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# Extracting and analysing data from general practice

PHE / NHS Health Checks webinar, 7 July 2016

Presented by Dave Roberts, Matt King and Kathryn Salt



# Today's presentation is in 4 parts

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1	<b>Primary care domain and general practice data</b>	Dave Roberts Head of Primary Care Information
2	<b>End to end process for general practice data</b>	Matt King Relationship Manager
3	<b>Analysis and publications</b>	Kathryn Salt (née Knight) Analytical Section Head
4	<b>Our work on NHS Health Checks</b>	



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Primary care  
domain & general  
practice data

End to end  
process

Data  
analysis and  
publication

Our work on  
NHS Health  
Checks

**Presented by Dave Roberts**

# Background

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- Primary Care Domain
- We work with:
  - General practice data
  - Dental data
  - Ophthalmic data
  - Data on eligibility for NHS Continuing Healthcare
- Today's focus is on general practice data

# HSCIC GP collections

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- We collect coded data
- Mainly using GPES  
(the General Practice Extraction Service)
- From general practices in England

# GP data collections (1)

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- GP contract services:
  - QOF
  - Enhanced Services
  - INLIQ
- Monthly dementia diagnoses data
- CCG Outcomes Indicator Set

# GP data collections (2)

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Department  
of Health



Public Health  
England

- Accountable GP metrics (in preparation)
- Learning Disabilities Observatory
- GP2DRS
- NHS Health Checks (in development)
- Latent TB Infections (in early discussions)

# GP data collections (3)

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- Patient objections management
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Plus extensive wider interest:

- Arm's Length Bodies
- Regional and local NHS
- Other government departments
- Local government
- Research and academia
- Charities
- The commercial sector



# Future opportunities

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- To support a broad range of users
- PHE interest in general practice data we would like to support:
  - Immunisations and vaccinations
  - Real time syndromic surveillance
  - Latent Tuberculosis Infection screening
- Plus ongoing discussions through PHE's Primary Care Intelligence Group

# Areas of focus

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- Meeting the needs of a broad range of users
- Making the process quicker
- Other process improvements



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**End to end  
process**

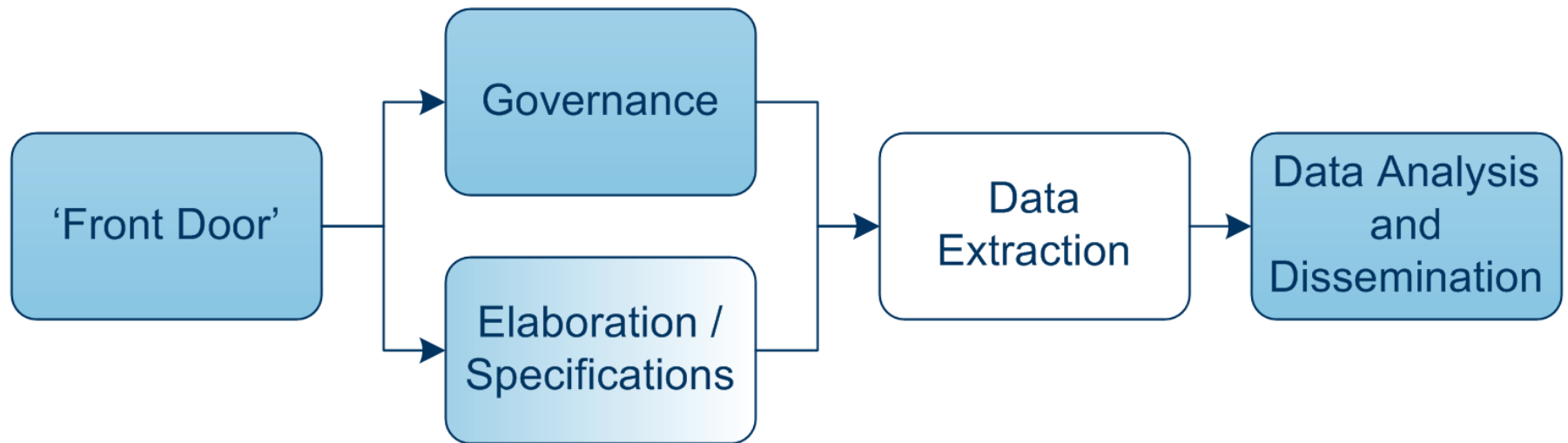
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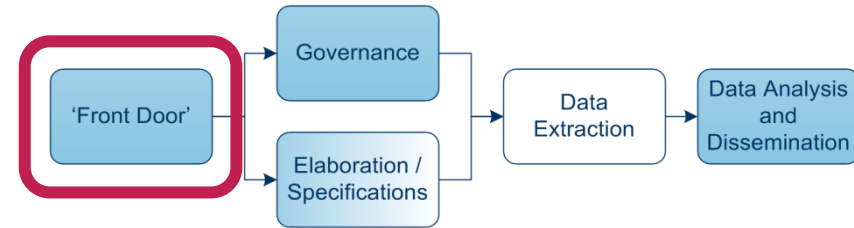
# End to end process

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# 'Front door'

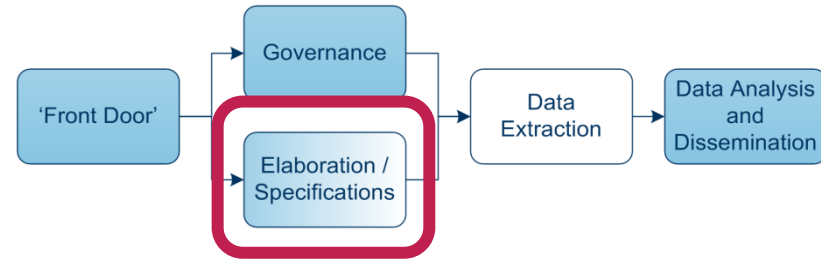
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- Receive, record and respond to initial enquiries
- Sharing basic information
- Feasibility discussions
  - Technical expertise from HSCIC analysts
  - Systems expertise from GPES staff
  - Clinical expertise from HSCIC clinical informatics advisors
- Prioritisation
  - Within HSCIC
  - Cross-NIB role of NHS England's Data Commissioning Group

# Specifications

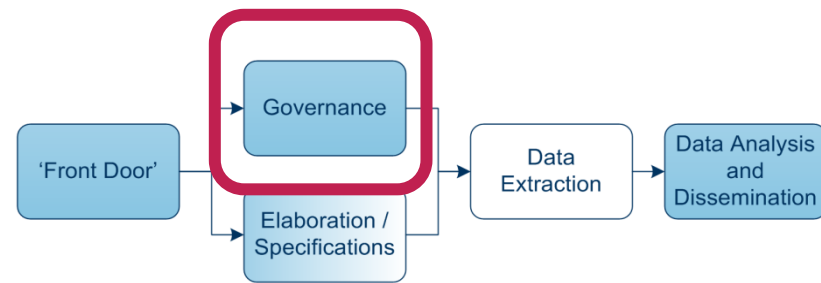
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- Define data collections
- Clear instructions to GP system suppliers
- Remove any ambiguity over data collection
- Key aspects include:
  - Populations of patients
  - Timescales
  - Sequencing of events
  - Read code clusters

# Governance

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## Collection of data:

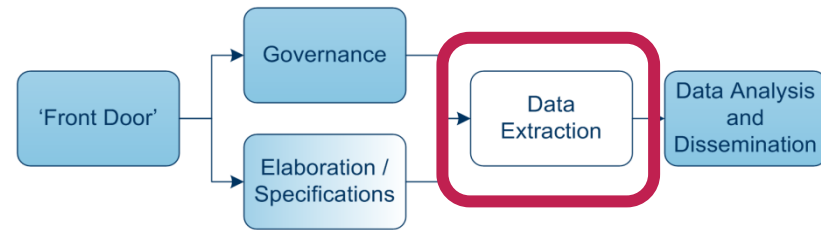
- Health and Social Care Act 2012: statutory responsibilities
  - Establish information systems (collect data) – some are directed
  - Notify general practices of data collections
  - Minimise the burden of data collections on the NHS
- Standardisation Committee for Care Information (SCCI)
  - Assures and approves information standards, data collections and data extractions
  - Works closely with the Burden Advice and Assessment Service

## Dissemination of data:

- Data Access Advisory Group (DAAG)

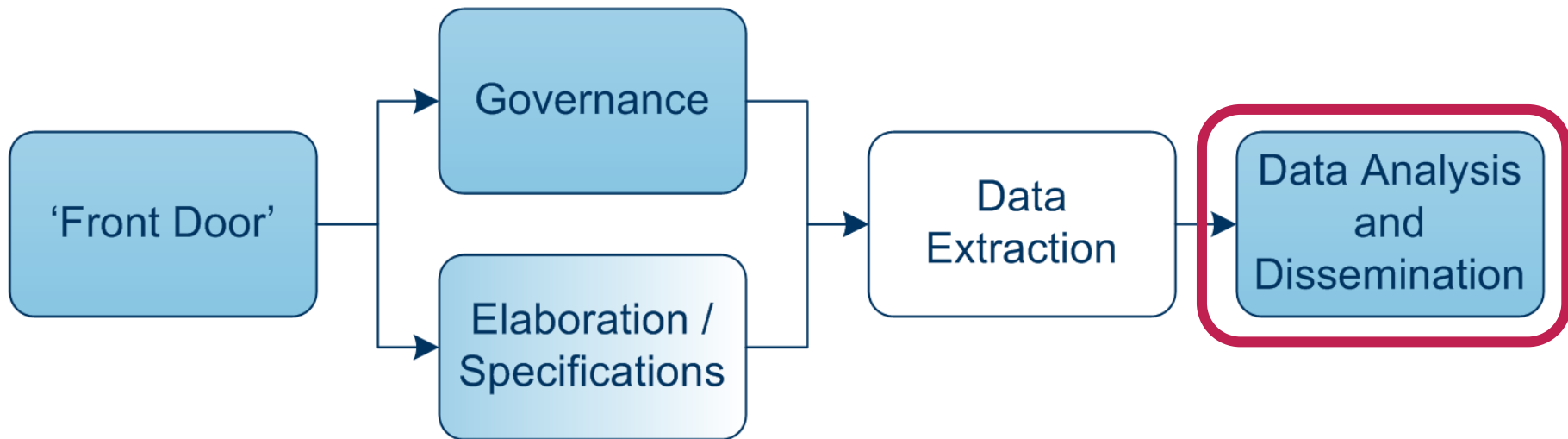
# Data extraction (GPES)

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- Specifications shared with 4x GP system suppliers
  - EMIS
  - TPP
  - INPS
  - Microtest
- Commercial negotiations
- 4x GP system suppliers develop extracts
- Certification
- Notification of upcoming extracts
- Confirming practice participation







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# Analysis – what do we do?

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- Assure data quality
- Analyse data
- Produce publications
- Respond to queries:
  - From customers
  - From the general public
  - Freedom of Information
  - Parliamentary Questions

# Analysis – Data Quality

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- Coverage - the degree to which data have been received from all expected data suppliers.
- Completeness - the degree to which data items include all expected values.
- Integrity - the degree to which data satisfy the agreed specification.

# Analysis – Data Quality

## Patient Preferences, May 2016, coverage summary

	Practices		Registered Patients	
	Number	Proportion (%)	Number	Proportion (%)
Active practices in England	7,689	-	57,684,496	-
Data collected <sup>1</sup>	7,383	96.02	56,257,680	97.53
Declined to participate <sup>2</sup>	26	0.34	192,714	0.33
Data not collected for other reasons <sup>3</sup>	280	3.64	1,234,102	2.14

<sup>1</sup>At least one successful data collection at any time up to the end of the reporting period.

<sup>2</sup>Declined to participate in the data collection.

<sup>3</sup>Data may not be collected for a number of other reasons including where a practice uses an IT system from which the HSCIC cannot collect data, where a practice has yet to respond to the invitation to participate in the data collection or where technical issues occur.

# Analysis

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- Linking to reference data
- Calculations – e.g. recorded prevalence, QOF achievement
- Statistics – standardisation, confidence intervals, descriptive statistics
- Time – time series, trends, comparability

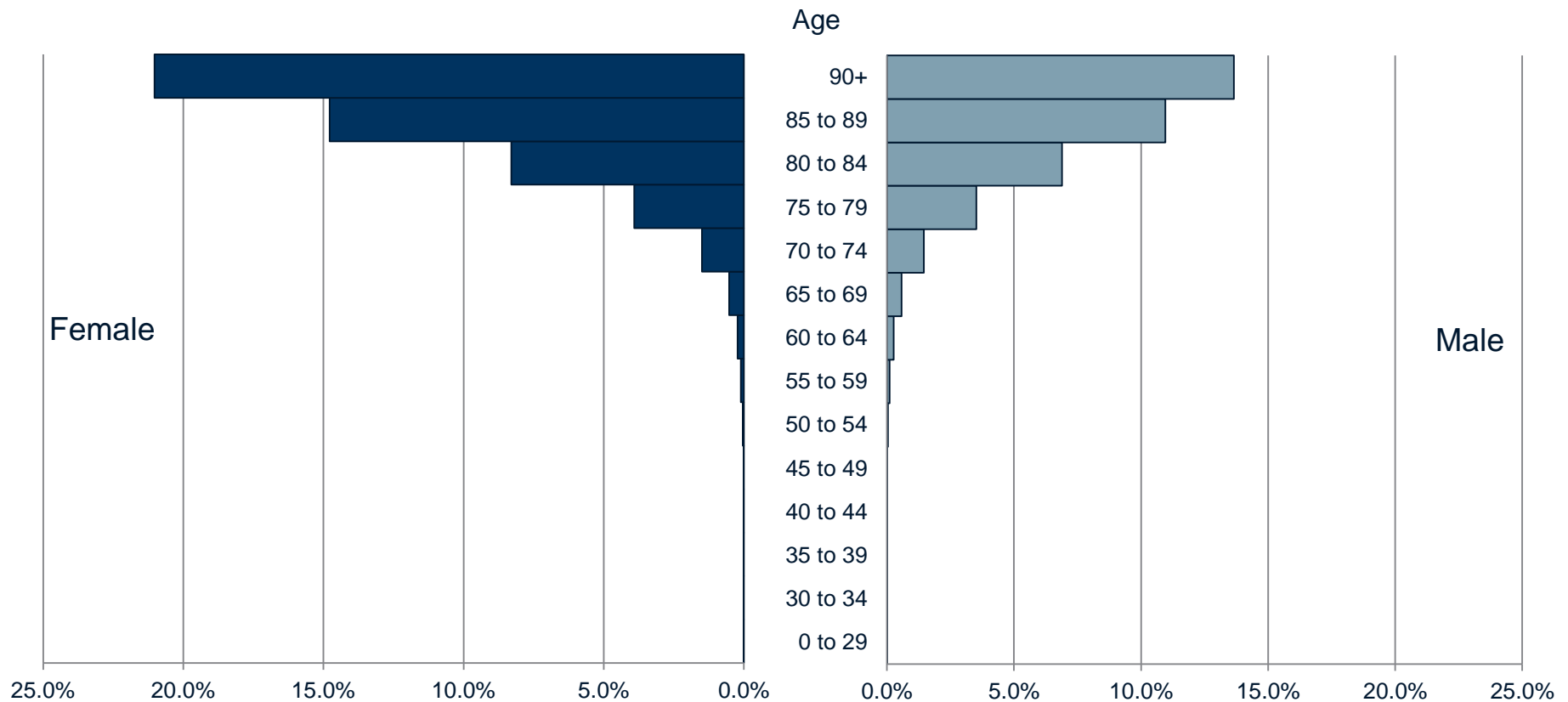
# Dissemination

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All publications are on the HSCIC website.

- Produce around 50 publications each year
- One-off, monthly, quarterly or annually
- Aim to cater for a wide range of users
  - Large .csv files (open data)
  - Traditional .xls spreadsheets
  - Accessible .pdf reports

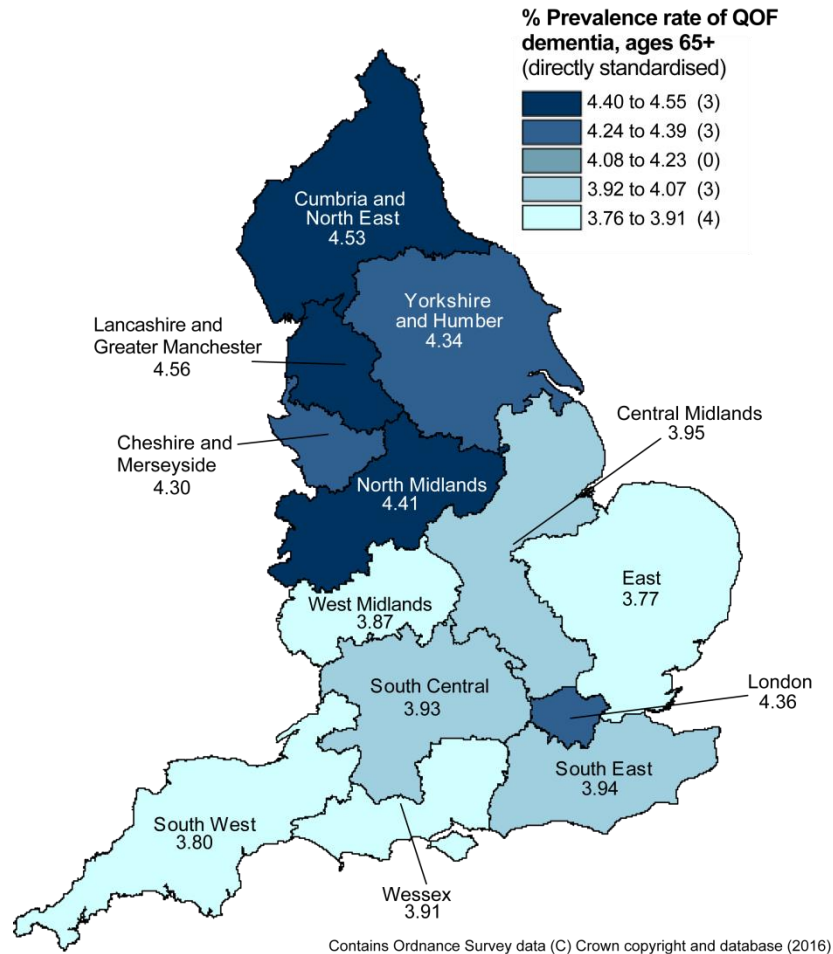
# Observed prevalence of recorded dementia in England by age group and gender





# Proportion of people in England diagnosed with dementia

## Quality and Outcomes Framework (QOF) – dementia subset



### A regional look at dementia

The proportion of people aged 65 and over with a recorded dementia diagnosis (prevalence rate) is greater in the north of England.

Rates displayed on the map have been adjusted for age and gender, so they represent what the rates would be if the regions had the same numbers and ages of men and women.

To review the data in this publication in more detail and to access monthly QOF dementia data: [www.hscic.gov.uk/qofdementia](http://www.hscic.gov.uk/qofdementia)

# Patients in England diagnosed with dementia

## Quality and Outcomes Framework (QOF) – dementia subset

Aiming to improve the national diagnosis rate for dementia, this annual report on dementia diagnosis data supports the [Prime Minister's Dementia Challenge](#).

At 31 March 2016:



# 427,000

People with a recorded dementia diagnosis

427,000 people in England (one in every 132 people registered with a GP) were recorded as having dementia.



# 1 in 23

People aged 65+ have a dementia diagnosis

The group with the highest recorded dementia prevalence was women aged 90 and over, at 20.9 per cent.

There is a difference between this recorded number and the number of women aged 90 and over thought to have dementia, which is estimated to be 35 per cent, [based on other research](#).



# 1 in 5 women aged 90+



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# Our work on NHS Health Checks

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- Information Standard from July 2011
- Detailed discussions since summer 2015
- Updated requirement
- PHE are seeking record level data for everyone who has had a Health Check
  
- Next steps
  - Business rules
  - Governance
  - Data asset using test data
  - Discussions about data linkage, data provision and publication can then begin
  
- First data extract planned for January-March 2017



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# Any questions?



# For more information

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- These slides will be published by PHE
- HSCIC website
  - GP collections pages:  
<http://systems.hscic.gov.uk/gpcollections>
- Contact us through by phone and email – please see our details on next slide



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## Connect with us



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