Digital and Data in COPD
Community Respiratory team
MHSCP

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Current learning

Tableau dashboard

- Design and implementation into team : - Digital analysts/ Mid digital lead/ Lead clinician CRT, Service Manager CRT

- **Clinical applications ? What does it do for us?**

- understand cohort better

- inreach easily to hospital patients

- targeted work to patients who admit (case finding)

- understanding service provision (designed trak coding system/ facilitates service improvements)

Community Respiratory Team - Monitoring

Midlothian Health & Social Care Partnership

Recently Discharged with a Coded COPD Admission

Last 3 months

CHI Number (Di..	Name	
		01/06/2022
		15/06/2022
		26/06/2022
		10/06/2022
		16/06/2022
		30/06/2022
		07/06/2022
		05/06/2022
		03/06/2022
		27/06/2022
		04/06/2022
		22/07/2022
		14/06/2022
		30/06/2022
		08/06/2022
		22/06/2022
		08/07/2022

Not Known Known to CRT or CRT+

The above list is of Patients who have recently been Admitted to Hospital, (and not deceased)
within the filtered period.
Where the main reason for Admission was **COPD**,
These patients are also **not already** known to CRT

Frequent Admitters to Hospital

Last 6 months

CHI Number (Diagnosis)	Name	Max. Number of Admissions	Max. Number of COPD Admissions	
		20	0	Known t..
		11	0	Known t..
		7	0	Known t..
		5	0	Known t..
		5	0	Known t..
		3	1	Not Kno..
		3	0	Known t..
		2	1	Not Kno..
		2	0	Known t..
		2	2	Not Kno..
		1	0	Known t..
		1	0	Known t..
		1	1	Not Kno..
		1	0	Known t..
		1	0	Known t..
		1	0	Known t..
		1	1	Not Kno..
		1	0	Known t..
		1	0	Known t..

This table shows a list of Patients who have frequently admitted to hospital.
IF they are potentially **relevent** to CRT.

This meaning, if they are **known** to CRT already. or if they are Not known however have

Currently in Hospital - Current CRT Patient

CHI Number	Name	
		Respiratory Medicine
		Respiratory Medicine
		Medicine of the Elderly
		Respiratory Medicine
		Respiratory Medicine
		Respiratory Medicine
		Respiratory Medicine
		Medicine of the Elderly
		Respiratory Medicine
		Cardiology

This is a list of Patients who are In hospital **Currently who are Known to CRT**,

The patients current ward has been included to help identify if they may be a potential
Facilitated Discharge

Community Respiratory Team - Insight

Midlothian Health & Social Care Partnership

Admissions Avoidance Contacts - How many Admitted within 48 hours

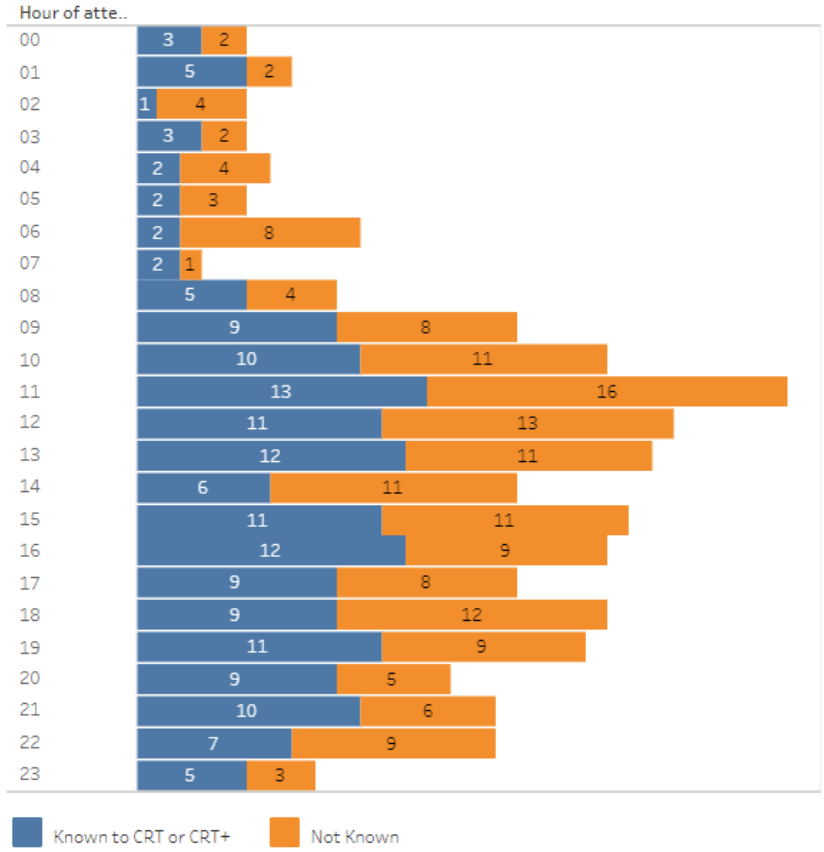
	Number of Admission avoidance contacts	Admitted after contact
Aug 21	8	0
Sep 21	17	0
Oct 21	5	1
Nov 21	11	1
Dec 21	28	0
Jan 22	11	0
Feb 22	8	0
Mar 22	15	0
Apr 22	29	0
May 22	17	0
Jun 22	16	1
Jul 22	17	0
Aug 22	11	0
Grand Total	193	3

This table shows the number of Admission Avoidance contacts performed by the CRT team.

COPD Admissions - what time did they attend A&E

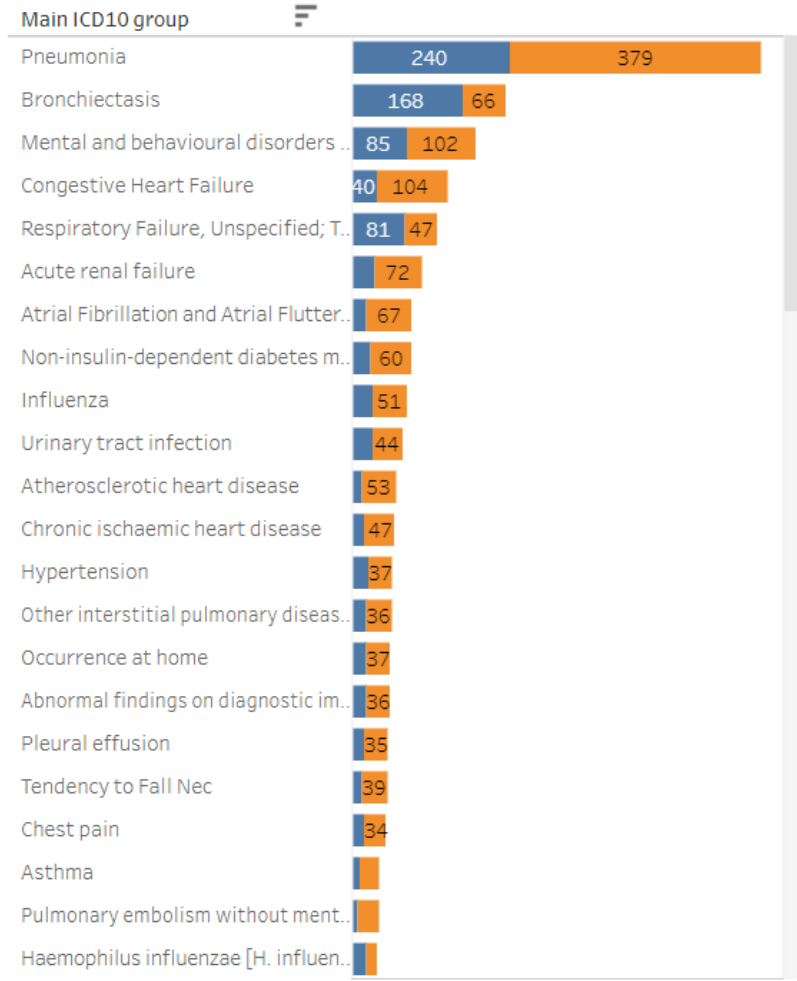
Attendance Date

Last 13 months



This Chart shows A&E attendances that linked to a COPD admission to hospital.

Other Main Diagnoses during COPD Admission



This chart shows the other Main reasons that were diagnosed within a COPD Admission

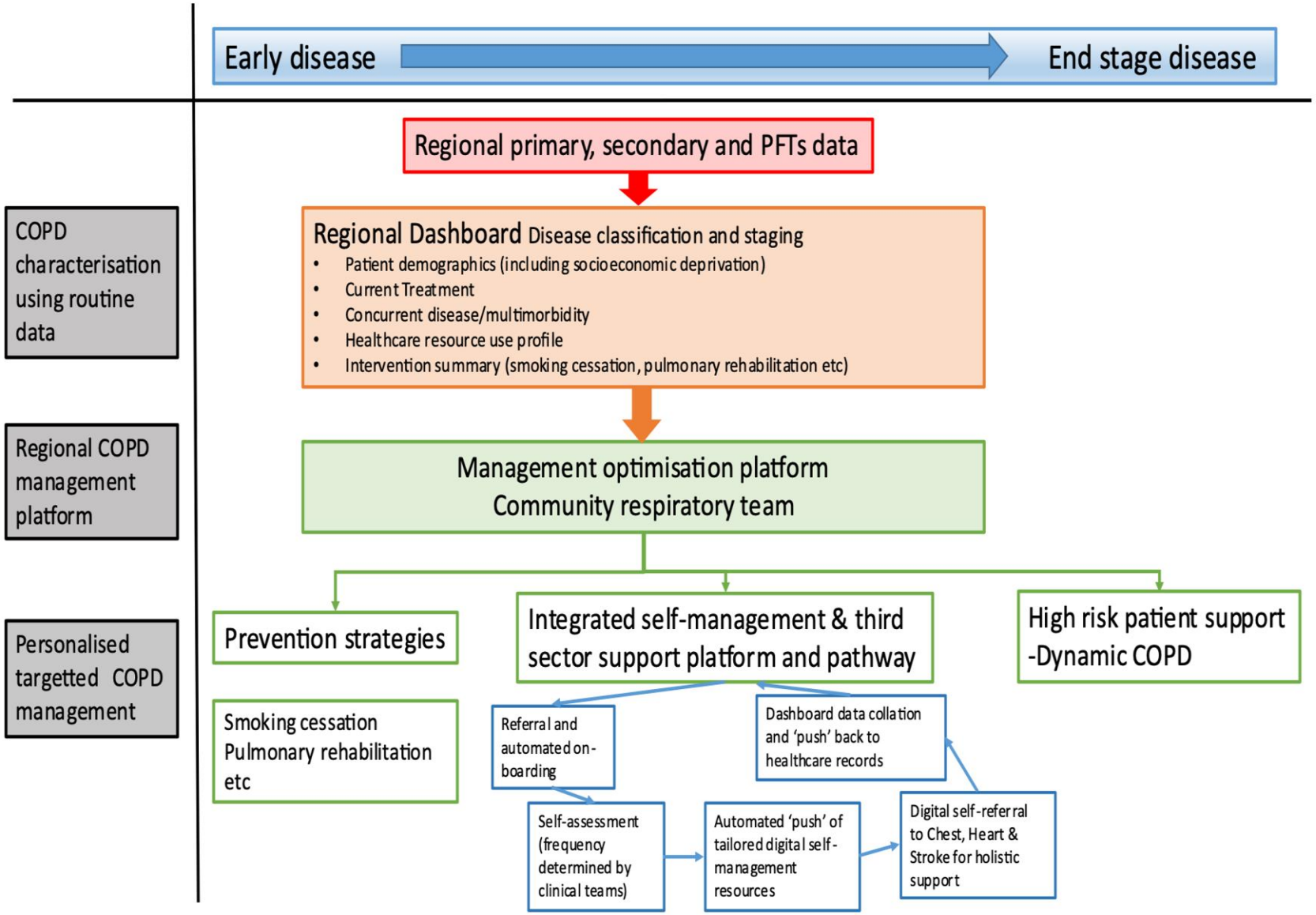
Chief Scientist Office Innovation Fellowship

- Phd starting Sept 2023 funded by CSO (part time 5 years).

- *Title :-* ***Utilising Routine Data and Digitally-Enabled Care to provide regional identification, triage, and management optimisation for COPD***

Aims / objectives

- To develop approaches to better interface the exchange of information and data between Primary and Secondary Care Teams, to enable early detection of COPD, early identification of high-risk patients, and better prescribing and optimisation of care.
- To co-design digitally-enabled innovations with patients, service leads, clinicians, and digital services through workshops
- To work with industry partners to develop an integrated self-management platform that enables co-management by NHS clinicians and the national charity supporting COPD (Chest, Heart & Stroke Scotland; CHSS)
- To pilot and evaluate novel digital services.
- To develop an early business case and evidence to support review by the ANIA team within CfSD, for procurement of national COPD solutions that build incrementally on ongoing work in high risk COPD groups


Early disease
End stage disease
COPD characterisation using routine data
Regional COPD management platform
Personalised targetted COPD management
Regional primary, secondary and PFTs data
Regional Dashboard Disease classification and staging
Patient demographics (including socioeconomic deprivation)
Current Treatment
Concurrent disease/multimorbidity
Healthcare resource use profile
Intervention summary (smoking cessation, pulmonary rehabilitation etc)
Management optimisation platform
Community respiratory team
Prevention strategies
Smoking cessation
Pulmonary rehabilitation
etc
Integrated self-management & third sector support platform and pathway
Referral and automated on-boarding
Dashboard data collation and 'push' back to healthcare records
Self-assessment (frequency determined by clinical teams)
Automated 'push' of tailored digital self-management resources
Digital self-referral to Chest, Heart & Stroke for holistic support
High risk patient support -Dynamic COPD

Dynamic Scot (DS) – with GGC & West Innovation Hub.

Midlothian Community Respiratory team project (2 years)

Implementation and review of DS

Patient Webapp/ Clinician portal

- Records Patient reported outcomes
- Allows patient messaging direct to team
- Patient access to self management information and training videos/ teaching materials (GGC webpage).
- Clinician portal

Quality Improvement approach in MCRT – *Plan, Do, Study, Act (PDSA) cycles - p*rovides reflective, task-orientated process of review & allows adaptation and change depending on learning.

DYNAMIC SCOT – LENUS

PDSA cycle 1

- Development and review of process maps and Standard Operating Procedures
- Understanding the system and balancing priorities
- Training clinical staff
- Navigating the digital competency and willingness of staff and patients
- Practical and clinical application of system within team
- Capturing learning

DYNAMIC SCOT – LENUS

PDSA cyle 2

- Increased staff and patient onboarding
- Monitoring and analysis of usage
- Staff and patient user experiences
- Development work undertaken in NHS Lothian Tableau Dashboard for MCRT
- Continued review of utilising clinical data
- Identification of system improvements