



UK National  
Screening Committee



## Screening Programmes

Sickle Cell and Thalassaemia

# Sickle cell & thalassaemia screening programme update

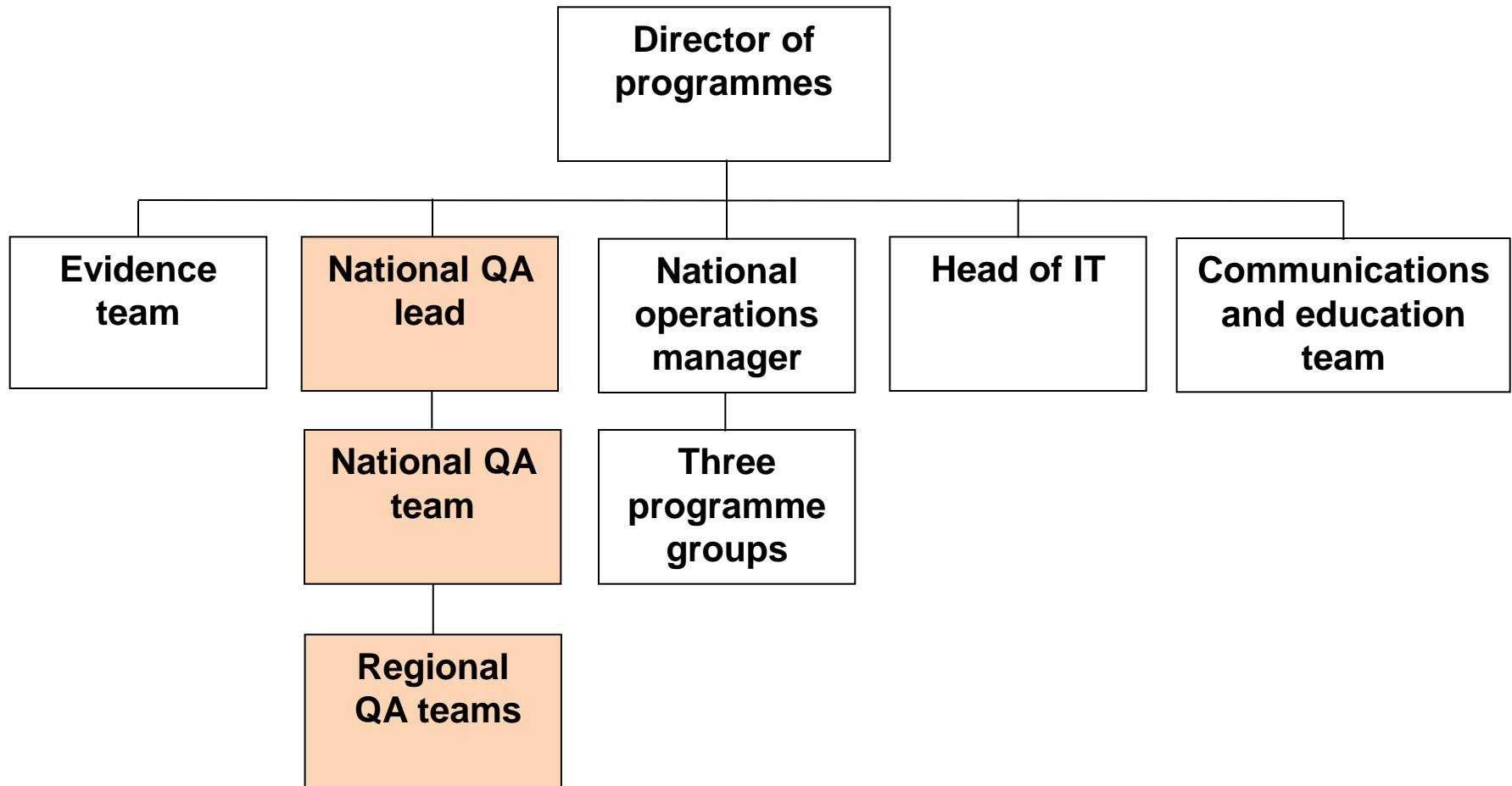
Haemoglobinopathy Forum  
14<sup>th</sup> May 2014



# Aims

- Who we are and what we do
- Programme performance (data report 2012/3; England only)
- Programme work streams

# UK National Screening Committee



# What do we do

- Appraising the evidence and setting policy
- Implementing new policy
- Developing detailed service specifications
- Setting aims and objectives
- Developing standards and guidelines
- Developing parent education resources
- Organising publicity, information and communication
- Development and maintenance of systems for information management
- Data collection, analysis and reporting
- Quality assurance of the whole screening pathway

# NHS screening programmes

## Antenatal and newborn



**Infectious diseases  
in pregnancy**



**Fetal anomaly**



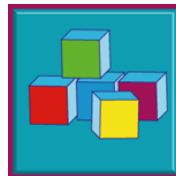
**Sickle cell and  
thalassaemia**



**Newborn hearing**



**Newborn blood  
spot**



**Newborn and  
infant physical  
exam**

## Adult and young persons



**Diabetic eye**



**Abdominal  
aortic aneurysm**

# The sickle cell & thalassaemia team

## National programmes lead

Andrew Rostron

## Programme manager

Cathy Coppinger

## Data manager

Matt Charlton

## Project lead

Habab Al-Hashim

## Project support

Hemant Mistry

## National QA Manager

Elizabeth Dormandy

## Laboratory leads

Joan Henthorn and Yvonne

Daniels

## Clinical leads

David Rees and Cynthia Gill

# Programme aims

- Support people to make informed choices during pregnancy and before conception
- Improve infant health through prompt identification of affected babies
- Ensure high quality, accessible care throughout England
- Promote greater understanding and awareness of the conditions and the value of screening

# Scope of screening

STARTS

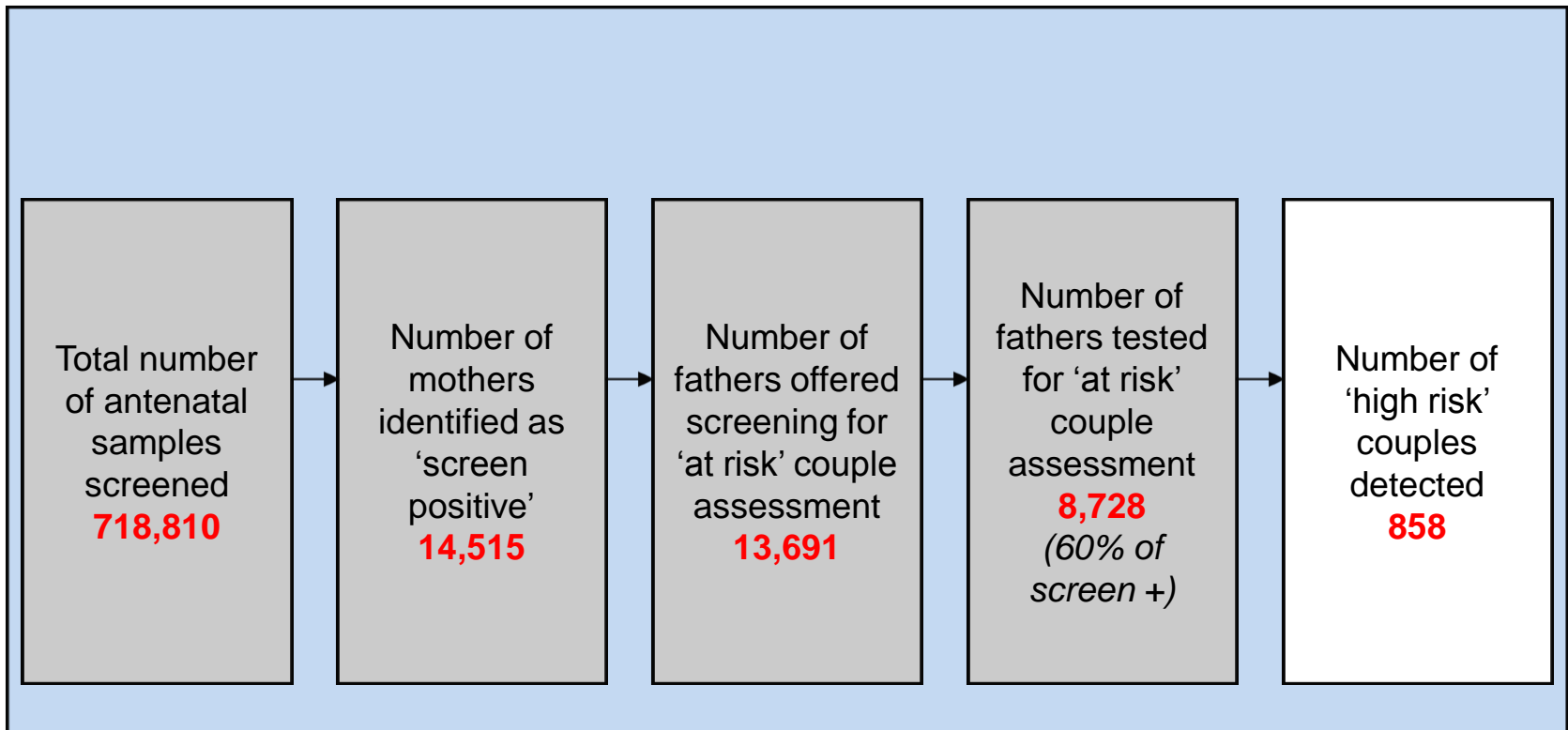


ENDS





# Programme performance: Antenatal

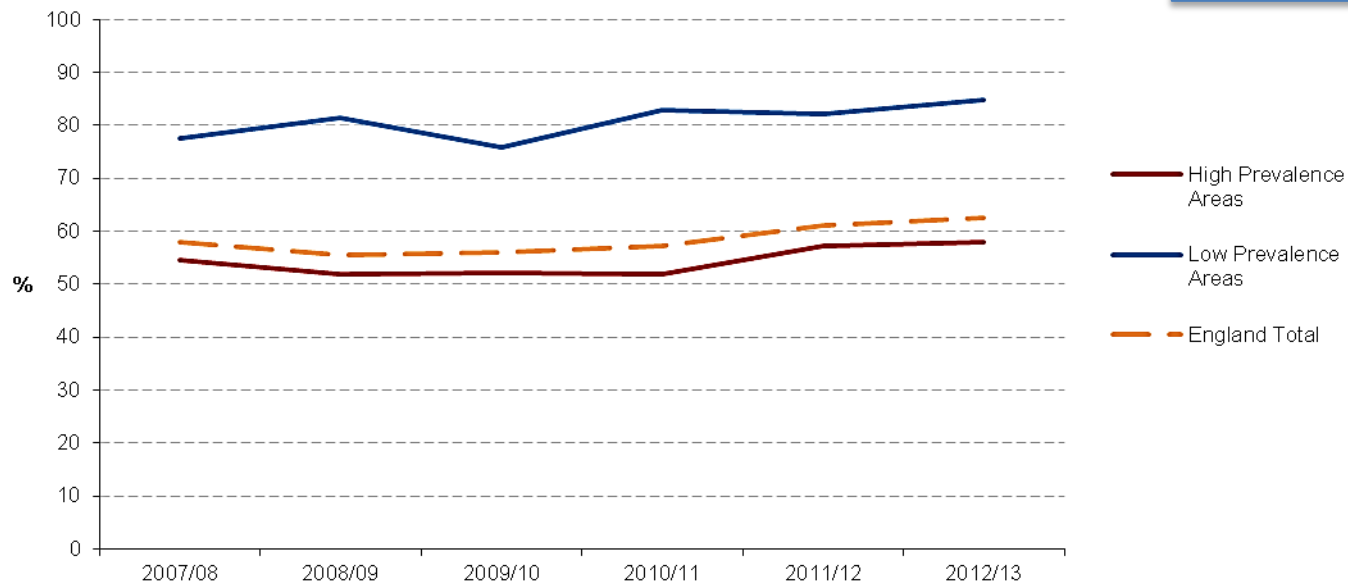


# Key performance indicators

<b>KPI Description</b>	<b>Acceptable threshold</b>	<b>Q1 2013/14</b>	<b>Q2 2013/14</b>
Antenatal coverage (%)	≥ 95.0%	98.2%	98.3%
Timeliness of test (%)	≥ 50.0%	48.7%	51.0%
Completion of FOQ (%)	≥ 90.0%	95.2%	95.0%

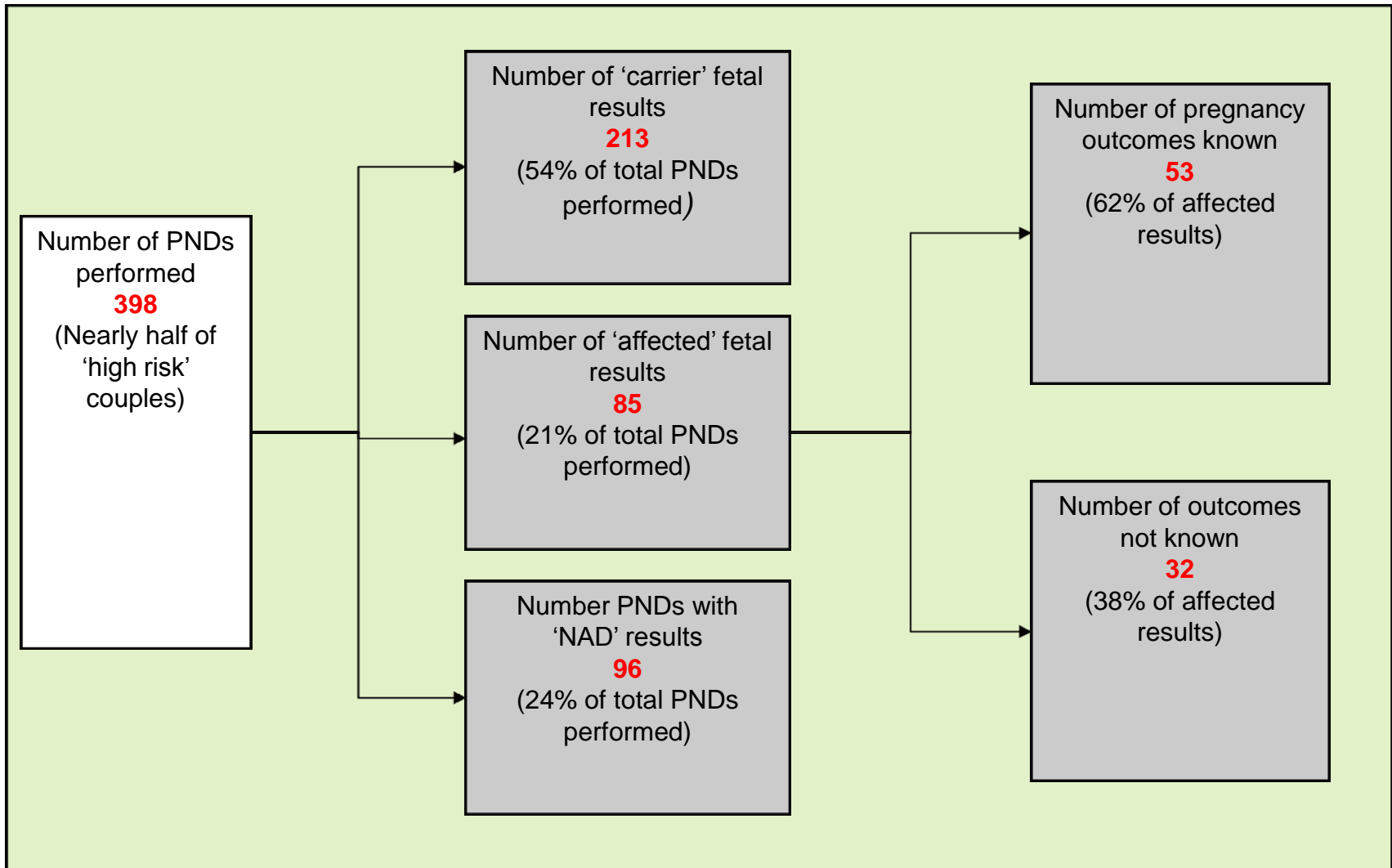
# Uptake in father testing

60% of screen  
+ve women



Exclusions based on missing or unavailable data: 2007/08: 19; 2008/09: 10; 2009/10: 7; 2010/11: 3; 2011/12: 6; 2012/13: 6.

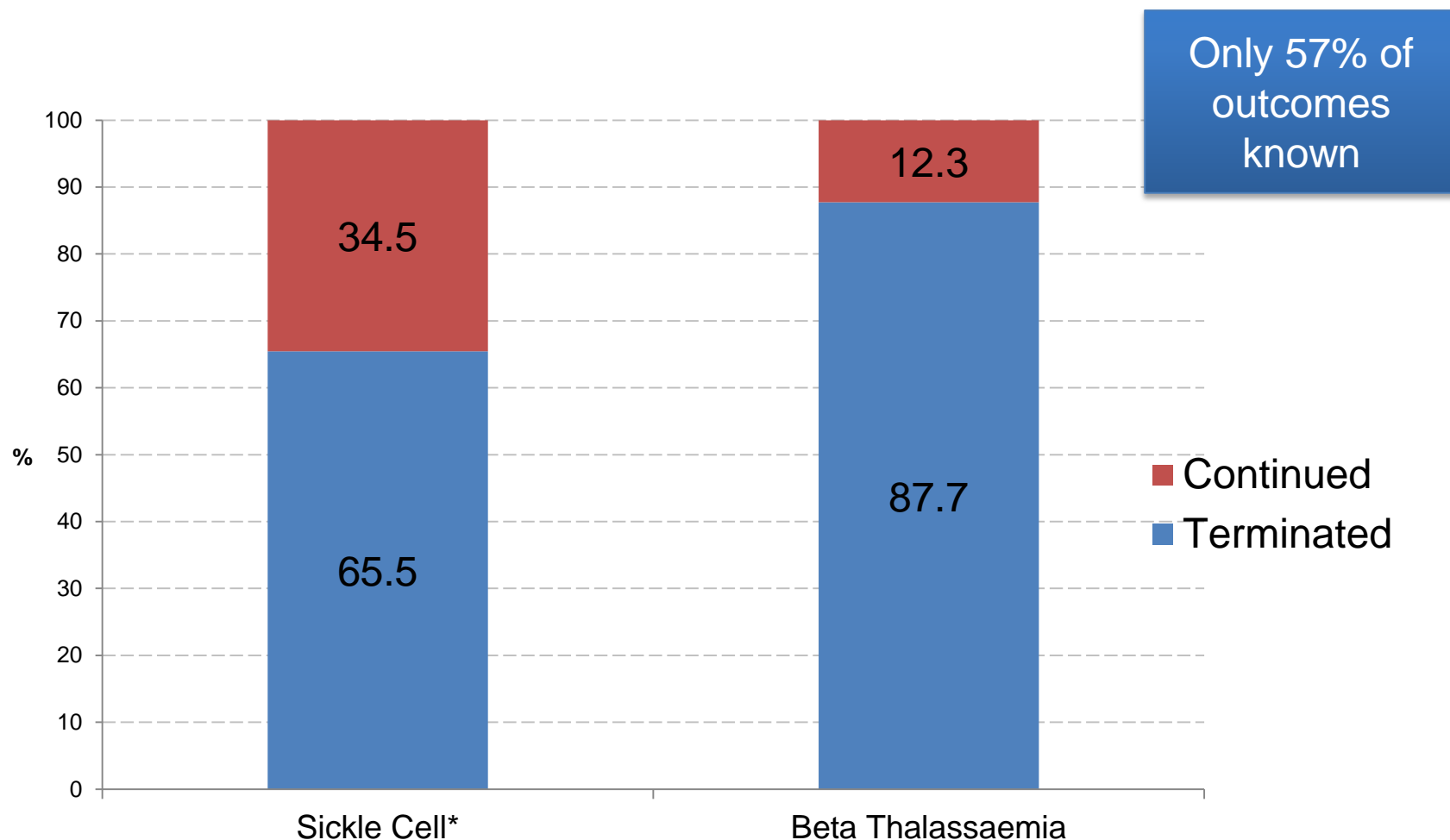
# Prenatal diagnosis



# Gestation at sample for PND, 2007-13

Gestation	2007/08		2008/09		2009/10		2010/11		2011/12		2012/13	
	n	%	n	%	n	%	n	%	n	%	n	%
<12+6 weeks	150	46.2	182	47.2	199	50.3	202	48.1	219	52.4	198	49.7
13+0 - 14+6 weeks	49	15.1	65	16.8	76	19.2	105	25.0	93	22.2	71	17.8
≥15+0 weeks	93	28.6	119	30.8	110	27.8	108	25.7	98	23.4	123	30.9
Unknown gestation	33	10.2	20	5.2	11	2.8	5	1.2	8	1.9	6	1.5
Total	325	100.0	386	100.0	396	100.0	420	100.0	418	100.0	398	100.0

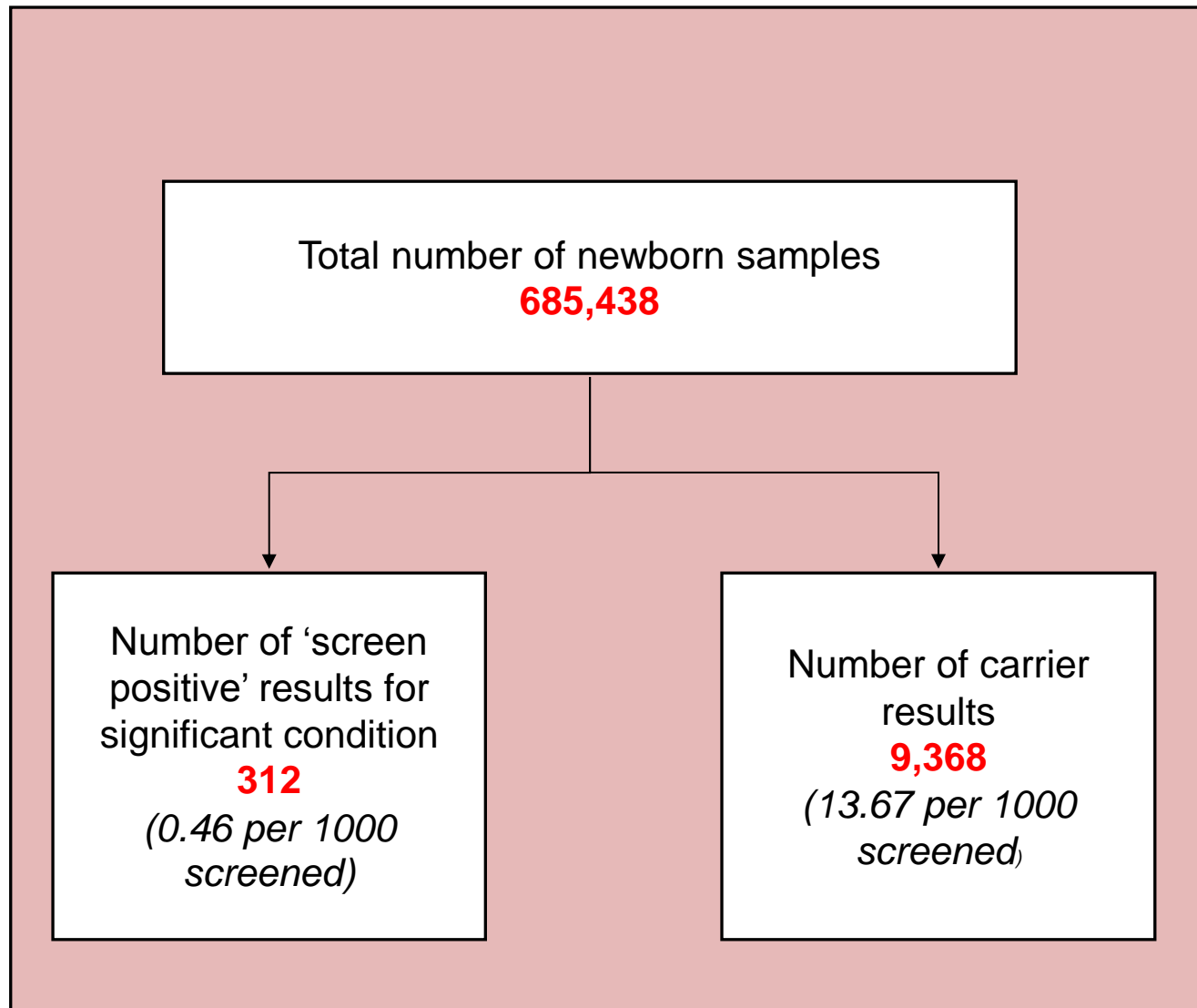
# Pregnancy outcomes: affected babies 2008/13



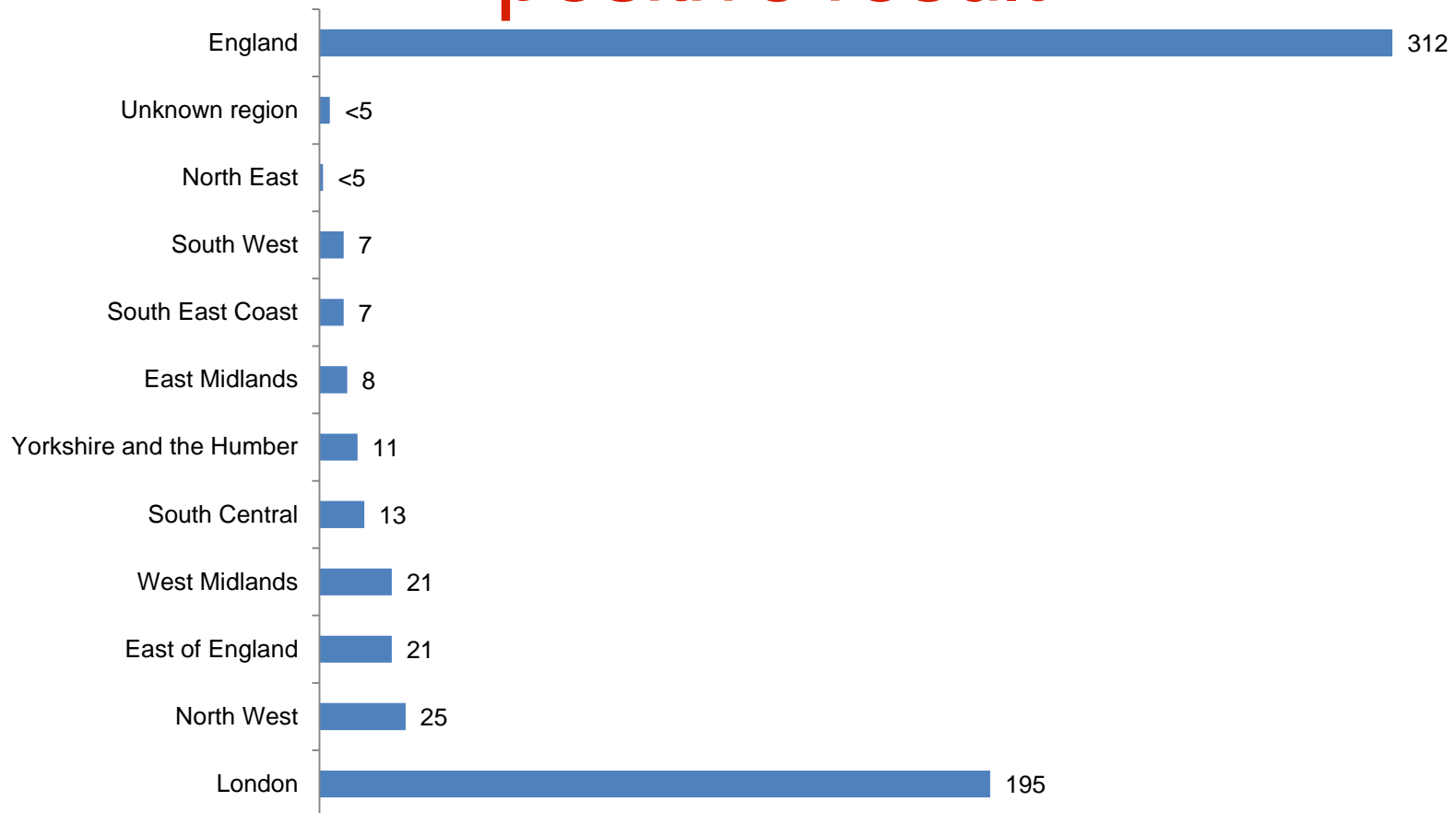
\*\*Sickle Cell\* includes cases where the result was sickle cell and thalassaemia

Excludes alpha thalassaemia cases, miscarriage outcomes, and 174 cases where pregnancy outcome was not known.

# Newborn screening



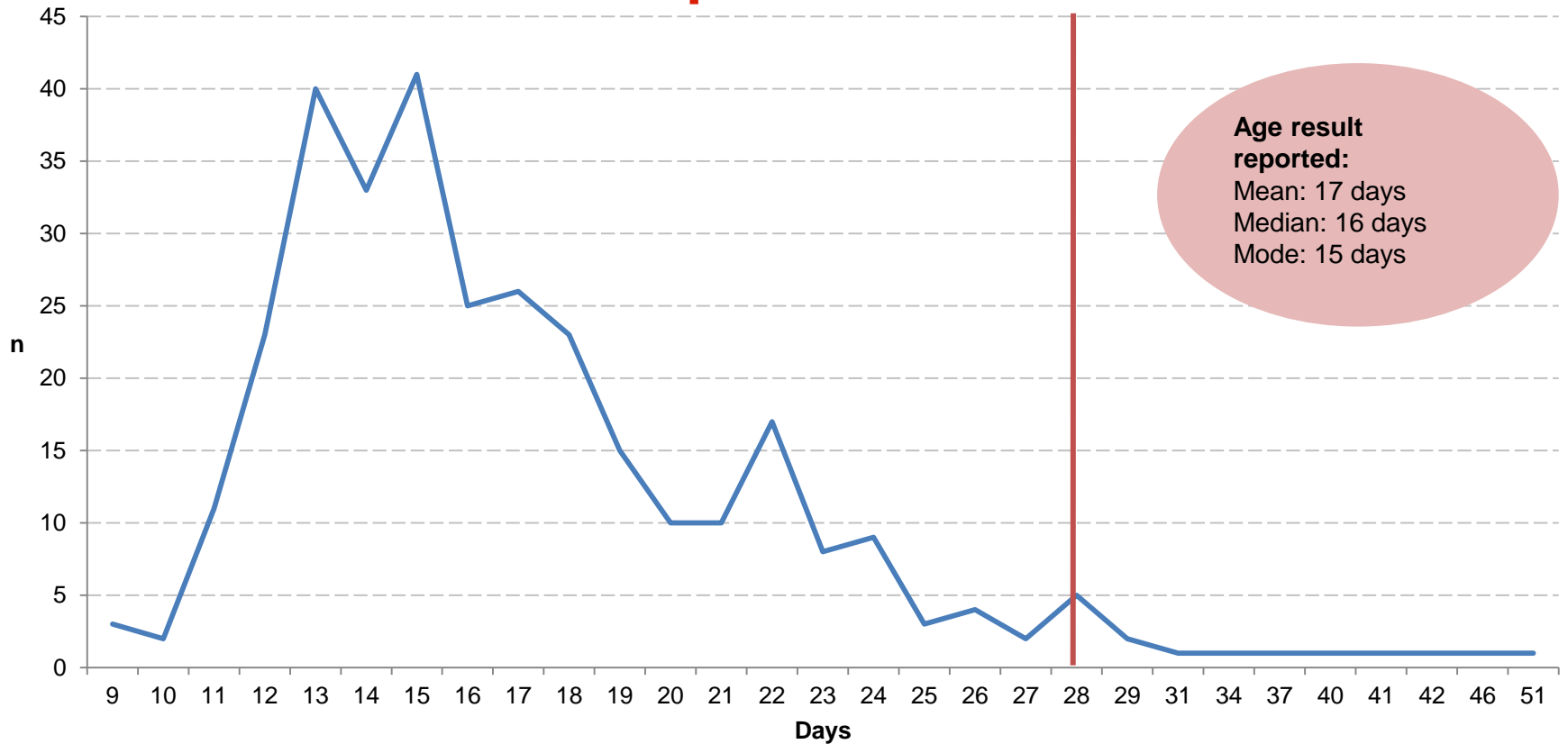
# Number of babies with a screen positive result



*Significant conditions comprise FS, FSC, FS Other and FE.  
There were 25 F-Only cases in 2012/13 (not included above).*



# Age when screen positive results reported



The reference line represents the 4 week standard for Programme standard NP3. There were 326 screen positive cases reported. These data include F-only cases.

# Key performance indicators

<b>KPI Description</b>	<b>Acceptable Threshold</b>	<b>Q1 2013/14</b>	<b>Q2 2013/14</b>
Newborn coverage (%)	$\geq 95.0\%$	94.1%	93.0%
Avoidable repeats (%)	$<2.0\%$	3.3%	3.3%
Timeliness of result (%)	$\geq 95.0\%$	99.5%	99.5%

# Programme work streams

## Stakeholder engagement and outreach

- Contribute to all working groups
- Outreach resource

## Laboratory projects

- Tandem Mass Spectrometry in newborn screening
- Low % A project
- Embed education into a university setting
- Consultation on storage, retention and use of retained blood spots
- Extended screening :Homocystinuria, Maple Syrup Urine Disease, Glutaric Aciduria type 1 and Isovaleric Acidaemia

## Improving outcome data

- Newborn outcome project
- Screening fields onto NHR Registry

# Programme work streams

## Information technology

- Rollout of e-foq in sites that already have Sunquest ICE in use
- Pilot/proof of concept to test integration with the laboratory information management system
- Newborn blood spot failsafe
- Antenatal Active Pathway project: antenatal failsafe

# Programme work streams

## Communication

- Two new leaflets for parent(s) at risk of having a baby with sickle cell disease or thalassaemia explaining choices and tests offered during pregnancy
- Letter for carrier mums and inviting dads for testing
- Move 'public facing' website content to NHS Choices

# Cross programme work streams

- Re-write “Screening tests for you and your baby”
- Review programme standards
- Governance review including SCT steering group
- Quality assurance including peer review, links with UKAS and UKNEQAS to avoid duplication and gaps

# Useful links

To contact the programme [phe.screeninghelpdesk@nhs.net](mailto:phe.screeninghelpdesk@nhs.net)

Laboratory updates <http://sct.screening.nhs.uk/labupdates>

Laboratory e-learning <http://sct.screening.nhs.uk/lab-elearning>

Data templates and report

<http://sct.screening.nhs.uk/datacollection#fileid12764>

<http://sct.screening.nhs.uk/data-report>

Service specification

<https://www.gov.uk/government/publications/public-health-commissioning-in-the-nhs-2014-to-2015>