



# **Scottish Clinical Biochemistry Network ANNUAL REPORT 2018/19**

Lead Clinician: Dr. Ian Godber

Network Scientific Manager: Mrs Janet Hogg

Programme Manager: Dr. Catherine Colquhoun

Programme Support Officer: Miss Philippa Cottam

# Scottish Clinical Biochemistry Network (SCBN): Annual report

## Contents

1. Executive Summary.....	1
2. Introduction.....	2
3. Network Objectives.....	3
4. Report against Workplan .....	4
5. Plans for the Year Ahead.....	11
6. Detailed Description of Progress in 2018/19 .....	12
7. SCBN Work plan 2019-2020.....	16
Appendix 1: Steering Group Membership .....	23
Appendix 2: Finance .....	24
Appendix 3: C-Peptide Business Case Clinical Pathway.....	25

## 1. Executive Summary

The Scottish Clinical Biochemistry Network (SCBN) has had another successful year, the first notable achievement is the successful completion of the network review, highlighting the many successes of the network since inception and culminating in a decision by NHS Boards and Scottish Government to designate SCBN for a further three year period. The network has looked to raise the profile and increase awareness; in considering how to do this the network has changed the network name from Scottish Clinical Biochemistry Managed Diagnostic Network (SCBMDN) to Scottish Clinical Biochemistry Network (SCBN). There has also been a re-vamp and a change to the web address of the network, to enable stakeholders to more easily access information. The network's new web address is [www.clinicalbiochemistry.scot.nhs.uk](http://www.clinicalbiochemistry.scot.nhs.uk), and the new network mailbox is [NSS.scbn@nhs.net](mailto:NSS.scbn@nhs.net).

The network has initiated discussion at the Diagnostic Steering Group (DSG) on the challenges facing work force planning. This has resulted in the establishment of a national work force planning group, covering all laboratory disciplines.

SCBN has delivered its first major data collection exercise, collecting and producing its first Benchmarking report, and through engagement with the National Demand Optimisation Group (NDOG), contributing to the National Atlas of Variation (AoV). Further engagement has been with the National Laboratories Programme Laboratories Oversight Board (LOB) and aligning the network work plans with national strategies such as Realistic Medicine, through engagement with the Realistic medicine event and aims.

The network has been collaborating with other networks in the development of the C-peptide business case for Type 1 Diabetes Mellitus (T1DM), working with the Genetics Consortium and the Diabetes Managed Clinical Network.

SCBN has developed the role of its cancer subgroup in improving diagnosis. Key work in 2018/19 has included production of a pilot audit report for the diagnosis of ovarian cancer, the CA125 audit, in conjunction with the Scottish Clinical Imaging Network (SCIN). This is now being rolled out as a national audit to identify if following the new diagnostic NICE guidelines, of an ultrasound and a CA125 test reduces the time to diagnose ovarian cancer and is therefore improving the diagnosis and management of the disease. The cancer sub group has developed links with the West of Scotland Cancer Network (WoSCAN), South-East Scotland Cancer Network (SCAN) and the North Cancer Alliance, cancer networks with representation at each network. Through the cancer sub group the tumour marker bookmark has been incorporated into the Scottish Cancer Referral Guidelines and subsequently the Scottish Cancer Referral Guidelines app, which has been endorsed by Realistic Medicine.

The network hosted a very successful annual education day event in September, where the attendance and engagement and spread of stakeholders had significantly increased from the event held in September 2017.

SCBN developed guidance documents on Vitamin D testing, Urea and Electrolytes (U & E), thyroid and follicle stimulating hormone testing (FSH), providing a basis for safe and effective clinical decision-making, maximising the efficiency of laboratory medicine.

During 2019/2020 SCBN has the following key priorities, complete the C-peptide business case and support implementation. The C peptide business case will provide a standardised national pathway for testing patients presenting with diabetes, to ensure the correct treatment plan is prescribed. The network has successfully produced the first annual benchmarking report and will build on this success to increase the data collected and presented by the network, this enables identification of variation to be addressed to ensure equity of testing across Scotland. The cancer sub group has collected all the SCBN and Socrates data and once they have received the SCIN data, the network will produce a national audit report on the uptake and impact of the new guidelines to assess if they have led to improvement in diagnosis and outcome for patients with Ovarian cancer. Additionally the network will carry out improvement work to reduce Vitamin D testing requests throughout Scotland, develop guidance on Lipid testing and the lfts liver screen panel and finalise the development of the innovation dashboard to enable the sharing of best practise through NHS Boards in Scotland.

## 2. Introduction

The Scottish Clinical Biochemistry Network was established in 2010, following discussions at the Scottish Senior Biochemists Group on the merits that closer collaboration between laboratories would provide to improve patient care. The network was originally directly commissioned by the Scottish Government. However, in 2013 the commissioning and performance management of the network was transferred to National Services Division (NSD) of National Services Scotland (NSS).

The network plays a key role in strategic planning for diagnostic services. The network delivery plan aligns with the NHS Scotland plan for realistic medicine. A key focus of the network is the strategic planning of healthcare within Scotland to ensure the service provided is the most beneficial to stakeholders, by maximising the resources available and by assessing the most efficient and effective means of service delivery. The network provides a framework for clear communication between stakeholders within the Biochemistry community in Scotland, a structure to enable engagement with national initiatives and resources to enable work streams to progress and changes and developments within Biochemistry services to occur. The benefits and strategic aims of the network are based on service improvement and the objectives of the Triple Aim.

Network Aims:

- Promote consistency in service provision, education and training
- Identify emerging challenges and problems likely to impact service provision such as workforce
- Enable and promote the sharing of best practise, one example of this is the networks Innovation dashboard
- Facilitate the adoption of appropriate guidance (e.g. NICE, SIGN or RCPATH), and develop network guidance
- Improve the evidence base for diagnostic testing, this is being done through developing the National Biochemistry Benchmarking report and the Atlas of Variation
- Achieve harmonisation of approaches towards service provision
- Provide a forum for the introduction and evaluation of new concepts and technologies
- Promote the development of services, which are focussed on the delivery of good clinical outcomes, through the development on an 'effectiveness agenda'
- Ensure activity is focussed on service improvement and the objectives of Triple Aim

The triple aim objectives are based on the simultaneous pursuit of three dimensions:

- Improving the quality of healthcare
- Improving the health of the population, and
- Achieving value and financial sustainability

The Biochemistry network potentially affects all of the Scottish population; diagnostic tests underpin 70% of clinical decisions. The networks benchmarking report has identified that Biochemistry services in Scotland carry out 70,750,000 tests per year. Key elements of laboratory workload captured within this report include details of the demand for biochemistry tests, tests referred to reference sites and workforce information. The SCBN has been working with the National Laboratories Programme, advising on the work that would be required to automate this data collection through the development of the National Laboratories Information & Intelligence Platform (NLIIP). Long term plans include a direct link from the NLIIP to populate the SCBN annual benchmarking report and AoV input.

### **3. Network Objectives**

The networks overarching objectives, in line with Scottish Government's core principles for national managed networks, are as follows:-

1. Design and ongoing development of an effective Network structure that is organised, resourced and governed to meet requirements in relation to SGHSCD Guidance on MDNs ( currently CEL (2012) 29 ) (Annex and national commissioning performance management and reporting arrangements; The networks core principles are on the five year work plan in Annex C.
2. Support the design and delivery of services that are evidence based and aligned with current strategic and local and regional NHS planning and service priorities.
3. Effective Stakeholder Communication and Engagement through design and delivery of a written strategy that ensures stakeholders from Health, Social Care, Education, the Third Sector and Service User are involved in the Network and explicitly in the design and delivery of service models and improvements.
4. Improved capability and capacity in biochemistry diagnostic services through design and delivery of a written education strategy that reflects and meets stakeholder needs.
5. Effective systems and processes to facilitate and provide evidence of continuous improvement in the quality of care (CQI).
6. Generate better value for money in how services are delivered.

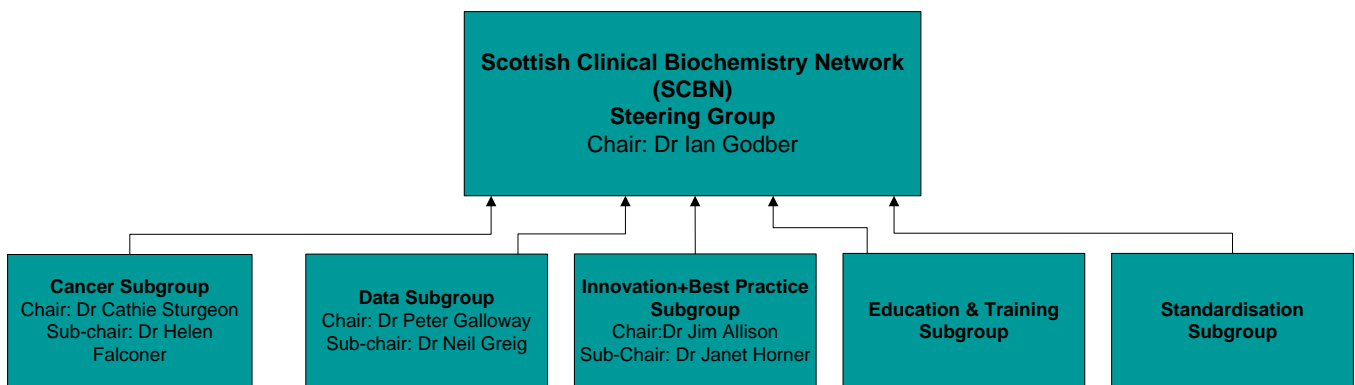
## 4. Report against Work plan

The network had a gap in programme management support, however has had a full core team in place since August, and driving forward effective delivery of the following workplan:-

### 4.1. Effective Network Structure and Governance

The core network team is comprised of a Lead Clinician (1PA), Network Scientific Manager (2 PA), Programme Manager (0.5wte) and Programme Support Officer (0.3wte). Dr. Ian Godber is the current Lead Clinician, his tenure started Sept 2016 and is due to finish on September 2019. The network scientific manager, is Mrs Janet Hogg who began in August 2017 and is due to conclude in September 2019. However, in the interest of continuity the network steering group endorsed a proposal on 1st March for both Ian and Janet to extend their roles for a further year. This was subsequently approved by NSD as Commissioners.

SCBN has a steering group which ensures the Scottish Government's core principles for Networks (as laid out in CEL 29 letter) are implemented. The principles highlight the importance of the national managed diagnostic networks developing and delivering the healthcare strategy through re-designing the service, promoting integration and developing good practise to enable improvement to the services provided.



Steering Group Membership can be seen in Appendix one.

### Strategic planning

The network is involved in strategic planning for the future, and aligns the work plan to:

- Realistic Medicine
- Vision 2020
- National Laboratories Programme Distributed Service Model Blue Print
- The National Delivery Plan for Healthcare Science

The network actively engages with:

- DSG
- DSG Advisory Group
- LOB,
- Regional laboratory groups
- National events for example the health care science event, realistic medicine event, NHS Scotland event

The network regularly reviews current processes and protocols and looks to streamline these through the production of national guidance. In 2018/19, the network has developed guidance for the testing of Vitamin D, thyroid, U & E and FSH.

The network aims to engage a wider range of stakeholders and raise the profile of the network at all available opportunities and this year has promoted SCBN through events such as:

- NMDN road shows in Queen Elizabeth University Hospital, Hairmyres Hospital and Crosshouse Hospital

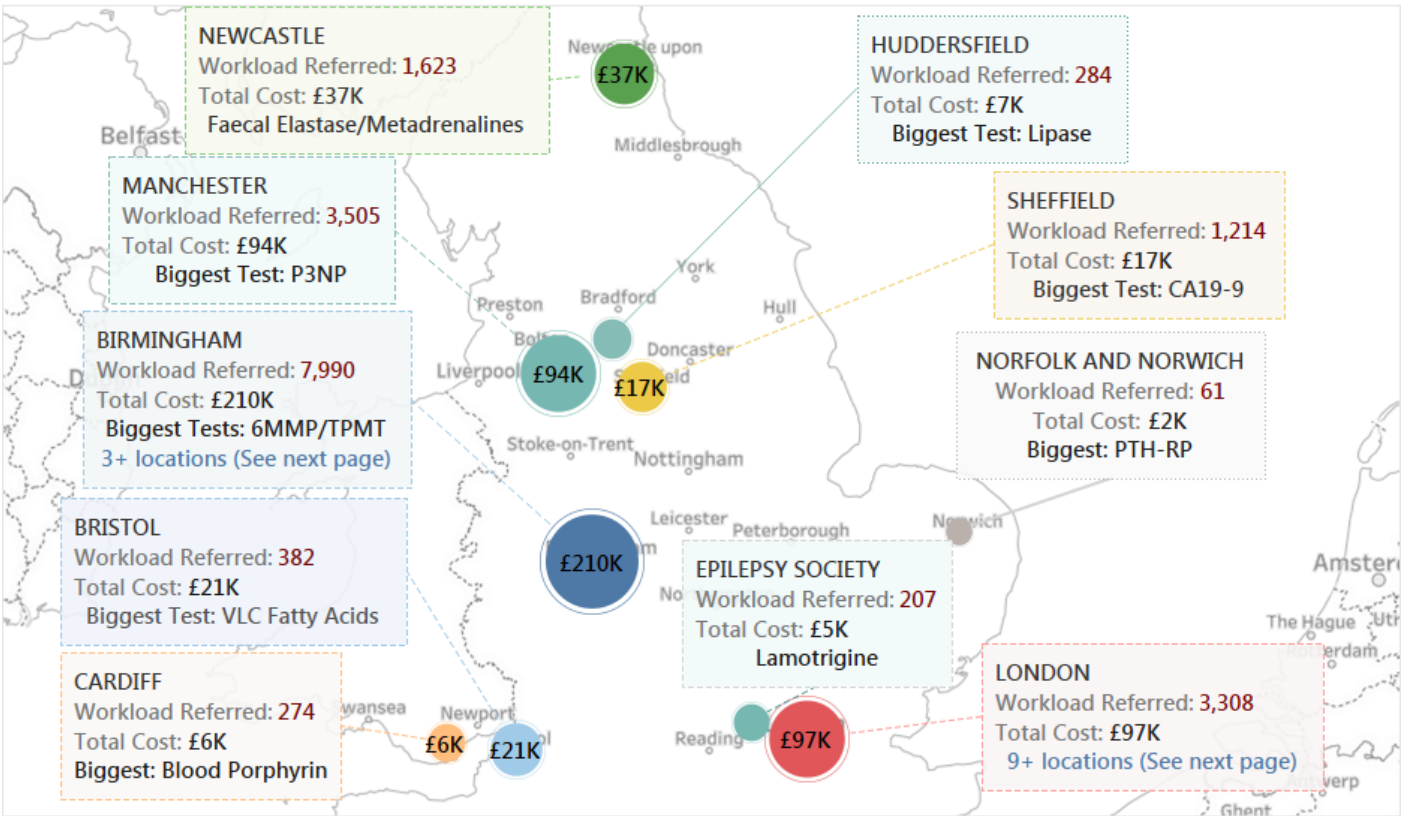
## Scottish Clinical Biochemistry Network (SCBN): Annual report

- Presenting a poster at the Association of Clinical Biochemistry event (ACB)
- A range of Quality Improvement projects with a range of NHS Boards
- SCBN has also successfully submitted an abstract for the NHS Scotland event. This will be presented in May 2019.

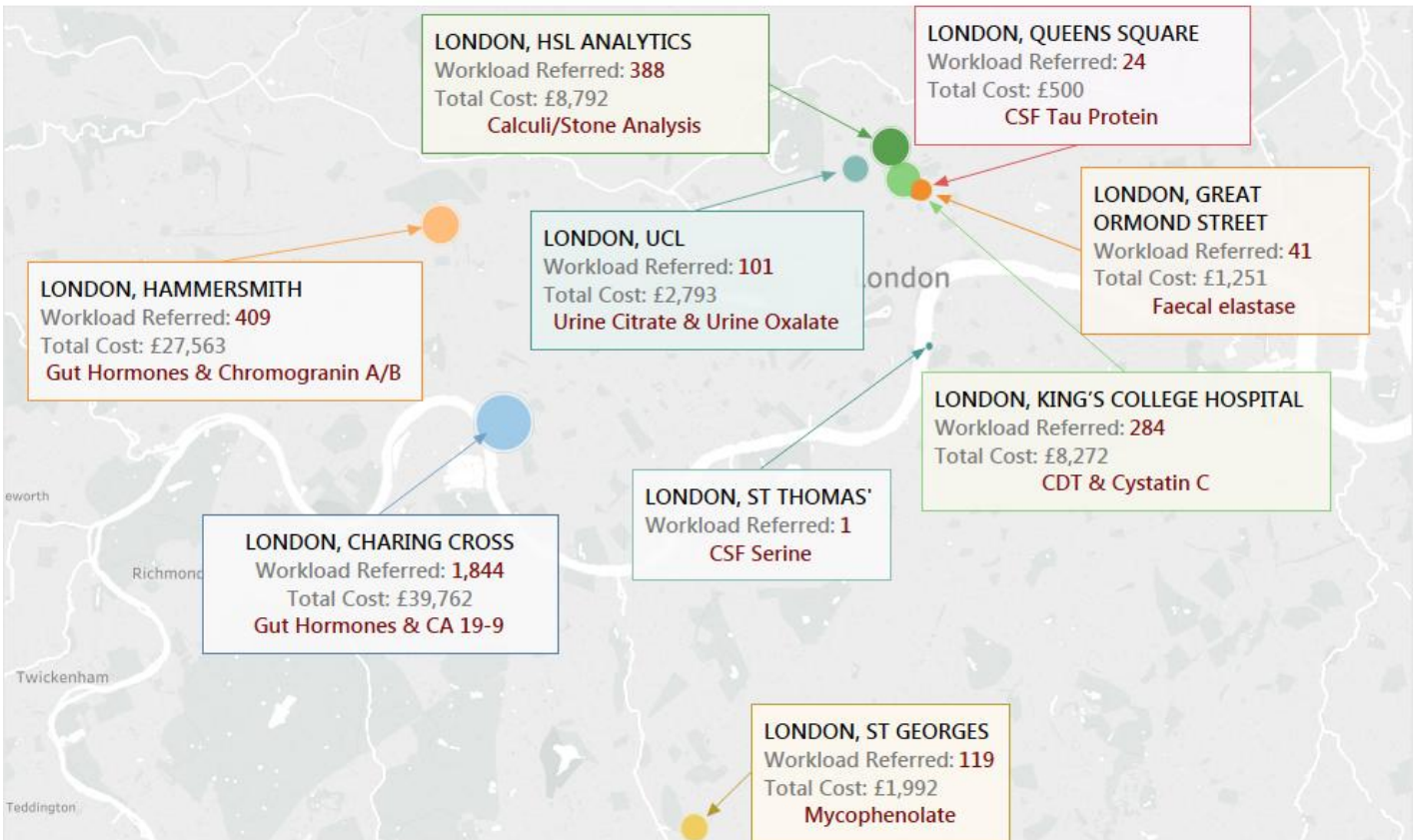
### **4.2. Service Development and Delivery**

The network held a data workshop and composed a questionnaire to form the networks first benchmarking report. This has now been produced and finalised with data received from almost all NHS Boards in Scotland. This is a huge achievement for the network and it is hoped going forward this will be built upon and developed into a range of quality improvement projects. The process of data collection is anticipated to be more streamlined this year through better engagement with the stakeholders and because they are more familiar with what is required. The detail of the benchmarking report will be revisited and developed for a second report during 2019/2020. One of the aspects the network investigated was tests referred to specialist sites out with Scotland, including where in the UK those were being sent. The network will aim to evaluate which tests could be repatriated into Scotland or streamlined into one centre in England, retaining services within Scotland where possible and feasible as well as ensuring best value.

Top 10 Destinations Map



Map of London Laboratories





## Scottish Clinical Biochemistry Network (SCBN): Annual report

The network has also identified 20 tests for the Atlas of Variation. These are tests the SCBN aim to include in future demand optimisation and audit initiatives, to address the variation that exists within these tests across Scotland. The network has gathered valuable data, which has been demonstrated at the Diagnostic Network Road Shows that are currently on-going throughout Scotland. Screenshot of examples for the Atlas of Variation for Primary Care can be seen below. This showcases some of the dynamic functionality of the Atlas. Depending on funding for the next stage of the National Demand Optimisation Group, the network aims to collect data for the following year.



### Requests per 1000 by Age Type



# Scottish Clinical Biochemistry Network (SCBN): Annual report



Guidelines: <https://www.clinicalbiochemistry.scot.nhs.uk/>

## Health Board Dashboard

< BIO, Albumin:creatinine ratio >

0

◀ ▶

Detail Level

Practice

Colour Overlay

Outliers

NHS Region

(All)

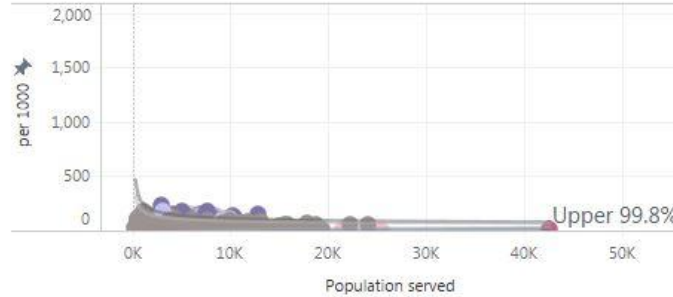
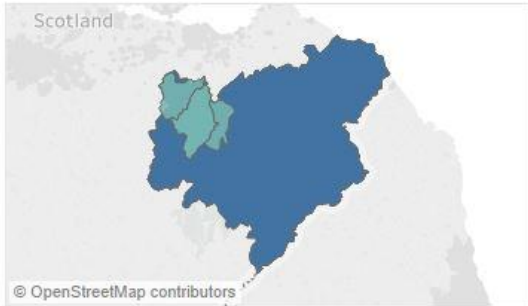
NHS Board

(All)

Cluster Name

Borders West

- High (0.001)
- High (0.025)
- Low (0.001)
- Low (0.025)
- Normal dist.



NHS Board N..	Cluster Name	Practice Code	Practice Name	Practice List Size	Practice Requests	Practice Requests per 1000
BORDERS	Borders West	16121	St Ronan's Pra..	4,539		
		16160	The Neidpath ..	6,074	1	0
		16174	West Linton M..	3,823	153	40
		16211	The Tweed Pra..	5,642		

Standardised P..

Original data

Reset Filters



Guidelines: <https://www.clinicalbiochemistry.scot.nhs.uk/>

## GP Dashboard

BIO, C-reactive protein

Show history

Practice List Size

8,574

Practice Requests

1,193

Avg. SIMD16 Decile

10

NHS Region  
South East

NHS Board  
FIFE

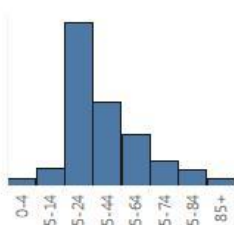
Cluster Name  
North East Fife

Practice Name  
Blackfriars Medical ..

Top 3 Requests per 1000

FBC	14
Sodium	14
Bilirubin	13

Cluster vs Practice Requests per 1000 AVG



Blackfriars Medical Practice - 21825 - BIO, C-reactive protein



North East Fife

Reset Filters

The network has been responsive and provided information for the DSG Workforce planning group. The DSG Work force group will soon be producing a report to evidence the current and future workforce in laboratory diagnostics, including recommendations for the future. The Biochemistry network already has a

clear idea of the numbers of staff required. The work of the network has identified that NHS Boards are having challenges in identifying funding to enable the recruitment and training of sufficient staff numbers. The network has facilitated discussions which has highlighted these challenges across NHS Scotland.

SCBN has been instrumental in developing a new pathway for the diagnosis of Diabetes Mellitus (See Appendix 3 This project has been a cross-disciplinary project, collaborating with Immunology, the Diabetes Clinical Network and the Genetics Consortium. It is a great example of inter-network collaboration and inter-disciplinary approach to develop a clear pathway that will improve the quality of life for many patients. Through the development of this pathway, it is expected there will be significant cost savings through the repatriation of tests to Scotland which is reducing the cost per test, as well as significant savings being made on the prescription of insulin and also improving the quality of life for a large cohort of patients. There have been several clinical guidance documents developed and produced by the network, to harmonise test evidence based test requesting. They can be found:

<https://www.clinicalbiochemistry.scot.nhs.uk/resources/documents/>. These are for Vitamin D, Follicle Stimulating Hormone (FSH), Urea and Electrolytes and Thyroid testing. These have been circulated throughout the network and are published on the website. It is expected these documents will inform best practise when it comes to testing in Scotland, and enable and support a once for Scotland approach.

The network was approached by Dr Paul Cawood, a biomedical scientist within NHS Lothian, regarding a business case for the testing of drugs of abuse within oral fluid. The assumptions made for the initial proposal were found to be inaccurate; therefore the business case at this stage will not be progressed. However, the data group will be incorporating information into the data requests to enable an accurate picture of the variation which exists in testing of drugs of mis-use throughout Scotland.

#### **4.3. Stakeholder Communication and Engagement**

The network has changed the name, web address and network email account to increase the 'search ability' of the network resources. It is hoped the profile of the network will increase with increased traffic through the website. The website has also been re-vamped, re-structured and is continuing to be updated, but has drastically improved in the last few months, thanks to the work of the programme support officer. The core team has now been writing and circulating regular newsletters updating stakeholders on the progress of the network. The format of the newsletter was also refreshed. It is hoped through an increased distribution list, the reach of the network through regular newsletter updates will increase the range of stakeholders and the engagement.

The network has re-drafted its communication and engagement strategy, it is awaiting input from remote and rural colleagues at present to enable the final draft to be produced and circulated. A request for a contact in each site has been circulated to enable one member to print and advertise the newsletter and to circulate locally to colleagues to again increase the reach and profile of the network. A range of contacts have volunteered but there are still some sites yet to offer a point of contact.

#### 4.4. Education

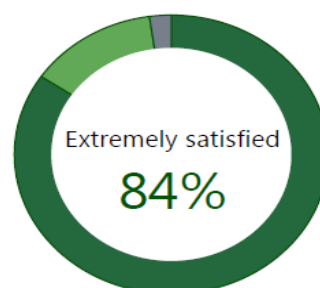
In September the network hosted a very successful annual education event, with a further increase in number of attendees from the previous year. There were 59 attendees at the 2018 annual education day event, 76% of attendees responded to the event evaluation, the results can be seen below.



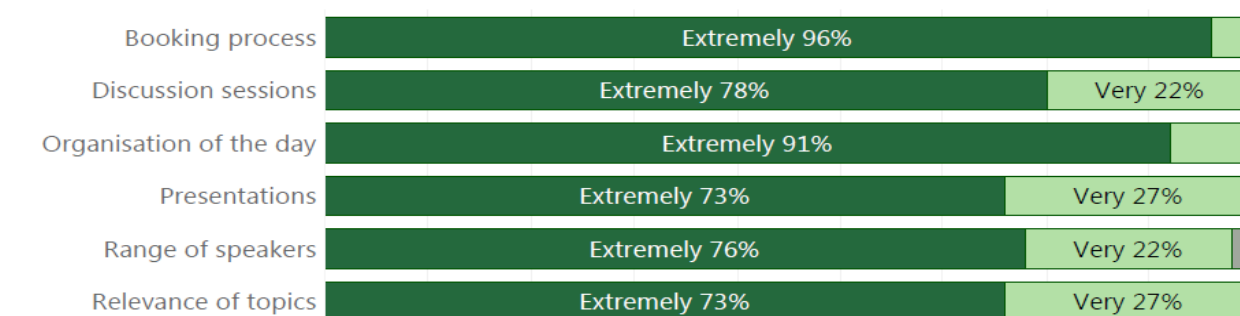
### SCBMDN Event Evaluation 2018

Number of responses

There were **45** responses to the survey



How satisfied are you with the ...



Any further comments/suggestions, including suggestion topics for future events? (group)

- No/Keep up the good work
- Better seating
- iLFT (grey zone)
- Procalcitonin/BNP
- Scotland Atlas of variation
- Copies of presentations needed
- More SCBMDN Updates

What aspects of the day will be of most use to you in your clinical practise? (group)

- Myeloma audit/diagnosis of myeloma (7)
- iLFT pathway (5)
- Hearing about national/improvement projects (4)
- Calprotectin presentation and GP challenges (3)
- All of it (2)
- Awareness as a trainee (2)
- Awareness of differences in EP practice (2)
- Learning from others experiences (2)
- Will have to think about that (2)
- Gastro presentations (1)
- Tumor marker presentations (1)

Did the educational event meet your expectations? (group)	Count of Responses	%
Yes	38	84.4%
Unanswered	6	13.3%
No prior expectations	1	2.2%
Grand Total	45	100.0%

How did you hear about the event? (group)	Count of Responses	%
Email	21	47%
Unanswered	12	27%
Colleague	6	13%
SCBMDN meetings	2	4%
ACB Scotland meeti..	1	2%
Invited to speak	1	2%
Went last year	1	2%
Work notice board	1	2%
Grand Total	45	100%

The topics selected were popular and stimulated lively discussion. The next event has been planned for 6<sup>th</sup> September 2019.

The network has also updated and re drafted the Education Strategy.

The network has developed guidance documents on Vitamin D testing, Urea and Electrolyte, follicle stimulating hormone and thyroid testing. This provides educational material to enable a standardised testing approach throughout Scotland.

#### **4.5. Audit and Continuous Quality Improvement**

The key projects to support data collection and continuous quality improvement are:

- Atlas of Variation
- QI strategy being re drafted
- Production of Documents/guidance,
- Programme Manager's successful entry to the, Scottish Improvement Leaders (ScIL) Programme and will focus project on a specific network QI need
- Publication, endorsement from realistic medicine and distribution of tumour marker bookmark
- Extensive developments of the new SCBN website, re structure and editing of the content

#### **4.6. Value**

The C peptide business case is the key example where the network has been instrumental in the development of a new pathway which will streamline processes. SCBN has worked with several professional groups to develop a new pathway which will optimise the testing pathway for the patients, save money and repatriate tests to Scotland which have currently been sent to England.

The network as developed guidance documents as previously discussed to optimise testing in Vitamin D, U & E, FSH and thyroid testing.

### **5. Plans for the Year Ahead**

SCBN has the following key priorities reflected in the work plan for 2019/20:-

- Complete website update
- Continue to increase stakeholder engagement
- Quality Improvement (QI) project development, particular focus is the Scottish Improvement Leader's (ScIL) project on the reduction of Vitamin D test requesting
- Engage at NHS Scotland and Healthcare science events
- Complete C-peptide business case and support implementation
- Successful annual network education day event in September
- Build on the annual benchmarking report and produce updated second report
- Continue to engage with National Demand Optimisation Group (NDOG) and Atlas of Variation (AoV)
- Develop and encourage engagement with the Innovation Dashboard
- Demand optimisation will focus on Lipids and lfts liver screen panel guidance development
- Completion of the Cancer Antigen 125 (CA125) national audit in partnership with SCIN
- Continue engagement with WoSCAN, SCAN and the North Cancer Alliance

Scottish Clinical Biochemistry Network (SCBN): Annual report

## 6. Detailed Description of Progress in 2018/19

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 28/03/2019	Anticipated Outcome	RAGB Status
2018-01	<p>Cancer Guidelines</p> <p>To have the bookmark printed and to distribute the hard and electronic copies of the bookmark. The information will additionally be incorporated into and disseminated through the Scottish cancer referral guidelines app containing the key reference intervals.</p>	1,2,3,4, 5	To be completed by Dec 2018	Dr Cathie Sturgeon, Dr Janet Hogg and Dr Catherine Colquhoun	The bookmark has been printed and the distribution of hard copies has begun, which has been met with positive feedback. The cancer guidelines have been incorporated into the Scottish Cancer Referral Guidelines which is online and in the Scottish cancer referral guidelines app.	The production and dissemination of clear national reference guidelines containing reference ranges for tumour markers. The reference intervals will provide standardisation of diagnosis of disease and equip non-specialists to improve cancer diagnosis and treatment for patients. The guidelines will be in the form of a bookmark and inclusion in a current app. Further promotion of the guidelines will occur through the network.	<b>B</b>
2018-02	<p>CA125</p> <p>Complete the joint audit between SCBMDN and SCIN data with regards to diagnostic investigations for the recognition of ovarian cancer in primary health care. The audit will be trialled in one health board, it has been agreed this is GG&amp;C.</p>	1, 2, 3, 4, 5, 6	Aim to be completed by Dec 2018	Mrs Claire Lawrie, Ms Karen Smith, Dr Niove Jordanides and Dr Catherine Colquhoun, Janet Hogg	The final report from the CA125 pilot audit in GG & C has been finalised, circulated and published on the SCBN website. The CA125 data for almost all NHS Boards has been submitted by Biochemistry departments. The Socrates data is expected to be sent to IMS within the next few days. IMS has met with SCIN Network scientific manager to discuss the submission of the RIS data. This is in progress, but the national report can not be completed until the RIS data has been submitted.	A complete audit of CA125 is to be completed, to obtain a clear picture of the variation of CA125 throughout Scotland. The audit will enable reference guidelines to be produced, which will enable the standardisation of diagnosis of ovarian cancer to occur ensuring equity across Scotland.	<b>B</b>

## Scottish Clinical Biochemistry Network (SCBN): Annual report

2018-03	<p>Innovation</p> <p>To re-design the innovation dashboard and have this on the website. The dashboard will be actively promoted and aim to increase engagement and spread of innovative practice throughout NHS Boards in Scotland.</p>	2, 3, 4, 6	Continue development to April 2019	Mr Jim Allison, Mr Michael Cairns, Dr. Ian Godber, Mrs Claire Lawrie and Dr Catherine Colquhoun	<p>A draft of the Innovation dashboard has been sent to the innovation group chair for comment. It is expected that this will be published on the website in March 2019.</p>	<p>Further development of the dashboard will promote and encourage examples of innovative practice to be replicated and incorporated into different NHS Boards.</p> <p>The outcomes of the dashboard are to be linked with other scientific disciplines.</p>	<b>G</b>
2018-04	<p>Workforce</p> <p>The network is gathering information on workforce through the data group. Karen Stewart is now looking at a secondee working with her a day a week to further investigate the challenges being faced.</p>	1, 2, 3, 6	On-going, to be completed March 2019	Dr Peter Galloway, Dr Ian Godber	<p>The network raised the challenges facing workforce at the DSG, which was identified as an issue affecting all diagnostic disciplines. As a result of the DSG, Dr. David Stirling has formed a working group to investigate these challenges. The network has included questions on workforce as part of national biochemistry data being collected and collated by the network and the IMS team.</p> <p>The specific challenges surrounding the future of Scientist training programme (STP) funding throughout Scotland have been identified by the group and ways forward are currently being explored.</p>	<p>The network will gather data to support the work being taken forward by NES and the cross disciplinary team led by David Stirling.</p>	<b>B</b>
2018-05	<p>Demand Optimisation</p> <p>The network will continue to develop demand optimisation work through the newly convened national demand optimisation group.</p>	1, 2, 3, 4, 5, 6	Continue to April 2019	Janet Hogg, Rebecca Pattenden, Janet Horner, Catherine Colquhoun and Ian Godber.	<p>The group has fully engaged in the National Demand Optimisation Group. The network has submitted data for the Atlas of Variation.</p> <p>The network has produced, published and circulated guidance on Vitamin D, Follicle Stimulating Hormone (FSH), Urea and Electrolytes (U &amp; E) and thyroid testing.</p>	<p>A shared understanding of best practice in demand optimisation. This group is now part of the innovation group.</p>	<b>B</b>
2018-06	<p>Communication</p> <p>The network will ensure regular communication is sent out in the form of newsletters and Twitter. The network will continue to increase its profile, and dissemination of information. Extend the reach of the network to attract more</p>	1, 3	April 2018 to April 2019	Dr. Ian Godber, Ms Janet Hogg, Dr Niove Jordanides and Dr Catherine Colquhoun.	<p>The newsletter has been regular since the core network team has been fully staffed. The communication strategy has been updated and the network has strived to ensure there is a representative to circulate communication in each site.</p>	<p>Increased engagement with the network and increased reach and range of professionals and ages of members. The increased awareness of the network will hopefully lead to engagement with a</p>	<b>B</b>

## Scottish Clinical Biochemistry Network (SCBN): Annual report

	stakeholders to engage.					wider range of members enabling the development of new ideas within the network whilst communicating the experience of the current members.	
2018-07	<p>Emerging Challenges</p> <p>Diagnostic services will continue to be responsive to emerging challenges and will be able to address them quickly.</p>	1,2,3,4,5,6	On-going	Janet Hogg, Catherine Colquhoun and Ian Godber	<p>The network has worked collaboratively with the Genetics Consortium and expert diabetiologists to develop a business case for the C-peptide testing pathway for T1DM.</p> <p>The network took forward the proposal of oral fluid mis-use drug testing to the DSG advisory group. This was positively received, however during the course of the research it was found that presumptions that were previously made were no longer accurate therefore it would not progress further.</p>	Network is prepared to be responsive and able to adapt to any emerging challenges.	G
2018-08	<p>Education Day.</p> <p>The network aims to host another successful education day event, with a further increase in the number and spread of attendees throughout the biochemistry community.</p>	1,3,5	Completed Sept 2018	All network members	The education day was held on 7 <sup>th</sup> September 2018, this event was successful with an increase in attendees from 2017, with 70 attendees registered and over 60 attending the event. The event is already planned for Sept 2019. The feedback received from this event was positive, enthusiastic and encouraging; highlighting the advances the network has made in increases the impact and reach of the network.	Increased attendance in the education day and increased spread of attendees. Feedback will be requested from the attendees and the spread of attendees will indicate the reach of the network.	B
2018-09	5 Year Work Plan. The 5 year plan has been developed however this is not a static document. It will continue to be developed and updated as the year progresses.	1,2,3,4,5,6	July 2017-March 2018	Catherine Colquhoun, Ian Godber	The plan is written, but will need to be updated and developed as required throughout the year.	The 5 year work plan will provide a clear, direct and targeted approach of the network, which is presented to all stakeholders. A structured plan is in progress. All stakeholders will be clear of the priorities and direction of the network and working efficiently towards common goals.	B



## Scottish Clinical Biochemistry Network (SCBN): Annual report

2018-10	SCBMDN will continue to support the haematology sub group to submit their own network application. The network will support haematology to deliver improvements to haematology services and develop their work plan as part of their network application.	1,2,3,4,5,6	June 2018	Liz Blackman, Ian Godber and Alistair Hart	The haematology short life working group has developed and submitted a proposal for an independent network. The network proposal was positively received by the NPPRG and will be discussed at the NSSC 19 <sup>th</sup> September.	The aim is that the Haematology workforce, should enjoy better engagement with national initiatives and that a strategic vision for haematology services in Scotland is developed and the implications and required resources understood.	<b>B</b>
2018-11	Data collection and presentation  The network is working closely with the IMS team developing the data collection and presentation of the data collected.	1,2,3,4,5,6	Until March 2019	Catherine Colquhoun, Claire Lawrie, Ian Godber	The network has produced the first National Biochemistry benchmarking report	NHS Scotland will have a clearer picture of biochemistry activity and an agreed way forward to develop the data set further and use the information to target variation and improve quality.	<b>B</b>
2018-12	Completion of the network review	1, 3, 4, 5	September 2018	Expert review group, Ian Godber, Janet Hogg, Philippa Cottam and Catherine Colquhoun	The review of the network has been very positive. The network has already incorporated the recommendations into their five year work plan. The network has been approved for a further commissioning cycle	Ongoing designation of network	<b>B</b>
2018-13	Atlas of Variation  The network is leading on the development of an atlas of variation showing variation in test requesting.  Deliver work streams in a lab to reduce unwarranted variation in the following tests: FSH; Vitamin D; Thyroid; U+E	1, 2, 3, 4, 5	March 2018 - March 2019	IMS, Data Group	A prototype Atlas of Variation has been produced and presented to a number of groups including the realistic medicine team. A template to collect data on Top 20 tests for biochemistry has now been circulated and responses received from almost all NHS Boards to date. The data will then be collated and presented.	Identification of variation in primary care leading to opportunities to reduce unwarranted variation	<b>B</b>

## SCBN WORK PLAN – 2019-20

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

## Scottish Clinical Biochemistry Network (SCBN): Annual report

Objective Number	Smart Objective	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31 March 2019	Anticipated Outcome	RAGB status
<b>1. Effective Network Structure and Governance</b> <small>[linked to Quality Dimensions 3,4,5,6]</small>						
2019-01	Develop the quality improvement strategy	1 <sup>st</sup> April 2019 – 30 <sup>th</sup> May 2019	Dr Catherine Colquhoun/Network Stakeholders	Draft format of strategy to be developed into final strategy. Continue engagement with the Lab Manager in Western Isles to obtain remote and rural perspective. 04/03/2019	To have a detailed and clear Quality Improvement strategy for the network.	<b>G</b>
2019-02	Circulate communication with all steering group members to ensure all members will endorse Ian and Janet continuing in roles for a further year	1 <sup>st</sup> April 2019- 30 <sup>th</sup> April 2019	Ms Philippa Cottam/Dr Catherine Colquhoun	The suggestion of continuation of the current lead clinician and network scientific manager for a year was agreed. However must email and confirm with all steering group members. 04/03/2019	It is anticipated both the Lead Clinician and Network Scientific Manager will continue until late summer 2020. Succession planning will ensure the positions are filled to enable a short overlap/handover between current core team and incoming post holders.	<b>G</b>
<b>2. Service Development and Delivery</b> <small>[linked to Quality Dimensions 1,2,3,4,5,6]</small>						
2019-03	Continue to facilitate the C-peptide business case and support set up of the new pathway	1 <sup>st</sup> April 2019 – Sept 2019	Dr Ian Godber & Dr Catherine Colquhoun	The business case has been drafted and been through the DSG AG, Genetics Consortium, Blueprint alignment group and the DSG. It is due to go to the LOB on the 23 <sup>rd</sup> April 19.	By September 2019, it is hoped the new diagnostic pathway will be in place, with historic patient cohort also being re-tested to identified any patients who are inappropriately being prescribed	<b>G</b>

## Scottish Clinical Biochemistry Network (SCBN): Annual report

Objective Number	Smart Objective	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31 March 2019	Anticipated Outcome	RAGB status
					insulin treatment.	
2019-04	Innovation dashboard, to showcase examples of innovation processes and examples of good practise throughout Scotland. This will enable the successful implementation of innovative practise within ther NHS Boards	1 <sup>st</sup> April 2019-30 <sup>th</sup> May 2019	Network Data Analyst/Innovation sub group	A draft of the innovation dashboard was circulated to the steering group for the 1 <sup>st</sup> March 2019 steering group meeting. This required further development and input from the sub group members.	It is hoped the innovation dashboard will be in final draft and have members actively inputting into the dashboard on a regular basis to make best use of the resource. The examples of innovative practise will be highlighted between all NHS Boards.	<b>G</b>
<b>3. Stakeholder Communication and Engagement</b> <small>[linked to Quality Dimensions 1,3,4,5,6]</small>						
2019-05	Continue quarterly newsletters	1 <sup>st</sup> April 2019 – 31 <sup>st</sup> March 2020	Network Core team	Within the last 6 months of this year, regular newsletters have been sent out. This will be continued through 2019-2020. A call for items for the newsletter has been put out to the network.	Regular timely newsletters will be circulated which will ensure stakeholders receive regular communications from the network and keep abreast of the on-going work of the network.	<b>G</b>
2019-06	The website development will continue to ensure full use is made of the members area and the website is made even more interactive and engaging to increase engagement with	1 <sup>st</sup> April 2019-June 2019	Network core team/ sub group leads/stakeholders	The network website address has changed and the network name to enable the site to be more easily located. The network website has been re-structured and the content largely edited. There is still some work to do to finish the complete re-vamp of	The website will contain clear information on the work on-going in the network.	<b>G</b>

## Scottish Clinical Biochemistry Network (SCBN): Annual report

Objective Number	Smart Objective	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31 March 2019	Anticipated Outcome	RAGB status
	stakeholders			the website.		
2019-07	Participation in national road shows	1 <sup>st</sup> April 2019-March 2020	All network members	Members of the core team have represented the network at several of the road shows and will be present at the road shows in Forth Valley 27 <sup>th</sup> March 19 and D & G in May 2019 and Borders date tbc. All network members need to continue to promote the road show when it is being hosted on their site.	The road shows are showing an increase in stakeholders signing up to the mailing list, as well as an increase in engagement on the twitter account.	<b>G</b>
2019-08	Continue to foster links with WoSCAN, SCAN and the North Cancer Alliance.	On-going-March 2020	Members of the Cancer sub group	The programme manager has set up contacts between the SCAN, WoSCAN and North Cancer Alliance. Key members of the Cancer sub group in the three geographical areas, have already made great progress, WoSCAN lead clinician had a meeting with two group members, the SCAN network has had two meetings attended by Cancer sub groups members where a presentation of the CA125 audit was given. The North Cancer alliance has recently undergone changes but is now in a position to meet with Grampian group members.	Forging links, and developing contacts through these networks, enables sharing of projects and on-going work. It ensures no duplication of effort and enables input from out with the group which can be valuable. The networking is also showcasing results from on-going work projects. It also enables greater horizon scanning and awareness of on-going work/potential challenges.	<b>G</b>
<b>4. Education</b> <small>[linked to Quality Dimensions 1,2,3,4,5,6]</small>						

## Scottish Clinical Biochemistry Network (SCBN): Annual report

Objective Number	Smart Objective	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31 March 2019	Anticipated Outcome	RAGB status
2019-09	Annual education day event	Sept 2018-Sept 2019	Core team and Network members	Following on from the success of the education day event held in Sept 2018, the event for 2019 has been booked in the same venue COSLA for Friday 6 <sup>th</sup> September. There has been a call for items for the day, and the programme is starting to take shape.	The team aims to increase the numbers of attendees and spread of attendees to continue to increase engagement and the profile of the network.	<b>G</b>
2019-10	NHS Scotland Event poster	Poster submission April 17 <sup>th</sup> , Event 30 <sup>th</sup> and 31 <sup>st</sup> May.	Dr Catherine Colquhoun and members of DO group	The abstract has been accepted for the event. The poster is in process of being drafted. This will be circulated to the demand optimisation group by the end of March and the poster submitted and printed mid April.	The poster will increase the profile of the network and highlight the guidance which has been developed and produced by the network.	<b>G</b>
2019-11	Promote CPD activities	April 2019-June 2019	Bernie Croal/Philippa Cottam	CPD activities list which has already been prepared will be added to the SCBN website. This will be promoted to network members to highlight opportunities for CPD.	It is hoped this will provide a useful resource to network members to increase their CPD activities.	<b>G</b>
<b>5. Audit and Continuous Quality Improvement</b> <small>[linked to Quality Dimensions 1,2,3,4,5,6]</small>						
2019-12	Ca125 audit	Ongoing – Sept 2019	Karen Smith, Janet Hogg, IMS	The SCBN network has submitted CA125 data returns for all NHS Boards bar one. The SOCRATES data has been received; we are now just awaiting the data from the SCIN network.	It is hoped we received all the SCIN data returns by June 2019 which would enable the national CA125 audit to be presented at the SCBN education day event in Sept	<b>G</b>

## Scottish Clinical Biochemistry Network (SCBN): Annual report

Objective Number	Smart Objective	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31 March 2019	Anticipated Outcome	RAGB status
					2019.	
2019-13	Demand optimisation guidelines development - LFTs	June 2019	Demand Optimisation sub group members	Guidance of LFTs is currently on-going. This will be reviewed by the demand optimisation sub group, then ratified by the steering group prior to being made available on the network website.	The development of the guidance will enable a once for Scotland approach, a standardisation document to enable all NHS Boards to adopt the same practise.	<b>G</b>
2019-14	Demand optimisation guidelines development – lipids	June 2019	Demand Optimisation sub group members	Guidance of Lipids is currently on-going. This will be reviewed by the demand optimisation sub group, then ratified by the steering group prior to being made available on the network website.	The development of the guidance will enable a once for Scotland approach, a standardisation document to enable all NHS Boards to adopt the same practise.	<b>G</b>
2019-15	Link in the Standardisation project	April 30 <sup>th</sup> -	Interested members to volunteer for the April 30 <sup>th</sup> meeting	Shared Services has approached the network regarding the development of a standardisation group. The network has been responsive and already set up a network sub group meeting to discuss the priorities for SCBN.	The network will fully engage with the standardisation initiative.	<b>G</b>
<b>6. Value</b> <small>[linked to Quality Dimensions 1,2,3,4,5,6]</small>						
2019-16	Data benchmarking report 2019-2020	24 <sup>th</sup> April 19 – Oct 19	Data sub group and a member from each NHS Board to submit the data.	The data sub group will be carrying out a data workshop on 24 <sup>th</sup> April 2019. This will set out the data to be requested from SCBN for the next benchmarking report. It is hoped we will then receive all data returns by Sept 19, to enable a report to be written and concluded prior to the final	The network will continue to develop its data collection and benchmarking. The data sub group will continue to refine and develop the questions asked to enable	<b>G</b>

## Scottish Clinical Biochemistry Network (SCBN): Annual report

Objective Number	Smart Objective	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as at 31 March 2019	Anticipated Outcome	RAGB status
				steering group meeting of the year.	meaningful data to be collected.	
2019-17	Update to Atlas of Variation	24 <sup>th</sup> April 19 – the next year data will be discussed but final end date depends on the on-going funding of NDOG	Data Group/All SCBN Stakeholders	The data group will discuss the data that would be requested in this following year, however this cannot proceed until it is known if NDOG has funding for a further year.	The development of a robust data bank which informs change in practise to streamline processes and enable the network to identify key areas to target and develop.	
2019-18	NLIIP	Commenced will continue throughout the year based on requirement from the NLIIP team.	SCBN Standardisation sub group	Allocated representatives from the network have met with NLIIP Team and recognise the significant challenges faced with respect to standardisation and automated data collection. In view of this, the network has been exploring the possibility of setting up a Standardisation Group to align with this and to be part of NLIIP.	Representation from the network informs and enables alignment of work streams between NLIIP and SCBN	



## Appendix 1: Steering Group Membership

### SCBN Network membership March 2019

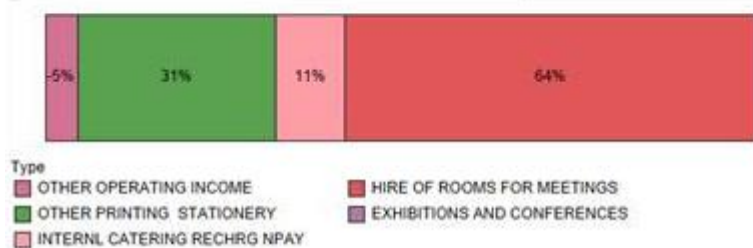
Lead Clinician	Ian Godber
Network Scientific Manager	Janet Hogg
Senior Programme Manager	Liz Blackman
Programme Manager	Catherine Colquhoun
Programme Support Officer	Philli Cottam
NHS Ayrshire and Arran	Suzanne Mackenzie, Gordon Taylor, Scott Blackwell
NHS Borders	John O'Donnell, Jackie Scott
NHS Dumfries and Galloway	Kim Heathcote, Martyn McAdam
NHS Fife	Ken Campbell, Heather Holmes
NHS Forth Valley	Mark Redpath, Gillian Lowe
NHS Grampian	Ian Rothnie, Jim Allison
NHS Greater Glasgow and Clyde	Christine Brownlie, Janet Horner, Maurizio Panerelli, Colleen Ross
NHS Highland	Brian Morrison, Catherine Dorrian, Heidi Mendoza
NHS Lanarkshire	Ian Godber, Louise Brown
NHS Lothian	Rebecca Pattenden, Louise McVicar, Stephen McCombe
NHS Orkney	Deborah Stevenson
NHS Shetland	Robert Wardrop, Kevin Deans
NHS Tayside	Chris Hind, Neil Greig
NHS Western Isles	Joel Briggs
NHS Golden Jubilee	Frank Finlay
Royal College of Pathologists	Bernie Croal
Association of Clinical Biochemists	Sarah Cleary
Shared Services	Heather Bryceland
ACB Audit Group	James Logie

## Scottish Clinical Biochemistry Network (SCBN): Annual report

Institute of Biomedical Scientists	Elaine Kennedy
SCBN Cancer Working Group Chair	Cathie Sturgeon
SCBN Data Subgroup Chair	Peter Galloway
SCBN Innovation + Best Practice Subgroup Chair	James Allison
SCBN Education and Training Subgroup Chair	Peter Galloway
NSS Information Management services	Claire Lawrie

## Appendix 2: Finance

Job description	Account description	18/19
SCB MDN	EXHIBITIONS AND CONFERENCES	£0.00
	HIRE OF ROOMS FOR MEETINGS	£3,167.55
	INTERNAL CATERING RECHRG NPAY	£534.40
	OTHER OPERATING INCOME	-£250.00
	OTHER PRINTING STATIONERY	£1,517.68
Grand Total		£4,969.63



A high level overview of the network annual expenditure can be seen above. A large proportion of the expenditure of the network during the last year was the hire of rooms for meetings.

Appendix 3: C-Peptide Business Case Clinical Pathway

Algorithm for Investigating Individuals with a Clinician-Diagnosis of Type 1 Diabetes (At Least 3 Years Post-Diagnosis)

