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In response to an enquiry from the north imaging alliance

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## Priorities for the north imaging alliance: a survey of members

### What were we asked to look at?

In August 2022 we [published a review of the evidence](#) on developing a successful radiology network. This informed the establishment of the north imaging alliance (NIA) across six health boards in northern Scotland. As a follow-up, we were asked to conduct an objective survey of members of the NIA about the benefits of the network and to identify short- and medium-term priorities for the alliance.

### Why is this important?

The need for national and regional collaboration and coordination to achieve sustainable and resilient radiology services has been recognised at national level in Scotland.<sup>1</sup> The NIA continues to support radiology services in the north of Scotland. The survey reported in this assessment will explore the benefits of the NIA to date and identify future priorities for the alliance over the next 5 years.

### What was our approach?

We developed a short survey in collaboration with representatives from the NIA and circulated to members of the alliance. We have summarised the findings of the survey in this assessment.

### What next?

The NIA will use the assessment to inform their discussions about the future direction of the alliance and as part of a business case for continued funding of the NIA.

## Key points

1. There is strong support for the continuation of the NIA across the six northern health boards involved in the network.
2. Amongst members who responded to the survey, the main benefit of the NIA is the creation of networking and communication opportunities. The additional capacity provided by the mobile MRI project and an enhanced service provision were also highlighted as benefits.
3. The most valued support provided by the NIA team were the opportunities for both networking and collaboration. Support for service improvement and project management was also seen as helpful.
4. Respondents indicated that improving diagnostic imaging, reducing waiting times and improving cancer care are the main priorities for the NIA in both the short (1–2 years) and medium term (2–5 years).

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## Introduction

Radiology is a medical specialty that uses imaging to diagnose and treat diseases.<sup>1</sup> It is vital to almost every specialty and every part of the NHS, and is fundamental to the ability to provide high quality, effective and timely treatment to patients. A shared recognition of the need for national and regional collaboration and coordination in order to achieve a sustainable and resilient radiology service led to the creation of the NIA.

The NIA is a collaborative network of radiology services from six health boards in the north of Scotland (NHS Western Isles, NHS Highland, NHS Orkney, NHS Grampian, NHS Shetland and NHS Tayside). The NIA was created to improve sustainability and resilience of radiology services across northern Scotland by working collaboratively on problems shared by these boards. The aim of our survey is to gather information about the benefits of the network and to identify short- and medium-term priorities for the NIA.

## Research questions

1. What are the benefits of the NIA?
2. What are the short- and medium-term priorities for the NIA?

## Methodology

A survey (*Appendix 2*) was developed in collaboration with representatives from the NIA regional core team (see *Acknowledgements*). The survey consisted of four demographic questions and six questions about the NIA. The survey used a mix of open and closed questions to gather both qualitative and quantitative data.

The survey was piloted with two people who were familiar with the NIA network. The people completing the pilot questionnaire and their responses were not included in the final sample.

The survey was developed in Smart Survey ([www.smartsurvey.co.uk/](http://www.smartsurvey.co.uk/)) and circulated by email to members of the NIA network. The survey was available for 3 weeks in September 2023. All responses were anonymous.

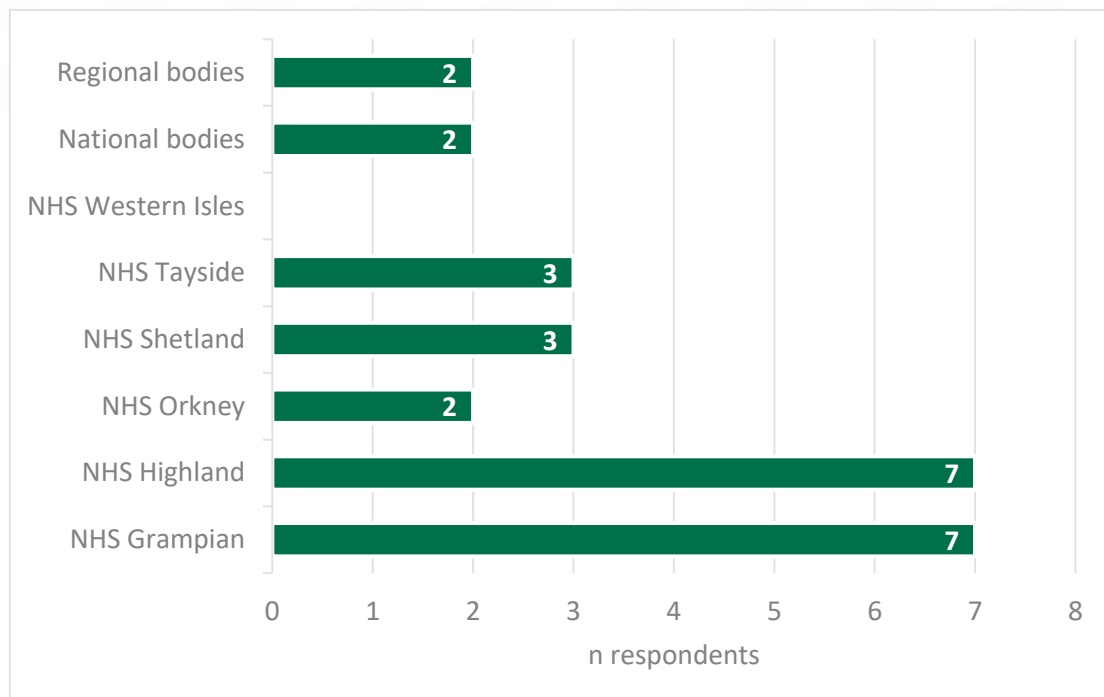
## Survey results

The survey was sent to 140 people and 26 people completed the survey in full (19% return rate). Eighteen partial responses were not included in the final sample.

## Demographic data

Five health boards from the NIA were represented in the survey responses; the only board not represented was NHS Western Isles (*Figure 1*). Two responses were received from representatives of national bodies and two responses were from people responding on behalf of regional bodies. National bodies included the Scottish clinical imaging network and Public Health Scotland. Regional bodies included the north cancer alliance and the NIA. Over half of the responses came from people working in either NHS Grampian (n=7, 27%) or NHS Highland (n=7, 27%).

*Figure 1: Health boards and bodies represented in survey responses*



Survey respondents covered 12 roles associated with radiology services (*Table 1*). The most common role was lead clinician (n=4).

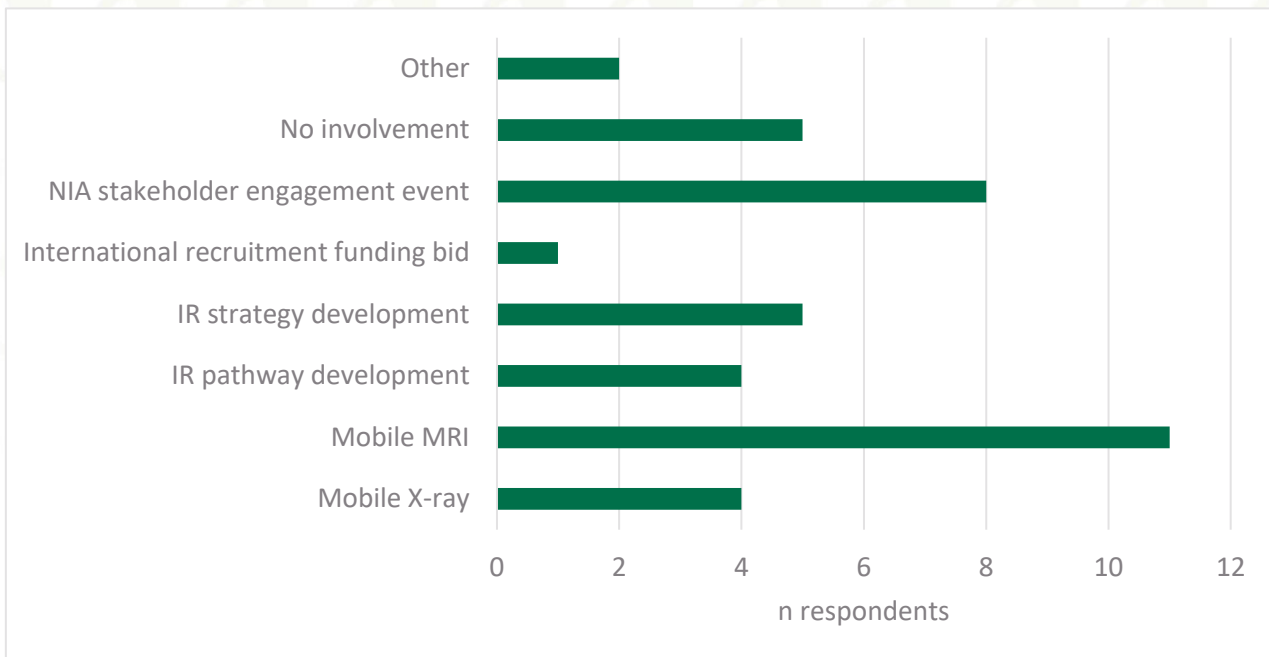
Table 1: Representation of roles within radiology services in the survey respondents

Role	n responses
Lead clinician	4
Imaging/radiology manager	3
Service manager	3
Modality lead	3
Radiographer	3
Programme/project manager	3
Radiologist	2
Head of medical physics	1
Site supervisor	1
Clinical scientist	1
Network manager	1
Project support officer	1

The majority of respondents (n=15, 57.8%) were not members of any NIA governance groups. Nine people (34.6%) were members of a work stream subgroup, eight (30.7 %) were involved with an operational delivery group and one (3.8%) was part of an executive board.

Five respondents had no involvement in regional imaging projects (*Figure 2*). The other 19 respondents had been involved in one or more projects. The project that most respondents had been involved with was the mobile magnetic resonance imaging (MRI) project (n= 11, 42.3%).

Figure 2: Respondent participation in regional imaging projects



IR = interventional radiology; NIA = north imaging alliance; MRI = magnetic resonance imaging

## Benefits of the NIA

Survey respondents were asked: ‘What have been the most significant benefits that the alliance has been able to influence or help you with?’ This open question received wide-ranging responses, with many respondents mentioning more than one benefit.

Four (15.4%) respondents commented that there were no benefits or that they were unsure of any benefits of the NIA. Responses from the remaining 22 respondents have been grouped into three themes: enhanced service provision, increased service capacity and networking and communications.

### Enhanced service provision

Enhanced service provision was mentioned by five respondents (19.2%), a coordinating interventional radiology (IR) strategy was mentioned by two people (7.7%) and reduced duplication was mentioned by one respondent (3.8%).

Two responses that represent this theme were:

‘It [NIA] has also enabled us to have a point of contact when needing stakeholder input, and has reduced duplication of effort significantly.’

‘Working to enhance service provision.’

## Capacity

Five respondents (19.2%) commented on the additional capacity provided by the mobile MRI project. Respondents described the benefits to patients of having a mobile MRI service that allowed them to be seen closer to home and not have to travel for imaging investigations:

‘The mobile MRI scanner has helped reduce the number of Orkney/Shetland patients travelling to NHS Grampian.’

‘Help with imaging capacity on the islands.’

## Networking and communications

The benefit of networking opportunities generated by the NIA was mentioned by 10 (38.5%) respondents. Four people (15.4%) commented that the NIA had opened up lines of communication for them. Peer support and opportunities for collaboration were mentioned by one respondent each.

Two responses representing this theme were:

‘Peer support, sharing of ideas and connecting with other boards.’

‘...it allowed us to open up communication channels across boards.’

## Other benefits

Other stated benefits of the NIA included:

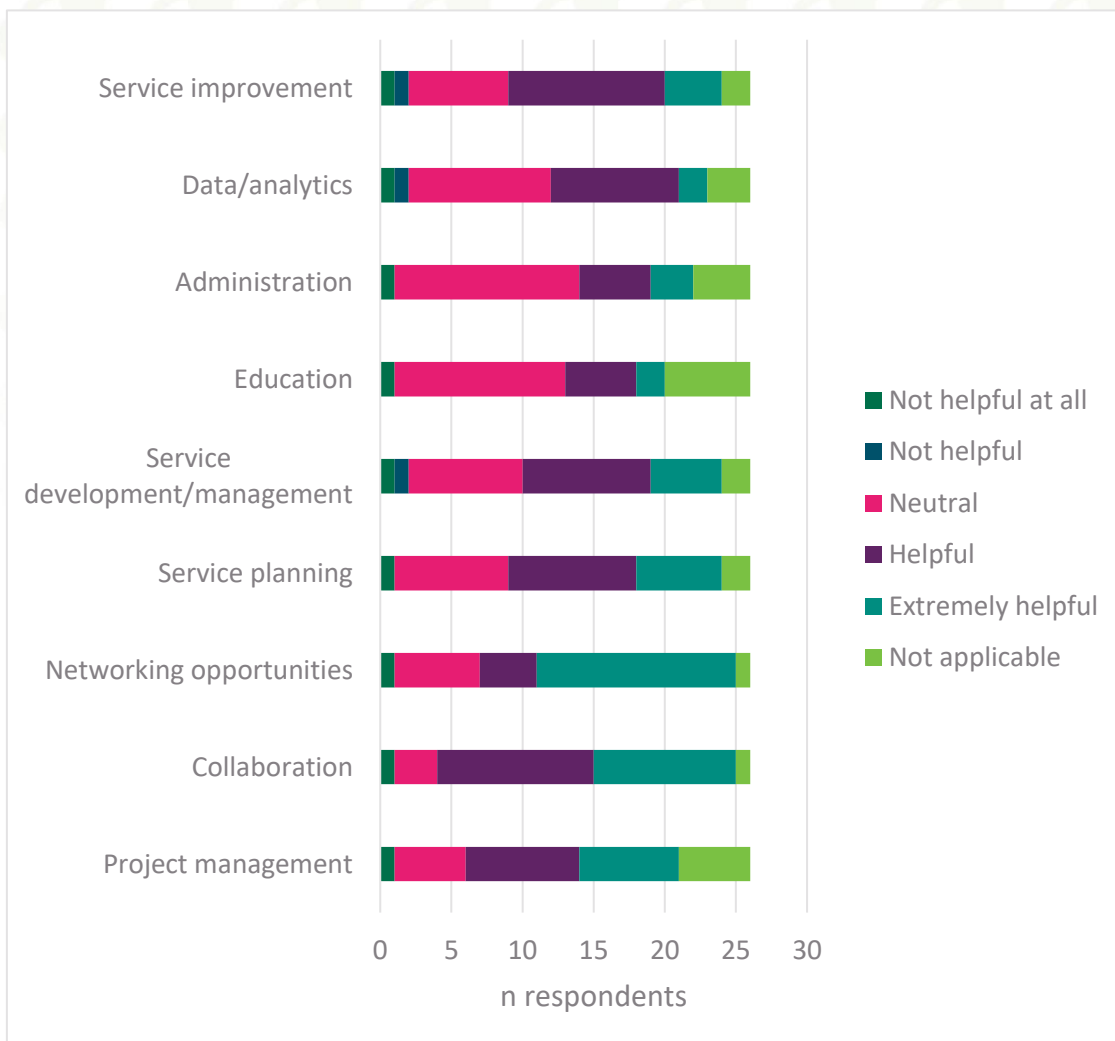
- expertise and input on service planning and development
- enhanced recruitment and retention, and
- help with service improvement activities.

## Types of support provided by the NIA

The survey explored the different types of support that have been provided by the NIA team and asked how helpful each type of support has been on a Likert scale of 1 (not at all helpful) to 5 (extremely helpful). Responses to this question are presented in *Figure 3*.



Figure 3: Types of support provided by the NIA team and how helpful it was to members



Networking opportunities were the most valued type of support, with 53.8% (n=14) of respondents finding it extremely helpful and 15.4% (n=4) finding it helpful. The next most valued type of support was collaboration where 38.5% (n=10) found the NIA support extremely helpful and 42.3% (n=11) found it helpful.

Service improvement support was considered to be helpful by 42.3% (n=11) of respondents and extremely helpful by 15.4% (n=4) respondents. Fifteen respondents found project management support (helpful 30.8%, extremely helpful 26.9%) and service planning (helpful 34.9%, extremely helpful 23.1%) to be either helpful or extremely helpful.

Types of support that were rated as less helpful were service development or service management (helpful 34.6%, extremely helpful 15.4%), education (helpful 19.2%, extremely helpful 7.7%), administration (helpful 19.2%, extremely helpful 11.5%) and data or analytics (helpful 34.6%, extremely helpful 7.7%). The type and source of education support was not defined in the survey question so responses may not be a true reflection of respondent’s views on that type of support.

## Continuation of the alliance

Respondents were asked if they could see a benefit to the NIA continuing. Eighty percent of respondents (n=21) answered yes. Only one respondent answered no and four respondents (15.3%) were unsure. Since this was a closed question we were unable to explore the reason why people were unsure or did not think the NIA should continue.

## Future priorities for the NIA

The survey asked NIA members what they consider priorities for future NIA support in the short- (1–2 years) and medium-term (2–5 years). The responses indicated that the short- and medium-term priorities were similar (*Figure 4 and 5*).

In the short-term, improving diagnostic imaging was considered a priority by 17 respondents (65.3%) and reducing waiting times were a priority for 16 respondents (61.5%). Nine people (34.6%) listed cancer care as a priority. Six respondents suggested other priorities. These were: clinical risk, regional vans for computed tomography (CT), recruitment and workforce planning. One respondent suggested that all of the categories suggested in the survey should be priorities given the severe radiologist understaffing in their area.

In the medium-term, reducing waiting times was selected by 16 respondents (61.5%) and improving diagnostic imaging was chosen by 13 respondents (50%). Twelve respondents (46.1%) listed cancer care as a priority in the medium-term. Five respondents suggested strategic service planning, workforce planning in diagnostic imaging and homogenised processes across health boards in the alliance.

Figure 4: Short-term priorities for the NIA

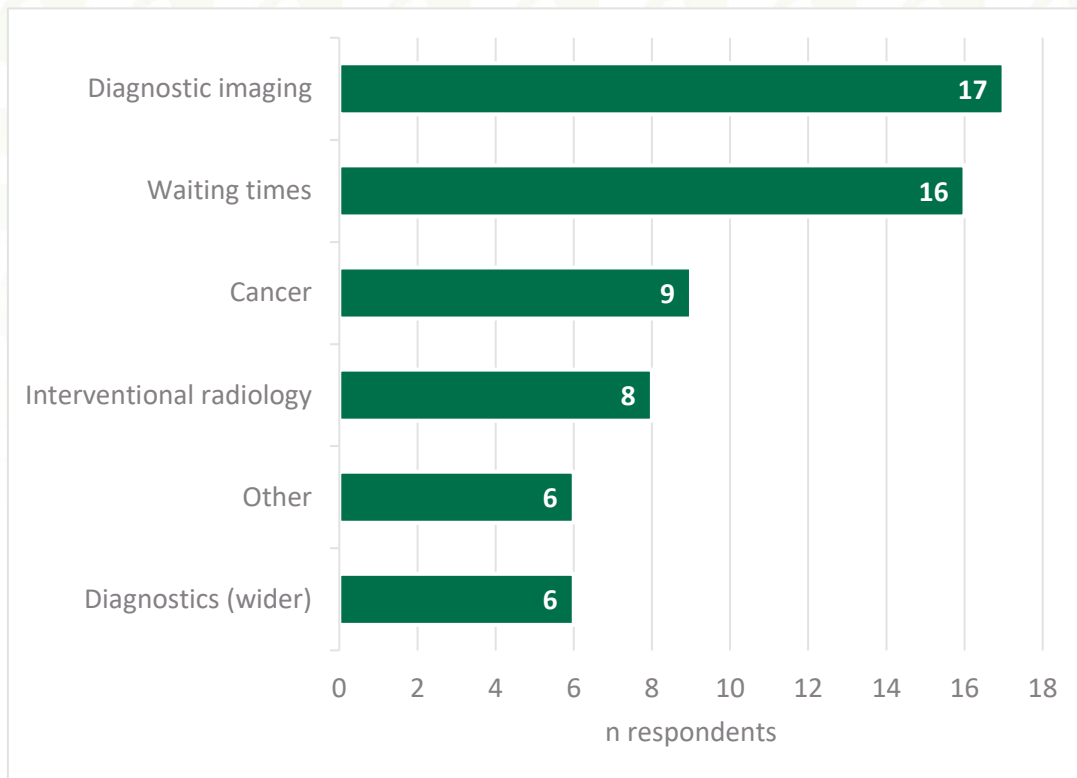
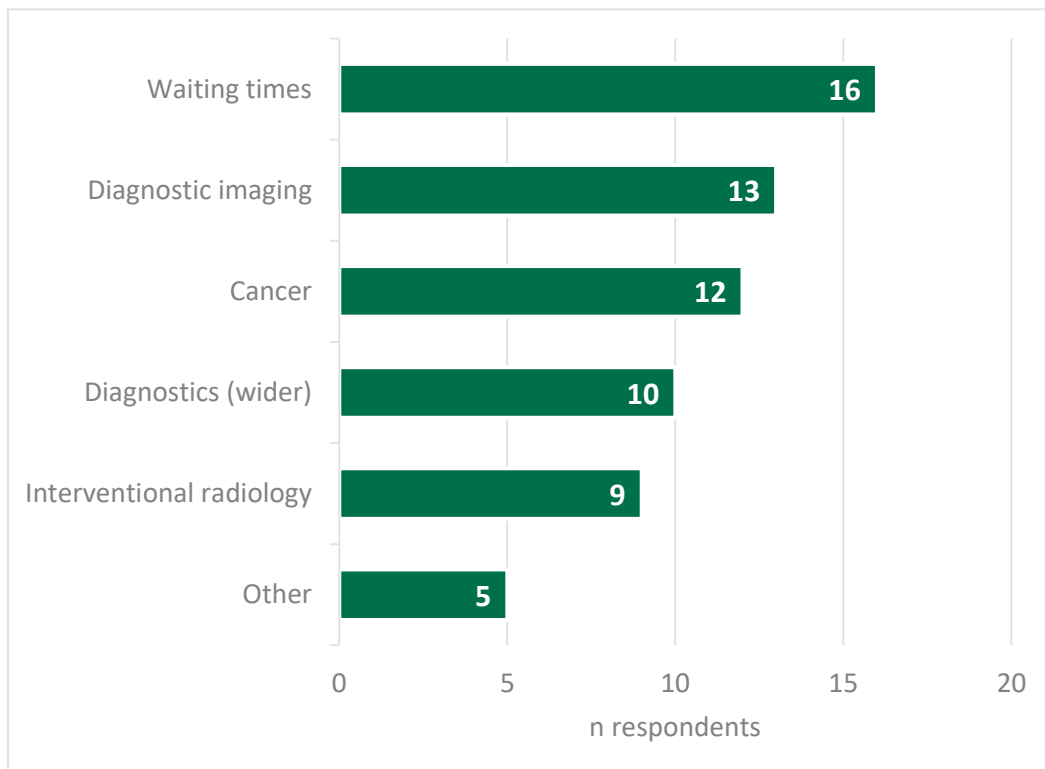


Figure 5: Medium-term priorities for the NIA



## General comments

The final question asked for any other comments respondents would like to make about the NIA. Fifteen comments were received and the majority (n=9) were overwhelmingly positive:

'I would suggest that the NIA continues with the valuable work undertaken as it provides a very important collective oversight of diagnostic imaging services provided in the region.'

'A great example of collaboration that is supported by excellent facilitation.'

'NIA colleagues have, without fail, provided support, guidance and advice whenever asked and ensured sufficient supportive follow through and guidance.'

'As a relatively new service manager into diagnostics, I very much relied upon the alliance when others within my own board were less than helpful. It has been a fantastic opportunity and encouraged much joined up networking/shared ideas outwith. On many occasions it provided a safe space for us all to support each other, which I don't think can be undervalued in these challenging times.'

Some comments contained suggestions for future development of the NIA or general comments about the NIA:

'The group works on a supportive basis, however, it does not have any decision making responsibilities.'

'Although I'm not convinced that what services need is yet another support/advisory actor - where there are so many of these already - I suspect what imaging services need most is more accountable leadership, with an appropriately technically experienced background?'

'Would be great to work on a diagnostic imaging hub for the north - similar to what GJH [Golden Jubilee Hospital] is used for in the central belt and/or community hubs. Also consideration to maintaining the MRI vans and an ask around the same service for CT.'

'Expansion of national reporting capacity.'

'I understand the purpose of streamlining services for north of Scotland but am very unsure about how this can be achieved. Clinical staff are overwhelmed dealing with everyday clinical and managerial issues so it's virtually impossible for clinical staff to be part of these groups, meetings and strategies due to time constraints.'

## Limitations of the survey

There are acknowledged limitations to the survey methodology and analysis used in this assessment:

- respondents were a self-selected group from a targeted population (19% of NIA members), which could result in sampling and response bias
- 18 survey responses were not analysed because they were only partially completed, and
- respondents may have been limited in what they could convey succinctly within the space limitations of the online questionnaire.

## Conclusion

The survey achieved a reasonable response rate (19%) and data saturation appears to have been reached since some of the same themes appeared in the responses to multiple questions from different sections of the survey.

The NIA is considered to be particularly useful for networking, for offering opportunities to collaborate across health boards and for opening channels of communication between and within health boards. Similarly, the types of support from the NIA that respondents found to be helpful were primarily around networking and collaboration. Support for service improvement and project management were also considered to be helpful.

NIA support for improving diagnostic imaging is considered a short term priority, as is support with reducing waiting times and improving cancer care. Over the next 2–5 years, waiting times was seen as the priority for NIA support, followed by support with diagnostic imaging and cancer.

The overwhelmingly positive responses (n= 21, 80%) to the question of whether or not respondents saw a benefit to the NIA continuing suggests that the NIA provides a valuable service that is appreciated by members.

## References

1. Calvert J, Herbert P, Maguire R, Mahal D. Factors contributing to a successful regional radiology network. Glasgow/Edinburgh; NHS Healthcare Improvement Scotland. <https://shtg.scot/our-advice/north-radiology-alliance/>

## Acknowledgements

### Healthcare Improvement Scotland development team

- Dr Dawn Mahal (lead author), Health Services Researcher, Healthcare Improvement Scotland
- Ms Jenny Harbour, Health Services Researcher, Healthcare Improvement Scotland
- Ms Mary Michael, Project Officer, Healthcare Improvement Scotland

### Other acknowledgements

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## Appendix 1: Abbreviations

<b>CT</b>	computed tomography
<b>GJH</b>	Golden Jubilee Hospital
<b>IR</b>	interventional radiology
<b>MRI</b>	magnetic resonance imaging
<b>NCA</b>	north cancer alliance
<b>NHS</b>	National Health Service
<b>NIA</b>	north imaging alliance
<b>PHS</b>	Public Health Scotland
<b>SCIN</b>	Scottish clinical imaging network
<b>SHTG</b>	Scottish Health Technologies Group
<b>S RTP</b>	Scottish radiology transformation programme

## Appendix 2: NIA survey

### North imaging alliance

The North imaging alliance (NIA) was established in 2021 to support a collaborative regional approach to sustainability issues, by delivering a new perspective on longstanding risks and mitigation opportunities. The NIA links with the six health boards in the north of Scotland; Grampian, Highland, Orkney, Shetland, Tayside and Western Isles.

In 2021 the Scottish Health Technologies Group (SHTG) identified key benefits and enablers to a networked approach. Link to the report—<https://shtg.scot/our-advice/north-radiology-alliance/>.

The NIA core team supports identified regional projects and workstreams and governance reporting is through the NIA Operational Delivery Group to the NIA Executive Board and thereafter to North Chief Executives. <https://www.nhsscotlandnorth.scot/networks/north-imaging-alliance/about-the-alliance>

The NIA has been supported through time-limited transformation and regional funding. It is important that we can demonstrate any benefits and value of this approach through objective feedback from our key stakeholders, therefore this questionnaire has been sent to members of north imaging alliance governance groups and key stakeholders across the imaging community in Scotland. It is anticipated that it will take around 10–15 minutes to complete. Your answers will be anonymous however, should you wish, you can provide contact details for follow-up.

\* Required

### About you

Which organisation are you a member of, or responding on behalf of? \* (dropdown, single answer)

- NHS Grampian
- NHS Highland
- NHS Orkney
- NHS Shetland
- NHS Tayside
- NHS Western Isles
- National (eg SCIN/ SRTP/ PHS, etc)
- Regional (eg NCA/ NIA/ Child Health, etc)
- Other

What is your role within this organisation? \* (dropdown, single answer)

Imaging/radiology manager

Service manager

Lead clinician

Radiologist

Modality lead

Radiographers

Administration manager

Programme/project manager

Other

Are you, or have you been, a member of any of the following NIA governance groups? \* (multiple answers)

Executive Board

Operational delivery group

Workstream subgroups (eg IR, workforce, data/ equipment/ innovation, finance, communication, etc)

Not a member of any NIA groups

### **Impact of the north imaging alliance**

Have you been involved in any of the following regional imaging projects? \* (multiple answers)

Mobile X ray

Mobile MRI

Interventional radiology pathway development

Radiology strategy development

International recruitment funding bid

NIA stakeholder engagement event

Other

What have been the most significant benefits that the alliance has been able to influence or help you with? \* (free text, long answer)

What support have you received from the NIA core team, and can you rate each from 1 (not at all helpful) to 5 (extremely helpful) \*

	1--Not at all helpful	2--Not helpful	3--Neutral	4--Helpful	5--Extremely helpful	Not applicable
Project management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaboration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Networking opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service development / management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data / analytics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Do you see a benefit to the north imaging alliance continuing? \* (one answer)

- Yes
- No
- Unsure

What areas would you appreciate help with in the short-term (1–2 years)? \*(multiple answers)

Waiting times

Cancer

Interventional radiology

Diagnostic imaging

Diagnostics (wider)

Other

What areas would you appreciate help with in the medium-term future (2–5 years)? \*(multiple answers)

Waiting times

Cancer

Interventional radiology

Diagnostic imaging

Diagnostics (wider)

Other

Are there any other comments you would want to make about the north imaging alliance? (free text, long answer)