

Acute Respiratory Infection (ARI) Hubs – a PCN-led model

99% of patients presenting at hubs were able to be managed in primary care

Background

ARIs are one of the largest causes of emergency department (ED) attendances nationally. NHSE states that 'Respiratory diseases are a **major factor in winter pressures** faced by the NHS; most respiratory admissions are non-elective. Gloucestershire A&E attendances for ARI over a 4-week period (17 Sept-14 Oct 23) showed that:

- 64% of patients were not admitted to hospital (616 pts)
- The highest number of people not being admitted were adults in the range of 15-44 years and paediatrics in the range of 1-4 years old.
- 70 people attending were 'heralded' walk ins (out of 616) - 'Heralded' walk-in attendances that arrive following an NHS 111, GP or OOH referral have been identified as they may be amenable to a direct referral to an ARI hub.

Aim

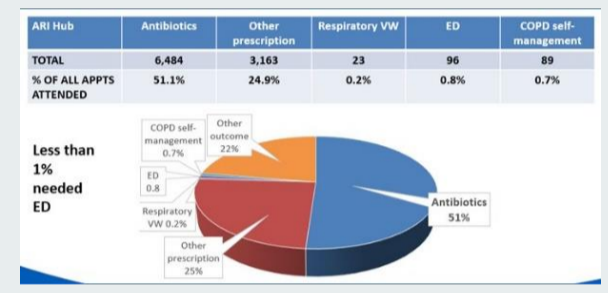
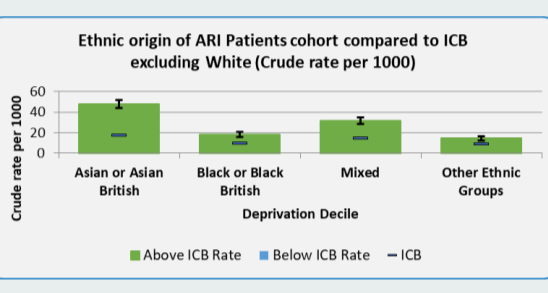
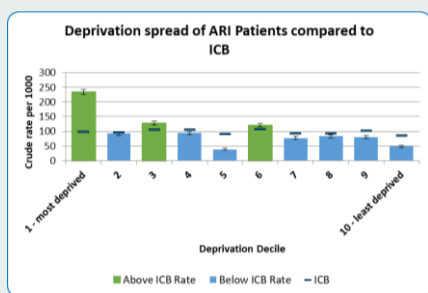
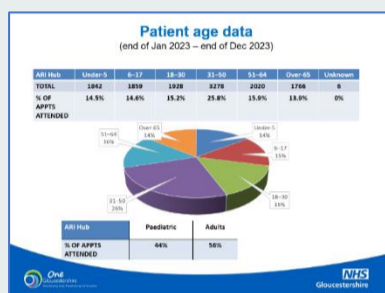
The NHSE ARI guidance states that an 'An Acute Respiratory Infection hub model is a system approach that drives a collective objective to provide timely and appropriate care to the population and helps reduce pressure on other parts of the system. The hub model may be best suited to those with acute, episodic needs.

The goals* of an ARI hub service are to:

- Support patients with urgent clinical needs
- Reduce the burden across the health community - particularly ED attendances and admissions
- Reduce the burden of acute respiratory illness on primary care
- Reduce nosocomial transmission by separating the high expected flow of infectious patients through hubs rather than usual GP waiting rooms and clinic
- Establish proof of concept for the delivery model'

*Edited for brevity

Measurement



Method/Design

A project group, consisting of two PCN Business leads and lead GPs and ICB Project Team (within the Transformation Team), used the national guidance along with the development of an agreed Gloucestershire Standing Operating procedure (SOP) for ARIs and Virtual Wards to operationalise ARI assessment hubs. A pathway was also developed and agreed.

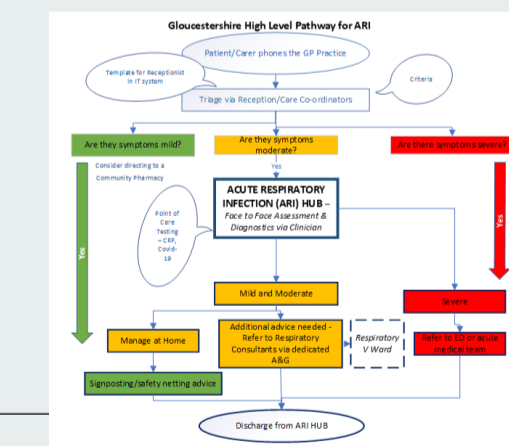
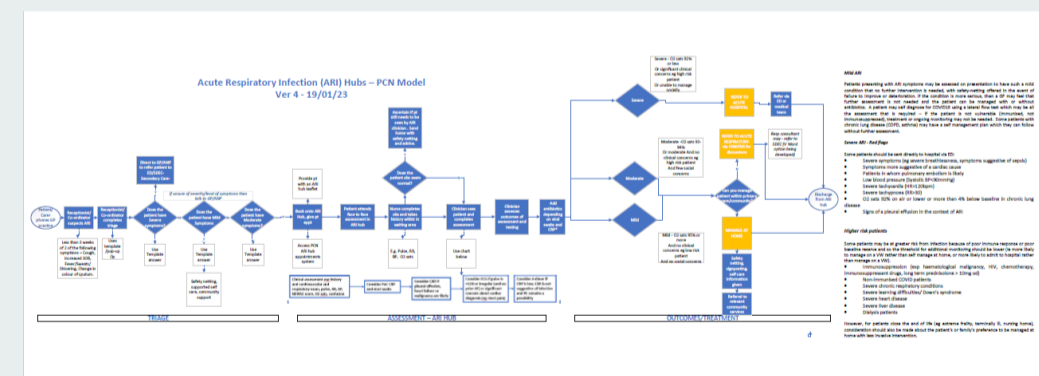
The project group continues to meet on a weekly basis to monitor the service, further develop the pathway and to rectify any relevant issues.

This is an opportunity to provide point of care testing and access to Respiratory Virtual Ward. The service is available 7 days a week for Gloucester and Cheltenham GP Practices.

Learning

The main outcomes of patients presenting with respiratory symptoms were that 99% of patients were able to be managed in primary care, with 76% receiving a prescription.

- There were opportunities for empowering and educating patients when they attend an ARI hub
- Clinicians were able to talk to a respiratory consultant for advice and guidance or refer to the Respiratory Virtual Ward
- Dedicated pharmacy support with the ARI hubs meant that some patients also got a medication review if relevant
- ARI Hubs also had access to GP's, ANP, Paramedics and other health professionals including Social Prescribers and Stop Smoking Nurses.



Possible non-cash savings

Actual Activity of service	12,701		
Possible Lower Average savings	Activity	Possible Savings	Lower cost
A&E attendance saved at 16.3% (used 50% of survey response)	2,070	£182,183	£88
111 calls saved at 13.2% (used 50%)	273	£3,279	£12
Calls 111 and then attends OOHs 10%	27	£2,050	£75
Possible ED admission savings	Activity	Savings	Average cost
Based on 30% of the 15% would have been admitted*	621	£150,301	£242
Lowest average saving		£337,813	
Possible Higher savings	Activity	Possible Savings	Average cost
A&E attendance saved at 32.6%	4,141	£1,780,426	£430
111 calls saved at 26.4%	3,353	£100,592	£30
Calls 111 and then attends OOHs 20%	671	£50,296	£75
Possible ED admission savings	Activity	Savings	Average cost
Based on 36% of the 32.6% would have been admitted*	1,656	£400,803	£242
Highest average saving		£2,332,117	
Average saving of the 2 options		£1,334,965	

Conclusion and Next Steps

- **Pre ARI Hub Opening (Feb 2022 – Dec 2022):** Gloucester and Cheltenham localities had an average of **447.82** ED attendances per month compared with **387.82** attendance for the other localities.
- **Post ARI Hub Opening (Feb 2023 – Dec 2023):** Gloucester and Cheltenham reported an average of **398.09** ED attendances per month compared with **372.09** in the other localities.
- **Reduction:** In Gloucester and Cheltenham the average ED attendances per month were **11.1%** lower in the Post ARI hub Opening period. In the other localities this was **4.06%** lower. **Therefore, there is a 7.04% difference.**

New Winter Criteria year 4 FINAL - November 2023

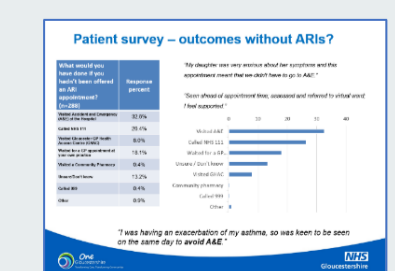
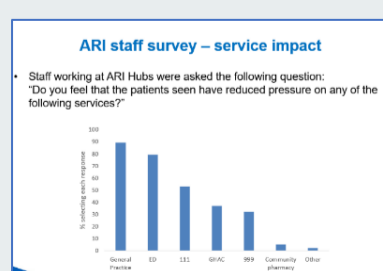
ADULTS

- Has the patient had symptoms for less than 3 weeks?
- Is the patient suffering with new or increased shortness of breath?

STOP: If the patient has NOT ticked the above 2 boxes, please follow your normal surgery process. Or consider the Community Pharmacy Consultation Service. If the patient has ticked both boxes please continue with this template as they may be eligible for an appointment at the ARI Hub.

- Does the patient have a new or worsening cough?
- Does the patient have fever, sweats or shivering?
- Has the patient noticed a change in the colour of their sputum?
- Does the patient have confusion?
- Is the patient immunosuppressed?

If any ONE of the above symptom boxes have been ticked (if not please follow your normal surgery process), they can be booked directly into the Respiratory Hub at XX



Tools and/or Models Applied

- Data/measurement/PHM
- Health inequalities
- Process mapping
- Engagement
- Value focus