Public Health England

NHS

Grading quality in your programme

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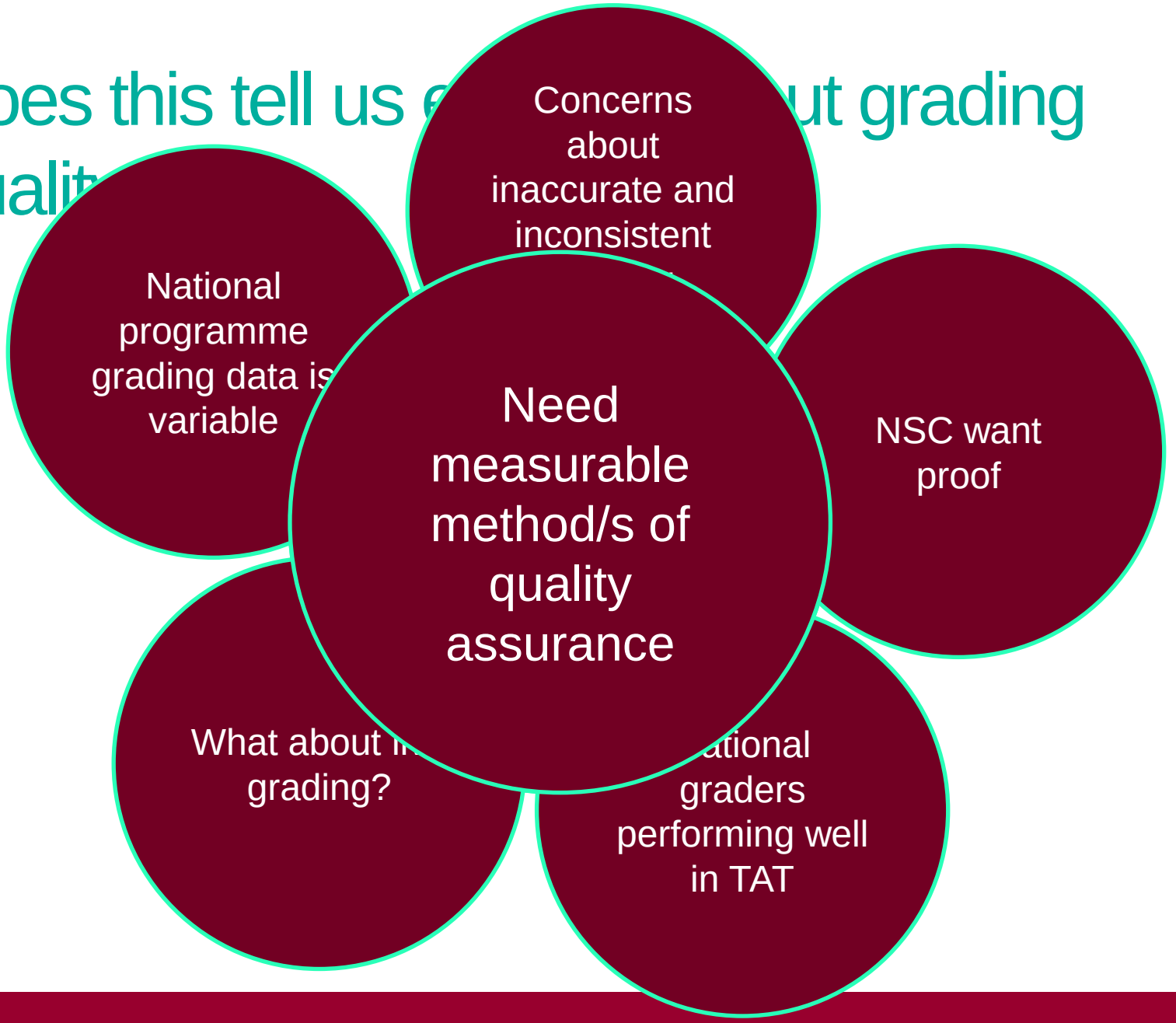
Aim

- look at current processes we use to measure grading quality
- discuss variances in national grading data
- give a brief insight into current national grading quality projects

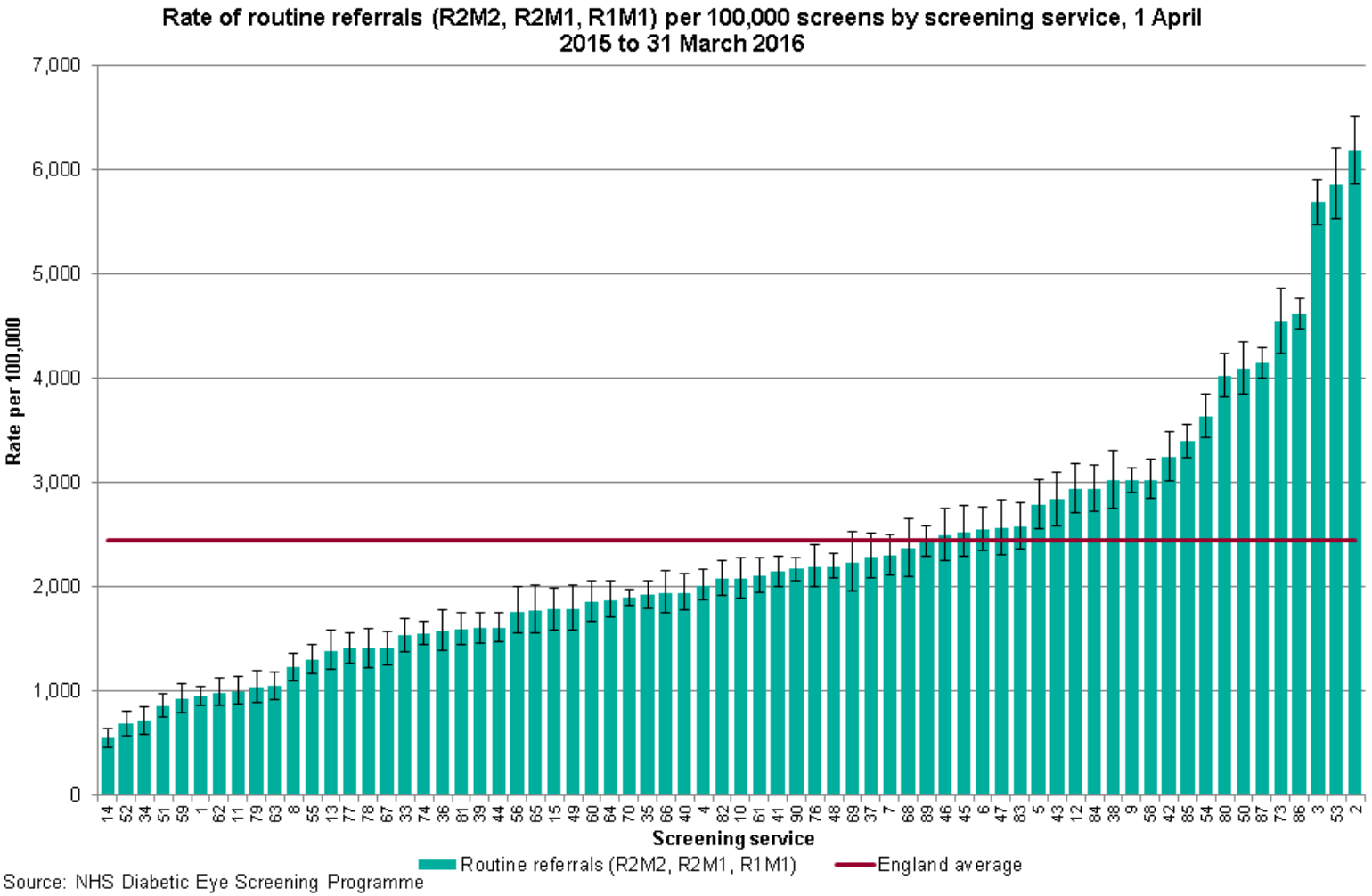
Current processes we use to check quality:

- complying with the service specification
- meeting the pathway standards
- KPI reporting
- complying with the test and training (TAT) guidance

Does this tell us e ut grading qualit

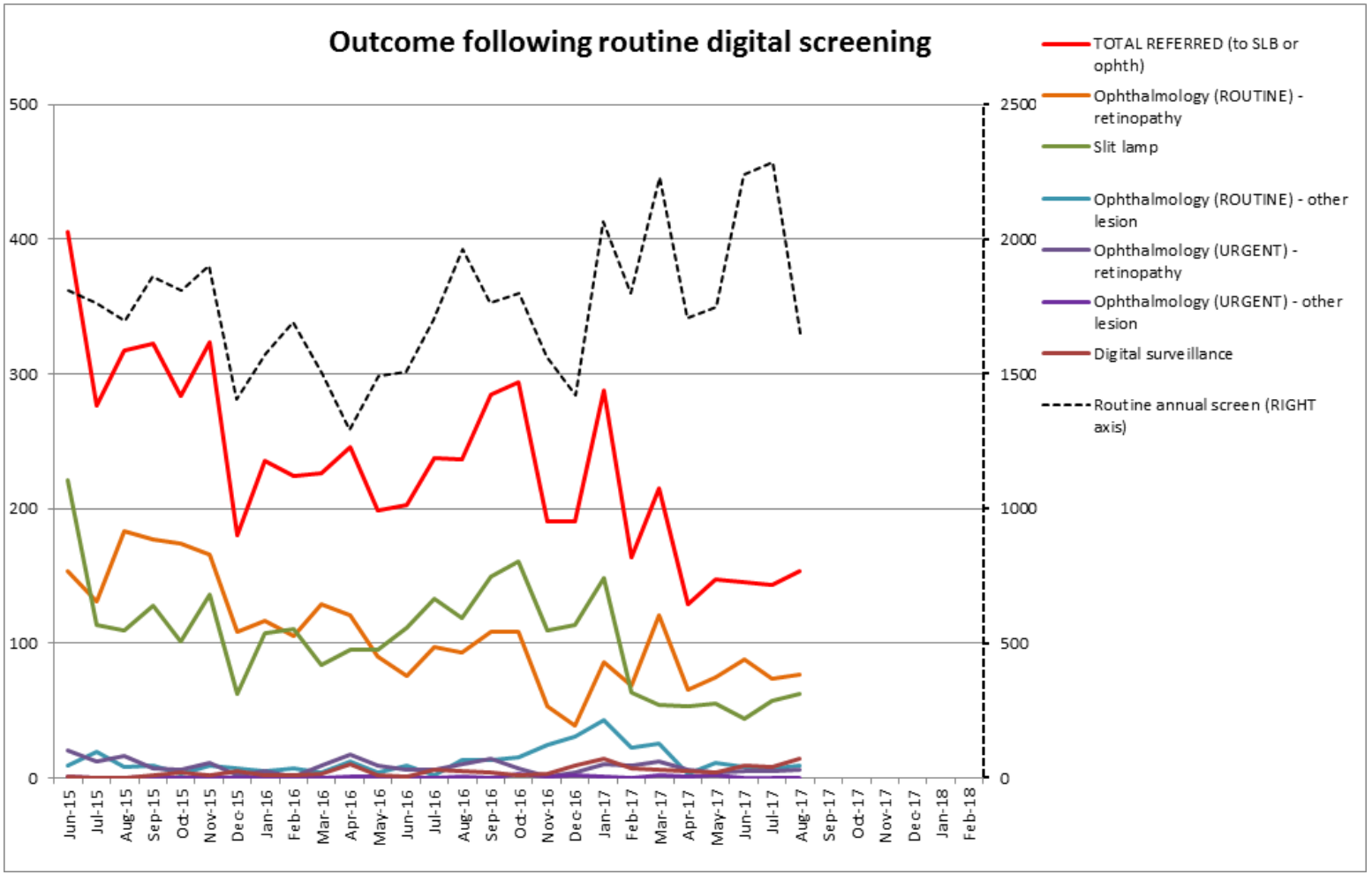


What variance are we seeing?



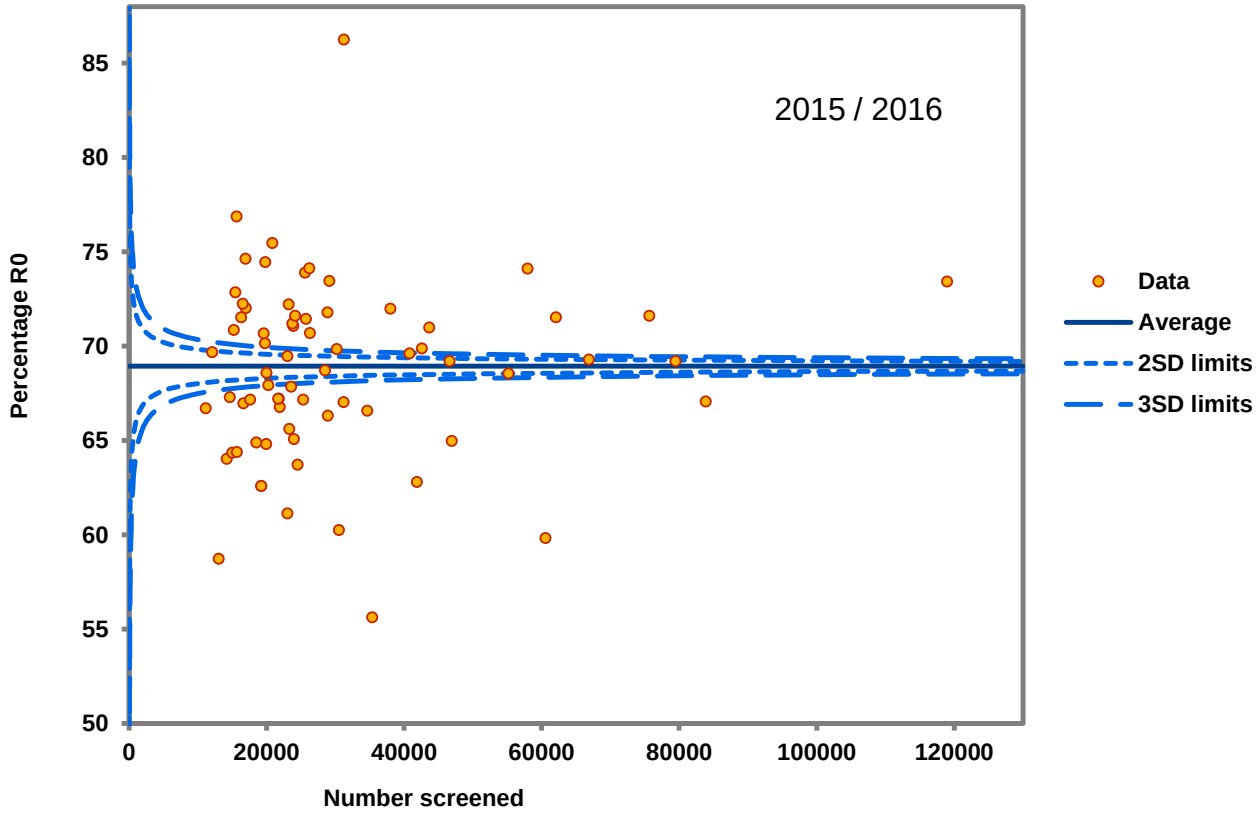
Source: NHS Diabetic Eye Screening Programme

Programme 2


Outcome following routine digital screening
TOTAL REFERRED (to SLB or ophth)
Ophthalmology (ROUTINE) - retinopathy
Slit lamp
Ophthalmology (ROUTINE) - other lesion
Ophthalmology (URGENT) - retinopathy
Ophthalmology (URGENT) - other lesion
Digital surveillance
Routine annual screen (RIGHT axis)
500
400
300
200
100
0
2500
2000
1500
1000
500
0
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17
Jul-17
Aug-17
Sep-17
Oct-17
Nov-17
Dec-17
Jan-18
Feb-18

What variance are we seeing?

Percentage of eligible patients screened with an R0M0 grade



Grading projects – QA audits

- NDESP want to use validated measures to prove that local programmes are grading to a consistent high quality and to help drive up quality where needed
- We recruited 11 local programmes to help us look at ways to do this
- The programmes extracted specific grading data which was analysed by a statistician
- This analysis showed there was significant variation among programmes in the progression from no disease to referable disease grades between 2 screening events
- The 11 programmes are doing a standardised audit by reviewing a number of cases to check the accuracy of their grading, and if any action is needed to improve their grading

Grading projects – automation as a QA tool

- We want to find out why the proportion of images graded R0M0 varies from 55% to 86%
- We are making progress in our plans to use automated grading to check the quality of grading at this level. This will tell us whether or not a local programme needs to review and improve its grading quality
- We suggest all local screening programmes think more about the R0 / R1 threshold and make sure graders are not regularly missing early disease

Why is this important now?

- National Screening Committee (NSC) agreed to support extended screening intervals
- Health Technology Assessment (HTA) study showed low risk patients (R0M0 both eyes for 2 consecutive years) can be screened 2 yearly

HTA showed:

  - the risk of future referral to ophthalmology for patients with no diabetic retinopathy at baseline after two screening episodes with no diabetic retinopathy was low, ranging from 0.3% to 1.3% at 2 years
  - the risk of future referral to ophthalmology for patients with R1 in one eye at baseline was ranged from 2% to 9% at 2 years
  - the risk of future referral to ophthalmology for patients with R1 in both eyes at baseline was very high, ranging from 13% to 29% at 2 years

- NSC need the assurance that programmes are grading to national standard

Your grading quality matters

- Know your data
- Compare your data with other screening programmes
- Is this what you expected to find?
- Explain why you think your data is different
- If you can't explain it – ask for help
- Plan regular specific audits of grading to check your quality and drive up quality where needed

GOV.UK > Diabetic eye screening: commission and provide > DES: data and research

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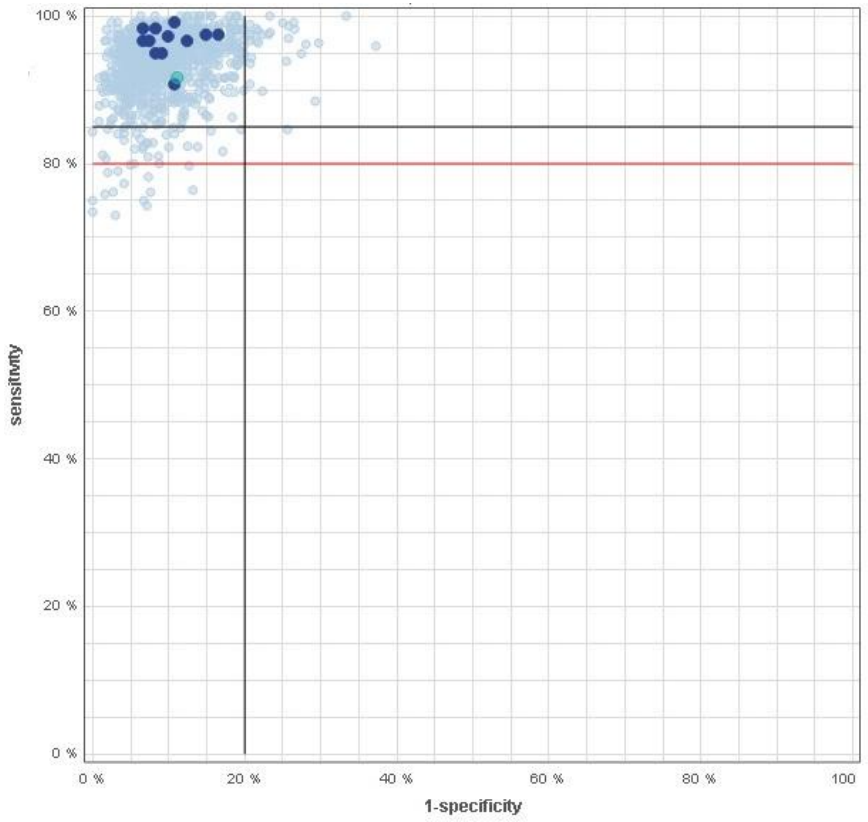
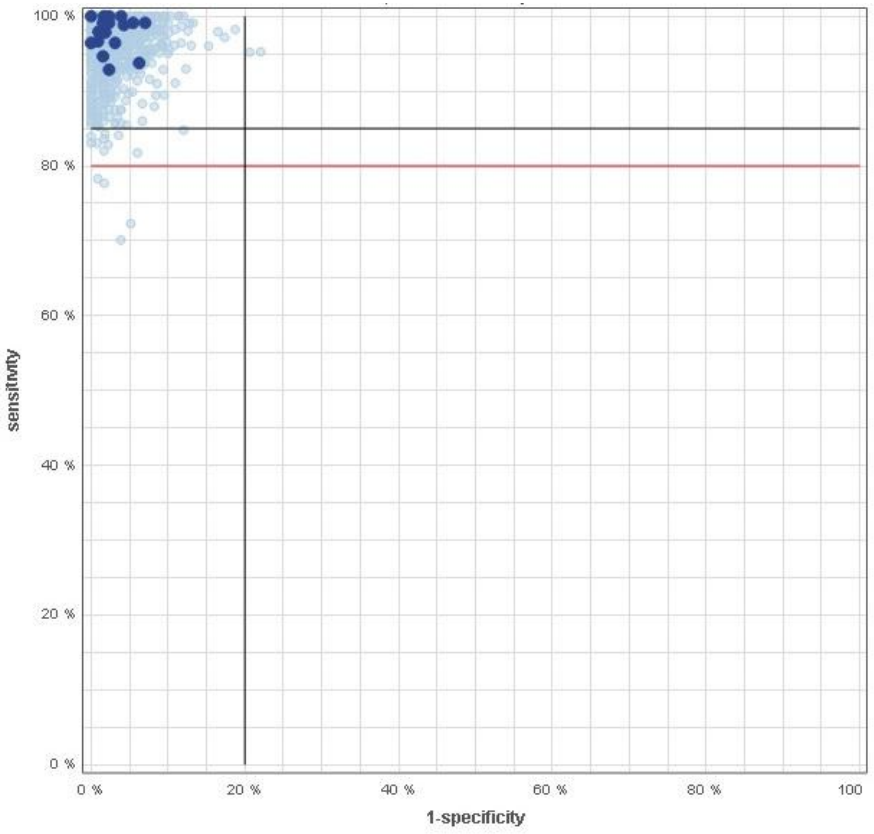
Thank you

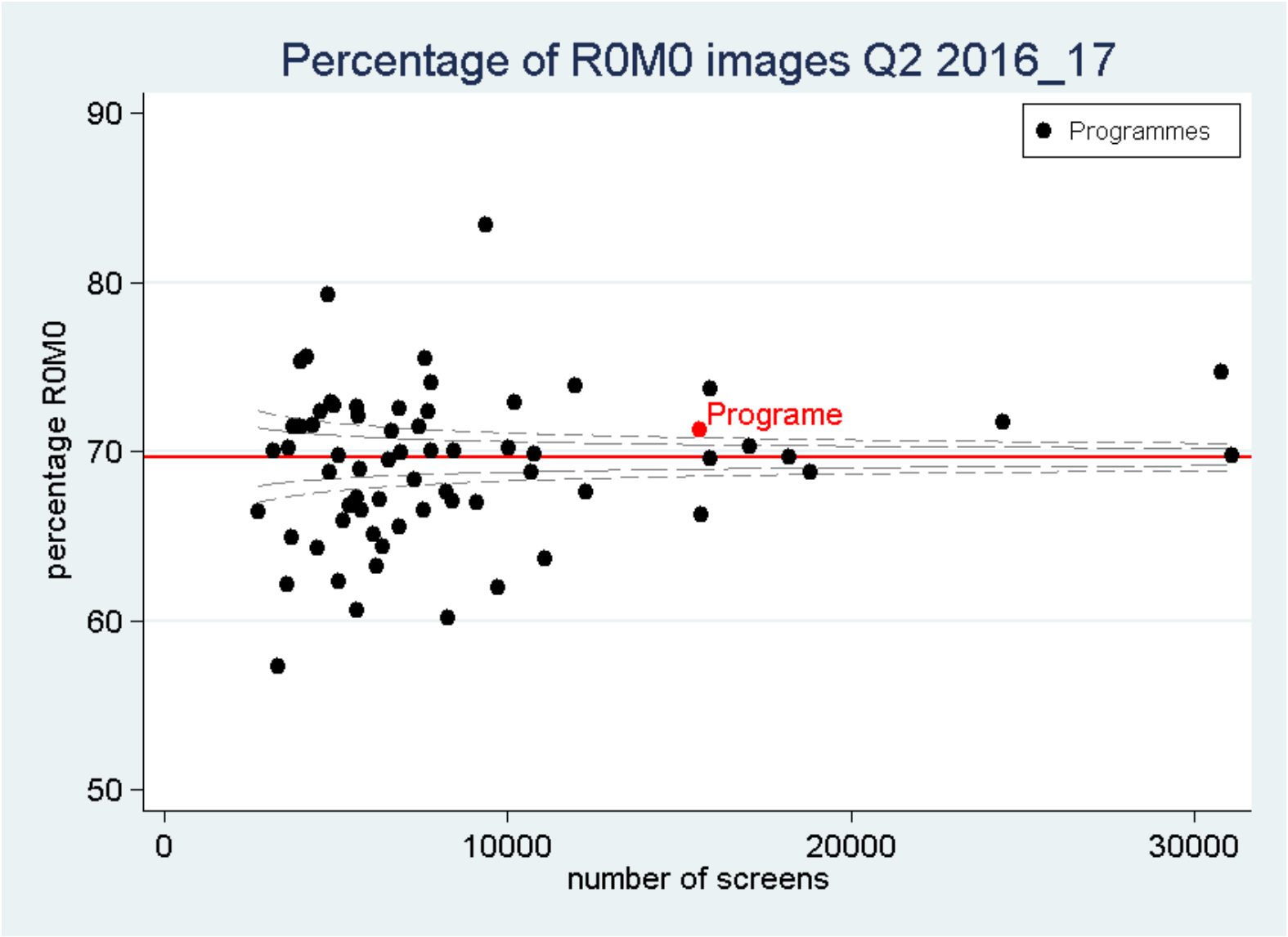
Sensitivity / specificity to referable disease in the TAT



January 2015 - December 2015



September 2016 – August 2017


Percentage of R0M0 images Q2 2016_17
Programmes
Programe
percentage R0M0
90
80
70
60
50
0
10000
20000
30000
number of screens