digitalhealth REWIRED
BIRMINGHAM 12-13 MARCH 2024

Headline Sponsors:

Graphnet Transforming Care
System C Connecting Care
tpp

Sharon Boundy

Director of transformation and digital, Frimley Health and Care ICB

INTEGRATED CARE STAGE

Stage Sponsor: tpp

CONNECTED CARE

2024

A proactive approach to remote monitoring using population health

Connected Care – Data driven, digitally enabled transformation

CONNECTED CARE

Population Health

Insight and intelligence at population and individual level supporting integrated and proactive care and evaluate the impact of interventions

System transformation approach

Integrated view of care

Shared care record (SCR) of individual's treatment and care that supports the delivery of high quality, appropriate and effective health and social care

Power of the eco-system

e.g. remote monitoring that uses all elements of Connected Care - identifying residents that can be supported at home, recordings reviewed by care teams via SCR, enabling residents to be better in control with clear evaluation of impact

Enabling self-care

Giving residents tools to manage their own health and wellbeing with support apps such as Sleepio, Healthier Together, GetUBetter

Underpinned by our objectives to integrate care around the resident, to move from reactive to proactive care and treatment and empowering our residents to better manage their own health and wellbeing

UTILISING DIGITAL TECHNOLOGY, ANALYTICS AND TRANSFORMATION

CONNECTED CARE

1

We can proactively target cohorts of patients, with a clear and actionable rationale, that can be delivered securely to relevant clinical and operational teams through our population health tools.

2

Remote Monitoring then enables cohorts to be managed effectively by maximises capacity, and improving safety and patient experience.

3

Embedded into the Connected Care shared record, all the readings are available to any professional in Frimley ICS.

Focus on improving outcomes

Strong leadership buy in and clinical ownership

Development of population health and digital tools

Robust information governance

Stakeholder engagement and service redesign

Evaluation and continuous improvement

Whole System Change

CONNECTED CARE

Unscheduled → **Scheduled** → **PROACTIVE**

1. Starting Well
We want all children to get the best possible start in life

2. Living Well
We want all people to have the opportunity to live healthier lives, no matter where in our system they live

3. Community Deals
We will agree with our residents, families and carers how we work together to create healthier communities

4. Our People
We want to be known as a great place to work, live, make a positive difference.

5. Leadership and Cultures
We will work together to encourage co-design, collaboration, inspiration and a chance to contribute.

6. Outstanding use of Resources
We will offer the best possible care and support where it is most needed in the most affordable ways

Remote Monitoring: Current Status

Frimley Health and Care

- Programme is clinically-led & driven. Through clinical population health leads, clinical leaders are building clinical networks, driving innovation & transformation.
- Patients can be enrolled into multiple interventions & escalate and de-escalate across pathways. Thresholds can be set at patient level to support personalised care.
- Alerts managed through remote monitoring services & when indicated, escalated to primary care or urgent care services.

Proactive Frailty	Care Homes	Long Term Conditions
Use John Hopkins Patient Need Groups (PNG) to segment our population into cohorts.	Each care home receives clinical monitoring hubs which are a certified medical device.	Extend digital capability and delivery approach to support diabetes and heart failure patients.
• 61 practices live with 7,000 patients actively monitored. • Started in Nov '22 & rapid progression to support winter pressures. • First area in the country to deploy PNG best practices. • Selected ~60k high risk patients steered by the ICS Medical Director, supported by the ICS clinical reference group.	• 34 care homes live with 950 patients actively monitored. • Started the programme to spot early deterioration. • A clinical monitoring hub device is setup on each floor of the care home & digitises Sp02, respiration rate, blood pressure, pulse & body temperature. • Baselines captured monthly with daily monitoring for a potentially deteriorating patient.	• 700 diabetic patients & 120 heart failure patients being actively monitored. • Pilots for disengaged diabetes patients in areas of deprivation and newly diagnosed patients. • Remote monitoring heart failure patients who are already on BHFT and FHFT caseloads. • Alerts managed by Heart Failure teams.

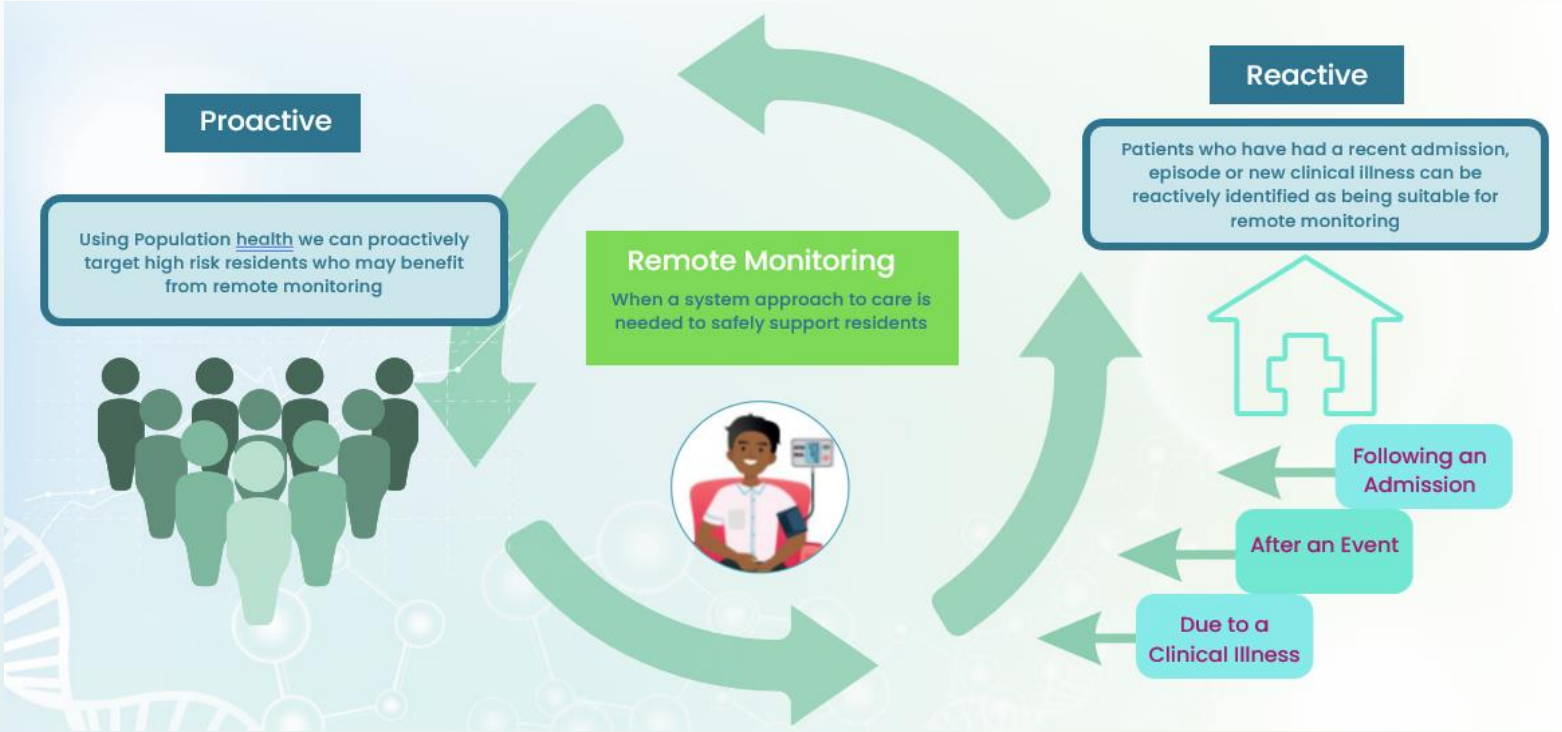
System Approach

Frimley Health and Care

Remote Monitoring supports our **highest risk residents** -

- **Proactively** by identifying them using Population Health
- Under the care of **specialist teams**, like Heart Failure or Diabetes
- As part of a **care pathway**, such as a Virtual Ward or Early Discharge Support
- At the **point of contact**, when the patient is deemed high risk and would benefit

Or, living in a **Care Home**



High Risk

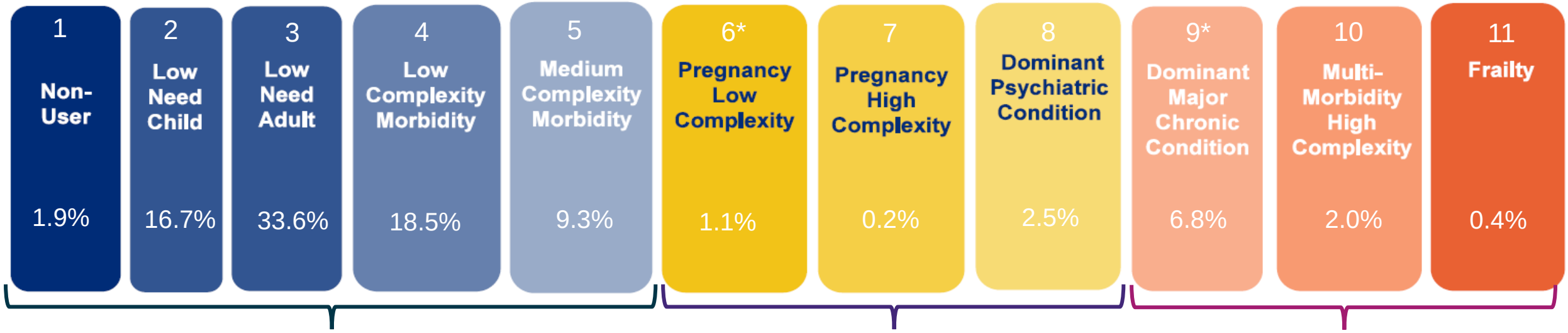
Standard package of care for Remote Monitoring

High Risk Acute

Increase frequency to support acute care e.g. Virtual Ward

High Risk +

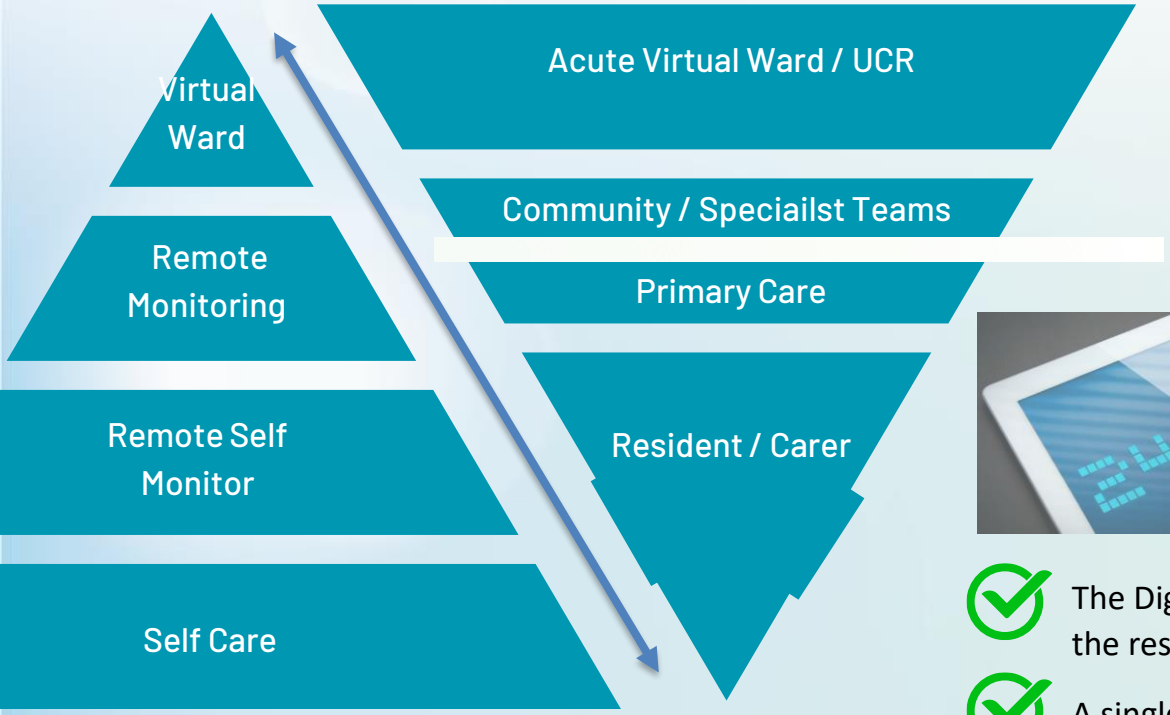
Health Needs



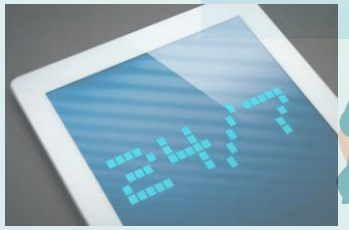
Health Needs

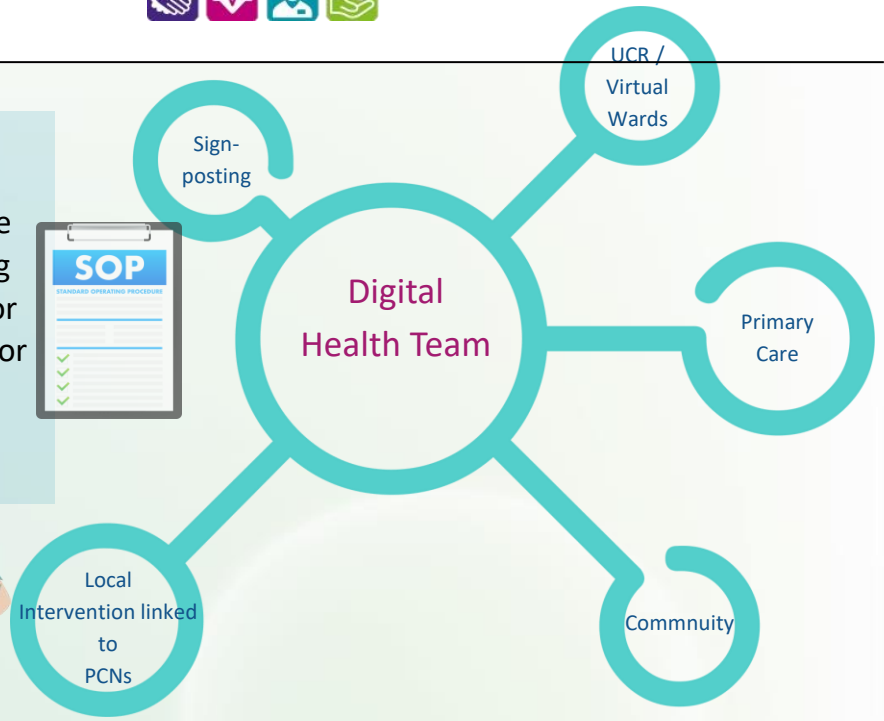
Clinical Model

Frimley Health and Care



Two Digital Health Teams are clinically led with an approximate breakdown of 1 nurse supporting 2500 patients, 1 care navigator for 909 patients and 1 care coordinator for 909 patients.





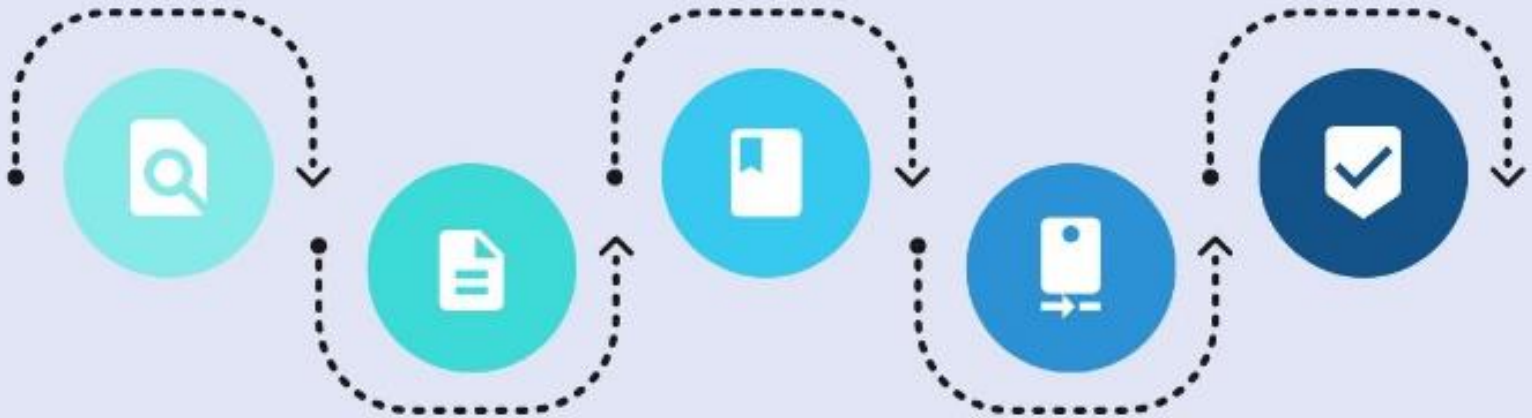
- The Digital Health Team continue to support the resident and the escalation point may change as the resident's needs change
- A single digital system allows residents to escalate up and down levels of care within the system
- Residents remain safe across transfer of care points as they are supported by the digital health care team using a single digital solution
- Frequency of remote monitoring may increase as the resident becomes more acutely unwell
- Once residents are self-actualised and well, they can move to remote monitoring without clinical intervention or self care

"It's made my life easier"

GP, Slough

PROCESS

CONNECTED CARE



1 - The Cohort

Connected Care Population Health identifies cohort of residents who will benefit most (High Risk PNG Groups 10 and 11)

2 - Introduction

Residents are sent an introductory text from their practice recommending they take part in the service

3 - Onboarding

The Digital Health Team contact residents by phone and explain the service

4 - Equipment

Residents are provided with a pulse oximeter, thermometer, blood pressure monitor and smart device if required

5 - Monitoring

The Digital Health Team review the respnses that residents send and make sure appropriate action is taken

Examples of Equipment needed:

Pulse Oximeter

Blood Pressure Monitor

Thermometer

Smart Device

Approximately 2000 alerts flag per week. The digital health team deal with around 98% of these.

WHAT DOES IT INVOLVE?

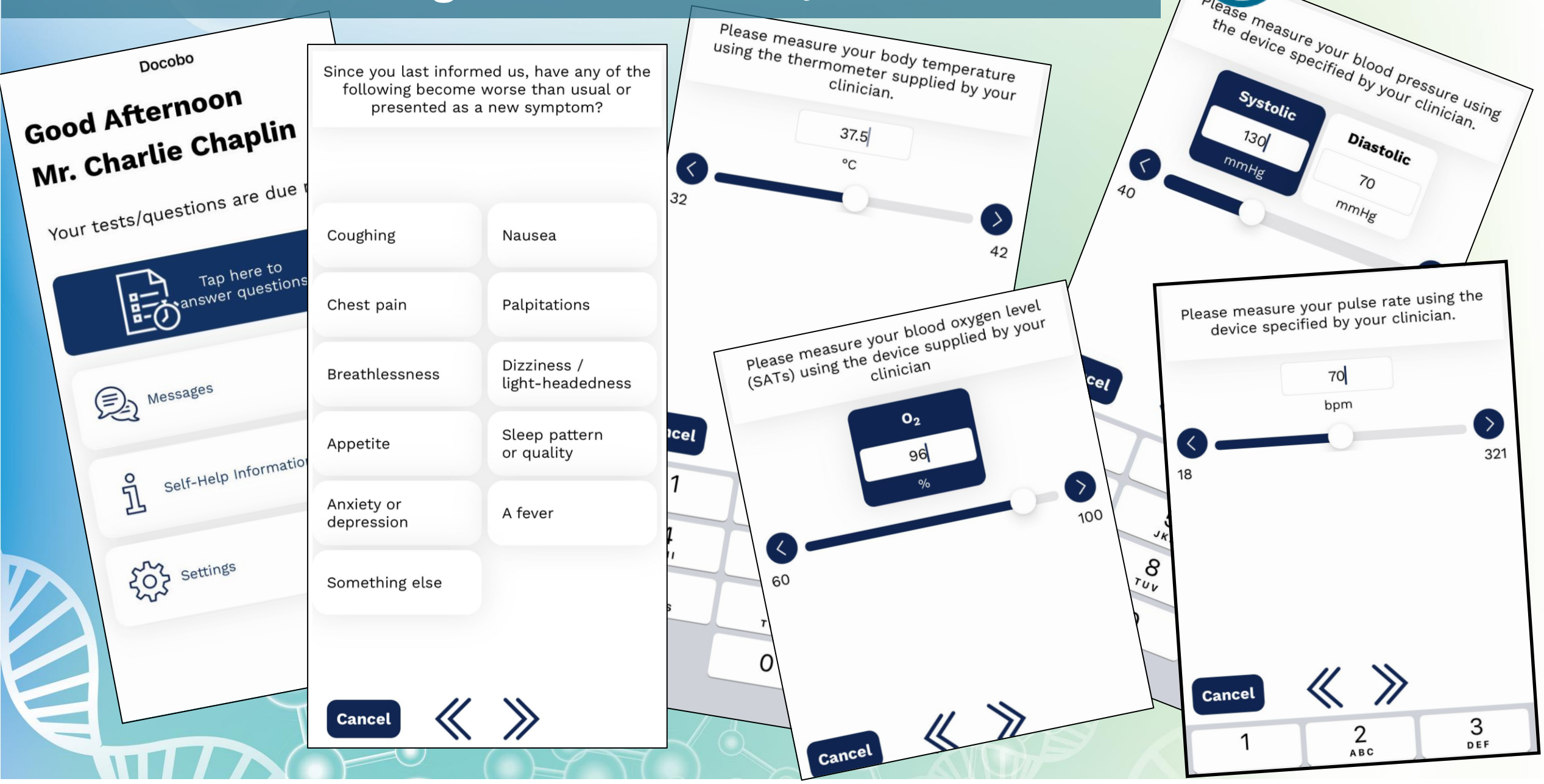
1. Residents answer questions on a weekly basis or when they feel unwell, covering clinical, mental health, social wellbeing and health promotion domains.

2. The questions will trigger RAG-rated responses which in the main can be dealt with by the **Digital Health Team**, a nurse led clinical team.

3. Where required the Digital Health Team may escalate to an appropriate service or intervention. All resident entered information is **available** to every clinician in the **Shared Care Record.**

Remote Monitoring *Resident Interface*

CONNECTED CARE

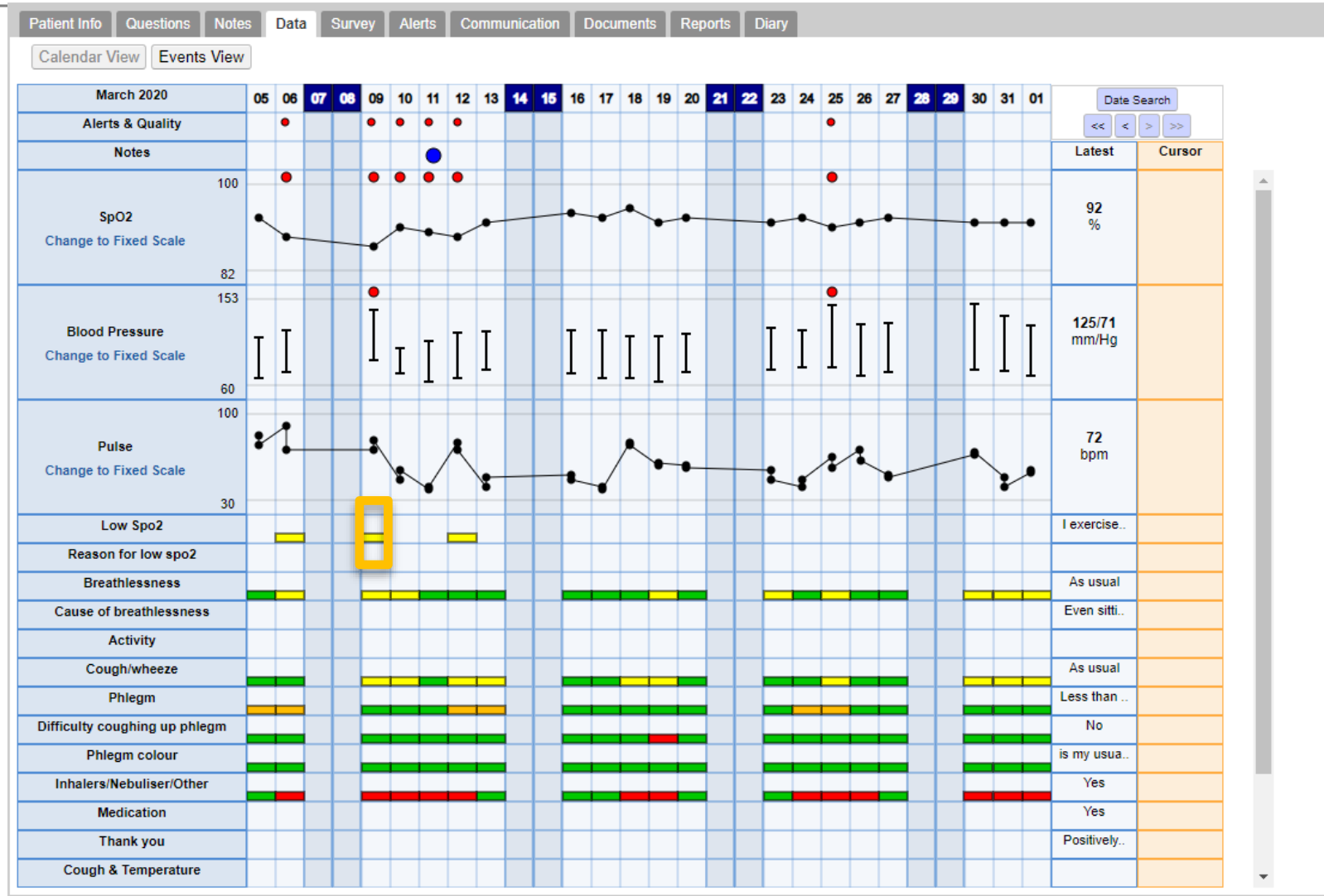


Clinician View

REMOTE MONITORING

Double clicking on a date column will highlight it and present a detailed summary of information input on that date.

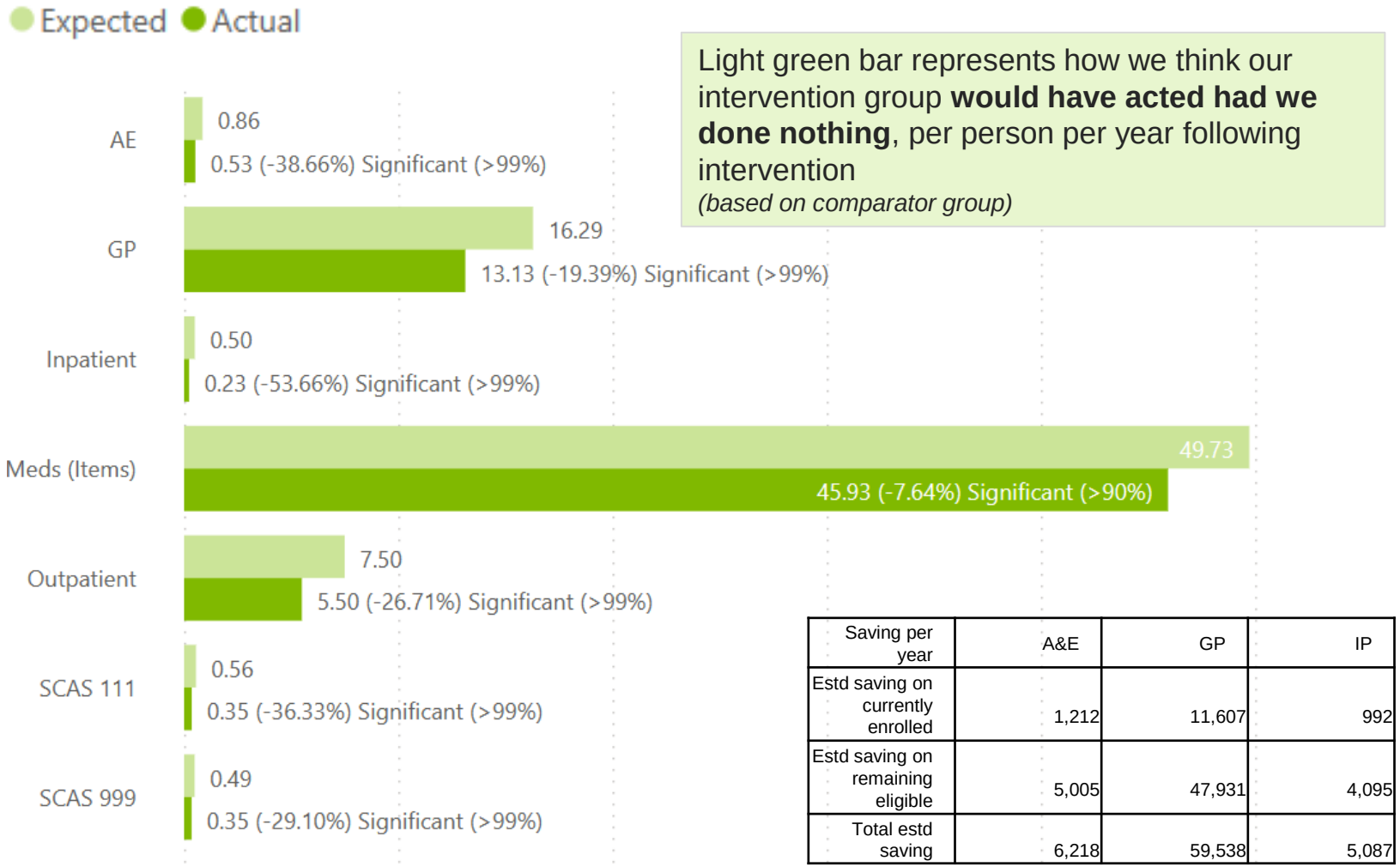
Red and amber markers indicates when alerts have been triggered and a threshold breached.



CONNECTED CARE

Frimley Health and Care

Service outcomes – RM High Risk (3,673 patients)



Light green bar represents how we think our intervention group **would have acted had we done nothing**, per person per year following intervention
(based on comparator group)

Saving per year	A&E	GP	IP
Estd saving on currently enrolled	1,212	11,607	992
Estd saving on remaining eligible	5,005	47,931	4,095
Total estd saving	6,218	59,538	5,087

Key insights

We observed the following service outcomes in our (3,673 unique) enrolled patients **compared to our case-matched comparator group** (n = 14,607):

- Reduced A&E attendance by 38.6%
- Reduced Admissions by 53.7%
- Reduced Outpatient appointments by 26.7%

- Reduced GP contacts by 19.4%
- Reduced volume of prescriptions issued by 7.6%

Inpatient stays have fallen by 0.27 per person per year, applying this to the total eligible population would give us a reduction of 5,087 admissions per year

We plot the change in activity before and after intervention, this is compared to their expected activity if they exhibited the same trend as the comparator group.

Currently deceased patients excluded

CONNECTED CARE

Frimley Health and Care

Remote Monitoring – High Risk summary

Definitions

Intervention group	Patients enrolled onto Frimley Remote Monitoring – High Risk Care Package between 1st December 2022 and 30th September 2023	3,673 unique patients
Remaining eligible cohort	Patients aged 30+, with higher needs *(as defined by John Hopkin's Patient Need Groups)*, who currently meet enrolment criteria and are registered in a Frimley practice	15,168 unique patients

Deprivation distribution

Group	Control		Intervention	
Deprivation Pentile	# Population	% of Population	# Population	% of Population
(Blank)	44	0.3%	9	0.2%
1	352	2.3%	111	3.0%
2	2,161	14.2%	656	17.9%
3	2,501	16.5%	613	16.7%
4	2,863	18.9%	683	18.6%
5	7,247	47.8%	1,601	43.6%
Total	**15,168**	**100.0%**	**3,673**	**100.0%**

Shape of plum bars indicates accessibility of service, comparing intervention group against remaining eligible cohort

Ethnicity distribution

Group	Control		Intervention	
Ethnicity L1	# Population	% of Population	# Population	% of Population
Asian or Asian British	1,504	9.9%	606	16.5%
Black or Black British	234	1.5%	66	1.8%
Insufficient data	191	1.3%	29	0.8%
Mixed	105	0.7%	27	0.7%
Other Ethnic Groups	638	4.2%	187	5.1%
White	12,496	82.4%	2,758	75.1%
Total	**15,168**	**100.0%**	**3,673**	**100.0%**

Currently deceased patients excluded

CONNECTED CARE

Testimonials

CONNECTED CARE

Dr Lalitha Iyer
GP
Chief Medical Officer
Frimley ICS

- The pandemic has resulted in an immense backlog with patients with patients not optimised for their long-term conditions
- Primary care are under extreme pressure from urgent day to day issues + playing catch up on services such as screening, immunisations and helping with Covid vaccinations

A key service to address pressures and benefit people and their care professionals is remote monitoring and management

- The ICS has a mature integrated record and population health management tool
- A remote monitoring model was first developed during the Covid pandemic with community providers
- The same principles are now being applied for the remote monitoring of long-term conditions and care homes.

Our providers in the community have the skills and capacity to monitor those indivduals we decide need to be monitored for their long-term conditions.

John Daniels
COO East Berkshire
Primary Care

Lead provider
Diabetes Workstream
and Out of Hours
services

On our remote monitoring programme we currently have:

- 25 dedicated staff members
- Who can monitor upto 3,000 patients
- And have serviced +20,000 patients without incident

Remote monitoring offers some great benefits for our system as a whole. The ability to:

- React quickly to deteriorating patients
- Monitor and get a good baseline
- Reduce ED appointments
- Reduce GP appointments required for monitoring

The list goes on. The benefits for our system and our patients are definitely there to be seen.

Helen Snowden
COO Berkshire
Primary Care

Lead provider
Care Homes
Workstream

Value of using the remote monitoring approach are:

- Data is available in one place on a digital record
- Alerts and responses are getting managed by a centralised team
- Reducing pressure on practices
- Providing a safe and more efficient way of monitoring patients

Within months of deploying in Care Homes we're experiencing tangible benefits:

- A drop in care home contact with us and practices
- GPs only engaged when warranted
- Fewer alerts getting generated as timely interventions are making residents more stable
- Admissions are being avoided

You can look after more patients safer using less resources.

Dr Nithya Nanda
GP
Clinical Director
SPINE PCN
Diabetes + CVD lead
Frimley ICS

Remote management has assumed greater significance now because:

- Pandemic reduced footfall to practices
- Increased need for remote follow ups and interventions for the frail and housebound and to address the backlogs in primary and secondary care

Operational Value

- The platform generates alerts when readings go beyond defined parameters
- A centralised clinical team refers patients to primary care for intervention when appropriate

Benefits for professionals and patients:

- Enabling remote management of more patients by the practice
- Earlier interventions reduce hospital admissions and medical complications

Kailash Khanal
Registered Manager
Beech House Care
Home

Looking after
Dementia, complex
and frail patients

Case study

- Resident had advanced dementia and was typically confused
- Declined overnight
- Appeared more confused, mobility reduced, fluid intake and urinary output were low

Before:

- Call the practice, speak to admin to request a call back from the doctor
- Wait for them to call - could be hours and patient continuing to deteriorate

Now:

- Used monitoring system to raise an alert to the monitoring hub
- Within 30 mins we got a call from the clinician

Operational value:

- Easy access to data
- Time efficiencies - reduce time to getting clinical guidance
- Captures patients daily status
- Analysing this over time informs clinical reviews

Benefits for our patients:

- Identifies deterioration sooner
- Promotes prompt treatment at home
- Avoids unnecessary hospitalisation