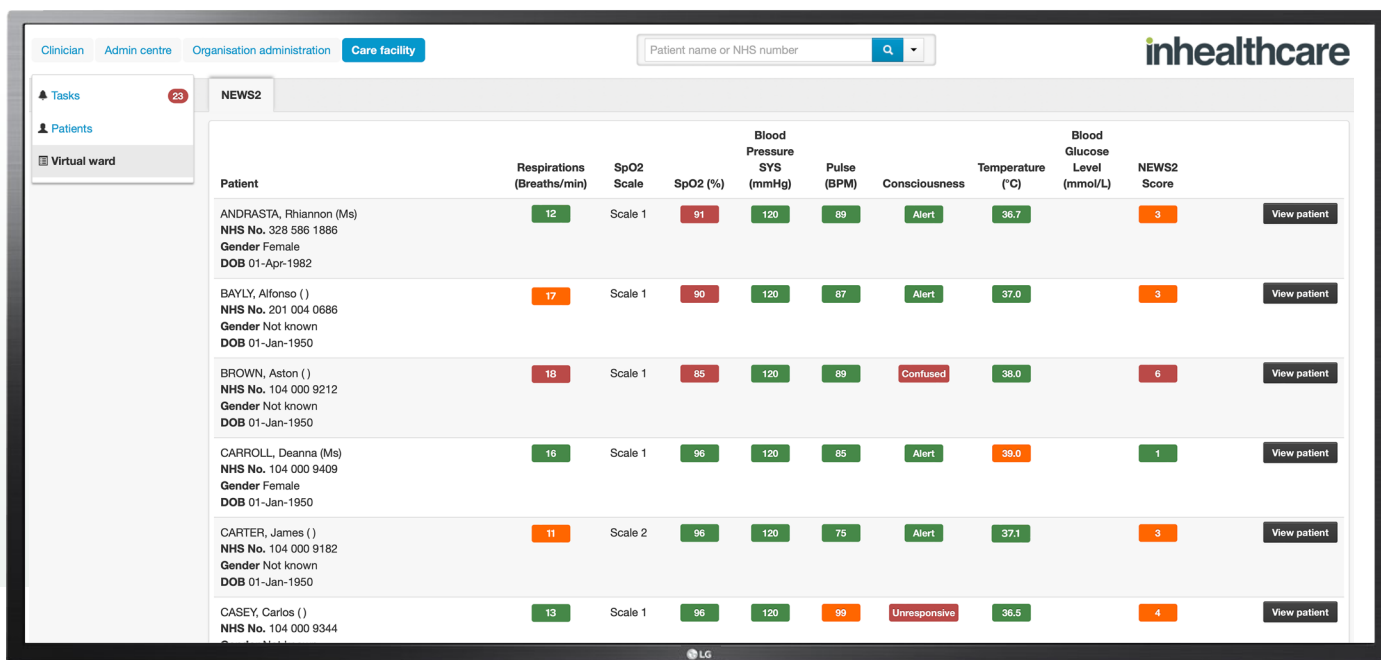# Respiratory Virtual Wards
Reducing hospital admissions and enabling safe and timely hospital discharge

Background

Hospitals across the UK are under pressure from increasing numbers of admissions year on year. The backlog of people awaiting operations continues to grow. Virtual Wards create capacity in the system, by caring for patients at home, and not in hospitals.

Solution

Our technology-enabled respiratory virtual ward monitors patients in their own home through our digital health platform. Patients or carers measure agreed vital signs and enter data using a communication method that suits them, including:

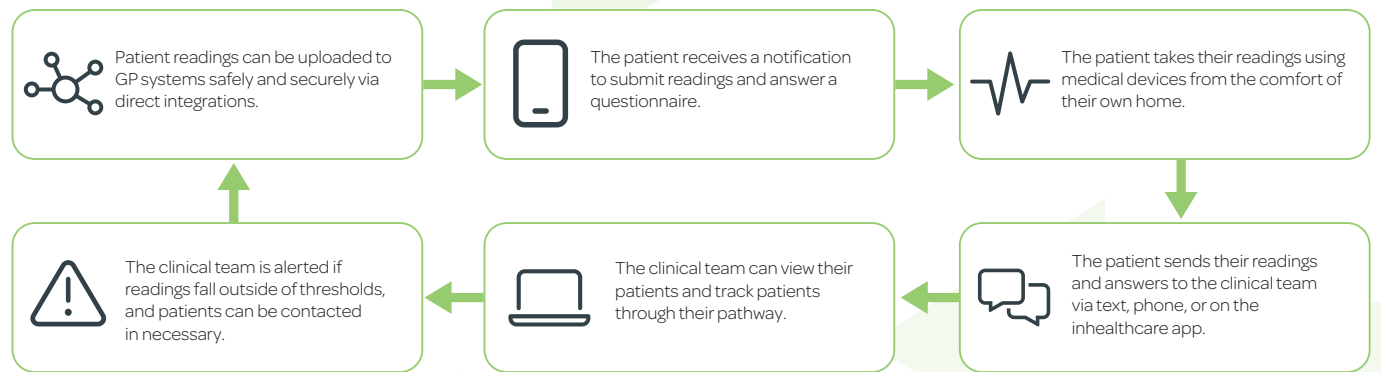| Email	Bluetooth devices	SMS	Automated phone call	Online	Smartphone app

Readings are presented to the clinical team on a patient caseload dashboard and the platform calculates and presents a NEWS2 score. The clinician is alerted if readings fall outside agreed parameters.

The Inhealthcare platform integrates into SystmOne and EMIS Web.

How does the service work?

Patient readings can be uploaded to GP systems safely and securely via direct integrations.

The patient receives a notification to submit readings and answer a questionnaire.

The patient takes their readings using medical devices from the comfort of their own home.

The clinical team is alerted if readings fall outside of thresholds, and patients can be contacted in necessary.

The clinical team can view their patients and track patients through their pathway.

The patient sends their readings and answers to the clinical team via text, phone, or on the inhealthcare app.

Patients can input a range of health observations, including respiratory rate, oxygen saturation, systolic blood pressure, diastolic blood pressure, pulse rate, level of consciousness, new confusion and temperature.

The observations collected include:

- Respiration rate (per minute).
- Are you on any supplementary oxygen?
- Blood oxygen (%).
- Systolic BP.
- Diastolic BP.
- Heart rate (bpm).
- Level of consciousness.
- Temperature (°C).

The care team at anytime can:

- Create an ad-hoc note.
- Schedule a video conference.
- Change the patient contact method.
- Change the patient conditions.
- Change the patient monitoring settings (including specific non-responder count).
- Send an ad-hoc message to the patient (SMS, email).
- Submit unscheduled patient observations.
- Discharge the patient with full summary.

Benefits of service

- Enhances the safety and speed of the service by ensuring healthcare professionals are able to access relevant information quickly and effectively.

- Supports better decision-making for workflow and capacity management across primary and urgent care.

- Enables vital patient data to be seen across all settings, making it easier and quicker for healthcare teams and services to work together.

- Helps to identify when a patient may be deteriorating and to prioritise patients who need urgent treatment.

- Enables timely hospital discharge, freeing up bed capacity.

- Supports step-up/step-down models of care.