

A large graphic of many blue birds flying in a curved path across the left side of the slide.

Mind the Gap

outstanding care
listening and leading
working together

Mark Hunt – IT Development Manager
15/03/2022

URGENT & EMERGENCY CARE

Data for 2019/20

- 75,216 attendances at Musgrove Park Hospital's A&E



- 47,250 non-elective admissions
- 105,742 attendances at our 7 minor injuries units (11,444 planned and 94,298 unplanned)
- Emergency vascular services for 800,000 people in Somerset, and north & west Dorset

ELECTIVE CARE

- 43,4306 patients seen in outpatient clinics
- 43,161 patients had day case admissions

Musgrove Park Hospital

- 700 inpatient beds
- 16 theatres
- Purpose-built cancer treatment centre
- Specialist bariatric surgery centre for South West: 156 procedures a year



Somerset NHS Foundation Trust

- CQC rated as Good
- Turnover of £348m in 2019/20
- Broke even in 2019/20 (after PSF)
- Employs 8,900 staff



County-wide services

- 4,529 patients seen at 4 dental access centres in Somerset + 3,481 patients seen by primary care dental services at 3 sites in Dorset

COMMUNITY SERVICES

- 287,954 clinic attendances in community hospitals



13 community hospitals commissioned for 190 beds

- 2,397 admissions to community hospitals
- 939,219 patient contacts in non-hospital setting (community clinic, GP surgery or patient's home)
- 87,565 virtual appointments (phone or video)
- 4 GP practices (list size c.25,000)

MENTAL HEALTH & LEARNING DISABILITY SERVICES

- 97,012 mental health outpatient appointments

10 mental health inpatient wards

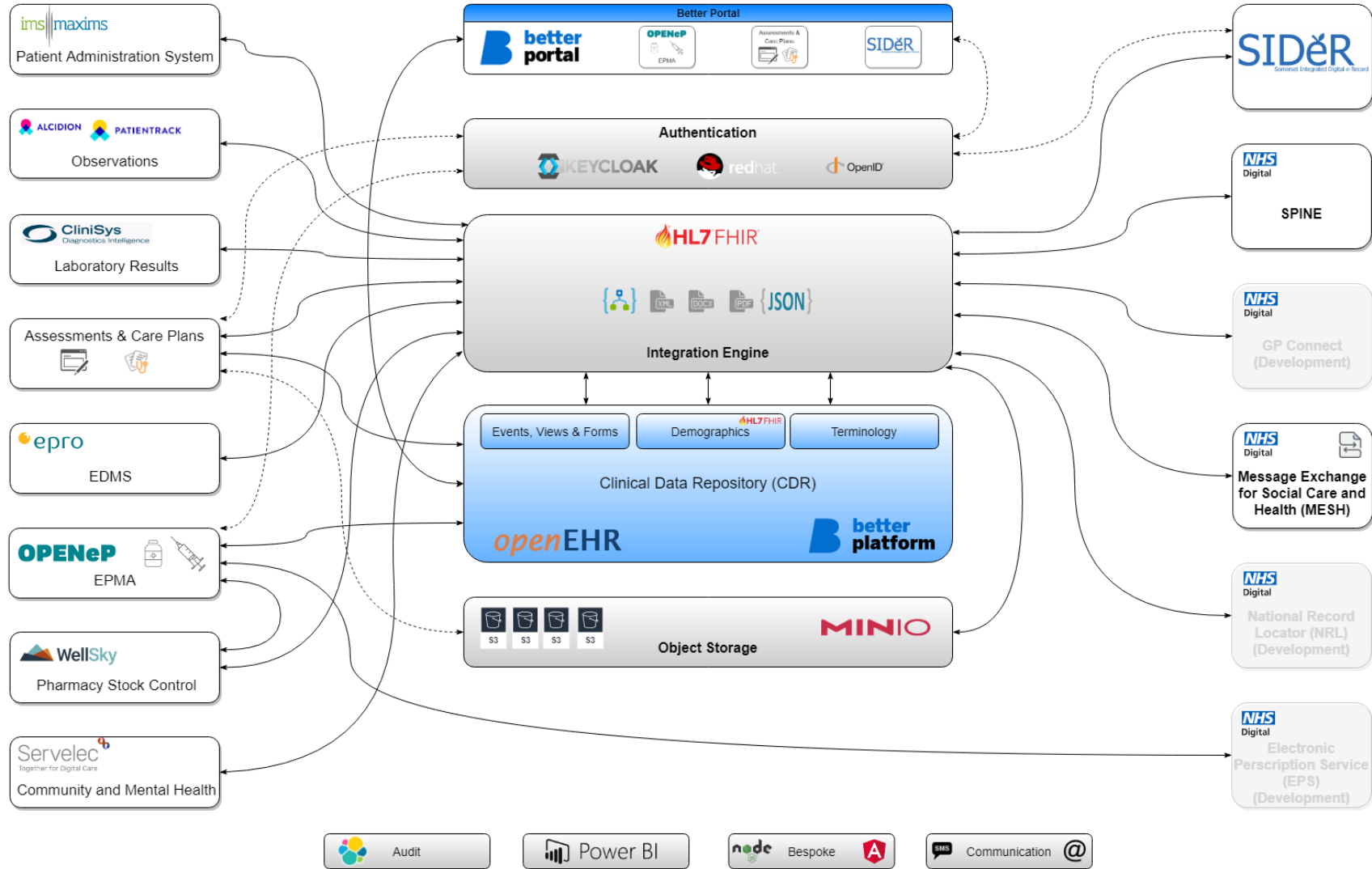
- 950 mental health admissions



outstanding care
listening and leading
working together



Setting the Foundations



Specifications and Standards



Clinical Summary and Assessments

PATIENT

CZ

ZZZTESTHETTY, Cheesy-Chips

01/01/2000 • 22y 2m • MRN 2156825

Eliot Ward • A.4

No known allergies

VIEWS

Summary

Assessment archive

Timeline

MODULES

Medications

Allergies

Better Viewer

SIDeR

ACTIONS

Assessments and Care Plans

Mark as my patient

SUMMARY

Updated: a few seconds ago [Update now](#)

ZZZTESTHETTY, Cheesy-Chips 01/01/2000 • 22y 2m • MRN: 2156825 | Eliot Ward - A.4 | No known allergies

NEWS 2 6 Medium a minute ago	Respiration Rate breaths/min 32 H a minute ago	SpO ₂ Scale 1 % 96 a minute ago	Air or Oxygen? Air a minute ago	Blood Pressure mmHg 120/80 a minute ago	Pulse bpm 64 a minute ago
Temperature °C 37.5 a minute ago	Consciousness ACVPU Confusion a minute ago	Weight kg 95 20 days ago	BMI kg/m ² 31 (Actual) 20 days ago	Active medication list	
Blood Glucose POCT No data	Completed assessments and care plans		<p>Trimbow 87micrograms/dose / 5micrograms/dose inhaler (Chiesi Ltd) DOSE 2 dose - Inhalation - 2X per day</p> <p>Simvastatin DOSE 40 mg - Oral - Night</p> <p>Hartmann's - Sodium lactate compound infusion 1litre bags - 1,000 mL RATE 250 mL/h - Intravenous - Every 12 hours - DURATION 4h COMMENT Fluid balance: Hypo/euvo /hypervolaemic</p> <p>Amoxicillin DOSE 50 mg - Oral - 3X per day INDICATION LRTI</p> <p>Salbutamol 2.5mg/2.5ml nebuliser liquid unit dose vials DOSE 2.5 mg / 2.5 mL - Inhalation - When needed INDICATION SOB</p>		

PATIENT

ZZZTESTKSI, Smoke 3

02/11/2000 • 21 y 4 m
MRN 2196086

A&E - US

No known allergies **Validate!**

VIEWS

Summary

Timeline

Assessment archive

MODULES

Allergies

Medications

ACTIONS

Assessments and Care Plans

Mark as my patient

ASSESSMENTS

Search documents

INPATIENT CARE AND RISK DOCUMENT

- 01 - High Impact Risk Assessment
- 02 - About Me
- 03 - Body Map
- 04 - Waterlow Pressure Damage Risk Assessment
- 05 - Diabetes Foot Screening Assessment
- 06 - Core Care Plan - Pressure Ulcer Prevention and Management
- 07 - Malnutrition Universal Screening Tool
- 08 - Multidisciplinary Moving and Handling Assessment and Care Plan
- 09 - Multidisciplinary Individualised Falls Care Plan
- 10 - Bed Rail and Low Bed Assessment

ADMISSIONS DOCUMENTS

Acute Take Tracker

COVID-19

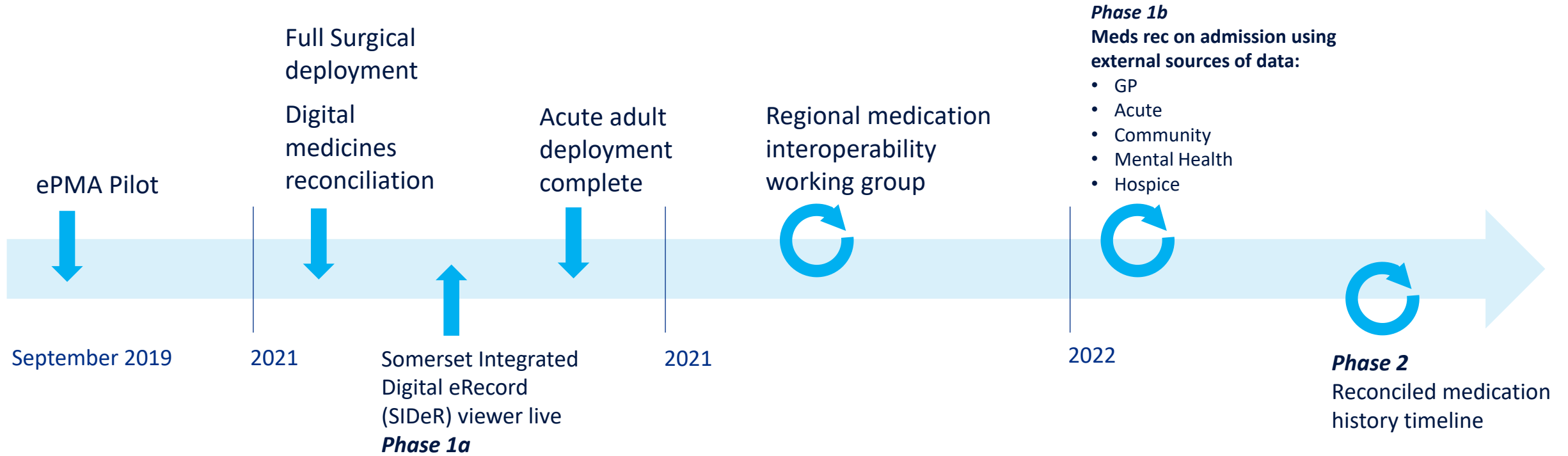
- COVID-19 Post Discharge Outcome
- Critical Care Daily Assessment - COVID 19
- Research - Suspected COVID-19 Assessment

CRITICAL CARE

Critical Care Daily Assessment



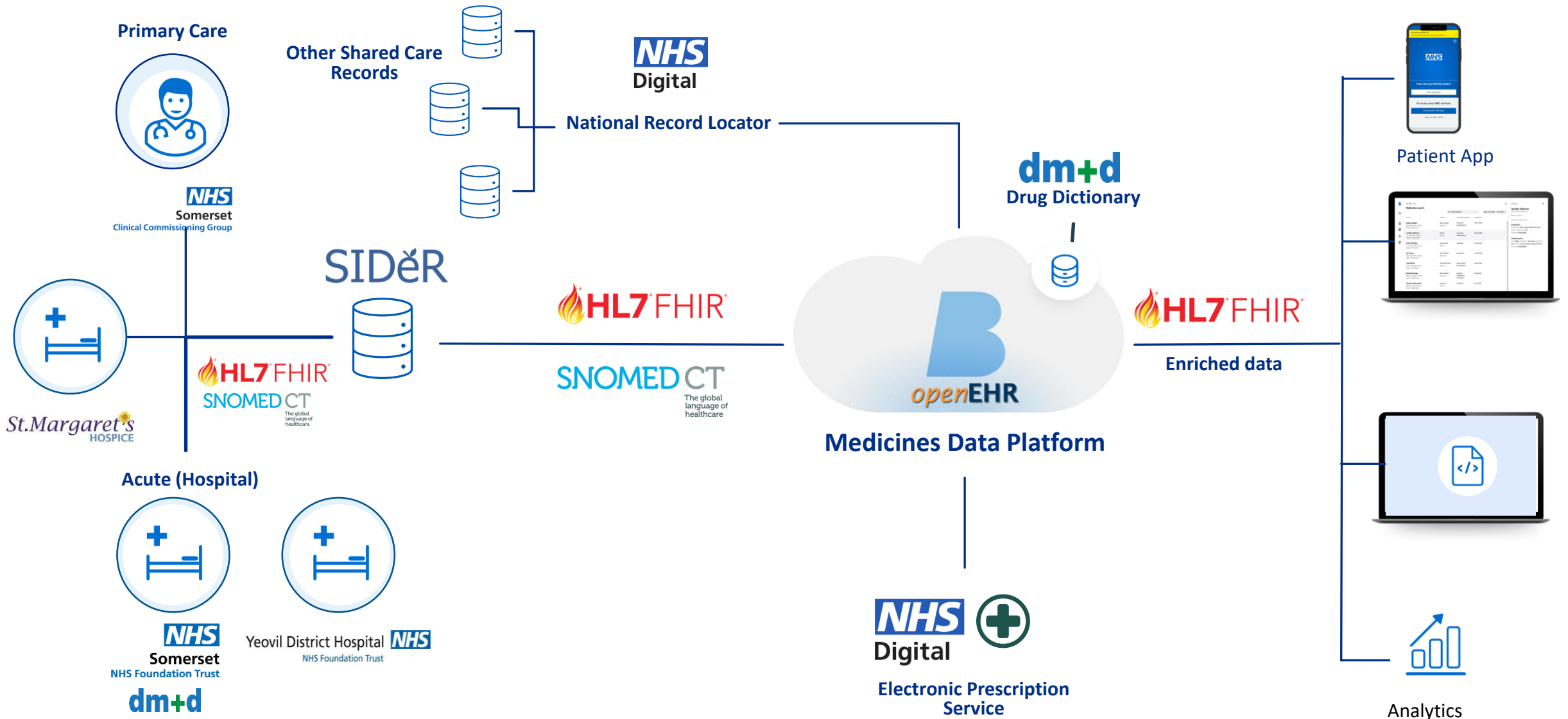
Our Journey to Interoperable Meds



- EPS
- Vendor independent PSC integration
- Somerset System Interoperability
- Medicines Platform



Interoperable OpenEHR and FHIR Meds



SIDeR Realtime FHIR Based Viewer

Summary Alerts Shared Forms 6 GP Record SFT Acute YDH SFT Comm&MH SMH SCC Contacts

Information

Active Medications ⓘ	Allergies ⓘ	Problems ⓘ
<p>SCC does not share Active Medications</p> <p>Repeat</p> <p>Aspirin 300mg dispersible tablets. 100 tablet. Last Issued:22-Oct-2019. <i>One To Three Tablets To Be Taken Every Four To Six Hours When Necessary (No More Than 12 in 24 Hours)</i></p> <p>Ventolin 100micrograms/dose Evohaler (GlaxoSmithKline UK Ltd). 2400 dose. Last Issued:28-Nov-2019. <i>One Or Two Puffs To Be Inhaled Up To Four Times A Day</i></p> <p>Deep Heat Maximum Strength cream (The Mentholatum Company Ltd). 75 gram. Last Issued:01-Oct-2016. <i>Apply When Required</i></p> <p>One Off Prescription- Past 60 days only</p> <p>Amoxil Powder For Solution For Injection 500 mg vial. <i>as directed</i></p> <p>Paracetamol Soluble tablets 500 mg. <i>One To Be Taken Every 4-6 Hours Up To Four Times A Day</i></p> <p>Furosemide Oral Solution, Sugar Free 10 mg/ml (50 mg/5 ml). <i>drink as required</i></p> <p>Ventolin 200micrograms/dose Accuhaler (GlaxoSmithKline UK Ltd). 300 dose. 05-Jan-2022 <i>One Dose To Be Inhaled Up To Four Times A Day</i></p>	<p>SCC does not share Allergies</p> <p>Penicillamine 18/12/2019</p> <p>Penicillin 06/12/2018</p> <p>cats and pollen 18/12/2019</p> <p>Encounters (past 30 days) ⓘ</p> <p>Reason: Personal Plan. (SCC)</p> <p>▶ (ambulatory) with Mr Black Pear. (GP System) 7</p> <p>Procedures (past 30 days) ⓘ</p> <p>YDH does not share Procedures</p> <p>SFT Comm&MH does not share Procedures</p>	<p>Asthma</p> <p>No known allergies 27/08/2019</p> <p>Heart failure 10/03/2019</p> <p>Chronic obstructive pulmonary disease annual review 20/02/2019</p> <p>Frailty 01/02/2019</p> <p>Senile dementia 10/01/2019</p> <p>Chronic obstructive pulmonary disease 25/11/2018</p> <p>Exception reporting: CVD quality indicators 23/07/2018</p> <p>Diabetes mellitus 21/04/2018</p> <p>Acute kidney failure stage 1 10/10/2017</p> <p>Insertion of urethral catheter 10/10/2017</p>



Medication Reconciliation

MEDICATIONS ×

SMITH, Jane 17 Feb 1945 · 76y 12m MRN 9 | Not hospitalized | Known allergies

📅 📄 📄 📄 📄 📄 Barcode ⚠️ All routes ↓ ATC BASIC ROUTE ☰ ☰

NAME: SMITH, Jane ALLERGIES: Known allergies

Wed 19 January				Thu 20 January				
00:00	04:00	08:00	12:00	16:00	20:00	00:00	04:00	08:00
No therapies found								

DD



Medication Reconciliation

SMITH, Jane  17 Feb 1945 · 76y 12m  · MRN 9 | Not hospitalized |  Known allergies





Medication on admission

View active inpatient therapies

Medication search - Enter at least 3 characters...

Switch to order set search Show all order sets

▼ YEOVIL (Successful Search) (updated: 23-Nov-2020)

-  PRESCRIBED **Citalopram 20mg tablets 28 tablet** Completed
DOSE 1 tablet(s) ROUTE Oral
INSTRUCTIONS no instruction
LAST UPDATED 24-Nov-2020
START 22-Feb-2019 END 08-Mar-2019
-  PRESCRIBED **Tramadol 50mg capsules 30 capsule** Completed
DOSE 1 capsule(s) ROUTE Oral
INSTRUCTIONS Do not drink alcohol., Warning. May make you sleepy. If so do not drive/use tools or machines
LAST UPDATED 24-Nov-2020
START 04-Mar-2019 END 14-Mar-2019
-  PRESCRIBED **TheiCal-D3 1000mg/880unit chewable tablets (Stirling Anglian Pharmaceuticals Ltd) 30 tablet 3 x 10 tablets** Completed
DOSE 1 tablet(s) ROUTE Oral
INSTRUCTIONS Suck or chew this medicine.
LAST UPDATED 24-Nov-2020
START 04-Mar-2019 END 03-Apr-2019
-  PRESCRIBED **Pregabalin 150mg capsules 56 capsule** Completed
DOSE 1 capsule(s) ROUTE Oral
INSTRUCTIONS Warning. May make you sleepy. If so do not drive/use tools or machines., Warning. Do not stop taking this medicine unless your doctor tells you to
LAST UPDATED 24-Nov-2020

Continue Confirm Cancel

Medication on admission








View active inpatient therapies

Medication search - Enter at least 3 characters...

Switch to order set search Show all order sets

► Previous discharge therapies (updated: 28-Jan-2022)


▼ DEMO GP SYSTEM (Successful Search) (updated: 18-Jan-2022)

-  PRESCRIBED **Ibuprofen 200mg capsules** Stopped
DOSE DESCRIPTION Dose 200 mg - Oral - Morning - When needed
DOSE 200 mg - Morning ROUTE Oral
LAST UPDATED 19-Jan-2022
-  PRESCRIBED **Omeprazole 20mg/5ml oral solution (Special Order)** Stopped
DOSE DESCRIPTION Dose 40 mg / 10 ml - Oral - 1x per day (14:00) - On an empty stomach
DOSE 40 mg - Every 1 days ROUTE Oral
LAST UPDATED 19-Jan-2022
-  PRESCRIBED **Symbicort 200/6 Turbohaler (AstraZeneca UK Ltd)** Active
DOSE DESCRIPTION Dose 2 dose - Inhalation - 2x per day (08:00, 20:00)
DOSE 2 dose - 2X per day ROUTE Inhalation
LAST UPDATED 19-Jan-2022
-  PRESCRIBED **Paracetamol 250mg/5ml oral suspension sugar free** Active
DOSE DESCRIPTION Dose 1,000 mg / 20 ml - Oral - Every 6 h (02:00, 08:00, 14:00, 20:00) - When needed
DOSE 1,000 mg - Every 6 hours ROUTE Oral
INDICATION For Back Pain
LAST UPDATED 19-Jan-2022
-  PRESCRIBED **Amoxicillin** Active
DOSE DESCRIPTION Dose 500 mg - Oral - Every 8 h (00:00, 08:00, 16:00)
DOSE 500 mg - Every 8 hours ROUTE Oral
INDICATION Chest infection
LAST UPDATED 19-Jan-2022
-  PRESCRIBED **Atorvastatin** Active
DOSE DESCRIPTION Dose 20 mg - Oral - Evening
DOSE 20 mg - Evening ROUTE Oral
LAST UPDATED 19-Jan-2022
-  PRESCRIBED **Tritace 1.25mg tablets (Sanofi)** Active
DOSE DESCRIPTION Dose 1 tablet - Oral - 2x per day (08:00, 20:00)
DOSE 1 tablet - 2X per day ROUTE Oral
LAST UPDATED 19-Jan-2022

► GP CONNECT (Successful Search) (updated: 22-Nov-2021)

► YEOVIL (Successful Search) (updated: 23-Nov-2020)

MEDICATION ON ADMISSION

-  Symbicort 200/6 Turbohaler (AstraZeneca UK Ltd)
DOSE 2 dose - Inhalation - 2X per day

Continue Confirm Cancel





Clinical Safety Hazard Log - FHIR Integrated Medicines on Admission - SDeR			
Programme	Digital Medicines	Document Record ID Key	
Sub-Prog / Project	Clinical Safety	NPFIT-FNT-TOCLNSA-0443.09	
Prog. Director		Status	DRAFT
Owner		Version	0.1
Author	David Chalkley Leo Martin-Scott Beverley Davies	Version Date	09/12/2021

Clinical Safety Hazard Log - *FHIR Integrated Medicines on Admission - SDeR*

Document Purpose

Copyright © 2018, Health and Social Care Information Centre. NHS Digital is the trading name of the Health and Social Care Information Centre. All Rights Reserved.

- **Clinical validation**
- **Scenario testing**
- **Small scale pilots and iteration on configuration**



Challenges

- **Completeness of data structure**
 - Dose syntax
 - Medication status
- **Data quality**
- **Terminology use and alignment**
 - dm+d
 - SNOMED
- **UI/UX**
 - User interpretation
- **Completeness of data**
- **Providers / settings /scenarios**



Where next?

- **Building on Clinical Data Repository Data feeds**
- **Shared Medications phase 2 – Consolidated Data**
- **Transfer of Care**
- **FHIR Integrations with other Shared Records**
- **PHR**



“

Thank You

”

