

# The facilitators and barriers to developing an integrated care pathway for CRS patients in England\*

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## Abstract

**Background:** With the NHS policy agenda focussed on facilitating integrated care, there may be an opportunity for healthcare professionals to collaborate across traditional healthcare settings and develop an integrated care pathway for patients with chronic rhinosinusitis. The aim of this paper is to identify what the facilitators and barriers are.

**Methods:** Semi-structured qualitative interviews of ENT consultants and general practitioners based in England and involved in treating patients with chronic rhinosinusitis (n = 18).

**Results:** This study identified five key themes to consider when developing an integrated care pathway. Whilst the NHS integrated care agenda provides opportunities for the development of an integrated care pathway, several challenges must first be addressed. These include primary and secondary care collaboration, and the utilisation of wider healthcare professionals, including nurses and physician associates. Without due consideration, there is a risk that chronic rhinosinusitis is deemed too low priority to warrant pathway redesign.

**Conclusions:** To support the development of an integrated care pathway, clinicians and managers need to engage with local health systems to understand the initiatives planned and make a suitable judgement on whether change is feasible for chronic rhinosinusitis care pathways.

**Key words:** delivery of health care, integrated, integrated health care systems, qualitative research, rhinitis, sinusitis

## Introduction

Chronic rhinosinusitis (CRS) is a prevalent chronic disease with complex underlying pathophysiologic mechanisms encompassing a range of inflammatory mediators<sup>(1,2)</sup>. CRS is challenging to diagnose, largely due to an overlap of its symptoms with other upper respiratory diseases<sup>(3,4)</sup>. The objective of CRS treatment is to achieve and maintain clinical control of an individual's symptoms.

Previous literature has highlighted challenges that patients face when engaging with general practitioners (GPs). Many have stated that CRS is not given the same priority as other health conditions<sup>(5)</sup>. ENT (Ear, Nose and Throat) specialists have repor-

ted missed diagnoses and inappropriate referrals from primary care<sup>(4)</sup>. Many GPs admit they are unaware of guidelines for patient referral and base their decision on personal experience. This has led to patients expressing frustration with primary care due to the lack of referral strategy<sup>(4,6)</sup>. Patients describe secondary care as an important step in understanding their disease; however, patients have reported frustration in the discontinuity of treatment due to follow-ups with different grades of healthcare professionals (HCPs)<sup>(5)</sup>.

It is recognised that the management of patients with CRS needs to improve across primary and secondary care. This has led to multiple publications, including EPOS2020, calling for the

development of an Integrated Care Pathway (ICP) <sup>(4,5,7,8)</sup>. Recent NHS policy initiatives around integrated care may be an opportunity for the development of a CRS ICP <sup>(9-11)</sup>. Furthermore, NHS England (NHSE) initiatives, including Getting it Right First Time (GIRFT), have identified opportunities to improve the delivery of ENT services by rethinking referral pathways and encouraging greater collaboration across the health system <sup>(12,13)</sup>. However, the provision of secondary care rhinology services in some areas is under threat due to restrictive referral criteria implemented by local commissioners <sup>(1,14)</sup>. The GIRFT report identified restrictive referral criteria as a threat to future service delivery <sup>(12)</sup>.

This paper provides insight into the facilitators and barriers to developing an ICP for adult patients with CRS in England. It collects opinions and experiences from stakeholders involved in the care pathway, GPs and ENT consultants with a specialist interest in rhinology. The interview questions considered challenges in the existing care pathway and wider NHS policy initiatives that may support ICP development.

## Methods

### Design

Qualitative data was collected by performing semi-structured interviews with a purposive sample of GPs and ENT consultants who have experience in engaging with patients diagnosed with CRS. Purposive selection is common practice in qualitative research as it captures the diverse viewpoints of study participants. Due to the investigative nature of the research, a pragmatic and flexible approach needed to be undertaken. Thematic analysis was judged the most appropriate qualitative analytic approach <sup>(15)</sup>. This study received approval from the Imperial College Joint Research Compliance Office (20IC6052).

### Participants and procedures

Study participants were recruited between June and October 2020. Inclusion criteria for selection included ENT consultants with specialist experience in rhinology (described as "ENT participant" henceforth) and GPs who were either partners or salaried in their practice (described as "GP participant" henceforth). As the research question was orientated around EPOS2020, it was deemed most appropriate to engage with ENT consultants with a specialist interest in rhinology. All study participants practice in England.

### Interviews

An interview guide was created by the author (JMS) after performing a literature review which helped develop a baseline understanding of the care pathway and policy initiatives that may support or hinder ICP development. This guide was piloted with an ENT consultant with a specialist interest in rhinology to ensure the questions asked are relevant. Feedback helped refine

the guide where required. The guide supported the structure of the interview though remained sufficiently flexible to investigate unforeseen topics.

All ENT participants and two GP participants were recruited from the author's personal network. Due to the authors limited contacts in primary care the remainder of GP participants were recruited via snowball sampling, a technique which capitalises on the networks of a few key interviewees <sup>(15)</sup>.

In total, eighteen participants enrolled in the study, including eleven ENT and seven GP participants. Semi-structured interviews were conducted by the author (JMS), each lasting between 25 to 50 minutes. Interviews were conducted over Microsoft Teams due to the meeting restrictions enforced by the COVID-19 pandemic.

Participants were asked to share their experiences of engaging with CRS patients, the processes undertaken to support diagnosis and treatment, and the HCPs involved in supporting patients along the care pathway. Additional themes explored include the objectives outlined in the EPOS2020 publication with respect to ICP development and the integration policy initiatives ongoing in the NHS. Interviews were recorded and transcribed verbatim by the author (JMS) in preparation for analysis. Transcripts were numerically randomised to protect the participants anonymity. Participant interviews were conducted until no new themes emerged, therefore concluding that data saturation had been achieved.

### Analysis

An inductive thematic analysis approach was taken to scrutinise the transcribed data <sup>(16)</sup>. Interviews were conducted concurrent to the analysis process. Data analysis was conducted in several stages. The first stage was familiarisation with the participant transcripts and recordings. Notations on early themes were coded next to the relevant transcript text and highlighted accordingly. The second stage systematically coded them to descriptive labels, capturing the essence of what each participant was describing. The third stage involved clustering the labels and highlighting the themes emerging across the transcripts. Finally, these themes were categorised according to scope. Transcripts and interviews were revisited to ensure that the data selected matched the context of each theme chosen. Once the analysis was complete for each transcript, the themes and associated sub-themes were compiled on a master list in Microsoft Excel. These themes were then grouped accordingly and relabelled where appropriate.

## Results

### Themes

Thematic analysis of the interview content identified five main themes related to the facilitators and barriers of developing an ICP for adult patients with CRS. This included:

Table 1. Themes identified on what the opportunities and challenges are to developing an integrated care pathway for adult patients with chronic rhinosinusitis

Themes	Sub-themes
Diagnosis and Referral	Diagnosis Treatment Disease perception
Collaboration	Primary and secondary care collaboration Digital communication The unified airway
Commissioning	Funding and commissioning
Workforce	Nurses and Physician Associates Pharmacists GPs with extended responsibilities
COVID-19 impact	Opportunities Challenges

1. Diagnosis and Referral
2. Collaboration
3. Commissioning
4. Workforce
5. COVID-19 impact

Quotations from participants are provided to highlight each theme identified.

**Theme 1: Diagnosis and Referral**

Due to the complexity of CRS, diagnosis was described as challenging by both GP and ENT participants. The slow onset of disease created challenges in primary care as patients tended to try and manage their own condition until symptoms significantly impacted their quality of life, thus requiring care from a HCP. ENT participants echoed these sentiments stating that despite years of specialty experience, sometimes they find it challenging to diagnose.

*“It’s very hard to define what is CRS. The problem with CRS is it’s nebulous, you know, it’s a nebulous diagnosis based on history, examination, nasoendoscopy findings, skin prick tests, and CT scan, right? So, until it becomes more tangible, then I think there’s always going to be a grey area.”*

[#5, ENT participant]

The lack of appropriate diagnostic equipment in primary care makes it difficult to diagnose, leading to frustrations from ENT participants about the quality of the referrals from primary care. GP participants admitted to not utilising guidelines when engaging with CRS patients, the main reason being time constraints associated with appointments and the need to address other conditions within that timeframe. On questioning the GP participants when they consider referral, the author received a variety

of answers which were not compliant with the aforementioned guidelines.

*“Very rarely, if at all... I probably tell them to get on with it if I’m honest, you know, that’s the way it is. We’ll do our best and this is what we can do.”*

[#3, GP participant]

*“I think if they come back to me kind of three or four times and I wasn’t getting on top of it... and if I maybe given some antibiotics and it hadn’t worked, then I probably refer them to secondary care.”*

[#16, GP participant]

Patients have argued that CRS is not given the same consideration by GPs as other health problems that they suffer (4). The interview responses supported this claim as it was evident that CRS is considered low priority in primary care. This is likely related to the unlikeliness of the disease having severe adverse effects if not effectively managed, though there was recognition that it may impact quality of life.

*“If someone kind of complained to me that I hadn’t managed their CRS well, water off a duck’s back. Look I’m sorry, it’s a chronic disease but it’s not going to kill you.”*

[#8, GP participant]

**Theme 2: Collaboration**

With the development of the NHS integrated care agenda, the interview questions sought to understand whether Integrated Care Systems (ICSs) may support ICP development. ENT participants expressed hope that pathways can be redesigned so that more care is provisioned in the community before the patient presents to secondary care; however, GP participants stressed that for an ICP to be successful, the approach needs to be collaborative and appropriate support needs to be provided by secondary care.

*“I think where it falls apart is where the integrated care, although it’s integrated and there’s advice from secondary care, but then basically the workload is dumped on the general practice, and it can be hard to sustain then.”*

[#11, GP participant]

ENT participants were conscious of the workload GPs face in the community which may impact the ability for more care to be delivered in the community. Community hubs were seen as an effective structure which may establish better collaboration between primary and secondary care practitioners. However, an appropriate quality assurance system needs to be introduced to stipulate where the clinical risk lies.

*"Historically, secondary care colleagues would say 'well if we're going to be sued over this, we're not going to do it unless we see the patients and we have control of it'. So, you need to have an agreed process and agreed checks and balances."*

[#9, GP participant]

Several participants raised concerns which may impede collaboration. Firstly, GP participants reported that the primary care networks (PCNs) in their respective regions were not yet structured in a format that would facilitate ICP development. Furthermore, the consolidation of GP practices into PCNs is not without issue as GPs face disagreement with local colleagues on what the organisations objectives should be. As such, several GP participants believed that CRS would be considered too low priority to be considered a focus.

*"The problem is that minor issues, such as CRS, will be neglected within the PCN. I'm pretty sure if I said, you know, I have a friend who wants to come in and create a new service for CRS, they would say 'yeah, put it back in its place.'"*

[#8, GP participant]

The EPOS2020 guidance recommends that patients with complex lower and upper airway conditions should receive a multidisciplinary approach. Whilst there was broad interest from ENT participants in setting up a multidisciplinary team, few had a joint airway clinic in operation. Many have encountered resistance within their workplaces due to the resources required in setting them up and the need to change job plans.

### **Theme 3: Commissioning**

Funding for integrated care was raised as a challenge by both GP and ENT participants. Traditional payment models were classified as insufficient and not conducive to the collaboration envisaged in an ICP.

*"It sounds all great 'oh we'll integrate primary care, we'll do this and do that', but you've still got the fundamental thing. Who can provide this? How we're going to commission it? And who's going to pay for it?"*

[#15, GP participant]

For an ICP to be successful, participants stated that new payment models will be required. Recent NHS policy developments in response to the COVID-19 pandemic were recognised as an opportunity by GP participants.

*"Now there are real opportunities at the moment because there is no tariff, it's all block contract due to COVID."*

[#9, GP participant]

Several ENT participants stated that research is vital to ensuring that rhinology services continue in the future.

*"If you have a finite number of resource, you're going to prioritise certain things. You could potentially deprioritise certain things, unless you have the evidence base to say that this works and trials like MACRO will hopefully go some way to address that."*

[#1, ENT participant]

### **Theme 4: Workforce**

All participants believed there is an opportunity for wider HCPs to become more involved in supporting patients throughout the pathway. GP participants stated that nurse practitioners are increasingly being utilised in primary care to support diagnosis and ongoing treatment of airway conditions, including CRS. ENT participants had noted this trend in recent years and were largely positive about their involvement, though stressed that staff first need to receive appropriate training. In recent years physician associates (PAs) have become more commonplace in primary care. Most GP participants believed that PAs could be utilised in protocol-driven chronic disease management and so be of benefit to diseases like CRS. Most ENT participants were unaware of the role that PAs can play in facilitating treatment, though one participant with experience of working with a PA was effusive about their contributions to service delivery. However, clinicians need to be cautious about how they are integrated into a pathway as ultimately, they are most beneficial for protocol-driven work.

*"These people at the end of the day are not doctors, and they will only do quite protocol-driven work and a lot of them will not carry any risk. They are very, very risk averse."*

[#18, GP participant]

### **Theme 5: COVID-19 impact**

All study participants stated that the COVID-19 pandemic has had a significant impact on NHS services and their practice. As a result, this has created both opportunities and challenges to ICP development.

Both sets of participants acknowledged that the pandemic has fast tracked the adoption of telemedicine. Some GP participants stated that it has also facilitated easier access for some people who may not have sought medical guidance prior to the pandemic.

The pandemic has presented several challenges. For ENT participants, the most immediate issue is around nasoendoscopy in ENT clinics as this procedure has been deemed aerosol generating <sup>(17)</sup>. Both GP and ENT participants believe there may be commissioning threats in the long-term for rhinology services as the NHS may transition into a system which focuses on complex life-threatening illnesses. This may result in the 'rationing of care'

for disease states such as CRS.

*"I think the reality is that these young, fit, healthy otherwise well patients with CRS will have to find another route and that's where the private services might be better suited."*

[#8, GP participant]

## Discussion

This study provides a blueprint on how to act on recent evidence to develop an ICP which is aligned with the vision of ICSs within the NHS. The thematic analysis identified several facilitators and barriers to ICP development.

### Integrated Care

When discussing the NHS integrated care agenda, several ENT participants believed that pathways could be redesigned to provision more care in primary care; however, GP participants were assertive in declaring that they need to strongly influence how the pathway is designed for it to be successful. For an ICP to be effective, appropriate support and funding is needed in primary care. In theory, the advent of ICSs should make enable these conversations to take place across traditional care boundaries. Community hubs were perceived as effective structures that may improve collaboration between care boundaries. One GP participant rated their local ENT community provider as *"one of the best services we've had"*. Despite enthusiasm for community hubs, a few GP participants stated that PCNs in their localities were too early in development to accommodate discussions around ICP development. Furthermore, CRS would likely be considered too low priority to consider for service redesign.

### Involvement of wider healthcare workers

Participants believe there is an opportunity to utilise wider healthcare workers, such as nurses and PAs, in supporting patients. Some GP participants were already utilising nurses in their practice to support the diagnosis and treatment of airway conditions, including CRS. Most ENT participants agreed that nurses could play a major role in hosting clinics for ongoing disease management, either in secondary care or within a community hub. A few GP participants believe that PAs could support protocol driven chronic disease management in the future. Participants stated that caution should be exercised when considering the role of nurses or PAs in a pathway as they have found they can be unwilling to take on clinical risk. As such, an effective quality assurance system will need to be implemented to ensure that high quality care is provisioned whilst clinical concerns are escalated in a timely manner.

The EPOS2020 publication calls for greater collaboration between clinicians from inter-related specialities, including respiratory and immunology colleagues, to support the patient management around the unified airway concept<sup>(4)</sup>. All ENT

participants were supportive of this strategy as they believed it will improve patient care and help raise the profile of CRS outside of ENT circles. This in turn may aid in addressing challenges around funding and commissioning. However, only a few ENT participants had a joint clinic in place and the majority had faced challenges around funding, renegotiation of work plans and identification suitable spaces.

### COVID-19

The COVID-19 pandemic has significantly impacted NHS services, creating unique opportunities and challenges in both primary and secondary care. Both sets of participants have seen the accelerated adoption of telemedicine to ensure continued patient care. GP participants generally felt that this has helped facilitate easier access for digitally engaged patients, particularly for those suffering symptoms which may not have necessarily led to them to engage with their local GP in person. Both GP and ENT participants believed that the pandemic raises long-term questions on the commissioning of some secondary care rhinology services, as they expressed concern that CRS care could be rationed in the future as focuses are centred on disease states which lead to severe disability or death.

### Study strengths and weaknesses

A key strength of the study was the recruitment of participants from primary and secondary care. This allowed the author to capture the challenges of the existing care pathway from both points of view and understand the clinical context in how an ICP could be developed.

A weakness of the study was the absence of participation from clinicians who specialise in either respiratory medicine or immunology. Their involvement would have provided richer insight into the context of how an ICP could operate at secondary / tertiary care level. Furthermore, there was no participation from ENT specialists without a specialist interest in rhinology. Finally, the number of GP participants recruited would have ideally been greater; however, the limitations enforced by the Health Research Authority in delaying non-COVID-19 related studies<sup>(18)</sup> restricted the authors ability to contact GPs outside of his personal network.

### Suggestions for clinicians and managers

Engagement from primary care stakeholders is key to bridging the current gaps in patient management across care boundaries. However, a CRS ICP may not necessarily be on the agenda for primary care stakeholders due to the volume and complexity of other disease states that they manage. Clinicians and managers interested in developing a CRS ICP will need to validate whether conditions in their locality lend itself to service redevelopment. If there is appetite from local primary and secondary care stakeholders, it is necessary to have support with appropriate fun-



ding to ensure good service delivery. Whilst no specific contract models were mentioned by interview participants, funding models do exist which may support this collaboration<sup>(19)</sup>. The move away from payment-by-results reimbursement may encourage better cross-boundary collaboration and support the NHS integrated care agenda as providers can best decide where to allocate its budget to improve the local populations health<sup>(20,21)</sup>. Clinicians and managers who wish to develop an ICS should be bold in acting as the integrator for designing, coordinating, and managing the service in addition providing the service itself. The prime provider contracting model is a mechanism that can enable this<sup>(19)</sup>.

With respect to the development of community hubs, clinicians and managers should consider the recommendations from the independent review of diagnostic services, commissioned by NHSE. The report supports discussion around community hubs as the programme advises that more care should be delivered in the community and away from acute services where appropriate<sup>(22)</sup>. Community diagnostic hubs should be considered as part of a pathway redesign to enable specialist care to be provisioned in the community.

## Conclusions

The NHS integrated care agenda offers an opportunity to develop an ICP for patients with CRS. However, challenges in primary and secondary care that need to be overcome include issues

regarding funding and collaboration between specialities. There is significant risk that service redesign and funding will not be possible due to the low priority of CRS in primary care. To support ICP development, clinicians and managers should engage with local health systems to understand the initiatives planned and pass suitable judgement on whether change is feasible. Clearly further studies are necessary to gather further insight from a broad range of HCPs that specialise in other clinical fields, including healthcare commissioners.

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## Authorship contribution

The study was designed and implemented in accordance with the Health Policy MSc degree. JMS studied at Imperial College London. EM supported JMS as a supervisor for the study and provided his input to support publication of the research.

## Conflicts of interest

None declared.

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