59026. Nurse experience of delivering asthma consultations during the Covid-19 Pandemic

**Strap**

Research

**Substrap**

Respiratory care

**Standfirst**

Nurses performing remote asthma reviews during the Covid-19 pandemic outline their experiences

**Keywords**

Asthma nurses / Remote consultation / Covid-19

**Head**

Delivering asthma reviews during the Covid-19 pandemic

**In this article…**

The challenges involved in working remotely versus face to face

Recommendations for future research on asthma consultations

The efficacy of remote consultation for asthma reviews

**Key points**

Access to asthma management changed dramatically with the Covid-19 pandemic

Nurses performing asthma reviews started to see patients remotely

This practice had huge benefits as well as some disadvantages

Study participants demonstrated resilience and adapted to the new challenges

More training is needed to upskill both health professionals and patients to interact in this way

**Authors**

Jane Watling-Smith is advanced nurse practitioner, Helensburgh Medical Centre.

Nicola J Roberts is Associate Professor, School of Health and Social Care, Edinburgh Napier University

**Abstract**

The Covid-19 pandemic meant that the delivery of asthma management in primary care changed virtually overnight, requiring the introduction of alternatives to face-to-face care. This study examines the experiences of nurses who were performing asthma reviews during the pandemic, identifying key themes that emerged as well as providing recommendations for future practice.

**Citation**

Watling-Smith J, Roberts NJ (2022) Delivering asthma consultations during the Covid-19 pandemic. Nursing Times; 119: 1.

**Quick fact**

15%

Proportion of the population of the UK affected by asthma or allergic disease

**Pull quote**

“This qualitative study revealed the resilience of nurses in ‘just getting on with things’ and embracing the added challenges”

**[Main text]**

The UK has a high prevalence of asthma and allergic disease; it affects around 15% of the population, putting a significant burden on the NHS

In March 2020, the Covid-19 pandemic immediately created a huge challenge for primary care services. Because of the need to reduce face-to-face assessment, access to basic respiratory care and asthma management changed dramatically with a shift to mass introduction of telephone or video consultations.

**[crosshead] Background**

Although the National Review of Asthma Deaths (NRAD) (Royal College of Physicians (RCP), 2014) made several recommendations to improve care, many patients’ asthma remains inadequately controlled. The disease continues to cause considerable morbidity and preventable high mortality rates in the UK (Asthma UK, 2019a)

Clinical guidelines advise that patients have adequate advice and education to help improve asthma control, and patients should have a review appointment at least annually by a health professional with appropriate expertise (Global Initiative for Asthma, 2022; British Thoracic Society/Scottish Intercollegiate Guidelines Network (BTS/SIGN), 2019).

 **‘The standard asthma review’**

Individuals with asthma should have knowledge of their condition, treatment and management, as well as appropriate self-management skills (BTS/SIGN, 2019). Education and regular reviews should address changes in symptoms but also support asthmatics to self-manage effectively. Key components to a review appointment include assessment of symptom control, adherence to medication, reviewing the treatment response, treatment adjustment and patient education, as well as assessment of future exacerbation risk. The BTS/SIGN guidelines (2019) emphasise the importance of regular monitoring of asthma patients.

**[crosshead] Aims and objectives**

This study set out to explore nurses’ experiences and views of performing asthma consultations via telephone or video during the pandemic.

**[crosshead] Literature review**

We identified five key articles that provide an overview of health professionals’ experiences of remote consultations during or before the pandemic (Halcomb et al, 2020; Jiménez-Rodríguez et al, 2020; Kaminsky et al, 2020; Murphy et al, 2020; Papadopoulos et al, 2020). All these explore health professionals’ views on implementation and management of video consultations, or the impact of the pandemic on asthma services and on disease burden. The studies identified huge benefits for patients and health professionals including reduced travel time, but problems centred on issues with technical equipment for both health professionals and patients, acknowledging that additional training is needed. In particular, issues were highlighted with older patients or people from deprived communities who cannot use or do not have access to technology Jiménez-Rodríguez et al, 2020.

Many doctors and nurses said that telemedicine takes longer, is more challenging and reduces job satisfaction (Jiménez-Rodríguez et al, 2020; Kaminsky et al, 2020; Murphy et al, 2020). However, Murphy et al (2020) and Papadopoulos et al (2020) suggest that switching to remote consultations has a minimal impact on asthma control in most patients, despite the restrictions to assessment. Papadopoulos et al (2020) suggested that validated tools should be used to improve monitoring, such as the Asthma Control Test (GlaxoSmithKline, 2021) or the Asthma Control Questionnaire (ACQ) (American Thoracic Society, nd).

These studies show that remote consultation is now commonly used in healthcare and offers significant benefits, but there are also barriers to successful implementation. Issues surounding technology need consideration if these practices are to be continued after the pandemic.

**[crosshead] Methods**

A qualitative general inductive approach was used to explore nurses’ experiences of remote consultation for asthma reviews. UK nurses regularly as part of their role undertaking asthma reviews were recruited through social media (Twitter, Facebook).

A semi-structured interview guide was developed, featuring a set of five pre-designed open-ended questions to explore participants’ views using telephone interviews. Interviews were audio recorded, transcribed verbatim and anonymised. Thematic analysis was undertaken to develop emerging themes. Ethical approval for the project was granted by the School of Health and Life Sciences ethics committee at Glasgow Caledonian University.

**[crosshead] Results**

Seven nurses were recruited and interviews with them were done in January and February 2021. All were between 45-64 years old and at NHS Band 6-8. All were based in the UK (England or Scotland), and just under half (three out of seven, 43%) had between 5-10 years’ experience, other four, more than ten, 57%. Participants were either based solely in primary care, caring for patients with other longterm conditions or in joint roles with secondary care. Predominantly working with respiratory patients.

Two key themes were identified: ‘Just getting on with things’ (focusing on the resilience of nurses adapting, making changes and embracing the challenges), and ‘The need to see patients face to face’ (as despite the benefits of remote consultation, this need remained). Fig 1 provides an overview of the key themes and sub-themes identified in the study.

**[subhead] Theme 1: ‘Just getting on with things’**

Participants discussed significant changes to home life, work environment and working practices during the pandemic. With the suspension of routine face-to-face asthma reviews, many participants found it necessary to prioritise patients, prioritising those most at risk from severe outcomes.

All but one of the participants reported changes to their personal circumstances. Three participants reported having to juggle work with home-schooling children. They each reported worrying about their children being left to get on with schoolwork by themselves. Another participant was a single parent of three. Two older children returned to the family home because of the pandemic and she was the only earner, so experienced an increased financial burden. Another nurse with roles in primary and secondary care moved from the family home to protect shielding family members, then switched to working only her primary care role remotely from home to reduce risk.

**[subsubhead] Changes to work and working practices**

All seven participants reported changes to their working routines. Changes included either changing their role (redeployment) or changes in schedule or working additional hours (reduced or increased). Two participants changed to working partly at Covid-19 assessment centres, reporting additional stress and worry about bringing the virus home and exposing family members to it.

The nurses working from home were provided with laptops and access to practice computer systems and were able to send prescriptions direct to pharmacies. The benefit of this was documented by one of the respiratory nurse specialists:

*‘‘I can also review more patients and quicker, as no wasted time travelling between surgeries. The practices would normally be waiting for me to come but now they can just email a referral and I could phone them the next day. The challenge is when I need to see someone, because I’m working from home, I have to refer to one of my colleagues, not the best for continuity of care.’’* (Participant 1)

Only two participants reported regularly using video consultations. The main reason stated for not using video were technical difficulties, lack of training or support, or patient dislike or reluctance.

**[subsubhead] Prioritising patients**

Many routine reviews were suspended to facilitate redeployment of services when the pandemic began. As a result, there was a backlog of patients who required review for most long-term conditions. Participants identified a need for risk stratification of asthma patients. Clinicians needed to identify those at high risk using guidelines, clinical data and previous reports. The lists were streamlined into those identified by NRAD as being at risk of severe outcomes (RCP, 2014).

**[subhead] Theme 2: ‘The need to see patients face to face’**

Participants acknowledged the benefits of remote consultations to reduce contagion, but also highlighted some of the disadvantages with the practice (Box 1). Six out of seven expressed a desire for an option to be able to see patients face to face, especially patients with complex issues that were too challenging to address remotely. Participants also said that remote consultations were often more stressful and tiring than face-to face encounters, carried greater clinical risk and were less satisfying. There is a risk that clinicians miss cues they would normally notice, such as poor inhaler technique or breathing pattern disorders.

**[crosshead] Discussion**

Online consultations have been an essential tool during the pandemic to provide remote diagnosis and treatment, effectively reducing the burden on hospitals, preventing overcrowding, reducing the risk of cross-infection and relieving patients' anxiety. In response to government guidelines issued during the pandemic. (General Medical Council; NHS and NHS Improvement, 2021 National Institute for Health and Care Excellence (NICE), 2020; Royal College of Nursing, 2020), study participants adopted remote consultations for many conditions, including assessing and reviewing patients with asthma. Despite the added challenges and stresses to their personal and work circumstances, they demonstrated resilience in ‘just getting on with things’ and embracing a new situation.

Some of the benefits of remote consultation identified by participants include:

* Greater flexibility for patients;
* Reaching or engaging with patients who might otherwise not seek help or attend routine appointments;
* Quicker for practitioner – no wasting time on travel to appointments or with patients ‘settling in’ for face-to-face consultations;
* Nurses able to review more patients;
* Better patient response rate, reducing face-to-face non-attendance rate.

Some of the disadvantages of remote consultation identified by participants include:

* Complex cases are more difficult to properly review remotely;
* Many patients are left to ‘go around the houses’;
* Some more elderly patients struggle with hearing or technical know-how;
* Non-verbal cues during in-person assessment are more easily missed;
* Some examinations, such as spirometry, are unable to be performed.

Roberts et al (2021) has highlighted the impact on practitioners as the additional workload caused by the pandemic is concerning and support mechanisms need to be put in place to protect nurses. A combination of high demands and poor terms and conditions has meant that many practice nurses feel undervalued and demoralised (Evans, 2021). Greenberg et al (2020) has shown that during the pandemic health professionals were at higher risk of mental health problems, so staff need to be protected and supported to minimise this risk.

The efficacy of remote consultation for asthma reviews has come under scrutiny, although some authors conclude that it is as good as face-to-face meetings (Greenhalgh et al, 2020a; Greenhalgh et al, 2020b).

Only two participants in this study were regularly using video. Participants highlighted that video consultations were more time consuming to set up and felt able to do most consultations via telephone, echoing research by Tarn et al (2021), which stressed that most patients prefer telephone. Others (Edgoose, 2021) are ambivalent about video consultations and argue that face-to-face appointments are needed to establish a good relationship with patients. Training is also needed to improve the adoption of video consultations (Greenhalgh et al, 2020a).

Some authors warn that viewing inhaler technique is necessary to complete the review (Siddaway, 2018). However, one participant concluded that even with video technology, observing inhaler technique was often inadequate.

Four participants also felt that emailing personal asthma action plans ( PAAPs) to discuss and change together worked well. Hamour et al (2020) considers screen-sharing technology, revealing its benefits in discussing PAAPs together was feasible and did not feel it diminished their discussion about the action plan.

Evidence suggests that remote consultations for asthma reviews are effective and could make better use of time and resources for patients and clinicians, enabling more people to be reviewed (Henry, 2021; BTS/SIGN, 2019; RCP, 2014).

Although telephone consultations were found to be adequate for most patients, participants also said that they were more tiring and stressful, especially for patients with complex issues. This is in part due to challenges to assessment, included missing visual cues and missed diagnostic objective testing. Nurses were unable to undertake certain components of asthma reviews such as demonstration of inhaler technique, spirometry, or fractional exhaled nitric oxide (FeNO) testing. An in-person review usually allows the opportunity for opportunistic screening with incidental findings from just taking a pulse, measuring blood pressure, doing a smear or taking routine bloods.

Box 2 features our action points and recommendations for further research in this field.

**[crosshead] Conclusion**

Remote consultation has had many benefits, but there have also been disadvantages, in part due to the speed of roll-out. Patients have had to adapt to receiving care in this new way.

Professional training and guidance is needed to upskill health professionals, in video and telephone consultations. Some patients also require education on how to use video technology for their consultation. Furthermore, NHS management and professional bodies need to allow time and resources for health professionals to be trained to implement interventions. Primary care must be workable, with a safe and manageable workload, with reasonable and fully funded priorities agreed.

The rapid challenge of the change from face-to-face to remote monitoring clinics provided little time for transition, often with hastily set up IT software to accommodate services. Going forward, it should be recognised that not one size fits all – many patients do not have adequate digital literacy to enable them to manage a remote review, whereas others are completely happy with this. Yet even those who are happy with the format may not respect the limitations of this method when a clinician risks missing subtle cues they would normally notice.

**REFERENCES**

American Thoracic Society (nd) Asthma control questionnaire. thoratic.org (accessed 11 November 2022).

Asthma UK (2019a) Asthma death toll in England and Wales is the highest this decade. Asthma.org.uk, 9 August (accessed 11 November 2022).

British Thoracic Society/Scottish Intercollegiate Guidelines Network (2019) British Guideline on the Management of Asthma. BTS/SIGN.

Edgoose JYC (2021) Exploring the face-to-face: revisiting patient-doctor relationships in a time of expanding telemedicine*.* Journal of the American Board of Family Medicine; 34, S252-S254.

Evans N (2021) Burnout: has Covid-19 pushed undervalued and stressed general practice nurses too far? rcni.com, 5 July (accessed 11 November 2022).

General Medical Council (nd) Remote consultations. gmc-uk.org (accessed 11 November 2022).

GlaxoSmithKline (2021) Asthma Control Test. asthmacontroltest.com (accessed 11 November 2022).

Global Initiative for Asthma (2022) Global Strategy for Asthma Management and Prevention. GINA.

Greenberg N et al (2020) Managing mental health challenges faced by healthcare workers during covid-19 pandemic*.* British Medical Journal: 368, m1211.

Greenhalgh T et al (2020a) Covid-19: a remote assessment in primary care*.* British Medical Journal*;*368, m1182.

Greenhalgh T et al (2020b) Video consultations for covid-19*.* British Medical Journal*;*368, m998.

Halcomb E et al (2020) The experiences of primary healthcare nurses during the COVID‐19 pandemic in Australia. Journal of Nursing Scholarship; 52: 5, 553-563.

HAMOUR, O., SMYTH, E. & PINNOCK, H., 2020. Completing asthma action plans by screen-sharing in video-consultations: practical insights from a feasibility assessment*. NPJ Primary Care Respiratory Medicine* [online]*.***30**(1), pp.48. Available from: <https://doi.org/10.1038/s41533-020-00206-8>

Henry H (2021) Remote asthma consultations in primary care. Practice Nursing; 32: 1, 10-14.

Jiménez-Rodríguez D et al (2020) Increase in video consultations during the COVID-19 pandemic: healthcare professionals’ perceptions about their implementation and adequate management. International Journal of Environmental Research and Public Health; 17: 14, 5112

Kaminsky E et al (2020) Registered nurses´ views on telephone nursing for patients with respiratory tract infections in primary healthcare: a qualitative interview study. BMC Nursing; 19: 65.

Murphy M et al (2020) Implementation of remote consulting in UK primary care following the COVID-19 pandemic: a mixed-methods longitudinal study. British Journal of General Practice; 71: 704, e166-e177.

National Institute for Health and Care Excellence (2020) COVID-19 rapid guideline: severe asthma. NICE.

Papadopoulos NG et al (2020) Impact of COVID-19 on paediatric asthma: practice adjustments and disease burden. The Journal of Allergy and Clinical Immunology. In Practice; 8: 8, 2592-2599.e3.

Roberts NJ et al (2021) Mental health of respiratory nurses working during the Covid-19 crisis. Nursing Times [online]; 117; 12, 26-28.

Royal College of Nursing (2020) RCN survey reveals ‘gut-wrenching’ shortages of PPE. Emergency Nurse; 28: 3, 7

Royal College of Physicians (2014) Why asthma still kills: The National Review of Asthma Deaths (NRAD). RCP.

Siddaway D (2018) Stepping down asthma treatment: perceptions of primary care staff. Nursing Times; 114: 4, 18-21.

Tarn DM et al (2021) Using virtual visits to care for primary care patients with COVID-19 symptoms. Journal of the American Board of Family Medicine; 34, S147-S151.

World Health Organization (2020) Asthma key facts. who.int

Asthma +Lung UK [Asthma + Lung UK | Asthma home](https://www.asthma.org.uk/)

RightBreathe <https://www.rightbreathe.com>

Allergy UK <https://www.allergyuk.org/>

My Lungs My Life <https://mylungsmylife.org>

Asthma Control Questionnaire <https://www.thoracic.org/members/assemblies/assemblies/srn/questionaires/acq.php>

**Figure 1. Key themes and sub-themes identified in the study**

Figure 1 labels:

Key themes

Theme 1: ‘Just getting on with things’

Changes to home and personal circumstances

Changes to work and working practices

Changes to practice

Prioritising patients

Resources and tools

Theme 2: ‘The need to see patients face to face’

Missed opportunities for education/health promotion and screening



**Box 1. Remote consultation – participants’ comments on benefits and disadvantages**

|  |
| --- |
| **Benefits**  |
| *‘‘I was able to catch more working from home. We’ve been able to access a farmer, he would never engage previously. He was pleased he didn’t have to stop work to come in.” (Participant 6)* |
| *‘’Particularly good for those that work, they don’t have to take time off; it’s given them flexibility.” (Participant 6)*  |
| ***‘****‘Definitely quicker, you’re not wasting time getting up going to waiting room, waiting for patient walking into room, taking coats off, making themselves comfortable.” (Participant 5)*  |
| *‘‘I’m getting hold of some of the difficult to reach ones that don’t attend usually, now they are at home, so that’s been beneficial.” (Participant 2)*  |
| *‘’It’s beneficial because I can review more people as no travelling time.’’ (Participant 1)* |
| *‘’It’s ideal for those that were already sorted out that are too scared to come in. It has also dealt with the problem of PPE shortage.” (Participant 2)* |
| *‘’I have to say I get a better response with phone reviews, I have so many non-attenders with face to face.’’ (Participant 5)*  |

|  |
| --- |
| **Disadvantages** |
| *‘’I think there’s a place for face-to-face visits because sometimes patients are really complicated, you can't really sort patients over the telephone.” ( Participant 5)* |
| *‘’I don't think remote consultation is as good as face to face. I know there’s some evidence from that ‘Greenhalgh lady’ that the virtual reviews are as good, I'm not sure to be honest!” (Participant 5)* |
| *‘’Some patients have just been going around the houses and just need to come in to be sorted out properly. I had a bloke that upset me, asthma was out of control and he was depressed, I spent 45 minutes with him, he really needed sorting.” ( Participant 5)* |
| *‘’I’ve found older folk struggle with hearing. It’s difficult because we can’t gauge their reaction to what you’re saying, I miss all the non-verbal cues that you would normally have.” ( Participant 3)* |
| *‘’Biggest impact has been missing the examinations that are done face to face, spirometry and I worry something will be missed.’’ (Participant 1)* |
| *‘’It is easier to phone someone up, but you do miss out on the just looking at someone and just knowing, instinct telling if someone’s ok. I feel missing those cues is a worry, but quick follow ups are good.” (5 Participant)* |
| *‘’I feel there is difficulty when we can’t listen to someone’s chest and can’t hear the wheeze.’’ (Participant 4)* |

**Box 2: Recommendations and further research**

When compared to younger age groups, over 65s have been late to adopting new technologies, and in areas of high deprivation, uptake of telemedicine and video consultations is reduced. This needs to improve to ensure equity.

Improved training, education and IT systems for professionals and patients is required on how to use video technology for their consultation.

This study has focused primarily on the provision of online reviews in primary care and further work could look at the similarities or differences in secondary care. What are patients’ preferences and is it likely that there will be a mixture of online and face-to-face consultations? If so, what impact would this have on services?

For some patients the pandemic has improved their self-management skills and there is scope to research what support patients need to be more effective at managing their asthma and ultimately reduce unnecessary GP and emergency attendances.