

Enhancing referral pathways between the Midlothian Community Respiratory Team (MCRT) and Chest Heart & Stroke Scotland (CHSS) through patient and stakeholder co-design to facilitate access to CHSS services and COPD self-management support

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Introduction

Approximately 1.7 million people live with Chronic Obstructive Pulmonary Disease (COPD) in the UK, with 600,000 of these undiagnosed [1]. Patients with COPD in Scotland can experience gaps in care, including delayed diagnosis and limited access to optimal care [2].

Midlothian Community Respiratory Team (MCRT) provides support to patients in acute exacerbations of COPD and helps them to manage their condition by optimising their self-management. Chest Heart & Stroke Scotland (CHSS) is one of Scotlands' largest health charities and a third sector organisation providing holistic support, promoting self-management, and encouraging patients with chest, heart and stroke conditions to participate in social activities by accessing the services below (Fig.1).

Despite availability, referrals to CHSS from MCRT and have historically been low, limiting the use of valuable services and support for patients, particularly in underserved areas.



Objectives

- Improve access to CHSS self-management support by improving the MCRT–CHSS referral pathway.
- Increase referrals from 9 (2023/2024) to 100 (2024/2025) over 12 months.
- Enhance collaboration between MCRT and CHSS.

Methodology

Quality improvement approach :

- A Theory of Change was developed and a driver diagram (Fig 2) identifies the primary and secondary drivers required to achieve the project aims.
- Change ideas were tested through iterative PDSA cycles.
- Outcome, process, and balancing measures were used to evaluate implementation, effectiveness, and unintended consequences (Fig 5).
- Quantitative data was integrated with qualitative feedback from staff and patients to identify barriers, test changes, and evaluate impact across activity, engagement, equity, and safety measures resulting in a recommended optimised pathway (Fig.6).

Fig 2. Driver Diagram for improvement of MCRT - CHSS pathway.

Primary Drivers	Secondary Drivers	Change Ideas
Efficient and standardised referral processes	Clear referral processes (SOP) through referral portal	Test referral processes and standardised workflow SOPs
Improved patient uptake and engagement	Identify barriers to engagement Patients to understand referral benefits Referral timing	Explore reasons for decline (modify if possible) Test providing CHSS patient leaflet Test referral approaches
Staff knowledge of CHSS	Improved awareness CHSS pathway Confidence to refer and co-work Referral consistency	Test online teaching sessions Test if face to face discussions help develop co-working
Reducing health inequality by improving access	Identify underserved populations accessing care Adaption of pathway to include those from underserved populations	Test SIMD to identify how underserved populations are accessing care
Effective, timely and structured communication	Structured and timely information sharing	Test adding CHSS to safe send email list Test joint team meetings and data sharing between CHSS/MCRT
Capacity and resource management	Improve coordination between services Reduce duplication and optimise co-working	Test sharing of tasks across both services Explore impact on MCRT caseload

Results

Fig 3. Data Profile of Patients and Referrals

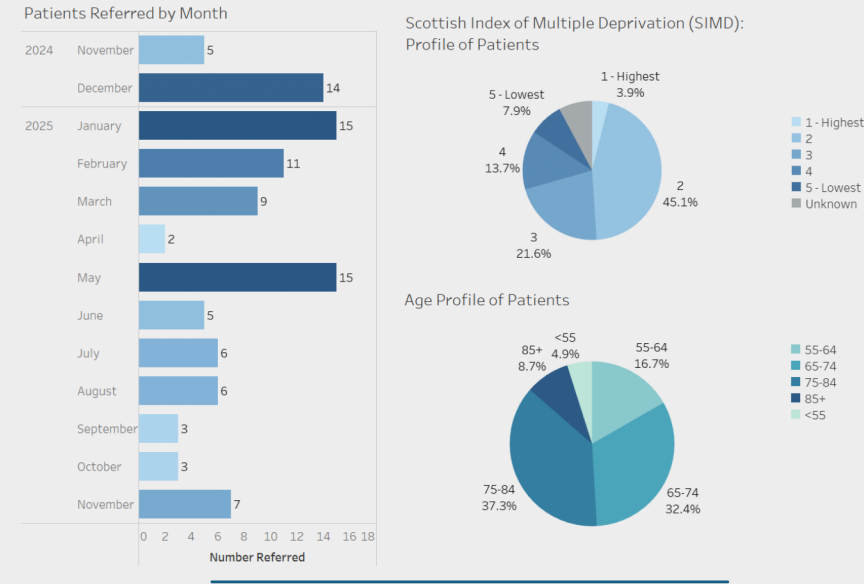


Fig 4. Data Profile of CHSS Services

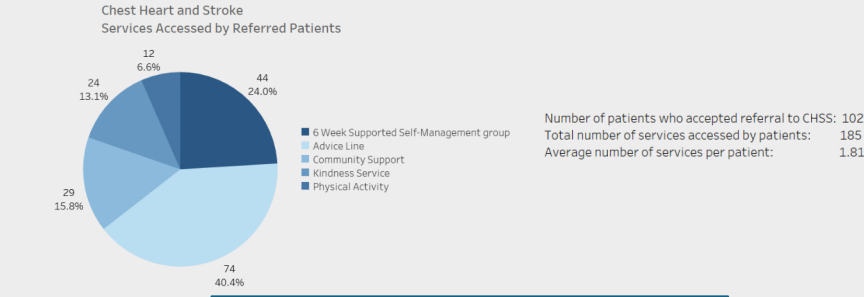


Fig 5. PDSA findings.

PDSA Number	Key Actions	Key Findings - Outcome	Key Findings - Process	Key Findings - Balancing
1. Referral processes	Standardised SOP Standardised referral process	✓ Increased referral rate from 9 -102	✓ 12 (100%) clinicians referred 1 patient ✗ 2 referrals were incorrectly processed (captured and corrected)	✗ Increased staff time required to make referrals, monitored informally
2. Patient engagement	Explore access equity, identify barriers	✓ Average wait time 3.87 days to 1st contact ✓ 102 patients accepted referral; engaged with 185 services ✓ Equity of access = 49% of referred patients in SIMD 1- 2 (Fig 3)	✓ 10 barriers identified, including limited digital access, physical constraints, and the need for carer support to access services ✓ 1 modified - 2 potentially modifiable	✓ CHSS capacity for more referrals
3. Staff online training	Deliver 5 online training sessions	✓ All 12 MCRT referring clinicians attended at least 1/5 online session, 3 clinicians (100%), 2 clinicians (80%)	✓ 10 key points were raised for ongoing review	✗ Workload and job responsibilities were barriers to attendance
4. Staff engagement	Deliver 2 engagement sessions	✓ Out of 14 clinicians: 5 – 100% attendance 5 – 50% attendance 4 – none (left service, work part time, on leave)	✓ 10 key recommendations generated, 4 implemented ✓ 100% staff informally reported clearer understanding of roles and services	✗ Sessions ran in a busy winter period affecting attendance
5. Maintenance/ Sustainability	SOP adherence Referral confidence	✓ Ongoing referrals sustained > baseline >1 per mth	✓ Communication maintained: CHSS attend MCRT monthly team meeting ✓ Ongoing case reviews and review of process improvements continues	✗ Expected monthly referral rate of 10/month not met due to MCRT staff vacancy rate

Analysis

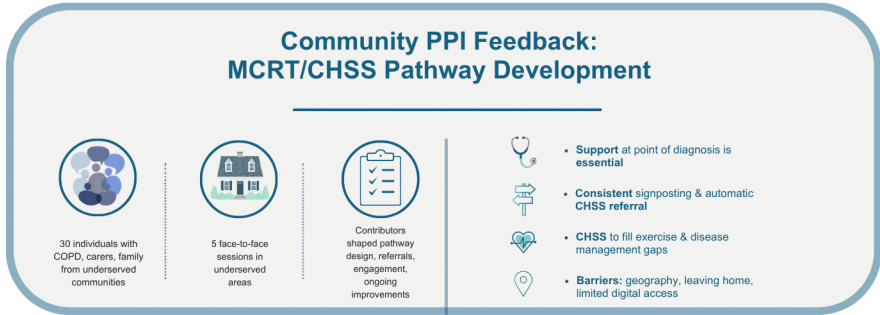
Referrals to CHSS increased (Fig 3.) with sustained staff engagement (Fig 5) despite staff vacancies and clinical pressures. PDSA-led improvements resulted in the below optimised pathway (Fig. 6), which is now embedded as routine practice within Midlothian Community Respiratory Team.

Fig 6. The Optimised NHS - CHSS pathway implemented within MCRT.



Patient and Public Involvement (PPI)

Fig 7. Community PPI Feedback



Conclusion

Aligned with Realistic Medicine, collaborative referral pathways improve access to equitable, sustainable COPD support, enhance patient engagement, and offer a scalable, cost-effective model supporting preventative care.

Further work has identified more opportunities for joint working and shared care planning. As CHSS provides services all across Scotland this is a scalable improvement that if implemented across community respiratory care pathways effectively, has the potential to significantly improve COPD care.

References

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