

SPAH
Scottish Paediatric and Adult
Haemoglobinopathies Network

Annual Report
2020/21

Lead Clinician: Dr Susan Baird
Programme Manager: Mhairi Gallacher
Programme Support Officer: Laura Craig
Data Analyst: Gavin Halford

Background

The term 'haemoglobinopathy' covers a range of inherited blood conditions in which haemoglobin (the oxygen carrying protein in red blood cells) is either qualitatively or quantitatively abnormal. The two main disease groups are Sickle Cell Disease (SCD) and Thalassaemia. These are lifelong genetic disorders that often result in complex medical problems.

The Scottish Paediatric and Adult Haemoglobinopathies Network (SPAH) has a remit to ensure that equitable, high quality care is delivered promptly to patients with haemoglobinopathies at all points in their journey, by a multidisciplinary health care team with knowledge of the condition. This includes minimising the risk of infections by immunisation and prophylaxis, management of drug therapies, transfusion needs and consequent iron overload to improve long-term health. Patient and parent education is also important to minimise the occurrence of sickle cell acute complications and managing these at home, where possible, thus reducing disruption to education and employment.

Due to the complex nature of Sickle Cell Disease and Thalassaemia early involvement of the specialist Haematology team is crucial to ensuring good patient outcomes. The network connects the various points of service delivery in the patient pathway and supports clinicians to work together effectively. Patients are primarily treated in five centres (Aberdeen, Dundee, Edinburgh, Glasgow and Forth Valley), with equity of care supported through the use of standard guidelines and networking amongst the clinicians to share best practice.

Current Position

Understandably NHS Scotland priority during 2020/21 has been to prepare for and deal with COVID-19 impact and this has seen clinical and other resource diverted from network activity.

In what has been an exceptional year, SPAH is pleased to report that it has delivered or progressed the majority of the objectives agreed in the 2020/2021 work plan. A small number of objectives were paused due to the ongoing pandemic. A full work plan update is available on page 12.

SPAH demonstrated its effectiveness as a network in relation to response to the pandemic by providing rapid communication and decision making in a number of key areas:

- assistance in the production of shielding patient lists which highlighted the importance of the SPAH Clinical Audit System as a registry of patients with haemoglobinopathies in Scotland.
- production of disease specific patient information.
- letter to patients highlighting the importance of COVID-19 vaccination programme.
- increased frequency of MDT meetings.

Another important and timely development was the establishment of links with the West London Haemoglobinopathy Coordinating Centre (HCC). Collaboration with this NHS England centre proved invaluable during the course of the year with access to wider expert MDT discussion and advice. To support this, SPAH has developed a MDT referral flowchart which captures this process along with the new requirement for reporting adverse patient events. Twelve cases were discussed at these meetings with three taken to the West London HCC where the advice received influenced the direction of care for these patients. New education opportunities have also become available for staff through links with the London HCC.

The network will continue to organise meetings and events virtually in line with NSS guidance and as soon as restrictions allow will aim to hold one face to face steering group meeting per year and host the families' day as an in person event.

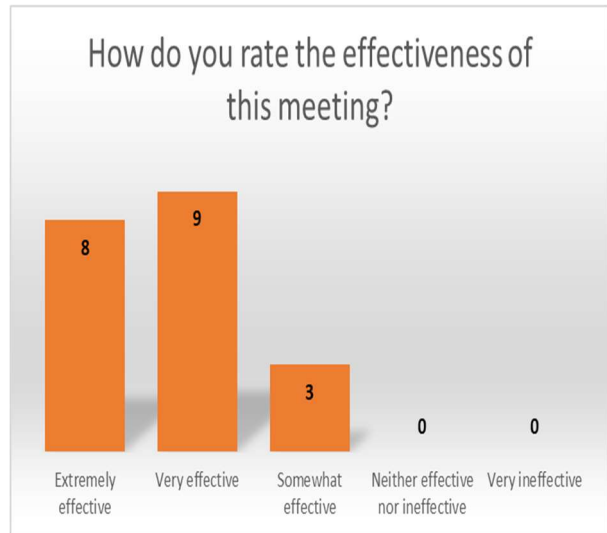
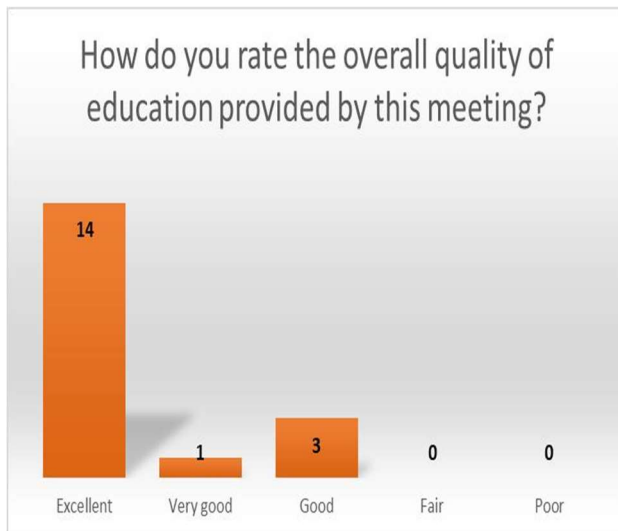
Highlights

Scottish Ambulance Service & Improvements to Pre-Hospital Care: A further area for improvement was highlighted by patients following on from inclusion of haemoglobinopathies in the Key Information Summary (KIS) which was undertaken in conjunction with the Scottish Ambulance Service (SAS). As the KIS correlates to the patient's home address, if an ambulance is called for them at another location the SAS will not have access to the information. At the request of patients, a patient alert card has been designed which contains key information about their condition and where further medical advice including pre hospital care can be accessed. It is anticipated this development will improve pre hospital care and experience and would be particularly useful on occasions when an ambulance has not been called direct to the patient's home address.

Education and information: This remains a priority for the network, with the aim to continue to build a range of resources for both professionals and other stakeholders. Current resources are easily accessible through the website and provided at clinics and the Nurse Sub-Group is now well established with regular meetings to review patient information as well as provide peer support and education.

Dr Baird delivered education on "Haemoglobinopathies in Neonates" at the Rare Diseases event in Autumn 2020 and the presentation is available on the SPAH website. <https://www.spah.scot.nhs.uk/educational-resources>

The network hosted a successful virtual education event for Haematology Registrars and trainees in September 2020. 73 people attended the event and evaluations were received from 20 participants.

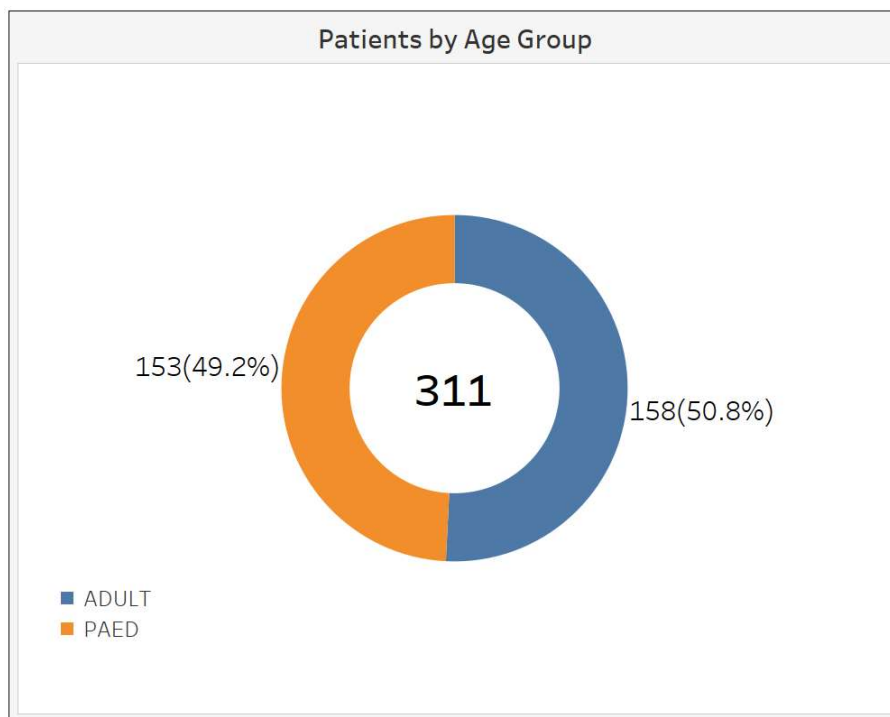


The feedback for individual presentations and the overall event was positive. One delegate in particular commented:

“I have recently returned to running haemoglobinopathy screens and the refresher in knowledge was great to allow me to think about service development and how I can improve our own service.”

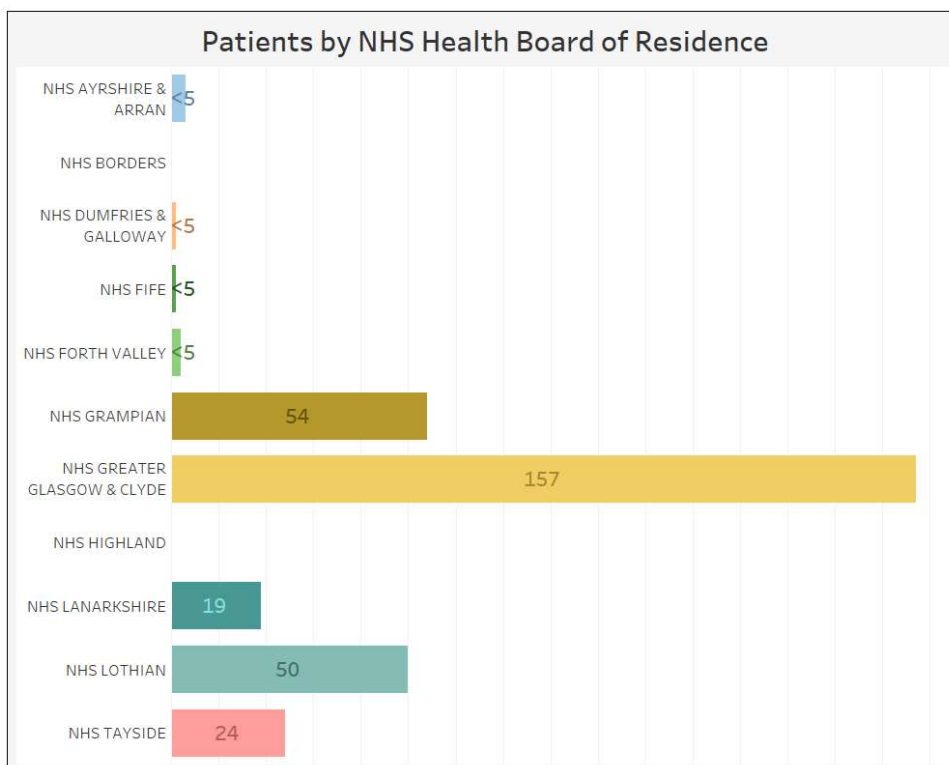
Patients with Haemoglobinopathies registered on the National Clinical Audit System (CAS)

The Clinical Audit System continues to be the national register for SPAH. There are a total of 311 active follow up patients currently registered on CAS, an increase of 20 patients from 2019/20.



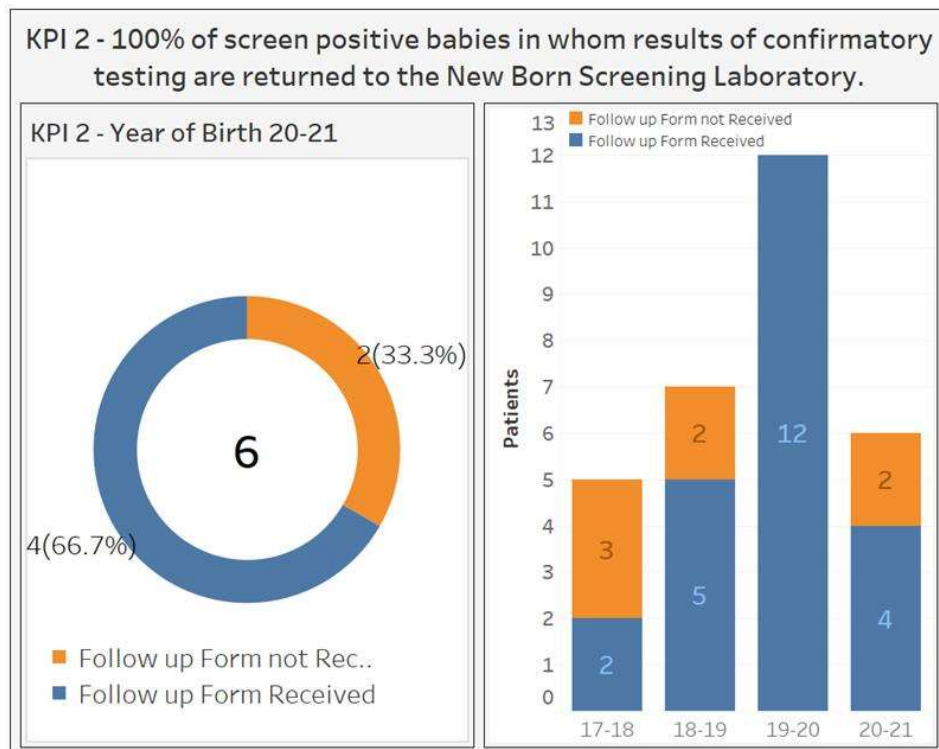
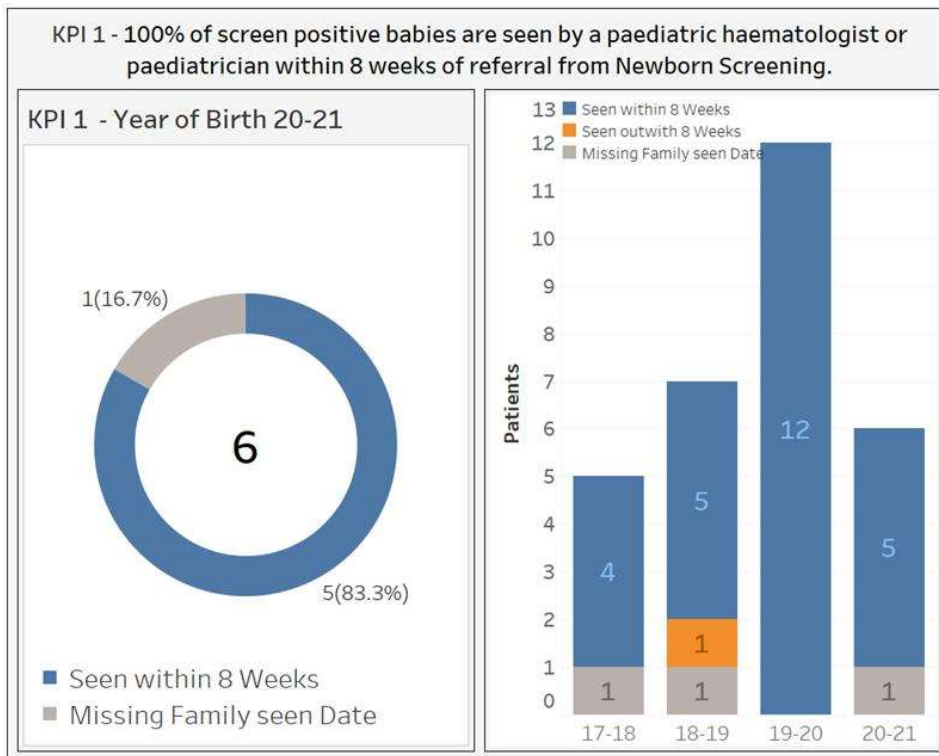
The largest group is patients with sickle cell disease, with the distribution across Scotland shown in the tables below:

Patients and Conditions by Treatment Centre			
	SICKLE CELL DISEASE	THALASSAEMIA MAJOR	THALASSAEMIA INTERMEDIA
ABERDEEN - ADULTS	23	<5	<5
ABERDEEN - CHILDREN	24		<5
DUNDEE - ADULTS	13	<5	<5
DUNDEE - CHILDREN	<5	<5	<5
EDINBURGH - ADULTS	24	<5	<5
EDINBURGH - CHILDREN	17	6	<5
FORTH VALLEY	<5		
GLASGOW - ADULTS	65	<5	5
GLASGOW - CHILDREN	80	12	17



Reporting Against SPAH Key Performance Indicators

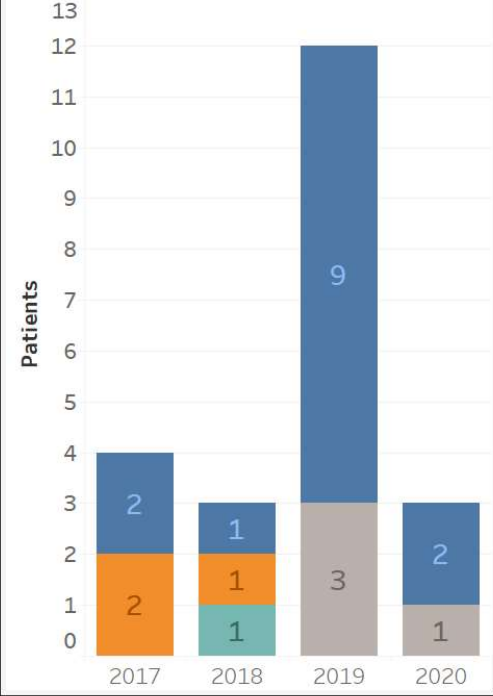
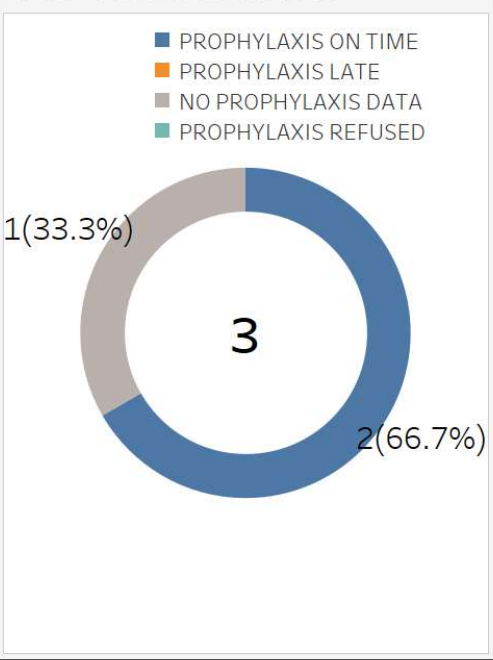
Measuring performance has once again been a major objective for the network during 2020/21. Clinicians have continued to provide data to measure against 7 Key Performance Indicators (KPIs). KPI data which is available within CAS is provided below.



Note: some patients born in this time period may not yet had confirmatory testing completed due to their date of birth.

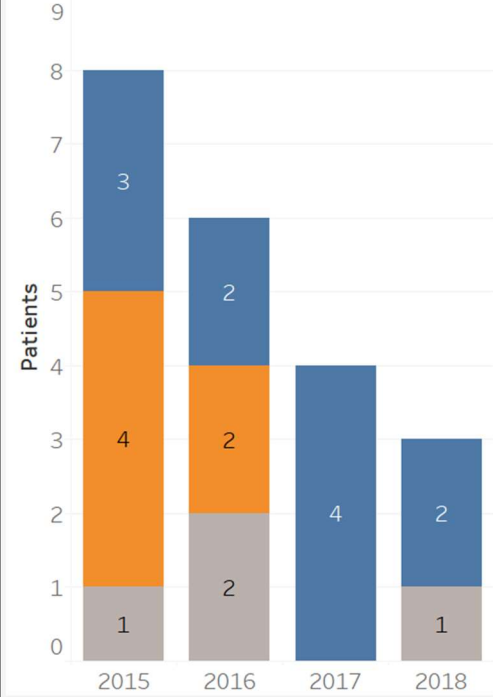
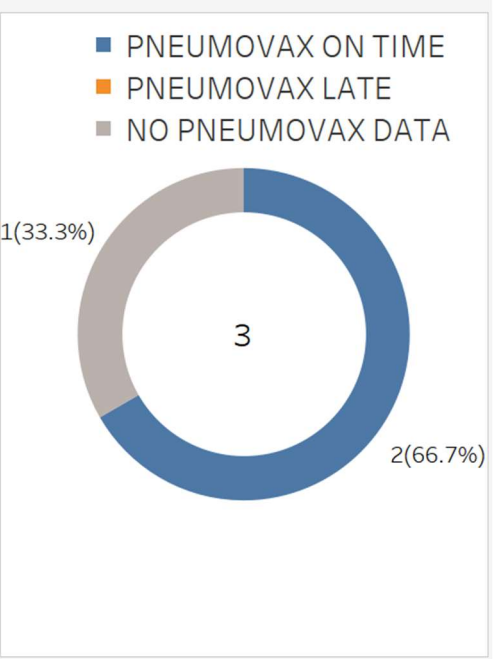
KPI 3 - 100% of infants with Sickle Cell disease are offered penicillin V (or alternative) by 3 months of age.

KPI 3 - Year of Birth 2020

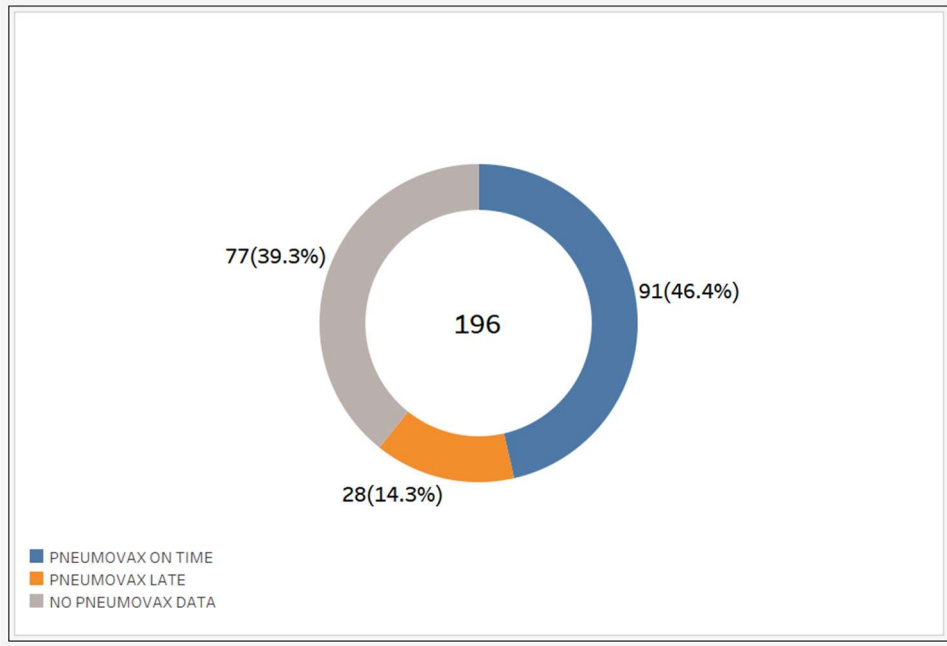


KPI 4.1 - 95% of patients should be given first Pneumovax (polysaccharide antigen) by 27 months.

KPI 4.1 Year of Birth 2018

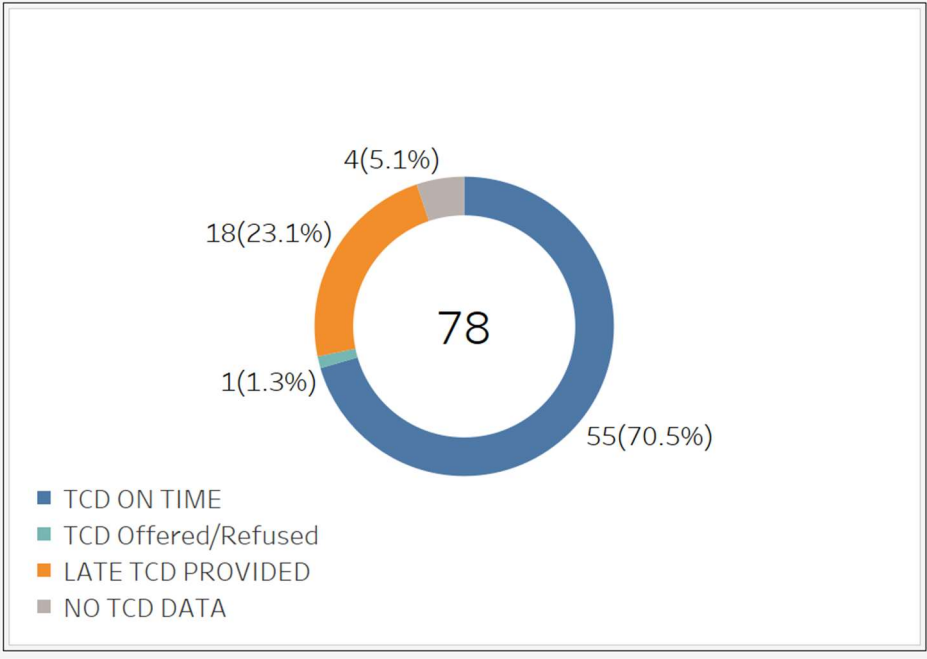


KPI 4.2 - 95% of patients with Sickle Cell should be offered Pneumovax (polysaccharide antigen) 5 yearly from 7 Years and 3 months of age



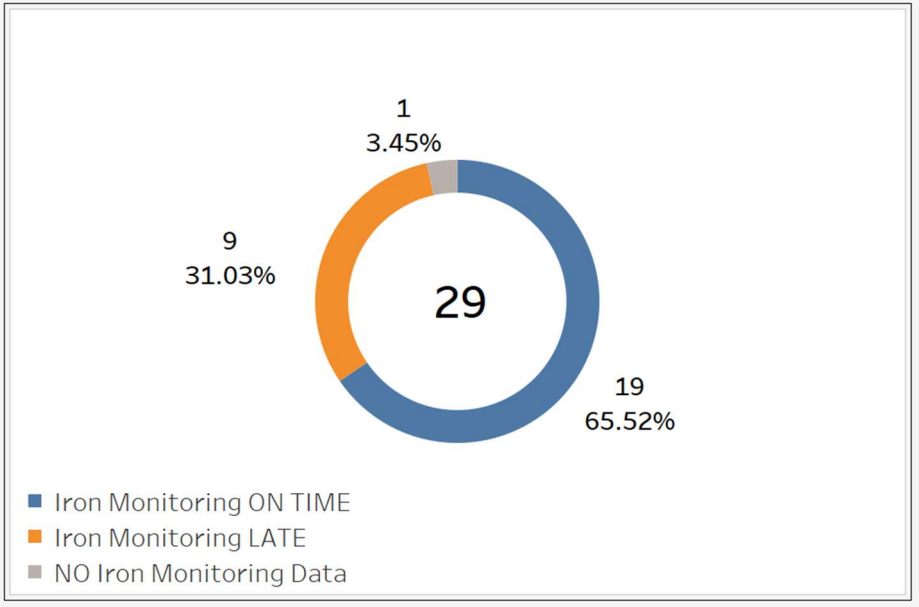
The Network's KPI that 95% of all patients with Sickle Cell receive their 5-yearly booster has proved difficult to collect. The data currently entered on CAS indicates that **46%** of patients have received their booster, however there are issues surrounding data collection because most booster vaccinations are undertaken by GPs. This is similar to last year's data (47%). The IT/Audit subgroup considered some of the limitations in collecting this data however agreed to report the information currently available. The sub-group will continue to explore ways of capturing this going forward and an audit of recording vaccinations for patients with sickle cell will be undertaken within NHS Lothian.

KPI 5 - 100% of children with HbSS or HbS/Beta thalassemia aged 2-16 years offered an annual TCD scan.



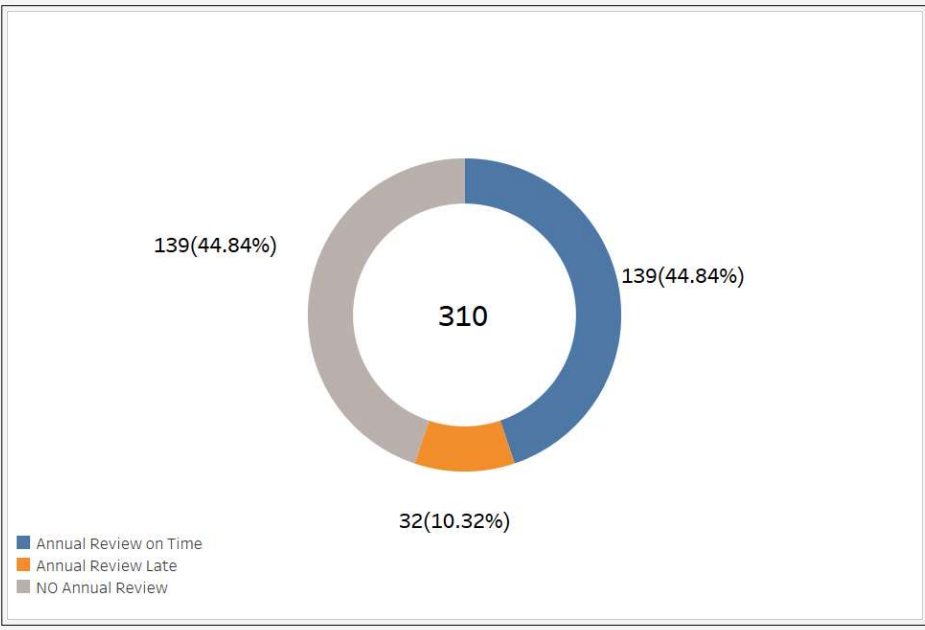
There is a slight improvement from last year’s audit (66.2%) with the service reporting that changes in practice as a result of the pandemic are likely to have affected results. The sub-group will review results and explore reasons for missing data which have been highlighted as capacity issues for clinicians updating CAS.

KPI 6 - 90% of thalassemia patients on regular transfusion undergoing appropriate monitoring of iron overload (annual MRI as per guidelines).



There has been a significant improvement from last year’s audit return (36% of patients received their annual MRI scan within 12 months). This could be attributed to the newly implemented process of clinicians being issued with quarterly updates which it was envisaged would improve data capture as well as assisting with identifying patients’ due inoculations and scans.

KPI7 - 100% of patients with Thalassaemia or Sickle Cell disease should be offered an annual review



This KPI was introduced during the reporting period and issues were experienced with where the data would be captured within the Clinical Audit System. This has now been resolved and changes made to the SPAH CAS Quick Guide. This year's result will be used as a baseline for improvement in data capture going forward.

The outcomes of KPIs are likely to have been affected as a result of changes in practice due to the pandemic. The Audit Sub-Group will review this year's results to identify any areas for improvement.

Quarterly update reports will continue to be issued to clinicians to improve data capture as well as assisting with identifying patient's due inoculations and scans.

Exceptions

The following objectives were not delivered as, given the situation caused by the pandemic, the network was keen to minimise the burden on clinicians.

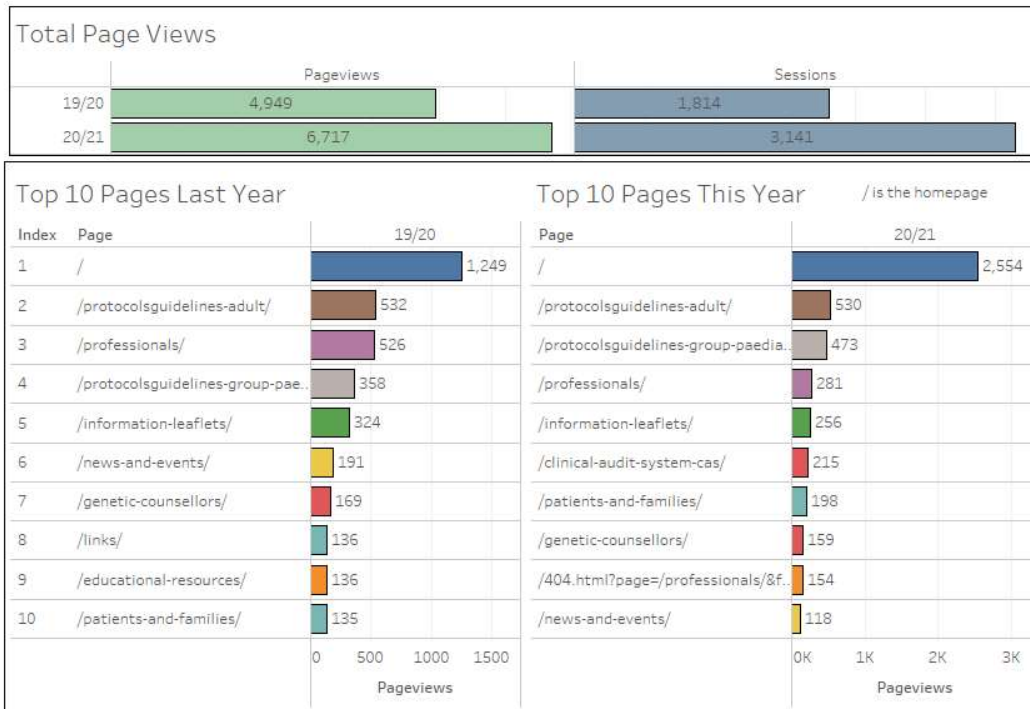
Review regional adult services: Development of a survey to gain feedback from haematologists in relation to current adult services and to raise awareness of the network and availability of SPAH protocols. The survey would also capture information from adult and paediatric clinicians as to how often staff utilise the guidelines and possibly identify any barriers or challenges around access to the guidelines.

Patient/Family event: All face to face events were cancelled for 2020/2021.

Provision of Adult Ferriscan: Scope provision of adult Ferriscan across Scotland in collaboration with Scottish Clinical Imaging Network (SCIN) and Scottish Medical Physics MRI group. Patients are currently attending RHC, Glasgow for Ferriscan.

Website

Full year report



Finance

The Network spend has been minimal in this reporting period. The network took the opportunity to print updated Schools Booklets at a cost of £256. This followed a review of the schools booklet during 2019/20.

Looking Forward

Lead Clinician: Dr Susan Baird's tenure as lead clinician ends on 3 June 2021 and the network will progress the appointment of a new lead clinician to this role.

Over the course of 2021/22 SPAH will work with its stakeholders to support, where possible, the remobilisation of services in Scotland and the programme of work will include:

- Development and Review of Guidelines/protocols & pathways
- Patient information leaflet - calling an ambulance
- Patient Alert Card
- Paediatric transplant referral pathway development
- Review of Regional Adult Services
- Parent/Family Event – March 2022
- Provision of Adult Ferriscan

SPAH Workplan 2020-21

When defining network objectives please consider the Institute of Medicine’s six dimensions of quality, which are central to NHS Scotland’s approach to systems-based healthcare quality improvement:

1. **Person-centred**: providing care that is responsive to individual personal preferences, needs and values and assuring that patient values guide all clinical decisions;
2. **Safe**: avoiding injuries to patients from healthcare that is intended to help them;
3. **Effective**: providing services based on scientific knowledge;
4. **Efficient**: avoiding waste, including waste of equipment, supplies, ideas, and energy;
5. **Equitable**: providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location or socio-economic status; and
6. **Timely**: reducing waits and sometimes harmful delays for both those who receive care and those who give care.

Key

RAGB status	Description
RED (R)	The network is unlikely to achieve the objective by the agreed end date.
AMBER (A)	There is a risk that the network will not achieve the objective by the agreed end date but progress has been made.
GREEN (G)	The network is on track to achieve the objective by the agreed end date.
BLUE (B)	The network has been successful in achieving the network objective to plan.

Objective Number	Smart Objective	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31/03/2021	Anticipated Outcome	RAGB status
1. Effective Network Structure and Governance [linked to Quality Dimensions 3,4,5,6]						
2020-01	Organise 3 Steering Group meetings to ensure effective delivery of the 2020/21 workplan	April 2020/ March 2021	Steering Group	Steering Group Meetings: 12 June 2020 11 September 2020 12 March 2021	Effective delivery of the SPAH network work plan to ensure continuation of progress.	B
2020-02	The network will meet reporting requirements: - Mid-year Report - Annual Report	31/10/20 31/05/21	Lead Clinician/ Programme Manager	On schedule	There are effective governance arrangements in place.	B
2. Service Development and Delivery [linked to Quality Dimensions 1,2,3,4,5,6]						
2020-03	Review 9 existing and develop 2 new clinical guidelines or pathways relevant to adult haemoglobinopathy services. <u>NEW Guidelines</u> • Thalassaemia Endocrine • Renal <u>REVIEWED guidelines</u> • Management of Hyperhaemolysis • Hydroxycarbamide • Acute Painful Crisis • Exchange Transfusion • Priapism • Perioperative Management (almost finalised) • Acute Chest Syndrome (almost finalised) <u>REVIEWED pathway</u> • Ferriscan Referral	April 2020 / March 2021	Adult Protocol/ Guideline sub group	Due to clinical work pressures during Covid-19 the completion of 2 new guidelines was deemed not a priority. Minor slippage in the review of 2 existing guidelines. This will be carried forward to 2021/22 workplan.	A suite of evidence based adult guidelines will ensure high quality haemoglobinopathy care throughout Scotland.	A

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31/03/2021	Anticipated Outcome	RAGB status
	<ul style="list-style-type: none"> Automated red blood cell exchange <p>One additional existing guideline due for review was being developed into a joint guideline</p> <ul style="list-style-type: none"> Acute Anaemia 					
2020-04	<p>Review 4 existing and develop 3 new clinical guidelines and pathways relevant to paediatric haemoglobinopathy services</p> <p><u>NEW Guidelines</u></p> <ul style="list-style-type: none"> TCD referral Thalassaemia Intermedia (almost finalised) Transfer of acutely unwell paediatric patients for Specialist Management <p><u>REVIEWED guidelines</u></p> <ul style="list-style-type: none"> Exchange Transfusion Priapsim Sickle Cell – Chronic Transfusion Stroke and other CNS manifestations (almost finalised) <p><u>REVIEWED Pathway</u></p> <ul style="list-style-type: none"> Painful Sickle Cell crisis 	April 2020 / March 2021	Paediatric Protocol/ Guideline sub group	<p>Minor slippage in the development of 1 guideline and 1 pathway. Also minor slippage on the review of 1 guideline group</p> <p>This will be carried forward to 2021/22 workplan</p>		A
2020-05	<p>Review 3 paediatric patient information leaflets, 1 adult patient information leaflets, and develop 10 new patients information leaflets</p>	April 2020 / March 2021	Nurses sub group	<p>Reviews completed. Two of the 10 leaflets have been signed off. The remaining 8 are all under development and will be carried forward.</p>	<p>Patients and their families/carers have access to good quality, up to date information to support them in living with their condition.</p>	A

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31/03/2021	Anticipated Outcome	RAGB status
2019-08	Scope provision of adult Ferriscan across Scotland in collaboration with Scottish Clinical Imaging Network (SCIN) and Scottish Medical Physics MRI group.	April 2019 / March 2020	Susan Baird	Objective paused due to covid-19 priorities.	An equitable service provision for adult patients across Scotland	A
2020-06	Review provision of Adult Ferriscan Services at Royal Hospital for Children, Glasgow.	April 2020/ March 2021	Mhairi Gallacher	Short term pathway finalised for Ferriscan provision at RHC on cost per case. First 3 patients treated on 31 July. Due to pandemic numbers being treated were small. Adult Ferriscan were carried out in smaller groups of patients which was working well.	Service is being utilised to ensure ongoing continuity	B
2020-07	Work with HaTS Network to review and standardise lab haemoglobinopathy services across Scotland (including Genetic Services).	April 2020/ March 2021	Beverley Robertson/ Trish Ryan/ Susan Baird	Dr Robertson and Trish Ryan are members of the HaTS haemoglobinopathy sub-group and provide regular updates.	An equitable service provision for patients across Scotland	B
2020-08	Review Regional Adult Services.	April 2020/ March 2021	Louisa McIlwaine/ Mhairi Gallacher	Paused due to Covid-19 priorities.		R
3. Stakeholder Communication and Engagement <small>[linked to Quality Dimensions 1,3,4,5,6]</small>						
2020-09	Implement new design of the SPAH website. Maintain and review content to ensure it is accurate and up to date.	May 2020 / March 2020	Laura Craig	New design implemented and website up to date.	Improved engagement with both professionals and patients	B
2020-10	Produce two Newsletters (summer and winter) to share with colleagues in Scotland and available from the SPAH website	June 2020/ January 2021	Laura Craig	Summer newsletter issued. Winter newsletter paused due to Covid-19 priorities.	Increase awareness of SPAH activity	B

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31/03/2021	Anticipated Outcome	RAGB status
2020-11	Organise and host a Family Event working with patients/carers to develop programme.	Spring 2021	Laura Craig	Paused due to covid-19 priorities.	Increase engagement with patients and families and have a better understanding of their priorities to address in future	R
2020-12	Develop more consistent communication pathways and linkage between antenatal screening, newborn screening and paediatrics.	April 2020/ March 2021	Beverley Robertson/ Susan Baird /Mhairi Gallacher	A questionnaire has been developed to establish a baseline of communication between Antenatal and Newborn screening colleagues by a Trainee in NHS Lothian. This will be carried forward to next year.		A
4. Education [linked to Quality Dimensions 1,2,3,4,5,6]						
2020-13	Implement new format of organising, hosting and evaluating monthly Multidisciplinary meetings that facilitates professionals from Scotland and Ireland to engage.	April 2020 / March 2021	Laura Craig	MDT discussion increased to monthly meetings. New paperwork and pathway developed. Outcomes captured on CAS. Links to West London HCC established.	Improved knowledge in haemoglobinopathies for healthcare professionals that either reinforces existing best practice or results in changes in practice	B
2019-16	Organise and host an education event aimed at Specialist Registrars/Trainees	June 2020/ August 2020	Laura Craig/ Glasgow clinicians	Virtual training took place on 16 & 23 September.	Increased knowledge in haemoglobinopathies for relevant healthcare professionals	B
2020-14	Promote link to the PHE module to Midwives.	June 2020/ July 2020	Laura Craig	Circulated to midwives along with link to Dr Baird's presentation "Haemoglobinopathies in Neonates".	Sharing of external education available to colleagues in Scotland	B

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31/03/2021	Anticipated Outcome	RAGB status
				https://www.spah.scot.nhs.uk/educational-resources		
2020-15	Explore and progress membership of the West London HCC and National haemoglobinopathy advisory panel for specialist advice on management of sickle cell and thalassemia patients in Scotland.	April 2020/ March 2021	Susan Baird/Mhairi Gallacher	Links to West London HCC established and SPAH pathway produced.	Collaborative and supportive working with colleagues in England	B
2020-16	Deliver education at the Rare Diseases Event in Autumn 2020.	August 2020/ March 2021	Susan Baird	Session delivered by Lead Clinician and made available on website.	Raising profile of conditions and of the Network	B
2020-17	Consider education requirements for haematologists.	April 2020/ March 2021	Susan Baird	Linkage with West London HCC providing education opportunities for haematologists.		B
2020-18	Deliver education session to University of Glasgow Undergraduate Nurses on care of adults with Haemoglobinopathies.	September 2020/ March 2021	Louisa Mcllwaine	University dependent.	Building on student nurses education on haemoglobinopathies	A
5. Audit and Continuous Quality Improvement [linked to Quality Dimensions 1,2,3,4,5,6]						
2019-19	Data collection on new KPI - "Annual review"	April 2020/ March 2021	IT/Audit sub group	Data collected and presented in 2021/22 annual report.	Improvements to service delivery are progressed from audit.	B
2020-19	Ensure CAS is reliably working to progress delivery of an audit programme against Key Performance Indicators	April 2020/ March 2021	Mhairi Gallacher/ Laura Craig/ IMS Team	Data collected and presented in 2021/22 annual report.	Improvements to service delivery are progressed from audit.	B
2020-20	Explore benchmarking opportunities against the rest of the UK through collaboration with National Haemoglobinopathy Register.	March 2021	IT/Audit sub group	Unable to take forward until CAS data reporting is robust.	Continuing programme of audit will ensure high quality haemoglobinopathy care throughout Scotland	A

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31/03/2021	Anticipated Outcome	RAGB status
2020-21	Execute a time to analgesia audit.	April 2020/ March 2021	IT/Audit sub group	Data collection commenced by Consultant in RHC, Glasgow. Unable to complete due to Covid work pressures.	Improvements to service delivery are progressed from audit.	A
2020-22	Continue Quality Improvement Project collaboration between SAS and SPAH including: <ul style="list-style-type: none"> Implementation of Key Information Summary (KIS), Hazard Alert notification form and covering letter to GPs Consider working collaboratively with other networks who are working with SAS to develop a patient information leaflet. Provide update at Lead Clinicians forum. 	April 2020/21	Susan Baird/Mhairi Gallacher/ Laura Craig	Implementation of collaborative working continuing. The objectives of developing a Hazard alert, bulletin for SAS and patient information leaflet all completed. The request to GPs to upload a patient's Key Information Summary (KIS) has progressed. Patient alert card designed.	Patients will benefit from organisations working together to provide optimum care and manage risk.	B
2020-23	Review transition before and after the implementation of the Ready Steady Go programme to capture improvement.		Ruth Bissell/ Core Team	Ongoing	Service improvements progressed.	B
6. Value [linked to Quality Dimensions 1,2,3,4,5,6]						

SPAH Workplan 2021-22

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1. Effective Network Structure and Governance <small>[linked to Quality Dimensions 3,4,5,6]</small>						
2021-01	Organise 3 Steering Group meetings to ensure effective delivery of the 2020/21 workplan	April 2021/ March 2022	Steering Group		Effective delivery of the SPAH network work plan to ensure continuation of progress.	
2021-02	The network will meet reporting requirements: - Mid-year Report - Annual Report	31/10/21 31/05/22	Lead Clinician/ Programme Manager		There are effective governance arrangements in place.	
2. Service Development and Delivery <small>[linked to Quality Dimensions 1,2,3,4,5,6]</small>						
2021-03	Review 2 existing clinical guidelines or pathways relevant to adult haemoglobinopathy services.	April 2021 / March 2022	Adult Protocol/ Guideline sub group		A suite of evidence based adult guidelines will ensure high quality haemoglobinopathy care throughout Scotland.	
2021-04	Review 5 existing guidelines and pathways relevant to paediatric haemoglobinopathy services.	April 2021 / March 2022	Paediatric Protocol/ Guideline sub group			
2021-05	Review 3 paediatric patient information leaflets, 1 adult patient information leaflet, and develop 8 new patients information leaflets.	April 2021 / March 2022	Nurses sub group		Patients and their families/carers have access to good quality, up to date information to support them in living with their condition.	

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at xxx	Anticipated Outcome	RAGB status
2021-06	Scope provision of adult Ferriscan across Scotland in collaboration with Scottish Clinical Imaging Network (SCIN) and Scottish Medical Physics MRI group.	April 2021 / March 2022	Lead Clinician		An equitable service provision for adult patients across Scotland	
2021-07	Review Regional Adult Services.	April 2021/ March 2022	Core Team/ Louisa McIlwaine		An equitable service provision for patients across Scotland	
2021-08	Develop new transplant referral pathway.	April 2021/ March 2022	Lead Clinician			
3. Stakeholder Communication and Engagement <small>[linked to Quality Dimensions 1,3,4,5,6]</small>						
2021-09	Maintain and review the content of the website to ensure it is accurate and up to date.	May 2021 / March 2022	Core Team		Improved engagement with both professionals and patients	
2021-10	Produce two Newsletters (summer and winter) to share with colleagues in Scotland and available from the SPAH website	June 2021/ January 2022	Laura Craig		Increase awareness of SPAH activity	
2021-11	Organise and host a Family Event working with patients/carers to develop programme.	Nov 2021 – Mar 2022	Core Team		Increase engagement with patients and families and have a better understanding of their priorities to address in future	
2021-12	Develop more consistent communication pathways and linkage between antenatal screening, newborn screening and paediatrics.	April 2021/ March 2022	Beverley Robertson/ Susan Baird /Mhairi Gallacher			

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at xxx	Anticipated Outcome	RAGB status
4. Education [linked to Quality Dimensions 1,2,3,4,5,6]						
2021-13	Organise and host monthly Multidisciplinary meetings that facilitates professionals from Scotland and Ireland to engage.	April 2020 / March 2021	Laura Craig		Improved knowledge in haemoglobinopathies for healthcare professionals that either reinforces existing best practice or results in changes in practice	
2021-14	Promote link to the PHE module and SPAH website education by cascading to Lead Midwives through links with Scottish Perinatal Network.	July 2021	Laura Craig		Sharing of external education available to colleagues in Scotland	
2021-15	Contribute haemoglobinopathies expertise to Royal College of Physicians of Edinburgh Event.	April 2021	Susan Baird		Improved knowledge in haemoglobinopathies for healthcare professionals that either reinforces existing best practice or results in changes in practice	
5. Audit and Continuous Quality Improvement [linked to Quality Dimensions 1,2,3,4,5,6]						
2021-16	Deliver audit programme against key performance indicators in line with the audit timetable.	April 2021/ March 2022	IT/Audit sub group		Improvements to service delivery are progressed from audit.	
2021-17	Explore benchmarking opportunities against the rest of the UK through collaboration with National Haemoglobinopathy Register.	March 2022	IT/Audit sub group		Continuing programme of audit will ensure high quality haemoglobinopathy care throughout Scotland	

Objective Number	Smart Objective	Planned start/end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at xxx	Anticipated Outcome	RAGB status
2021-18	Finalise time to analgesia audit.	April 2021/ March 2022	IT/Audit sub group		Improvements to service delivery are progressed from audit.	
2021-19	Continue Quality Improvement Project collaboration between Scottish Ambulance Service and SPAH including: <ul style="list-style-type: none"> • Development of Patient Information Leaflet. • Print and distribute patient alert cards. 	April 2021 – March 2022	Core Team		Patients will benefit from organisations working together to provide optimum care and manage risk.	
2021-20	Review transition before and after the implementation of the Ready Steady Go programme to capture improvement.	April 2021 – March 2022	Susan Baird/ Ruth Bissell Laura Craig/ Mhairi Gallacher		Service improvements progressed.	
2021-21	Review the SPAH Quality Strategy outlining the network's approach for improving quality in haemoglobinopathy services.	April 2021 – March 2022	Core Team			
6. Value [linked to Quality Dimensions 1,2,3,4,5,6]						