

# Scottish Radiology Transformation Programme (SRTP) Conference

#### Thursday 14th March 2019



Upload questions: www.slido.com #NSSSRTP

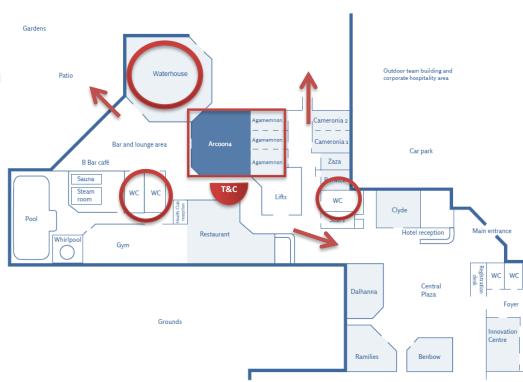
Beardmore Centre

Housekeeping

 No fire tests today
 Exits via each door

River Clyde

- Toilets circled
- Lunch behind bar







# Scottish Radiology Transformation Programme (SRTP) Conference

Thursday 14th March 2019

Jeff Ace, Chief Executive NHS Dumfries & Galloway Chair SRTP Board

# SRTP Purpose of the Day

- Update the Radiology community on the SRTP work so far
- Work on the future vision for Radiology in Scotland
- Discuss the next set of activities required for transformation in Radiology



# Scottish Radiology Transformation Programme (SRTP) Conference

Thursday 14th March 2019

Jim Cannon, Programme Director Hamish McRitchie, Medical Director SRTP, NHS NSS

# SRTP Overview of the Day

- Programme background and update
- Presenting your Vision for Radiology
- The new model for Radiology
  - Morning and afternoon workshops
- Q&A sessions
  - Slido.com #SRTP
  - or hand in written questions



09:30 - 10:00	Registration/ Coffee				
10.00 - 10.10	Welcome	Jeff Ace CEO NHS Dumfries and Galloway			
10.10 - 10.45	Update from the SRTP Team Q&A	Jim Cannon & Dr. Hamish McRitchie			
10.45 - 11.00	Radiology Strategy Update and Alms for the Day	Jim Cannon & Dr. Hamish McRitchie			
11.00 - 11.15	Coffee / comfort break				
11.15 - 12.30	Facilitated workshops				
12.30 - 13.30	Lunch				
13.30 - 14.50	Facilitated workshops				
14.50 - 15.00	Coffee / Comfort Break				
15.00 - 15.45	Q&A and next steps				
15:45	Closing Remarks	•			

09.30-16.00 Thursday 14 March, 2019

# SRTP Programme Background

- The current model of Radiology services was recognised to be unsustainable
  - Workforce
  - Generalist and specialist services
  - Financial model





- Shared Services Programme
- Why Radiology? Sustainability & resilience
- Engagement with Radiology community
- Development of Initial Agreement and a model for radiology
- Business case development and procurement

#### SRTP

#### Rationale

#### Current service is unsustainable

#### The Vision

#### A collegiate solution

Ability for radiology staff to work across Scotland

Maximising role utilisation, and flexibility to work across traditional Health Board boundaries

#### Agreed nationally accepted:

- Clinical governance
- QA

#### Integrated, compatible IT Systems supporting:

- data sets and definitions
- patient pathways and protocols reduced variation and demand management
- workforce optimisation, e.g. radiography reporting, radiography assistant
- transfer of reporting
- -de-coupling of image capture and reporting
- separation of scheduled and unscheduled activity for both image acquisition and reporting
- Cross boundary image requesting
- Image acquisition and sharing delivered by re-procurement of national PACS
- Cross boundary image reporting
- Reducing adverse / unwanted variation

#### Desired Outcomes

Ensure continuing good outcomes for patients Sustainable, equitable, access to robust, timely services

Maintain local image acquisition

Local accessibility to expert radiology opinion

Equity of access

Local Sustainability of service

Increased resilience of Service

Objectives

Costavoidance Costsavings

local services

clinicians

Virtual rationalisation with minimal impact to patients and staff

Benefits

Cross boundary reporting

hours reporting

equipment

radiology reporting

service change

reporting of images

Improved waiting time performance

Co-ordinated approach to out of hours

Support for remote and rural boards in

National approach to radiology reporting

Ability to identify demand, capacity and

Reduced shortfall in reporting capacity

Achieving the recognised standard for

Improved guality of service planning by

Flexibility to adapt to emerging clinical

coupling of scheduled/unscheduled

Increased throughput and guality due to de-

Sustain image acquisition close to patient

Sustain expert radiology opinion for local

Provide specialised radiology opinion to

availability of comparable data

More effective use of the workforce

#### Constraints/Dependencies

Agreed data sets

Agreed data definitions

National RIS functionality (requesting and reporting)

Ability to report cross boundary

- Production of nationally agreed:
- HR policy
- clinical governance model
- QA model
- Integrated, compatible IT systems
- patient pathways/protocols

#### Risks

Unsustainable radiology services Mismatch between demand and capacity

Inability to meet waiting times

Increased costs of private sector for reporting

Recruitment, retention issues

Delayed diagnosis leading to poor patient outcomes

Re-procurement of PACS

Costs

- circa£20m

- capital and revenue without SS changes

Additional PACS functionality to support RIS reporting only

- circa£2.5m

Datamart to enable service planning - Circa £250,000

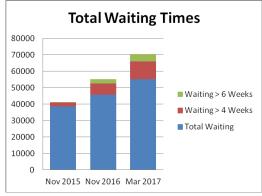
NSS Support Costs - Programme Team - SME

Design of QA, HR & clinical governance models (costs to be established)

National Model for Diagnostic Radiology

Constraints/Dependencies/

Risks



**Deteriorating patient access** Nov 2015 to Mar 2017: A 1,288% increase

#### Uncontrolled unbudgeted costs

Locum and agency 2015/16 to 2016/17 half year data: 9% increase Outsourcing and additional payments 13/14 to 14/15 increase by 50%: £1.75m increase. Consultant Radiologist Vacancies<sup>1</sup> and Staff in Post as a Percentage of Establishment<sup>2</sup> as at 30th September 2015 Consultant Radiologist Vacancies<sup>1</sup> and Staff in Post as a Percentage of Establishment<sup>2</sup> as at 30th September 2016



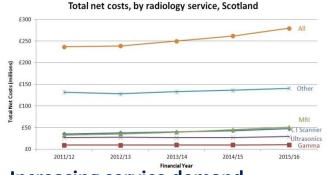
Vacancies as a Percentage of Establishment
 Staff in Post as a Percentage of Establishment

Vacancies as a Percentage of Establishment
 Staff in Post as a Percentage of Establishment

Source: ISD Socialind Validonal Statistics Publication - 6th December 2016 1. Avacancy is defined as a post which has been cleared for advint after being through the redeployment process (internal advert) and remains a vacancy until ain individual starts in the post. 2. Establishment is calculated by adding the number of starf in post to the number of vacant posts.

#### **Escalating workforce shortages**

Sep 15 to Sep 16: Increase from 8.3% to 11.5% Sep 16 to Mar 17: 13%: 33.4 WTE



#### Increasing service demand

Total net costs: An increase of £36m or 14.75% from 2012 - 2016

- Full business case
  - Data
  - Cross-boundary reporting
  - Workforce
- Business case approved September 2017
- Purpose to improve sustainability and resilience
- Additional benefit to avoid cost

#### Business case developed



Visioning

Engagement

Initial Agreement

Business Case Development for CEs

- Procurement
- Business Case Development
- Data
- Cross-Boundary Reporting
- Workforce



Chief Executives Approval & Commissioning

> Business Case Approved Sep '17
> SRTP Established within NSS

• Additional funding (beyond initial business case)

- Additional radiologist trainees

- Reporting radiographer funding
- Additional workstations
- Clinical Decision Support software pilot

## SRTP Programme update: SRTP Workstreams

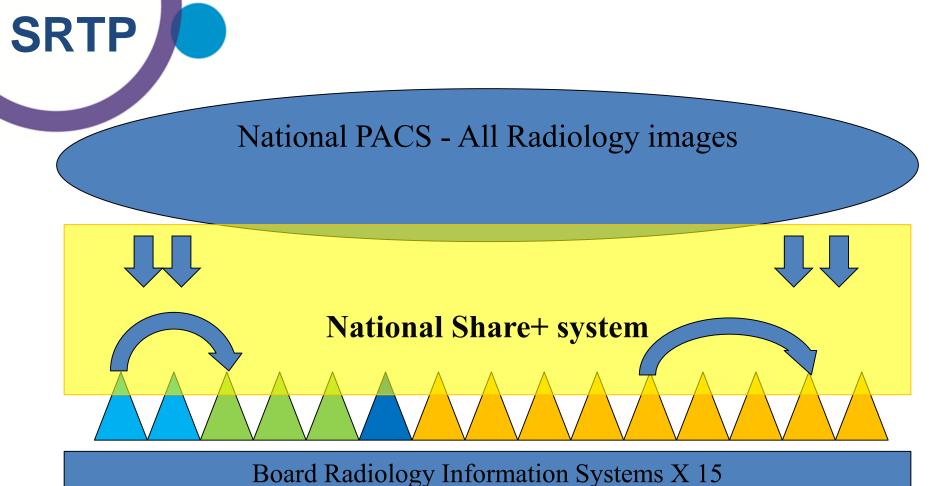
- National IT connectivity
- National data collection & analysis
- Workforce planning tool
- International recruitment
- Radiologist job planning
- Reporting Radiographer framework
- Safe Working Framework

- Advanced Practice
  - Reporting Radiographer pilot
  - Sonography
  - Breast AP
- National "Bank" pilot
- Clinical Decision Support pilot
- Home workstation pilot

## SRTP Programme update: National IT Connectivity

- Soliton's Share+ solution procured Q1 2018
  - Central servers
  - Share+ enables cross-border reporting
  - Interfaces with existing RISs
- CSH & HSS interfaces
  - Procured: Summer 2018
  - Developed: Autumn 2018
  - New interfaces for CSH 11 and TrakCare funded

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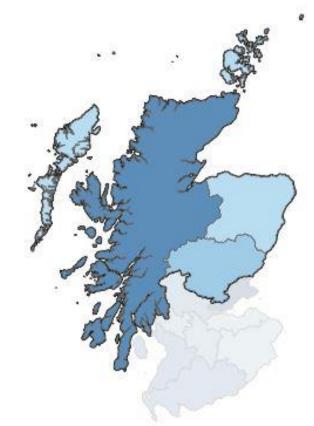
Reports / Clinical Info / Demographics / App'ts

## SRTP Programme update: IT Connectivity: North Region



- Regional implementation model
  - Regional implementation team
  - Regional implementation groups
  - Workflow managers
    - roadshows, support & training
  - Implementation:

NHS Highland Oban Raigmore NHS Tayside NHS Grampian NHS Shetland NHS Orkney NHS Western Isles \*\*



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## SRTP Programme update: IT Connectivity: West Region

- West regional planning group established
- Kick off meetings held with each board
- New interface with Golden Jubilee
  - Includes Western Isles
- Implemented by May 2019



### SRTP Programme update: IT Connectivity: East Region

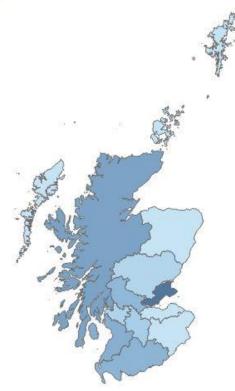
- Planning underway
- Interfaces to Trakcare in progress for NHS Lothian

# SRTP Programme update: NRIIP

- National Radiology Information & Intelligence
   Platform (NRIIP):
  - •Data sets agreed
  - Dashboards developed
  - •Test data from Boards
  - Dashboards released

- •Data mart in development
- •Data extraction mechanism
- •Further dashboards
- Ongoing analytical support

#### Programme update: NRIIP Dashboards





#### NRIIP Phase 1 - Level 1 -Examinations Carried Out



#### NRIP Allied Health Professionals Workforce Information



#### NRIIP Medical & Dental Workforce Information

All Costs	Staff Costs	Map View
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#### NRIIP Costs Book Information

#### **#NSSSRTP**

SRTP

### SRTP Programme update: Supplementary Staffing Model

- New in-sourcing model for reporters to do additional sessions
- Capacity within existing NHS staff to undertake additional work for the NHS
  - Early career Radiology Consultants
  - Retired Radiology Consultants
  - "Other" Radiologists

### SRTP Programme update: Supplementary Staffing Model

- Requires an employment model
- Requires a payment model
- Options developed:
  - Employment models
  - Radiologist payment models

## SRTP Programme update: Supplementary Staffing Model

- Proposals:
  - Employment: Radiology Bank
  - Employment: Host Board
  - Payment: Bank Rate Radiologists
  - Payment for RR pilot: Agenda for Change Radiographers
- In development with senior HR / Management groups



### SRTP Programme update: Governance & Quality Assurance

- Safe Working Framework developed in consultation
   with clinicians with wide engagement
  - Workflow Manual
  - CLO Legal Statement
  - Adverse Events Process
  - Information Governance
  - System Training
  - Service management and IT support
  - Resilience & Disaster Recovery
- PBBP and PIA developed to ensure appropriate
   #NS information governance protocols met



#### SRTP Programme update: Scottish National Radiology Reporting Service (SNRRS)

- Reporters performing cross-boundary work
- Workflow managers
- Reporting Radiologists and Reporting Radiographers
  - 1. RR pilot plain film only
  - 2. Home workstation pilot
  - 3. Support existing cross boundary arrangements
  - 4. National Bank

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# SRTP Programme update: Advanced Practice (AP)

- Sonography
- Breast AP
- Reporting Radiographers (RR)

## SRTP Programme update: Advanced Practice

- Sonography / Breast AP
  - Potential Scope of Practice
  - Workforce numbers, their skills and their location geographically
  - Understand the current education provision
  - Current and potential future activity
- Gap analysis
- Options / recommendations for future

## SRTP Programme update: Reporting Radiographer (RR) Pilot

- RR pilot trials SNRRS and associated governance arrangements by
  - Testing the new IT Connectivity system (Share+)
  - Testing the business rules and workflows
  - Piloting the Safe Working Framework

• Go Live - 15<sup>th</sup> March 2019 – 9<sup>th</sup> August 2019

## SRTP Programme update: Reporting Radiographer Pilot

- The Pilot will be used as a Proof of Concept to:
  - Establish if a radiographer led plain film reporting service could better utilise the existing workforce
  - Test the use of consultant radiographer skills across boundaries
  - Quantify any increase in the radiography workforce that may be required to sustain the service in the future
- The Pilot will be evaluated on completion with follow on recommendations made

#### SRTP Programme update: International Recruitment

Agreed with RCR to undertake international recruitment to vacant osts at a national level.

#### PROCESS

- Identify vacant posts
- Job descriptions
- Advertising
- •Workforce Reference Group established International Recruitment subgroup
- Appointment panel
- Telephone interviews
- •Candidate checking and vetting
- Long-listing
- Short-listing
- Interview
- Appointment
- Consultant posts
- Non-Consultant posts
- On-boarded for subsequent appointment
- Learning lessons for on-going national recruitment

## SRTP Programme update: International Recruitment

- Lessons Learned
  - National processes worked:
    - Advertising
    - Selection
    - Appointment
    - Matching candidates to jobs
  - Recruitment from overseas outside of the EU difficult due to employment constraints
  - Processes potentially usable on an ongoing basis from within the UK

### SRTP Programme update: Workforce Planning

- Workforce modelling tool developed
  - Collaborating with Scottish Government Workforce Planning colleagues
- Uses a demand-led model
- Enables scenario planning

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	8.1	335687	83922	ur TC

CONSULTANT RADIOLOGIST (CR) REPORTING TIME AVAILABLE

TOTAL WORKING

TIME

1607

HOURS

RCR GUIDELINE

50%

804

MODELLED

40%

643

AVAILABILIT

	SESSIONS		402		20	)1	161
	% TIME A	DDITIONA	L CONSULTAN	TS SPEND F	REPOR	TING	80%
*Procedura	l = not in calc		N	ЛОDELLIN	NG SE	CTION	
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ur)	Mammography		0%	6391	9	10653	2663
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ur)	Nuclear Medicine		0%	5022	7	8371	2093
our)	DEXA		0%	3256	4	1357	339
our)	Dental		0%	2944	8	1227	307
ur)	Foreign Films		0%	9		2	1
TOTAL AT	ENDANCES						

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## SRTP Programme update: Clinical Decision Support



"We will expand use of knowledge mobilisation and decision support tools and services to support frontline practice, selfmanagement and shared decision-making." **Digital Health and Care Strategy** 

"Realising knowledge for a realistic era" Practising Realistic Medicine



Decision support encourages: "Right test for the right patient"

# SRTP Programme update: Employment Frameworks

- Radiologist Consultant Job Design Best Practice
- National Reporting Radiographer framework

### SRTP Programme update: Home workstation pilot

- Evidence to support deployment of new workstations
  - Short small scale test
  - Governance
  - IT
  - Benefit vs. Cost ?



### **The New Model for Radiology**

## SRTP Future Look

- Objective: To develop the next business case for the future of Radiology beyond this programme
- Story so far:
  - SCIN Strategy Day November 2017
  - Visioning Workshop March 2018 Stirling
  - SRTP Conference June 2018
  - Local Board & Regional Engagement
  - Executive Group Meetings
  - "Art of the Possible" from the across the UK

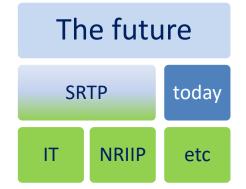


# SRTP The New Model for Radiology

## "A world leading, user focussed service that continually improves the health and wellbeing of the people of Scotland"

## SRTP The New Model for Radiology

- Transformation of Radiology was accepted as a 10 year, multi-phase process
  - SRTP has delivered building blocks
  - Future phases will be needed to realise the benefits
- Opportunity to review and revalidate those benefits and strategic aims

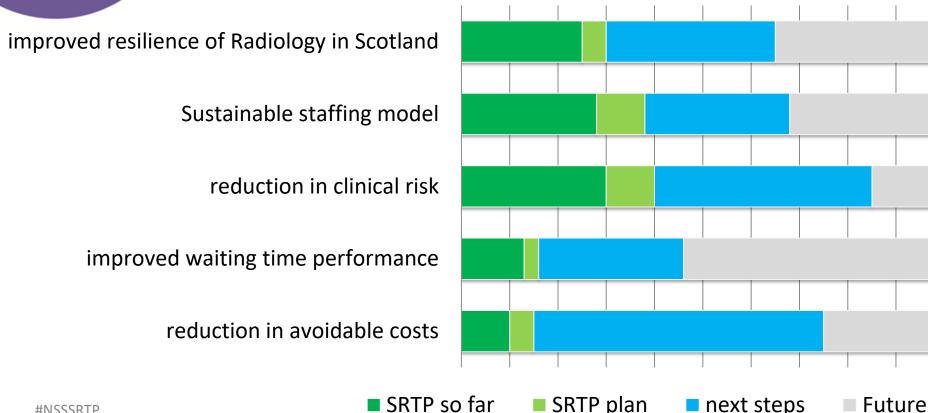


### SRTP Validating future concepts: Benefits

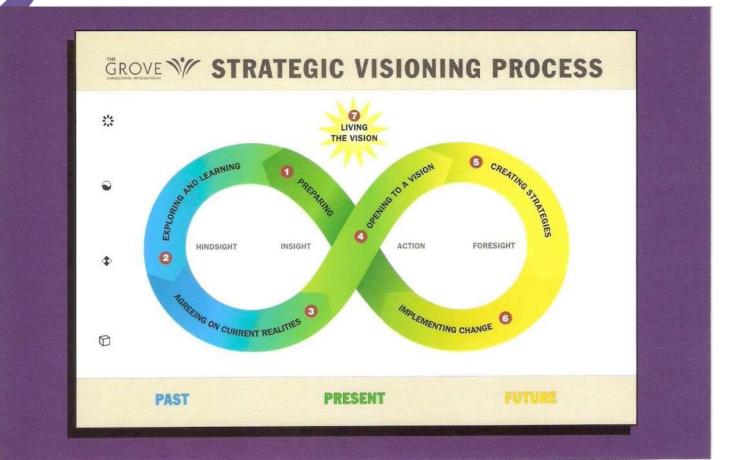
- Benefit themes needed to drive future change:
  - Improved waiting time performance
  - Improved resilience of Radiology in Scotland
  - Sustainable staffing model
  - Avoidance of unnecessary costs
  - Reduction in clinical risk

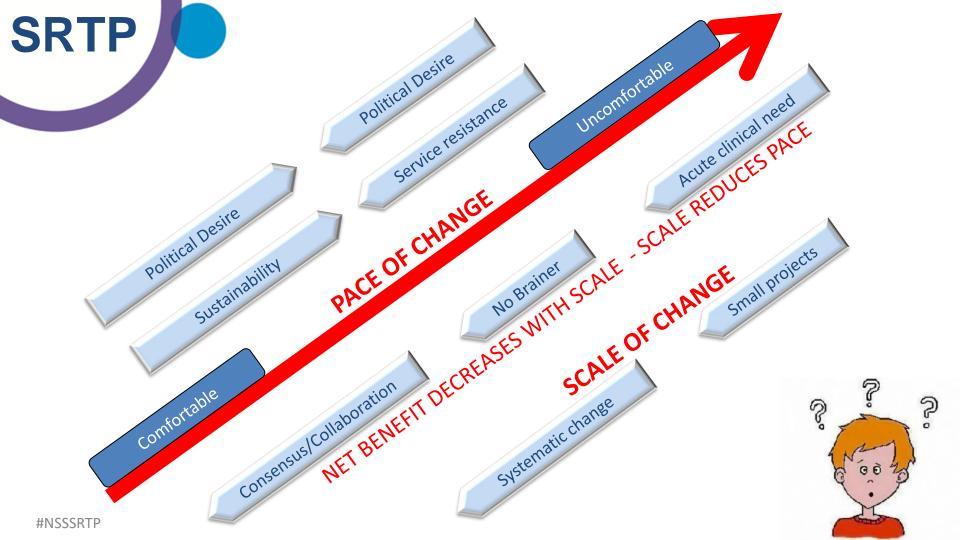
1	✓ - SRTP complete		National Model for Diagnostic Radiology				
	Rationale	O - SRT	P ta	rget		-	0,
	Current service is unsustainable	e × - futu	re		Benefits	Constraints/Dependencies/ Risks	Costs
	The Vision						
	A collegiate solution		√ ×	Cross bounda Improved wait	ry reporting ing time performance	Constraints/Dependencies	Re-procurement of PACS - circa £20m
√ ×	Ability for radiology staff to work across Scotland	ff to work across		Co-ordinated approach to out of hours Support for remote and rural boards in hours reporting		Agreed data sets Agreed data definitions	<ul> <li>capital and revenue without SS changes</li> </ul>
Ĩ	boundaries	Objectives	×	National appro	9 bach to radiology reporting use of the workforce	National RIS functionality (requesting and reporting)	Additional PACS
0	Agreed nationally accepted:	Maintain local image acquisition	√		fy demand, capacity and	Ability to report cross boundary Production of nationally agreed: - HR policy	functionality to support RIS reporting only
	- QA	Local	√ √	Achieving the	tfall in reporting capacity recognised standard for	<ul> <li>- FIR policy</li> <li>- clinical governance model</li> <li>- QA model</li> </ul>	- circa£2.5m
	Integrated, compatible IT Systems supporting:	accessibility to expert radiology	x		ity of service planning by com parable data	<ul> <li>Integrated, compatible IT systems</li> <li>patient pathways/protocols</li> </ul>	Datamart to enable service planning
~	<ul> <li>patient pathways and protocols - reduced variation and demand</li> </ul>	opinion Equity of	0	service chang		Risks	- Circa £250,000
~	<ul> <li>workforce optimisation, e.g. radiography reporting, radiography assistant</li> </ul>	access	~		ughput and quality due to de- neduled unscheduled lages	Unsustainable radiology services Mismatch between demand and	NSS Support Costs - Programme Team
s ~	- transfer of reporting	Local Sustainability of service	✓ ✓	-	acquisition close to patient tradiology opinion for local	capacity Inability to meet waiting times	- SME
~	- separation of scheduled and unscheduled activity for both image	Increased resilience of	×		alised radiology opinion to	Increased costs of private sector for reporting Recruitment, retention issues	Design of QA, HR & clinical governance
0		Service	x x	Costavoidano Costsavings	æ	Delayed diagnosis leading to poor	models (costs to be established)
1	byre-procurement of national PACS     Cross boundary image reporting		x	Virtual rational	lisation with minimal impact to	patient outcomes	,
	Reducing adverse / unwanted variation			patients and st	an		

#### **Trajectory of benefit delivery** SRTP



## SRTP Developing a future strategy







## Comfort break & coffee 15 minutes



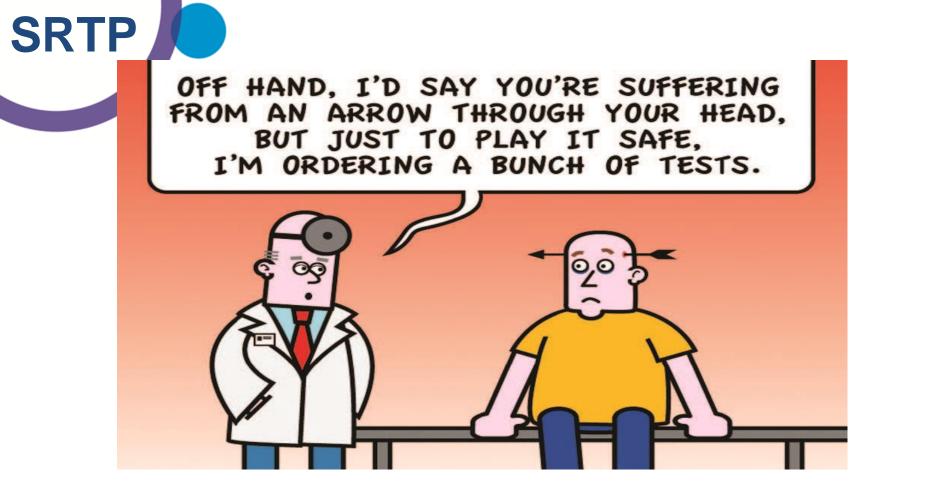
## Clinical Decision Support (CDS)

**Presentation and Demonstration** 

## Clinical Decision Support (CDS) Project

SRTP

#### Dr Raj Burgul, Consultant Radiologist & Chair of CDS Steering Group





### Aims of pilot

Assess the ability of the software to optimise demand and to increase the appropriateness of referral requests.

Establish the role such software could play in modifying individual referrer behaviour and analysing referral patterns on a macro level.

Investigate deployment of more complex interactive clinical guidance algorithms.

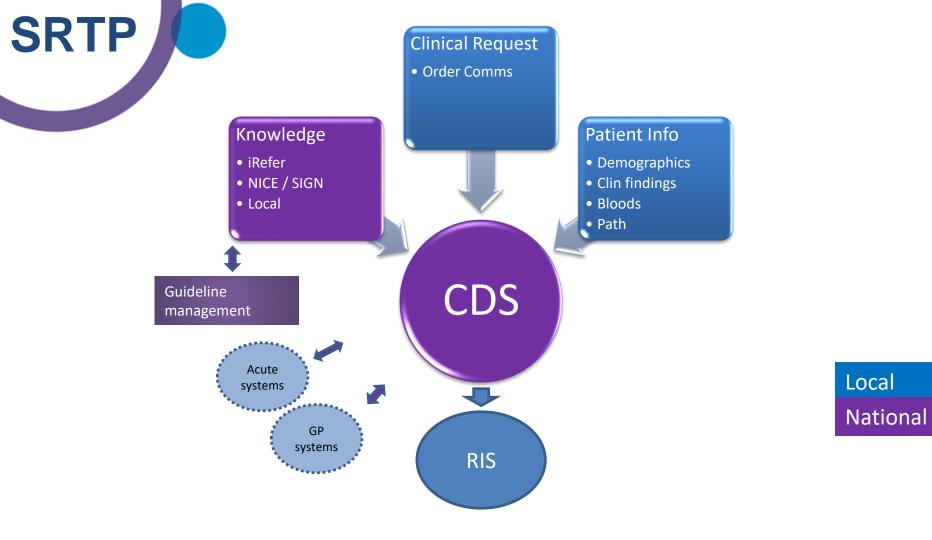


### **CDS Project Update**

- Collaboration with Scottish Government.
- Project Governance and CDS Steering Group established.
- Cambio agreed supplier prototype developed.
- Business Specifications developed.
- Integration discussions with InterSystems and CliniSys.



• We are working with Cambio, 3<sup>rd</sup> party order comms suppliers and local sites (NHS Greater Glasgow & Clyde, Ayrshire & Arran, NHS Tayside) to understand where integration is technically possible and viable to run the pilot.





## Where are we going?

#### Proposing future projects for transforming Radiology

### SRTP Where are we going? Breakout Session 1

- Draft blueprint in your delegate packs
- Illustrates the "future state" for Radiology
- A number of proposed projects to deliver the future state identified

### SRTP Where are we going? Breakout Session 1

- Draft set of projects on your tables
  - Identify benefits, challenges, timescales
  - Are we missing any projects?
  - Pick your preferred project(s)
- Facilitator at each table
  - Capturing comments, queries and suggestions on the poster
- Jim and Hamish to feedback to the room

### SRTP Where are we going? Breakout Session 1

Name of Project	Deliverables	Name of Project	Deliverables
Reporting Bank	Employment and payment model for national cross-boundary reporting outside of contracted sessions, as an alternative to outsourcing	Reporting Service	Organised reporting; e.g. reporting in date order / urgency at a national level
Out of Hours Reporting Service	On call work – reporting images captured out of hours needing reports before the morning at a national level	Radiology Information & Intelligence Service	Support, management and wraparound service for the data platform
National Recruitment & Matching	Using learning from international recruitment programme to recruit on an ongoing basis for NHSS from the UK as well as internationally. Matching consultants to vacancies as they arise.	Sharing Service	Management of workflow through the IT platform – currently only funded to 2020
National Clinical Decision Support Software	National solution for a Clinical Decision Support model, inc. software and referrer education.	National Reporting IT Platform	Soliton contract – what should happen at end of funding
National Vetting IT Platform	Important for specialty networks – vetting done somewhere other than image capture site	PACS Reprocurement	Timed to link to Share+ contract dates. Could include national RIS.
Consultant Radiologist Job Design / Best Practice	Implement CR best practice across Scotland.	Advanced Practice	Collaborative approach to learning & development. Combined multi- disciplinary training approach.
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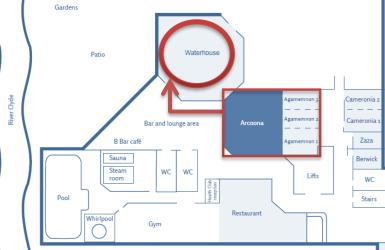


#### Slido.com #SRTP hand in written questions



## Lunch





## SRTP 4 nations – feedback Northern Ireland

- Establishing Imaging Board
  - Review
  - Strategic Framework for Imaging Services
  - Imaging Board
    - Strategic Planning
    - Workforce Planning / recruitment
    - Infrastructure
    - Separate from operational delivery

## SRTP 4 nations – feedback England

- National Imaging Optimisation Programme Delivery Board
  - Target Operating Model
  - Oversee implementation
  - Advice, input to reviews, modelling, KPI's, share best practise
  - Reports into NHS England / NHS Improvement

## SRTP 4 nations – feedback Wales

- Imaging Taskforce Ministerial statement of intent
- National Imaging Network Strategy Board
   "Delegated Authority within defined parameters"
- 8 Key areas

Public Involvement & Engagement

Equipment

Services

**Research & Innovation** 

Workforce Development Quality Informatics & Information (Inc. Performance) Governance

Initial focus – Establish "network" & Imaging Academy



## How will we get there?

Who / How

The Options available

## SRTP How will we get there? Breakout Session 2

- How could the prioritised sets of projects be delivered?
- Who could plan the projects?
- Who could implement the projects?
- Who could own the project outputs?
- Who could fund the projects?

## SRTP How will we get there? Breakout Session 2

- Prioritised projects from Breakout Session 1
- Facilitator at each table to capture comments, queries and suggestions
- Jim and Hamish to feedback to the room

## SRTP How will we get there? Breakout Session 2

- What mechanism will we use to achieve transformation?
- Suggestions on a postcard....
  - Who?
  - How?



## Comfort break & coffee 10 minutes



## Next steps

## SRTP Next Steps Reference group

- To support Business Case Development
- Reports to NCBOG
  - Aims
    - Scoping of projects
    - Validating benefits
    - Determining cost, effort, risks

## SRTP Next Steps Business Case Development

**Draft Proposals** 

- Reference Group to be established
- Financial modelling of benefits
- Options to be developed

Further engagement



- Clinical community
- NHS / SG Governance groups

_	

Business Case Process

- Development of Business Case options
- Presented to Chief Executives
- Autumn 2019





#### Slido.com #SRTP All questions recorded and will be taken away



## Thank you

#### NSS.S.R.T.P@nhs.net

A feedback questionnaire will be sent to delegates