Can a digital self-management platform with a data repository support the Dorset COPD patient population & service delivery?

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Introduction

Chronic obstructive pulmonary disease (COPD) places a significant burden on patients and healthcare services with increased prevalence in areas of socioeconomic deprivation[1].

An estimated 17700 people are diagnosed with COPD in Dorset. To promote self-management, and to reach those patients who are at a socioeconomic disadvantage, Dorset Clinical Commissioning Group (CCG) evaluated the impact of digital health. The myCOPD application (app) was integrated into local clinical services and married with the Dorset Intelligence and Insight Service (DiiS). The DiiS links data from health and social care across Dorset.

Aim

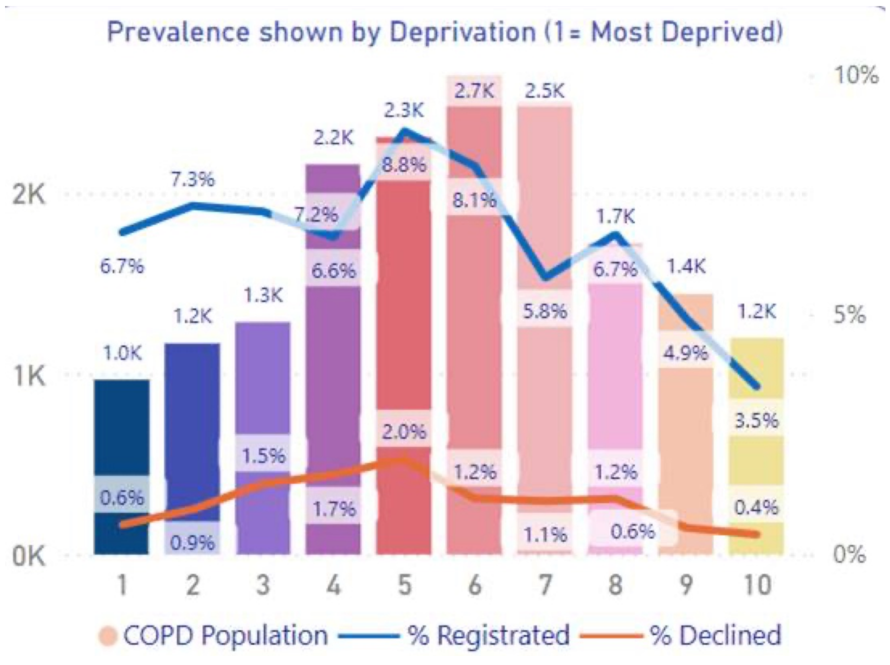
To evaluate a population health management approach to target COPD patients with the aim of identifying and reducing health inequalities using the DiiS and myCOPD.

Methods

Over 12 months the DiiS was used to:

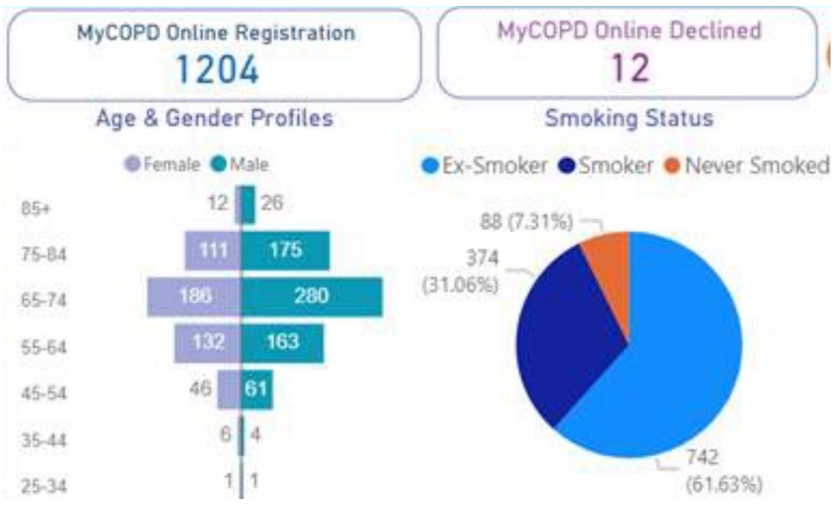
- Identify and target high risk (≥ 2 hospital admissions and/or exacerbations) and rising risk groups (smoking, gender, BMI ≥30, housebound, live in deprived areas)
- Explore uptake to myCOPD and profiles of those who activated and declined the app
- Determine digital literacy demographics of those who used myCOPD

The DiiS functionality was reviewed to examine how it could support clinicians and patients



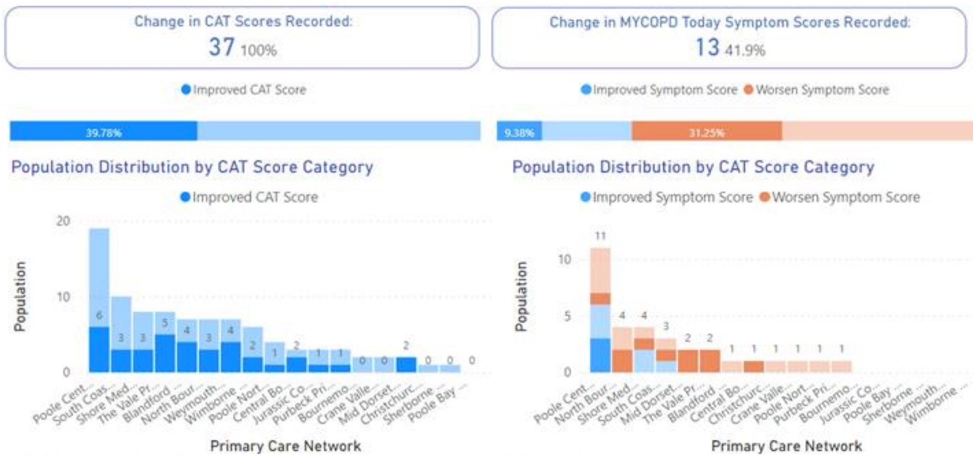
References

1. https://www.blf.org.uk/policy/economic-burden



Outcomes

- 1204 patients were registered for myCOPD
- Greater uptake in males aged between 55-70 years, ex-smokers
- DiiS enabled identification of those in deprived areas and those who were housebound and myCOPD enabled clinicians to reach and monitor them remotely
- 85% patients said they were digitally literate. Of those who declined there was no difference in gender, smoking status or deprivation. However, 35% said they lacked digital confidence, and 60% did not record their digital skills
- Improvements in CAT scores were observed across 43%, with an overall clinical improvement seen in 34% of patients



Conclusion

Data from DiiS and myCOPD enabled anticipatory care by proactively identifying and accelerating equity of services for clinicians to identify those at risk. Additionally, myCOPD enabled patients to engage in their follow-up with clinicians through the use of technology.

Outcomes have shown that PCNs are driving and engaging this technology, enabling shared learning across the teams developing PCN maturity and the opportunity to share best practice.

Further work to generate real world evidence on outcomes and service quality is required.

NB: Since writing the abstract, further analysis of DiiS has provided a more comprehensive data set, explaining the variation from the initial abstract data.