User perspective of an intelligent Clinical Support software (LungHealth) as part of the MISSION project in Greater Manchester

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MISSION is a collaborative working project between Health Innovation Manchester and Chiesi Ltd with services provided by National Services for Health Improvement.

Background to Project

Asthma and COPD are common respiratory conditions in the UK and are associated with significant morbidity and mortality. Guidelines recommend respiratory patients should receive reviews annually, however it is estimated that only 30% of people living with asthma and <20% people living with COPD, in the UK receive even basic levels of care[1].

In Greater Manchester, around half of emergency respiratory admissions originate from areas of high deprivation. There is significant variation in patient outcomes across GM localities[2].

Despite its scale, respiratory disease is underdiagnosed and suboptimally managed, especially in deprived communities. This leads to higher rates of crisis-driven hospitalisation, poorer long-term outcomes, and high mortality and increased economic burden, this is felt most in areas of high deprivation[2].

Greater Manchester (GM) is ranked 6 out of 326 in the index of multiple deprivation (1 being the most deprived) and has a greater prevalence and worse asthma outcomes than the national average. It has been reported that those living in the most deprived areas of England face the worst healthcare inequalities[3].

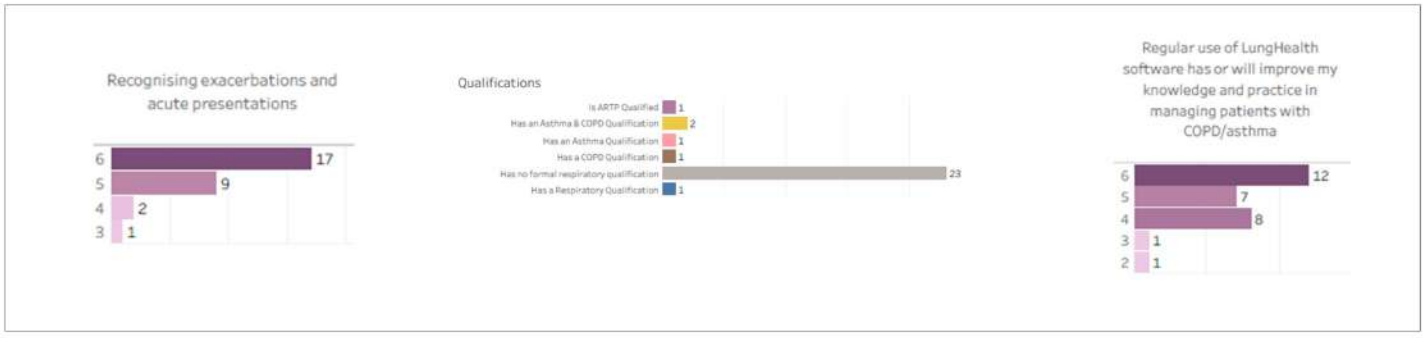
This project aimed to evaluate a digital approach to respiratory reviews and the impact of implementing an intelligent Clinical Decision Support System software (LungHealth) in the form of a computer-guided consultation (CGC).

The MISSION project is a collaborative working project between Chiesi Ltd and Health Innovation Manchester (with NSHI providing clinical services). GP Practices in GM were invited to participate and recruitment took place from September 2024 to June 2025.

Measurement of Improvement

The LungHealth software received an overall average satisfaction score of 4.9 (out of 6).

- 79 % (23/29) respondents hadn't received formal respiratory training prior to participation in the MISSION project.
- 59% (17/29) agreed the LungHealth software allowed then to provide improved respiratory reviews.
- 66% (19/29) agreed that regular use of the software would improve knowledge and management of patients with respiratory conditions.
- 90% (26/29) agreed they were more confident with recognising exacerbations and acute presentations.
- 76% (22/29) felt more confident about decision making on non-pharmacological interventions recommended.



Lessons Learned

- Users felt that the LungHealth software increased their confidence in many areas of the respiratory consultation, e.g. when to refer to secondary care, on decision-making with regards to escalating and de-escalating treatment.
- Many (66%) respondents felt with regular use it would improve their practice and knowledge, and majority (90%) were more confident with regards to recognising symptoms and acute presentations.

References:

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