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## “Asthma bus” aims to accelerate UK care postponed due to COVID-19

More than one in 20 patients (6.7%) in the United Kingdom postponed emergency care due to the COVID-19 pandemic and more than a quarter of patients (27.5%) avoided receiving treatment by general practitioners (GPs), according to a report by Asthma UK, cited by *PharmaTimes* and other publications. Further, it is estimated that approximately 3.5 million of the 5.4 million people diagnosed with asthma in the UK are not receiving a “basic level of care.”

### Accelerating the delivery of asthma care

In response, the UK National Health Service (NHS) has launched the PRECISION Asthma Mobile Clinic (or “asthma bus”) provided by AstraZeneca, which will partner with local NHS respiratory services to accelerate the delivery of asthma care.

The first asthma bus began its journey in October in Central Lancashire, where it was scheduled to provide 10 weeks of support before traveling around the UK. The mobile clinic was expected to conduct 350-400 appointments during its stay.

“The PRECISION Asthma Mobile Clinic provides essential capacity and specialist service capability to fast-track diagnosis and provide dedicated care for patients with severe asthma,” explained Tom Keith-Roach, Country President, AstraZeneca UK. “Starting in Lancashire we hope to be able to reduce patient waiting lists and



improve access to the treatment that patients suffering from this devastating disease deserve.”

### Working with local GPs and primary care networks

On the asthma bus, specialist nurses will identify and invite eligible patients to attend the clinic for testing, then will liaise with their GPs to formulate action plans for asthma care. In addition, three rooms on the bus will be offered to local primary care networks to support the diagnosis of respiratory conditions using spirometry testing. Training and education packages for primary care will also be made available along with resources to support patients who self-manage their condition.

### An innovative pilot project

“The PRECISION Asthma Mobile Clinic is an innovative approach...to allow earlier access to care for the high vulnerability asthma patients. The pilot project aims to reduce severity of asthma in a high risk population who regularly have exacerbations leading to repeated prescriptions of oral steroid tablets, visits to hospital emergency departments and even hospital admissions. Some of these patients are admitted to intensive care units with life threatening asthma. New treatments are now available to high risk patients to improve their quality of life, reduce the frequency and severity of their exacerbations,” noted Dr. Aashish Vyas, Lancashire Teaching Hospitals NHS Foundation Trust.

“The pilot aims to provide care closer to home for our patients by using mobile units which can be located close to high density patient populations with an expert team undertaking the assessments and feeding back the results to the primary care teams, the specialist center and most importantly to the patients with [a] plan for ongoing care for that individual.”

“Hosting the unit, the first of its kind in the UK, marks our commitment to do more to diagnose and manage respiratory problems earlier, as set out in the ambitions in the NHS Long Term Plan. Following the outbreak of the global coronavirus (COVID-19) pandemic, it is more important than ever for us to work together in new and innovative ways,” said Dr. Sumantra Mukerji, a Lancashire GP and Clinical Commissioning Group Chair. “We anticipate the positive impact that this additional resource will have for those suffering with severe asthma in our communities, potentially avoiding unnecessary urgent admissions and reducing the incidence of deaths, whilst also reducing pressures within the wider healthcare system.”

## References

Content for this article was based on and excerpted from:

- UK’s first “asthma bus” to support NHS respiratory service. PharmaTimes, October 6, 2021. [https://www.pharmatimes.com/news/uks\\_first\\_asthma\\_bus\\_to\\_support\\_nhs\\_respiratory\\_service\\_1379926](https://www.pharmatimes.com/news/uks_first_asthma_bus_to_support_nhs_respiratory_service_1379926).
- UK’s first “asthma bus” set to provide vital resource to pressured NHS respiratory services as asthma sufferers admit to putting off care during pandemic. <https://www.centrallancashireccgs.nhs.uk/latest-news/410-uk-s-first-asthma-bus-set-to-provide-vital-resource-to-pressured-nhs-respiratory-services-as-asthma-sufferers-admit-to-putting-off-care-during-pandemic>.

- UK’s first “asthma bus” comes to Chorley thanks to AstraZeneca and NHS partnership. Lancashire Post, October 8, 2021. <https://www.lep.co.uk/health/uks-first-asthma-bus-comes-to-chorley-thanks-to-astrazeneca-and-nhs-partnership-3412317>.

- The UK’s first asthma bus launches in Leyland. The Preston Hub, October 11, 2021. <https://theprestonhub.co.uk/2021/10/11/the-uks-first-asthma-bus-launches-in-leyland>.

- Lancashire to host UK’s first asthma bus. Planet Radio, September 28, 2021. <https://planetradio.co.uk/rock-fm/local/news/lancashire-to-host-uk-first-asthma-bus>.

## “Asthma bus” touring UK schools helps improve students’ symptom control

In 2014, Slough, UK had some of the highest rates of asthma in England in children less than 19 years old. Emma Bushell, a respiratory nurse specialist in children’s services at the Frimley Health Foundation Trust, realized that understanding asthma and its treatment could help children gain better disease control, reduce exposure to triggers and adjust medication. In addition, empowering them to self-manage their asthma could bring symptom relief and a sense of being in control; as well as reduce emergency department attendance and length of hospital admissions.

Bushell also wanted to develop a program that could reach many children quickly and cover the geographical area efficiently. When she asked, “Could we have an asthma bus?” the response was, “If you can find a bus and fund it, then you can have one.” Work between the children’s service and school nurses along with first-year

funding from the Frimley Health Charity launched the mobile clinic or “asthma bus” in 2016.

“We targeted secondary school pupils, as this is an age when children are keen to take control of their lives, but also at risk of non-adherence to treatment,” Bushell explained. “We needed to make our intervention fun and interesting to engage children and encourage them to ask questions,” she added.

## Focusing on basics in 2016

The third week of September was chosen as the best time for the asthma bus tour, fitting most easily into school schedules and coinciding with a spike in asthma admissions. The spike was thought to be due to children’s poor adherence to treatment during summer, increased exposure to viral infections, changes in weather, and stress due to workload, exams and new environments.

All 16 secondary schools in Slough agreed to host the bus for a half day or whole day. Students with asthma were identified and the schedule finalized, knowing the bus could accommodate 10-12 children at a time. Approximately 410 students, aged 11-17, spent an average of 30 minutes with the asthma bus team, comprised of an asthma nurse and a school nurse, sometimes joined by a student nurse and/or a health visitor.

In that first year, approximately 80% of the children who participated did not understand what their inhalers provided. Most did not understand the link between asthma and allergies, the importance of adherence to treatment or the benefits of using a spacer.

To address those concerns, the asthma bus nurses presented basic information about what inhalers do, the importance of spacers, recognizing triggers, limiting exposure, recognizing and managing symptoms, accessing information and healthy lifestyles.

## **A range of improvements for 2017**

To make sessions more interactive for 2017, the team developed short videos that demonstrated inhaler and spacer techniques, and created a leaflet utilizing information from Asthma UK. During the 2017 tour, approximately 560 students were seen. Those who participated in 2016 were encouraged to attend again and returning students had retained some information from the previous year.

Bus visits were followed by emails to the schools containing basic asthma management information for students to share with families. The team also emailed primary and secondary care clinicians to inform them of the topics on which children needed better information, including use of preventer, reliever and combination inhalers, the role of spacers, inhaler technique and asthma triggers.

## **Positive and award-winning results**

Data showed that the annual asthma bus tours in Slough had a positive effect. When results from 2015 and 2017 were compared, decreases in emergency department attendance and pediatric unit admissions for students 4-17 years old were observed.

In addition, the initiative won the Respiratory Nursing category in the 2017 Nursing Times Awards.

For 2018 and beyond, plans for the future included increasing participation among sixth-formers, plans to attend university preparation days and investigating ways to reach primary school children.

## **Reference**

Bushell E. Asthma bus touring schools improves pupils' symptom control. *Nursing Times* [online]; 114:4,22-23 (2017). <https://www.nursingtimes.net/clinical-archive/respiratory-clinical-archive/asthma-bus-touring-schools-improves-pupils-symptom-control-12-03-2018>.