



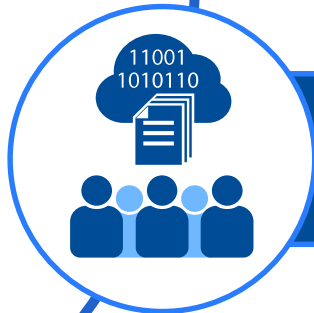
QuintilesIMS™

# Commercial Uses of Real World Data to Support the NHS and the Pharmaceutical Industry

Tim Sheppard, General Manager, Northern Europe



**What do QuintilesIMS do?**



**Using Patient Data for Research**

# Quintiles & IMS Health



**Improve  
clinical trial  
design and  
execution**

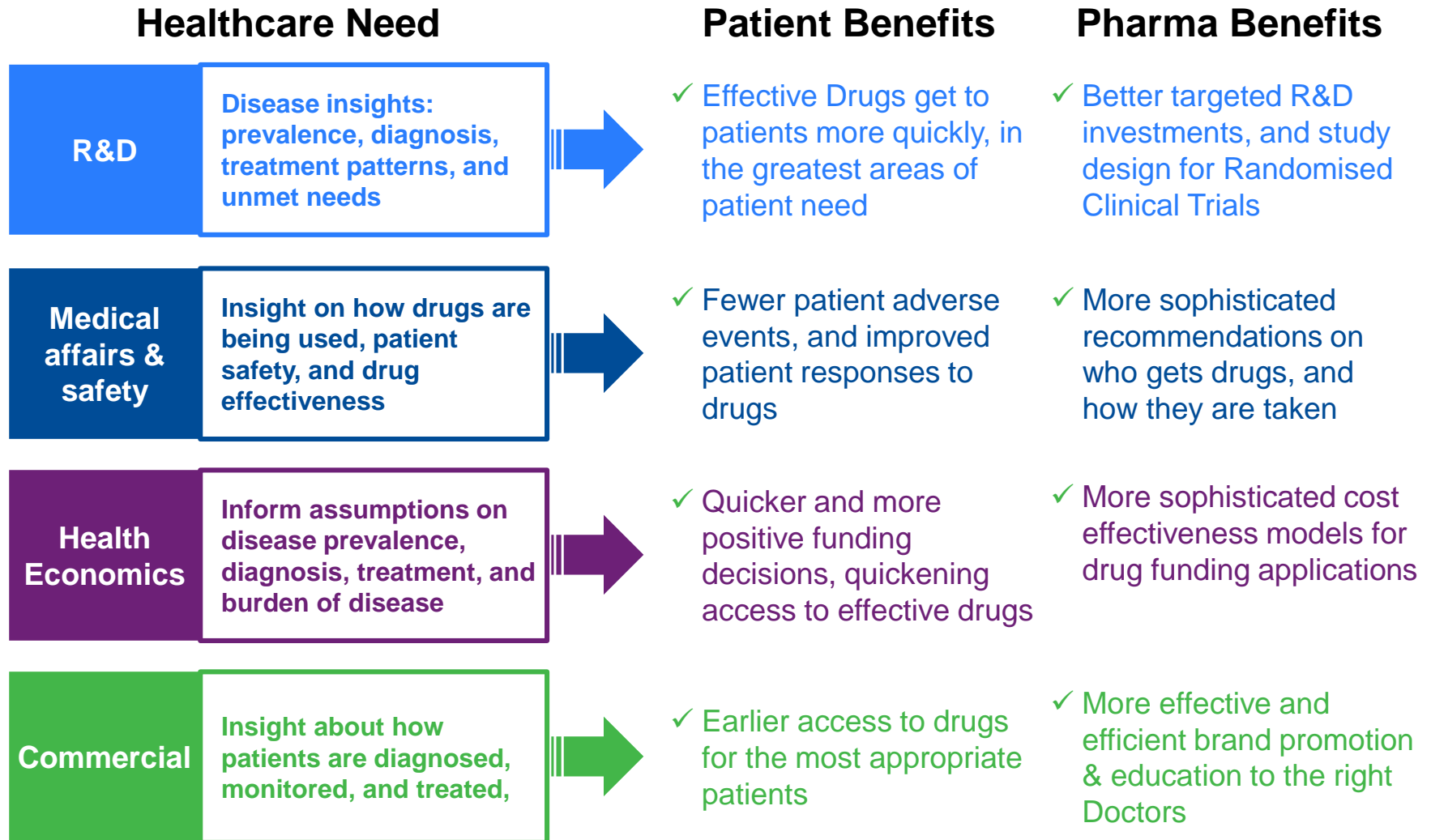


**Improve access  
to medicines**

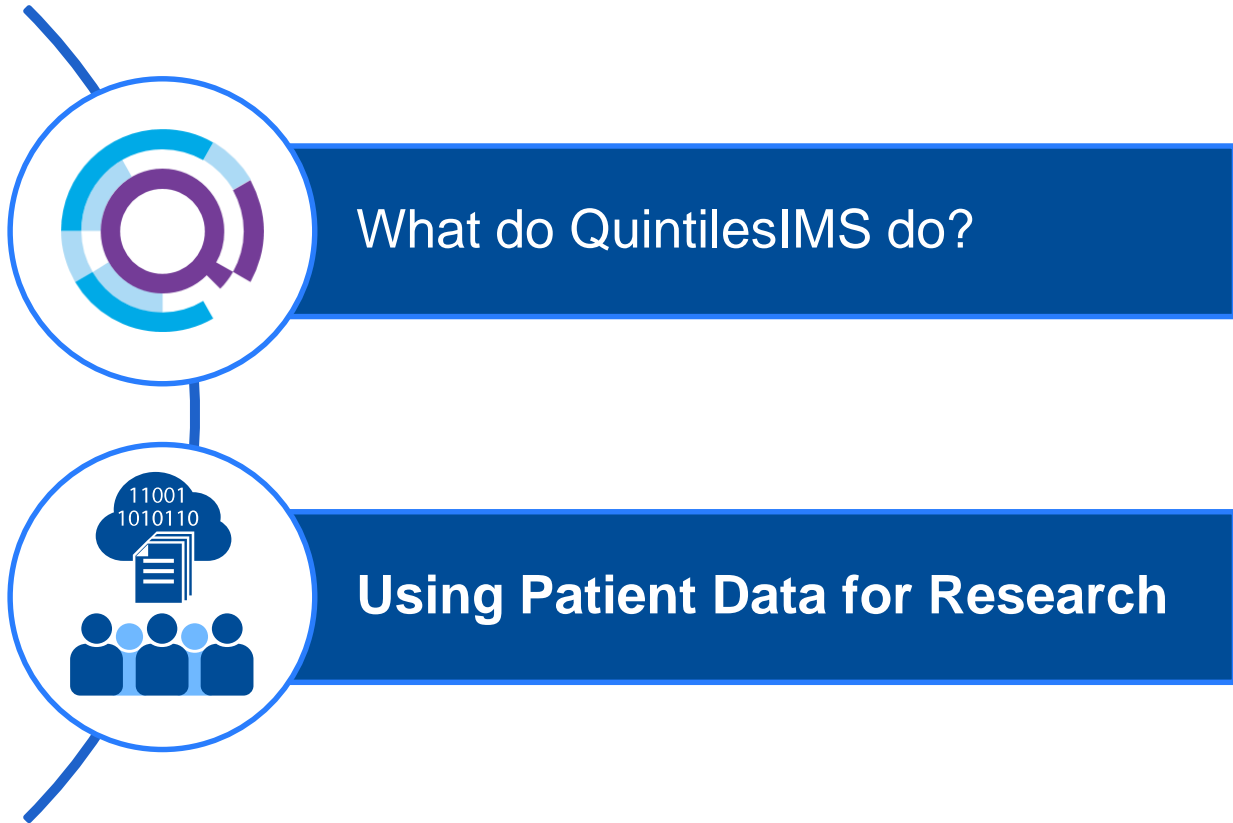


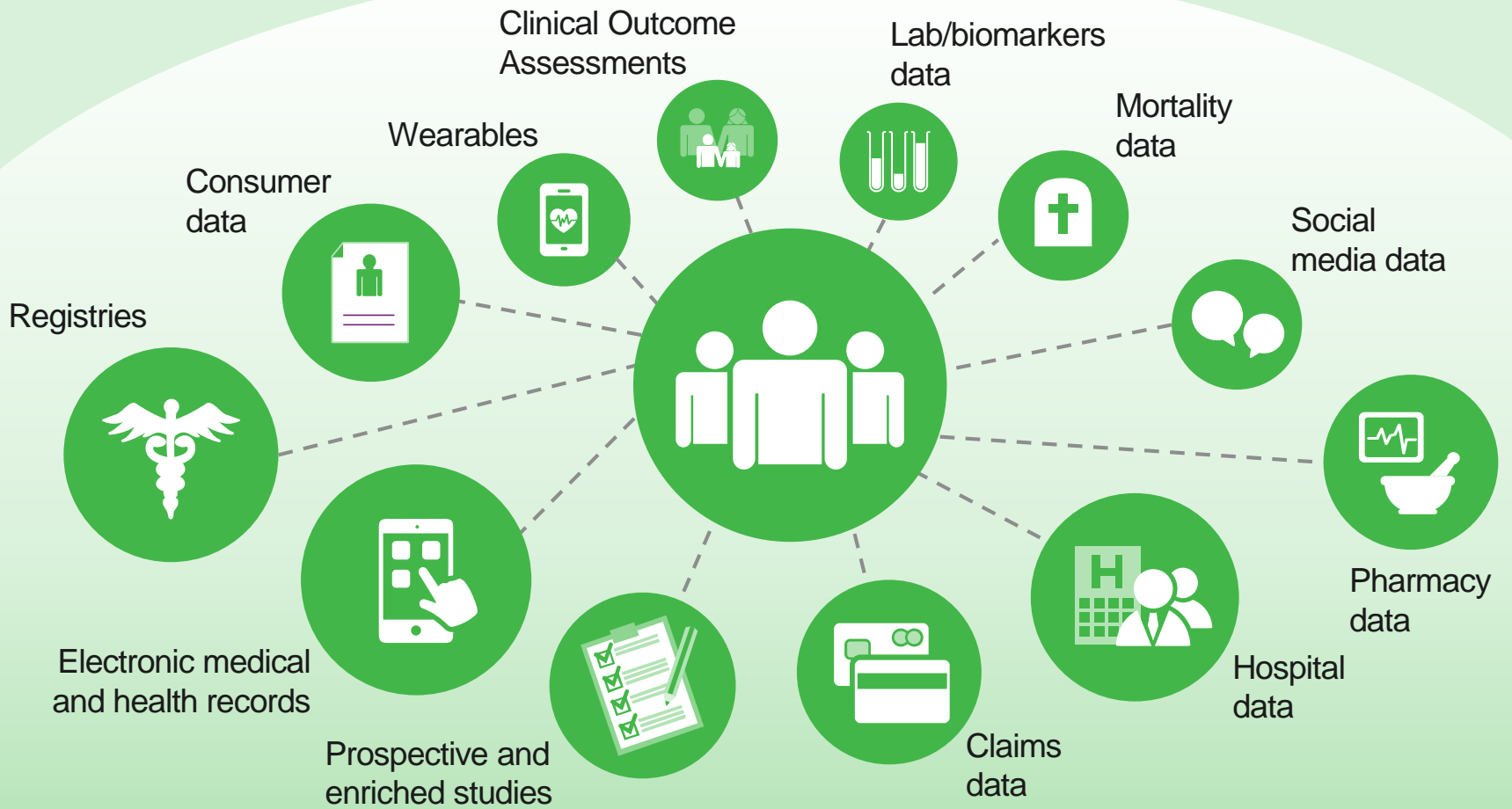
**Demonstrate  
value of  
medicine and  
measure  
outcomes**

# Commercial use of Real World Data resolving industry needs, and producing tangible benefits to patients

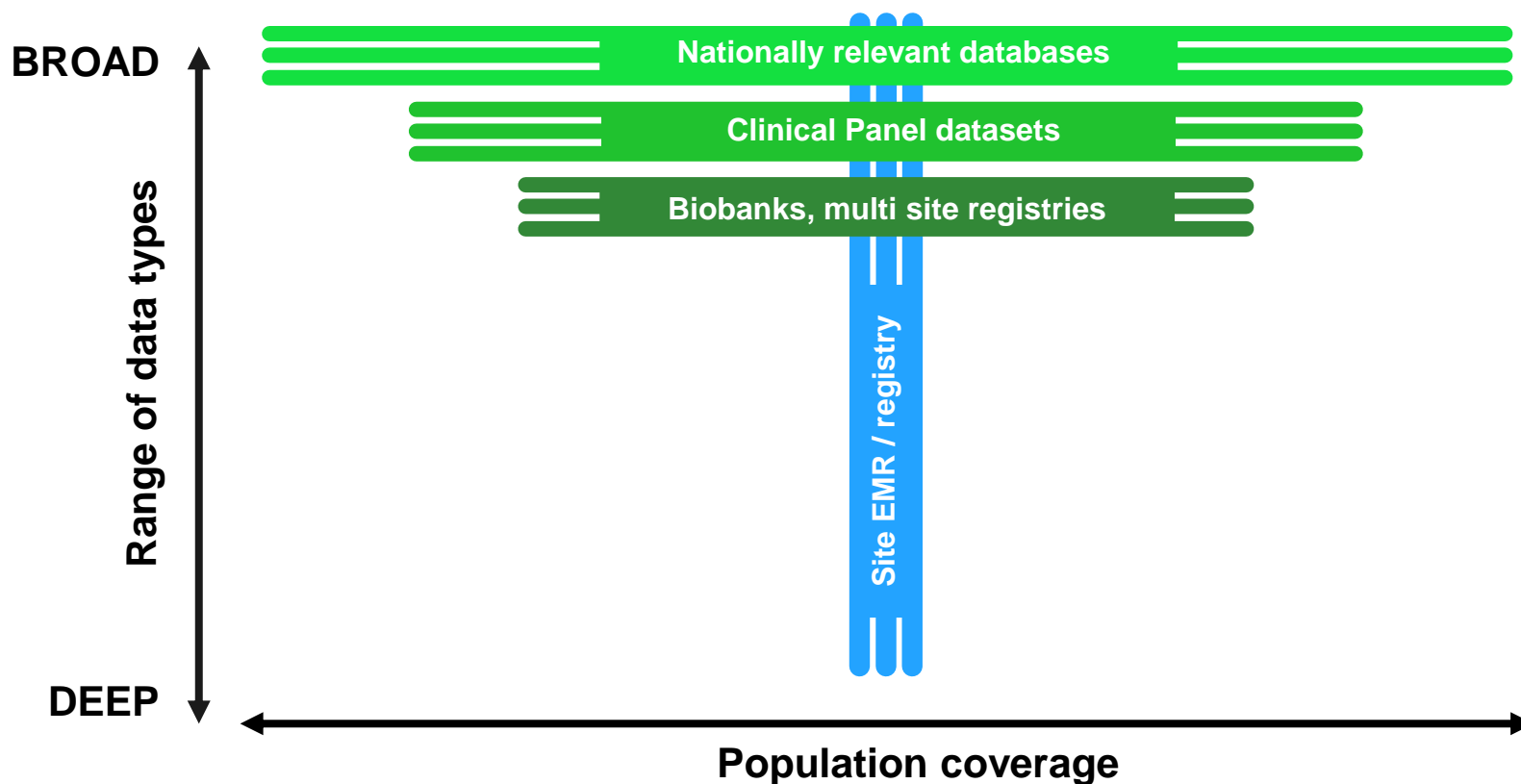


# Agenda





# QuintilesIMS can also identify and source data from third parties, and combine with other datasets...



# Rare diseases are not so rare, but finding those patients is taking too long



**350 million** people suffer from a rare disease worldwide<sup>1</sup>

**40%** of patients are misdiagnosed initially<sup>2</sup>



**7,000**

rare diseases have been identified<sup>1</sup>

**QuintilesIMS**  
brings more HOPE  
to rare diseases sufferers



**7.3**

**physicians (avg.)**  
are seen before diagnosis<sup>3</sup>



**50%** of rare disease sufferers are children<sup>1</sup>

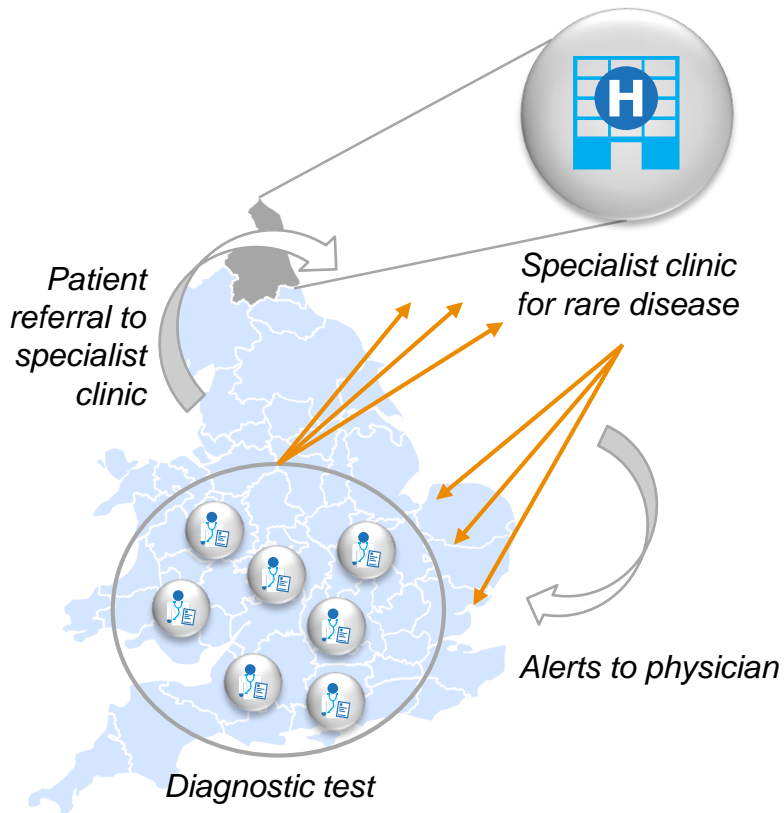
**4.8** years (avg.)  
before an accurate diagnosis<sup>3</sup>



Same methodology applies to any disease with a delay in diagnosis (rare or non-rare). Hepatitis C, Ankylosing Spondylitis, NASH are just some examples of non-rare diseases that suffer from a delay in diagnosis, and can benefit from this methodology



# Rare disease detection using patient data



- 1 National coverage of all hospital episodes in England collected in single data source
- 2 Partnership with specialist clinic to develop risk stratification algorithm to find undiagnosed patients
- 3 Alerts sent from specialist clinic via mail to physicians with guidance to screen named patients for rare condition
- 4 Physicians carry out diagnostic test
- 5 Newly diagnosed patients referred to specialist clinic

# Today's Clinical Trials Present Familiar Challenges. And New Complexities.



**48%**

of hospitals miss their patient targets<sup>1</sup>



**57%**

of trials have a protocol amendment<sup>2</sup>



**80%**

of trials are delayed, often recruitment related<sup>3</sup>

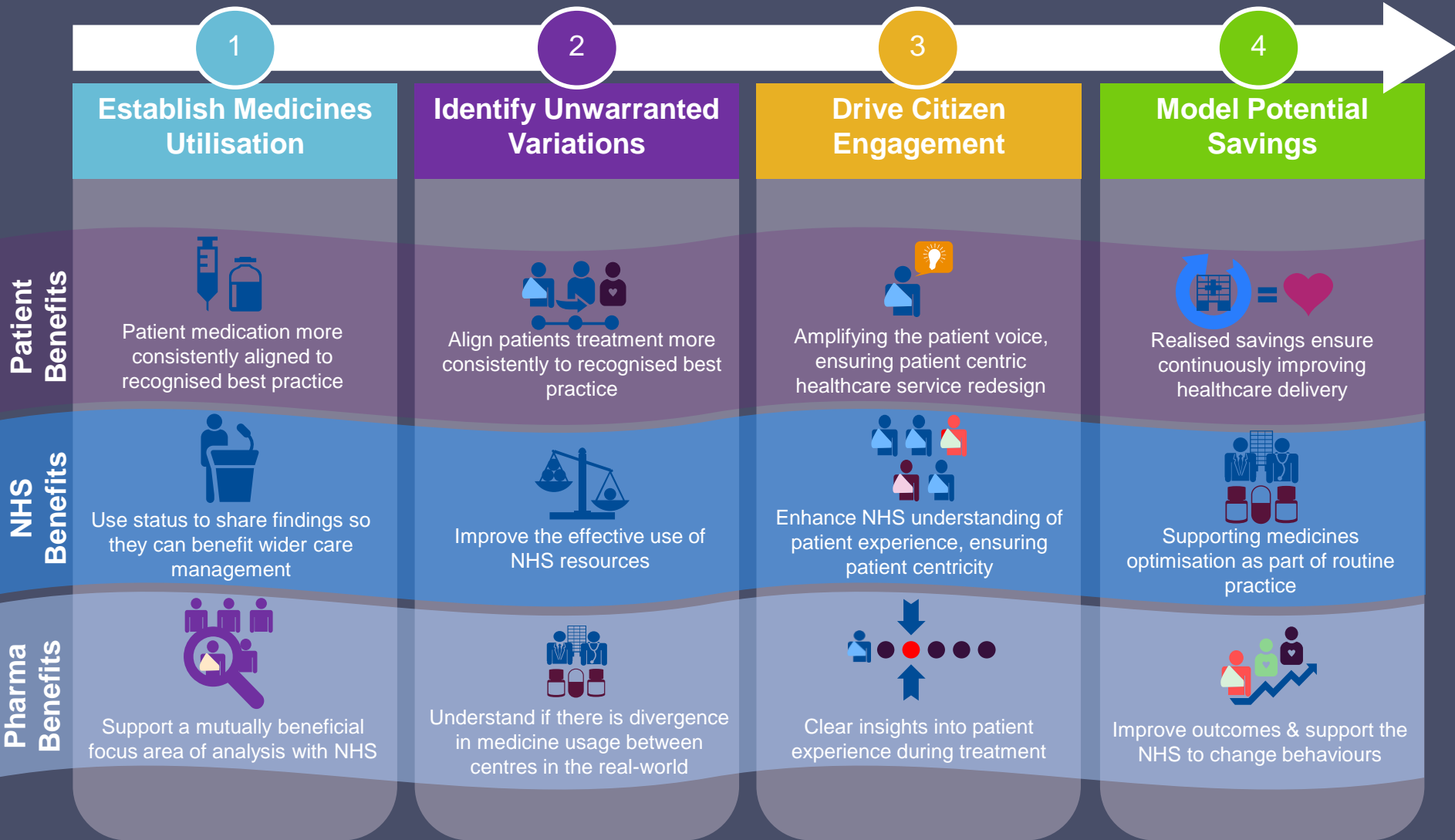


**61%**

increase in inclusion/exclusion criteria<sup>4</sup>

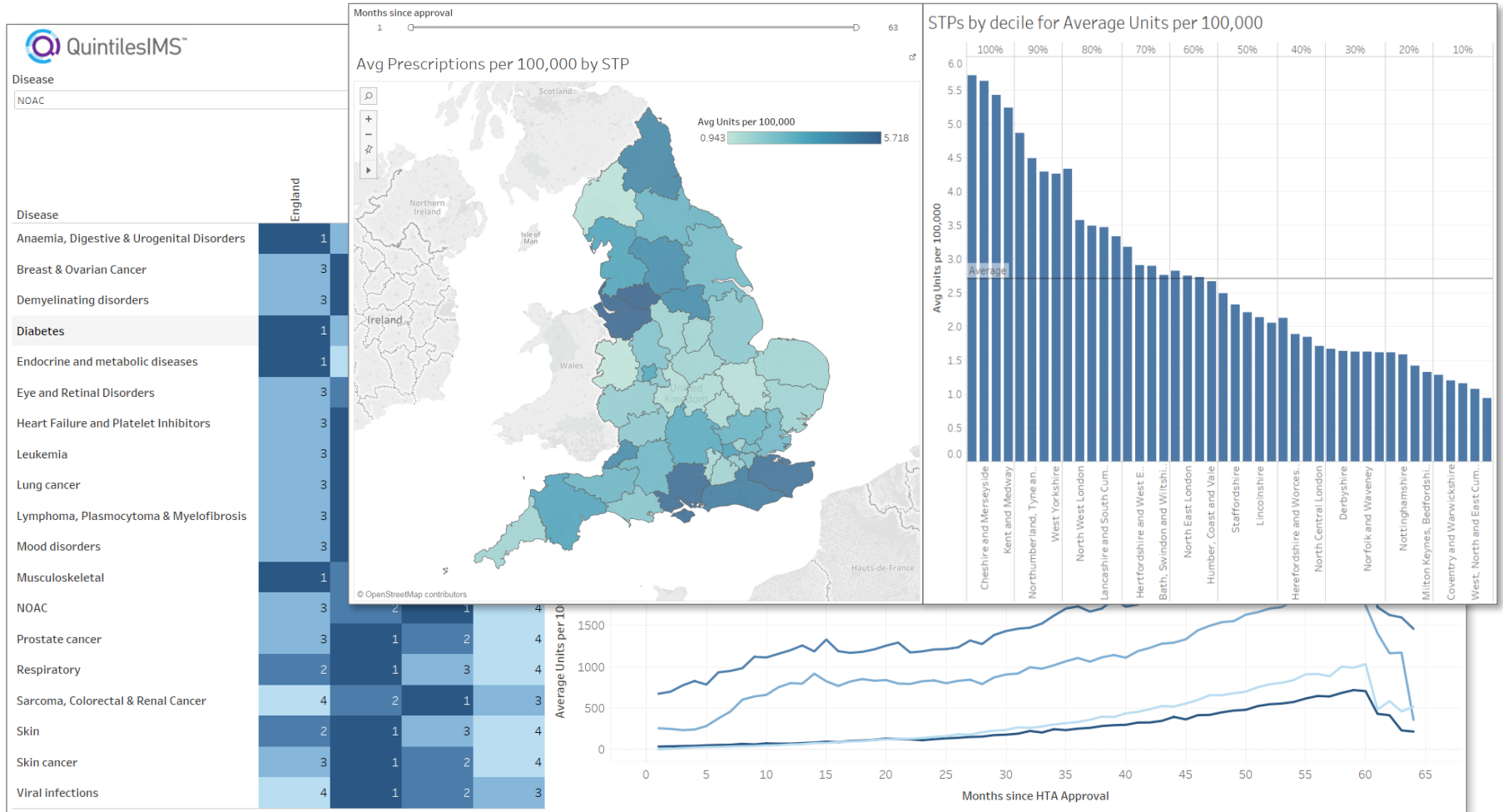
**In an era of targeted therapies and tightly defined patient populations, you need a new approach**

# Improving patient care with the Cancer Vanguard



# Dashboards provide international benchmarking

## With country drill downs assessing rate of uptake by NHS region



# Case study: New methods of pharmacovigilance – direct to patient validation study

Conducted with European Medicines Agency

## Situation

To assess the extent to which data collected directly from pregnant women provides information on medication use and other potential risk factors throughout pregnancy, and is suitable for research purposes, including:

- How well can consumers report drug use and outcomes?
- How much medication usage (eg OTC or prescribed but not taken) is not recorded in electronic health or prescription records?
- Are there additional risk factors not typically recorded?

## Solution

- Compare self-reported medication use with data from electronic health records and national prescription data.
- Data collected in 4 countries, 4 languages



## Results

- 83% used  $\geq 1$  non-pregnancy-related medication during pregnancy or the preceding month; 24% reported using OTC medications; 7 % reported not using prescribed medications
- Additional risk factors not found in EMR were reported.
- Validation of clinical outcomes of special interest may be warranted

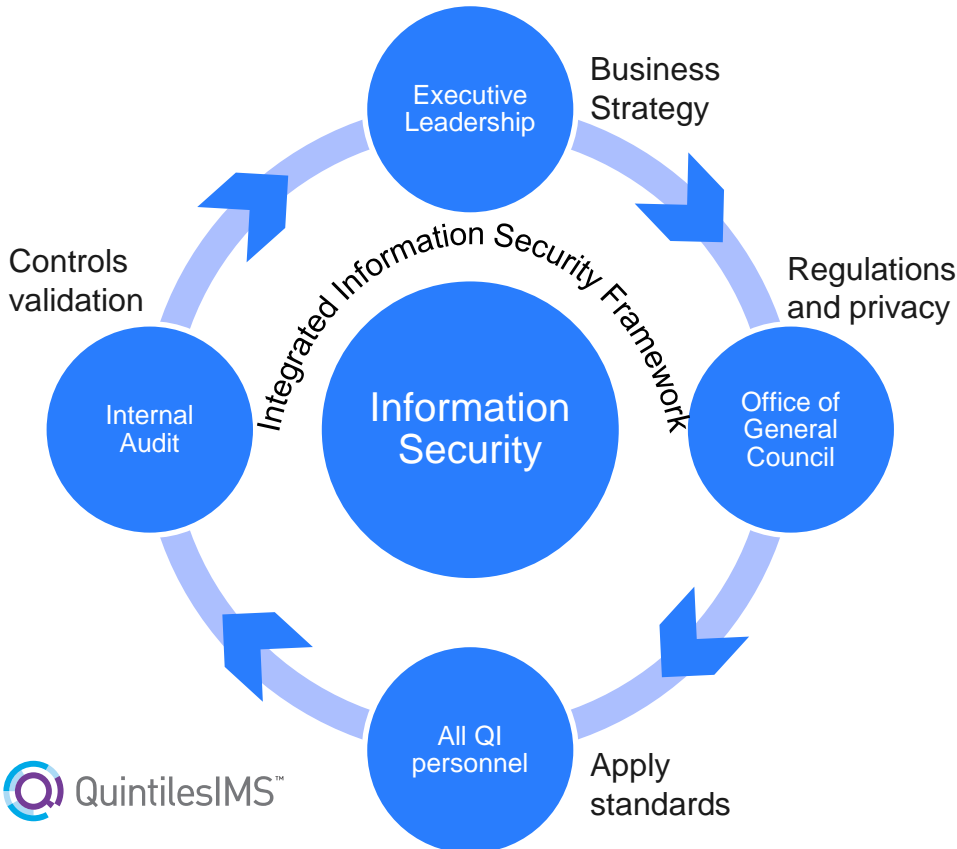
# Information Security at QuintilesIMS



## Key drivers requiring responsible security practices

- QuintilesIMS (QI) Contracts and client expectations
- Protection of assets, reputation and Intellectual Property
- Legislation and regulation, including data privacy and biopharmaceutical services

20<sup>+</sup> petabyte data  
 100<sup>+</sup> countries  
 5000<sup>+</sup> customers



## QuintilesIMS Pledge

- Global Integrated Information Security Framework
- Comprehensive security safeguards
- Dedicated security experts and resources as part of the Global Information Security team
- Draw on the knowledge and insight of external cybersecurity experts and vendors
- Training and awareness for internal and external users

