south ayrshire
health & social care
partnership

Meeting of South Ayrshire Health and Social Care Partnership **Held on:**	**Strategic Planning Advisory Group** **26th September 2023**
Agenda Item:	**11**
Title:	**Rapid Respiratory Response Service**

Summary:

This report, providing an update on the Rapid Respiratory Response Service has been brought to SPAG for information. Previously presented to SPOG in June 2023.

Author:	**Joanne Anderson – Senior Nurse for Primary Care** **Helen Strainger – Strategic Delivery Lead (RUC)** **Barry Watson – Programme Lead (RUC)**

Recommendations:

It is recommended that the Integration Joint Board

i. Note the content of the report provided and offer any further commentary.

Route to meeting:

Initial report had been presented to SPOG in June 2023.

Directions:		**Implications:**	
1. No Directions Required	x	Financial	☐
2. Directions to NHS Ayrshire & Arran	☐	HR	☐
3. Directions to South Ayrshire Council	☐	Legal	☐
4. Directions to both SAC & NHS	☐	Equalities	☐
		Sustainability	☐
		Policy	☐
		ICT	☐

Rapid Respiratory Response Service Update

1. PURPOSE OF REPORT

1.1 The purpose of this report is to provide an update on the Rapid Respiratory Service currently provided across South Ayrshire.

2. RECOMMENDATION

2.1 It is recommended that the Integration Joint Board

i. Note the content of the report and provide any further commentary.

3. BACKGROUND INFORMATION

3.1 A Rapid Respiratory Response Service was introduced as a pilot in South Ayrshire in March 2021. The appended report provided a detailed update on the service which has previously been presented to SPOG in June 2023.

4. REPORT

4.1 Following previously agreed funding at SPOG the pilot service was extended. The appended report (Appendix 1) provides a detailed update on the service.

5. STRATEGIC CONTEXT

5.1 The Rapid Respiratory Response service supports individuals to live well. This service strives to support people to receive the right care at the right time.

6. IMPLICATIONS

6.1 Financial Implications

6.1.1 No financial implications are identified at this time.

6.2 Human Resource Implications

6.2.1 No human resource implications at this time.

6.3 Legal Implications

6.3.1 None.

6.4 Equalities implications

6.4.1 There are no equality implications from this report which need to be considered.

6.5 Sustainability implications

6.5.1 None.

6.6 Clinical/professional assessment

6.6.1

7. CONSULTATION AND PARTNERSHIP WORKING

7.1 No consultation has taken place related to this report or the content of the report.

8. RISK ASSESSMENT

8.1. There are no associated risks which the IJB should consider arsing from this report.

REPORT AUTHOR AND PERSON TO CONTACT

Name: Joanne Anderson – Senior Nurse for Primary Care
Helen Strainger – Strategic Delivery Lead (RUC)
Barry Watson – Programme Lead (RUC)

BACKGROUND PAPERS

19 September 2023.

Name of Meeting	SPOG
Date of Meeting	5 June 2023
Author(s)	Joanne Anderson – Senior Nurse for Primary Care Helen Strainger – Strategic Delivery Lead (RUC) Barry Watson – Programme Lead (RUC)
Topic	Update on Rapid Respiratory Response Service

Situation	This paper is presented to update on the progress of the Rapid Respiratory Response (RRR) service following a request in March 2022 to expand the core funded service. The paper presented in March 2022 set out the staffing and funding requirements for the RRR service expansion and proposed that an allocation of £288k in year 1 from the national Ayrshire and Arran Ambulatory Interface Care allocation be utilised to pay for the initial expansion plans. The establishment, and subsequent expansion of RRR Services supports the safe management of patients with COPD in the community. The service is designed to safely and effectively provide rapid access to treatment for patients with an acute exacerbation in their COPD, which may result in presenting to healthcare services on an urgent or unscheduled basis. The service underwent a change in clinical leadership and programme delivery support in November 2022. This has afforded an opportunity to review the current position within the service. The RRR Programme Board has taken a data informed approach to explore how the service can make best use of collaborative pathways across primary and secondary care services and expand into all three HSCPs. The initial pilot targeted 6 GP practices within the Northwest Kilmarnock cluster, with the very small team working closely with the Practice staff including other respiratory practitioners. Through a gradual expansion, as further staff were appointed, additional GP practices were approached where the data suggested the RRR service would impact on ED and CAU presentations and admissions. The service has further expanded only recently and currently now works with 14 GP Practices, 6 in East Ayrshire and 4 in both North Ayrshire and South Ayrshire. A further practice in East Ayrshire and two more in

	North Ayrshire have been identified with plans underway to engage with those practice teams to consider how to widen the service to include their patients. These practices refer COPD patients who are experiencing exacerbation of symptoms into the service for prompt assessment and stabilisation in the community. The service has been targeted at Practices with large registers of COPD patients and high incidence of those patients presenting at ED and CAU. The data used to inform this work is provided within a report designed by the NHS Ayrshire & Arran Information Team and is therefore reliable and robust. Through analysing the data by GP practice the RRR team have been able to consider several criteria when identifying the next round of expansion. The criteria includes COPD registered population, ED attendances with a COPD clinical coding, CAU presentations with a COPD clinical coding and Admission data associated with a COPD condition. Referrals into the RRR service so far has resulted in engagement with 363 patients many of whom have self-referred back into the service multiple times during periods of exacerbation. This has resulted in a total of 737 individual referrals. During the initial pilot period from June 2021 through to August 2022 the total number of referred patients was 279. Since September 2022 to date there have been a further 458 referrals. It is anticipated that through the continued expansion this number will increase significantly over the coming months. It should be noted, as is described further in the paper, that in 2021/22, progress was slow due to the team not being in place with recruitment challenges.
Background	In early 2022, the Scottish Government's Ambulatory Interface Care programme (now part of the Urgent & Unscheduled Care Collaborative) recommended that NHS Boards establish, or scale-up community respiratory teams. The impact of COPD on unscheduled NHS care is greater in NHS Ayrshire & Arran compared to other parts of Scotland with the third highest admission rate of all Scottish NHS Boards. Analysis of data for 2022/23 showed a total of 729 ED and 1,128 CAU presentations over the course of the year for COPD patients – on average 2 patients per day presenting to ED and 3 being referred to CAU. The data also highlighted that over the course of 2022/23 there had been 838 COPD related hospital admissions, a 45% conversion to admission rate. National guidance suggests that the average length of stay for a COPD patient is between 4 and 8 days, however in Ayrshire & arran the average is 8.25 days. This could account for as much as 6,900 bed days which converts to 18 beds within our hospitals at any

	one time. Whilst there will be fluctuations throughout the year and in length of stay for patients, this estimate of demand provides a backdrop to how impactful the RRR service can be in supporting patients with COPD to avoid hospital attendance and admission when faced with an acute exacerbation. Core funding of £218k was agreed in 2021 for the initial RRR service to operate within the Northwest Kilmarnock cluster across 6 practices with plans to further expand the pilot. The service has since received additional funding which is enabling further expansion with a total of 14 practices across the three HSCPs engaged with the RRR service by the end of May 2023. The original vision was always to expand the Rapid Respiratory Response service to support all 53 GP Practices across Ayrshire and Arran with new referral pathways embedded within AUCS, CAU and SAS and the ability to support early discharge from both acute hospitals. Plans are underway to roll out RRR to out-of-hours services and with SAS pathways in June. This will have a further impact on reduction in front door presentations of patients experiencing a COPD exacerbation. In May 2023 the National Respiratory Clinical Network updated that the Scottish Government is considering how best to support Health Boards Nationally to expand community based respiratory services and standardise the evaluation of services across Scotland, an update from Scottish Government on available support to boards is expected soon.
Assessment	**Workforce Update** The staffing model for the original pilot set out to have one Band 7 Advanced RRR Practitioner input, supported by 0.5WTE Band 2 Administrator. In addition, a further Band 7 was recruited although this staff member didn't remain within the service. These staff members who were part of the original pilot worked closely with the Respiratory Consultant and the Community Respiratory Nurse Specialist. In July 2022 a further Band 7 Advanced RRR Practitioner post was recruitment into and in order to support the full expansion across Ayrshire a further Band 7 was recruited to the team in October 2022. In addition to the core team funding and expansion allocation was agreed by SPOG in March 2022 from the Urgent and Unscheduled Care Collaborative budget. This aimed to facilitate expansion of the workforce model, increasing the workforce by adding in Band 6 Specialist RRR Practitioners. In order to recruit to these posts new job descriptions were required to go through the NHS Ayrshire and Arran job evaluation committee. This process took 9 months to conclude to allow recruitment to progress and had an impact on the roll out timeframe with the full allocation being underspent. All work undertaken by the RRR team was funded from within the core budget allocation due to delays in job evaluation and subsequent recruitment

timeframes.

It was therefore agreed that the funding allocation in 2023/24 would reinstate the £288k expansion budget to allow plans to be implemented which had so far been delayed.

However, in order to mitigate the impact of the delays with recruitment in year, deployment of a staff group from the mass vaccination team in January and February 2023 gave an opportunity to explore the proposed model over a 7-week period. Staff deployed consisted of 1.5 WTE Band 5 nurses and 2.4 WTE band 3 Health Care Support Workers (HCSW).

The additional resource supported a refocused role of the RRR Respiratory Practitioners and increased the ability to accept acute presentations and complexity within presentations. Delegation of review appointments to both the band 5 nurses and HCSWs has intensified support during the acute phase with further time spent on holistic assessment.

It is estimated with the additional supportive roles approximately 40% of the RRR Respiratory Practitioners' time is released. This has informed the mixed workforce model which will be rolled out during 2023/24.

Service Model and Expansion

Original Pilot	
Marnock Medical Group	East
The Wards	East
Portland Road Medical Centre	East
Dr Sardar and Partners	East
Old Irvine Road	East
Crosshouse Medical Practice	East
September 2022 **Expansion into North Ayrshire GP Practices**	
Townhead Surgery	North
Frew Terrace	North
May 2023 **Further expansion across North and South GP Practices**	
Kilwinning Medical Practice	North
Eglinton Family Practice	North
Station Rd Medical Practice	South
Templehill Surgery	South
Tam's Brig Surgery	South
Cathcart Street Medical Practice	South
Next Proposed Practices **(Based on Demand data)**	
Tanyard Medical Practice	East
Ayrshire Medical Group (Saltcoats)	North
South Beach Medical Practice	North

The process for a patient engaging with the RRR service is based on referrals being received from GP Practices who are aligned to the service. These can

	be from the GP or the patient themselves can self-refer when they have previously engaged with the service. Referrals are assessed and prioritised by an advanced respiratory practitioner on the day of referral, whenever possible, resulting in optimal access, limiting waiting time and providing treatment within hours of referral. Individuals engaging with the service are provided with intense support to the point of resolving exacerbation, inclusive of maximising COPD treatment, increasing confidence of self-management, including use of rescue medication, and optimising inhaler technique. Respiratory investigation is also often undertaken and actioned, supported by respiratory physician before returning to the care of the GP Practice. As well as the RRR nursing team members, the service also benefits from Respiratory consultant input at a weekly MDT, and this facilitates a broader whole system discussion to take place to ensure continuity of care for the patients within the RRR service. This new core team are engaging with a wide range of respiratory services across the whole system, taking a data driven approach to inform service expansion, based on population need and the expected demand profile in future years. It is defining a sustainable staffing model fit to support patient with COPD experiencing an exacerbation. An early detailed service specification document is in use which details the Service delivery model including the referral criteria for patients using the service, the eligibility criteria, interdependencies with other Respiratory services, systems and infrastructure requirements, as well as the future staffing and funding model. **Overview of Activity** Since the start of the pilot in 2021 there have been a total of 737 referrals into the service with 3,604 patient contacts recorded on EMIS. During the course of the initial pilot (June 2021-August 2022) a total of 279 referrals were received by the service with 1,357 patient contacts recorded on EMIS during that time. Therefore, on average during this time there were approximately 19 referrals per month and 90 patient contacts. Since September 2022, with the recruitment of additional staff and the service expansion picking up pace, there have been a further 458 referrals and 2,247 patient contacts recorded on EMIS. The average number of monthly referrals has increased to 57 per month and the average patient contacts has gone up to 281 per month. This is a three-fold increase per month in referrals and patient contacts to the RRR service during the past 5 months. Given we already know that on average 2 patients per day are presenting to ED with COPD exacerbations and that a further 3 patients are being referred to CAU we have set an initial aim that we would

reduce this by 15% by the end of September 2023. This would result in 5 fewer patients per week avoiding ED or CAU presentation. This number could be significantly higher if full coverage across all GP practices and other pathways was achieved.

By reducing the COPD presentations at the front door by 5 patients per week, we would estimate that this would reduce admissions by 2 admissions per week. If we scale this up based on the 8.25 ALOS for these patients this would result in approximately 200 bed days saved in the next quarter.

It is important to note that these figures are estimates based on the data currently available, and that further in-depth analysis of patient impact will be required in order to validate the assumptions used.

However, with further additional posts being filled and coverage across additional practices planned from May 2023 onwards, as well as expansion to include an AUCS and SAS pathway it is anticipated that this improvement is deliverable over the next quarter.

In terms of validating activity data, a week of care audit was undertaken in January 2023, with the results as follows:

- 84 patients contacted in one week
- Initial assessment take 60 minutes on average and follow up appointments typically take 30 minutes
- Each patient had on average 8 contacts during their engagement with the RRR service, before being discharged safely back to the GP Practice

Within the context of the demand at the front door of the hospitals these engagements with patients are resulting in a 60% reduction in ED attendance for those patients engaged with the RRR service and therefore impact on overall admissions and subsequently bed days associated with those admissions. These are key measures of service success.

A focus in recent months has been to create a detailed performance framework to ensure outcomes and benefits of the service are captured. This work is underpinned by system development and creation of reports detailing RRR service activity. Measures described above and triangulation of sources to create a balanced picture of service activity and demand are being included.

Patient Feedback

In addition to quantitative data, patient feedback has also been extremely positive with those engaging with the service finding the support of the RRR team invaluable in managing exacerbations with their COPD condition.

A number of patient stories have been collected which have demonstrated the positive impact the RRR service has had on the patients engaged with the service. Three case studies are attached at

	Appendix 1 although summaries are shown below. *Case 1 – COPD patient in advanced stages of disease progression who was a frequent user of healthcare (over a 3-week period had 13 contacts with GP, 2 SAS calls and 1 ED presentation). Since engagement with RRR service this patient has wider community support, anticipatory care planning, rescue medication and self-management plans alongside anxiety management, and as a result their care is managed pro-actively rather than reactively.* *Case 2 – COPD patient who had previously had 5 hospital admissions in the previous 12 months. Through introduction of RRR service this resulted in self-management plan being put in place, alongside additional support from pulmonary rehab, domiciliary physiotherapy for chest clearance, modification of oxygen therapy and introduction of prophylactic medication. This patient was able to manage two further exacerbations at home rather than require further hospital admissions.* *Case 3 – Recently diagnosed COPD patient otherwise fit and active experienced an acute exacerbation leading to a hospital admission. Deterioration in quality-of-life following discharge from hospital and increased breathlessness. Engaged with RRR service who provided antibiotics and steroids and altered and maximised inhaled therapy. Focus also on patient education and understanding of diagnosis, treatment, self-management, and benefits of pulmonary rehab. Multidisciplinary approach led to increased patient confidence in condition management and reduced likelihood of self-presenting to ED.* **Future Operating Model Considerations** The total patient population with a COPD diagnosis is around 12,000 across Ayrshire. These patients typically take about 5 years to reach a point of diagnosis and 25% of all cases are misdiagnosed or receive sub-optimal care due to late diagnosis and availability of Spirometry service provision. Ayrshire and Arran traditionally provided a blended approach to Spirometry across Primary and Secondary Care. However, Spirometry services were paused during the Pandemic and as a result this has created a backlog of patients awaiting Spirometry to confirm their COPD diagnosis. This is reflected at a local and national level. A previous paper presented to the NHS Ayrshire & Arran Respiratory Clinical Leadership Group estimated that within Ayrshire around 2,800-3,000 patients will require spirometry annually, as prevalence continues to increase. The national Respiratory Care Action Plan (RCAP) in 2021-26 commits to improving and simplifying access to appropriate diagnostic tests for respiratory conditions, and exploring the use of high quality, consistent spirometry testing and chest and lung CT scans. Currently there is variability in access to Spirometry and limitations on recognised training and governance. Further work will require to be undertaken to fully scope a future model for Spirometry provision which meets

	local needs and is aligned to national guidance. This will inform the development of the local operating model considerations for a future integrated Respiratory operating model across Ayrshire. Clarity if required to determine where the responsibility for spirometry sits as this is not clear. Since the change of leadership and refreshed programme approach, implemented in November 2022, detailed analysis of demand data relating to ED and CAU presentations and admissions has informed the creation of a demand profile for COPD patients. This has been analysed at a GP practice level and linked with data showing COPD registered patients within those practices. Using this demand profile data GP practices with high levels of presentations and high levels of prevalence of COPD have been identified as potential RRR practices. Once engaged with the RRR service these practices are able to refer eligible patients to the service. The week of care audit undertaken in January 2023 also informed the workforce model, identifying the numbers of staff required to meet the potential patient demand. It is estimated that a Pan-Ayrshire respiratory team would require 14 WTE Practitioners, ranging from Band 3 to Band 7, supported by 2.1 WTE Administrative staff. Current staffing is 8.2 WTE Practitioners (Band 3-7) and 1 WTE admin. Therefore, to scale up this would require an additional 5.8 WTE practitioners (Band 3-7) and an additional 1.1 WTE admin resource. The impact of the current service provision on patient journeys and wider services will inform future roll out ambitions. This is based on the COPD registered patient population within Ayrshire, scaling up staffing to create a model which would deliver full coverage. This is also consistent with the latest National Respiratory Clinical Network recommendations on staffing requirements for the service based on Ayrshire and Arran's total Population. Further review of skill mix and evaluation of the RRR service within the current year will inform future staffing model beyond 2023/24. It is important to note that the short term nature of the current funding impacts on the ability of the team to both recruit and retain staff. A recurring allocation would provide stability in the workforce and realisation of the pan-Ayrshire staffing model. On the basis of the analysis of demand, plans are already in place to expand the RRR Service into additional GP Practices and to develop additional pathways such as SAS and AUCS, as well as CAU and early supported discharge. Discussions have taken place in recent months regarding the use of TEC in supporting self-management and remote monitoring. There are options being considered to progress with these models as the workforce grows due all TEC models still requiring oversight and review by the team. It is also essential that a review of the available staff resource across all community and acute respiratory teams, pulmonary rehab teams and links with the wider system is undertaken. This review will inform the development of a more integrated respiratory service which would maximise resource and skills to develop a more cohesive and seamless service across both primary and secondary care for Respiratory patients. RRR Programme Board recommend

	this work is undertaken as a priority. **Risks** An RRR Programme Board Risk Register is in place and includes the following risks to the Programme expansion. 1. **Non-recurring funding for RRR service** - there may be an update on this soon nationally. This is a specialist service which requires a lot of training and important we retain staff. Short term fixed term contracts does not make the roles attractive. 2. **Availability of Spirometry –** local options being explored to identify what is possible utilising current staff within RRR and Covid-19 therapeutic service. Further work required to understand demand and delivery model with clarity needed where this sits within the system.
Recommendations	SPOG are asked to: • Note the delays to expansion in 2022/23 which resulted in agreed funding carrying over to 2023/24. • Support the methodology used to identify cohorts of GP Practices with highest demand for RRR services, whilst ensuring coverage across the 3 HSCPs. • To consider a wider review and scope how all community and secondary care services could be working together for a more seamless patient journey, as well as resource and skill mix fully utilised. • Note the risks associated with non-recurring funding to attract required workforce. • Note the risk set out in relation to community spirometry and backlog for this service. • Consider oversight and future reporting timeframes to SPOG

Appendix 1

CASE ONE

Rita is a 70-year-old lady with advanced COPD and Bronchiectasis. She was referred to RRR service during an exacerbation and reduced oxygen levels. Rita has advanced disease and dependant on long term Oxygen therapy and prophylactic antibiotics. She did not have access to a rescue pack or self-management plan. Anxiety was also driving some of her symptoms.

She was treated for infective exacerbation with modification of oxygen therapy enabling her to remain at home with the support of RRR service.

RRR continued to support Rita introducing self-management plans, breathing exercises, and supported to use app to improve breathing and reduce anxiety.
Rita was able to self-refer to RRR who continued to support Rita through further exacerbations at home and recognised she was at end stage with limited alternative treatment options. RRR and Rita worked together to agree an anticipatory care plan and DNACPR. RRR and DN services worked together to support Rita with symptoms and to remain at home with confidence.

Unfortunately, RRR staff stepped down input with Rita for a 3-week period as they were redeployed during Covid pandemic. During this short period of time Rita has 13 contacts with her GP practice, 2 calls to Scottish Ambulance Service and an attendance at CAU.

RRR service made significant impact in this complex case avoiding several hospital admissions, GP practice input and emergency service contacts.

CASE TWO

Wendy is a 78-year-old lady with advanced COPD requiring home oxygen.
She was referred to RRR service with symptoms of an acute exacerbation. She was noted to have had 5 hospital admissions in the previous 12 months due to infective exacerbations and Type 1 respiratory failure.

She did not have a rescue pack of medication or self-management plan and had no contact with pulmonary rehab services despite having advanced COPD.
RRR were able to timeously assess, exclude differential diagnosis and treat her infection. Oxygen therapy was modified to enable her to remain at home with intense input from RRR over the first 72hours monitoring oxygen saturation.
Support from wider MDT including physiotherapy for chest clearance was facilitated as well as remote support from Respiratory physician lead to initiation of prophylactic medication.

RRR service in collaboration with Wendy and her family have been able to support conversation around self-management and anticipatory care planning.

Being able to self-refer to RRR service has enabled Wendy to remain at home, avoiding hospital admission during two further exacerbations to date.

CASE THREE

Nancy was referred to RRR service for assessment of increased breathlessness, cough and sputum production. She shared she had a recent diagnosis of COPD and Bronchiectasis but had had no symptoms until an acute episode of breathlessness and chest infection which

had not responded to treatment. This led to a hospital admission where treatment, investigation and diagnosis was made.

Stated was fit and active walking up to 35,000 steps per week and had intentionally lost weight. Since her discharge her quality of life has reduced significantly and is unable to carry out normal day to day activities due to increased breathlessness. Nancy was treated at home by RRR service with antibiotics and steroids and inhaled therapy was altered and maximised. Support from RRR continued to focus on Nancy's understanding of her diagnosis, treatment, self-management, and benefits of pulmonary rehab. Her case was discussed at the MDT meeting ensuring Nancy had maximum treatment considered.

Nancy had been at risk of potential further hospital admissions had she not been highlighted to the RRR service. She had no understanding of her condition, was very anxious and frightened by her symptoms. By taking a multidisciplinary approach she was able to be assessed and treated quickly treatment and coping strategies introduced to reduce her symptoms. She is more confident that she has "someone to turn to" for advice, support her self-management and provide ongoing support with her condition as it progresses. The role of RRR services has been valuable in this patients' care enabling her to self-manage and improve quality of life.