Northern Ireland

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N.I Interoperability

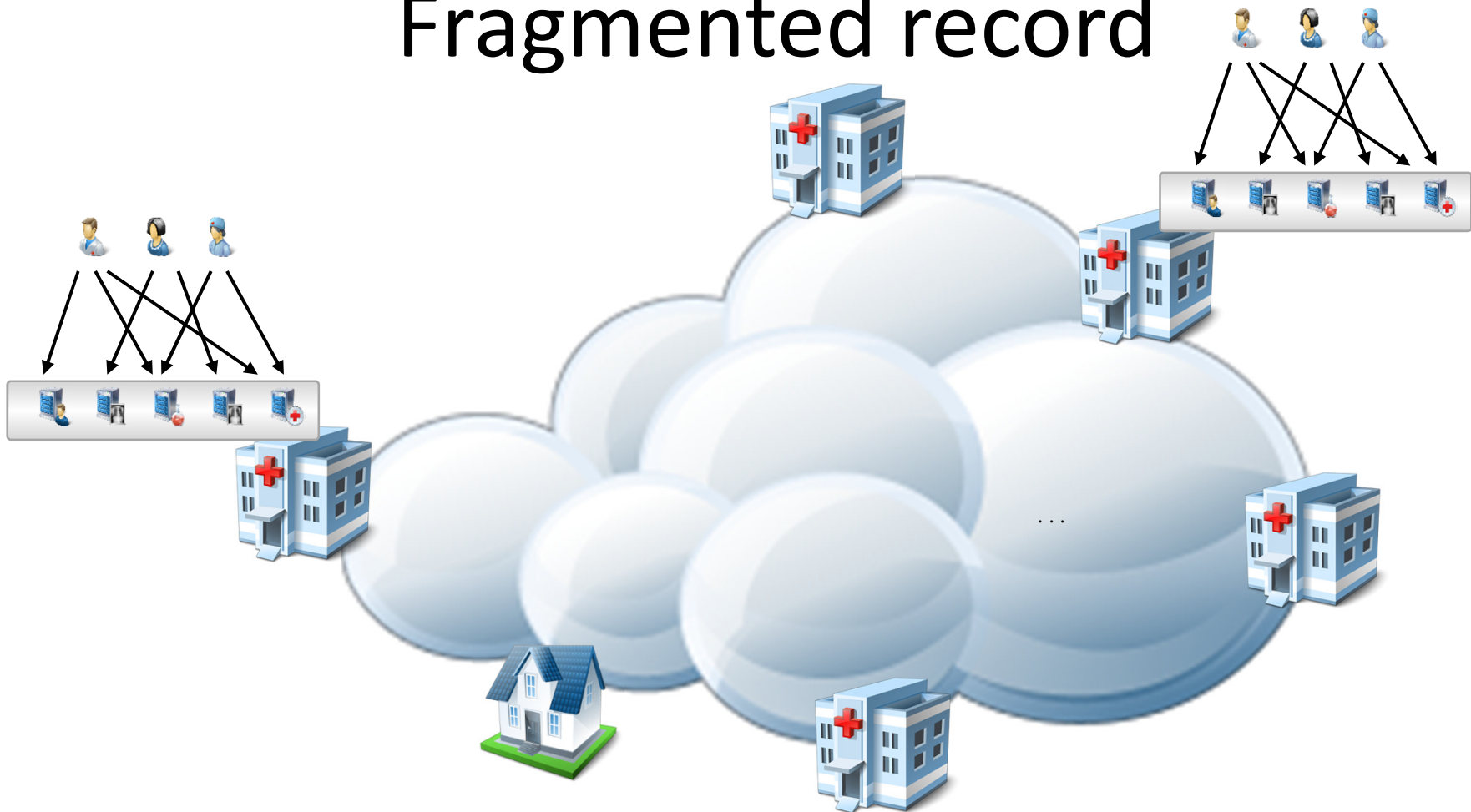Health and Social Care Board

- Background to N. Ireland

- Strategic challenges and direction

- Integration

- Current successes

- Future plans

Background to N. Ireland

- Background
  - Self governing region
    - 1.8m population
    - £4b health budget
    - Health department
      Health Board
        Six Hospital groups
- Integrated Health & Social Care
- General Practice
- Private Dentist, Pharmacy, Optometrists
- Voluntary & Commercial sector
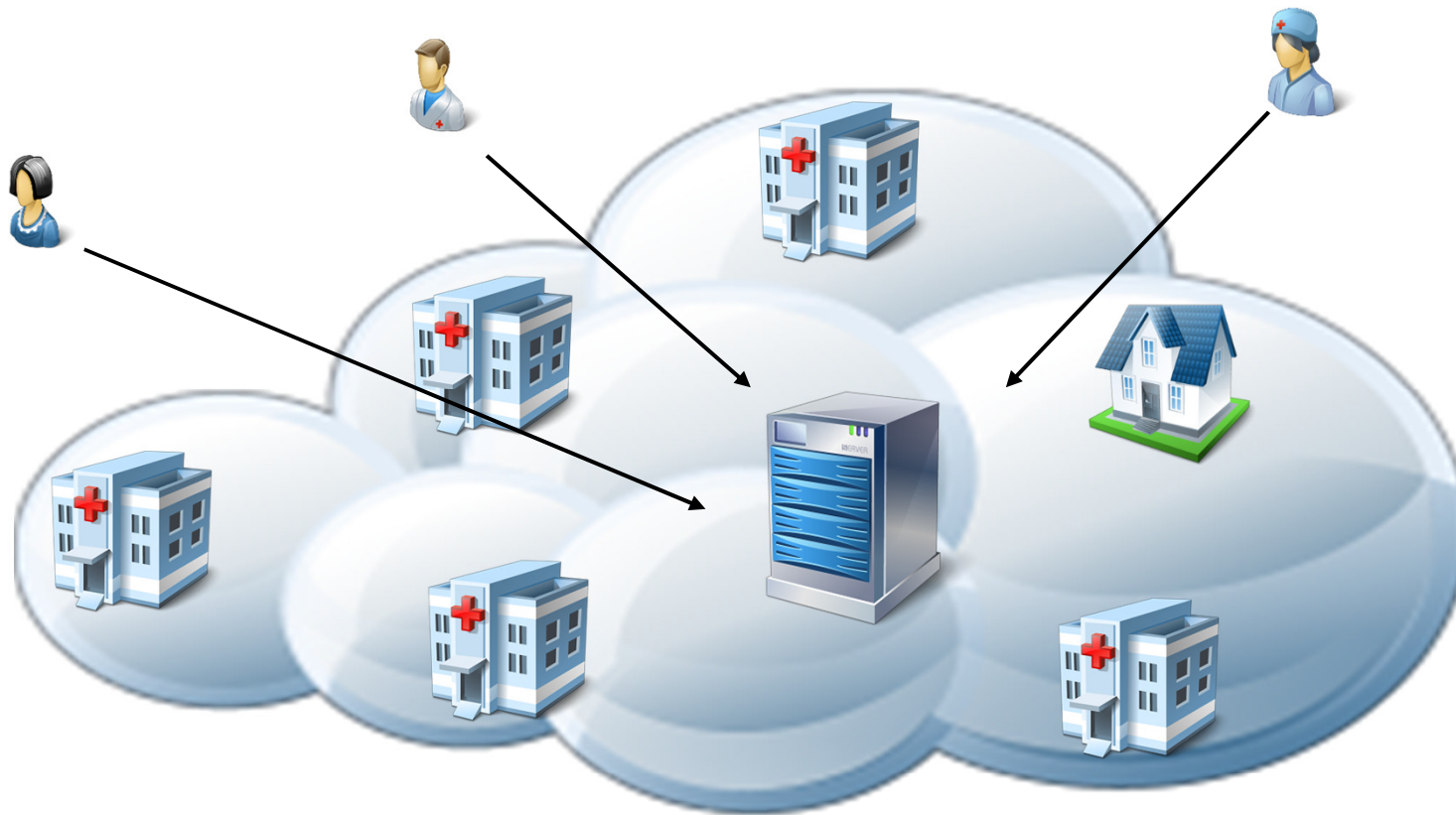- Transforming Your Care reform programme

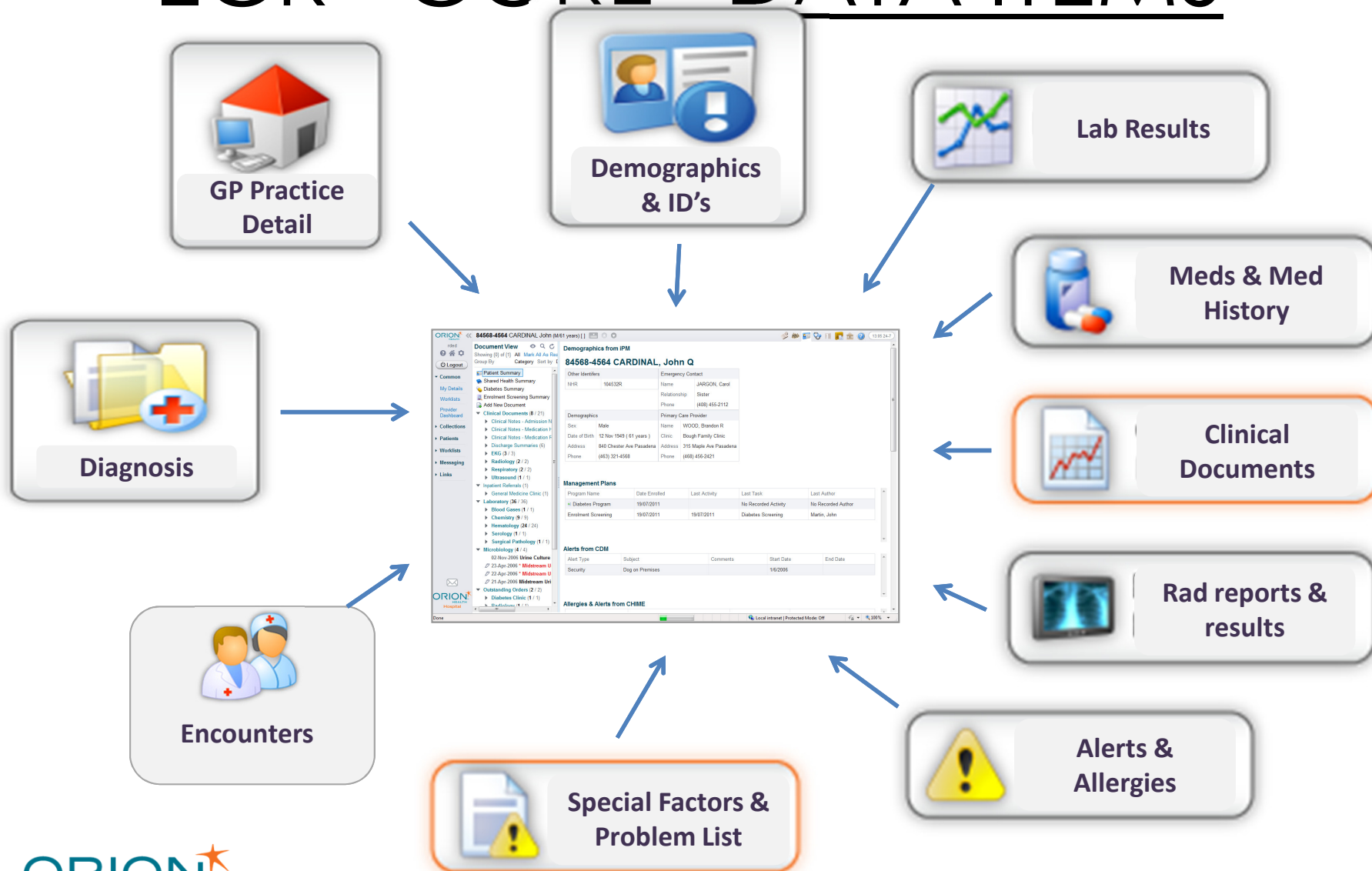# Strategic challenge
Fragmented record

Strategic design;
One virtual patient/client record

ECR "CORE" DATA ITEMS

GP Practice Detail

Demographics & ID's

Lab Results

Meds & Med History

Diagnosis

Clinical Documents

Encounters

Rad reports & results

Special Factors & Problem List

Alerts & Allergies

Systems Integration

- Patient Administration Systems x 8
- Laboratory x 6
- PACS x 3
- RIS x 3
- Emergency Department systems x
- General Practice x 360
- GP OOH Messages x 4
- GP Electronic Referrals x 1
- Cancer Tracking x 1
- In/ Out/ Day/ Result letters
- Social Care systems x 6 (PARIS, Socare, LCID)
- RVH, Children's
- EPEX (NT Mental Health)
- Cardiology (TTE and TOE/MDM Forms)
- Orthopaedics
- Electronic Document management
- Maternity system x 7
- Prescribing
- Tele monitoring
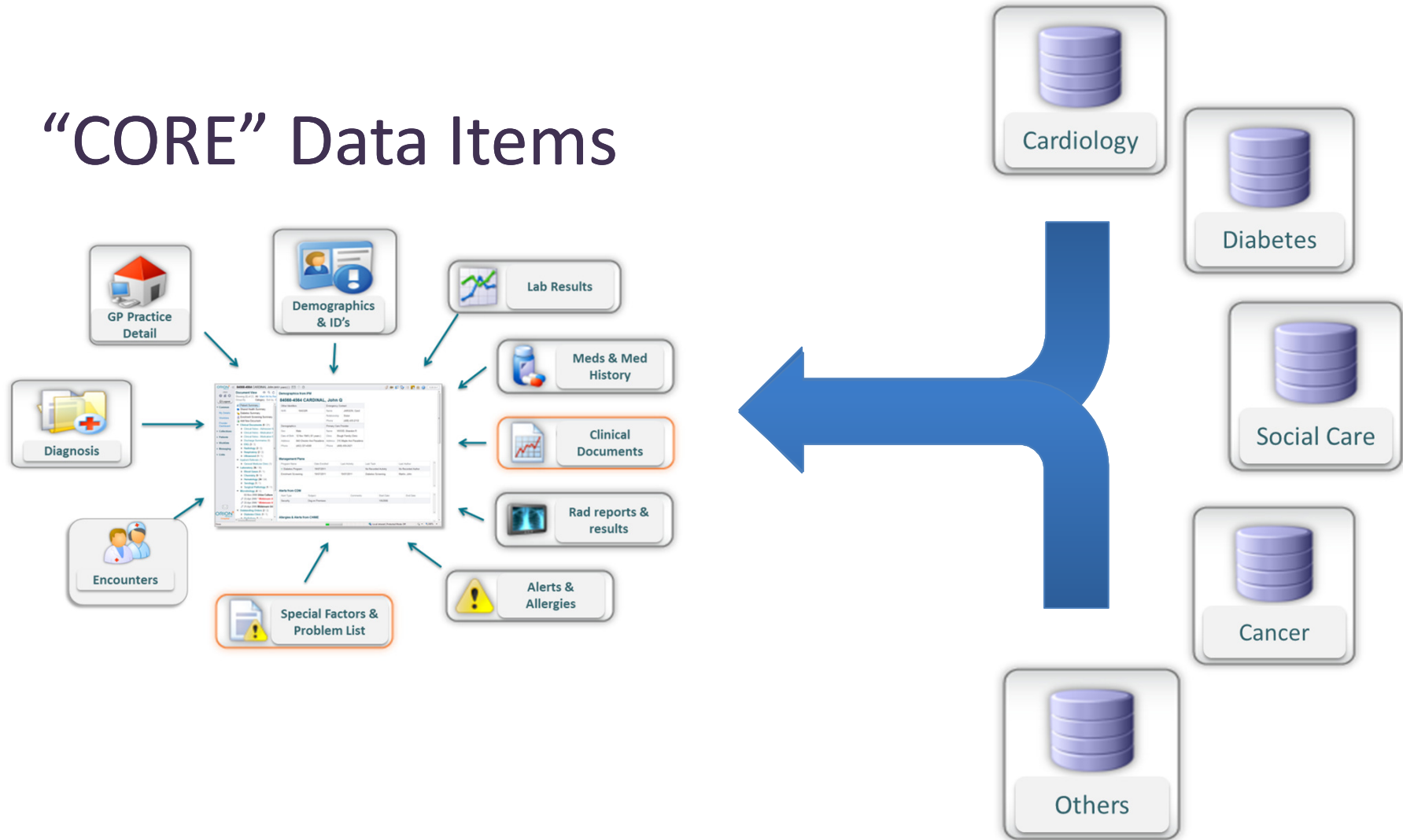- Tele Health
- Cardiology x 3

Challenges and Barriers

- How was NIECR achieved
  – Political, Vision, Clinically lead
  – No ripe and Replace
  – Clinical leadership
- Testing critical
  – First mistake = setback
- Record structure information
- Business as usually gets in way, No spare time
- Limited resources
  – EU funds helpful, hard to get.

Additional interfaces over time

Where next

- ECR Integration Projects
  - Diabetes
  - PAS Pre-Admissions
  - OP/IP Waiting Lists
  - Infection Control Information
  - Emed Renal
  - COIS Historical Reports
  - Endoscopy Reports
  - Theatre Management System
  - eNISAT
  - Remote Telemonitoring
  - Stroke System
  - Blood Transfusion

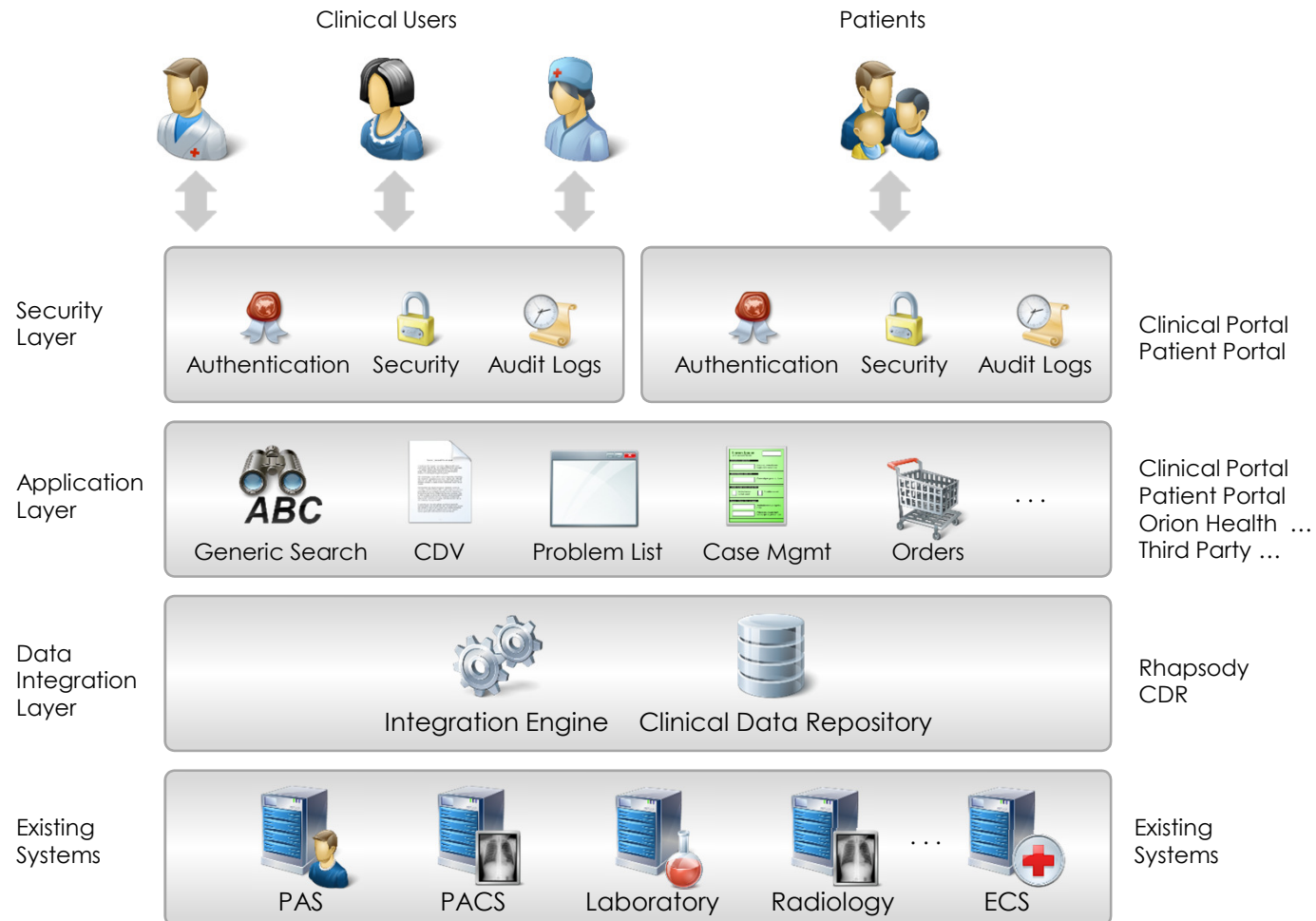# More functionality

Short Term Future Functionality

- Flowsheets
- Shared Worklists
- Alerts & Notifications
- eForms – Pre-Operative assessment, MUST, EWS
- Patient Handover
- Add Document Function
- Alert Document Template
- Shared Integrated Care Plans
- Referral Triage Management Solution
- Key Information Summary
- Results sign Off

More functionality

Medium and Long term Future

- ePrescribing
- Immediate Discharge Letters
- Order Communications
- Patient Portal
- Business Intelligence tools to support more informed decisions in treatment and care planning
- Clinical Workflow Suite (Forms technology for Chronic Disease Management)
- Mobile applications for specific workflows to improve efficiency and access to information (sign-off, patient drugs)
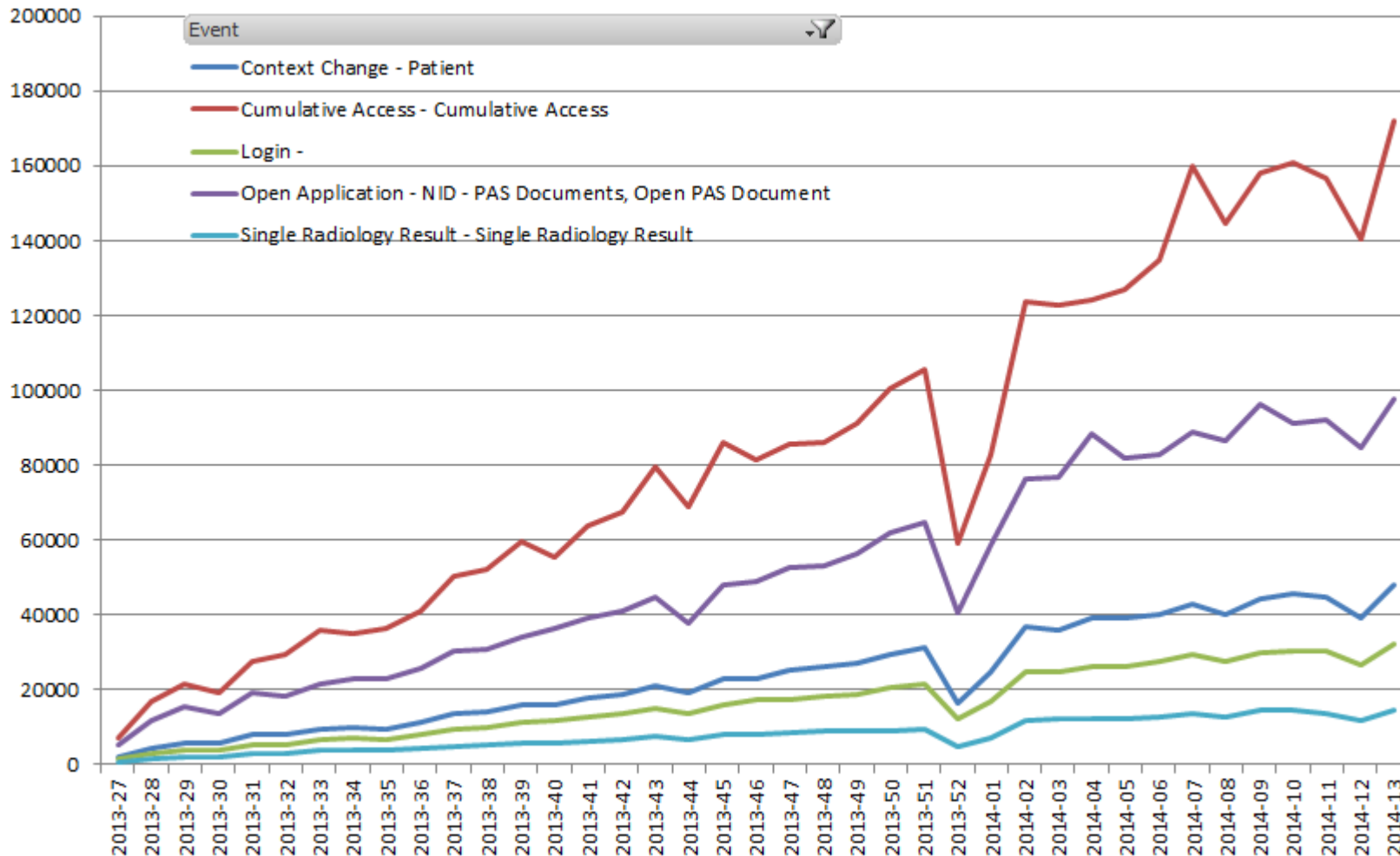
Integration Framework

Health and Social Care Board (HSC)

Clinical Users | Patients

Security Layer — Authentication, Security, Audit Logs | Authentication, Security, Audit Logs — Clinical Portal, Patient Portal

Application Layer — Generic Search, CDV, Problem List, Case Mgmt, Orders ... — Clinical Portal, Patient Portal, Orion Health ..., Third Party ...

Data Integration Layer — Integration Engine, Clinical Data Repository — Rhapsody, CDR

Existing Systems — PAS, PACS, Laboratory, Radiology ... ECS — Existing Systems

Information for better, safer, faster care

NI Electronic Care Record

HSC Health and Social Care Board

- ## Regional solution live since July 4th 2014
  - 250,000 Unique Patients Accessed
  - 950,000 accesses to Patient Records
  - 195 Million Messages Stored
  - 2 million patient centre documents accessed
  - 13,000 Drug Accesses per week
  - 100,000 Print Requests
  - 250,000 Radiology Reports Viewed
  - 3.3 million Cumulated Laboratory results
  - 1250 ereferrals per week

ECR usage

Methods and tools

- Message types
  - Propriety, HL7, CSC,

- Methods
  - Real Time Transactional Push, Pull, Batch

- Integration brokers
  - Rhapsody, Clover Leaf

- Record Matching
  - Enterprise Master Patient Index

Future Integration

- Private sector – Two way
  - Different applications
- Apps (IOS, Android) Commercial and HSC
  - Security
    - Authentication
      - Data security
- Connected Health Interoperability Platform
  - New York
  - NI Ecosystem

Health and Social Care Board

- Strategic vision and determination
- Country wide ECR
- Continuous Integration
- Interoperability CHIP
  - ROI, New York
- Success 10,00 users in 10 months