



Digital Imaging 2017

Radiology Information Systems & PACS

Delivering the Paperless and Filmless Hospital

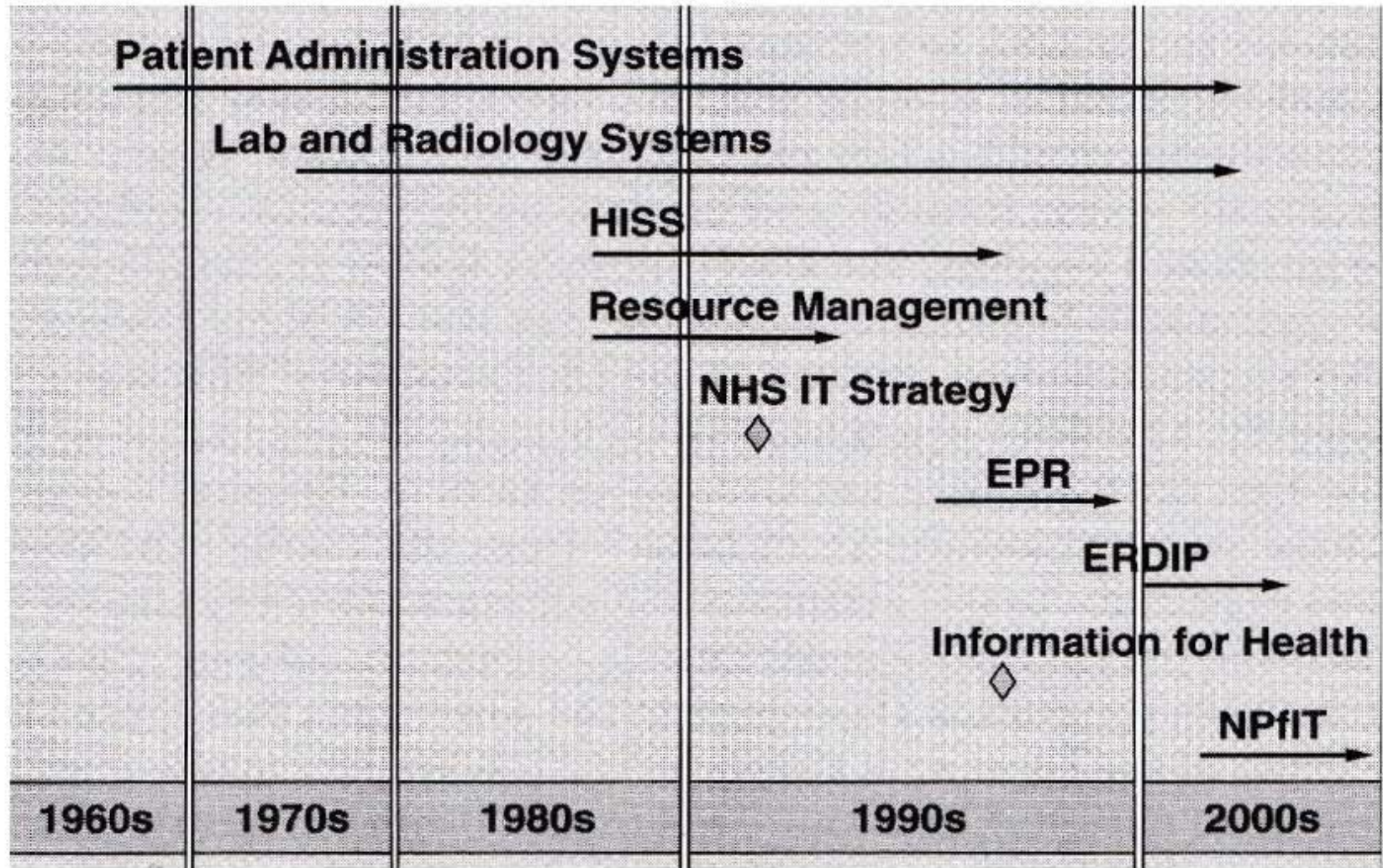
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Hampshire Hospitals 
NHS Foundation Trust

Topics

- The role of RIS and PACS in delivering the goal of a filmless & paperless NHS
- Technical solutions to radiology workforce and other departmental challenges pre-2020

A Brief History

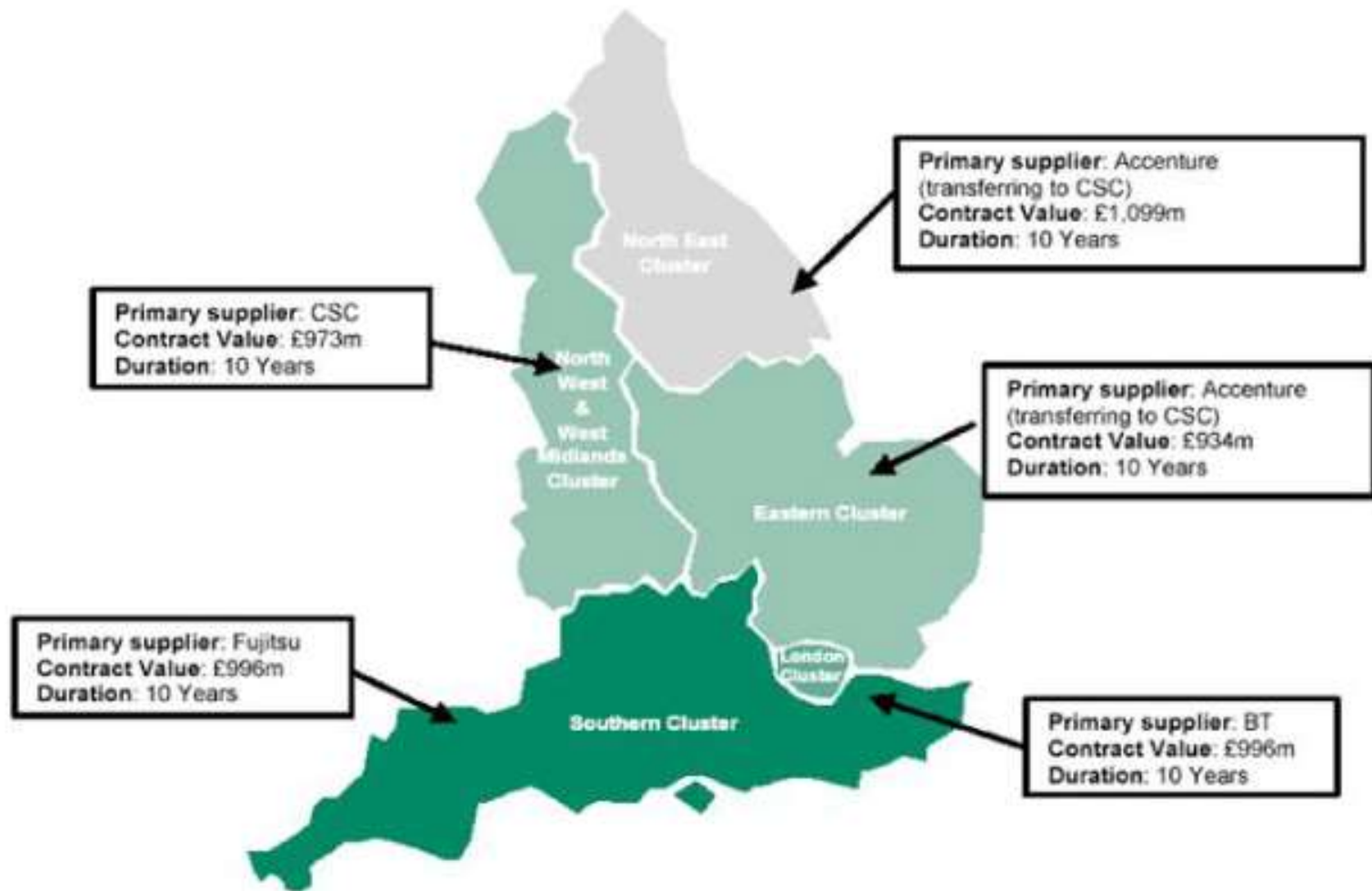


National Programme for IT in the NHS

- Announced on 12 June 2002
 - an integrated electronic health records system
 - electronic prescriptions
 - an electronic appointment booking system
 - an underpinning IT infrastructure with sufficient capacity to support the national applications and local systems

- Later additions included:
 - NHSmail
 - PACS

The NPfIT Landscape



The Filmless Hospital

- A success!



South Devon Healthcare **NHS**
NHS Foundation Trust

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X-rays Go Film-less at Torbay Hospital

28 Sep, 2006

The process of developing and interpreting X-ray images has been revolutionised at Torbay Hospital this month with the introduction of a new digital imaging system.

Instead of having to produce the image on photographic film, it is now instantly accessible through computers across the hospital, 24 hours a day, seven days a week. This means that bulky X-ray packets no longer need to be carried from the X-ray department to other departments, and more than one doctor can view them at the same time.

This will speed care for patients, and allow doctors to confer about the images without having to be in the same room. Additionally, it makes it much easier to compare the pictures with previous images, at the touch of a button.

Digital Transfer



The National Image Sharing Network

‘The Central Challenge’

“From notepad to iPad:
technology and the NHS”

Jeremy Hunt
Secretary of State for Health
16 January 2013

Updates

- ~~By March 2015, everyone would have online access to their own health records~~
- Downgraded to Summary Care Record only
- Limited visibility to patients

Revised targets...

- A 'paperless NHS' by 2018, allowing NHS staff to quickly and securely access and share digital patient records
- 'Personalised Health and Care 2020' framework (Nov 2014)
 - Patients to be able to access their health records by 2018
 - and to make "all patient and care records digital, real-time and interoperable" by 2020

Wachter calls for extension to paperless 2020 target

Dr Robert Wachter has said the “unrealistic” paperless 2020 goal should be discarded in his long-awaited review into the digital future of the NHS.

Instead, the review says a target should be set for all trusts to be “largely digitalised” by 2023 rather than 2020.

NHS hospitals won't be paperless before 2027

Digital Health Intelligence, sister company to Digital Health News, has today launched its CDMI+36 NHS technology adoption report, which has found that health secretary Jeremy Hunt's NHS 'Paperless 2020' target will not be met before 2027.



Next steps on the NHS Five Year Forward View

Simon Stevens
NHS England Chief Executive

A 'new' target...

- Personal online access
 - By September 2017 we will have upgraded NHS Choices to become NHS.UK
 - ...will be possible for patients to access their personal health record through NHS.UK

The Paperless Hospital

- Upstream from Radiology = Variable
 - 60-95% of requests are now digital
 - Depends upon site and specialty
- Exceptions
 - Orthopaedics
 - ENT clinic
 - 3rd party contracts

The Paperless Hospital

- Downstream = Some success
 - All GP practices receive electronic reports
- But...
 - Significant findings still faxed
 - IP/OP results still printed and posted internally
 - Sec printing reports for clinic to speed things up
 - MDT prep/running

e-Requesting/Reporting Project

- **Carrot - investments**
 - ICE improvements
 - My Patient lists
 - Custom order panels and streamlined rules
 - Request label printers (Path)
 - CRIS Communicator (significant findings)

- **Stick**
 - End date for paper – supported by Chief Exec, Medical Director, Divisional Directors, etc

The Paperless Hospital

- Within Radiology
 - Predominantly paper-based workflow
 - Every incoming request is printed
 - Request vetting/protocolling
 - Mix of electronic and paper diaries
 - Digital reporting worklists



Why does it matter?

- Money
 - Media
 - Staff time
- Inefficiencies
 - Lost requests
 - Single user/location access

Workflow Mapping

- Pre-radiology
 - Local referrals
 - External referrals
- Within
 - Vetting
 - Protocolling
 - Scheduling
 - Intervention prep
 - Patient check-in
 - ID checking
 - Safety/pregnancy checks
- Post-radiology
 - Consent
 - Post-processing/QA
 - Dose Monitoring
 - Peer Review/Feedback
 - Coding/Charging
- Post-radiology
 - Reports
 - Significant Findings
 - Declined requests
 - MDTs
 - External transfers

Solutions 1

- Requests
 - 3rd party access to OrderComms
 - Scan paper-requests into RIS and destroy

Solutions 2

- Electronic RIS functionality
 - Vetting
 - Protocolling
 - Scheduling

Solutions 3

- Patient arrival/queuing
 - Self-check-in kiosks
 - Tablets
- ID check & Pregnancy/Safety questions
 - Scan into RIS?
 - Digital signature
- Post-processing
 - Tablets

Solutions 4

- Significant Findings



THE ROYAL COLLEGE OF RADIOLOGISTS

NHS

National Patient Safety Agency

Safer practice notice

16

Early identification of failure to
act on radiological imaging reports

Radiology (& NHS) Challenges

- Political mandates
- Financial pressures
- Staff shortages
- Improved patient care
- Better work:life balance

NHS England 'Five Year Forward View'

- By 2020... we expect that cancer will be diagnosed or excluded within 28 days of the GP referral.



**Next steps on the
NHS Five Year Forward View**

Simon Stevens
NHS England Chief Executive

NHS England 'Five Year Forward View'

- ~~By 2020... we expect that cancer will be diagnosed or excluded within 28 days of the GP referral.~~
- ...the new 28 day faster diagnosis standard which will be rolled out from April 2018



Sustainable future for diagnostic radiology: establishing network solutions for radiology services

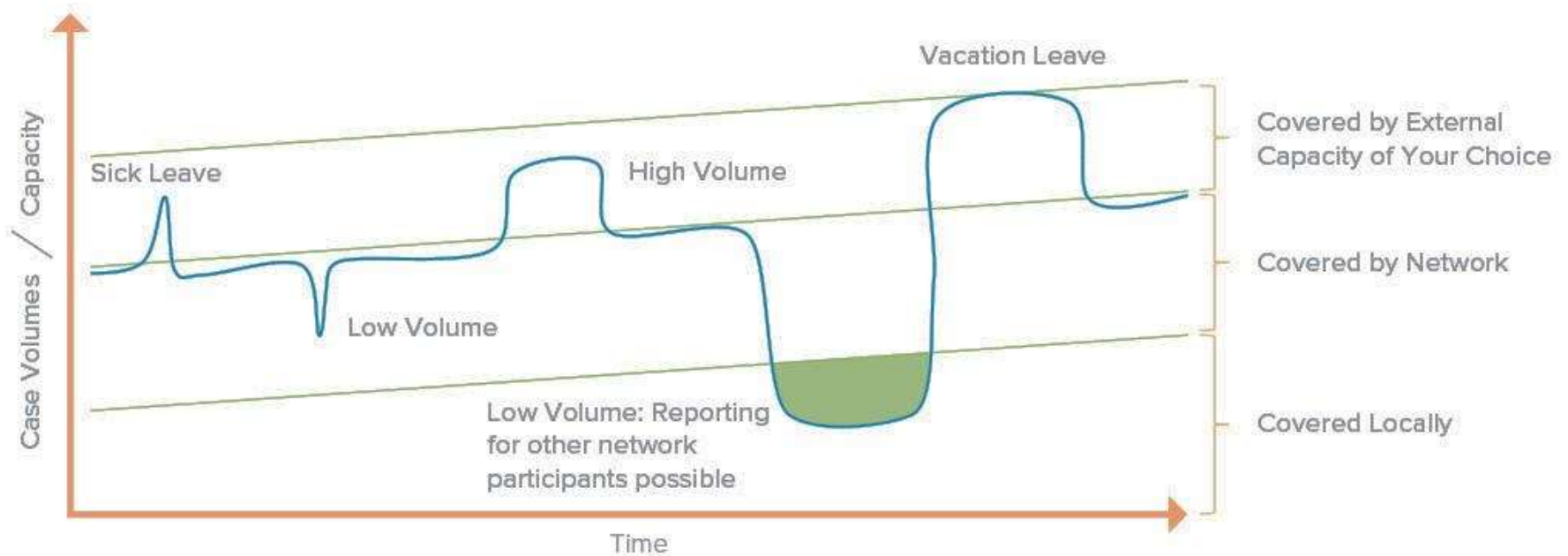
Radiology Networks

- Challenges
 - Access to non-imaging data (pathology, etc)
 - Inter-system image/report transfer
 - Significant Findings
 - Staff scheduling cross-Trust
 - Cross-site worklists
 - Staff contracts
 - Billing/invoicing/cross-charging
 - Additional reporting hardware/software
 - IT support
 - Costs

Radiology Networks

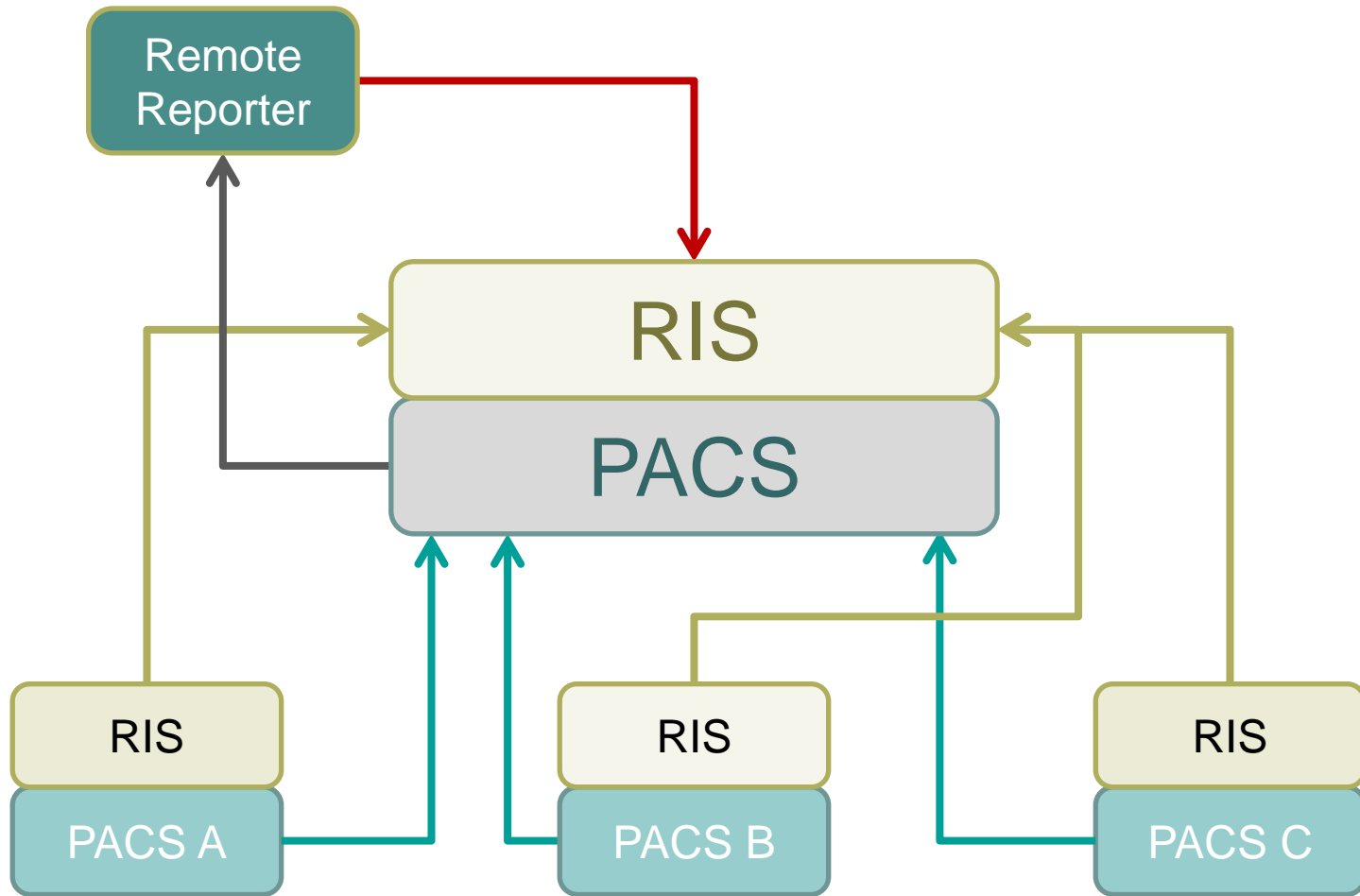
- Benefits
 - Specialist primary reporting
 - Access to specialist second opinion
 - Better support for leave/sickness cover
 - Out-of-hours reporting
 - Regional MDT meetings
 - Reporting backlog

Capacity Management

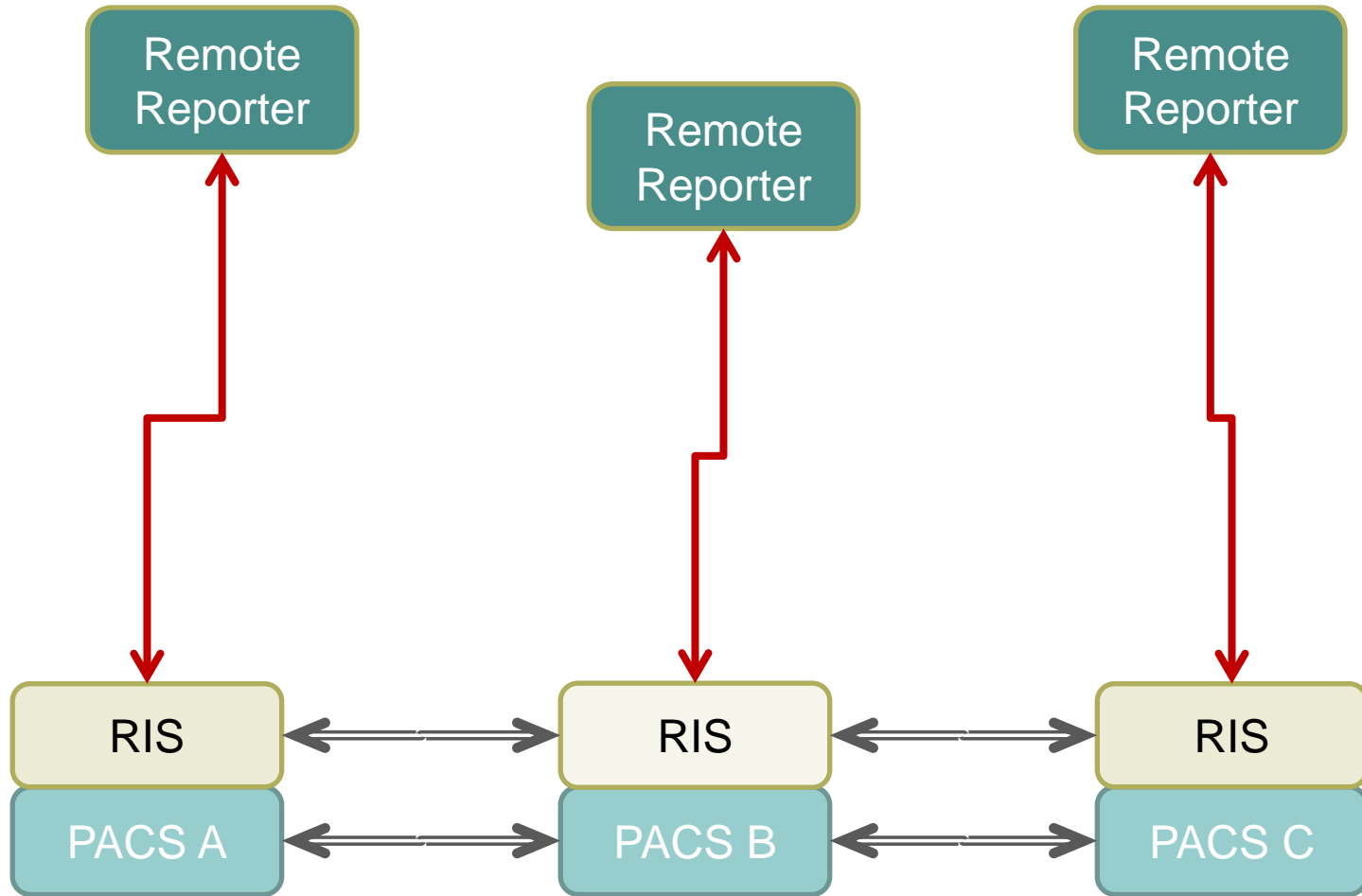


Acknowledgement: Telemedicine Clinic

Networking – Regional 3



Networking – Ideal?



Sustainability and transformation partnerships (STPs)



Code4Health
Interoperability Community

G I R F T
GETTING IT RIGHT FIRST TIME


National Information Board

NHS

**The Forward View Into Action:
Paper-free at the Point of Care
Guidance for Developing Local
Digital Roadmaps**

Getting It Right First Time

THE GIRFT PROCESS

Data, visits and reports

- Reinforce the dashboard
- Mandate collection of data
- Use data to change practice

Return visits

- Re-run GIRFT dataset
- Re-visit all units within speciality
- Meet SMT and clinicians to track deliver

Objective setting

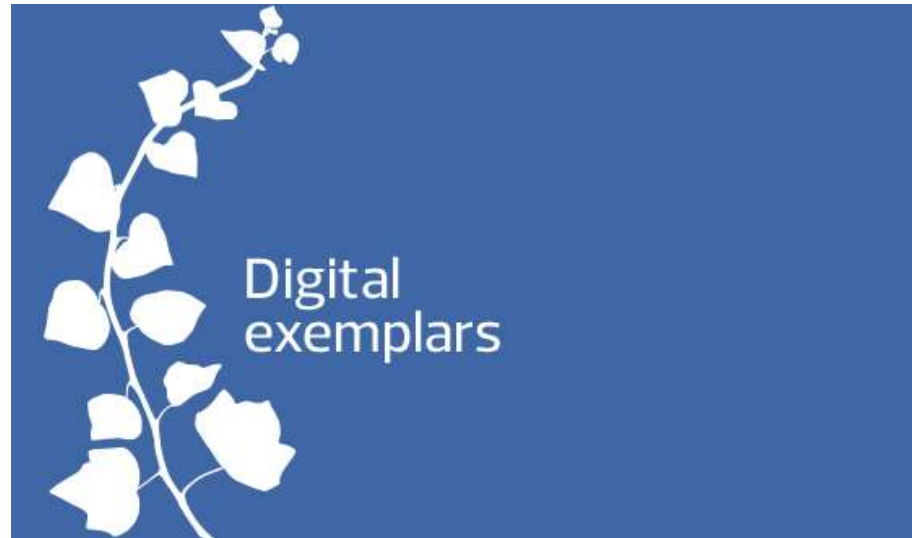
- agreeing actions for each trust
- Failure to act on data not an option

Providing support

- Supporting trusts to drive change
- Measuring implementation and productivity



Next steps on the NHS Five Year Forward View



Simon Stevens
NHS England Chief Executive

Global Digital Exemplars

- A Global Digital Exemplar is an internationally recognised NHS provider delivering exceptional care, efficiently, through the use of world-class digital technology and information.
- Exemplars will share their learning and experiences to enable other trusts to follow in their footsteps as quickly and effectively as possible.
- All Acute Global Digital Exemplars are now partnered with fast followers – trusts who will support the spread of best practice and innovation.

Conclusions

- Paper's days are numbered
- RIS/PACS must become part of an integrated digital healthcare system, including the crossing of Trust boundaries
- Radiology service provision must change to meet multiple challenges
- IT remains the bedrock of any successful radiology department