



*Together, we're finding
answers to cancer.*



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AGENDA

Cancer Trials Ireland Stakeholder Engagement meeting

Gibson Hotel, Dublin, February 10th 2017



9.00 am	DSSG Opening remarks by:	Eibhlin Mulroe, CEO, Cancer Trials Ireland	5 mins
9.05 am	Enhancing Capability, Knowledge & Timely Access to Information	Gemma Gavan – E-Health	15 mins
9.20 am	‘From Here to There – Alignment towards the EHR’	Alan Price –E-Health	15 mins
9.35 am	Why developments in eHealth could help the growth of cancer trials activity in Ireland?	Jacinta Marron, Data Project Lead, Cancer Trials Ireland	15 mins
9.50 am	‘Sizzling Sausages and the Role of Information’	Gaye Stephens Prof. of Health informatics, TCD	15 mins
10.05 am	E-Health in Ireland, an exciting and rapidly evolving environment	Professor Martin Curley, Maynooth University	20 mins
10.5 am	Panel Discussion	Eibhlin Mulroe, CEO, Cancer Trials Ireland	30 mins
10.55 am	Concluding Remarks by:	Eibhlin Mulroe, CEO, Cancer Trials Ireland	5 mins

How will the rapidly evolving ehealth environment, through the introduction of integrated information management and technology platforms, deliver patient centred, safe and excellent integrated care for cancer patients living in Ireland.

Eibhlin Mulroe,
CEO,
Cancer Trials Ireland

Enhancing Capability, Knowledge & Timely Access to Information

Gemma Garvan,
e-Health Ireland,
Programme Delivery Director for Access to Information

Enhancing Capability, Knowledge & Timely Access to Information

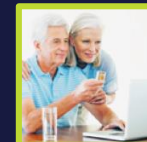


eHealthIreland.ie |  @eHealthIreland | @GemmaGarvan1

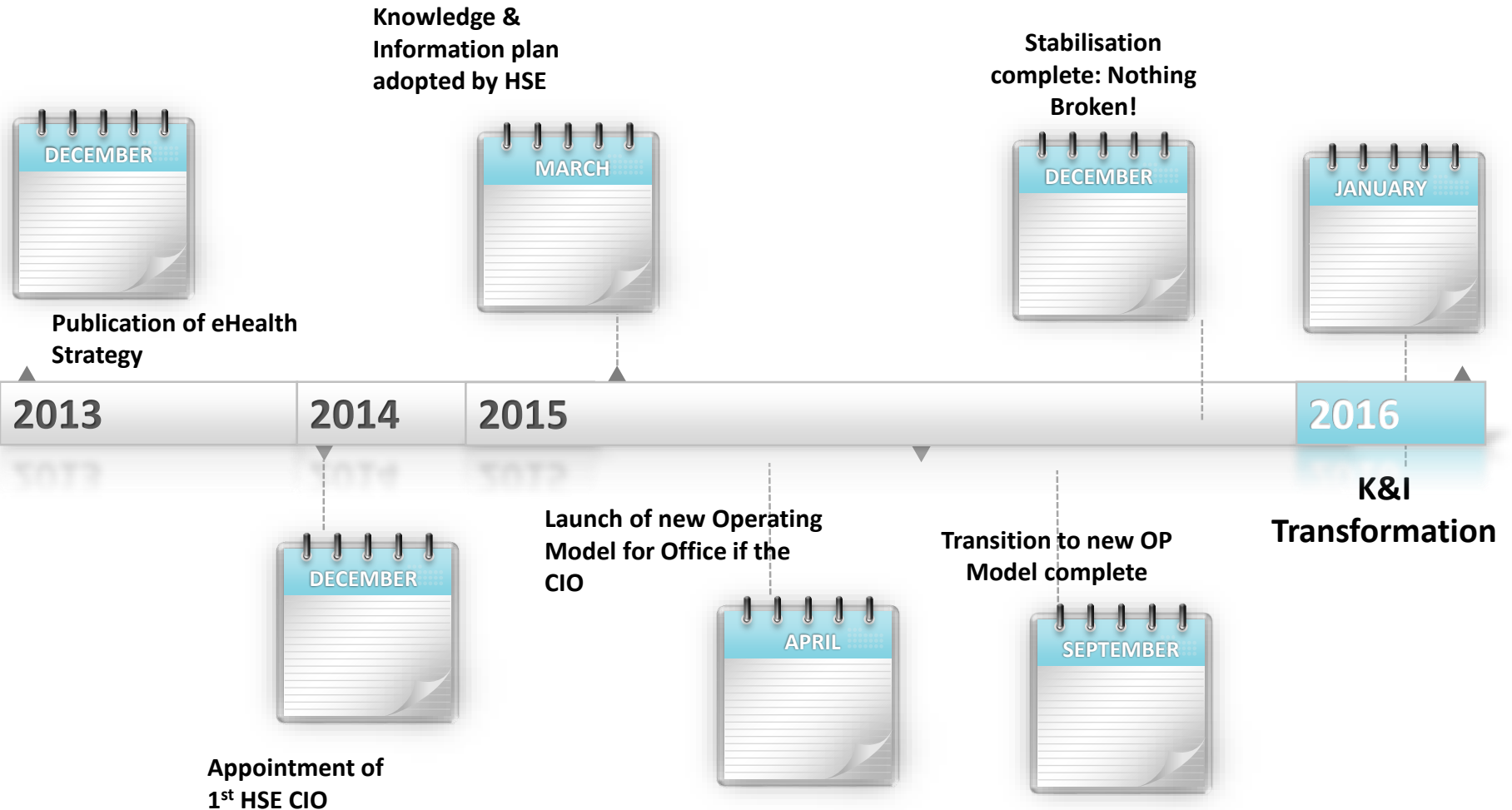
Delivering eHealth Ireland



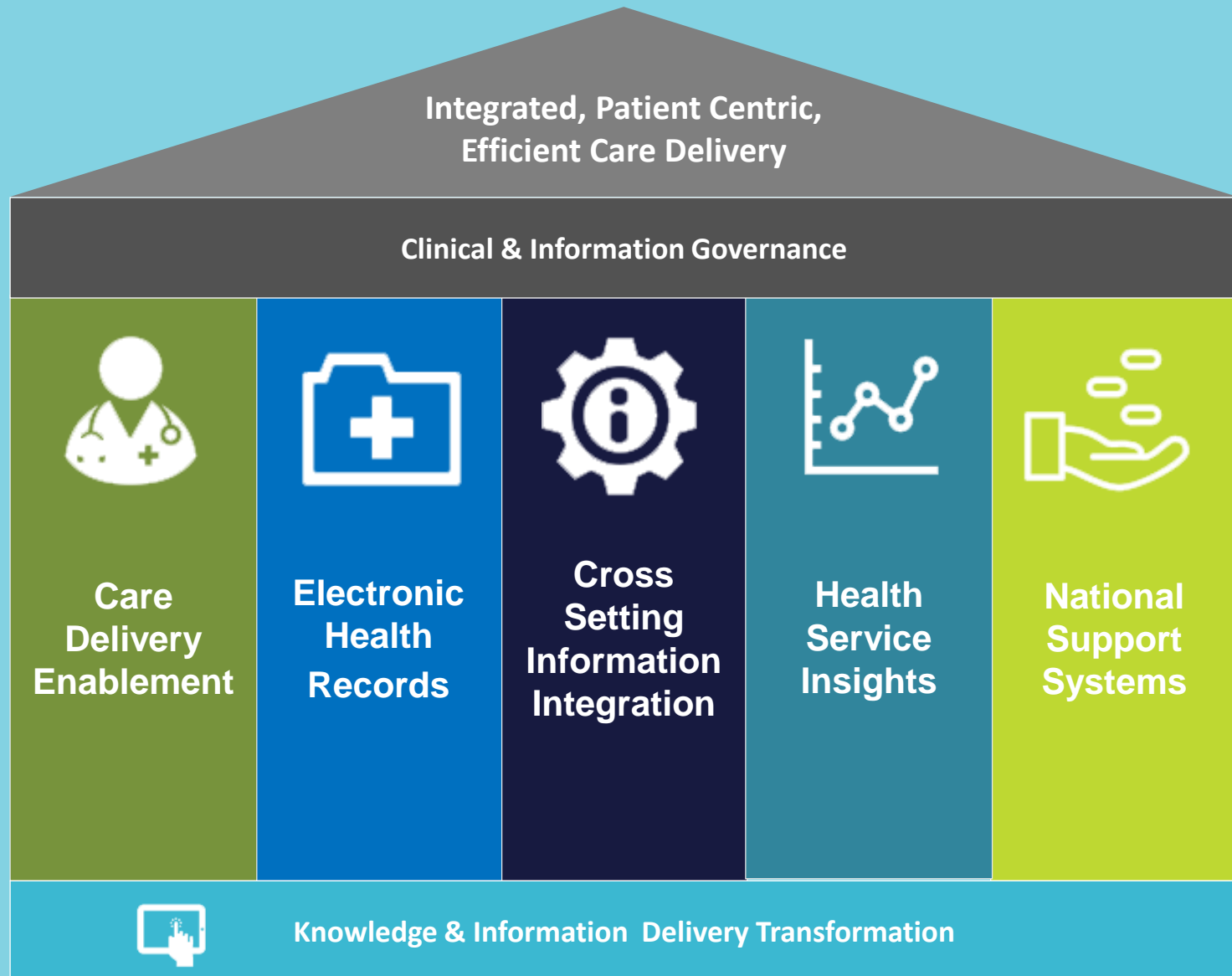
Office of the Chief Information Officer



The Journey



Knowledge & Information Plan



“To improve population wellbeing, health service efficiencies and economic opportunity through the use of effective and innovative digitally enabled solutions.”

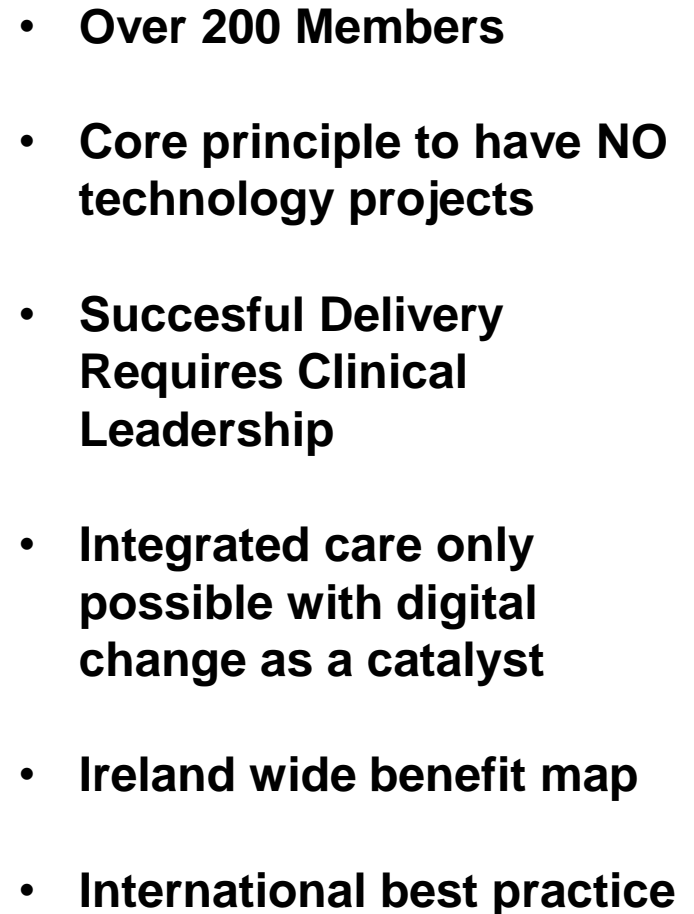
Future State

A digital health record for every person in Ireland:-

- Complete and comprehensive
- Accessible and added to by you
- Shared appropriately with all your health care professionals
- Available when and where required
- Investment in Health & Wealth of Ireland

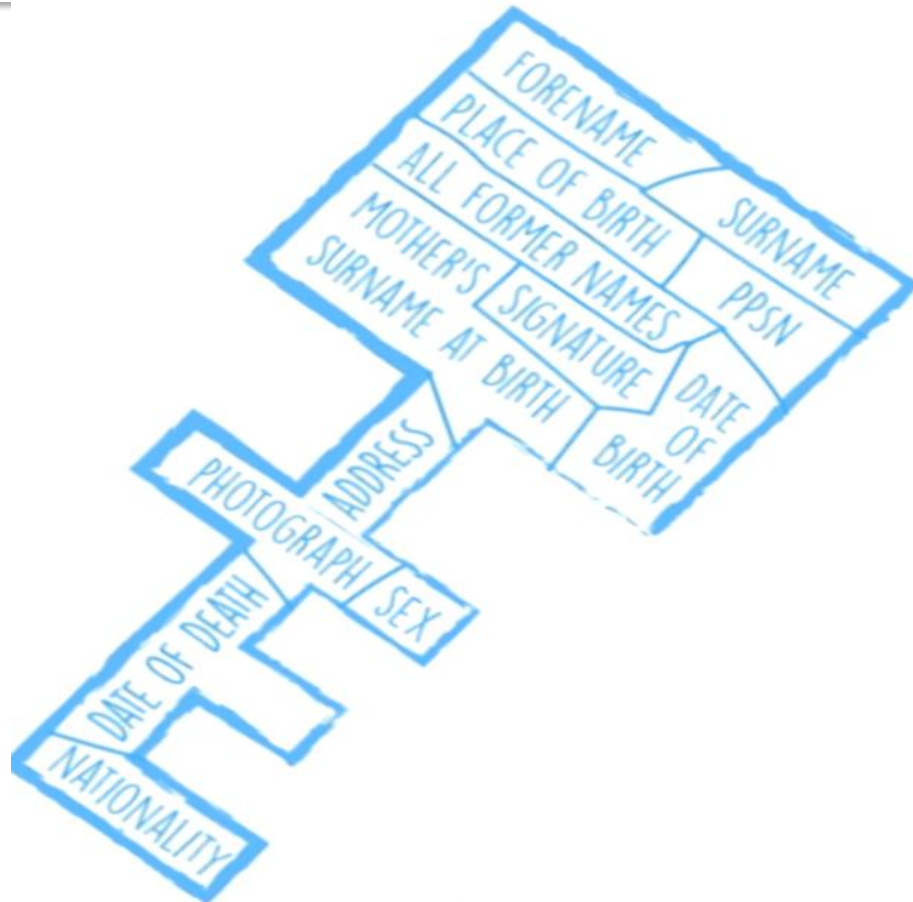
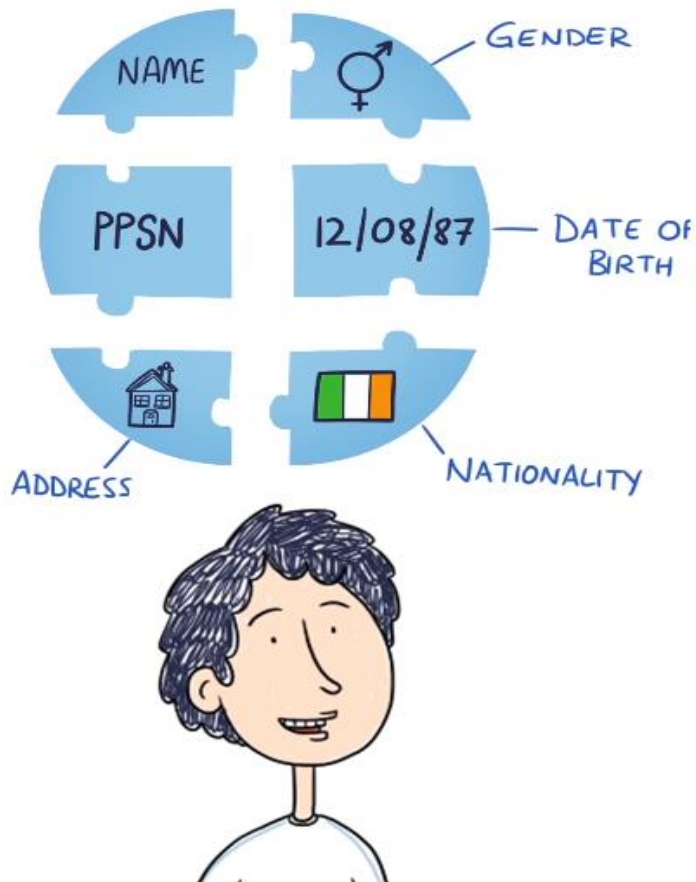
eHealth Ireland will be the:-

- **Accreditation** Body for eHealth
- **Design Authority** for eHealth solutions
- **Delivery Vehicle** for strategic eHealth Programmes and Projects
- **Commissioner** of eHealth Services
- **Custodian** trusted broker for Electronic Health information
- **Driver for Innovation** in eHealth
- **Demonstrator** of clinical leadership



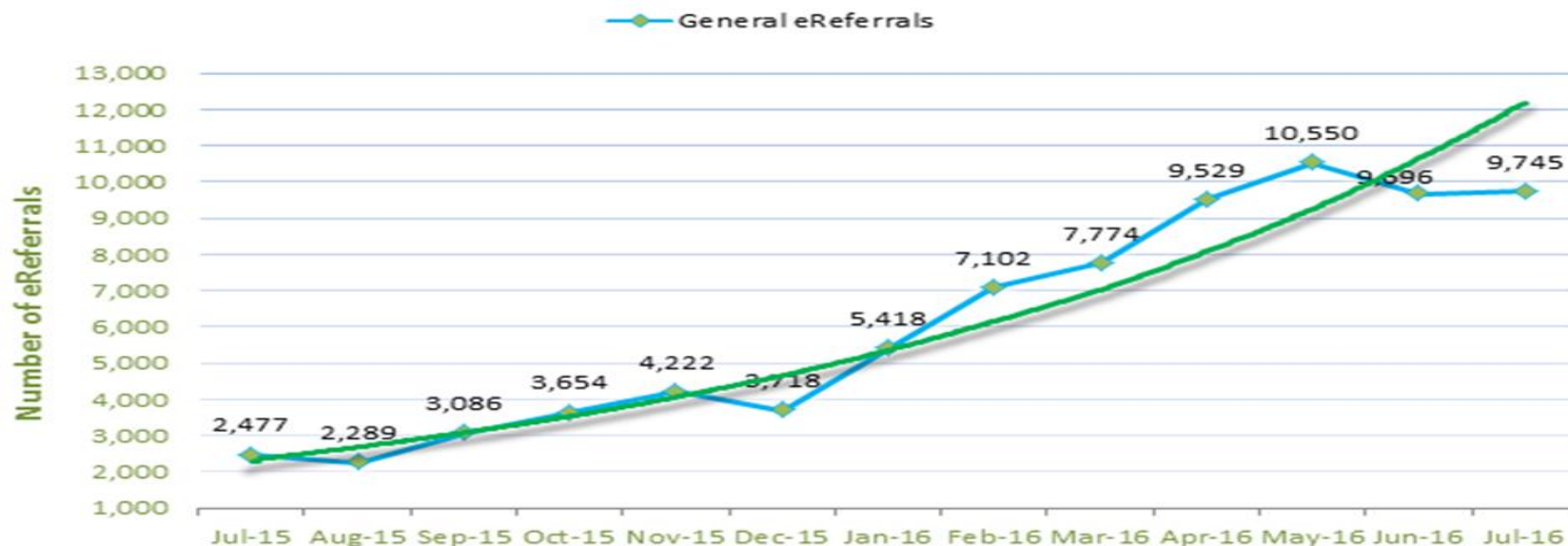
Projects - IHI

The IHI will use personal data to accurately identify a specific individual, this data will include;



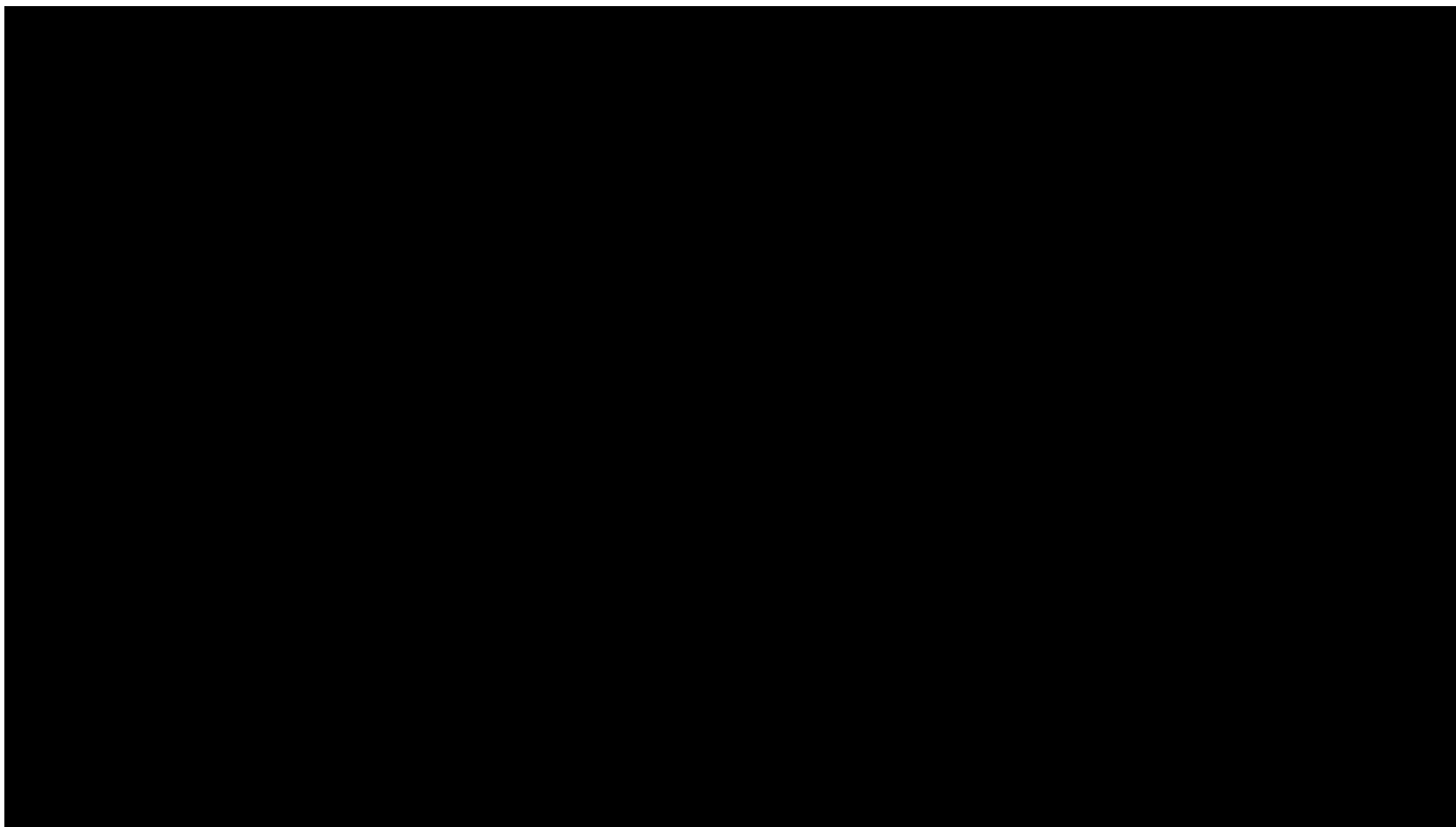
Projects – eReferral

Electronic General Referrals



Estimated Savings based on two separate metrics	Direct Cost Only (paper, envelopes, print and postage costs)	Administrative Savings (incl. direct cost)
Current Savings	€ 85,426	€ 171,255
Predicted Savings if 100% OPD eReferrals	€ 1,293,078	€ 2,592,263

eReferral Animation



Next 12 months



- Replace 19 lab systems
 - Starting with St James
- The remaining 52 sites over 18 months



- Replace all maternity systems
- Go live Cork 22nd –December 2016–
Kerry Go live March 2017



- 47,000 new digital identities and an additional 10,000 staff given access to a digital device
- Ireland is now the first member state to have a Cloud First Policy in Health

Purpose for A2I Portfolio

Bring silos of information together



Purpose

- Established to tackle the issue of a fragmented Health system environment
- Prevent new silo's of information being introduced into the system
- Have an enterprise wide view of eHealth Solutions so information can flow easily through the system and can be reused and redirected where appropriate.



A Case for Change



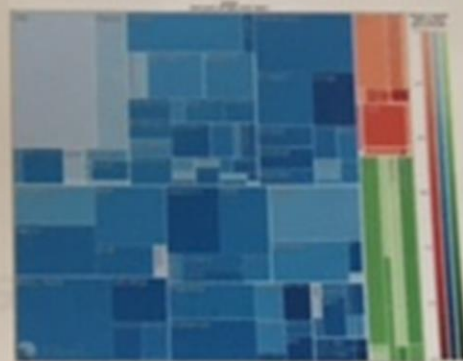
Hospital-centric
MOC

Figure 2.5: Population pyramid for 2011 and 2041 (MEX), most optimistic scenario

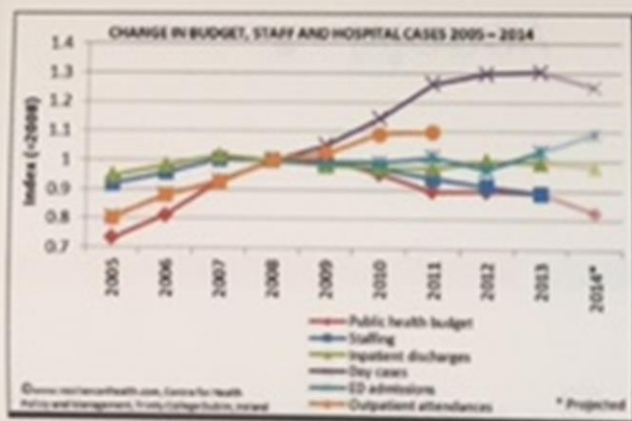


Source: Central Statistical Office, Population and Labour Force Projections 2010-2041

Ageing population



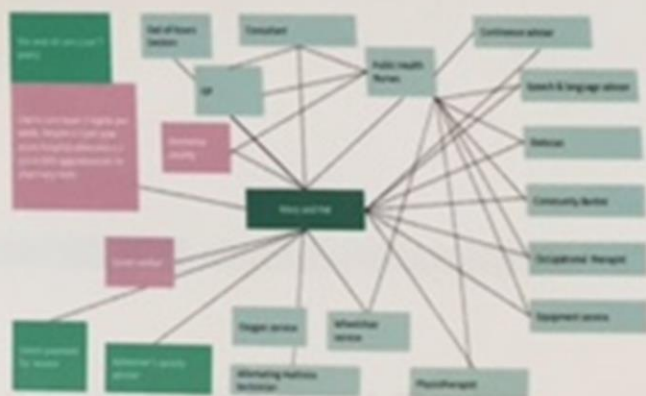
Chronic disease
and obesity



Source: www.healthcare.gov.uk, Centre for Health Policy and Management, Trinity College Dublin, Ireland

* Projected

Money



Fragmented

Key Customers

Citizens

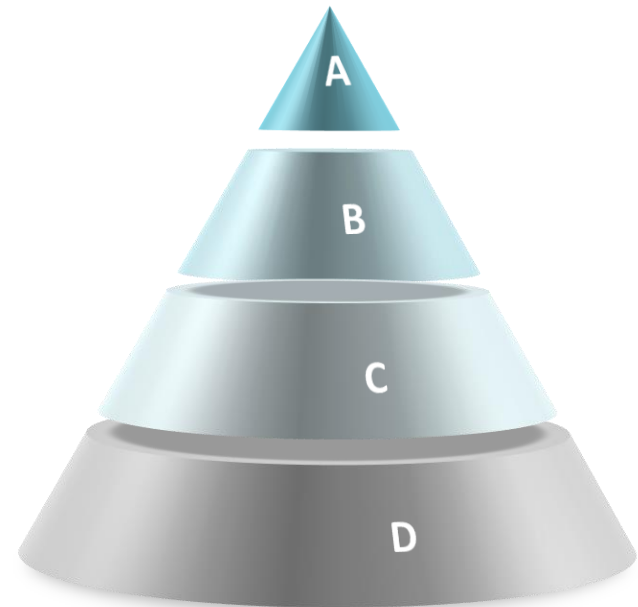
Clinicians

Managers

Government bodies



Key Objectives



A

Patient

Enabling the sharing of information with the patient

B

Clinicians

Enable the sharing of information from core national systems with clinicians in the community

C

Integration

Enable integration of Core National Clinical Systems

D

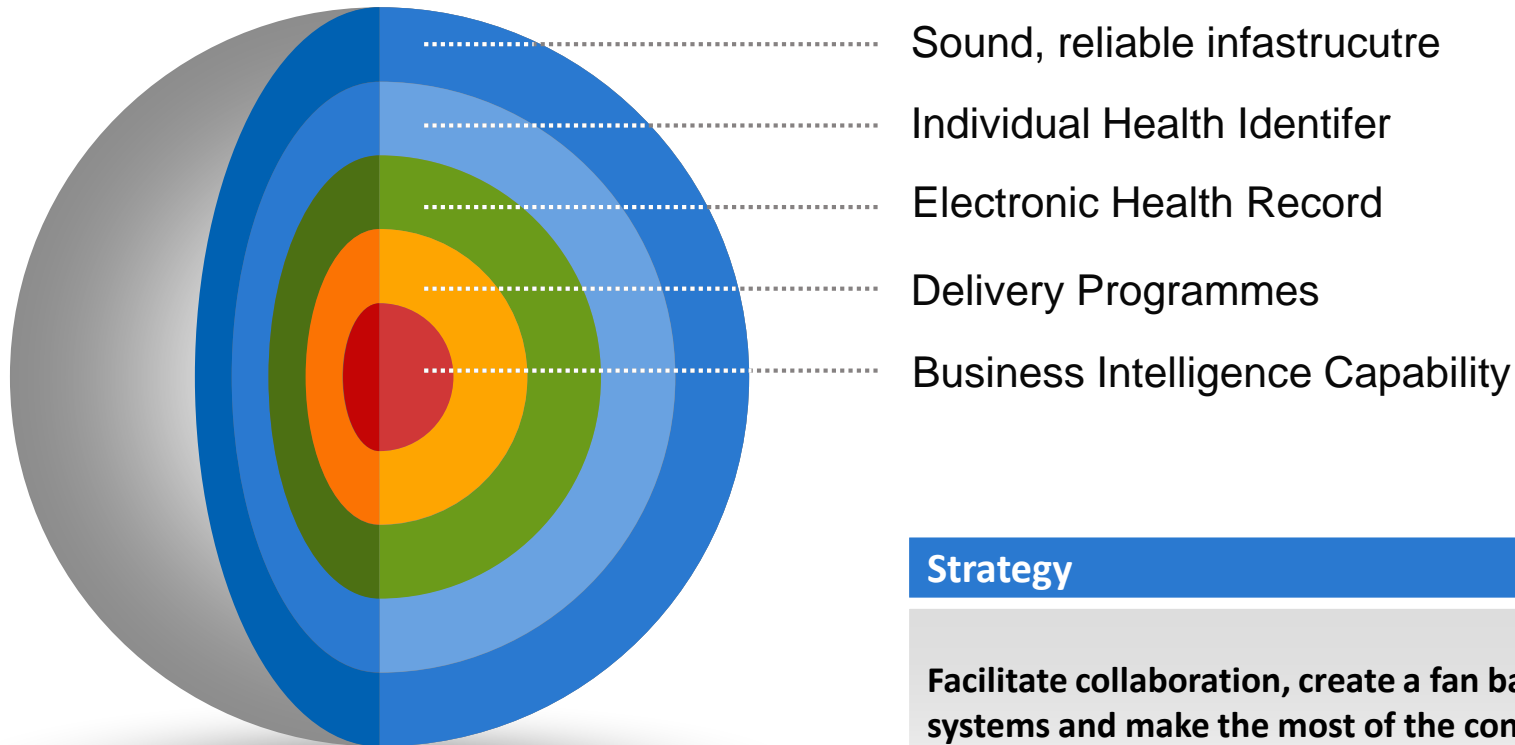
Electroinc Health Record

Building blocks in place for a national EHR

IT - Catalyst



IT – Stabilising Agent



Strategy

Facilitate collaboration, create a fan base of the systems and make the most of the connected data.

Turn data into information that enables insight and facilitates knowledge creation.

Building blocks - Possibilities

Research capability

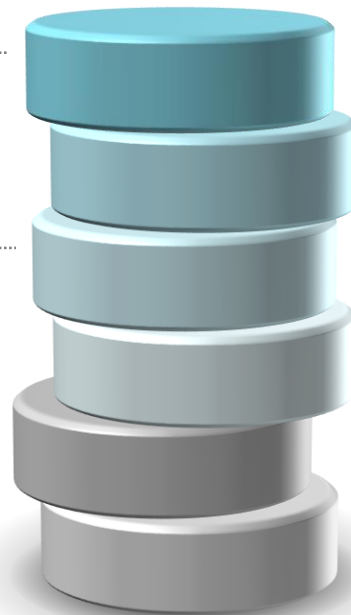
Data to genomics – Legislation need

Single Data Source

Legislation to allow data in one place

Integration

Links to eReferral and EHR mandatory



Clinical Integration

Systems across care settings

Patient Systems

Public access to information & addition to systems

Cancer Specific EHR

Digital data for all patients

Electronic Cancer Referrals from GP's to Hospitals via Healthlink

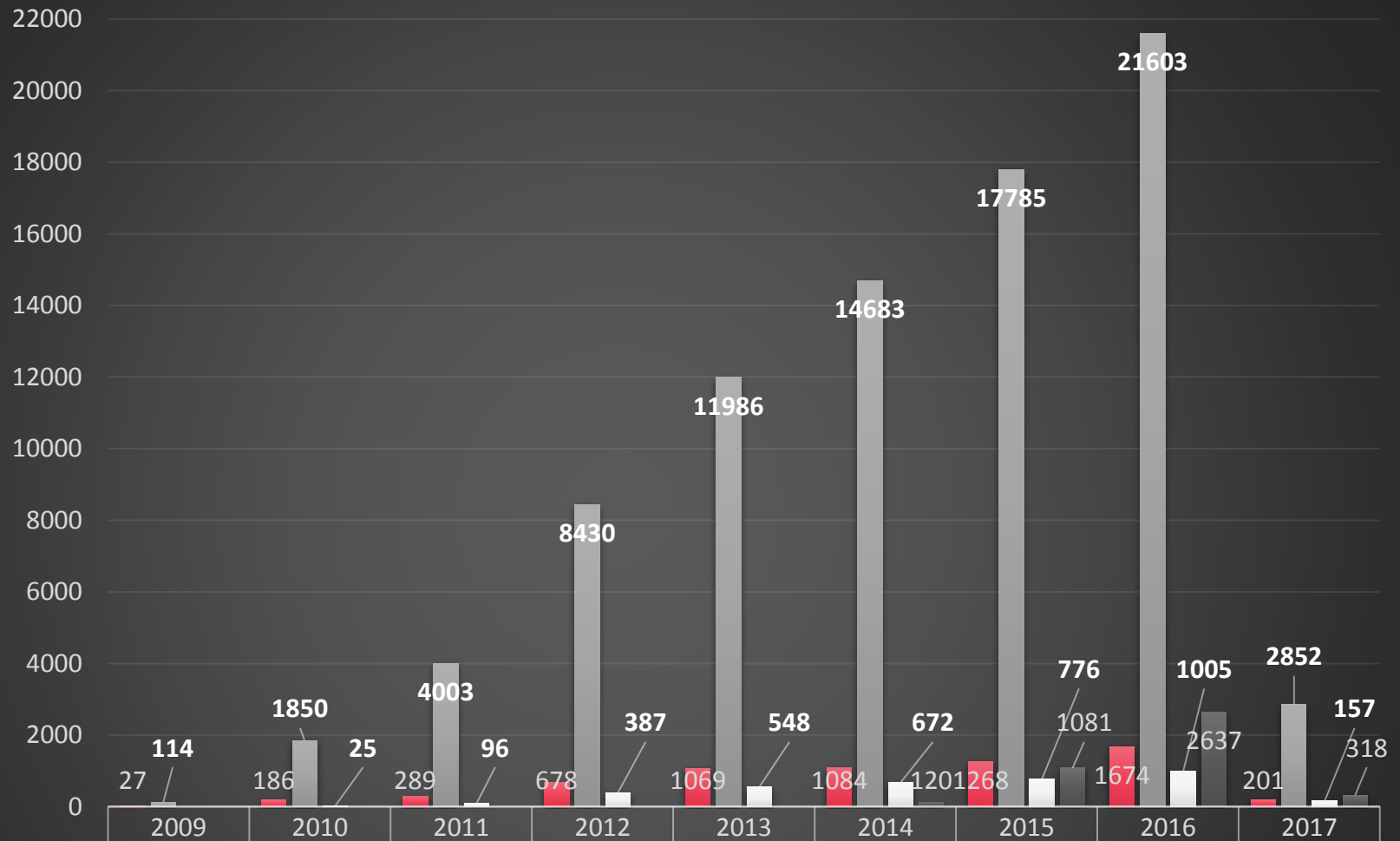
Live in all 8 Cancer Centres and all GP practices

- Suspected Breast Cancer Referrals
- Suspected Lung Cancer Referrals
- Suspected Prostate Cancer Referrals
- Pigmented Lesion Suspected Cancer Referrals

Others In Development

- Ovarian, Colorectal, Colposcopy

NCCP Electronic Cancer Referrals 2009-2017



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Prostate	27	186	289	678	1069	1084	1268	1674	201
Breast	114	1850	4003	8430	11986	14683	17785	21603	2852
Lung		25	96	387	548	672	776	1005	157
Pigmented Lesion						120	1081	2637	318

Cytology results have also been made available electronically from the specialist laboratories using the National Message Broker, Healthlink

- International Labs – significant efficiencies and safety benefits to using Digital Health Delivery of these results
- Use of international standards means US laboratories had no difficulty in exchanging the information with our National Broker.

Mammograms results have also been made available to GPs from the NSS using Healthlink

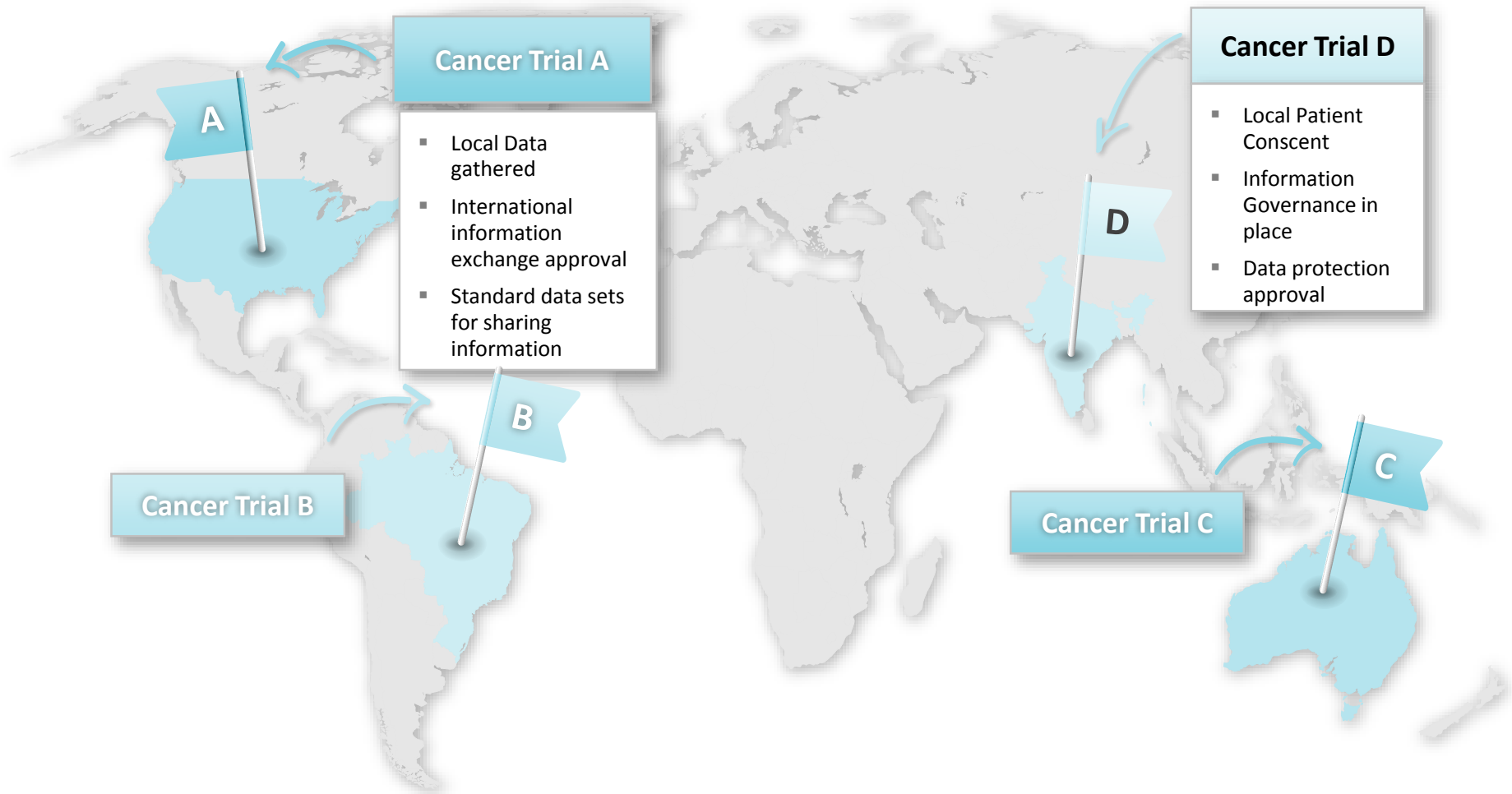
Outpatient Service
Improvement Programme

National Clinical and
Integrated Care
Programme

Our role is to enable these
change programmes to
meet their business
objectives using the
appropriate eHealth
Solutions



Sharing and Accessing clinical information internationally





of the world's adult population will own a smartphone by 2020, up from **50%** in 2015



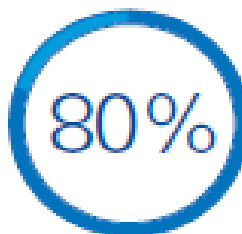
medical apps are now available on iTunes and **500 million** people around the world will use a healthcare app this year



A survey of

7000

British patients found that:



would like to view medical records online

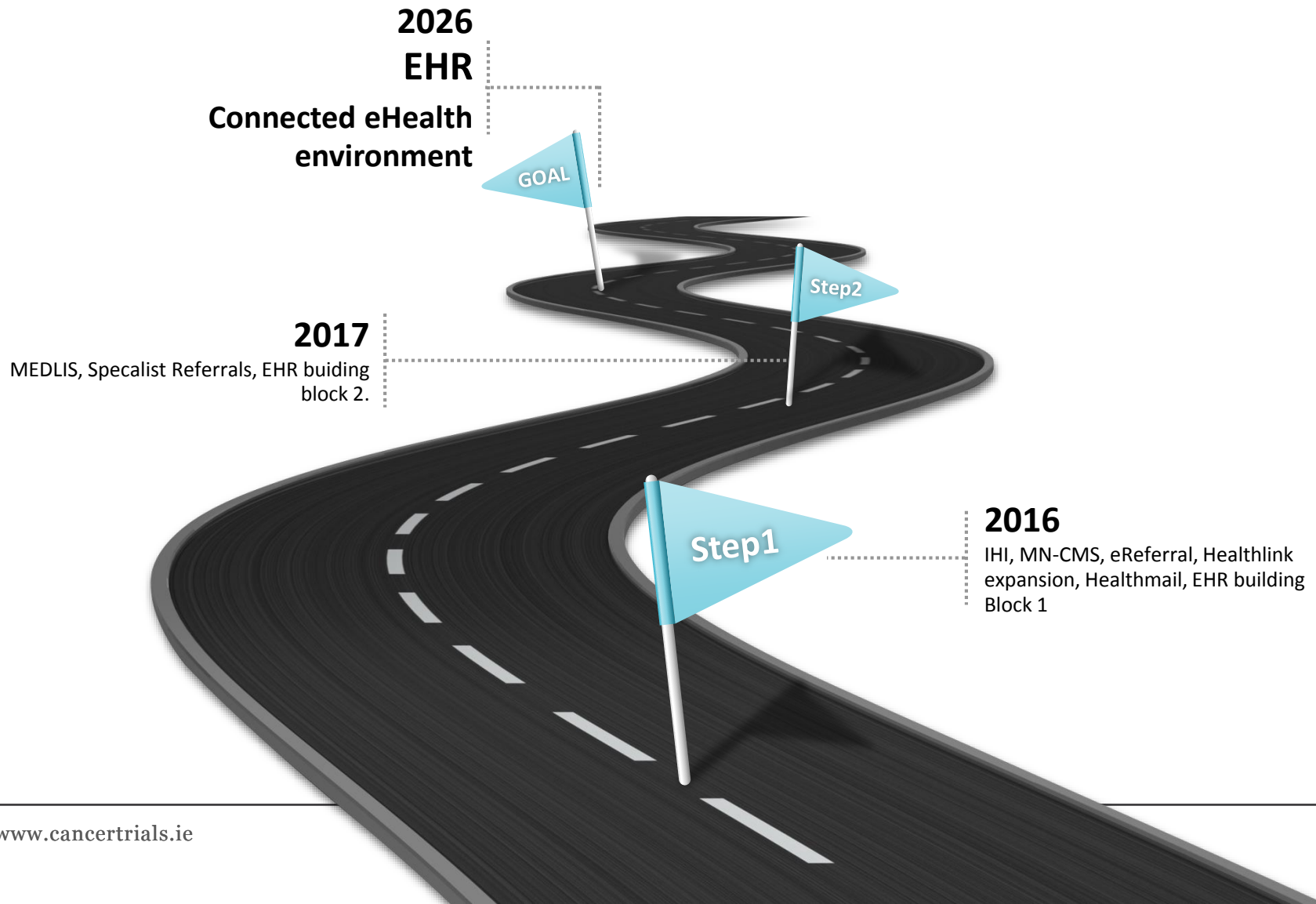


would use an online GP appointment booking service



would use a service letting you ask a clinician a question

Roadmap



Thank you

From Here to There – Alignment towards the EHR

Alan Price,
e-Health Ireland,
ICT Delivery Director
Social Care, Mental Health and Health and Wellbeing

From Here to There – Alignment towards the EHR

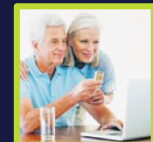
Alan Price – IT Delivery Director, Social Care, Mental Health and Health and Wellbeing

eHealthIreland.ie  @eHealthIreland @alanpricehse

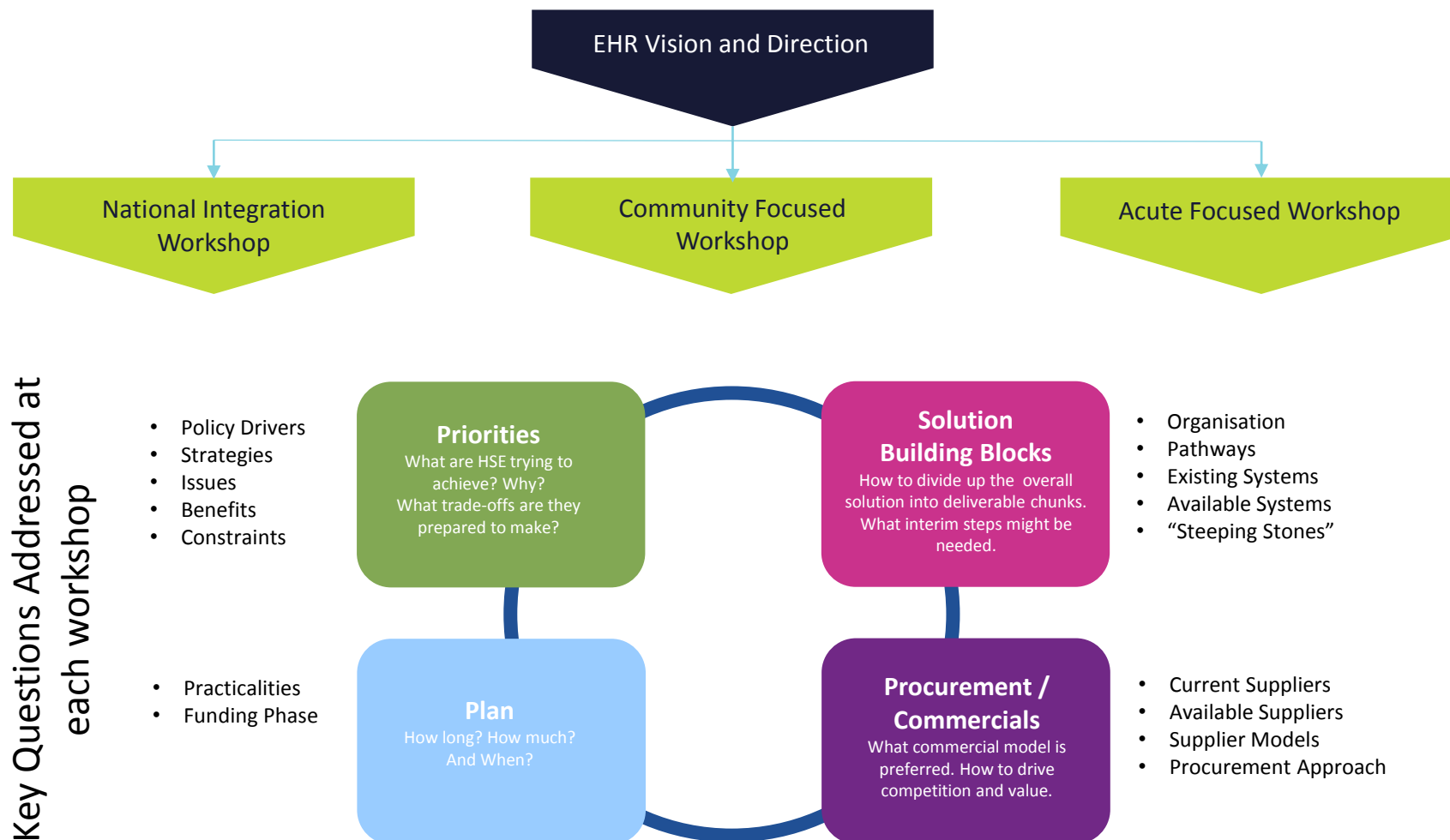
Delivering eHealth Ireland



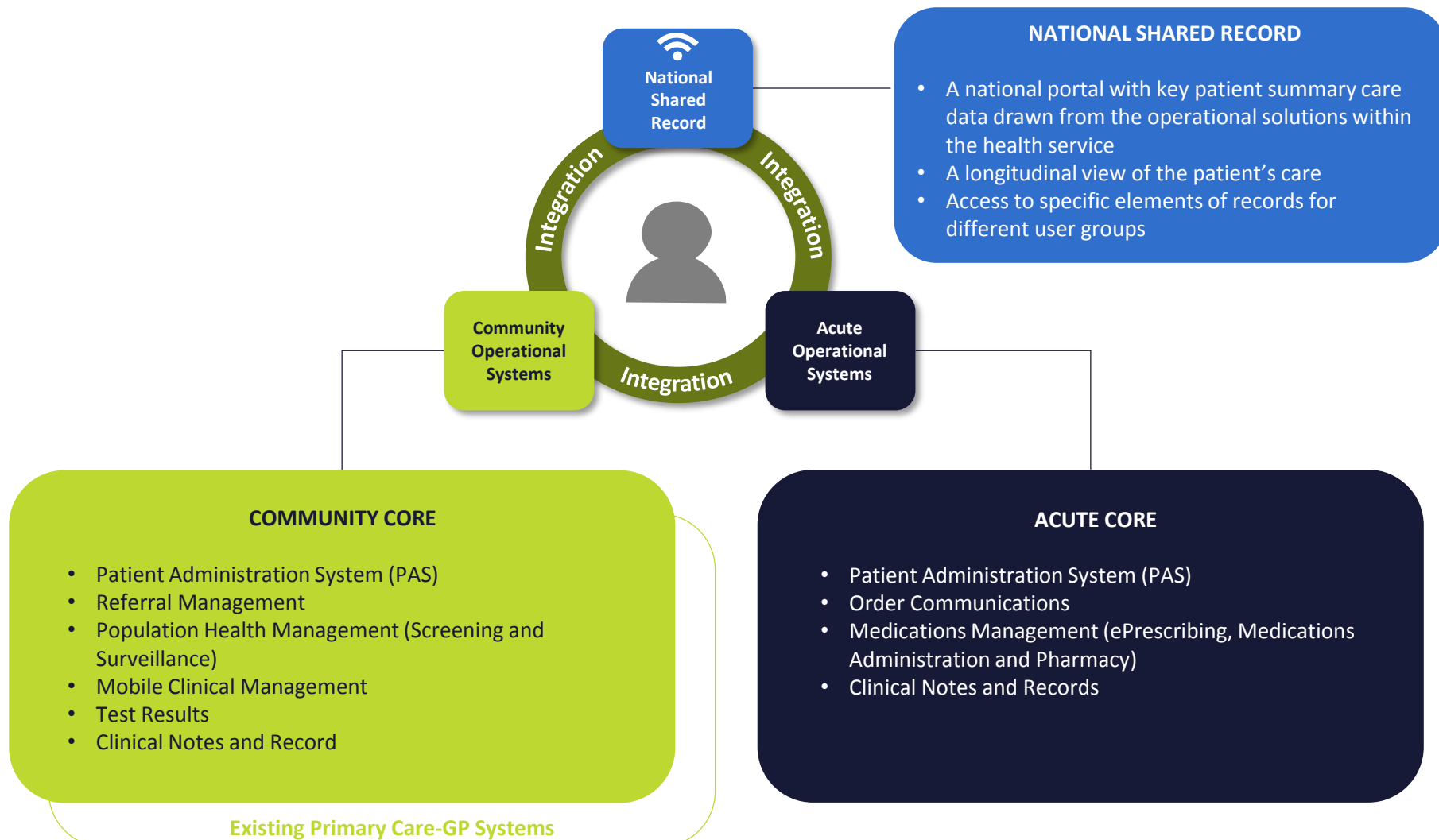
Office of the Chief Information Officer



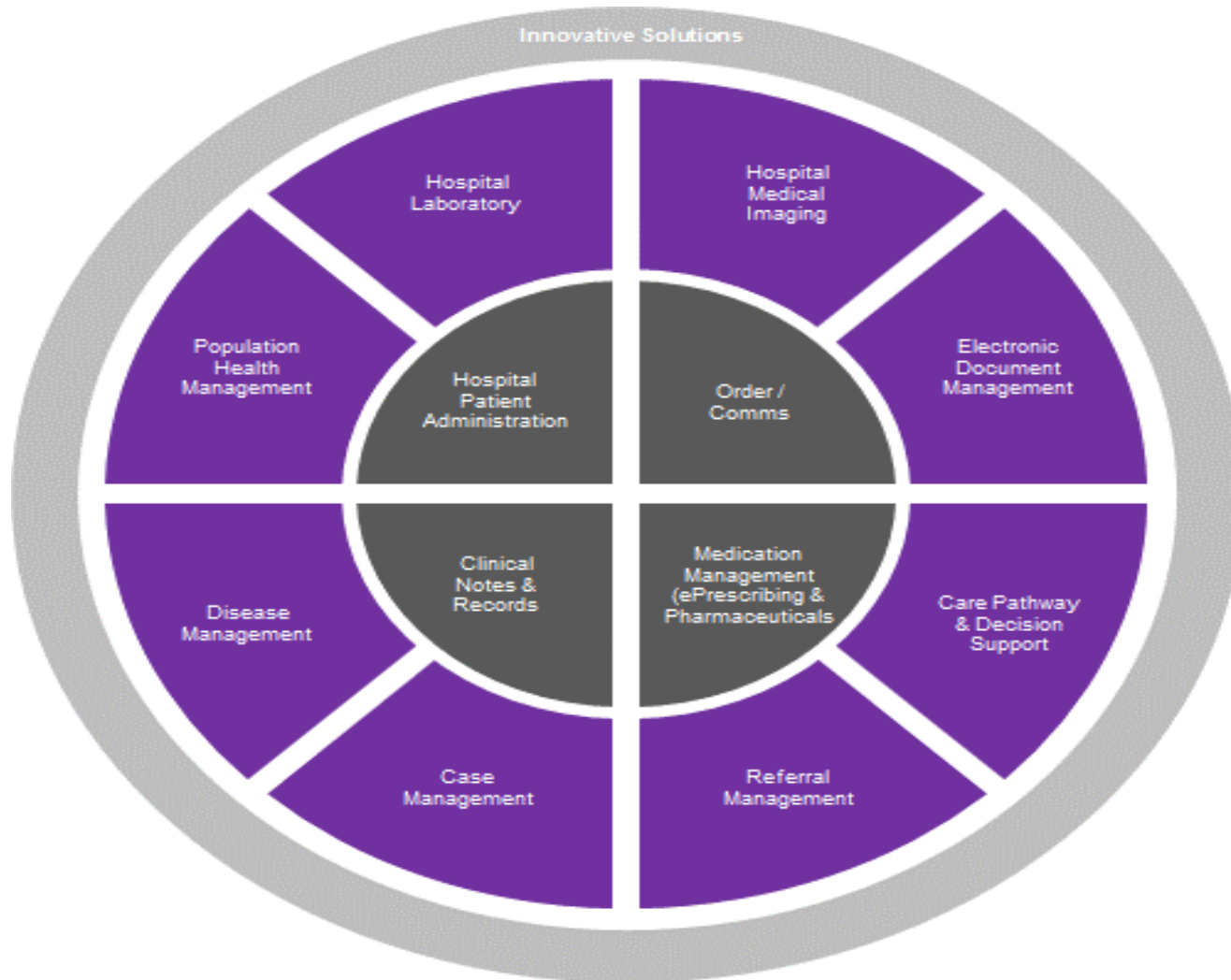
We worked with stakeholders to define our approach



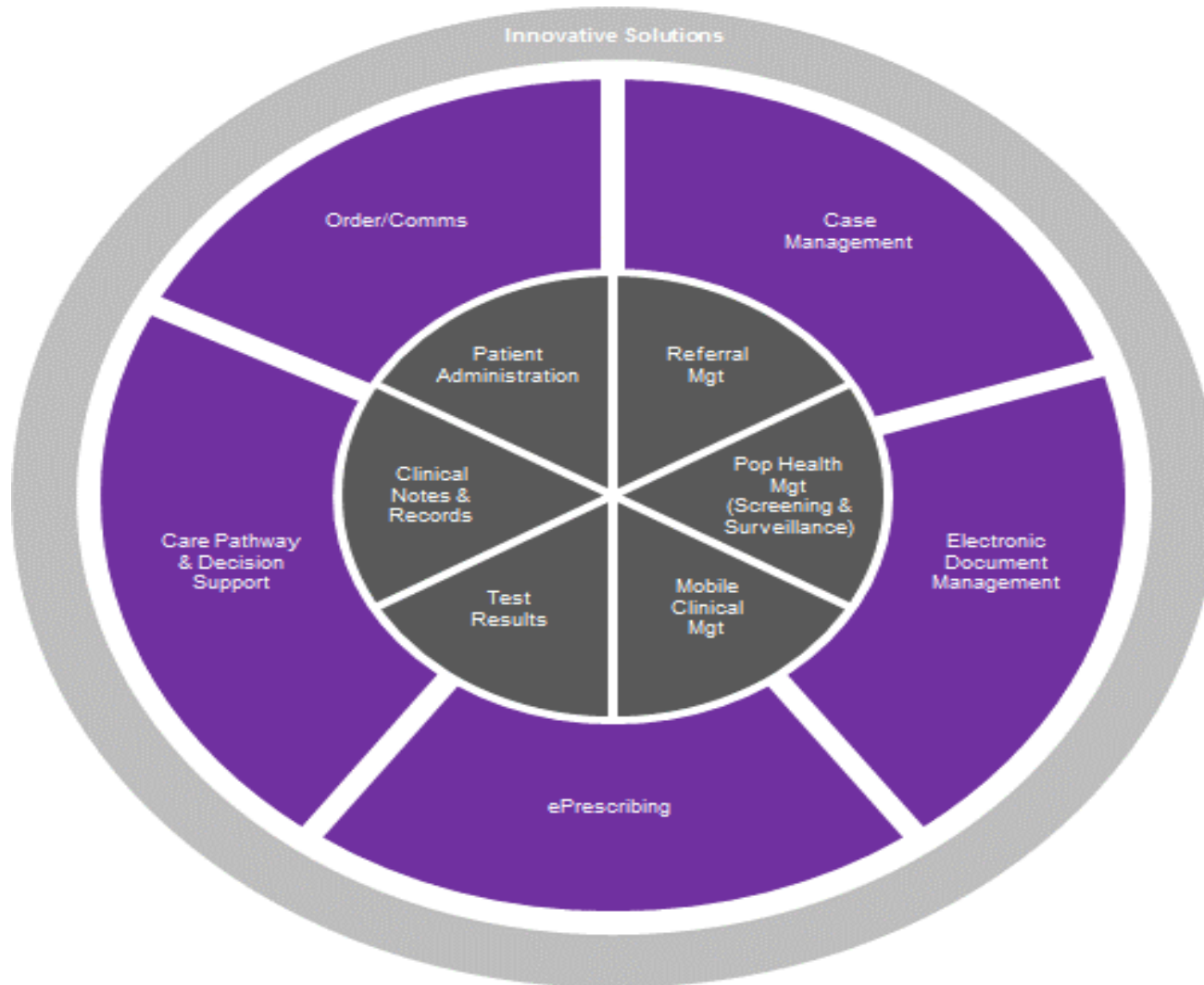
Core Solutions of Record



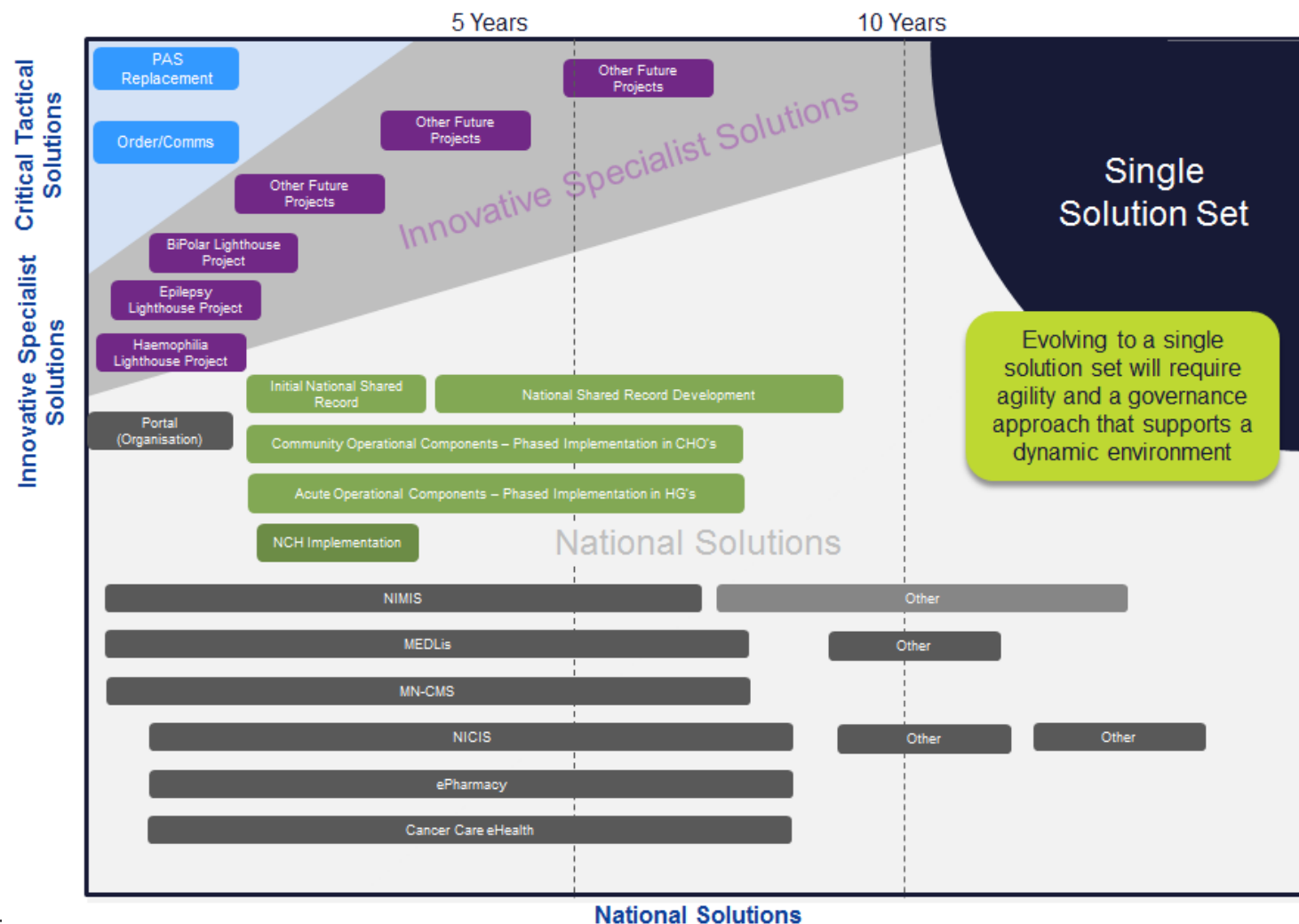
Acute Hospitals Operational Systems



Community Operational Systems



Path to a Single Solution Set



The EHR – Where are we now?

Approvals needed:

- National EHR Business Case with DoH – not financial approval, agreement in principle, on going
- Shared Record Business Case - Financial approval
 - Being developed, broad engagement, personas
- Integration and interoperability Business Case
- Acute Operational Systems Business Case
- Community Operational Business Case

The IHI is critical:

- Index in place but final part of legislation to be enacted to allow use by frontline systems
- Concept proven
- Use by all healthcare providers

Acute Hospitals

- Individual or Group PAS
- Individual hospital or group wide MRNs
- A level of real-time bed management
- NIMIS – almost nationwide
- Some have order comms
- Separate Lab systems
- Various levels of Clinical ED systems
- Little ePharmacy
- eDischarge Summaries
- Little clinical functionality

Acute Hospitals Alignment:

- IHI the enabler – IHI matching to local indices
 - First hospitals and GP practices lined up
 - Enable the linking of patients between systems
- National System; Labs, Radiology and Maternity
- Systems being procured now:
 - Medical Oncology Clinical Information System (MOCIS)
 - ePharmacy
 - Emergency Floor System (ED and AMU)
- Current Clinical Systems remain until national functionality is developed in EHR
- PAS will be part of the new EHR
- Systems already in place access via Shared Record

What is MOCIS?

- It will be an information system which will support
 - electronic scheduling,
 - prescribing,
 - compounding, and
 - administration of Systemic Anti-Cancer Therapy (SACT)
- It will support the accurate recording of information on patient diagnosis and treatment options at cancer Multi-Disciplinary Meetings (MDMs)
- It will be a nationally configured and hosted system
- It will be used by 25 hospitals
- Selection complete, procurement almost complete, working on system Blueprint.

Primary Care:

- 4 main GP systems – one company
- eReferrals
- Healthmail
- PCRS
- National Dental System

Alignment

- Via IHI and Shared Record Portal
- Links with Child Health Record
- National Lab system via Order Comms

Community Care:

- 8 different Child Health Systems
 - Primary Childhood Immunisation
 - Schools Immunisation System
- National Screening Services Systems
- Environmental Health (EHIS)
- Public Health Labs and Food Safety Labs
- National Counselling System
- Health Atlas
- Disability Databases
- Single Assessment Tool
- Home Care Management
- Some PAS in Longstay, Rehab and Mental Health

Community Care Alignment:

- Current systems being procured:
 - National Immunisation and Child Health System –NICIS
 - E Rostering in MH
 - Chronic Disease Education System
 - Clinical Care Programme for Diabetics
 - Clinical Care Programme for Older People
 - Warmth and Wellbeing
- Extend current hospital PAS
- Via IHI and Shared Care Record
- Wearables and Home Monitoring

Continuum of Care

- At birth IHI issued and patient details flow into EHR and 3rd party systems
- 48 visit and immunisation records administered and recorded with payments to GPs
- Acute hospital visit – summary record available as a start and clinical activity recorded with discharge summary available on summary record
- GP can assess summary record
- Labs, radiology, drugs etc all recorded as they happen regardless of where transaction done
- Security, access, FoI to be considered
- I can see my own record and allow others to see it

To Make it Happen

- Leadership
 - The vision is there
 - The Green light is nearly there
 - Local Leadership – doctors, nurses, admin
- Change Culture
- Innovation
- Partnership
- Commitment for the duration
- Patience
- Hard Work

Thank You

alan.price@hse.ie

Tw: @alanpricehse

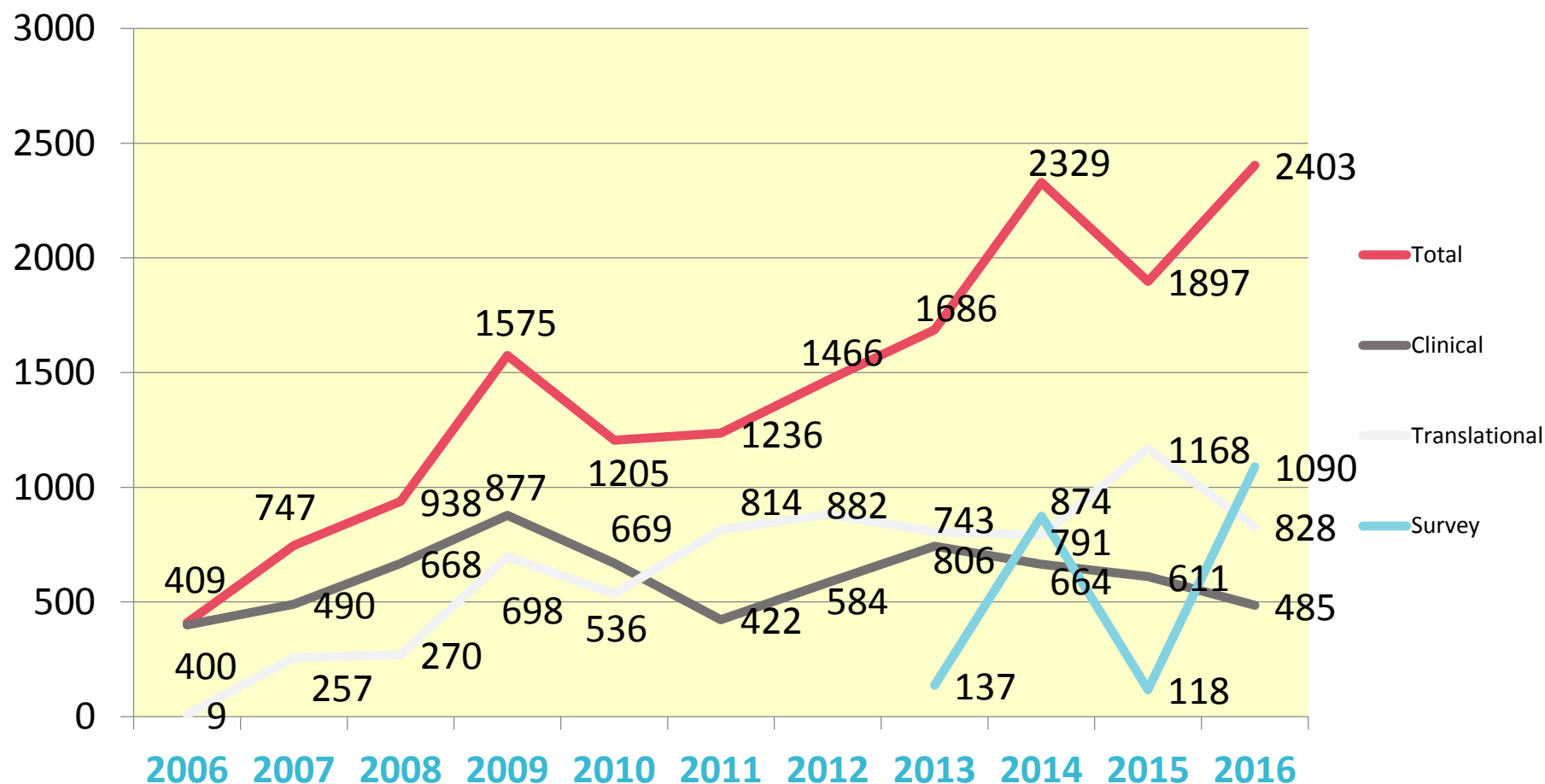
Why developments in eHealth could help the growth of cancer trials activity in Ireland?

Jacinta Marron,
Data Project Lead,
Cancer Trials Ireland

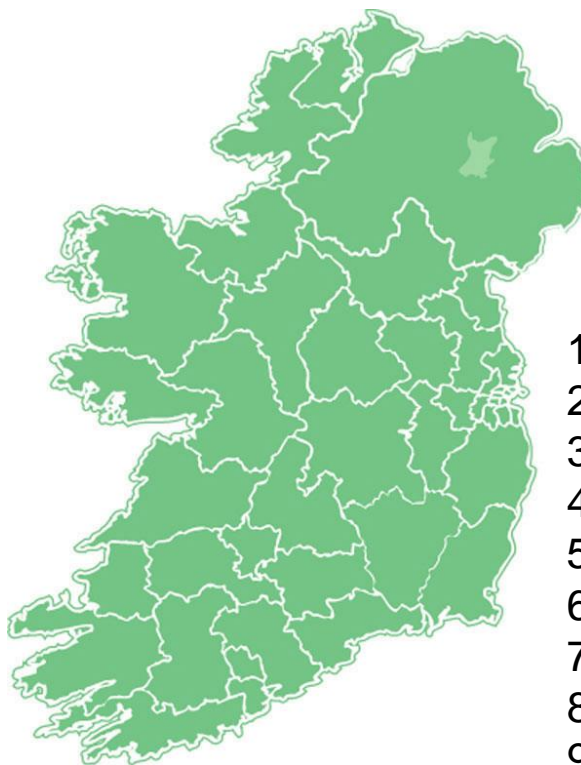
Summary

- Our Working Environment
- Our current landscape in eHealth
- Where do we need to go?

Patients Enrolled 2006 - 2016

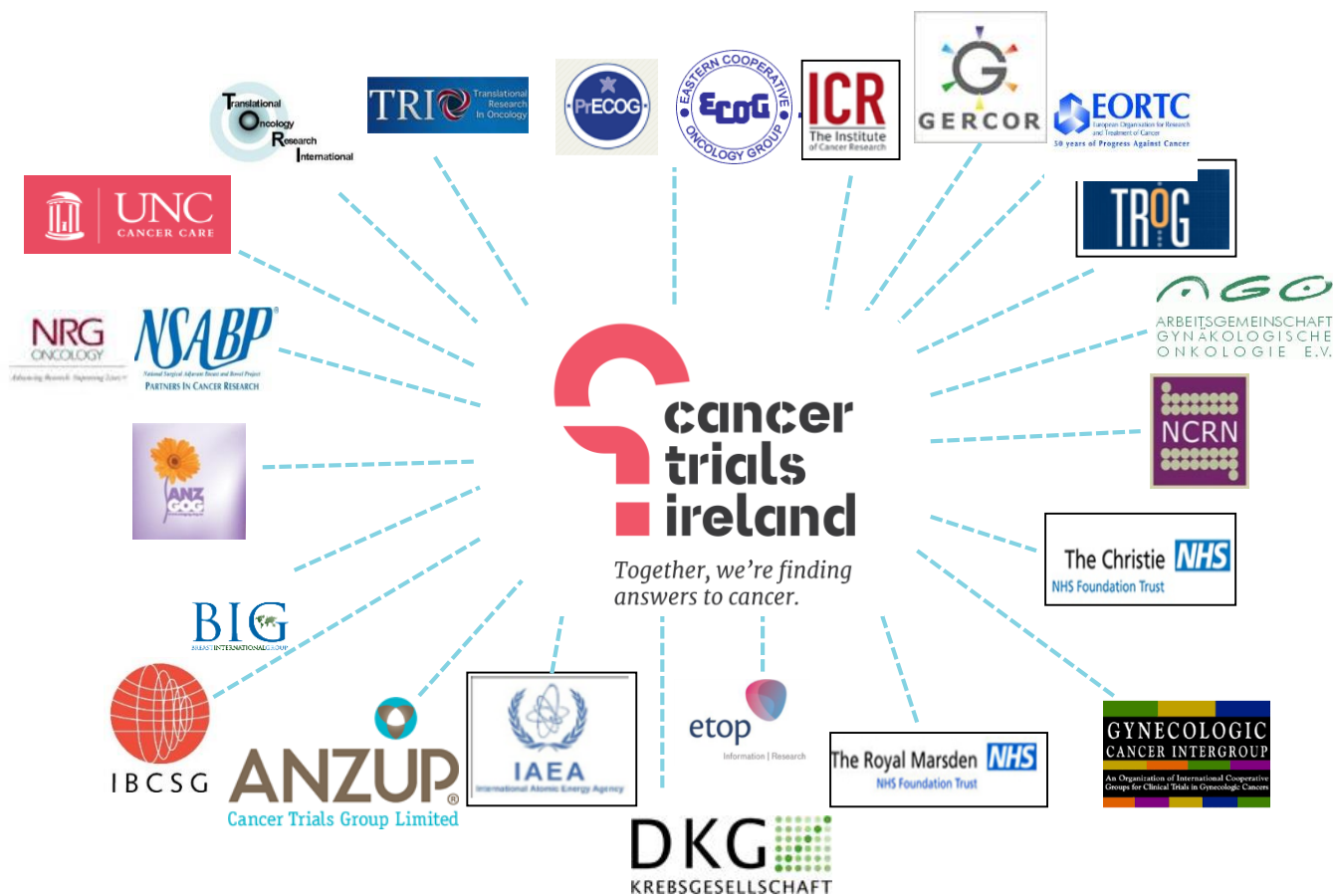


14 Hospital Research Units Partners



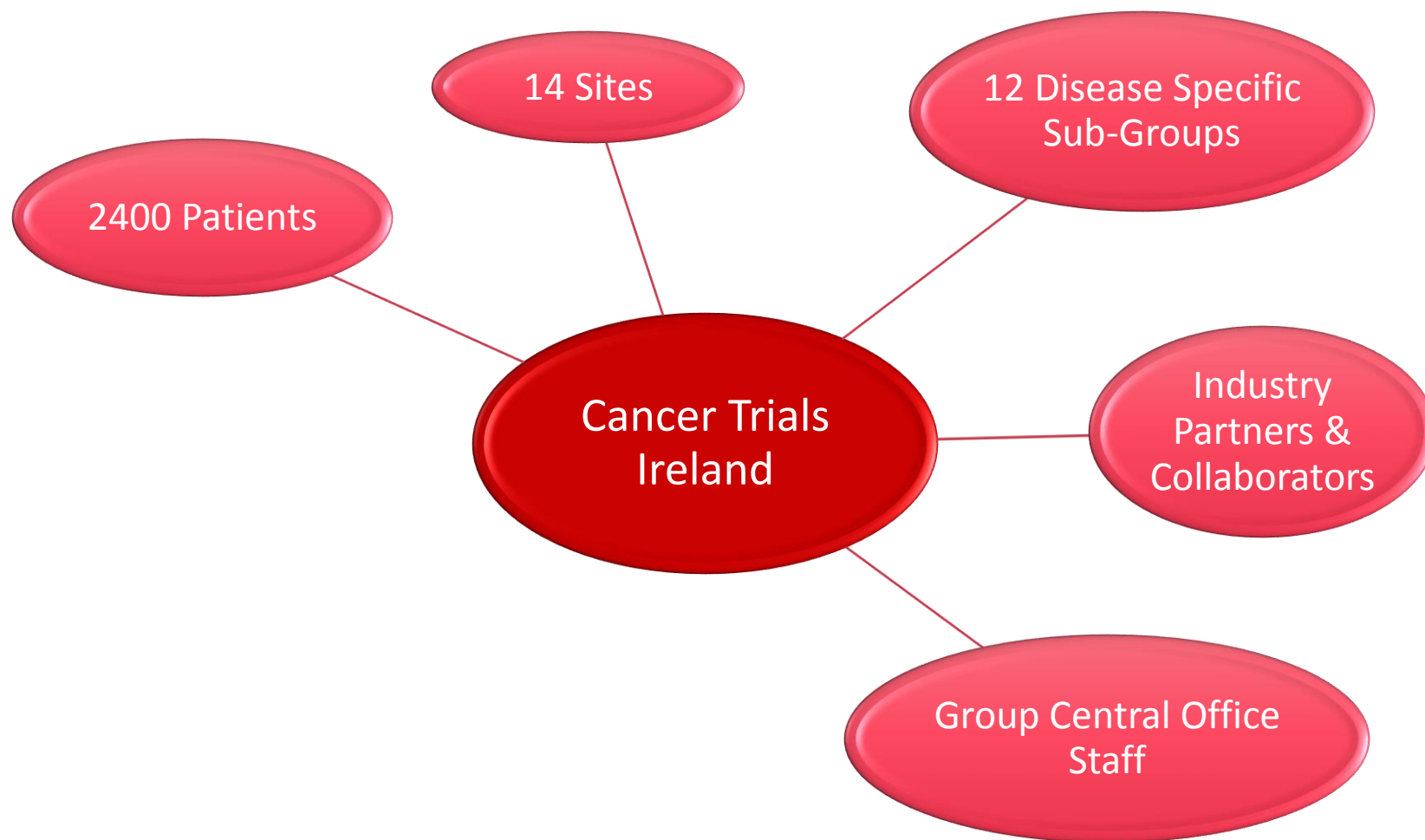
1. Cork University Hospital
2. Bon Secours, Cork
3. University Hospital Limerick,
4. Midland Regional Hospital
5. University Hospital Galway
6. Sligo General Hospital
7. Letterkenny General Hospital
8. Waterford Regional Hospital
9. St Vincents University Hospital
10. Beaumont Hospital
11. St James' University Hospital
12. Tallaght Hospital
13. Mater University Hospital
14. St Luke's Hospital.

Cancer Trials Ireland Collaborators

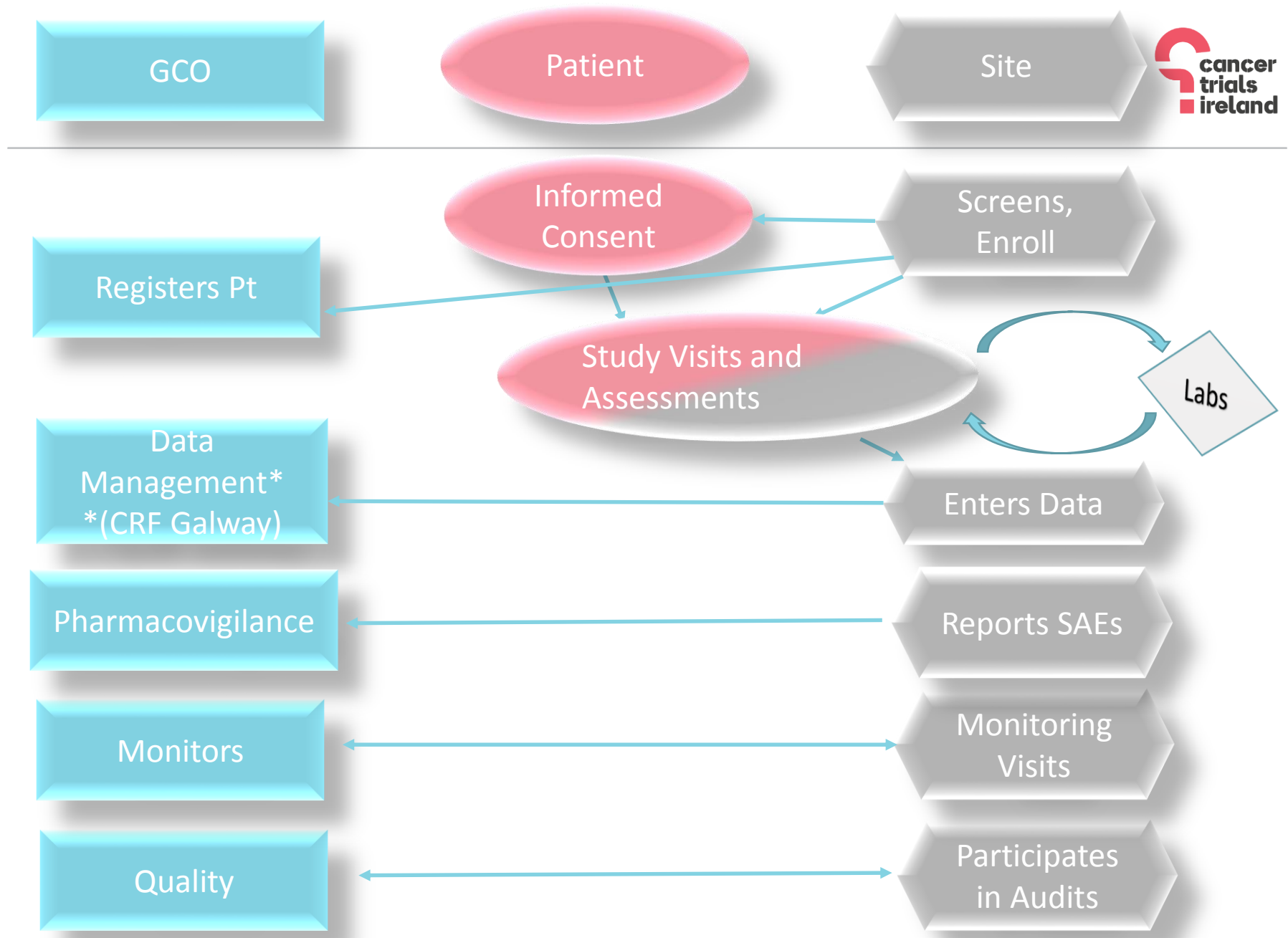


Cancer Trials Ireland Industry Partners





Our current landscape



GCO

Patient

Site

Informed
Consent

Screens,
Enroll

Registers Pt

Study Visits and
Assessments

Clinical Data Management System

Labs

Data
Management*
*(CRF Galway)

Enters Data

Pharmacovigilance

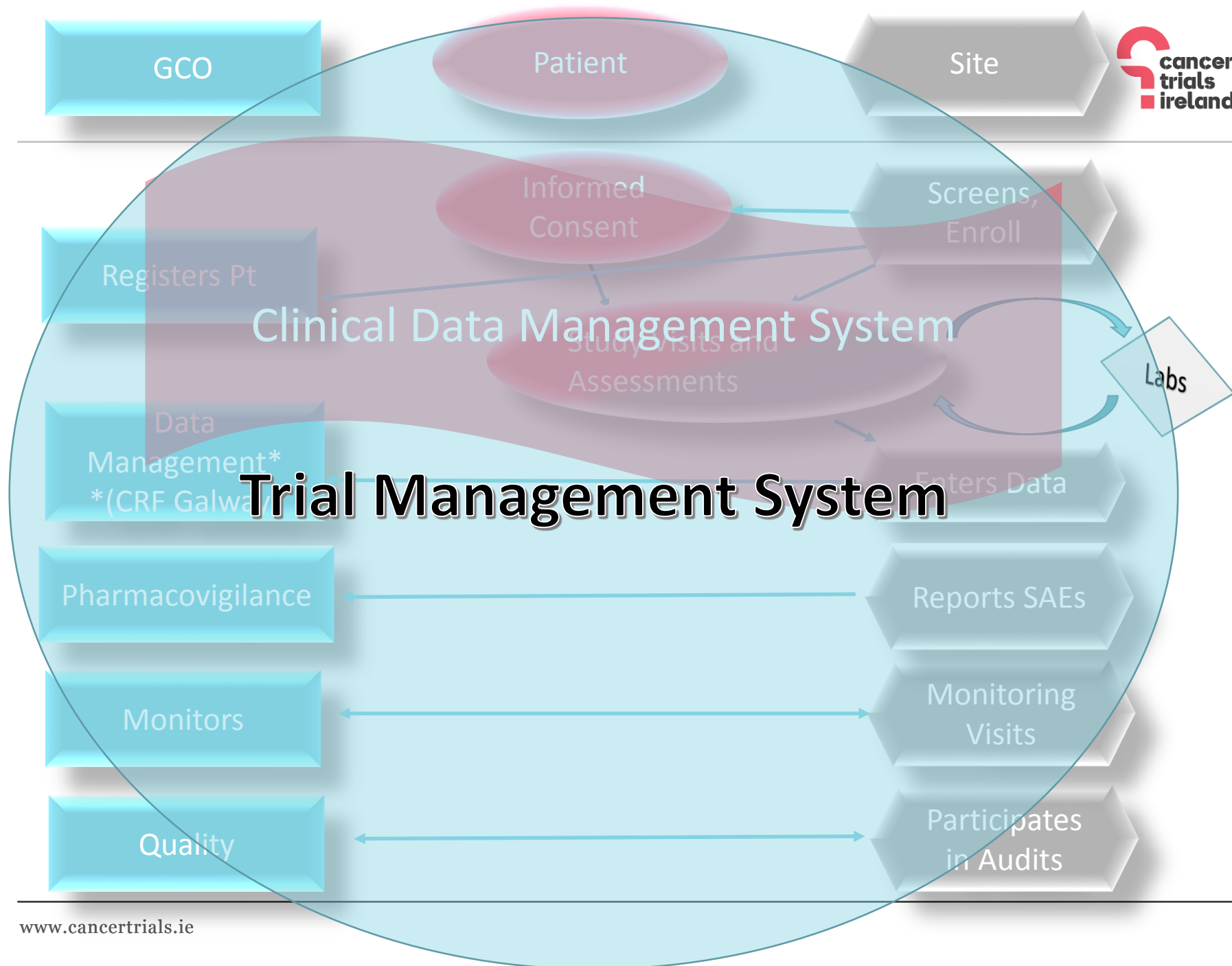
Reports SAEs

Monitors

Monitoring
Visits

Quality

Participates
in Audits



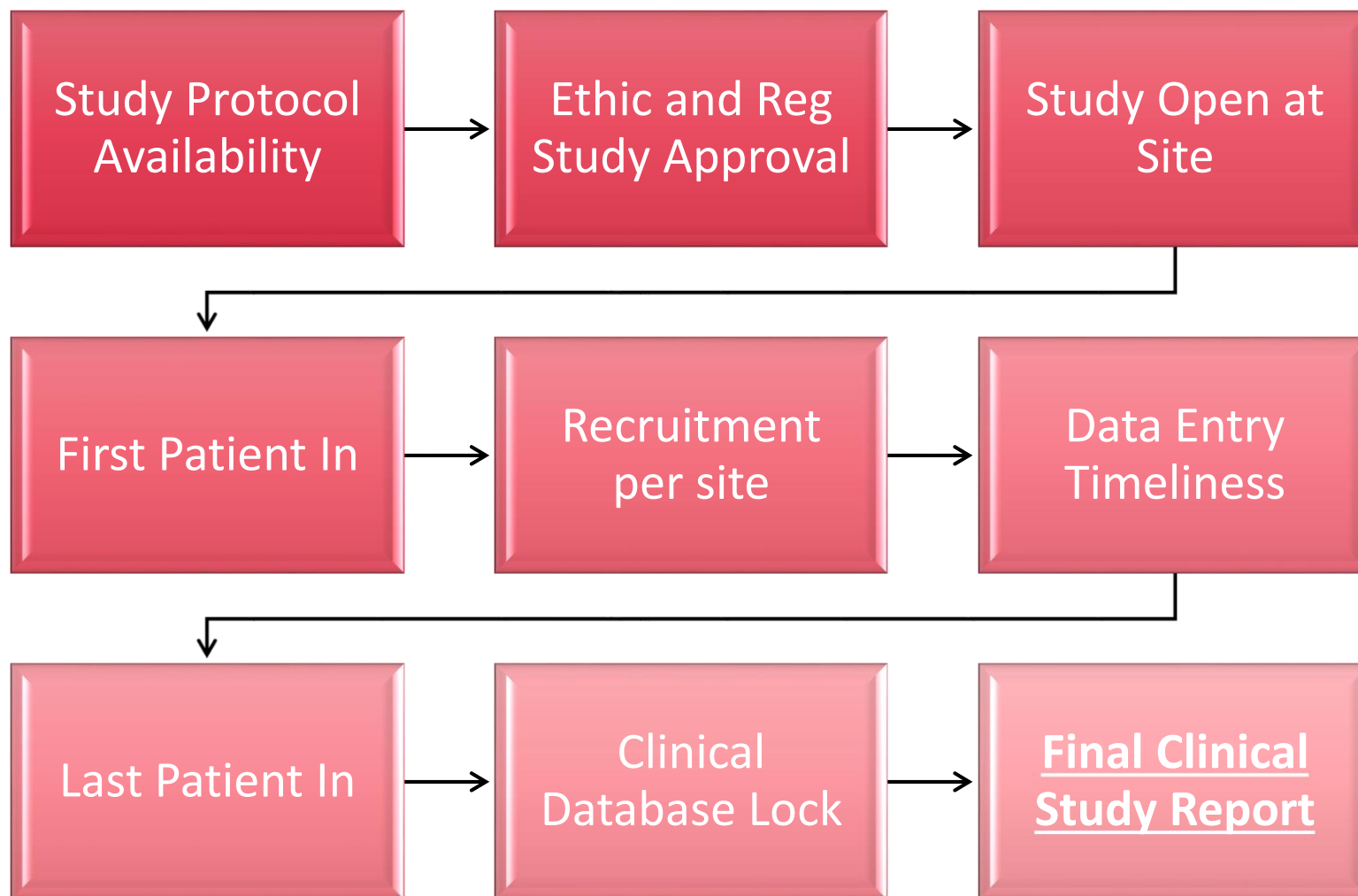
Why Integrated Trial Management System?

Efficiency

- **Open more trials** for patients with the resource we have
- Not only for GCO – Site Staff in our 14 Centres, CRF Galway colleagues

Compete

- Integrated TMS is becoming **standard** in similar organizations internationally
- Competition from Contract Research Organizations
- Real time metrics to demonstrate to our existing and potential funders and collaborators what we are achieving



Why Integrated Trial Management System?

Efficiency

- **Open more trials** for patients with the current resources
- Not only for GCO – Site Staff in our 14 Centres, CRF Galway colleagues

Compete

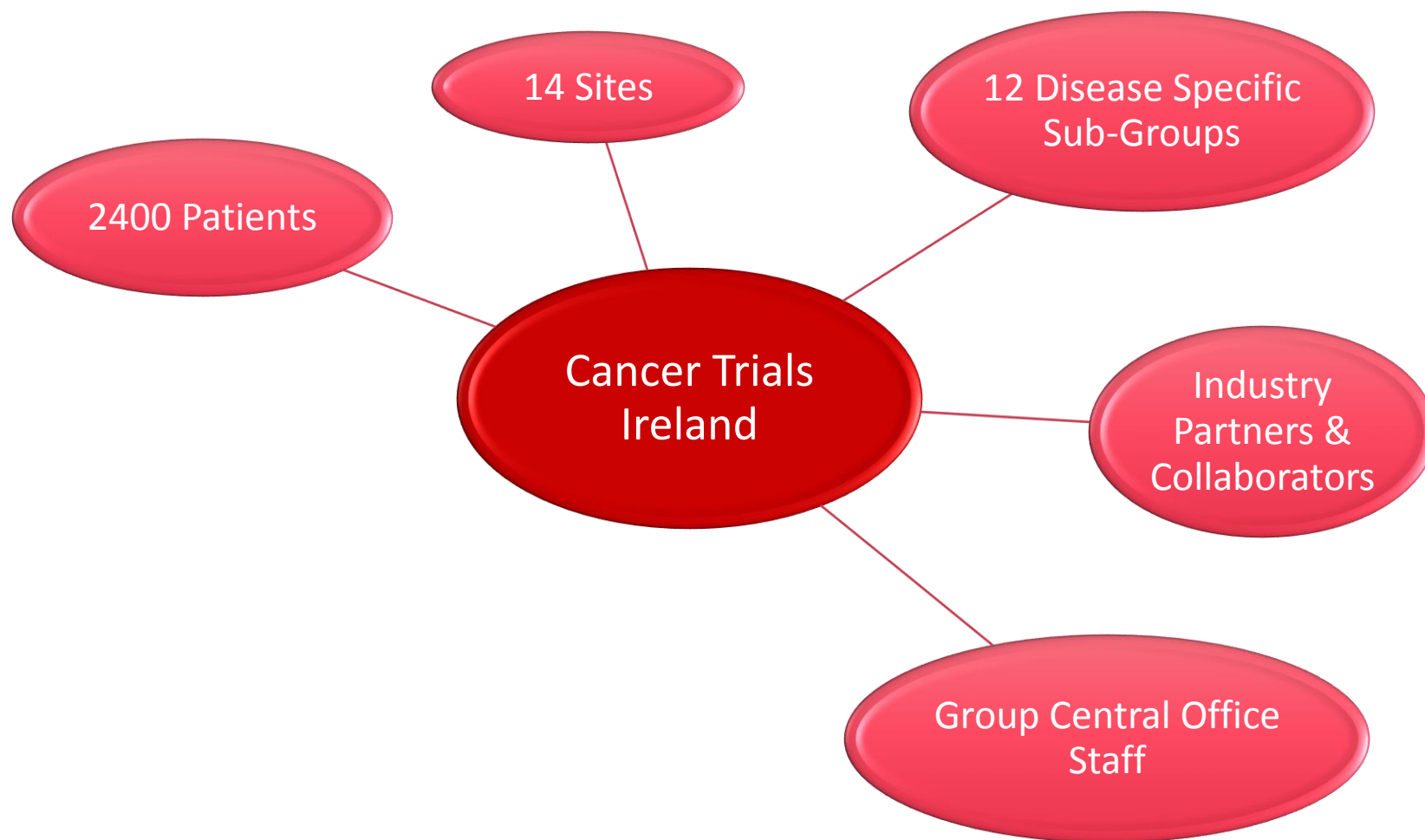
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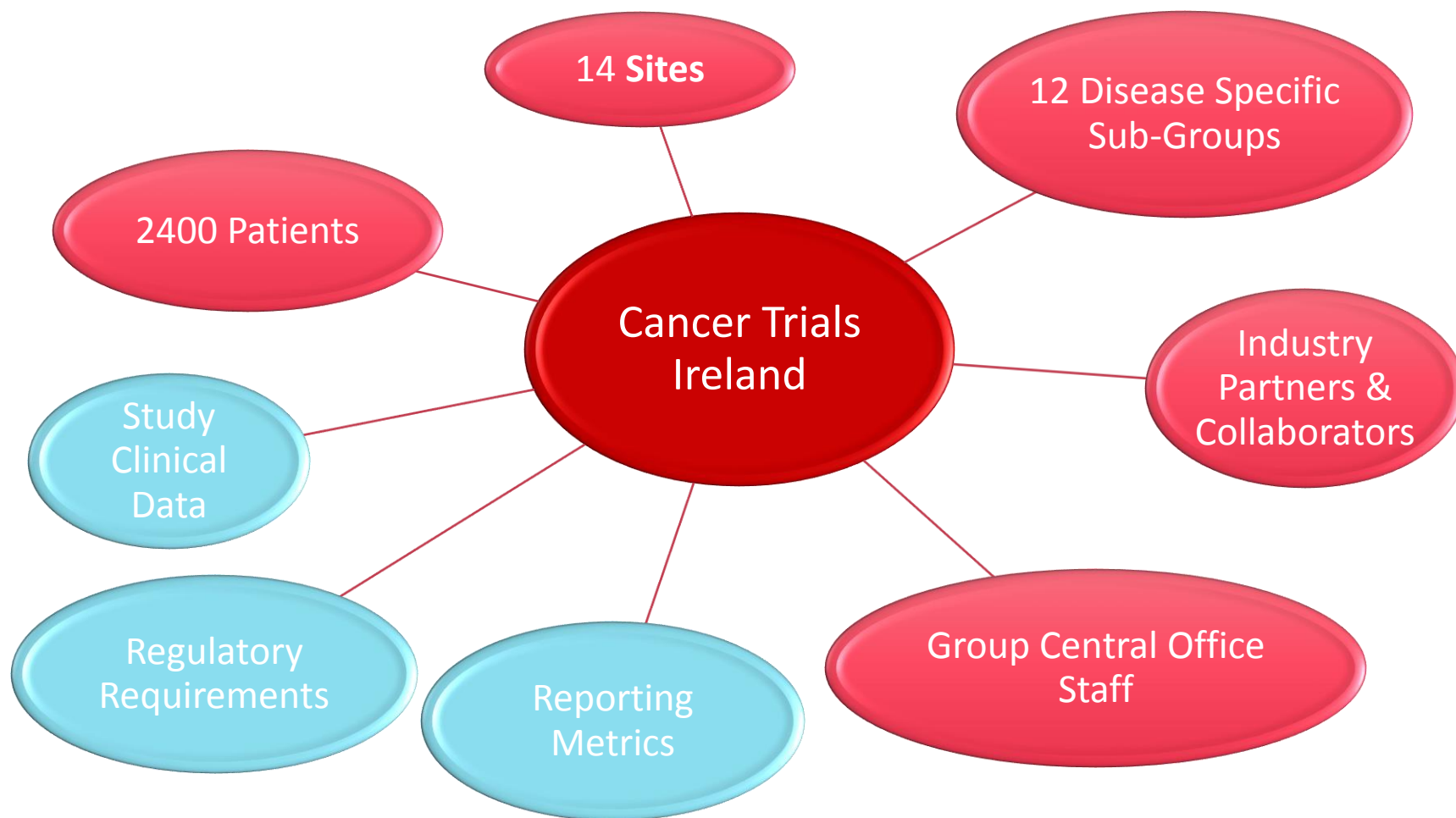
Compliance

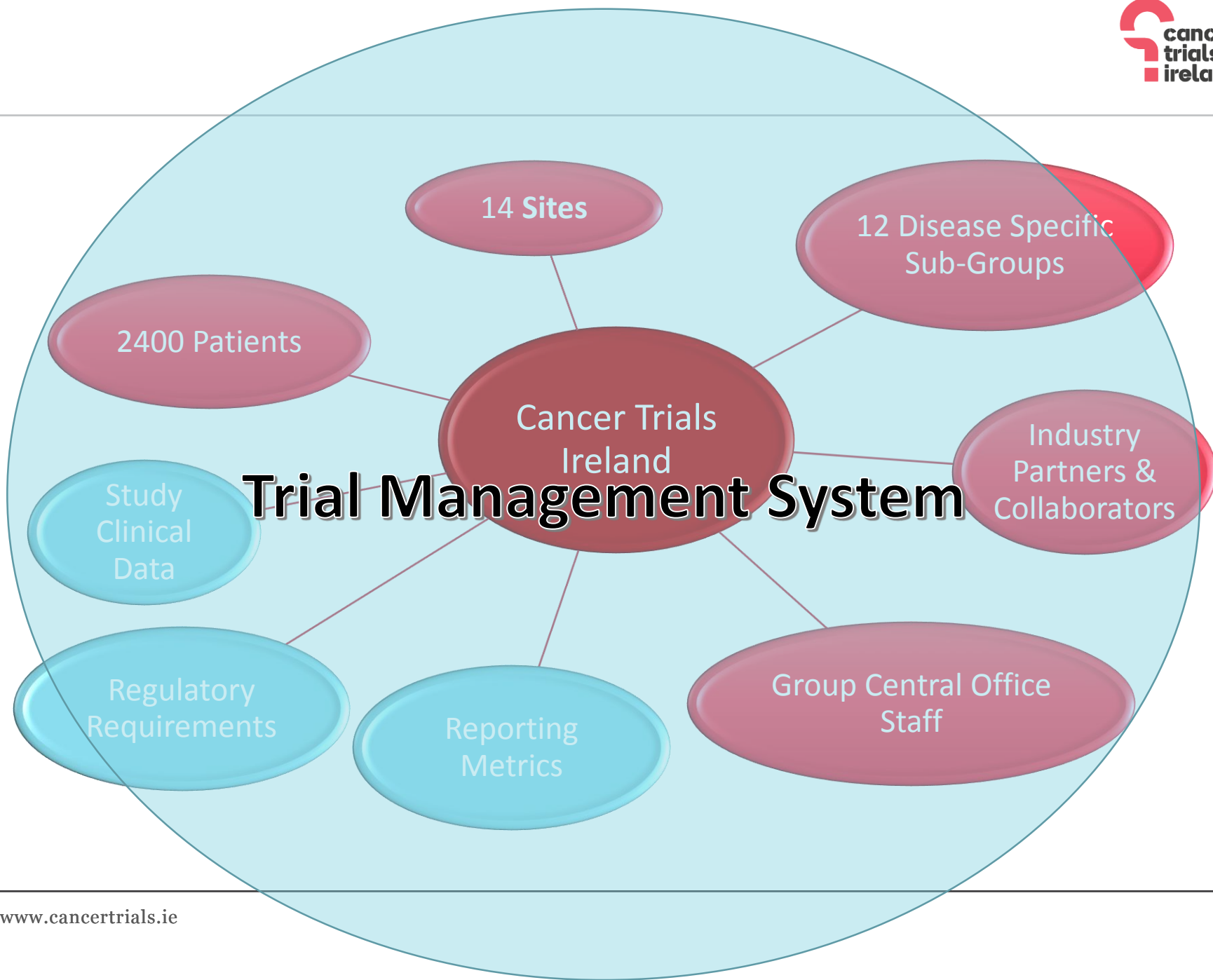
- Operational Environment – compliance regulations have become more **complex and resource intensive**
- Move in GCP to more holistic and risk based review of trial data
- New EU General Data Protection Regulations in 2018

Increased Regulatory and Safety Oversight









Cancer Trials Ireland Vision

**‘To open high quality and
relevant cancer trials that seek
better ways to extend and
enhance lives.’**

Next Steps..

- Development of Integrated Trial Management System is part of our Strategic Objective
- Co-operation from all our sites and stakeholders
- My details:
Jacinta Marron
Data Project Lead
jacinta.marron@cancertrials.ie

Thank you!

‘Sizzling Sausages and the Role of Information’

Gaye Stephens,
Professor of Health informatics,
Trinity College Dublin

Sizzling Sausages and The Role of Information

Gibson Hotel, Feb 10th, 2017

Gaye Stephens



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

IPPOSI

Patient Centric ???

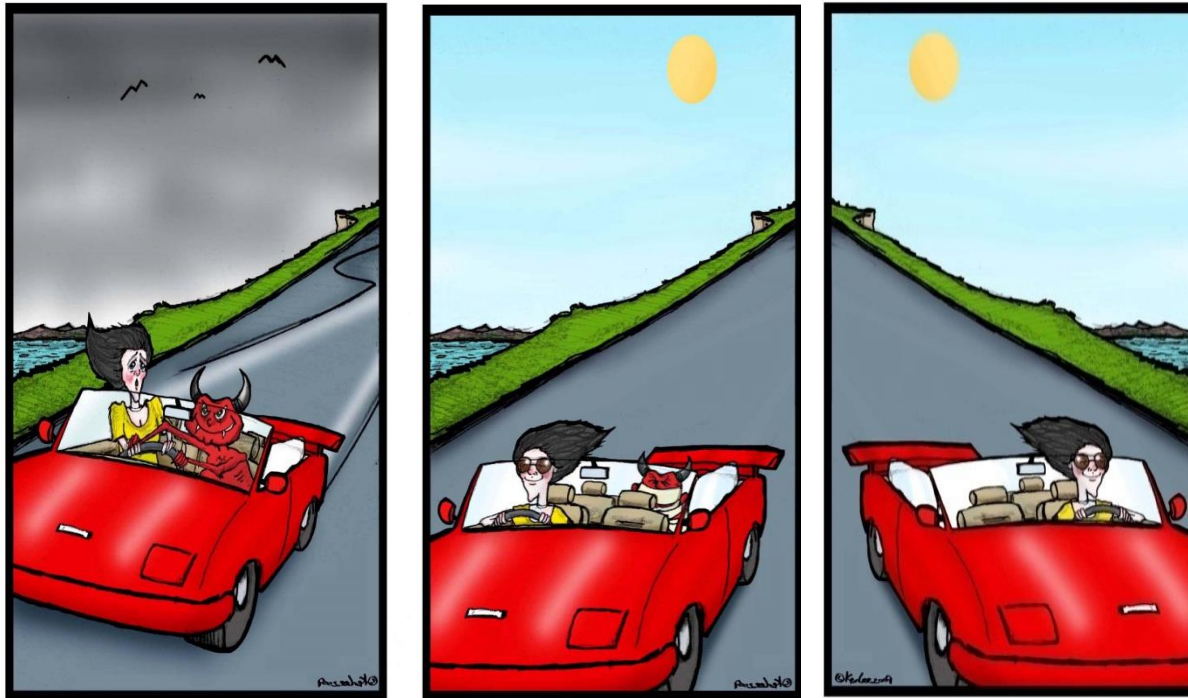
***“Just because a system has
patient data at its core
does not mean it is
patient-centric”***

Jane Grimson



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

The Role of information



Designed by Claire Kinneavy, Illustrated by Ken Lee

Health Informatics Society of Ireland (HISI) Workshop – Nov 2016



What is sizzling?



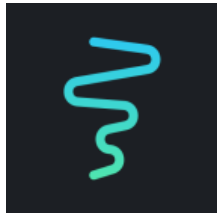
<http://www.ehr4cr.eu/>



Benefits for Patients

- faster access to safe and effective innovative medicines
- Contributing to improving health outcomes
- Better and more inclusive mechanisms for participation in clinical trials
- Supporting the discovery of better medicines for future generations
- Knowing your health data are held securely and your privacy is assured

What else is Sizzling?



HealthRhythms

makes it easy to measure and care for everyone's mental health

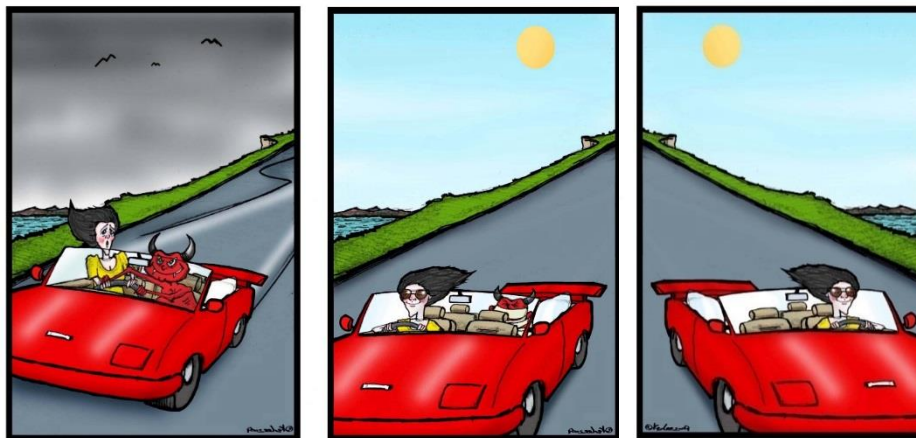
<https://www.healthrhythms.com/>

Rhythm Sensing
Clinical Actionability
Flexible Implementation



**Increased
Proactive
Care**

Our Journey to Electronic Health Records



Designed by Claire Kinneavy, Illustrated by Ken Lee

Light House Project- Haemophilia, Epilepsy, BiPolar
National Systems

Patient Organisation Registries

Patient Apps, Devices, Wearables, Insideables

OPPORTUNITIES FOR PATIENT INVOLVEMENT

National Education / Training on EHRs

For clinicians, nurses and Patients

By clinicians, nurses and Patients

Capacity Building / Empowerment of patients

Link to self-management programmes

EHR Design + Roll-out

Patient Portal

Other building blocks

Decision-making boards

Public Trust + Confidence

Who, When, Why?

Consent – How?

Special Considerations for individual groups

Data Linkage & Sharing

Advocating for essential building blocks

Real-Time information

Informed Consent

Bi-directional flow of information

Tracking patient outcomes

Promoting Partnerships

Communication

Openness & Transparency

Developmen
t of
Electronic
Health
Records
(10 years)

TO ADDRESS THE FOLLOWING CHALLENGES

Trust

Access

Collaboration

Consent

Communication

Community

Education and Training

Sharing

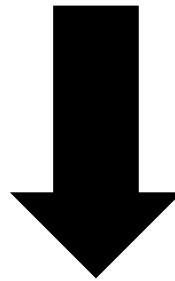
Timing

Opportunities in 2017

- **Feb 2017**

- Patient Personas Workshop- Refocused by patient-led input.

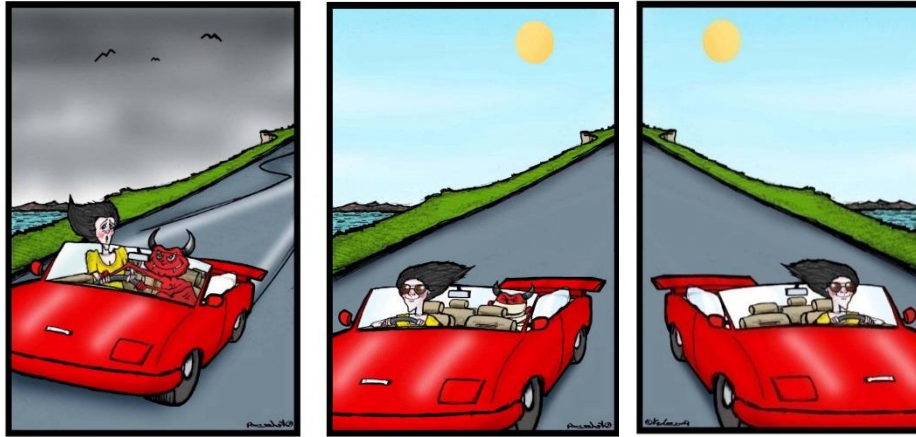
2-Way Interaction with Public / Patient



Health information & Quality Authority (HIQA)
National Standards Authority of Ireland (NSAI)
Healthlink
Dept. of Health
eHealth Ireland
Academic Institutions
Industry
MORE??

- **Nov 2017**

- Health Informatics Society of Ireland – patient-led workshop



Thank You for Listening

Gaye.stephens@tcd.ie

e-Health in Ireland, an exciting and rapidly evolving environment

Professor Martin Curley,

Senior V.P. and Group Head of Global Digital Practice at Mastercard
& Professor of Innovation at Maynooth University

Thank you

Panel Discussion

Moderator
Eibhlin Mulroe,
CEO,
Cancer Trials Ireland

Summary & Close

**The Stakeholder Meeting
is now closed**

**Patient Advocate Advisory Meeting
will commence shortly**

Cancer Trials Ireland, Patient Advocacy Advisory Group (PAAG)

**Diane Hanly,
Chairperson**

Meeting closed