobs, UK economy
- Current Status
 - 30+ NHS organisations using doc@HOME, including Barnsley, Bassetlaw, Nottingham, Doncaster , Essex, Gloucestershire
 - Managed service 350,000 population in Sussex for Integrated Care

21st Century Challenges- Complexities and fragmented care



Multiple chronic conditions, complications, longevity combined with frailty and resilience, multiple medications, intensive care needs (health [physical and mental] and social care), social isolation suffered by people young and old anytime anyplace.

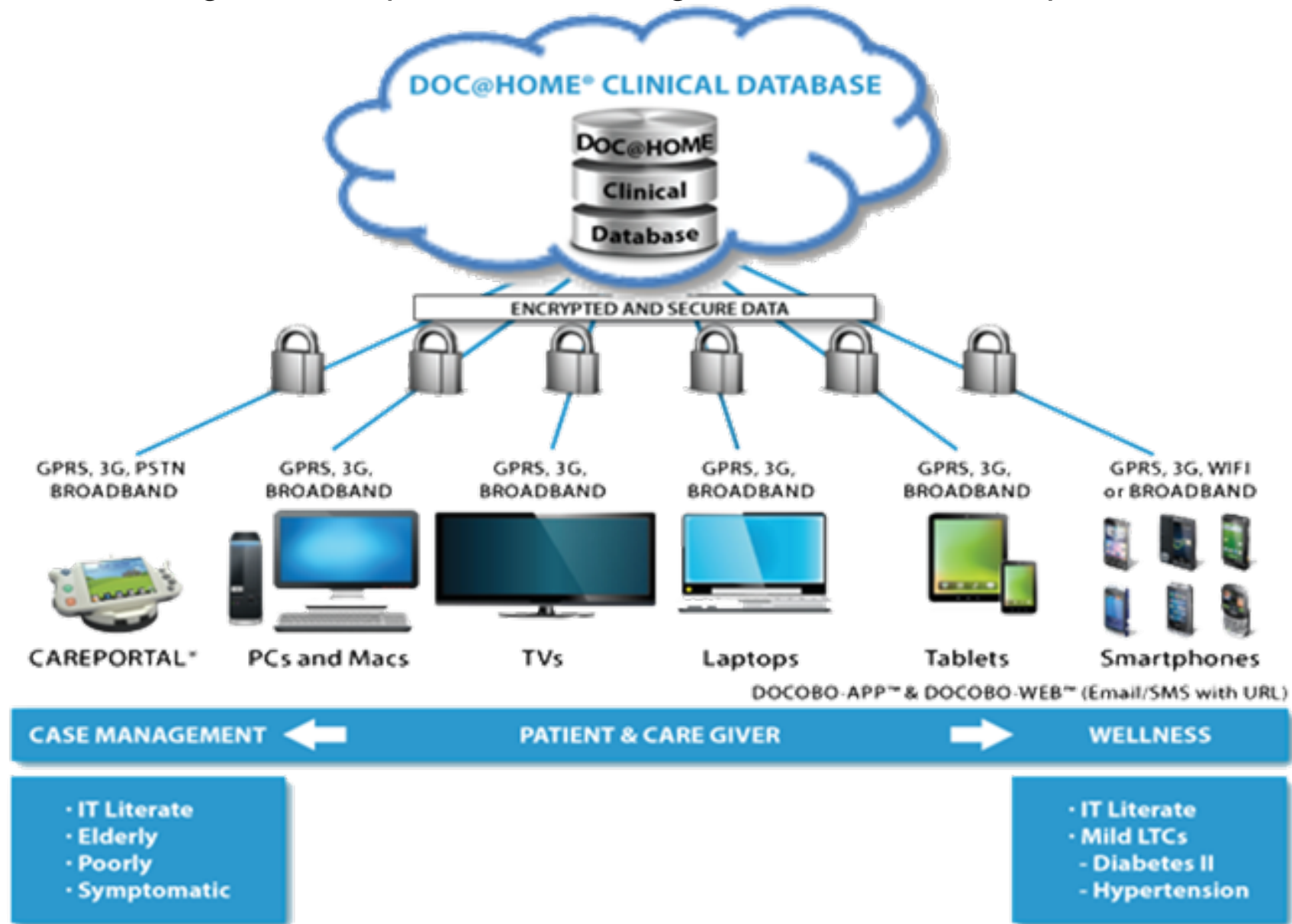
Addressing the Challenges – the Four Elements

- Self Management
- Care and Treatment
- Early Intervention
- Prevention

Self Management

DOC@HOME® – Telehealth service

for management of patients with long term conditions or episodic events



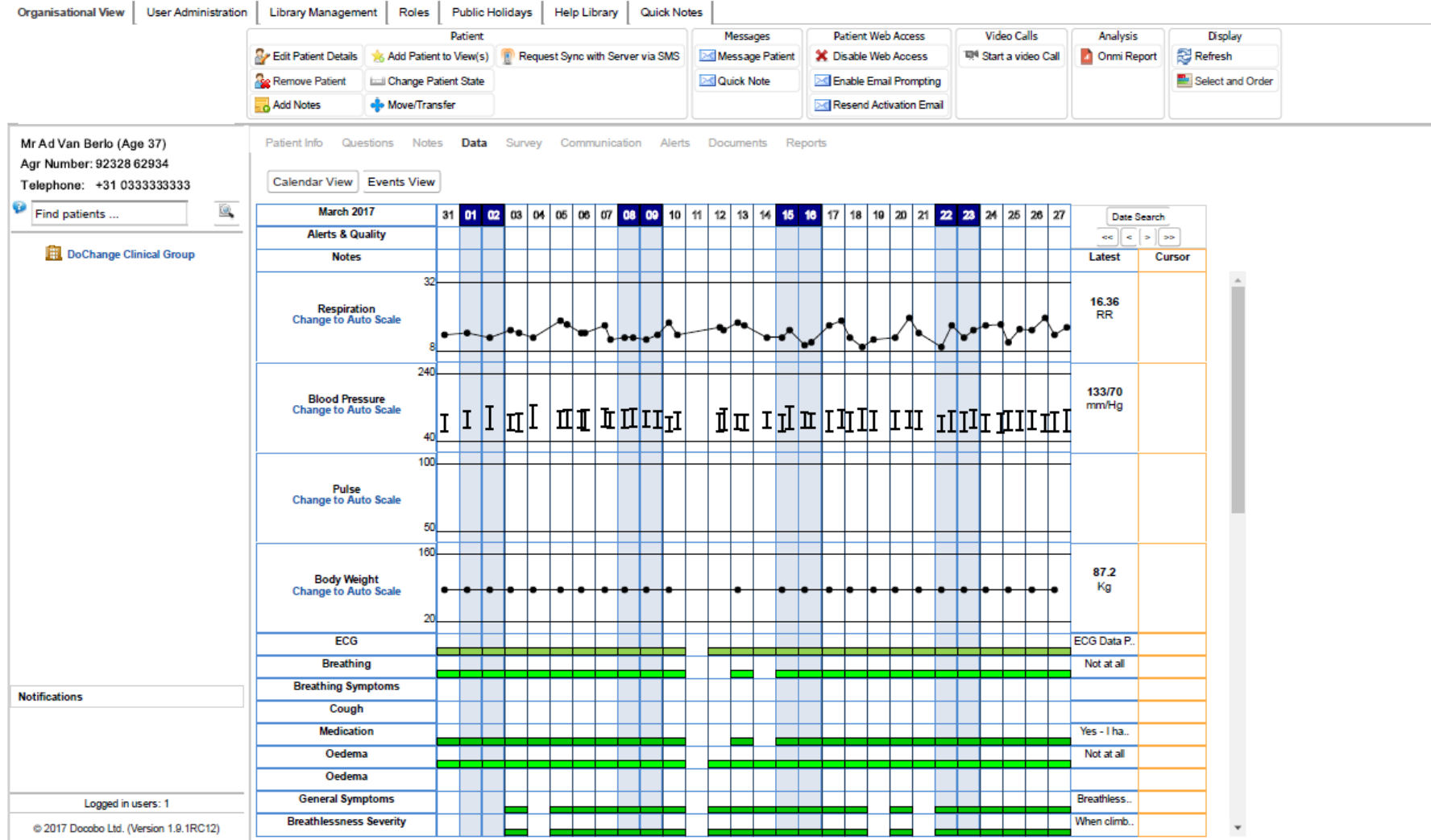
CAREPORTAL® – Patient Support



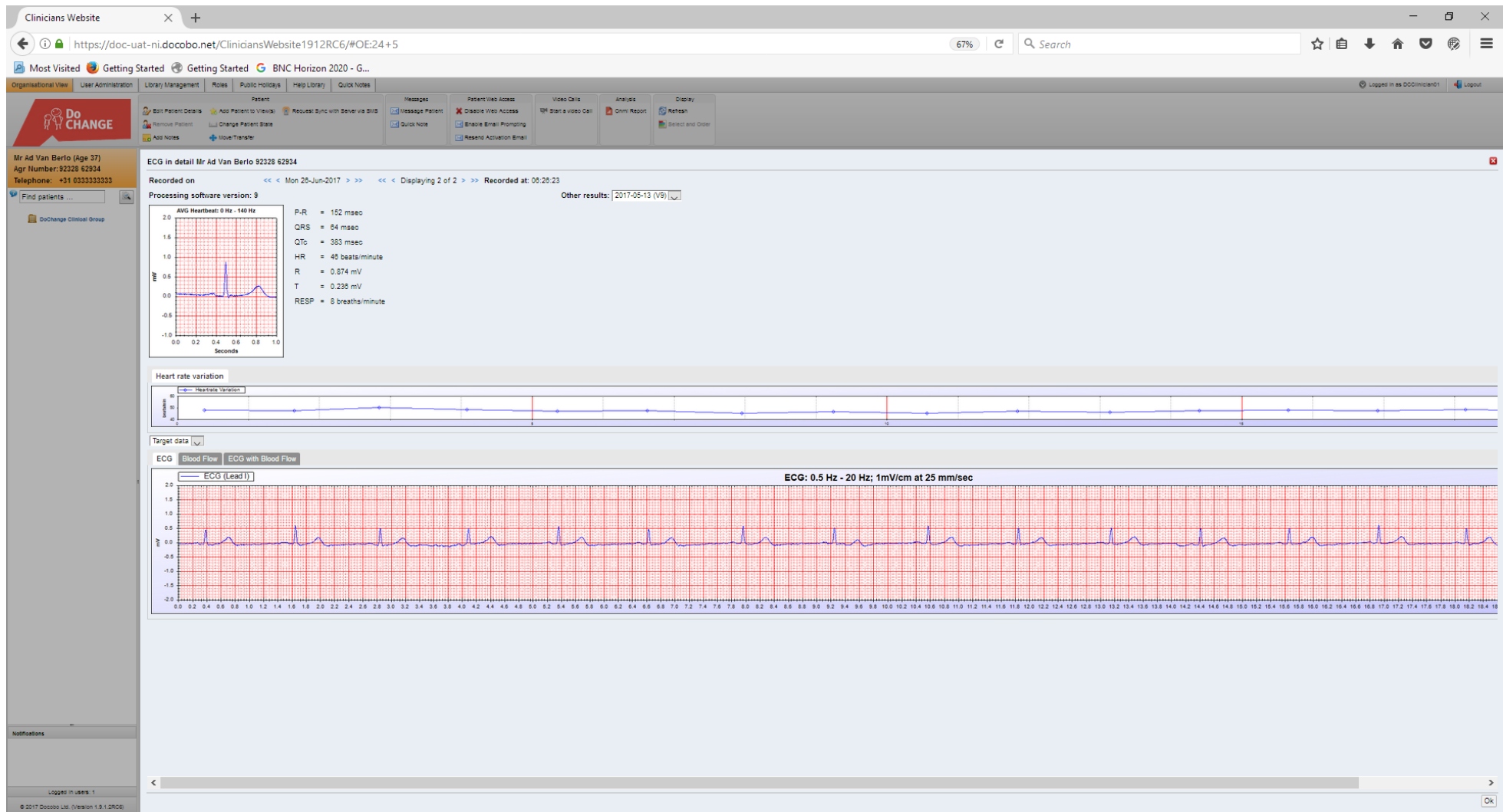
- **Monitoring LTC's – Respiratory, Cardiac, Diabetes, etc**
- **Motor Neurone Disease (Aintree)**
- **Mental Health**
- **MSK**
- **Cancer – Symptom management, Home White Blood count, post treatment follow up PROMS**
- **Various PROM's/PREM's**
- **Video conferencing**
- **Care Homes = 60-70% reduction in admissions**
- **Self Help Educational content**
- **Text and Video Messages**
 - Ensures contact is maintained
 - Educational videos

Care and Treatment

Clinical Data – Clinicians Portal



Clinicians Portal - Patient Lead I ECG view

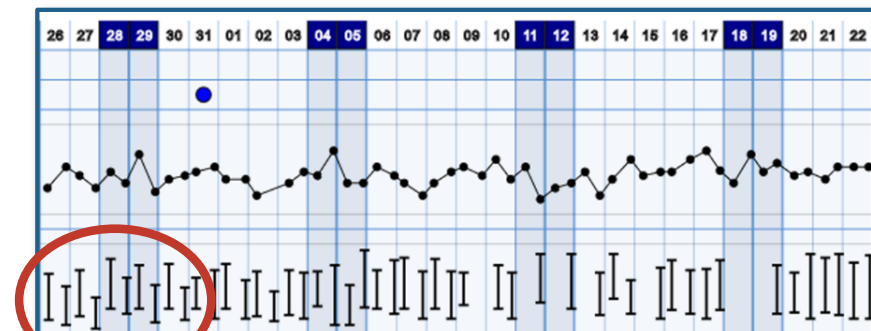
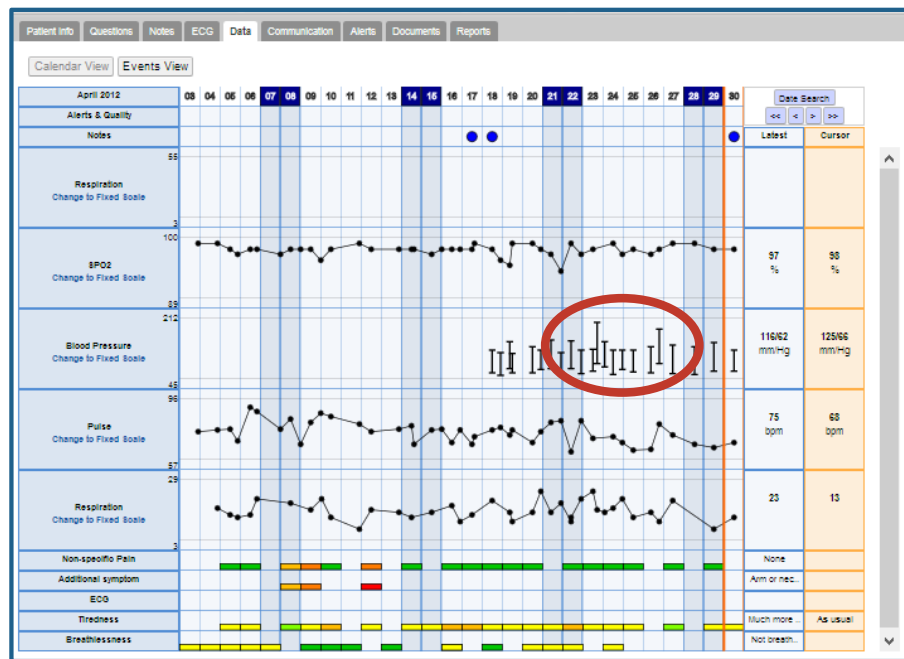


Early Intervention

Trend Analysis

Atypical Blood Pressure induced Falls

Female, age 91 – Mild CHF – Hypertension - Falls



Atypical alternating Blood Pressure
Falls occurred only when BP was high
Ramipril adjusted
Alternating BP reverted to variable
Seizures/Falls ceased



Stabilised Blood Pressure with in surgery iatrogenic event

Prevention

Disease Risk Identification
Health and Wellbeing

Disease Risk Identification

ARTEMUS-ICS provides Population Health Intelligence for optimised assessment of the local and/or multi-local health economy.

ARTEMUS-ICS System Overview

Patient-lists for service targeting and evaluation

Search for a single patient

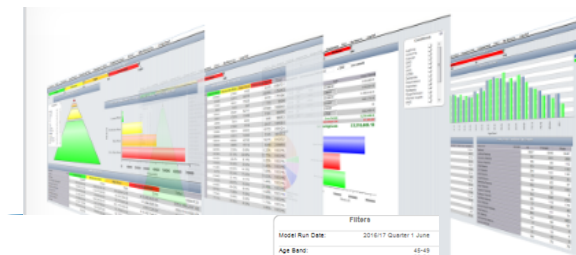
NHS Number / Patient ID

Manage a Cohort

- View Patient Level Data
- View GP Practice Lists
- Create and Manager Custom Lists

Enter Cohort Manager

Patient level analysis



Cohort level analysis

List: <div>query results</div>	View: <div>History of Falls</div>	Export to CSV	Copy all patients	Clear																							
PatientID	NHSNumber	DOB	Age	Sex	History of Falls Risk Factor Count	History of Falls Risk Factor Score	History of Falls	Cognitive Impairment	Dementia	Diabetes	Falls Meds Risk	Fragility Fracture	Geriatrician Disorder	Hypertension	Instability	In a Home	Incontinence	Lives Alone	Mobility Problems	Parkinson's	Polypharmacy 4 plus	Rheumatoid Arthritis	Stroke	Visual Impairment	Weakness	Practice	CCG
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Health and Wellbeing

Integrating Lifestyle Data

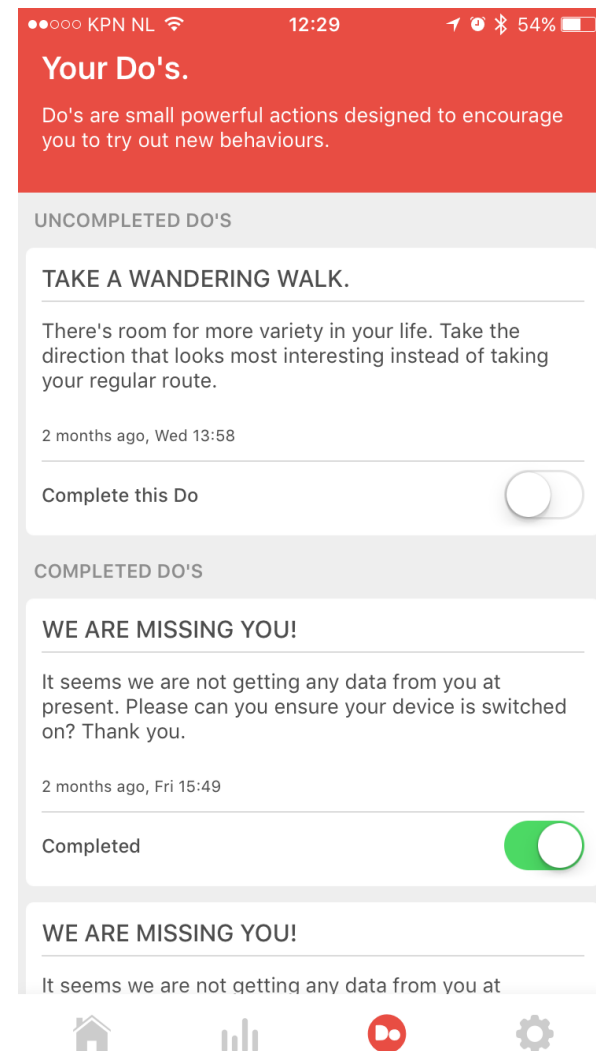
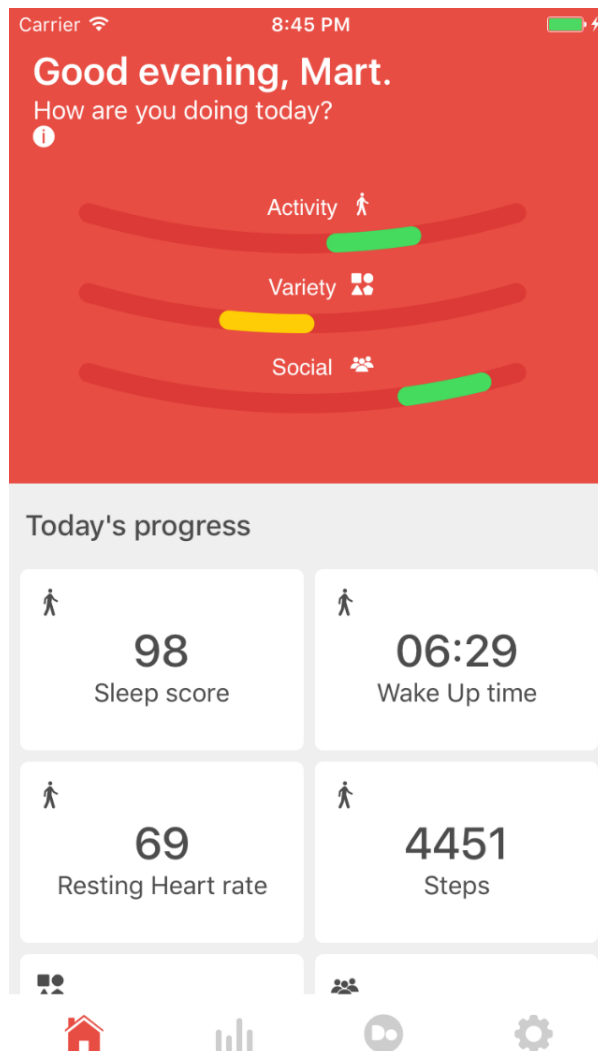


The Do CHANGE Project

The primary goal of the Do CHANGE project is to develop a health ecosystem for integrated disease management for hypertensive and cardiac patients based upon **behaviour change**.

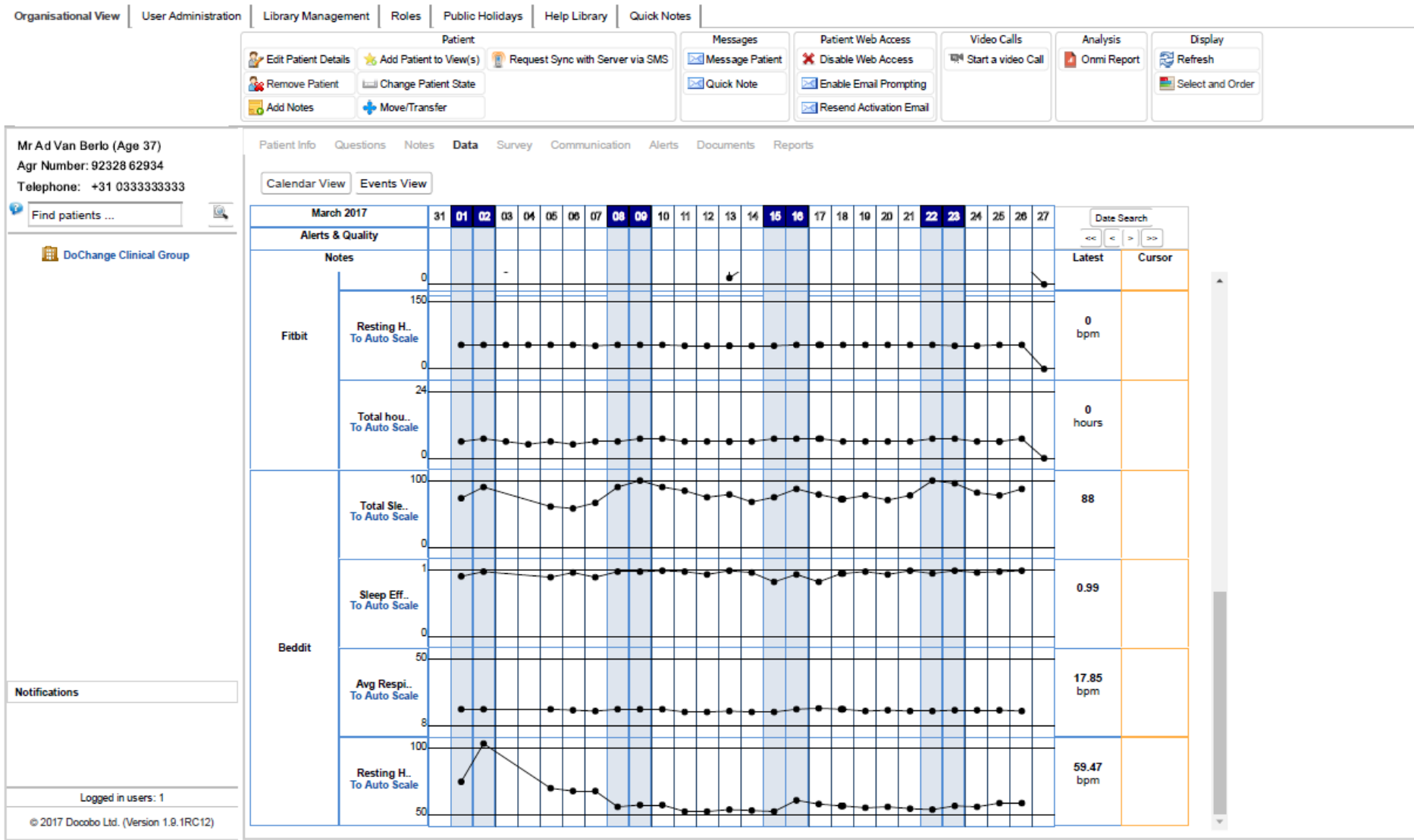
This ground breaking system – which will be adaptable for other health and social issues – gives people access to a set of personalised health services that directly respond to a range of measurements and situations.

Lifestyle Data – Vire App



Lifestyle Data

Clinicians Portal



The Integrated Care Environment

**Introducing HealthIoT – the enabler for the
integration of the Four Elements to form
the Integrated Care Environment for
Optimised Care Delivery**

TIHM for dementia

Using technology to improve the quality of life for people with dementia

How does the trial work?

- ▶ Technological devices such as sensors, apps and trackers installed in people's homes
- ▶ Testing remote monitoring of health and wellbeing using data combinations gathered via Internet of Things
- ▶ Evaluation of results and share health technology learning to support other long term conditions



Integrated Care Environment - Outcome Impacts

- Patients empowered to self manage their conditions in their daily lives, home, work, anytime anywhere
- Life style enhancement improving health and wellbeing
- Clinician access to real time data enhanced with lifestyle and environmental data
- Early elective intervention
- Improved care planning and management
- Advances clinical knowledge

Resource management

- Reduces hospital admissions and in-stay days
- Releases resource for other services
- Reduces A&E attendances
- Optimised outpatient appointments

Patients.....

20

60

120

Releases...

€ 0.7 M

€ 2.1 M

€ 4.2 M

Driving behavioural change - reducing the care burden –
keeping us going longer!