

# Scottish Clinical Biochemistry Network (SCBN)

## Annual Report 2021/22

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## **Background**

Managed Diagnostic Networks are defined as co-ordinated groups of health professionals that support diagnostic services to continuously improve service delivery in order to ensure equitable provision of high quality, clinically effective services. Diagnostics, whether delivered in primary, community or secondary care, have an important role to play in achieving NHS Scotland's quality ambitions by contributing to early, accurate and cost-effective diagnosis, monitoring and self-management.

The role of the Scottish Clinical Biochemistry Network is to improve laboratory biochemistry services and foster close and effective links between diagnostic and clinical professionals. This is progressed through setting clear objectives, with delivery monitored through the annual workplan. In order to most efficiently and effectively drive service improvement this is achieved through:

- An annual data collection exercise and benchmarking report. This provides current and relevant data to inform service improvements, workforce planning activities, and horizon scanning, to ensure the network is future-ready and prepared for upcoming developments.
- Being responsive to emerging challenges occurring within the diagnostic community, and facilitating once-for-Scotland solutions.
- Actively engaging with and pursuing demand optimisation and QI projects to ensure optimal use of resources and skills within clinical biochemistry, and that the most efficient and effective service possible is being provided.
- Upholding professional guidelines and standards and supporting the clinical biochemistry community to maintain these high standards.

## **Covid-19 Impact**

Since the COVID-19 pandemic was declared in 2020, the Scottish Clinical Biochemistry Network has provided a vital forum for communication and information sharing, which has been crucial to the ongoing management of the pandemic. Due to the impact on the laboratory workload, some network objectives and workstreams had been deferred or paused. As Scotland moves out of legal COVID-19 restrictions into a more 'endemic' environment, previously paused objectives and workstreams are resuming, where capacity allows.

The pandemic has also brought about new ways of working and positive changes in practice for the network. The proliferation of virtual meetings and online conferencing tools continues to provide many new ways to deliver training, and has allowed the network to greatly expand representation at meetings, in particular to colleagues from more remote and rural areas for whom in-person travel difficulties were always a limiting factor.

Multiple key workstreams have been progressed throughout 2021-22 amid the pandemic emergency, highlights of which are given in the next section.

## **Highlights**

## A World Leader in Diabetes Diagnosis

With the support of SCBN, Scotland successfully launched two new diagnostic pathways for Type-1 diabetes testing in November 2021 – the first of their kind in the world.

These new pathways, developed by a dedicated group of scientists and diabetologists within the network, allow for a more accurate diagnosis of Type-1 diabetes mellitus (T1DM) among new patients, and the ability to correct potential mis-classifications of existing patients. An incorrect classification can have notable quality-of-life impacts on a patient, through the different treatment routes these entail. Therefore more accurate diagnoses provide much better outcomes for patients, and an improved patient journey.

Notably, one patient who took part in the pilot of these pathways in NHS Lothian was reclassified as having HNF1 $\alpha$  monogenic diabetes rather than T1DM, fourteen years after their original T1DM diagnosis. This enabled them to switch away from insulin therapy to Glicazide therapy, and they no longer required home blood glucose monitoring. While not only improving quality of life for the patient, that single test brought about a cost saving to NHS Scotland of ~£49,000 over that patient's life between the two treatment routes.

The importance of these pathways was highlighted in the level of interest in the launch, with over 100 attendees at a virtual launch event (run and facilitated by the network), and a news article even making it to the top-10 on the BBC News website (<u>link</u>).

## Scotland to rollout diabetes test for Type 1 patients

③ 30 October 2021



Misdiagnosed Type 1 diabetes patients could be freed from the need to take insulin after a new test is rolled out.

Scotland will become the first country to offer the C-peptide blood test to all patients who have had a Type 1 diagnosis for at least three years.

The test shows how much insulin a patient's body is producing itself.

A pilot by NHS Lothian allowed some people who had been taking insulin to stop or reduce the treatment. The test will be available from 1 November.

Funding for these pathways was pursued by SCBN, and after successful presentation of a business case in September 2021, initial pump-priming funds were granted by the Diagnostics in Scotland Strategic Group (DiSSG) on behalf of the Scottish Government. The network is hopeful that avenues will become available for future funding to accelerate and expand the rollout of this pathway.

### **National Laboratory Information Management System (LIMS) Development**

The network has continued to provide subject matter expertise to the National LIMS Consortium throughout the tender process, and facilitated communications between stakeholders and the Consortium. With the preferred bidder for the LIMS now in place, the network is focusing on standardisation activities to ensure a swift and effective implementation of the new system.

#### **PathNexus**

One key standardisation activity is the PathNexus platform. This is an interface designed to standardise the coding of laboratory tests and unify under a single programmatic banner the different conventions and systems currently in use, in a much more time-efficient manner than manual standardisation. This standardisation will allow data records to be more easily transferred between NHS Boards, which will be an invaluable component of the new National LIMS.

Funding for a pilot of this software was pursued by SCBN and granted by the DiSSG on behalf of Scottish Government in November 2021 following successful presentation of a business case. A six-month pilot is now beginning in NHS Grampian, driven by the network Lead Clinician, and is due to conclude in the summer of 2022. Following this pilot, the network will explore options for national scale-up of the software, progressing concurrently with the roll-out of the National LIMS.

## **Annual Benchmarking Report and Demand Optimisation**

The network's annual benchmarking report highlights where there is variation in biochemistry testing and the laboratory workforce across Scotland. This allows the opportunity to identify and target areas for improvement within particular diagnostic pathways, or within NHS Boards. It also provides useful data to inform and support both local and national business cases.

The network's Data Subgroup have remained active during the pandemic and have contributed to the development of further data collection for the 2021-22 period. This year's collection will continue to include data requests supporting the National Demand Optimisation Project as it highlights patterns in service recovery and remobilisation. Data will also be collected to help populate a new online test directory, providing a go-to reference for biochemistry departments in Scotland who may need to refer tests to other centres.

#### CA-125 Audit

The network's ongoing CA-125 audit examines whether current testing guidelines for suspected ovarian cancer improve the time to diagnosis, and therefore patient prognosis. These guidelines recommend a CA-125 test with a simultaneous ultrasound scan, and the ongoing audit of this test would contribute to the body of evidence that CA-125 is cost-effective and a clinically-effective diagnostic tool, which proves less invasive for the patient. The CA-125 audit group, tasked with auditing this original research question, has been regularly meeting throughout the pandemic to progress this work, where local Board

capacity has allowed. This will identify areas for improvement, and help inform future cancer pathways.

### **Looking Forward**

With the increasing moves within Scotland toward an 'endemic' Covid response it is hoped that more network activities can resume. Over the course of 2022/23, the network will continue to monitor and progress the PathNexus pilot and Type-1 Diabetes Pathway projects, and begin setting up (in conjunction with the Haematology and Transfusion Scotland Network [HaTS]) a dedicated subgroup forum for remote and rural colleagues in blood sciences.

Also in conjunction with HaTS, work is continuing on the scoping and development of a business case to help roll out Serum Free Light Chains (SFLC) testing on a national basis, following a recent change in clinical guidelines recommending the use of this in a first-line myeloma screen. SCBN is represented on this group, and in certain Boards a SFLC test falls under the relevant biochemistry department, so the network is a key stakeholder in development of this work.

The network will also continue to develop all key workstreams noted in the 2022-23 proposed workplan. This includes engaging with Scottish Government colleagues during the development of a national Diagnostics Policy Framework; continuing to support the National LIMS Oversight Group as the National LIMS begins its rollout to territorial Boards; assisting NHS Lanarkshire with a new pilot of Neuron Specific Enolase testing; and continuing to pursue further funding support for the new Type-1 Diabetes Pathway.

#### **Finance**

The network has not utilised its budget during this financial year, due to pandemic restrictions preventing the arranging of in-person education events or meetings. It is expected that in-person events will resume in some form during the 2022-23 financial year, and the network will consider best use of its budget accordingly.

## SCBN report against workplan April 2021 – March 2022

| Objective<br>Number | Smart Objective   | Planned start/ end<br>dates               | Detailed Plan<br>Available / Owner      | Description of progress towards meeting objective as at 31 <sup>st</sup> March 2022   | Anticipated<br>Outcome   | RAGB status |
|---------------------|---|---|---|---|--|-------------|
| 1. Effective        | Network Structure and Governance  | ce [linked to Quality Dimensions 3,4,5,6] |   |   |  |             |
| 2021-01             | SCBN will engage with the new, emerging strategic governance structure for diagnostic services in Scotland. This will ensure SCBN play a key role in shaping the structure to ensure it is fit for purpose and is a structure the community can utilise and engage with in the future to progress pieces of work or challenges as required. | Apr 2021 – Mar 2022                       | Core Team,<br>Steering Group<br>members | The SCBN core team have attended relevant LEB and DiSSG meetings on the proposed strategic network throughout 2021-22, as well as a number of engagement sessions with key policy drivers within Scottish Government.  Network steering group members have been kept continually updated on the progress of the new strategic model, with feedback received via quarterly LEB meetings. | SCBN continues to contribute to and mould the new emerging diagnostic strategic network, and becomes a fully-invested part of the new structure upon its launch later in 2022. | G           |
| 2021-02             | Ensure effective leadership of the network by recruitment of Network Scientific Manager (NSM), for the network, due to the completion of tenure by the current NSM in April 2022, to ensure smooth transition of the core team.   | Nov 2021 – April 2022                     | PM, PSO                                 | The contract of the current NSM ended on 31st March 2022. Recruitment is ongoing at present, with the conclusion of applications expected in late April 2022, with shortlisting and interviews to follow soon after. This is slightly behind the originally-planned schedule, but does not pose a significant risk at this time.  | The network maintains a consistent leadership structure, and continues key workstreams without disruption.   | Α           |

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|---------------------|--|---------------------------------------|---|--|---|-------------|
| 2021-03             | Continue to develop and update the strategic vision for service improvement, as articulated in the five-year work plan and the QI Strategy. This will ensure the most appropriate, efficient and effective objectives are being identified, within each work stream to ensure maximal outputs for benefits to service developments are achieved through the network. | Apr 2021 – Mar 2022                   | PM, Core Team                               | The network has continued to support workstreams which develop and improve services for patient care – including the Type-1 Diabetes Pathway, and the CA-125 Audit.  | The network pursues workstreams which offer tangible improvements for patients. The network remains open to QI projects, and will promote and support workstreams which enhance and develop patient services. | G           |
| 2. Service          | Development and Delivery [lin  | ked to Quality Dimensions 1,2,3,4,5,6 | ]   |  |   |             |
| 2021-04             | Develop NHS Scotland as a world leader in Diabetes Care by enabling a robust, clear testing pathway for Type 1 Diabetes. This will provide a standardised, once for Scotland approach, that ensures patients are correctly diagnosed with the correct sub set of diabetes T1DM.  | Apr 2021 – Mar 2022                   | Diabetes pathway<br>Implementation<br>Group | Pump-priming funding was obtained in November 2021 to assist with the roll-out of this pathway. While this only covers the cost of the C-Peptide testing service, plus minor contributions to local antibody testing costs, it is a good start. Genetic testing costs are covered internally through NSD genetics funding.  Boards are now moving to implement this pathway within current financial constraints, noting that an overall cost saving | Diagnostic pathways implemented will result in a more structured robust and accurate diagnosis of T1DM. Rolling out the national testing pathway is expected to result in more patients being accurately      | В           |

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|                     |   |   |   | to Boards generally results due to less drain on prescribing budgets. SCI Diabetes successfully launched its new functionality with the pathways in late 2021.  The network is now exploring other funding avenues to help provide national support beyond the initial pump-priming funding.             | diagnosed each year, preventing patients receiving unnecessary insulin treatment which is invasive and expensive.   |             |
| 2021-05             | Innovation dashboard developed and expanded into a teams channel, to show case examples of innovation processes and examples of good practise throughout Scotland. Sharing of best practise enables other NHS boards to adopt examples of successful initiatives, and it shares the beneficial practise discussed across the sub groups with the wider community. | Apr 2021 – Mar 2022                                   | Network Data<br>Analyst/Innovation<br>sub group | The Innovation Subgroup now have a dedicated Teams section to enable them to easily communicate and share examples of best practice. Further options are being explored to create a more public dashboard which can be easily edited by members of the subgroup and allow discussion on showcased items. | The dashboard will promote and encourage examples of innovative practice to be replicated and incorporated into different NHS Boards. The outcomes of the dashboard are to be linked with other scientific disciplines. | G           |
| 2021-06             | SCBN will continue to drive and shape the blood sciences service review in collaboration with the NLP, and HATS colleagues. By ensuring the views of the community are accurately and clearly represented, it ensures the most is made of the   | Apr 2021 until service review business case completed | NLP/ Core team/<br>Wider network<br>engagement  | The National Laboratories Programme and associated workstreams were shut down in mid-2021 – this included the Blood Sciences Service Review.  The network has now incorporated some items of the   | The network will continue to incorporate these key workstreams into its ongoing business, and will continue to be responsive to   | В           |

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|---------------------|---|-----------------------------|------------------------------------|--|---|-------------|
|                     | opportunity to review, shape and identify improvements which, can be made to the service to provide the best patient care.  |                             |                                    | Blood Sciences Service Review into its business-as-usual plan.  Remote and Rural colleagues will be facilitated by the establishment of a cross-network blood sciences Remote and Rural subgroup; while the Standardisation Subgroup has been revived to deal with LIMS and standardisation issues in advance of the new National LIMS rollout.  | any feedback<br>received and any<br>QI projects<br>which could<br>result from this<br>work.   |             |
| 2021-07             | Strive to optimise the communication streams that are employed by the network, to best highlight the work streams on going within the network.  SCBN will continue to raise the awareness of SCBN ensuring staff in all roles are engaged with the network and its work through:-  Newsletters (minimum 2 per year)  Informative and up to date website, including members area | Apr 2021 – Mar 2022         | Network Core<br>team               | The website has been updated during the past year, with the core team developing a new plan for website content. As part of this, network subgroups have been tasked with refreshing the content of their own pages, to ensure the most accurate and relevant information is on the public-facing areas of the website.  The resumption of newsletters in a Microsoft Sway format is planned to take place in mid- | The network is utilising several means of electronic communication through newsletters, Microsoft Teams, Twitter and email. With the adoption of more virtual meetings, it will continue to enable greater engagement | G           |
|                     | <ul> <li>Investigate methods<br/>for streamlining</li> </ul>  |                             |                                    | 2022.  | from staff in remote and rural sites and even   |             |

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|---------------------|--|-----------------------------|------------------------------------|---|--|-------------|
|                     | newsletter production and dissemination such as Microsoft Sway  • Continue to develop and update SCBN website to provide a more useful resource of relevant documentation to the Steering Group, subgroups and members, by improving its layout and accessibility. The website will also promote the network to the wider community, highlighting the key work streams.  • Roll out the use of Microsoft Teams to subgroups and encourage its use for relevant workgroup collaborative activities. |                             |                                    | March 2022  | mainland sites to be able to more readily attend meetings as the time commitment is reduced with no travel time. |             |
|                     | <ul> <li>Make greater use of         Twitter to engage         with the clinical         biochemistry         community.     </li> <li>Continue engagement         with laboratory staff</li> </ul>  |                             |                                    |   |  |             |

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|---------------------|--|--------------------------|------------------------------------|---|---|-------------|
|                     | via roadshows and other external events where permissible in the current environment, and investigate alternative engagement methods (such as webinars) as suitable replacements in the event of ongoing social distancing.  |                          |                                    |   |   |             |
| 2021-08             | Continue to foster links with WoSCAN, SCAN and the North Cancer Alliance, to support closer joint working and greater awareness of on going work streams. Greater communication between the network and cancer groups will enable sharing of on-going projects to maximise the outputs and benefits of projects. | Apr 2021 – Mar 2022      | Cancer Subgroup                    | Links have now been developed with the North Cancer Alliance as part of the CA-125 Audit. Existing links with WoSCAN and SCAN have been facilitated via members of the Cancer Subgroup. | Forging links, and developing contacts through closer joint working and greater awareness of other work, SCBN can enable improvements in cancer services in line with NHS Scotland's strategic direction. | G           |

4. Education [linked to Quality Dimensions 1,2,3,4,5,6]

| Objective<br>Number | Smart Objective   | Planned start/ end dates | Detailed Plan<br>Available / Owner  | Description of progress towards meeting objective as at 31 <sup>st</sup> March 2022  | Anticipated<br>Outcome  | RAGB status |
|---------------------|---|--------------------------|---|--|---|-------------|
| 2021-09             | Annual education day event, provides valuable educational talks and discussions, addressing relevant or hot topics of interest to the biochemistry community. This adds to the knowledge, skill set scientific discussions and networking within the community.   | Sep 2021 – Sep 2021      | Education Sub<br>Group, Core team<br>and Network<br>members                       | This event was not held due to pandemic restrictions preventing in-person events, and a lack of capacity in local Boards to enable a virtual event to be planned and take place in 2021. An in-person education event is currently being planned for September 2022. | The education sub group has a draft agenda for the next annual education day, whether this is carried out in person or virtually will be dependent on the restrictions in place.  | R           |
| 2020-10             | The education sub group is looking into On line eLearning resources. This would help collate and sign post to already available resources. The network is also exploring what can be produced within the Scottish clinical biochemistry community, which would provide a national standardised approach to training and support smaller centres where there is not sufficient resource to develop educational resources locally. This will enhance the learning and development of clinical scientists within Scotland. | Apr 2021 – Mar 2022      | Education sub<br>group, Core Team,<br>Wider Clinical<br>Biochemistry<br>Community | Discussions are ongoing between local Boards and NES on how best to advertise these resources, with further progress expected later in 2022.   | It is hoped network members will benefit from access to eLearning links that will improve quality, raise standards in the work place and ultimately benefit patient service. This should aid standardisation of training, and open up more opportunities to remote and rural sites. | G           |

| Objective<br>Number | Smart Objective  | Planned start/ end dates       | Detailed Plan<br>Available / Owner  | Description of progress towards meeting objective as at 31st March 2022  | Anticipated<br>Outcome  | RAGB status |
|---------------------|--|--------------------------------|---|--|---|-------------|
| 5. Audit ar         | Ca125 audit, is to ascertain the benefit of the guidelines, that a patient presenting with suspected ovarian cancer should receive a CA125 test and simultaneously an urgent ultrasound. The audit is looking to see if these guidelines have improved time to diagnosis and therefore prognosis. This will inform and hopefully improve the patient pathway for patients with suspected Ovarian cancer. | ement [linked to Quality Dimen | CA125 working group, SCIN colleagues, IMS                                   | Work is ongoing with the CA-125 audit, and welcome links have now been established with the North Cancer Alliance to enable sharing of data and the inclusion of clinical colleagues from the north region.  However, due to the pandemic, clinician capacity has been extremely limited, and clinical analysis of the data is currently behind schedule. As the extension of scope is in place until 2023, it is anticipated that work can resume in 2022 as clinician capacity becomes more available. | To establish a more detailed description of presenting, diagnosis and subsequent pathway of investigation and treatment to improve patient service and care. This should also help identify any key delays or hurdles within NHS Boards where time to diagnosis could be improved, therefore hopefully improving prognosis. | A           |
| 2021-12             | To support and establish the Placental Growth Factor (PLGF) pilot within one NHS Board in Scotland, this will provide data to demonstrate if this would be beneficial to roll out nationally throughout Scotland to aid identification of pregnant women at risk of pre-   | Apr 2021 – Jan 2022            | Core Team,<br>Scottish<br>Government<br>colleagues,<br>Carsten Mandt,<br>PM | Due to the large cost involved, the planned pilot in an NHS Scotland Board was not granted. The network is currently exploring other ways in which this test can be assessed and implemented where appropriate.  | It has been shown in NHS England that over 40,000 women have benefited from this test, so it is hoped if the pilot in NHS   | A           |

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|---------------------|---|--------------------------|--|---|--|-------------|
|                     | eclampsia. This will enable a clear data-based approach to inform the benefits to a national testing pathway to be rolled out.  |                          |  |   | Scotland was successful this could be rolled out nationally to prevent women at risk of preeclampsia to come to harm.  |             |
| 2021-13             | Continued support for the lipid subgroup, to enable the group to develop demand optimisation guidelines and to identify key work streams that would help support colleagues working in this area to identify key challenges that can be addressed to enable this service to still be offered throughout Scotland.   | Apr 2021 – Mar 2022      | Lipid subgroup,<br>PM, PSO, NSM                                | The Lipid Subgroup has had only a single meeting in the past year due to capacity constraints in local Boards. However, the chair and vice-chair are now engaging with the network core team on a structured route forward. | The development of DO guidance will enable a once for Scotland approach, a standardisation document to enable all NHS Boards to adopt the same optimised practise. | Α           |
| 2021-14             | Production of a national data benchmarking report to enable comparisons between NHS Boards, highlighting successes and where there may be gaps the network can support or aid in finding solutions. The benchmarking report highlights tests which may be candidates for repatriation, variation occurring between NHS Boards, or work force challenges, this enables | Apr 2021 – Mar 2022      | Data & DO<br>Subgroup, NHS<br>board<br>representatives,<br>IMS | Returns were received and a benchmarking report issued in November 2021. The preparation of this year's template is still being finalised, and is due to be issued shortly.   | To have a clearer picture of biochemistry activity, and an agreed method through which to develop and utilise the data received.                                   | G           |

| Objective<br>Number | Smart Objective  | Planned start/ end<br>dates | Detailed Plan<br>Available / Owner               | Description of progress towards meeting objective as at 31st March 2022   | Anticipated<br>Outcome  | RAGB status |
|---------------------|--|-----------------------------|--|---|---|-------------|
|                     | challenges or opportunities to be identified.  |                             |  |   |   |             |
| 2021-15             | Continued development of the data benchmarking template so this will be ready for circulation 31 <sup>st</sup> March 2022 for data capture 2021-22. This enables the network to take a data based approach to service improvements and to provide evidence to support business cases. Continued development of the template ensures more useful and relevant data is capture to suit the communities requirements. | Feb 2022 – Mar 2022         | Data Subgroup,<br>IMS, Core Team                 | Some minor delays have been encountered in development of additional questions for this year's template. However, the rest of the template is ready for issue, and will be finalised for issue in w/c 25 <sup>th</sup> April 2022. This is not anticipated to affect the timelines of other aspects of the benchmarking report process. | To have a clearer picture of SCBN activity and agreed way forward to develop the data and use the information to target variation and improve quality of service and patient care                                   | Α           |
| 2021-16             | Continue to support the move to one method for the testing of CA19-9 in Scotland. This reduces clinical risk for those patients that receive tests or treatments between more than one NHS Board where different methods may be employed for CA19-9 testing, which poses a significant clinical risk.  | Apr 2021 – Feb 2022         | Cancer subgroup,<br>Core Team,<br>Steering Group | Two centres out of three have now agreed to standardise to a single method for CA 19-9 testing. This represents a good step forward, and leaves just one centre currently performing a different method. The Cancer Subgroup is engaging in discussions to move this final centre toward a standardised method.                         | The optimal outcome if there was one method identified and agreed upon was employed throughout Scotland, to ensure a standardised once for Scotland approach which will reduce clinical risk to this patient group. | A           |

| Objective Smart<br>Jumber  | rt Objective  | Planned start/ end dates | Detailed Plan<br>Available / Owner                   | Description of progress towards meeting objective as at 31 <sup>st</sup> March 2022 | Anticipated<br>Outcome   | RAGB status |
|--|---|--------------------------|--|---|--|-------------|
| Nation coding project practis Guidel agreed develo out of stream occurs new LI suppor practis all stak same or risk is residued. | onal Standardisation of ng for the National LIMS ect, standardised units and tises to be agreed upon. Itelines and nationally ed coding will be eloped to enable the roll of LIMS to be as amlined as possible and to are national dardisation of test coding ars simultaneously with the LIMS system. This ports better clinical tise across Scotland, with takeholders utilising the e coding and terminology, is minimised with dardisation. | Apr 2021 – Mar 2022      | Standardisation<br>Sub-group, NLP,<br>Lead Clinician |   | A national standardised list of codes will be produced for the roll out of the LIMS project. This will enable a streamlined IT system to support communication and working between laboratories to enable a once for Scotland approach. A national LIMS within Scotland supports many potential advancements within the Scientific communities within Scotland such as | G           |

| Objective<br>Number | Smart Objective   | Planned start/ end dates | Detailed Plan<br>Available / Owner      | Description of progress towards meeting objective as at 31st March 2022   | Anticipated<br>Outcome  | RAGB status |
|---------------------|---|--------------------------|---|---|---|-------------|
| 2021-18             | SCBN will promote optimised use of testing through its partnership with the DO optimisation programme by continued contributions to the Atlas of Variation and associated projects. | Apr 2021 – Mar 2022      | Data Subgroup, All<br>SCBN Stakeholders | The network has continued to engage with the Demand Optimisation programme throughout the past year. Aspects of the DO data collection have been incorporated into the SCBN benchmarking template, and were included in the previous benchmarking report.  The launched Atlas of Variation dashboards have been promoted wherever possible to relevant stakeholders within the network. | The network will continues to play a key role in the DO project, supporting NHS remobilisation and enabling key services to return to pre-COVID levels. | G           |

## SCBN PROPOSED WORKPLAN - 2022-23

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 socioeconomic status; and
- 6. Timely: reducing waits and sometimes harmful delays for both those who receive care and those who give care.

#### Key

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

| Objective<br>Number | Smart Objective  | Planned start/ end dates                                    | Detailed Plan<br>Available / Owner | Description of progress towards meeting objective as at 31 <sup>st</sup> March 2022                                    | Anticipated<br>Outcome  | RAGB status |
|---------------------|--|---|------------------------------------|--|---|-------------|
| 1. Effective        | Network Structure and Governance   | Ce [linked to Quality Dimensions 3,4,5,6]                   |                                    |  |   |             |
| 2022-01             | SCBN will engage with the new strategic network structure for diagnostic services in Scotland. This will ensure SCBN will continue to play a key role in | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2022 | Core Team,<br>Steering Group       | The network has contributed feedback to the new strategic network structure, and both the core team and other steering | SCBN is able to contribute to the new strategic network within a functional |             |

| Objective<br>Number | Smart Objective   | Planned start/ end dates                                    | Detailed Plan<br>Available / Owner | Description of progress towards meeting objective as at 31 <sup>st</sup> March 2022   | Anticipated<br>Outcome  | RAGB status |
|---------------------|---|---|------------------------------------|---|---|-------------|
|                     | shaping and implementing the structure, ensuring it is fit for purpose and is a structure which can be utilised by the biochemistry community to progress pieces of work or challenges as required. |   |                                    | group stakeholders have attended engagement events.   | laboratories facet, and be guided by the strategic vision produced by the new structure.  |             |
| 2022-02             | SCBN will engage constructively with the new Diagnostics Policy Framework being produced by Scottish Government, and aim to provide support to this where possible.                                 | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2023 | Core Team                          | The network core team have attended DiSSG meetings discussing the development of this framework, and will endeavour to support it where appropriate.  | SCBN has constructively engaged with the new Diagnostics Policy Framework, and is able to pursue projects which align with Scottish Government policy priorities. | G           |
| 2022-03             | Recruit a new Network<br>Scientific Manager for<br>April/May 2022 start, to ensure<br>smooth continuous leadership<br>of the network.   | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup> May<br>2022   | PM, PSO                            | The post became vacant on 31st March 2022, with applications closing on 20th April. Interviews will be scheduled as soon as possible afterwards, with the successful candidate aimed to be in place by mid-May at the latest. | A new scientific manager will be recruited following this process, ensuring continuity of leadership within the network and progression of workplan items.        | G           |
| 2022-04             | Continue to develop and update the strategic vision for service improvement, as articulated in the five-year work plan and the QI Strategy.   | 1 <sup>ST</sup> April 2021- 30 <sup>th</sup><br>March 2022  | PM, Core Team                      | The network will continue to support work streams that are developing and improving services for patient care such as the Diabetes testing pathway and  | Many<br>workstreams<br>being monitored<br>within the<br>network are   | G           |

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|                     | This will ensure the most appropriate, efficient and effective objectives are being identified, within each work stream to ensure maximal outputs for benefits to service developments are achieved through the network.                     |   |                                      | CA125 audit service within Scotland.  | improving services for patients - such as Sapropterin treatment, and engagement with the HATS Myeloma subgroup on SFLC testing. The network will continue to be open to new QI projects. |             |
| 2. Service          | Development and Delivery [link   | ked to Quality Dimensions 1,2,3,4,5,6                       | 1                                    |   |  |             |
| 2022-05             | Provide a monitoring process for the new Type-1 Diabetes Testing Pathway, ensuring that pump-priming funding for this pathway is being utilised appropriately and effectively, and allowing for issues to be highlighted in a timely manner. | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2023 | Innovation<br>Subgroup, Core<br>Team | The pathway was successfully funded in November 2021, with finance schedules agreed and monies distributed in February 2022. The Innovation Subgroup will develop monitoring criteria in conjunction with the PM to provide regular updates to DiSSG and LEB on the progress of this new pathway. | Suitable monitoring process developed, allowing regular and relevant updates to be provided to appropriate stakeholders.   | G           |
| 2022-06             | Transition of the Innovation Dashboard from a static webpage into a Microsoft Teams / Microsoft SharePoint- based platform.  | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2023 | Innovation<br>Subgroup, PM,<br>PSO   | Following engagement and feedback from the Innovation Subgroup, a dynamic web platform was deemed more suitable for sharing best practice content than the current static Dashboard webpage. Solutions are currently being investigated   | A suitable platform for sharing of best practice among the biochemistry community, with documents  | G           |

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|                     |   |   |   | by the PM and PSO to host innovation documents and attract more readers.   | easily accessible to all.   |             |
| 2022-07             | Help establish a cross-<br>disciplinary blood sciences<br>Remote & Rural Subgroup to<br>give greater attention to<br>specific issues affecting these<br>locations.                                  | 1 <sup>st</sup> April 2022 – 30 <sup>th</sup> June<br>2022      | SCBN Core Team,<br>HaTS Core Team,<br>PM, PSO | Discussions have taken place with Remote & Rural labs, who are in favour of having a specific R&R subgroup. A terms of reference is being established, and a membership list drawn up.   | Establishment of a successful and engaged subgroup which can provide a voice for R&R issues, and escalate these appropriately where necessary.  | G           |
| 2022-08             | Provide support and a monitoring process for the funded pilot of PathNexus being carried out in NHS Grampian, ensuring Scottish Government funding is being utilised appropriately and effectively. | 1 <sup>st</sup> April 2022 – 30 <sup>th</sup><br>September 2022 | Core Team, PM                                 | Funding was approved in November 2021, with finance schedules agreed and monies distributed in February 2022. NSS Digital & Security were unable to provide technical resource to NHS Grampian to assist with the pilot, so this is now being handled in-house by NHS Grampian's eHealth team. A minor delay to procurement has been encountered, but this is being dealt with by NHS Grampian, and is not expected to impact the overall project. | A successful pilot of the PathNexus software, which provides useful feedback allowing a decision to be made on whether to scale PathNexus up to a national rollout in advance of the National LIMS. | G           |
| 2022-09             | Progress standardisation work in advance of the new National LIMS being introduced in 2022-23.  | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2023     | Standardisation<br>Subgroup, Core<br>Team, PM | Discussions are ongoing with representatives from the National LIMS Consortium on how work can proceed in this area.   | The network to have contributed meaningfully to standardisation work in advance of the National   | G           |

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|                     |  |   |                                    |  | LIMS rollout,<br>with all boards<br>able to<br>implement the<br>new software<br>effectively.  |             |
| 3. Stakeho          | Continue to optimise the communication streams that are employed by the network,   | agement [linked to Quality Dime                             | ensions 1,3,4,5,6]                 |  |   |             |
| 2022-10             | to best highlight work ongoing within the network, and raise awareness of the network more widely.  Planned streams include:  Newsletters (minimum 2 per year)  A refresh of the network website's Members Area  Redevelopment of the main sections of the website with updated information on all subgroups' work.  Encourage the use of Microsoft Teams channels for subgroup administration.  Make greater use of Twitter to engage with the clinical | 1 <sup>st</sup> April 2022 - 31 <sup>st</sup><br>March 2023 | Core Team                          | The network Core Team will conduct a full review of the website, and implementation of its outcomes will be tasked to the PSO. The PM is encouraging subgroups to take greater ownership of their website content and develop specific content for upload, with a view to developing a more active public-facing resource.  An education event has been mooted for September 2022, and the Education & Training Subgroup will be tasked with progressing this. | The activities of the network are widely publicised through several means, such as newsletters, Twitter, and Microsoft Teams.  The website will have been refreshed with updated content and be of greater relevance to stakeholders. | G           |

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|                     | biochemistry community.  Continue engagement with laboratory staff via roadshows and other external events where permissible in the current environment.  |   |                                    |  |   |             |
| 2022-11             | Continue to foster links with WoSCAN, SCAN and the North Cancer Alliance, to support closer joint working and greater awareness of ongoing work. Greater communication between the network and these cancer groups will enable sharing of ongoing projects to maximise the outputs and benefits for both parties. | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2023 | Cancer Subgroup                    | Good contacts have already been made with all three cancer networks via the CA-125 Audit, which has involved data analysis on a regional basis with all three cancer networks. Members of the Cancer Subgroup also sit on all three regional bodies to maintain communication links in general | Good links will be maintained with the three Cancer Networks, developing contacts and enabling closer joint working with the SCBN. This also allows SCBN to help drive improvements in cancer services, following NHS Scotland's strategic direction. | G           |

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| 4. Educati          | on [linked to Quality Dimensions 1,2,3,4,5,6]  | 1   |  |  |  |             |
| 2022-12             | Holding an annual Education Day event to provide valuable educational talks and discussions. This will address topics of interest to the biochemistry community, adding to the knowledge and skillset of the community, while permitting relevant scientific discussions and networking. | 1 <sup>st</sup> April 2022 – 30 <sup>th</sup><br>September 2022 | Education &<br>Training subgroup,<br>Core Team | An event has been mooted for September 2022, with details beginning to be worked out by the Core Team and E&T Subgroup.  | Bookings are in place for a suitable date in September 2022, with an event programme prepared by the Education & Training subgroup.  | G           |
| 2022-13             | The Education & Training subgroup has been investigating online e-learning resources, with the aim of providing a central location to existing web-based courses and learning material.  | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2023     | Education &<br>Training Subgroup               | Discussions have taken place with representatives in local NHS boards who are working on developing online learning material, with the aim of the network advertising this and assisting in its development. | Network members will benefit from easier access to online learning resource, improving their education and raising workplace standards, ultimately benefitting patient services irrespective of geographic location. | G           |

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| 5. Audit ar         | nd Continuous Quality Improv   | rement [linked to Quality Dimen                                 | sions 1,2,3,4,5,6]                                      |   |   |             |
| 2022-14             | Ongoing CA-125 audit. This will assess the benefit of current guidelines into testing of suspected ovarian cancer patients, and whether these guidelines have improved time to diagnosis, and therefore overall prognosis. | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2023     | CA-125 Audit<br>Group, SCIN<br>colleagues, Core<br>Team | The audit has been granted an extension to scope and timeline through to 2023. There have been regular meetings with engaged clinicians to further this audit and produce a final report, although delays have been encountered where clinical capacity has been required elsewhere during the COVID-19 pandemic. | A more detailed picture of the value of CA-125 testing to diagnosis, prognosis and overall outcomes in suspected ovarian cancer cases. Issues within local Boards affecting these matters should also be highlighted as a result, and solutions identified. | A           |
| 2022-15             | Assist NHS Lanarkshire with their pilot of Neuron-Specific Enolase testing, with a view to progressing this to a full business case if a national rollout would be appropriate.  | 1 <sup>st</sup> April 2021 – 30 <sup>th</sup><br>September 2022 | Core Team,<br>Innovation<br>Subgroup                    | NHS Lanarkshire are currently running a pilot into the use of NSE testing, with support being provided by SCBN colleagues. Should the pilot prove to have been of benefit to patients and outcomes, progression to a national business case will be explored.   | NSE has been identified as a potentially useful test for neuroprognostic ation in out-of-hospital cardiac arrests.  Implementation of this could improve patient outcomes in these situations.  | G           |

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| 2022-16             | Continued support for the new Lipid Subgroup, enabling this group to identify key workstreams to progress with regard to lipid clinic staffing and testing.  | 1 <sup>st</sup> April 2022 – 31 <sup>st</sup><br>March 2023 | Lipid subgroup,<br>Core Team                           | Specific meetings are planned between the network core team and the leadership of this subgroup to establish a detailed plan and terms of reference for the subgroup.                            | A functioning and contributing subgroup dealing with issues facing lipid clinics across Scotland.                                | G           |
| 2022-17             | Collate annual benchmarking data and produce an annual benchmarking report. This highlights successes and areas in which the network could be of assistance or develop future business cases.  | 1 <sup>st</sup> April 2021 – 31 <sup>st</sup><br>March 2023 | Data Subgroup,<br>NHS board<br>representatives,<br>IMS | The data template is undergoing final checks prior to issuing to Boards, with a benchmarking report due in autumn 2022.  | To have a clearer picture of biochemistry activity, and an agreed method through which to develop and utilise the data received. | G           |
| 2022-18             | Continued development of the data benchmarking template, ready for circulation on 31 <sup>st</sup> March 2023 for the 2022-23 data capture period. This ensures that the most relevant evidence base exists and can be used the network to horizon scan for potential service improvements, and to support business cases. | Feb 23 – Mar 23   | Data Subgroup,<br>Core Team, IMS                       |  | To have a clearer picture of biochemistry activity, and an agreed method through which to develop and utilise the data received. | G           |
| 2022-19             | Continue to support the move to one method for the testing of CA19-9 in Scotland. This reduces clinical risk for those patients that receive tests or treatments between more than one NHS Board, where  | Apr 22 – Mar 23   | Cancer subgroup,<br>Core Team                          | Two of the three centres have currently standardised on a single method. Discussions are taking place within the Cancer Subgroup on how to standardise the method in the final remaining centre. | A single CA 19-9 method is agreed for Scotland, ensuring a standardised Once for Scotland  | G           |

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|                     | different methods may be employed for CA19-9 testing.  |                          |  |   | approach and reducing clinical risk to this patient group.   |             |
| 6. Value [lii       | nked to Quality Dimensions 1,2,3,4,5,6]  |                          |  |   |  |             |
| 2022-20             | Continue to engage and support the progress of the National LIMS consortium, by providing expert advice where necessary, and by engaging in standardisation activities to assist development and ultimate roll-out of the National LIMS. | Apr 22 – Mar 23          | Standardisation<br>Subgroup, Steering<br>Group | The PathNexus pilot in NHS Grampian will provide a good testbed for automated standardisation of lab test coding. The Standardisation subgroup is also being revived to progress more detailed aspects of standardisation work, such as on units and methods. | A national standardised list of codes will be produced in time for the national roll out of the new LIMS. This will enable a more streamlined setup and implementation, and eventually assist crossworking and data transfer between laboratories in a Once for Scotland approach. | G           |
| 2022-21             | Continue to actively engage with the Demand Optimisation Programme to promote optimised use of testing in Scotland.  | Apr 22 – Mar 23          | Innovation<br>Subgroup                         | The network has continued to be engaged with the DO programme throughout the COVID-19 pandemic. Aspects of DO data collections have been incorporated into the previous year's benchmarking template,   | The network continues to play a valuable role in shaping and assisting with the work of the DO programme,  | G           |

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|                     |                 |                          |                                    | and discussions with the DO programme will take place on elements to be included in future templates. | ultimately<br>supporting the<br>remobilisation<br>and recovery of<br>NHS services |             |
|                     |                 |                          |                                    | The newly-launched Atlas of Variation has also been promoted by the network where possible.           | within Scotland.  |             |