

Radiology QI ICT System Overview

Brian Dunne

RQI ICT Project Manager, Office of the CIO

16-Jun-2015

Delivering eHealth Ireland



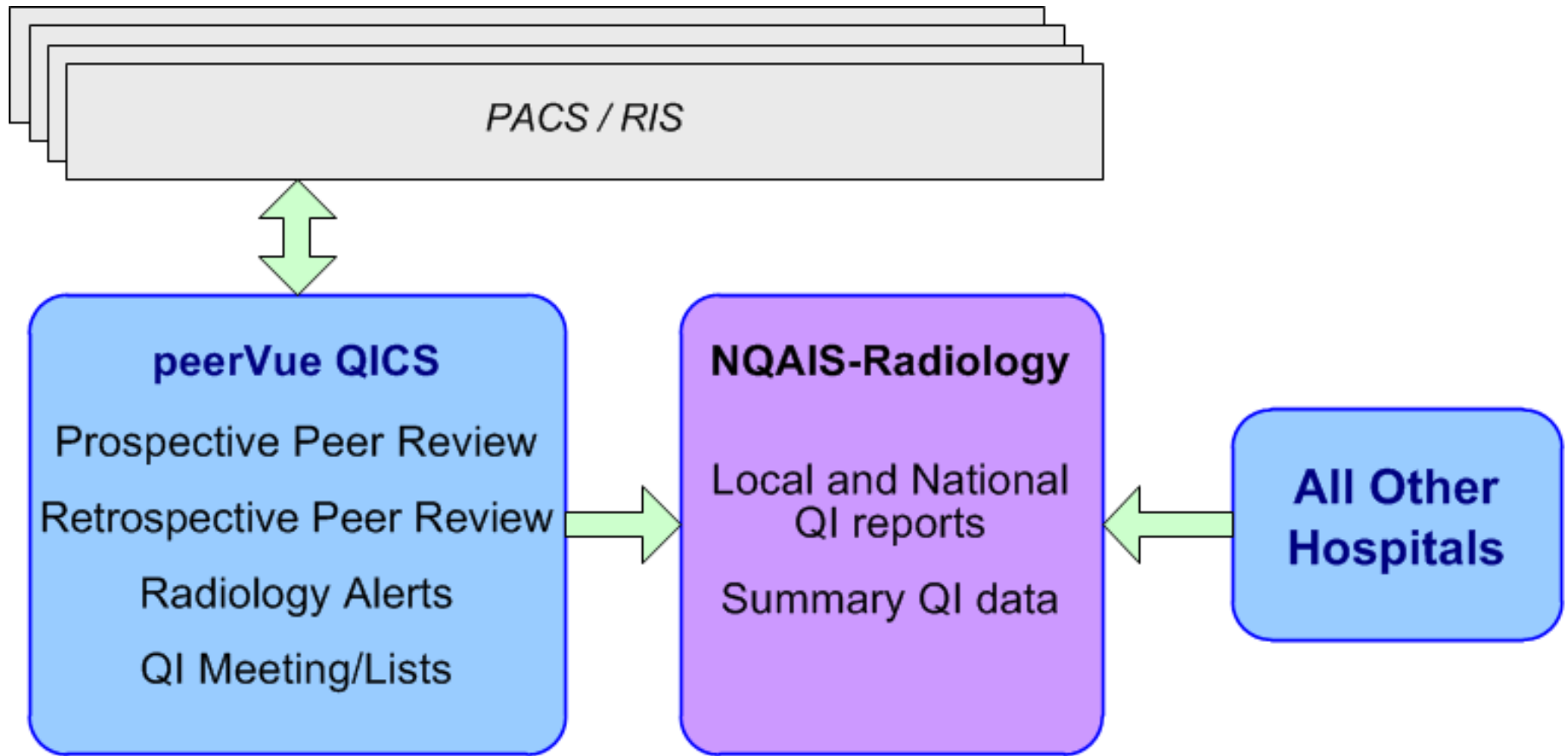
Office of the Chief Information Officer



Timeline

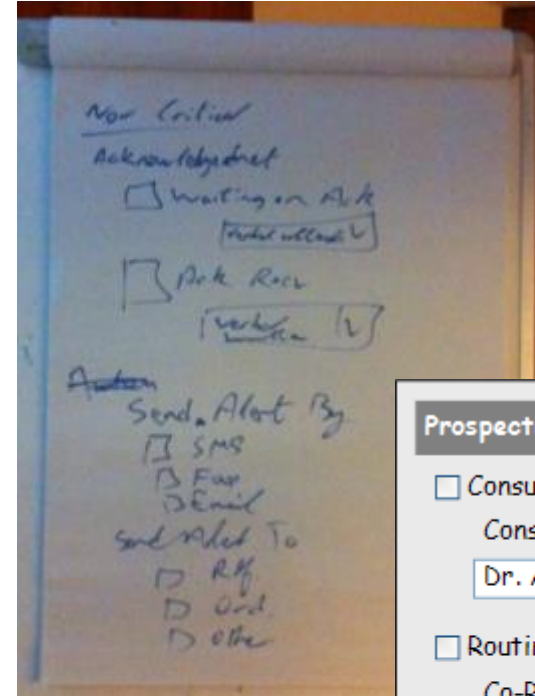
- 2010
 - Faculty of Radiologists established the *National Quality Improvement Programme in Radiology*
- 2011
 - Requirements specification
- 2012
 - Public procurement (EU tender)
- Sep 2013
 - Contract awarded for McKesson/peerVue
- Jun 2014
 - First site live – University Hospital Waterford
- Jun 2015
 - 30 sites live

Radiology QI ICT Solution



QI Workflows

- QI Guidelines / Reqs Spec / Tender
- QI Workflows
 - Process descriptions
 - Mock-ups
 - peerVue QA panels
- Workshops
 - Project team
 - Radiology QI Working Group
 - Regional (4)



Prospective Review

☐ Consultation complete
 Consulted Radiologist

Dr. Anthony Ryan

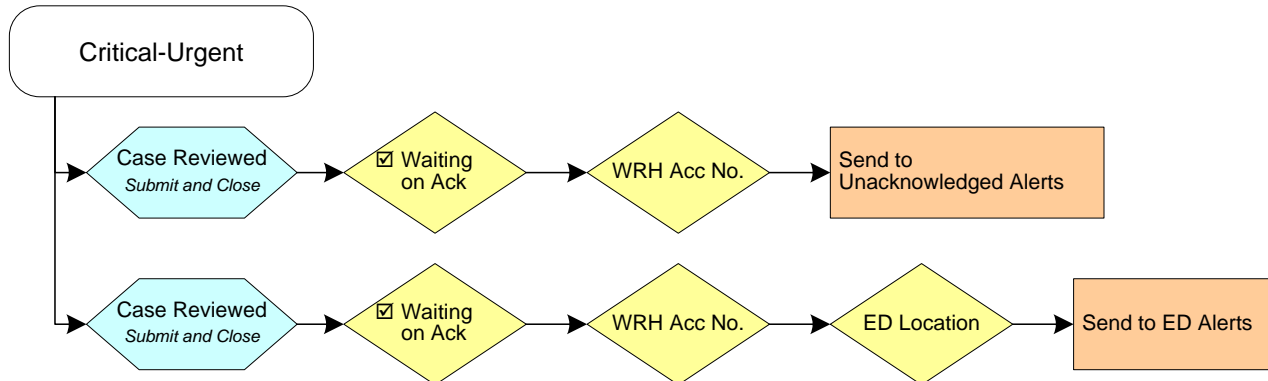
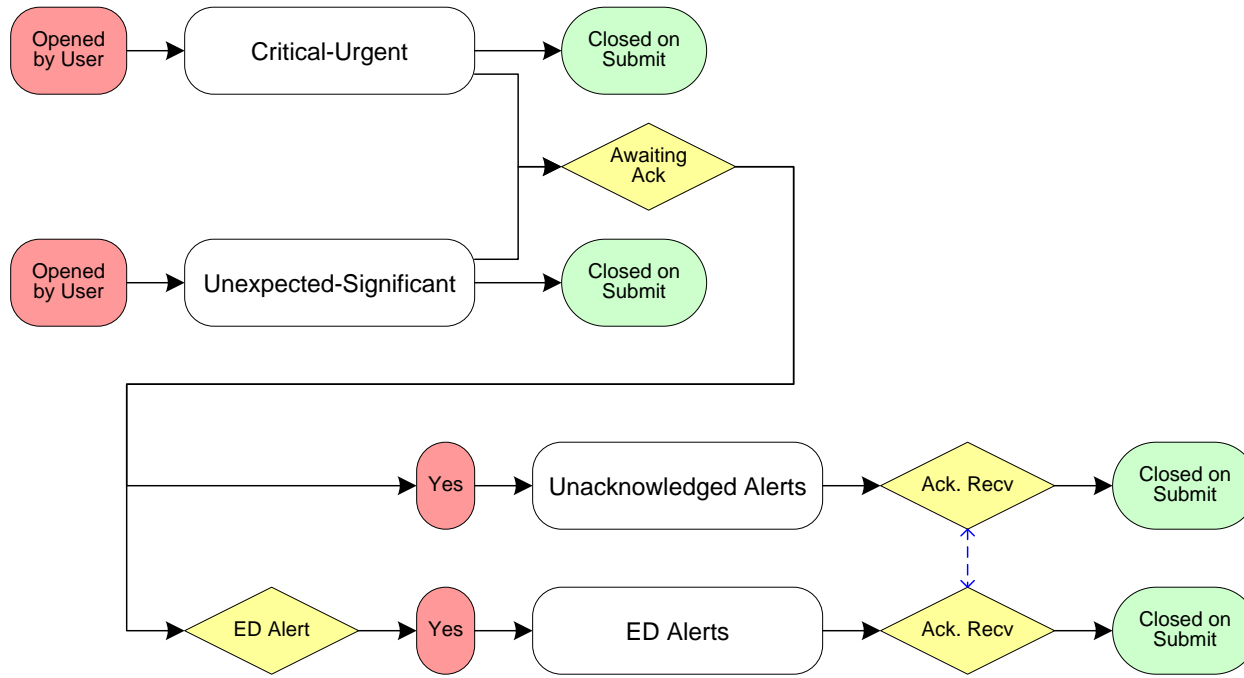
☐ Routine double-read complete
 Co-Reader

Dr. Anthony Ryan

Communication

Submit & Close

peerVue Space Design



peerVue, Inc. - Windows Internet Explorer

peerVue QICS

Critical-Urgent

Urgency Level

- ☐ Critical
- ☐ Urgent

Acknowledgement

- ☒ Waiting on Acknowledgement
- ☐ Acknowledgement Received

Escalation

- ☐ Escalated Communication

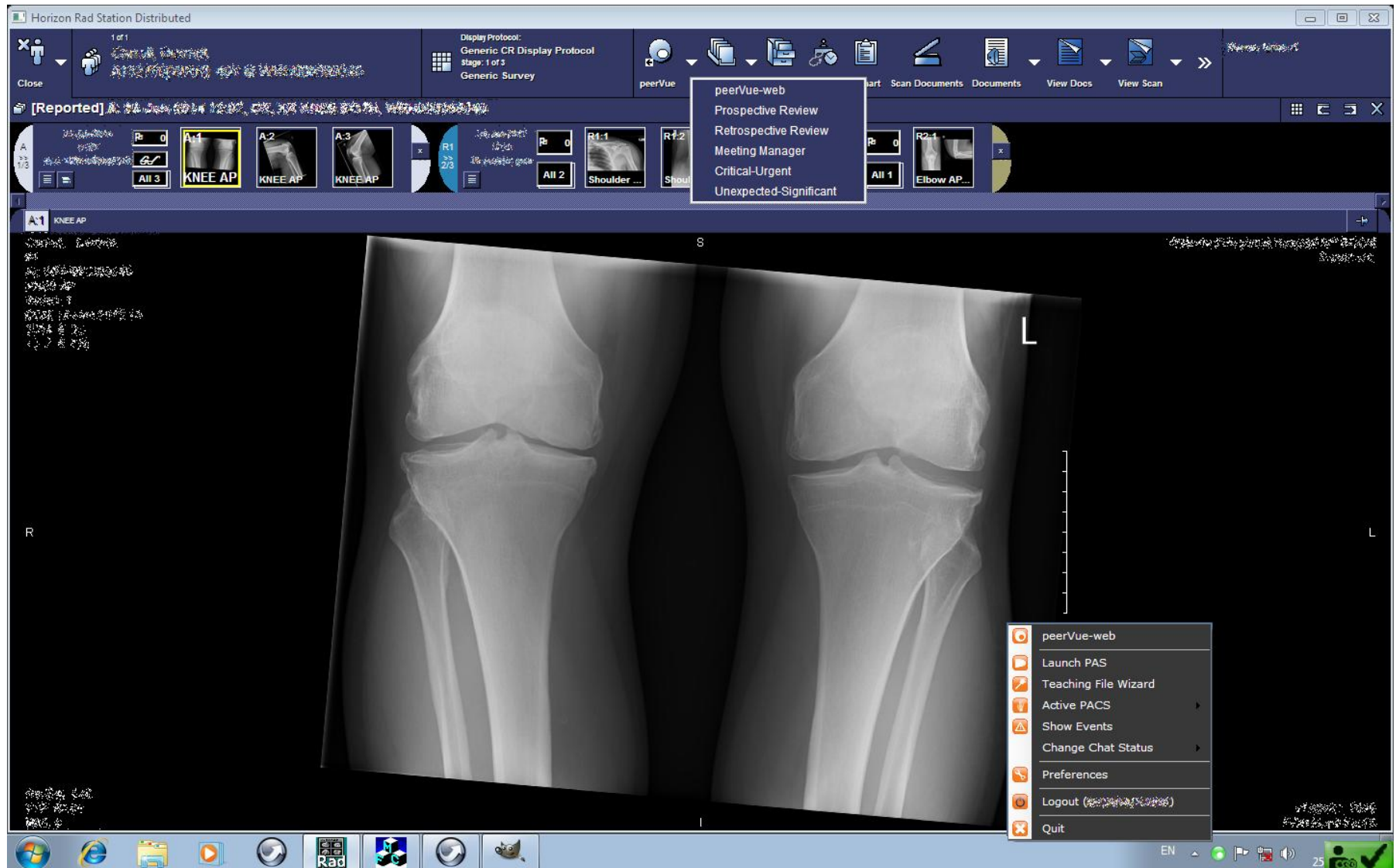
Review Summary

Accession # [text]

Submit & Close

Local or
National

NIMIS and peerVue





7



8



Radiology Alert 1

Horizon Rad Station Distributed

1 of 1

Close

Display Protocol:
Generic CR Display Protocol
Stage: 1 of 3
Generic Survey

peerVue Studies Find RIS e.chart Scan Documents Documents

[Reported]

A.1 KNEE AP A.2 KNEE AP A.3 KNEE AP R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15 R16 R17 R18 R19 R20 R21 R22 R23 R24 R25 R26 R27 R28 R29 R30 R31 R32 R33 R34 R35 R36 R37 R38 R39 R40 R41 R42 R43 R44 R45 R46 R47 R48 R49 R50 R51 R52 R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R88 R89 R90 R91 R92 R93 R94 R95 R96 R97 R98 R99 R100

A.1 KNEE AP

R

S

I

peerVue, Inc. - Windows Internet Explorer

peerVue QICS

Critical-Urgent

Urgency Level

☐ Critical

☐ Urgent

Acknowledgement

☒ Waiting on Acknowledgement

Comment

☐ Acknowledgement Received

Escalation

☐ Escalated Communication

Review Summary

Accession #

Submit & Close

Current User: BRIAN A DUNNE

Patient Name

MRN

Patient DOB

Patient Sex

M

Facility

Patient Class



Radiology Alerts 2

peerVue

<< < Viewing 3 of 4 > >>

WRH Unacknowledged Alerts

Acknowledgement

☒ Waiting on Acknowledgement

Comment

☐ Acknowledgement Received

Send SMS (if available)

☐ Attending Consultant (SMS)

☐ Ordering Physician (SMS)

Send Email (if available)

☐ Attending Consultant (Email)

☐ Ordering Physician (Email)

Send Fax (if available)

☐ Attending Consultant (Fax)

☐ Ordering Physician (Fax)

Escalation

☐ Escalated Communication

Review Summary

Sort Review By

Review Date

25/06/2014 09:00:41

Space: WRH Unacknowledged Alerts

Reviewer: [User]

Review: Waiting on Acknowledgement

Comment: emailed [User] on 25/06/2014

25/06/2014 16:40:54

Space: Unexpected-Significant

Reviewer: [User]

Review: Waiting on Acknowledgement

Spaces Business Intelligence

Current User [User] My Profile Log Out

Worklist Filtering

Space: WRH Unacknowledged Alerts Unspecified Date Range Search Criteria... Search

Case Status: Review Pending

Space Worklist

☒ View in PACS ☐ Review case Auto-refresh Off

| Select | Status | Modality | Space Name | Date Created | Patient Name | MRN | Accession # | Study Description | Study date |
|-------------------------------------|--------|----------|---------------------------|---------------------|--------------|--------|--------------------|-------------------------------------|---------------------|
| <input checked="" type="checkbox"/> | | CT | WRH Unacknowledged Alerts | 25/06/2014 11:27:36 | [User] | 022424 | 250606000000000000 | CT ABDOMEN AND PELVIS WITH CONTRAST | 25/06/2014 11:27:36 |
| <input checked="" type="checkbox"/> | | CR | WRH Unacknowledged Alerts | 25/06/2014 14:47:05 | [User] | 022424 | 250606000000000000 | XR CHEST | 25/06/2014 14:47:05 |
| <input checked="" type="checkbox"/> | | CR | WRH Unacknowledged Alerts | 25/06/2014 14:48:53 | [User] | 022424 | 250606000000000000 | XR CHEST | 25/06/2014 14:48:53 |
| <input checked="" type="checkbox"/> | | CR | WRH Unacknowledged Alerts | 25/06/2014 15:03:45 | [User] | 022424 | 250606000000000000 | XR CHEST | 25/06/2014 15:03:45 |

Check All Clear All Show 500 1-4 of 4 First Previous Next Last

First Site Implementation

- University Hospital Waterford
- Integration with McKesson RIS & PACS
- Comprehensive testing
- Final configuration of peerVue
- Supplementary spaces
- Security configuration
- Go Live – June 2014

Implementation of Sites 2-16

- 16 sites live by end of 2014
- Evolved
 - Implementation approach
 - Documentation and training
 - Acceptance tests
 - Technical questionnaires
 - Communication materials

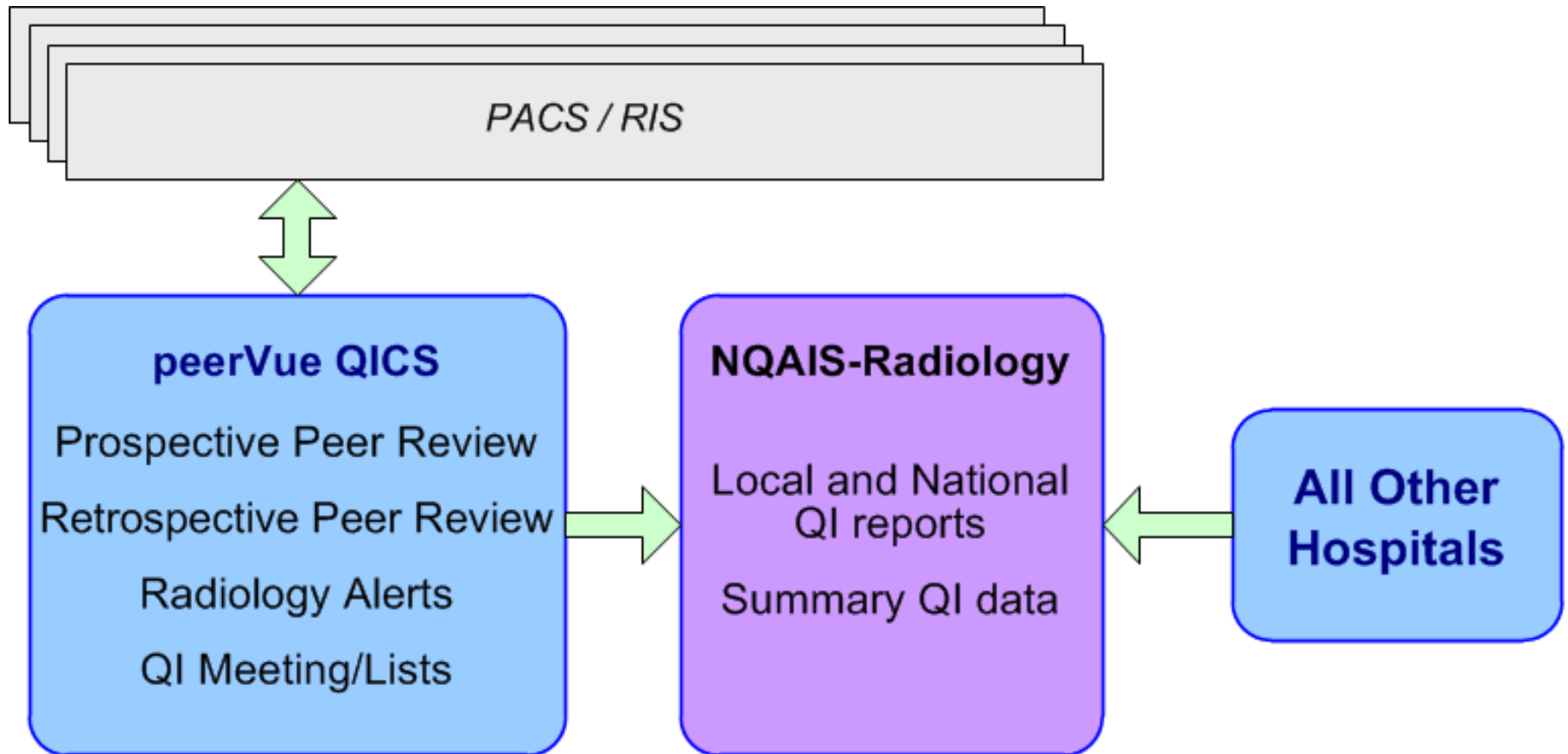
Project Plan – Public Hospitals

| 2014 | | | 2015 | | | | 2016 | |
|------|----|----|------|----|----|----|------|----|
| Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
| 1 | 2 | 13 | 4 | 13 | 8 | 1 | 2 | 6 |

■ Private Hospitals

- Implement ICT solutions to support QI processes
- Transfer QI information to NQAIS-Radiology

Radiology QI ICT Solution



Implementation 1

- 12 week project
- Personnel
 - Lead QI Radiologist
 - RQI Technical Lead (typically PACS Manager)
 - Support staff lead
- Key tasks
 - Policies and procedures
 - User and clinician lists, including contact details
 - Testing

Implementation 2

- Project web site
 - <https://docs.healthatlasireland.ie/nqais-radiology>
 - User Guides, Quick Reference Guides, Install Guides
 - Sample policies and procedures
 - Questionnaires
 - Communication material
- Training
 - Hospital's team (0.5 day on site)
 - Online training video
 - Face-to-face during go-live
 - Advanced peerVue (2 days, post go-live)
- Radiology QI Tech Leads Forum

What's Next?

- Implementation
 - peerVue on 50 sites
 - Private hospitals
 - NQAIS-Radiology
- Data quality analysis & improvement
- Quality Indicators – review, target setting
- peerVue upgrade

peerVue Configuration

30 hospitals

1203 workflow actions

34 assignment timers

709 panel attributes

1533109 studies

270 security roles

41316 QI records

125 spaces

1888 workflow conditions

8 national spaces

8278 users

1202 workflow triggers

1329 access rules

94 assignment conditions

1256 study fields

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