

To: NHS Board Chief Executives

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NHS Board Directors of Finance  
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NHS Board Directors of Public Health  
NHS Board Directors of Corporate Communications  
NHS Board PACS Managers  
NSS National Screening Division

09 August 2021

Dear Colleague,

## Picture Archiving and Communications System (PACS) Update

We are writing to update you on the progress of some key pieces of work in the existing PACS arena and to make you aware of the PACS Re provisioning programme that is currently underway.

### **Background**

The National Picture Archiving and Communications System (PACS) is managed by NHS National Services Scotland (NSS) on behalf of NHSScotland. This national system supports the acquisition, storage, retrieval and display of high quality digital images and results, within and between clinical sites across NHSScotland, to support faster diagnosis, care planning and treatment of patients on a 24/7 basis.

This “Once for Scotland” PACS system was first procured in 2006 and is used across 15 Health Boards. There have been a number of PACS technology refresh programmes over the past 15 years, the most recent of which is due to complete in March 2022.

### **PACS Version 12 Technical Refresh**

The current PACS V12 Technical Refresh Programme activities are ongoing and the status of each phase is as follows:

- **Phase One – National Archive PACS Version 12 Technical Refresh**
  - Completed – The primary data centre Go Live was November 2018 and the secondary data centre failover exercise completed in January 2019, providing a fully replicated and resilient back up.
- **Phase Two – Local Health Board PACS Version 12 Technical Refresh**
  - This work commenced in February 2019 and includes a consolidation of the number of PACS Local Health Board Sites from 31 down to 22. Rollout was paused between March 2020 and August 2020 due to Covid-19 and the programme plan was revised and re-baselined with full involvement of the local Health Board teams. New working practices were adopted in line with Covid Guidelines and 16 projects have now been completed, with the remaining six implementations scheduled to complete by March 2022. ***(See Appendix A for a breakdown of completed and pending implementations by Board)***
- **Phase Three – Breast Screening PACS Version 12 Technical Refresh**
  - This work commenced during the autumn of 2018 and includes a data centre technical refresh and six breast screening clinic technical refreshes. The programme was paused for a number of months during 2020 due to Covid-19 and

the programme was re-baselined. The Breast Screening data centre technical refresh and two of the breast screening clinic projects have been completed. The remaining four projects are scheduled for completion before the end of March 2022. ***(See Appendix B for a breakdown of completed and pending implementations by Board)***

- This programme also includes an upgrade to the mobile van solution. Upgrades have been successfully completed in the South East of Scotland Breast Screening Centre (Edinburgh) and the North East of Scotland Breast Screening Centre (Aberdeen). A date has been agreed with the South West of Scotland Breast Screening Centre (Irvine) for late August 2021 and planning is underway for the remaining three sites, with a target date for completion of the end of March 2022.

Successful delivery of the V12 upgrades to date have been made possible by the professionalism, commitment and enthusiasm of all involved. Particular thanks go to the NHS Board PACS Managers and eHealth, radiology and breast screening teams, who have worked closely with the NSS PACS Team and Philips to ensure that the implementations have run smoothly and safely, with minimal impact on clinical service delivery.

### **PACS Reprovisioning**

There is now a requirement for NHSScotland to carry out a public procurement exercise with a view to having a new national PACS contract in place by the spring of 2023.

As you are aware, the existing national PACS delivers considerable benefits to patients, service users and the wider NHS clinical services. It is therefore imperative that any new contract delivers service sustainability as a minimum, whilst also ensuring alignment with the Scottish Radiology Transformation Programme, the Scottish Government's Digital Health and Care Strategy and other emerging strategies related to integration, digital imaging and person-centred care.

The Initial Agreement for the PACS Reprovisioning was endorsed by the Scottish Government Enabling Technology Board on 9 December 2020 and permission was granted to proceed to production of the Outline Business Case. So far, a Prior Information Notice (PIN) has been published to the marketplace, which received significant interest from suppliers and provided a valuable insight into market capabilities, solutions and indicative costs. This information is helping to inform the Outline Business Case and the new system requirements specification, which are on schedule to be approved by the end of 2021, to enable the Advert to be placed and the formal procurement process to commence in January 2022.

The programme intends to put in place a 10+ year contract for a PACS as a Managed Service from a single prime supplier. In the immediate term, the focus will be on replacing the existing PACS to continue to support the clinical service, whilst adopting a longer term strategy to move to a public cloud based model during the lifetime of the contract. Based on market research, it is likely that the architecture model will move away from multiple large local PACS instances, to a centralised PACS, with mini PACS in the local Boards for resilience. There will be a greater focus on cross boundary functionality, including reporting functions within the PACS.

The scope will be limited to the PACS and will not include Radiology Information Systems (RIS), but it will include additional modules and features which deliver business benefit such as Business Analytics; Multi Disciplinary Team (MDT) planning software; Radiation Dose Management; Artificial Intelligence; Peer Review; Workflow Management; Natural Language Processing and Critical Alerts. PACS based reporting and Breast Screening will be core services within the new PACS, with the flexibility to extend PACS Based Reporting across the whole of the NHS in Scotland during the contract term, if required.

Once a new contract is awarded in the Spring of 2023, transition to the new national PACS will be carefully planned and implemented over a number of years. There will be a period of double running whilst all Boards are transitioned over to the new system, estimated costs for which will be incorporated into the Business Case. In the meantime, some investment will be required in the existing PACS with Philips (formerly Carestream) to ensure that there is enough storage and that the Microsoft operating system, hardware and software remains supported, secure and performant between 2023 and 2027.

An engagement plan is being put in place to help ensure that the Outline Business Case is reviewed, endorsed and approved by the appropriate NHSScotland governance groups. This will include the Corporate Finance Network (Sept/Oct), Directors of Finance (Nov), Health Board Digital Delivery Board (Nov), Enabling Technology Board (Nov), Imaging Executive Board (Oct), Diagnostics in Scotland Strategic Group (Nov), NSS FPPC (Nov) and then final approval being sought from the Digital Health and Care Strategic Portfolio Board on 8 December 2021.

With the procurement of a new national PACS for Scotland remaining a priority for Digital Health & Care and Radiology Transformation in Scotland during the COVID-19 pandemic, it is essential to minimise the risk of any delays and to ensure that each NHS Board has this programme firmly targeted as a priority.

#### **For Action**

Consequently, you are asked to:

- Share this letter within your organisation by way of formally reporting and expressing our thanks for the significant contribution of all staff involved in the PACS V12 technical refresh activities to date.
- Share this letter with your Directors of Finance, Digital Health & Care Teams and Radiology Teams to ensure that this programme is targeted as a priority and that they have some awareness of timescales, resource implications and who to contact for further information.
- Ensure that the Transition to a newly procured PACS is incorporated into your Local Health Board Delivery Plans between 2023 and 2027.

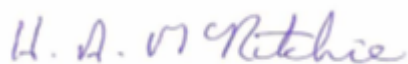
We will continue to provide updates as the Version 12 Technical Refresh and the Re provisioning programmes progress. However, should you have any questions in the meantime, please contact:

[nss.pacs-riscontractmanagement@nhs.scot](mailto:nss.pacs-riscontractmanagement@nhs.scot) for queries relating to the existing PACS service and the V12 rollout.

[nss.pacsreprovisioning@nhs.scot](mailto:nss.pacsreprovisioning@nhs.scot) for queries relating to the PACS Re provisioning Programme.

Thank you for your continuing assistance and support.

Best Regards



**Dr Hamish McRitchie**  
Chair of the PACS Governance Board  
Chair of the PACS Re provisioning Programme Board  
NHS National Services Scotland



**Mary Morgan**  
Chief Executive  
Senior Supplier for the National PACS  
NHS National Services Scotland

## Appendix A

Phase 2 PACS V12 Local Health Board Technical Refresh Programme					
Completed Implementations			Work In Progress Implementations		
PACS Site	Health Board	Date	PACS Site	Health Board	Date
Orkney	Orkney	May-19	Tayside (Ninewells, PRI, Stracathro) Consolidation	Tayside	Aug-21
Shetland	Shetland	Oct-19	Golden Jubilee	Golden Jubilee	Sept-21 TBC
Lorn and Islands	Highland	Nov-19	Crosshouse/Ayr Hospital Consolidation	Ayrshire & Arran	Oct-21
Borders	Borders	Nov-19	Western Isles	Western Isles	TBC
Dumfries & Galloway	D&G	Dec-19	GGC North (GRI/Gartnavel) Consolidation	GG&C	Nov-21
Hairmyres	Lanarkshire	Feb-20	GGC South (QUEH, INS, RCH) Consolidation	GG&C	Feb-22
Monklands	Lanarkshire	Feb-20			
Wishaw	Lanarkshire	Feb-20			
St Johns	Lothian	Mar-20			
Western General	Lothian	Aug-20			
RIE/Sick Kids Consolidation	Lothian	Oct-20			
Victoria	Fife	Dec-20			
Forth Valley Royal	Forth Valley	Feb-21			
GGC Clyde (RAH, VOL, IRH) Consolidation	GG&C	Apr-21			
Raigmore	Highland	Jun-21			
Aberdeen Royal Infirmary	Grampian	Jul-21			

## Appendix B

Phase 3 PACS V12 Breast Screening Technical Refresh Programme					
Completed Implementations			Work in Progress Implementations		
Breast Screening Clinic	Health Board	Date	Breast Screening Clinic	Health Board	Date
Data Centre	National	May-20	North East Scotland (Aberdeen)	Grampian	Oct-21
North of Scotland (Inverness)	Highland	Oct-20	East of Scotland (Dundee)	Tayside	Nov-21
South East Scotland (Edinburgh)	Lothian	Dec-20	West of Scotland (Glasgow)	GG&C	Feb-22
			South West Scotland (Irvine)	Ayrshire & Arran	Mar-22