

Final project report

A Collaborative Working Project between NHS Greater Glasgow and Clyde Health Board and Sanofi to support a Specialist Asthma Pharmacist role in the Severe Asthma Service.

<p>OUTCOMES ACHIEVED AND SUCCESSES:</p>	<p>The overall aim of NHS Greater Glasgow and Clyde Health Board in partnership with Sanofi was to develop a sustainable multi-disciplinary service which offers patients improved access to specialist asthma care and biologic therapy.</p> <p>The objectives of project were:</p> <ul style="list-style-type: none"> • To enhance the multi-disciplinary Severe Asthma Service offered for patients by developing a specialist pharmacist role. • To improve service access and reduce service waiting times by delivering short-term improvements in service capacity and optimising existing patient pathways. • To build a business case for the ongoing funding of a Specialist Asthma Pharmacist within the Severe Asthma Multi-disciplinary Team by the Health Board at the end of the project. <p>A summary of the key outcomes from the project are shown below.</p> <table border="1" data-bbox="491 1025 1380 1998"> <thead> <tr> <th colspan="2" data-bbox="491 1025 1380 1093">Creation of Service Pathway Maps</th> </tr> </thead> <tbody> <tr> <td data-bbox="491 1093 742 1998">Service map review</td> <td data-bbox="742 1093 1380 1998"> <p>The Severe Asthma Service pathway was mapped for the South, North and Clyde Sectors with repeat mapping after implementation of a specialist pharmacist role into the South Sector.</p> <p>This process was used to understand the complexity of the service, facilitate identification of pinch points and support the decision-making process of where the introduction of a specialist pharmacist role would benefit the service and have a clearly defined role within the South Sector. The following key areas were identified:</p> <ul style="list-style-type: none"> • Waiting time from referral to consultant review for a routine referral into severe asthma clinic. • Biologic homecare prescribing. • Biologic annual reviews. • Inhaler technique reviews and adherence reviews to support consultant severe asthma clinic. • Supporting severe asthma MDT and governance around biologic use. <p>Mapping all sectors created opportunity to understand differences in asthma pathways between different sectors within the health board. This will support future service planning of asthma services within the Health Board and the future</p> </td> </tr> </tbody> </table>	Creation of Service Pathway Maps		Service map review	<p>The Severe Asthma Service pathway was mapped for the South, North and Clyde Sectors with repeat mapping after implementation of a specialist pharmacist role into the South Sector.</p> <p>This process was used to understand the complexity of the service, facilitate identification of pinch points and support the decision-making process of where the introduction of a specialist pharmacist role would benefit the service and have a clearly defined role within the South Sector. The following key areas were identified:</p> <ul style="list-style-type: none"> • Waiting time from referral to consultant review for a routine referral into severe asthma clinic. • Biologic homecare prescribing. • Biologic annual reviews. • Inhaler technique reviews and adherence reviews to support consultant severe asthma clinic. • Supporting severe asthma MDT and governance around biologic use. <p>Mapping all sectors created opportunity to understand differences in asthma pathways between different sectors within the health board. This will support future service planning of asthma services within the Health Board and the future</p>
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		introduction of a specialist pharmacist into the North and Clyde Sectors to provide equity of care.
Optimisation of Severe Asthma Patient Pathways		
	Pharmacist-led Asthma Optimisation Clinic	<p>A pharmacist-led asthma optimisation clinic was established to review patients while on the waiting list for an asthma consultant review. Waiting time for a routine asthma referral was 54 weeks. Introduction of a pharmacist clinic provides the opportunity for earlier review for selected patients within the asthma service to achieve optimisation of asthma treatment.</p> <p>Impact of the pharmacist Asthma optimisation clinic:</p> <ul style="list-style-type: none"> • Reduce waiting list time: Patients were reviewed within the asthma service, on average 117 days (range 27 – 181 days) earlier if they received pharmacist review. • Improvement of asthma pathway: Four patients were upgraded from routine to urgent following their pharmacist review, resulting in an earlier consultant review, thus improving the asthma patient pathway and access to biologic therapy • Clinical need: 57% of patients reviewed at the pharmacist clinic had an acute care episode for asthma in the prior 12 months, 11% had an acute care episode for asthma during the time from the initial referral until pharmacist review and 81% of patients had been prescribed at least one steroid course in the 12 months prior to review. This demonstrates the importance of early interventions to improve asthma control, reduce acute care episodes and reduce adverse effects from steroid exposure in this patient group. • Optimisation of asthma patients: Asthma treatment was increased in 64% of patients, 34% of patients were prescribed a medicine to manage an asthma co-morbidity, 74% of patients had a change to their inhaler, inhaler device or the addition of a spacer and 15% of patients were referred to a support service. • Save consultant time: changed clinic templates mean that consultants will now see 4 more new patients across South sector 1 being an urgent new, 3 being a modified new (e.g. been seen by pharmacist so not needing full new time allocation). • Increased discharge rate from outpatient clinic: Data showed that 53% of patients reviewed by a pharmacist were then

		<p>discharged after the first consultant review compared to 15% of patients who did not have a pharmacist review.</p> <ul style="list-style-type: none"> • Reduce Steroid exposure: 77% of patients had a steroid course in the 12 months prior to review at the pharmacist clinic, however only 22% of these patients went on to have an exacerbation in the time from the pharmacist review until the consultant review highlighting the impact of the interventions made at the pharmacist clinic
	<p>Support consultant severe asthma clinic with inhaler technique and adherence</p>	<p>Supporting the severe asthma clinic through the provision of inhaler reviews, exhaled nitric oxide testing and preparation of adherence data in advance of clinic appointments avoids referral to the nurse-led clinic and facilitates changes to patients' asthma treatment to be actioned at the time of the clinical decision.</p> <p>Benefits:</p> <ul style="list-style-type: none"> • Streamline service: no longer have to wait to get seen by nurse for inhaler technique review or exhaled nitric oxide testing at a later date. Clinical decisions can be actioned immediately for the benefit of patients. • Equitable service: Previously only half of the patients were getting reviewed as above by nurse. • Improved skill mix: Addition of pharmacist to clinic adds a different dimension • Increase nurse-led clinic capacity: reduced referrals for inhaler technique review frees up nurse-led clinic time. Service development opportunities, such as nurse-led steroid weaning, are being scoped. • Support roll out of digital asthma app: Increase in capacity to see patients on the day of consultant review means that more patients can get the opportunity for face to face support to register for digital asthma app.
	<p>Pharmacist Support of Asthma Biologic Delivery</p>	
<p>Homecare repeat biologic prescribing</p>	<p>There was transfer of responsibility for repeat prescribing of asthma biologics for the South Sector from nursing team to specialist pharmacist. This freed up capacity of the Lead Respiratory Nurse for South Sector.</p>	

		<p>Promotion of governance around biologic prescribing was strengthened through:</p> <ul style="list-style-type: none"> • Uploading of biologic repeat prescriptions to the electronic clinical record as a clear record of current specialist prescribing by secondary care. • Ensuring asthma biologics are visible on the Emergency Care Summary (ECS) for reference by healthcare professionals treating severe asthma patients.
<p>Establishment and maintenance of biologic worklists and registry</p>	<p>Worklists on the electronic clinical record system were established for each asthma biologic to create an active list of patients prescribed each biologic therapy. A biologic registry was created for asthma biologic use within the service on Microsoft Excel. The worklists and registry are updated at the point of repeat prescribing or following MDT discussion to ensure they remain an up to date source of reference on biologics for the service. These will serve to provide information on biologic usage, biologic patient numbers, horizon scanning, and registry for biologic products within the South Sector Severe Asthma Service.</p>	
<p>Biologic annual clinic reviews</p>	<p>The specialist pharmacist has been trained to undertake biologic reviews for patients established on biologic therapy. This provides capacity to maintain annual reviews in response to the increasing demand on the service as the number of patients started on biologic therapy increases. An additional 3 annual reviews by the pharmacist equates to a 43% increase in capacity of the consultant Airways clinic. This supports the clinical and cost effective prescribing of high cost biologic therapies within the service, as maintaining annual reviews of biologics is essential for biologic switching in uncontrolled patients and also de-prescribing of non-biologic asthma therapies in well controlled patients to avoid side effects and polypharmacy.</p>	
<p>Consultant referrals to pharmacist-led clinic</p>	<p>A pathway was established for consultant referral to the pharmacist-led clinic. Capacity within the pharmacist-led optimisation clinic was sufficient to support the addition of this pathway. The consultant can refer patients potentially suitable for biologic therapy who require an earlier review following a period of treatment optimisation. The consultant clinic would not have the capacity to support the earlier review. The pharmacist can discuss the outcome with the referring consultant and present the case at the severe asthma MDT for discussion of biologic therapy if appropriate.</p>	

		This pathway supports the service timely access to biologic therapies for patients within the service. It also creates capacity to meet the changing needs of the service in the biologic era of severe asthma.
	Addition of a specialist pharmacist as part of severe asthma MDT	<p>Introduction of a pharmacist member of the MDT supports clinical and cost effective use of biologic therapies through a focus on:</p> <ul style="list-style-type: none"> • Biologic cost information for MDT. • Biologic license and Health Board procedures for off-label and unlicensed use of medicines. • Obtaining ICS adherence data for patients to support MDT decisions at the point of clinical decision making to ensure the cost effective prescribing of biologics.
	Specialist Asthma Pharmacist Business Case	
	Business case	Data were collated from the project outcomes and used to write a structured business case to be presented to General Managers for funding of a specialist pharmacist in the South Sector Severe Asthma Service. A business case for a specialist pharmacist within the other sectors, North and Clyde, are areas of future work. Through the collaborative project work, it was recognised that the severe asthma pathways vary between sectors, resulting in different priorities and pinch points, which informed the decision that separate business cases tailored for each sector would be a more suitable approach.
E A TIMESCALES:	<p>Project commenced in October 2023</p> <p>Specialist Pharmacist started in post in October 2023.</p> <p>Project completed in April 2025.</p>	
SERVICE IMPACT OF THE PROJECT:	<p>The impact of the collaborative working project was shared within NHS Greater Glasgow and Clyde which led to the development of a business case for funding for a specialist asthma pharmacist. The business case is in the final stages and, once finalised, will be submitted for funding. Results from the pharmacist optimisation clinic were shared at a pharmacy research network meeting.</p> <p>Summary of the service impact of the outcomes detailed above:</p> <ul style="list-style-type: none"> • Waiting time: <ul style="list-style-type: none"> ○ Reduced waiting time to be seen within the severe asthma service for patients seen by a pharmacist of an average of 117 days (range 27 – 181 days). 	

	<ul style="list-style-type: none"> • Capacity: <ul style="list-style-type: none"> ○ Change to consultant clinic templates to include 4 new asthma slots weekly within the South Sector. ○ 43% increase in biologic review slots within Airways Clinic. ○ Increase in lead nurse capacity due to transfer of biologic repeat prescribing role. ○ Creation of capacity for earlier review of potential biologic patients. • Equity of service: <ul style="list-style-type: none"> ○ Improving patient access to inhaler education at consultant review.
<p>RESOURCES REQUIRED AND SOURCES:</p>	<p>The resources utilised in the project were as planned at the outset. The total cost of the project was: £89,492</p> <p>This was split into NHS and Sanofi contribution as follows:</p> <ul style="list-style-type: none"> • NHS contribution = £43,094 which was made up of £1,870 of direct costs and £41,224 of indirect costs • Sanofi contribution = £46,398 which was made up of £43,458 direct costs to fund 0.4 WTE band 8a pharmacist for 18 months and training meetings in other centres and £2940 of indirect costs
<p>STAKEHOLDER OPINION AND SUPPORT AND PATIENT VIEWS IF APPLICABLE:</p>	<p>Linsey Watt, Specialist Pharmacist “I am extremely grateful for the extensive training and support I received for this new role and appreciate this would not have been possible without the collaborative working and support of this project.”</p> <p>Professor Rekha Chaudhuri, Asthma specialist “This was an excellent project that has helped to create a completely new role of a pharmacist to support our asthma clinic and biologic services. The support from Alastair in Sanofi has been exemplary. The project has achieved useful goals and we hope the service will be continued by the NHS.”</p> <p>Dr Nicola Lee, Consultant Physician “This project gave us the opportunity to embark on a remarkable journey of service development and show that positive changes could be achieved given the right resources and support. Alastair's management of the project was impeccable. He helped us maintain momentum through regular meetings where new ideas flowed and plans for change took shape.”</p> <p>Lesley-Anne Tait, Lead Clinical Pharmacist “With this unique opportunity we now have sufficient evidence to support our business case for the addition of a specialist pharmacist to the asthma MDT. Linsey and I have learnt so much and really appreciate the training and support we have received from both the asthma MDT and Sanofi. I hope to work with Sanofi in the future if an opportunity arises.”</p>

EVALUATION AND
AUDIT: WHAT RESULTS
DID THE PROJECT
ACHIEVED

The project has delivered the following benefits for patients and the NHS.

NHS

- Reduction in unwarranted variations in specialist asthma care through improved access to inhaler education, exhaled nitric oxide testing and adherence reviews for patients reviewed in the consultant asthma clinic.
- Maximising Active Clinical Referral Triage (ACRT) within the South Sector Severe Asthma Service for the benefits of patients through the creation of a pre-optimisation pathway for patients suitable for a specialist pharmacist review.
- Accurate registry of biologic use within the South Sector Severe Asthma Service. These serve to support governance for high cost biologic medicines, biologic horizon scanning, service planning in terms of capacity, and audit and research work within the service.
- Increase in clinic capacity in relation to high cost biologic medicines to meet increasing demands on the service.
- Reduction in South Sector Asthma waiting list achieved by a 30% increase in new patient slots across South Sector, e.g. seen by pharmacist so not needing full allocation of a new slot.

Patients

- Earlier review by asthma specialist for selected routine referrals into asthma service.
- Improved pathways for access to biologic therapy through the introduction of a *consultant clinic to pharmacist clinic* referral pathway for patients potentially heading towards a biologic to facilitate earlier review than the consultant clinic capacity allows for.
- Improved access to asthma support during attendance at the consultant asthma clinic.

Sanofi

- Gain experience and knowledge of the severe asthma environment, service and pathways across NHS GGC.
- Established reputation and relationships with Respiratory departments in Glasgow.
- Optimised patient care within the pathway and improved access has led to an increase in the total number of patients on biologics (including those made by Sanofi) during the timeframe of the project.