



**Scottish Clinical Biochemistry Managed
Diagnostic Network (SCBMDN)
ANNUAL REPORT 2016/17**

Lead Clinician: Dr. Ian Godber

Network Scientific Manager: Dr. Julia Anderson

Programme Manager: Mr Jimmy Paul/Dr. Catherine Colquhoun

Programme Support Officer: Ms Robina Collins/Miss Alison Walker

SCBMDN Annual Report 2016-17

Contents

Executive summary.....	1
Introduction	3
Aim/ Purpose/ Mission Statement of network	3
Report against Workplan	3
Plans for the year ahead.....	4
Network governance.....	7
Detailed Description of Progress over Reporting Period	8
Appendix 1: Network membership.....	8
Appendix 2: Finance	19

Executive summary

The SCBMDN has achieved a huge amount across a challenging 2016-17. The Network has seen several staffing changes in the internal management team, but has also experienced successful and smooth recruitment of a new Lead Clinician, Programme Manager and Programme Support Officer through effective forward planning. The staffing changes have not offset the progress of the Network, which has resulted in an annual work plan for which almost all objectives have been met.

The Network was one of the first at National Services Division to produce a long term vision through a five year work plan. This has since been replicated by other Networks and it has been positively received by Network commissioners.

A SCBMDN Communication and Engagement Strategy was co-produced and endorsed by the Steering Group. This sets out the key challenges for the Network, as well as a plan to address these. This has resulted in the creation of the very first Twitter account for the National Managed Diagnostic Networks (NMDN's). The SCBMDN also produced an Innovation Strategy through its Innovation Working Group. The purpose of this strategy is to guide the Network in identifying, promoting and sharing best innovative practice across biochemistry diagnostic services, and to provide the mechanisms to facilitate this.

Key members from the Network worked closely with Scottish Government colleagues and contributed to a report for B-Type Natriuretic Peptide (BNP) which was included in the Scottish National Delivery Plan (NDP). The Network has since been working with the Scottish Healthcare Science Officer, Scottish Government and Colleagues in cardiology on the national implementation of BNP/NT-proBNP testing in heart failure pathways. The outcome of this is that NHS Scotland Chief Executives signed up to implementing BNP testing at NHS Board level for heart failure pathways in Scotland. The aim is to reduce patient waiting times, increase rapid diagnosis and improve the treatment received by patients.

The Network has mapped the use of different tests across Scotland. We now have a clear picture on what tests take place for troponin testing for acute myocardial infarction, acute kidney injury and chronic kidney disease and diagnosis of diabetes (HbA1c) which will be used to progress implementation of a range of initiatives to improve quality in biochemistry services.

The Network held its annual event in May 2016. In keeping with its strategic and political pertinence and feedback from key stakeholders, the topic for the day was Shared Services. The SCBMDN is committed to ensuring that Shared Services percolates all aspects of the Network, and this has been reflected in the annual work plan, the five year work plan and through the various Network strategies.

The Tumour Markers working group have made great progress this year. The group is currently developing guidance on tumour marker requesting for the non-specialist and has obtained approval for the incorporation of the guidance into the Scottish Cancer Referral Guidelines and newly developed App and bookmark. Working with colleagues from the Scottish Clinical Imaging Network (SCIN) and the Information Management Service the group has developed a plan for a joint SCBMDN and SCIN audit of the cancer referral guidance for ovarian cancer .. The audit will be piloted in Greater Glasgow and Clyde and aims to assess the uptake in primary care of the guidance. The group has collated data on the target ranges for tumour markers in use across Scotland. The group is reviewing this data with the aim of harmonising target ranges across Scotland where possible.

SCBMDN Annual Report 2016-17

The Workforce working group has completed a SCBMDN report identifying the key workforce challenges in the coming years. This report incorporates a section written specifically for remote and rural areas.

Pilot implementations for the use of the Faecal Immunochemical for Haemoglobin Testing (FIT) in symptomatic patients has taken place in NHS Lanarkshire and NHS Tayside. A NICE diagnostic assessment on FIT testing will be published in June 2017. The network will work closely with colleagues in Health Improvement Scotland (HIS) on implementation of FIT testing in the pathway for assessment of symptomatic patients with low risk of cancer in primary care.

The SCBMDN website has been totally revamped this year using feedback from key stakeholders. It continues to be robustly maintained and kept relevant and up to date in line with the new Communication and Engagement Strategy.

The SCBMDN Demand Optimisation Group has reconvened and will develop a plan to facilitate implementation of their recommendations; these will be the focus of part of the SCBMDN Education Event for 2017. The demand optimisation group have participated in the multidisciplinary National Demand Optimisation group which developed the Scottish Government's National Demand Optimisation Report which was published in Feb 2017.

Introduction

Diagnostic services are an essential part of the patient journey. They are required by clinical teams in many contexts of their patient focussed work. Accurate and timely diagnosis of disease is one aspect of the work undertaken by these services, as part of a process to ensure that patients receive appropriate, safe and effective treatment with good outcomes. The services are fundamentally scientific services operating at the forefront of technology within an evolving health care delivery system. Around 70-80% of health care decisions affecting diagnosis and treatment are based on laboratory based diagnostic tests, making them a critical component in care pathways and an essential focus in any review of models for health care delivery.

The Scottish Clinical Biochemistry Managed Diagnostic Network (SCBMDN) was formed following discussions at the Scottish Senior Biochemists Group. It was felt that closer collaboration between laboratories could bring significant advantages and promote a more effective and evidence-based approach to laboratory medicine. This would ultimately optimise patient care. The SCBMDN was established with pump priming funding in February 2010. Diagnostic networks have significant involvement in a number of key pieces of national strategic work which include;

- Shared Services
- National Delivery Plan for Healthcare Scientists
- National Clinical Strategy

Aim/ Purpose/ Mission Statement of network

Through facilitating and fostering co-operation between clinical biochemistry departments, the SCBMDN aims to:

- promote consistency in service provision, education and training;
- identify emerging challenges and problems likely to impact on service provision;
- enable and promote the sharing of best practice;
- facilitate adoption of appropriate guidance (e.g. NICE, SIGN or RCPATH);
- improve the evidence base for diagnostic tests;
- achieve harmonisation of approaches towards service provision;
- provide a forum for the introduction and evaluation of new concepts and technologies, and
- promote the development of services which are focussed on the delivery of good clinical outcomes, through the development of an 'effectiveness agenda'.

Activity is focussed on service improvement and the objectives of Triple Aim.

The Steering Group is the SCBMDN's stakeholder group which meets four times per year. It is composed of the Network Clinical Lead (One session per week), Network Scientific Manager (Two sessions per week), Programme Manager (0.5 WTE) and the Clinical Lead and Laboratory Manager from each NHS Board, as well as representatives from the Royal College of Pathologists, Association for Clinical Biochemistry, Institute of Biomedical Science, and other members co-opted to represent project working groups.

The SCBMDN is accountable to Scottish Government through National Services Division. The Diagnostic Steering Group provides influence and is a key stakeholder for the SCBMDN.

Report against Work plan

1. B-Type Natriuretic Peptide (BNP)

A paper on BNP was written for the Scottish Government's National Delivery Plan report by SCBMDN members, cardiologists and cardiac physiologists. Surveys were also completed to map BNP practice across Scotland. The Network worked with the Scottish Healthcare Science Officer, Scottish Government and Colleagues in Cardiology on the national implementation of BNP/NT-proBNP testing in heart failure pathways. NHS Scotland Chief Executives signed up to implementing BNP testing at board level for heart failure pathways in Scotland. Medical Directors and regional planning networks are being briefed on the outcome of this meeting and local business cases will be requested.

2. Faecal Immunochemical Tests (FIT) for Haemoglobin

FIT pilots have taken place in NHS Lanarkshire and NHS Tayside. The SCBMDN is aware that NICE guidance for FIT will be released in June 2017 and a meeting planned for May 18th 2017 - this will provide SCBMDN with the opportunity to take a national approach to the implementation of FIT testing in the pathway for assessment of symptomatic patients with low risk of cancer in primary care.

3. Demand Optimisation

The SCBMDN has a Working Group dedicated to demand optimisation. The group had been on hold due to the formation of the National Demand Optimisation Group (NDOG) which had SCBMDN involvement and was chaired by one of the Steering Group members, Dr Bernie Croal. The purpose of the NDOG was to agree priorities for demand optimisation which the NMDN's would take forward. The final NDOG report was cascaded in December 2016. The SCBMDN demand optimisation group has reconvened and is currently developing an agenda for the education day, as demand optimisation is one of two key topics. The group will produce five key recommendations at the event and two presentation sessions.

4. Innovation

Across 2016-17, the SCBMDN has increased its' focus and commitment towards innovation. The SCBMDN Innovation Strategy was produced by the Innovation Working Group which details the key challenges for identifying, monitoring and sharing innovative practice through the Network and across Scotland. It also identifies key stakeholders who can help to address these challenges and makes recommendations to improve how the Network innovates. The innovation sub-group now has representation from eight NHS Boards (Grampian, Dumfries and Galloway, Lanarkshire, Forth Valley, Greater Glasgow and Clyde, Shetland, Lothian and Tayside), Healthcare Improvement Scotland and holds regular interaction with Scottish Innovation agencies such as SHIL and DHI.

In response to the recommendations in the Innovation Strategy, a 'Network Innovations' dashboard was set up on the SCBMDN website. The purpose of this is to allow people to share their innovative practice, learning and approaches as well as providing a central hub for Network innovative practice. Additionally, Network members have been formally linking to Innovation Hubs and Innovation Portals. Network members have also been involved in QUBE sessions (which are virtual meetings) to discuss the progression of the innovation agenda for the Network.

The publication of the SCBMDN Innovation Strategy earlier this year sets out the aims and objectives of the sub-group to support laboratories and boards to implement good innovative practice. Additionally it empowers the workforce to create innovative solutions to the challenges

5. Tumour Markers

The Tumour Markers working group is preparing guidance on the use of tumour markers for the non specialist and has obtained agreement to include these in the Scottish Cancer referral guidelines and App. An ambitious cross-Network audit of the Scottish Cancer Referral guidelines for ovarian cancer is underway with SCIN. The audit will be piloted in Greater Glasgow and Clyde. The group has also collated information on the tumour marker target ranges in use across Scotland. The group will review the target ranges and propose harmonised ranges where applicable.

6. HbA1c

A business case detailing the benefits of using HbA1c as a diagnostic test was produced and shared with all Health Boards across Scotland. Across 2016-17, the Network has experienced challenges with rolling out the use of HbA1c as a diagnostic test across Scotland. The lack of a governance structure by which to implement known best practice was highlighted as a key challenge to NMDNs. However, the Network supported the evidence based use of HbA1c as a diagnostic test. This ultimately came down to the individual health boards to progress and there has been a varied official network role out, with five boards advocating the use of the test in diagnosis; one board as a first line test and four as a second line test. A survey was completed in January 2017 with the six health boards that haven't implemented HbA1c. Responses said that for three NHS Boards, if a business case was approved and service funded they would implement; for two further boards they do not plan to implement but do not reject HbA1c test requests; and one NHS Board said if a business case was made they would implement the test.

7. Workforce

A paper has been produced by the Workforce Working Group of the SCBMDN which outlines the challenges that NHS Scotland will face for recruitment of healthcare scientists and biochemists in coming years. This incorporates a supplementary paper on the specific challenges facing remote and rural areas. Both of these papers make recommendations relating to early recruitment of professionals and workforce review. However there has been no progress on the NES proposed HSST training programme that was presented to the Scottish Government Health Department over a year ago when it was rejected due to a lack of funding.

8. High Sensitivity Troponin

A questionnaire mapping high sensitivity troponin practice across Scotland was completed by all NHS Boards. It indicates that there is scope for harmonisation of practice however, it has been agreed that this is not a key priority at this time.

9. Lead Clinician Recruitment

With the former Lead Clinician due to vacate their post in 2016, there were concerns that the Network may be without a Lead Clinician for a period, which would have had the potential to halt the Network's progress against its work plan. However with good forward planning, there was a smooth transition.

10. Communication and Engagement Strategy

The Network co-produced a Communication and Engagement Strategy which incorporates the main challenges of the Network. As a result, quarterly newsletters are being distributed, a new NMDN Twitter account is fully operational and the SCBMDN has been using this strategy to have more of an outwards focus. The Network is targeting younger members to become involved.

11. SCBMDN website

The SCBMDN website has been revamped across the past year. Using feedback from members, the website was improved in terms of its' look, functionality and content. The member's area is currently being developed; it will host information on the network research, signposting to all relevant websites and have newsletters and meeting papers.

12. Shared Services

The SCBMDN Shared Services discussion document was completed in 2015. The recommendations in this report have filtered into the SCBMDN work plan and the five year work plans which have been drawn up this year. There is now a 'Shared Services' column on the NMDN work plans to detail exactly how the objectives align to the Shared Services discussion document. As a result SCBMDN is engaging with the Shared Services portfolio. Since the second workshop the data project group has met twice. The main focus of action has been to establish the benchmarking questionnaire which is due for circulation.

13. Five Year work plan for the Network

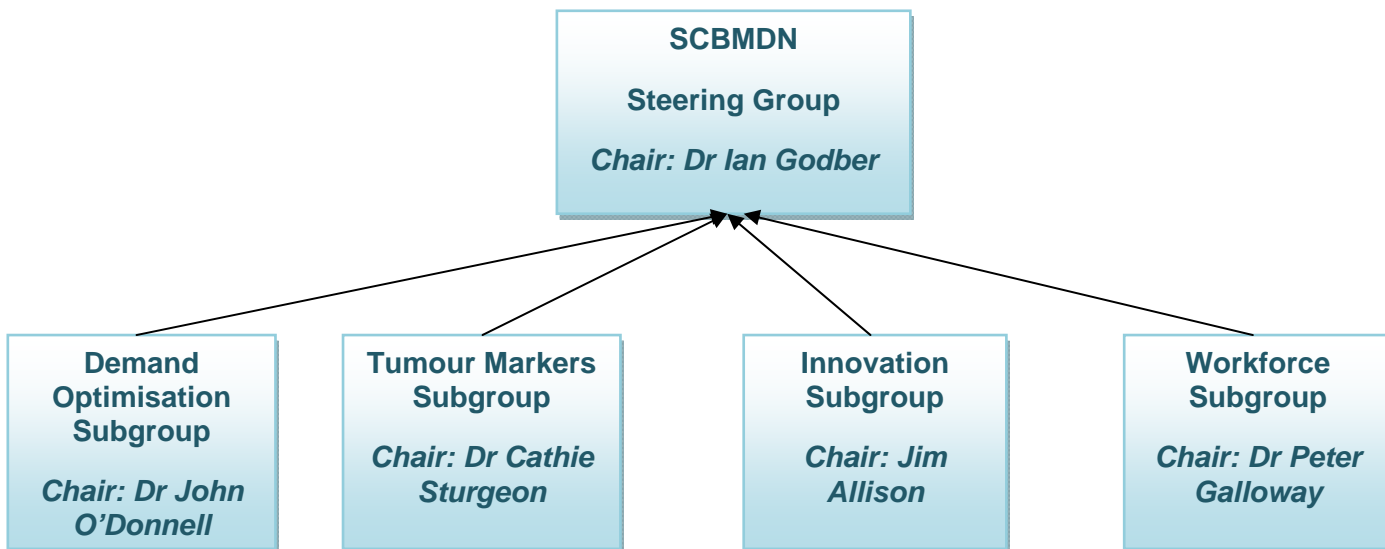
It was identified that the SCBMDN would benefit from a long term vision. The SCBMDN produced a five year work plan for the Network with eight different areas of focus. This has since been replicated by other Networks and commended by NSD as good practice. The Five Year work plan is now on the SCBMDN website.

Plans for the year ahead

- Standardising diagnostic testing
- Plans to address emerging workforce challenges
- Increasing Innovative Practise
- Finalisation of method of data collection exploring KEELE and IMS options
- Guidance on tumour marker requesting for non-specialists
- Communicate key recommendations: a basic level of MRI for a basket of tests to be implemented in Scotland from demand optimisation
- Joint CA125 with SCIN investigations into ovarian cancer
- Send out another questionnaire to assess where Scotland is with AKI and to work collaboratively with HIS on this project

Network governance

Scottish Government's Core Principles for Networks (as laid out in CEL 29) letter highlight the importance of the 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. SCBMDN does this through the oversight of its Steering Group, which is accountable for delivery of the workplan, and through the establishment of appropriate subgroups and short life working groups. The governance structure as at 31st March 2017 is as follows:-



SCBMDN Annual Report 2016-17

Detailed Description of Progress over Reporting Period 2016-17

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 31/03/2017	Anticipated Outcome / Evidence of Improvement	RAGB
2016-01	<p>Demand Optimisation To create and share best demand optimisation practice in a blueprint document for based on NHS Tayside, and to support Health Board areas to develop local improvement plans</p>	1:2:4:5:6	April 2016 - March 2017	No Dr John O'Donnell, Dr Janet Horner and Dr Bill Bartlett	As a response to the realistic medicine report, the demand optimisation will be one of the main topics of the networks annual education event in September. Five key recommendations on demand optimisation will be present during two presentation sessions.	A shared understanding of best practice in demand optimisation. This will be communicated to 100% of Health Boards through the blueprint document and they will be supported to replicate this.	B
2016-02	<p>Tumour Markers To evaluate current requesting guidance for the Non Specialist Bookmark and to harmonise approaches across Scotland, in line with best practice.</p> <p>To assess and update the existing tumour markers guidance and to carry out an audit of CA125 requests in five Health Boards</p>	1:2:3:4	May 2016 - March 2017	No Dr Cathie Sturgeon and Dr Julia Anderson	A survey of tumour marker ranges has been carried out. The results of this survey will be used to provide harmonised target ranges where appropriate. Scottish Clinical Imaging network has agreed to carry out a joint audit of uptake by primary care of the Scottish Cancer Referral guidelines for the non-specialist. The audit proposal has been agreed. It has been agreed that the pilot will be carried out in GG&C. The submission to the Public Benefits and Privacy Panel for Health and Social Care is currently been prepared.	Evaluated, up to date tumour markers guidance which is available to 100% of Health Boards across Scotland and the UK by March 2017. This will be in the form of the updated non Specialist Bookmark.	B
2016-03	<p>Workforce The diagnostic workforce is aware of significant imminent workforce challenges. The SCBMDN will research and evaluate the Scottish Clinical Scientist staffing and identify optimal service models. This includes evaluations of job descriptions against service developments.</p>	2:3:4:6	January 2016 – March 2017	No Dr Peter Galloway and Mr David Cameron	A report has been produced by Peter Galloway and Robert Wardrop. The report looks at the likely short fall in staff and suggests over the next five years we appoint at least 3 a year from 2017 to 2021. Due to the time required to train and current gap, it would be wise to start with more training posts sooner rather than later.	A shared understanding across 100% of Health Boards of the challenges facing the diagnostic workforce, with evidence to support this from the Position Paper by March 2017.	B
2016-04	<p>HbA1c Recently, NICE guidance has stated that Hba1c should be used as a diagnostic test for diabetes. The SCBMDN will identify which Health Boards are currently using HbA1c as a diagnostic tool. An amended business case will be provided to all</p>	3:5:6	March 2016 – March 2017	No Dr Bill Bartlett	There is variation in the use of HbA1C testing for diagnostic purposes across Scotland. Five health boards have agreed to accept HbA1C requests for diagnostic purposes. However, only one health board has had a business case accepted, as previously recommended to Medical Directors. The protocols for use of HbA1C for diagnostic purposes vary with one	A shared understanding of which Health Boards use HbA1c as a diagnostic tool and for 100% of Health Boards to be aware of	B

SCBMDN Annual Report 2016-17

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 31/03/2017	Anticipated Outcome / Evidence of Improvement	RAGB
	Health Boards, which was created last year, to support them to implement this locally.				health board providing first line testing using HbA1C and four health boards providing second line testing using HbA1C for diagnosis of diabetes. Six health boards have not agreed to provide HbA1C testing for diagnostic purposes. However, it is likely that HbA1C testing for diagnosis is being carried out as requests for diagnosis and monitoring diabetes are not distinguished and two respondents noted an increase in HbA1C requests.	the benefits of HbA1c diagnostic testing. The Network will provide support to the remaining Health Boards to implement this through a generic business case.	
2016-05	Innovation The Network will support innovation by identifying and sharing best practice across the country. This will be supported by information gathering across the Network, which will allow the Network to establish a clear vision for innovation. The Network will lead the development of an Innovation Strategy which reflects this.	2:3:4:5:6	November 2015 - March 2017	No Dr Julia Anderson, Mr Jim Allison and Mr Jimmy Paul	The innovation strategy has been produced and the innovation group now have a proposed strategy for capturing and sharing the information. A dashboard has been designed and is now on the website in a draft format. It enables all members to share innovative practise so it could be implemented in other NHS boards.	A shared understanding across 100% of Health Boards how innovative practice will be identified and championed in the coming years. This will be communicated in the coproduced Innovation Strategy.	B
2016-06	Distributed Services Model (NHS Scotland Shared Services Portfolio Board) All SCBMDN Working Groups will align their workplans to the SCBMDN shared services document recommendations which will be reviewed by the Steering Group by the end of 2016.	2:3:4:5:6		Yes Dr Bill Bartlett, Dr Julia Anderson and Mr Jimmy Paul	Subgroups are currently aligning their work plans with the objectives of shared services. The network continues to engage and communicate work plans with shared services.	The work of the SCBMDN to align closely to Scottish Government guidance. This will be achieved by amending work plans according to recommendations in the Shared Services document.	B
2016-07	B-Type Natriuretic Peptide (BNP) The SCBMDN will write a paper on the on the NHS Greater Glasgow & Clyde and NHS Dumfries & Galloway BNP pilot studies to provide evidence for its benefits. These papers will be shared with all of the Scottish Health Boards along with other evidence. This will be used to inform a business case that includes an indication of benefits clinically and organisationally from an earlier diagnosis and clear patient	2:3:4:5	June 2015 - November 16	Yes Dr Coleen Ross & Dr John O'Donnell	The MDN audited BNP use across Scotland and along with the Healthcare Science Test of Change Project on BNP pilots was used to inform discussion with Karen Stewart and representatives from National Planning. The Cardiology MCN has now had National Chief Executive approval to roll out across Scotland using the Greater Glasgow and Clyde business case for BNP use in primary care as a template. A survey has been commissioned by Dr. David Stirling to evaluate the outcomes of the BNP work.	All Health Boards will understand the benefits of using BNP and will be supported to implement BNP through a generic business case.	B

SCBMDN Annual Report 2016-17

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 31/03/2017	Anticipated Outcome / Evidence of Improvement	RAGB
	pathways						
2016-08	Faecal Immune Testing (FIT) Quantitative Faecal immunochemical Testing for haemoglobin (FIT) should be included in the diagnostic pathway for patients presenting to primary care with new bowel symptoms. The SCBMDN will undertake an audit for FIT. This will then be rolled out across two Health Boards.	1:2:3:4:5:6	March 2015 – March 2017	Dr Bill Bartlett and Dr Julia Anderson	An audit of provision of FIT services in Scottish Health Boards has been completed. The NICE diagnostic assessment of FIT is due to be published and SCBMDN has proposed assessment of FIT to the Scottish HTA group. The studies undertaken in NHS Tayside and NHS Lanarkshire will feed into the HTA assuming that the HTA is progressed. A meeting on 18 th May, brought together biochemists, clinicians and Scottish government. It was agreed that FIT should be rolled out nationally. However, it was clearly noted that it is essential to ensure a national testing protocol is agreed and ensure equity of testing throughout Scotland. A FIT SLWG will be created to respond to the outcomes of the meeting.	An evidence-based, person-centred patient pathway for FIT will be in place in NHS Tayside and Lanarkshire. Audits will be completed within these Health Boards.	B
2016-09	Communication and Engagement Strategy For the SCBMDN to understand its communication and engagement challenges, and to produce a strategy which addresses these.	2:3:5	1/07/15 - 31/05/16	Dr Ian Godber/Dr Julia Anderson	The communication and engagement has been updated for 2016/17. Communication and promotion of the education day will continue to extend the reach of the engagement with the education day and the network.	A clear and shared understanding of the communication and engagement challenges across diagnostic services, and a shared vision of how to address these challenges through the Communication and Engagement Strategy.	B
2016-10	SCBMDN Website The diagnostic community will have a website which is relevant, up to date which captures the work of the Network and diagnostic services across Scotland. It will provide access to the various Network strategies, minutes for working group meetings and all related websites and documents and this will be patient and staff friendly. Website hits will be monitored	2:3:5	1/07/15 - 31/04/16	No Ms Robina Collins, Mr Jimmy Paul, Dr Bill Bartlett and Dr Julia Anderson	The website is continuously updated and it is planned to include a member's only area in the near future. Within the members only area, it is proposed to keep all meeting information and action planners. Steps have been taken to introduce an innovation dashboard on the website as a means of promoting and capturing good innovative practice and empower the work force to create innovative solutions to the challenges that diagnostic services face.	Improved communication and engagement across the diagnostic community through the use of a robust, up to date and relevant SCBMDN website.	B
2016-11	Recruitment of Lead Clinician Dr Bartlett's tenure as Lead Clinician is due to end in December 2016. This post will need to be recruited to with an experienced and well networked member of the diagnostic community in post before Dr Bartlett leaves.	2:3	01/06/2016 – 01/08/2016	No Mr Jimmy Paul and Ms Liz Blackman	Dr Ian Godber was appointed Lead Clinician for the network.	A smooth handover from one Lead Clinician to the next, facilitating a good transition and continued work stream progress.	B

SCBMDN Annual Report 2016-17

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 31/03/2017	Anticipated Outcome / Evidence of Improvement	RAGB
2016-12	High Sensitivity Troponin The Network will have mapped how health boards use Troponin testing and will produce a position paper to reflect this.	1:2:4:5	01/07/2016 – 01/04/2017	No Dr Julia Anderson	A questionnaire was sent to SCBMDN steering group members in June 2016 to establish the current status of troponin service provision in Scottish NHS boards. Responses were received from 9 boards. All NHS boards provided a laboratory service for troponin. 6/9 boards provided a high sensitivity troponin T assay. However, it is likely that this will increase to 8/9 boards in 2017 and clinicians are considering a business case for a high sensitivity troponin assay in the final board. There were a variety of protocols in place utilising high sensitivity troponin assays to rule-in or rule-out acute coronary syndrome in boards across Scotland indicating that there is scope for developing national clinical protocols. The results also indicated that there is scope for harmonisation of reference ranges for high sensitivity troponin assays.	An accurate understanding of how health boards use Troponin testing across Scotland which has informed an understanding of what best practice is.	B
2016-13	Five Year Workplan The Network will produce a five year workplan which establishes a clear vision for the purpose and aims of the Network.	1:2:3:4:5:6	01/06/2016 – 01/11/2016	Yes Mr Jimmy Paul	The Network has recently coproduced a five year work plan which includes SMART (Specific, Measurable, Achievable, Realistic and Time-Oriented) objectives throughout.	A clear, shared, coproduced vision for the network and for biochemistry diagnostic services exists which sets out how services can be improved to increase efficiency, equity and quality of patient care.	B

SCBMDN Annual Report 2016-17

Annual Work plan 2017-18

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 31/03/2017	Anticipated Outcome
2017-01	<p>Cancer Guidelines</p> <p>To evaluate guidance on tumour marker requesting for the non-specialised will be written and incorporated into the Scottish Cancer Referral Guidelines and to distribute this to primary care. The information will be disseminated through the production of an app and a bookmark containing the key reference intervals.</p>	1,2,3,4, 5	To be completed Oct 2017	Dr Cathie Sturgeon and Catherine Colquhoun	<p>A survey of tumour marker ranges has been carried out. The results of this survey will be used to provide harmonised target ranges where appropriate.</p> <p>The bookmark has been drafted and is with the printers for a draft proof to be produced. The bookmark should be completed by mid July. The app options will be investigated in the coming months, with the aim to have the app running by Oct 2017.</p>	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 an app.
2017-02	<p>CA125</p> <p>An audit of joint SCBMDN and SCIN data with regards to diagnostic investigations for the recognition of ovarian cancer in primary health care will be designed. The audit will be trialled in one health board it has been agreed this is GG&C.</p>	1, 2, 3, 4, 5	Ongoing. Aim to be completed		Scottish Clinical Imaging network has agreed to carry out a joint audit of uptake by primary care of the Scottish Cancer Referral guidelines for the non-specialist. The audit proposal has been agreed. It has been agreed that the pilot will be carried out in GG&C. The submission to the Public Benefits and Privacy Panel for Health and Social Care is currently been prepared.	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.

SCBMDN Annual Report 2016-17

2017-03	B-type Natriuretic Peptide (BNP) The mapping of BNP practice has taken place and a position paper on BNP, written by the SCBMDN has been included as part of the National Delivery Plan report for the Scottish Government	1, 2, 3, 4, 5	To begin June 2017 to be completed August 2017.	Catherine Colquhoun, Ian Godber and Alison Walker	NHS Chief executives have agreed to roll out the national programme. A survey will be carried out by the network.	A wrap up summary survey of the BNP project, once completed this piece of work will no longer be with the network. The project will be concluded with a clear picture of how effectively BNP has been implemented and the variations between regions.
2017-04	Innovation Additional members with varying levels of expertise are involved in the SCBMDN and there is more frequent communication around the work of the SCBMDN	1, 2, 3, 4, 5, 6	May 2017 to April 2018	Jim Allison, Catherine Colquhoun	Increased innovative practise to be evidenced by the use of the dashboard on the SCBMDN website. Also want to increase the number of boards represented on the innovation group and contributing examples of innovative practise.	Developed innovation dashboard on the website, evidencing innovative practise that can be implemented in other areas. The communication of innovative practise in one area will enable the innovated practise to be implemented and utilised in other areas. The sharing of good practise enables the same ideas which have been successful to be utilised elsewhere benefitting the patients and service providers.
2017-05	Workforce Filling existing vacancies and focusing on recruitment by considering upcoming vacancies in the next 5-10 years across Scottish Biochemistry Services	2, 3, 4, 6	On-going, to be completed March 2018	Peter Galloway, Bill Bartlett	A report has been produced to highlight the likely deficit in staffing numbers. Further discussions are on-going and recommendations being made to increase staff in takes into training now to have trained staff in place to take on roles when staff approaching retirement leave.	It is hoped the recommendations will inform a plan to address the deficit in workforce. The desired outcome is an increased number of trainees will be taken on to counter balance the expected deficit in staffing numbers. This should enable the continuity of service to occur and prevent the loss of technical experience due to overlap of new trainees with experienced scientists.

SCBMDN Annual Report 2016-17

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 31/03/2017	Anticipated Outcome
2017-06	Demand Optimisation To reduce under and over testing in biochemistry across Scotland. To develop 5 key recommendations of examples of key areas where demand optimisation could be implemented and to communicate this through the network and the education day.	1, 2, 3, 4, 5, 6	Began May 2017 to September 2017	John O'Donnell, Janet Horner, Catherine Colquhoun and Ian Godber.	<p>A draft of 5 key recommendations has been agreed, this has been circulated to the sub group for comment and to expand on the detail. A draft programme for the education day with demand optimisation one of the key topics.</p> <p>The event will be publicised extensively to increase the reach of the network and expand the range of members of the network, therefore engaging a wider range of professional to engage with demand optimisation.</p>	<p>A shared understanding of best practice in demand optimisation. This will be communicated to 100% of NHS Boards through the blueprint document and they will be supported to replicate this.</p> <p>The promotion and communication of 5 key recommendations of demand optimisation and discussion on the implementation at the education day should increase DO occurring throughout Scotland, which should help address the increasing demand on the service.</p>
2017-07	Communication Increase awareness of the network, and dissemination of information. Extend the reach of the network.	1, 3	May 2017 to April 2018	Catherine Colquhoun.	Re-vamp of the newsletter, continued development of the member's area of the website, increased use of twitter and of the website through the member's area.	<p>Increased engagement with the network and increased reach and range of professionals and ages of members. The increased awareness of the network will hope to engage with a wider range of members enabling the development of new ideas into the network whilst communicating the experience of the current members.</p>
2017-08	Emerging Challenges Diagnostic services will be responsive to emerging challenges and will be able to address them quickly,	1,2,3,4,5, 6	On-going	Catherine Colquhoun and Ian Godber	The network will have clear communication lines and be efficient at implementing plans for any emerging challenges	Network is prepared to be responsive and able to adapt to any emerging challenges.

SCBMDN Annual Report 2016-17

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 31/03/2017	Anticipated Outcome
2017-09	Recruitment of Network Scientific Manager, expected to finish Jan 2018.	1,3	May 2017 until successful candidate recruited.	Catherine Colquhoun, Liz Blackman and Ian Godber	Job spec will be drawn up and post advertised.	New scientific manager recruited. An overlap between the current and future scientific managers is planned to ensure a smooth transition and no negative impact on the progress of the network.
2017-10	Education Day. Aim to publicise network and increase understanding of innovative practise and point of care testing.	1,2,3,4,5,6	Began May 2016, completed Sept 2017	Catherine Colquhoun, Alison Walker and publicising from all network members.	Draft agenda has been developed, speakers for most slots identified. Agenda to be firmed up by the end of May and the event advertised from end of may.	Increased attendance in the education day and increased spread of attendees. Feedback will be asked for from the attendees and the spread of attendees will indicate the reach of the network. It is also hoped the network will increase the understanding and implementation of demand optimisation and POCT as the two key focus topics of the day.
2017-11	5 Year Work Plan. The 5 year plan has been developed however this is not a static document. It will 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, it will just need to be updated and developed as is 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.
2017-12	FIT Testing	1,2,3,4,5,6	May 2017-March 2018	FIT SLWG	A report will be produced by Ian Godber on behalf of SCBMDN to develop the outcomes from the meeting on May 18 th . A SLWG will be pulled together to form a plan and a business case for the DSG advisory group on Aug	There will be a network response and input to the design and implementation of FIT

SCBMDN Annual Report 2016-17

Objective Number	SMART Objective	Linked Dimensions of Quality	Planned start/ end dates	Detailed Plan Available / Owner	Description of progress towards meeting objective as of 31/03/2017	Anticipated Outcome
					7 th .	testing in Scotland. The standardisation and use of FIT testing will increase which in turn will reduce the number of referrals to secondary care, relieving pressure on demand and reducing unnecessary invasive procedures.
2017-13	Launch a short-life working group for Haematology to deliver improvements in haematology services; scope the future development of services and ascertain the future workplan and support needs.	1,2,3,4,5,6	May 2017 to November 2018	Catherine Colquhoun, Alistair Hart	First meeting arranged as a development session with agenda targeted to identifying quick wins for the group as well as working on longer term aims to identify future support needs	Haematology workforce enjoy better engagement with national initiatives; a strategic vision for haematology services in Scotland is developed and the implications and required resources understood.
2017-14	To support improved data collection, analysis and benchmarking in NHS Scotland through supporting development of the Keele University Benchmarking System and comparing this to a pilot study to produce reports for participating NHS Boards	1,2,3,4,5,6	June 2017 to September 2018	Catherine Colquhoun, Claire Lawrie	Keele questionnaire has been developed in partnership with Steering Group, agreed and disseminated. NNMS Information Management Service developing SCBMDN pilot to produce reports similar to pathology reporting as a comparison.	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 rive up quality.

Appendix 1: Network membership

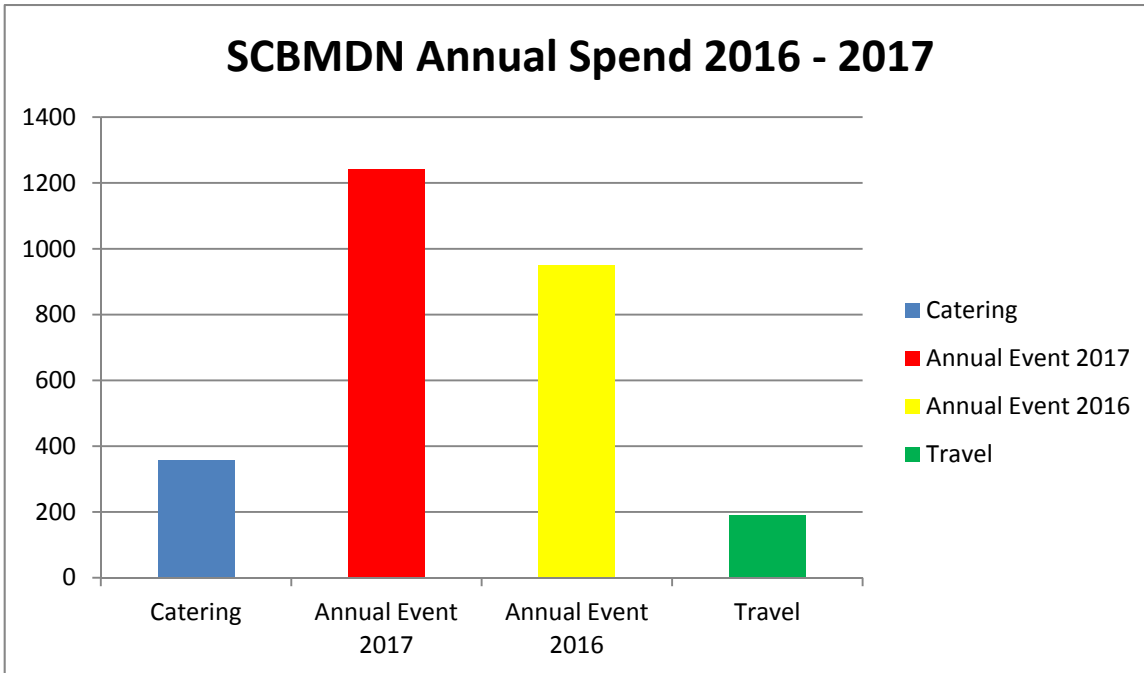
NHS Lanarkshire Lead Clinician	Ian Godber
NHS Dumfries & Galloway Scientific Manager	Julia Anderson
NHS NSS Programme Manager	Catherine Colquhoun
NHS NSS Programme Support Officer	Alison Walker
NHS Ayrshire & Arran	Suzanne MacKenzie and Gordon Taylor
NHS Borders	John O'Donnell and Jackie Scott
NHS Dumfries & Galloway	Julia Anderson, Michael Burns and Kim Heathcote
NHS Fife	Ken Campbell and Neil Greig
NHS Forth Valley	Sheila Kowalczyk and Mark Redpath
NHS Grampian	Jim Allison and Ian Rothnie
NHS Greater Glasgow & Clyde	Christine Brownlie, David Cameron, Maurizio Panarelli, Colleen Ross and Shona Twaddle
NHS Highland	Marie van Drimmelen and David Smith
NHS Lanarkshire	Janice McNicol and Ian Godber
NHS Lothian	Rebecca Pattenden and Ian King
NHS Orkney	Robert Wardrop
NHS Shetland	Robert Wardrop
NHS Tayside	Chris Hind and Judith Strachan

SCBMDN Annual Report 2016-17

NHS Western Isles	Ian Gilbert
Shared Services	Bill Bartlett
Association of Clinical Biochemistry Audit Group	James Logie
Association of Clinical Biochemists	Sarah Cleary
Institute of Biomedical Scientists	David Cameron
Royal College of Pathologists	Bernie Croal
SCBMDN Tumour Marker Working Group Chair	Cathie Sturgeon
SCBMDN Work Group Working Group Chair	Peter Galloway

Appendix 2: Finance

Appendix: Finance



SCBMDN was allocated a £5,000 budget.

Budget Expenditure		
	£	%
Catering	358.11	13.08
Annual Event 2017	1241.60	45.31
Annual Event 2016	950.00	34.66
Travel	190.51	6.95
Total Spend	2740.22	