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NHS Wales Health
Collaborative

Laboratory Information Network Cymru (LINC) Programme Staff Survey 2021

Presentation of findings November 2021



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Aim

- The aim of the survey is to assess staff attitude to standardisation of services and monitor any change in attitude since the original survey in 2019.

Methodology

- The research was carried out by an online survey.
- The target audience were LINC stakeholders primarily pathology staff throughout Wales.
- A sample of 712 email addresses was gathered.
- All staff on the sample was sent a bilingual email with a link to the survey.
- The survey was set up such that the email could be forwarded to those staff within each discipline whose email address was not included in the original sample. The survey could also be forwarded to home addresses for completion outside of working hours. Staff were able to complete the survey on a PC, laptop, tablet or mobile phone for added convenience.
- LINC newsletter 14 was also sent out with the survey.
- The survey was initially sent out on 24 September, followed by a number of reminders and closed on 22 October 2021.



Methodology (continued)

- The fieldwork dates are shown in the table below.

ACTION	DATE
Initial email sent	24 th September 2021
First reminder sent	1 st October 2021
Second reminder sent	8 th October 2021
Other reminders	12 th October 2021 18 th October 2021 20 th October 2021
Final reminder sent	22 nd October 2021
Survey closed	Midnight 22 nd October 2021

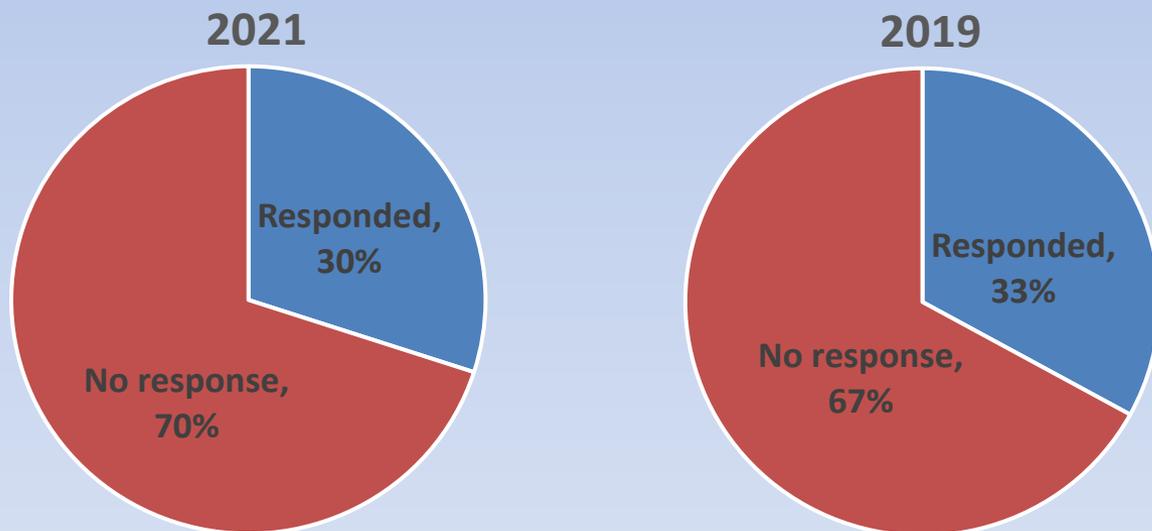
Things to note:

- Where there are differences between any of the demographics, these have been highlighted in the report. Although please note these should be treated with caution as base sizes are small.
- No references have been made to individual results for Andrology and Immunology due to the base sizes being too small.

Responses

Who took part?

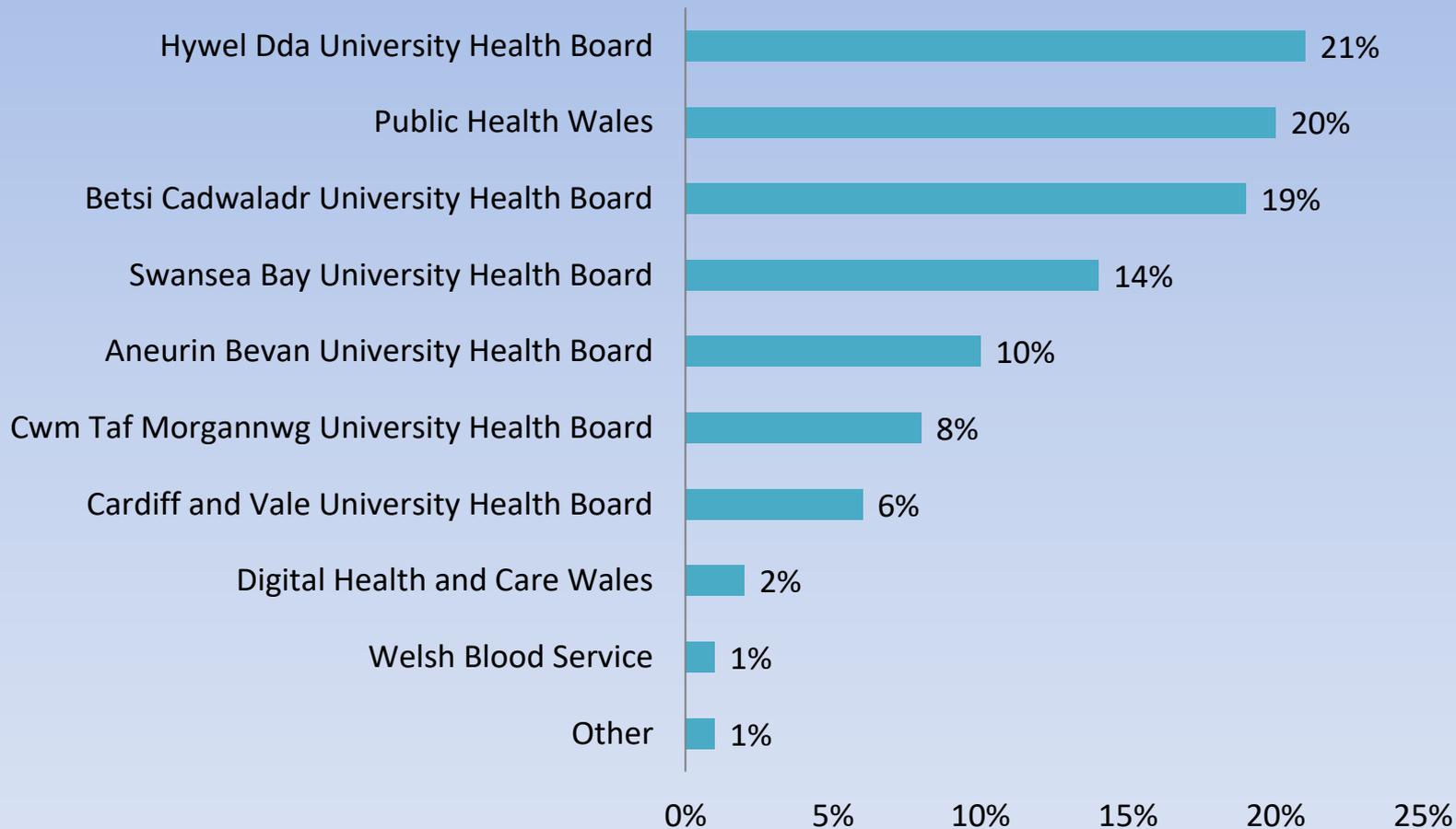
- In total 214 responses were received, a response rate of 30%.
- For comparison purposes, in 2019 approximately 950 email were sent out and 315 were received, a response rate of 33%.
- These response rates are higher than what would be expected for surveys of this kind.



- The demographics of those who took part are shown in the following charts.

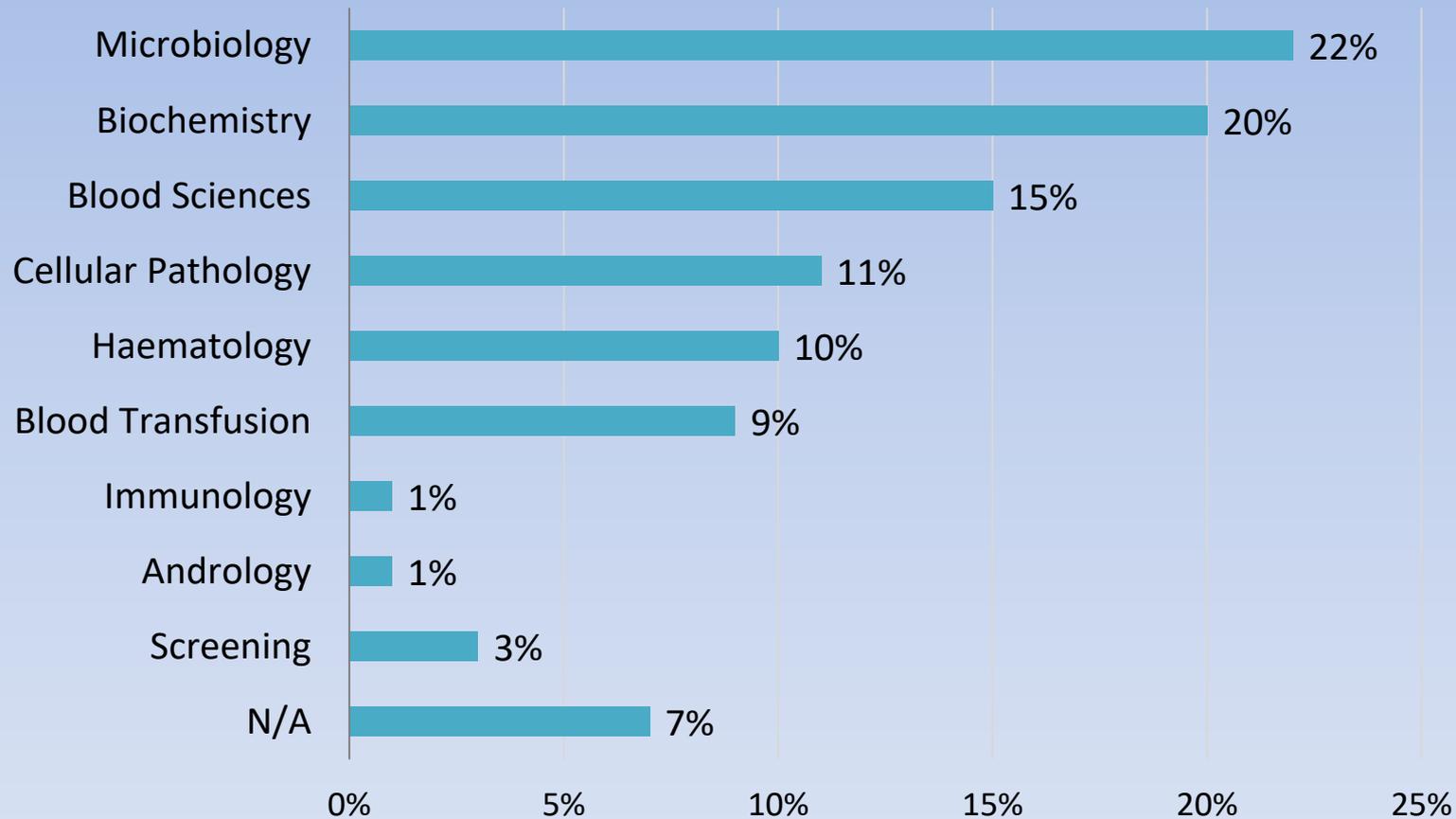
Q1: Please select the organisation you work for (Health Board/Trust).

No of responses
45
42
41
30
21
16
13
4
1
1



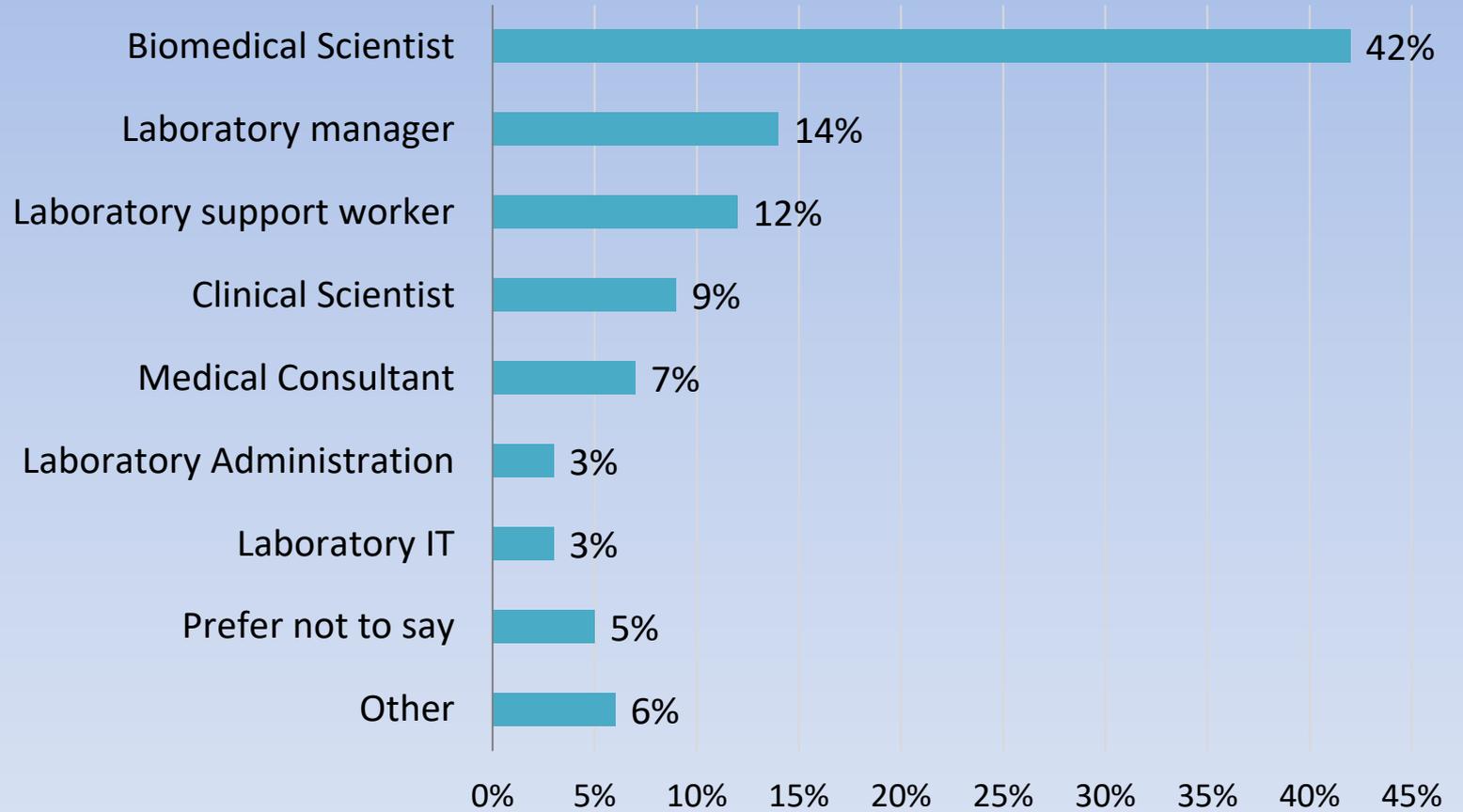
Q2: Please select your main discipline

No of responses
48
42
33
24
22
20
7
2
2
14



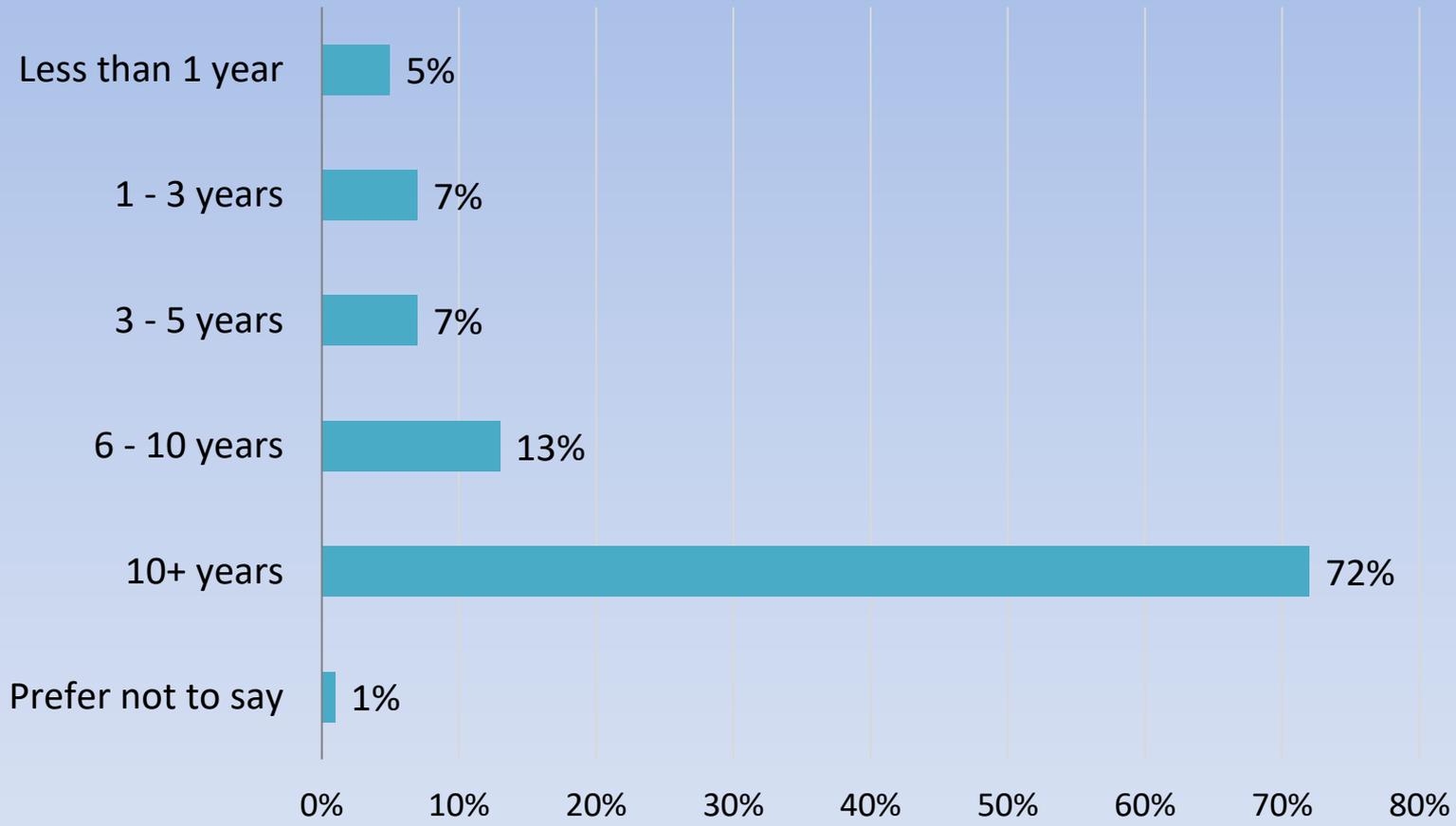
Q17: Please select your job role/description

No of responses
89
30
25
19
15
6
7
11
12



Q18: How long have you worked in a pathology related job role?

No of responses
1
14
15
28
153
3

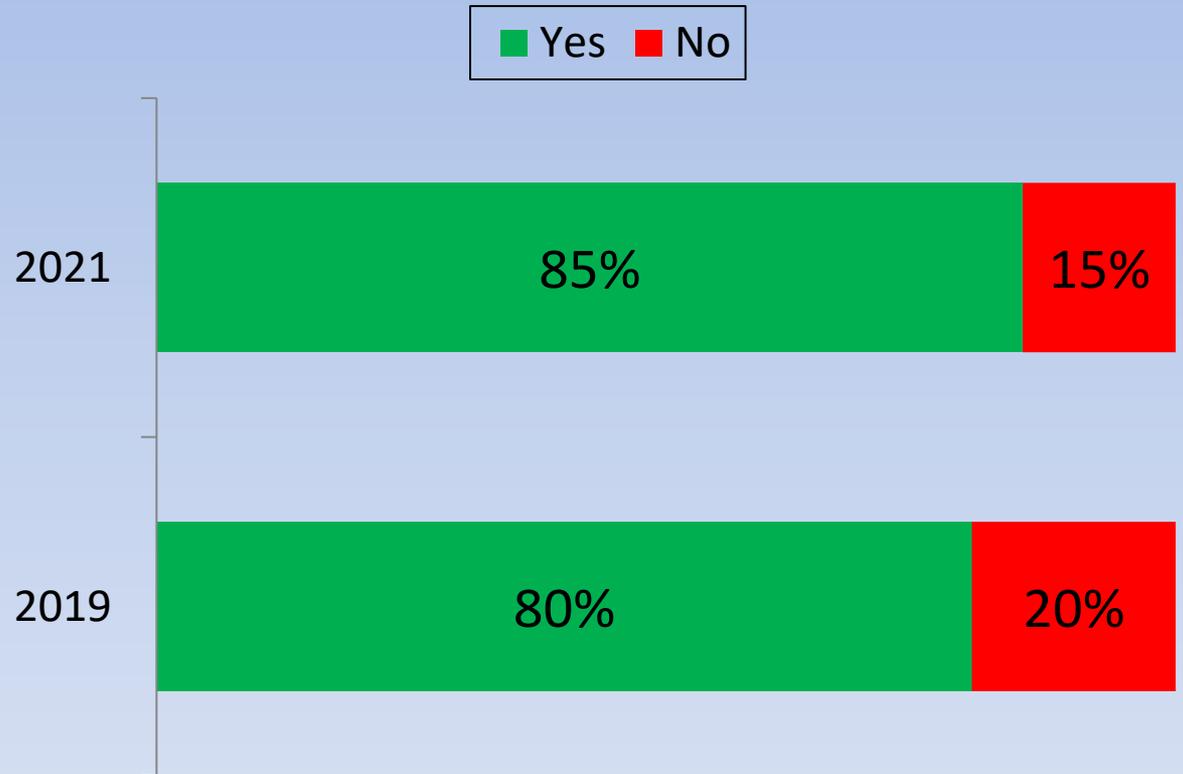


Main Findings

Awareness of the LINC Programme

Q3: Have you heard of the LINC Programme?

- Overall, 85% of staff were aware and 15% said that they were unaware.
- The percentage aware of the programme has increased slightly since 2019 (80%).



Q3: Have you heard of the LINC Programme?

Discipline	% Yes
Blood transfusion	95
Cellular Pathology	92
Haematology	86
Biochemistry	86
Blood Sciences	79
Microbiology	77
Screening	71

Health Board/Trust	% Yes
Aneurin Bevan	100
Betsi Cadwaladr	100
Cardiff & Vale	100
Digital Health and Care Wales	100
Welsh Blood Service	100
Swansea Bay	93
Hywel Dda	80
Public Health Wales	79
Cwm Taf Morgannwg	75

- Those working Blood Transfusion (95%) and Cellular Pathology (92%) were most aware. Those from Screening were least aware (71%).
- Those from Aneurin Bevan, Betsi Cadwaladr, Cardiff & Vale, Digital Health and Care Wales and Welsh Blood Service were most aware (all 100%) and those from Cwm Taf Morgannwg were least aware (75%).



Q5: Have you seen the LINC newsletters?

- Around two thirds (67%) had seen the LINC newsletter. This was slightly higher than in 2019 where only 56% told us that they had seen it.



Q5: Have you seen the LINC newsletters?

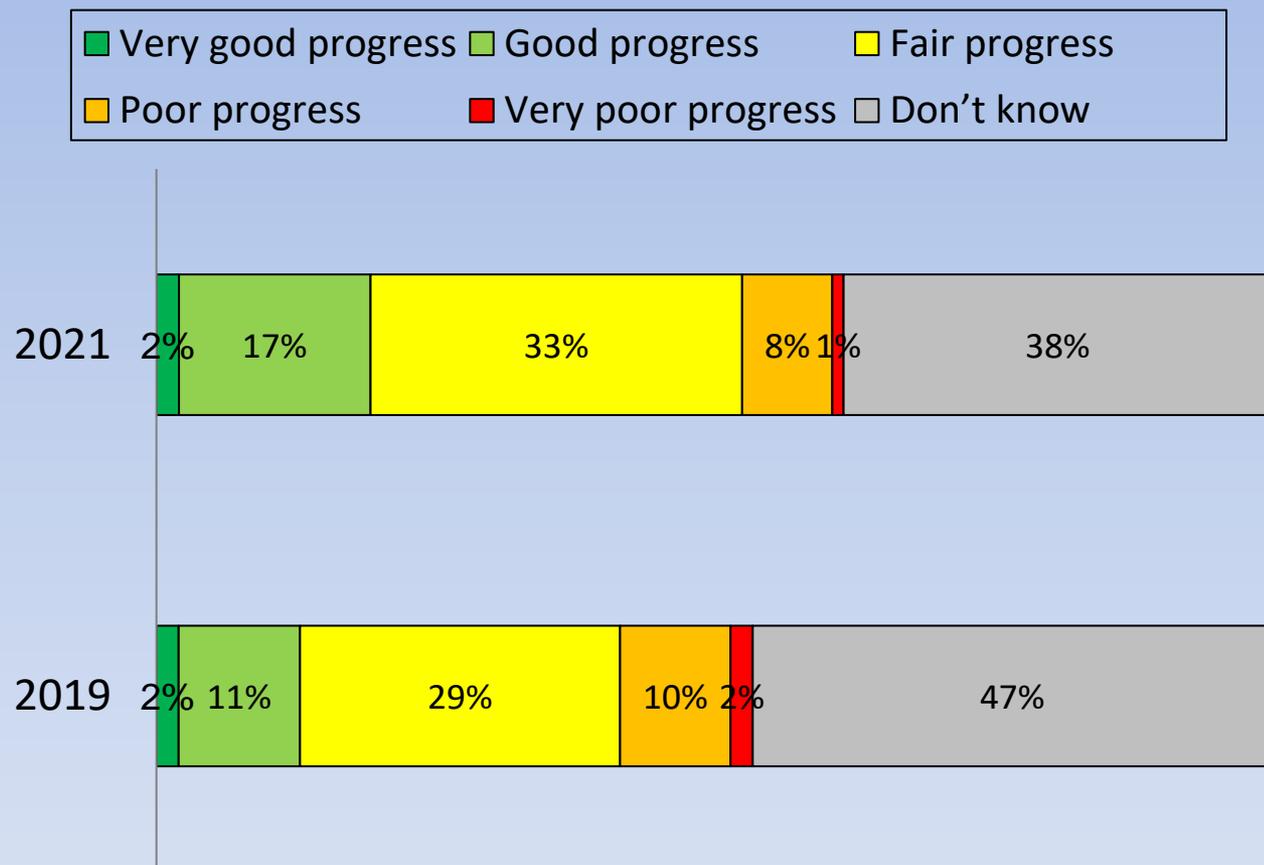
Discipline	% Yes
Cellular Pathology	79
Blood Sciences	70
Haematology	68
Microbiology	63
Biochemistry	62
Blood transfusion	55
Screening	43

Health Board/Trust	% Yes
Digital Health and Care Wales	100
Welsh Blood Service	100
Cardiff & Vale	92
Hywel Dda	73
Cwm Taf Morgannwg	69
Aneurin Bevan	67
Betsi Cadwaladr	63
Public Health Wales	62
Swansea Bay	50

- Those working in Cellular Pathology were most likely to have seen it (79%) and those from Screening were least likely (43%).
- In terms of Health Board, those from Digital Health and Care Wales and Welsh Blood Service were most likely to have seen it (both 100%), and those from Swansea Bay were least likely (50%).

Q4: How would you rate the progress that LINC is making?

- Just 19% rated the progress that LINC is making as very good or good, increasing to 53% when you include those rating it as fair.
- This was higher than in 2019 where only 42% rated the same.
- Just less than 1 in 10 (9%) felt that the progress being made was poor or very poor (12% in 2019).
- However, a high proportion (38%) did not know, although a lower proportion than in 2019 (47%).



Q4: How would you rate the progress that LINC is making?

Discipline	% Very good / good
Blood Sciences	27
Blood transfusion	25
Biochemistry	17
Cellular Pathology	17
Microbiology	15
Screening	14
Haematology	5

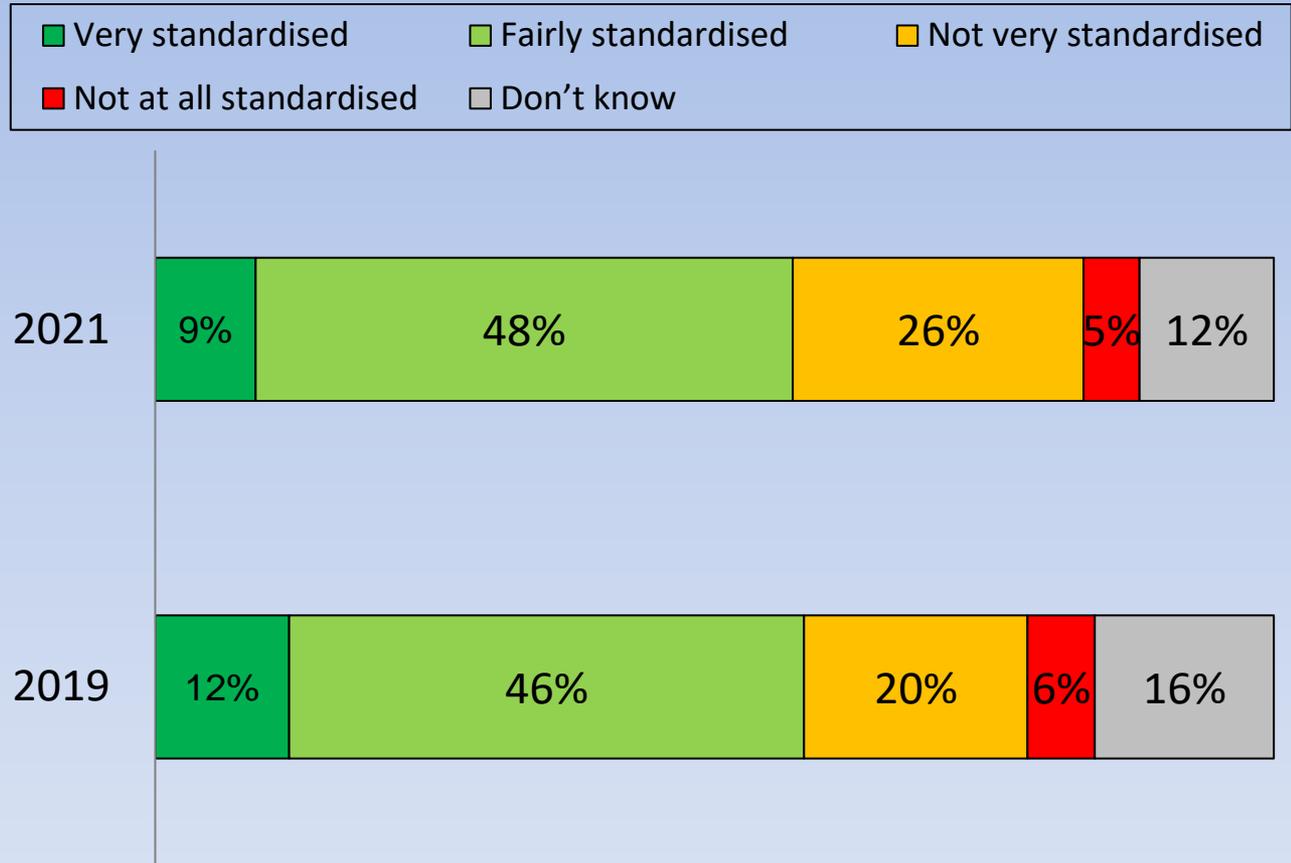
Health Board/Trust	% Very good / good
Betsi Cadwaladr	32
Cwm Taf Morgannwg	25
Digital Health and Care Wales	25
Cardiff & Vale	23
Hywel Dda	22
Swansea Bay	13
Public Health Wales	12
Aneurin Bevan	5
Welsh Blood Service	0

- Those rating progress as very good or good was highest amongst Blood Sciences (27%) and Blood Transfusion (25%) and those working in Betsi Cadwaladr (32%), Cwm Taf (25%) and Digital Health and Care Wales (25%).

Views on Standardisation

Q6: To what extent do you feel that your service is standardised?

- Over a half (57%) felt that the service is either very or fairly standardised (58% in 2019) and a further 31% felt that it is not very or not at all standardised (26% in 2021). 12% did not know.



Q6: To what extent do you feel that your service is standardised?

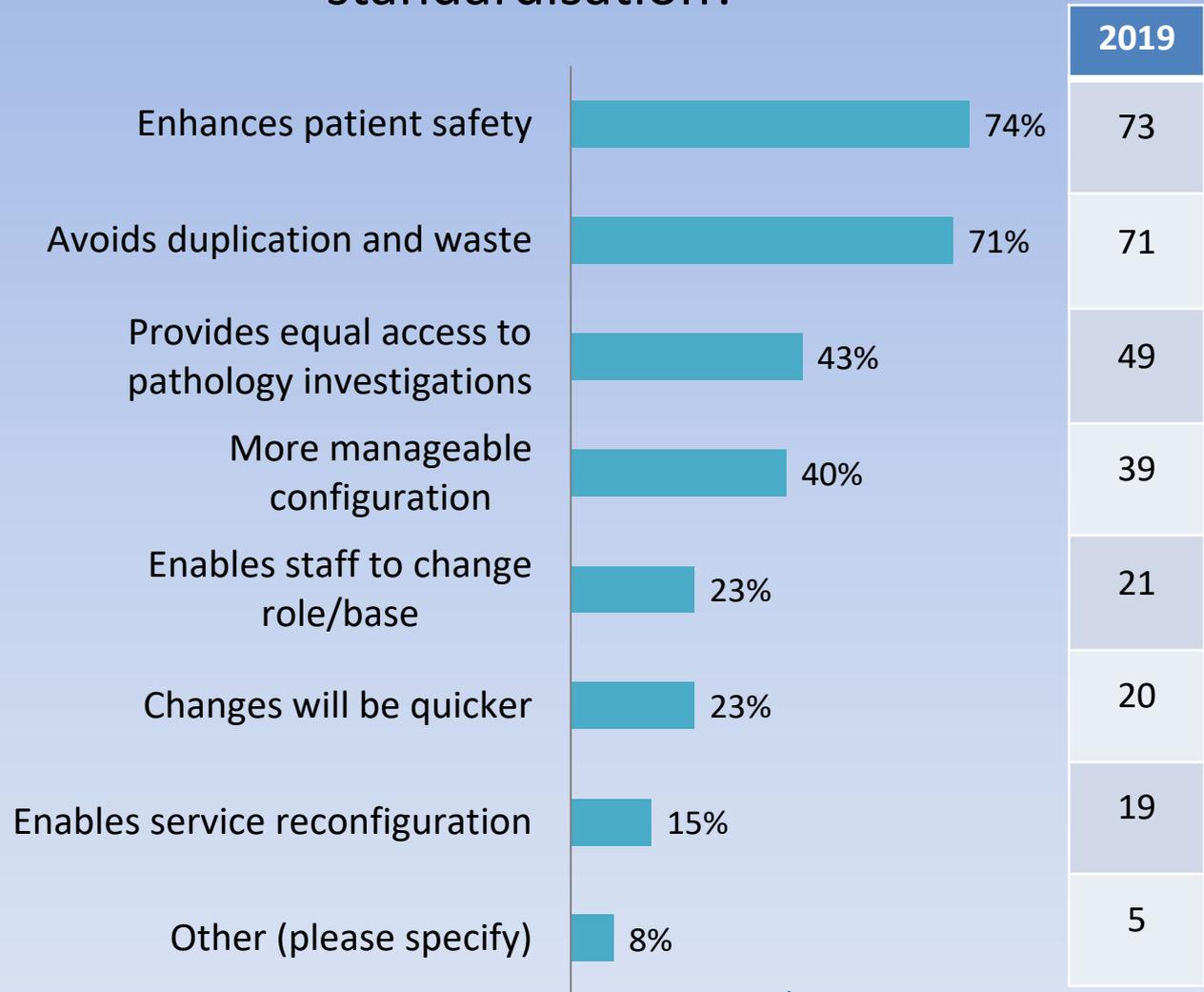
Discipline	% Very good/good
Haematology	68
Blood Sciences	64
Microbiology	58
Screening	57
Biochemistry	52
Blood transfusion	45
Cellular Pathology	42

Health Board/Trust	% Very good/good
Welsh Blood Service	100
Swansea Bay	67
Aneurin Bevan	62
Hywel Dda	56
Public Health Wales	55
Betsi Cadwaladr	54
Cardiff & Vale	54
Cwm Taf Morgannwg	50
Digital Health and Care Wales	50

- Those rating the service as very or fairly standardised was highest in Haematology (68%) and Blood Sciences (64%) and lowest in Cellular Pathology (42%).
- In terms of Health Board, it was highest in Welsh Blood Service (100%) and Swansea Bay (67%) and lowest in Cwm Taf and Digital Health and Care Wales (both 50%).

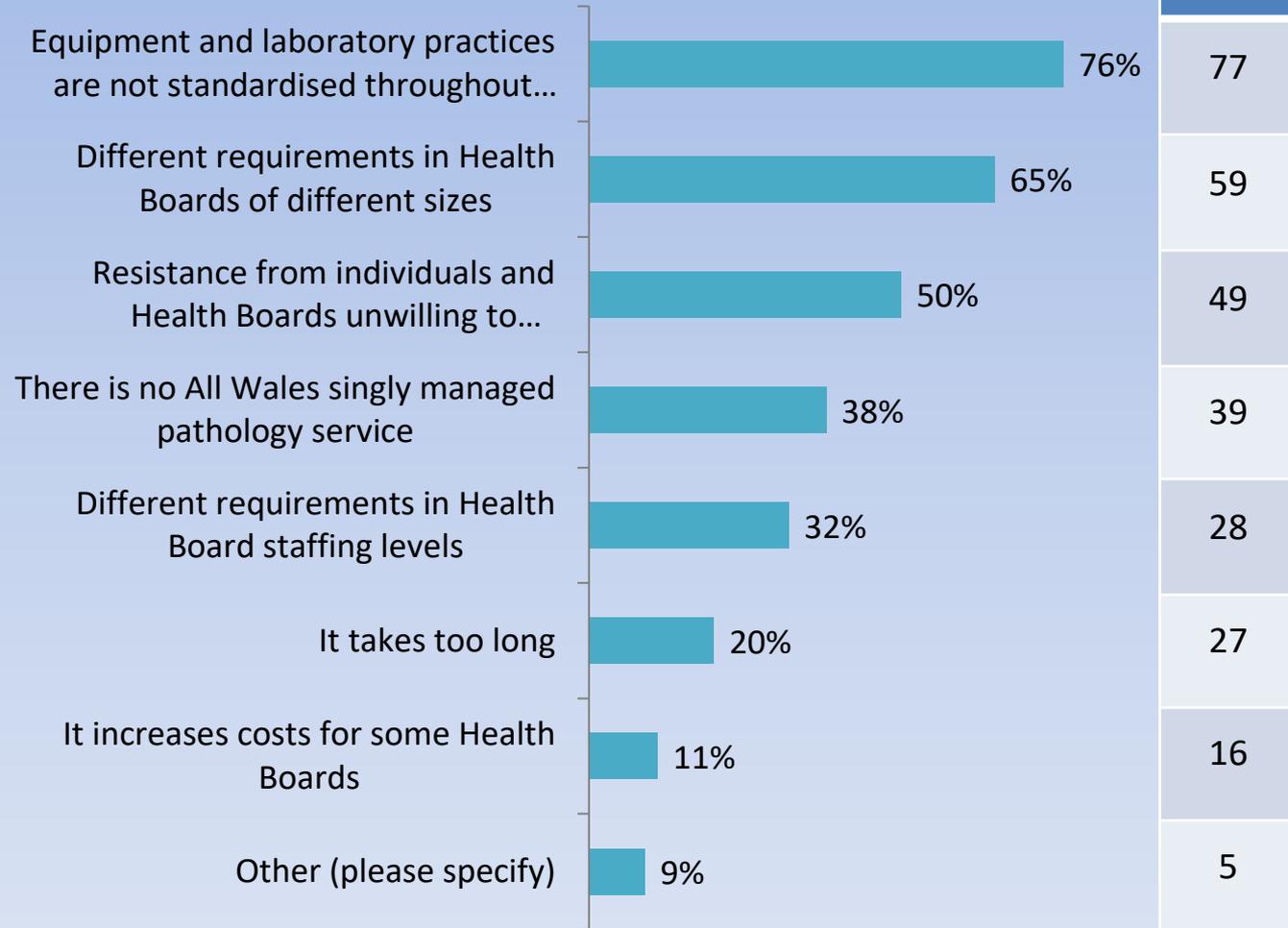
Q7: What do you consider to be the top three most important benefits of standardisation?

• The main benefits were considered to *enhance patient safety (74%) and avoid duplication and waste (71%)*. Results were similar to 2019.



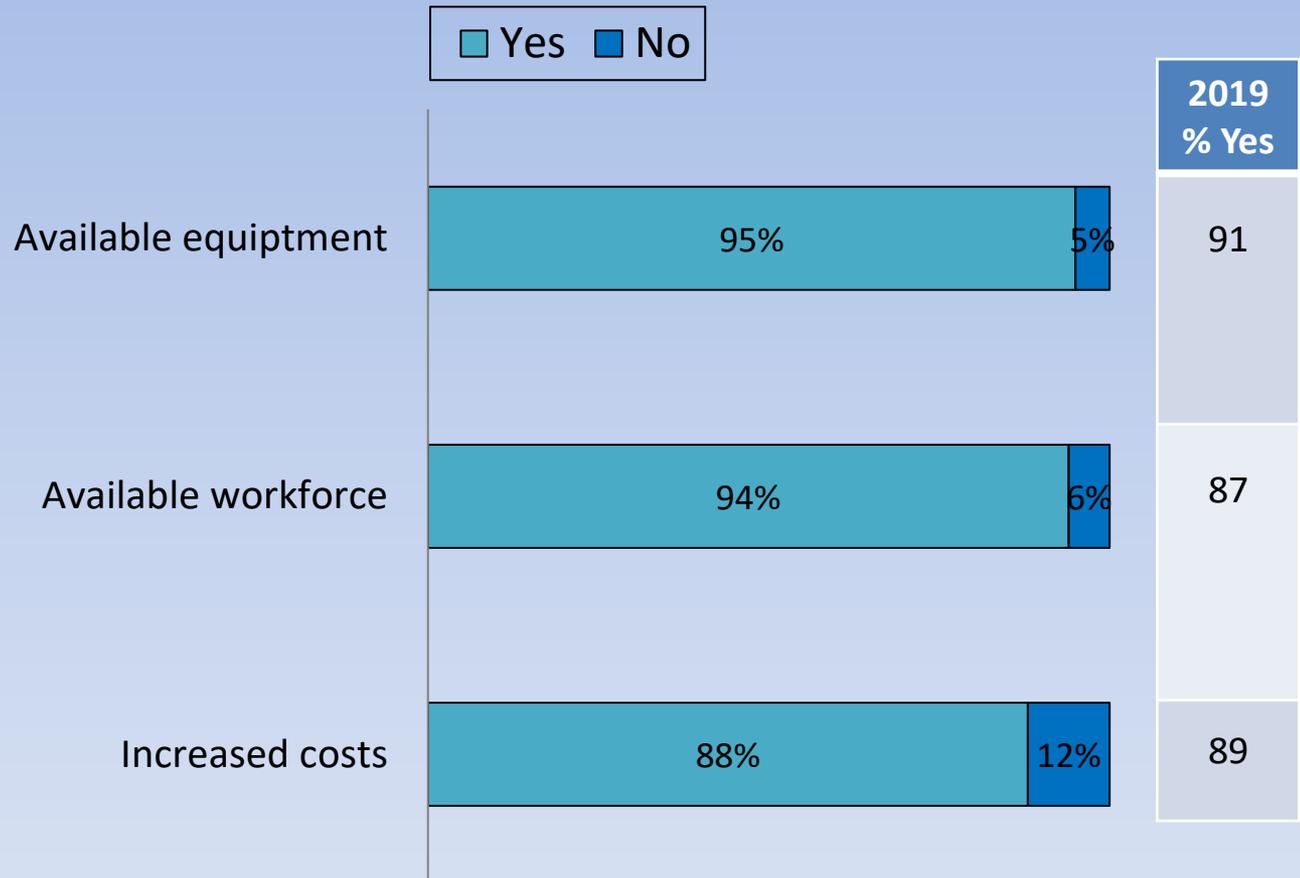
Q8: What do you consider to be the top three challenges in achieving standardisation?

- The main challenges were considered to be *equipment and laboratory practices are not standardised throughout Wales* (76%), followed by *different requirements in Health Boards of different sizes* (65%). Results were similar to 2019.

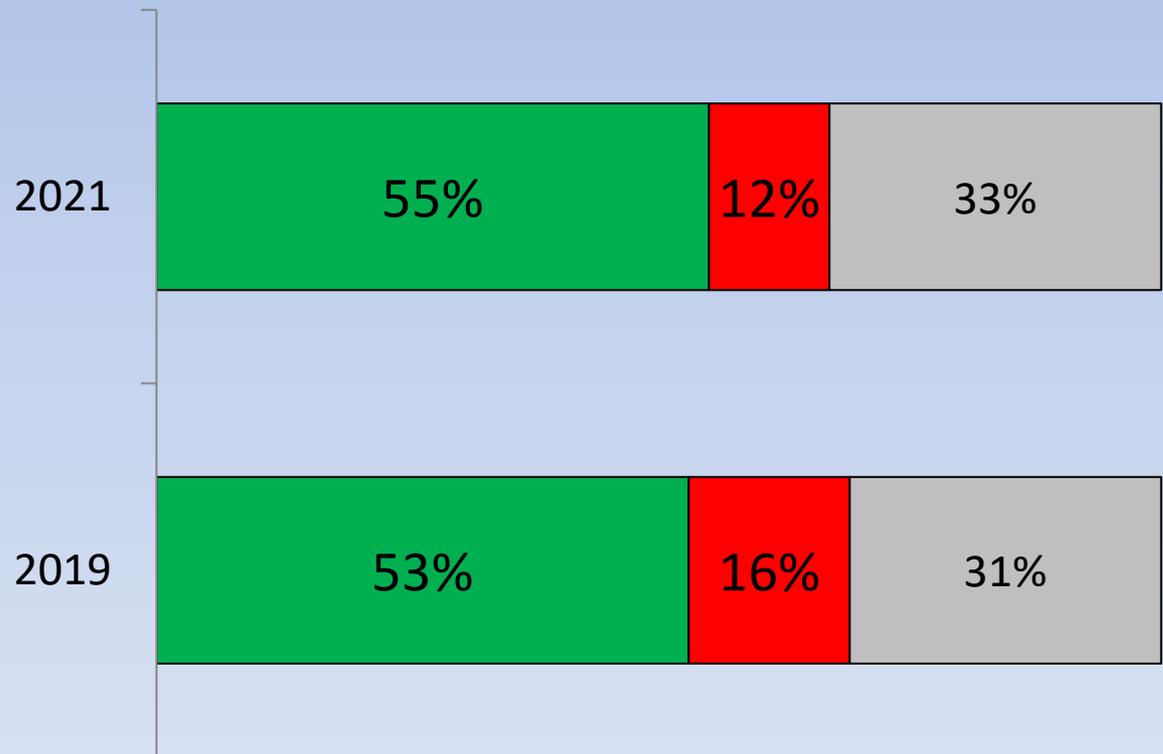
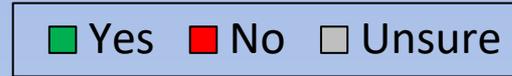


Q14: Do any of the following have an impact on the degree of standardisation that can be achieved?

- The majority agreed that they all had an impact on *available workforce* (95%), *available equipment* (90%) and *increased costs* (85%). *Available workforce* was thought to have more of an impact that in 2019 (an increased from 87% to 95%).

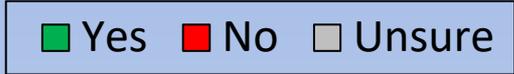


Q9: Do you think a standardised All Wales LIMS will reduce the risk of configuration errors?

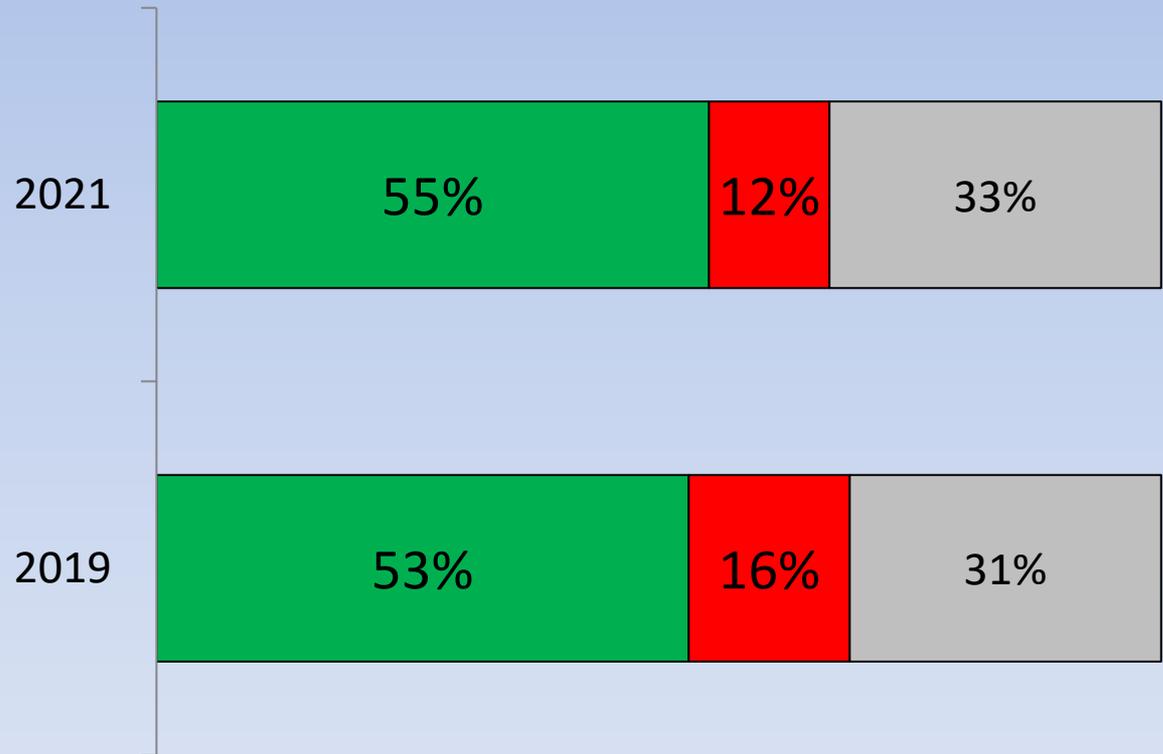


- Over a half (55%) think that a standardised All Wales LIMS will reduce the risk of configuration errors, 12% said that it won't and 33% were unsure.
- Results were almost identical to 2019.

Q10: Do you think a standardised All Wales LIMS will reduce clinical risk?

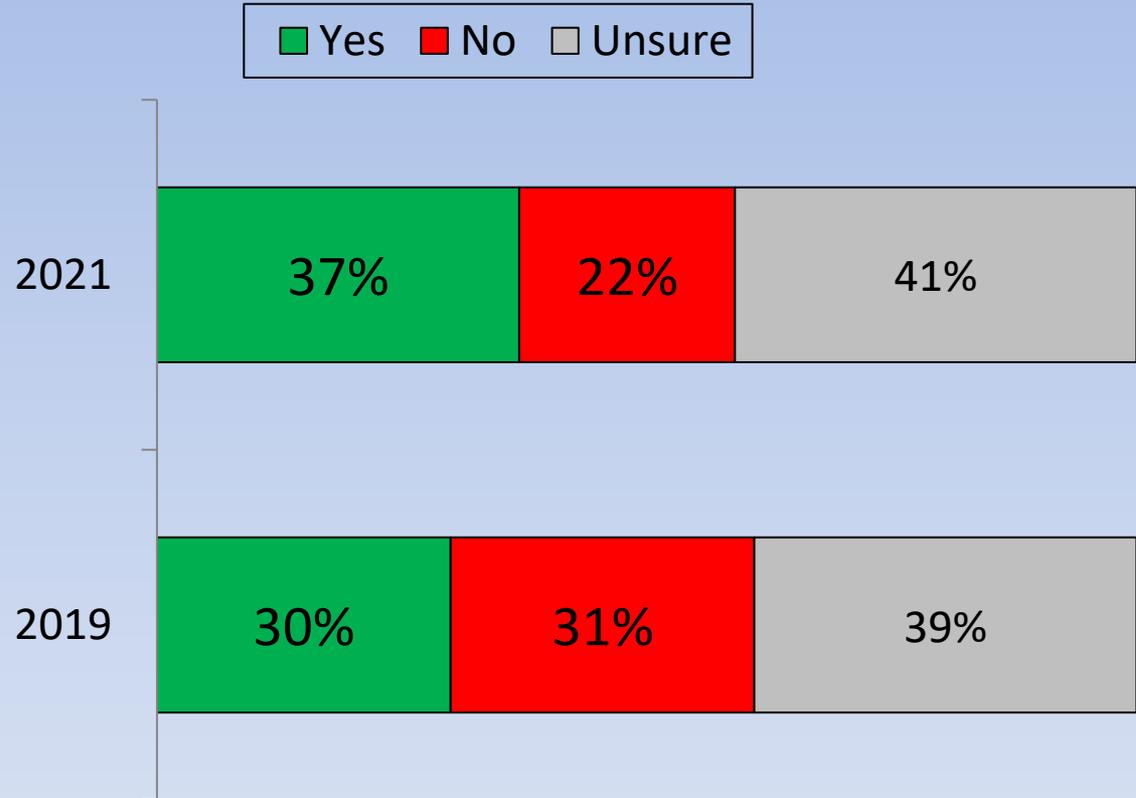


- Almost 3 in 5 staff (59%) think that it will reduce clinical risk, 15% said that it won't and 26% were unsure.
- Again, results were almost identical to 2019.



Q11: Is the right structure in place to deliver standardisation for your discipline?

- Just 37% said that the right structure was in place, and 22% said that it wasn't. 41% did not know.
- A slightly higher percentage said that the right structure was in place in 2021 compared to 2019 (37% compared to 30%), and a lower percentage said that it wasn't (22% compared to 31% in 2019) .



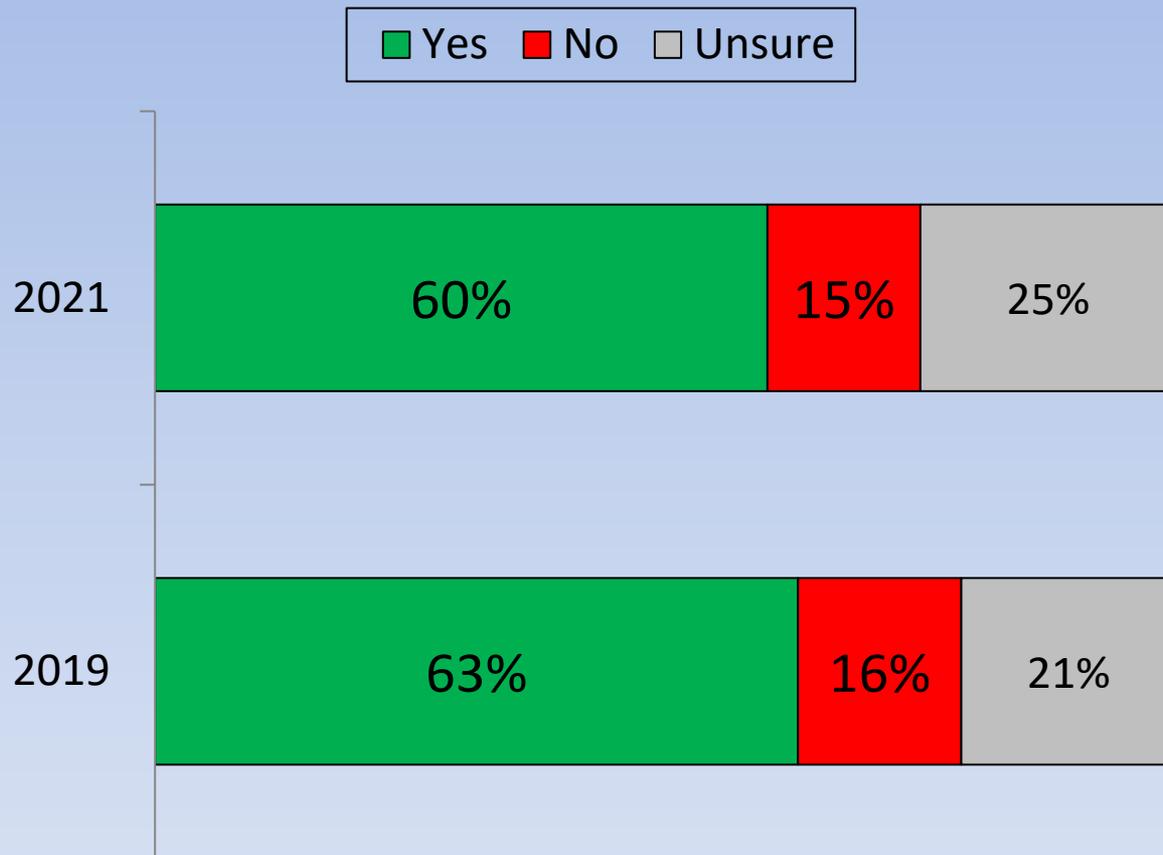
Q11: Is the right structure in place to deliver standardisation for your discipline?

- Those working in Blood Sciences (48%), Blood Transfusion (45%) and Screening (43%) were most likely to say that the right structure was in place
- Those Cellular Pathology and Haematology were the least likely (29% & 27%).

Discipline	% Yes
Blood Sciences	48
Blood Transfusion	45
Screening	43
Biochemistry	36
Microbiology	35
Cellular Pathology	29
Haematology	27

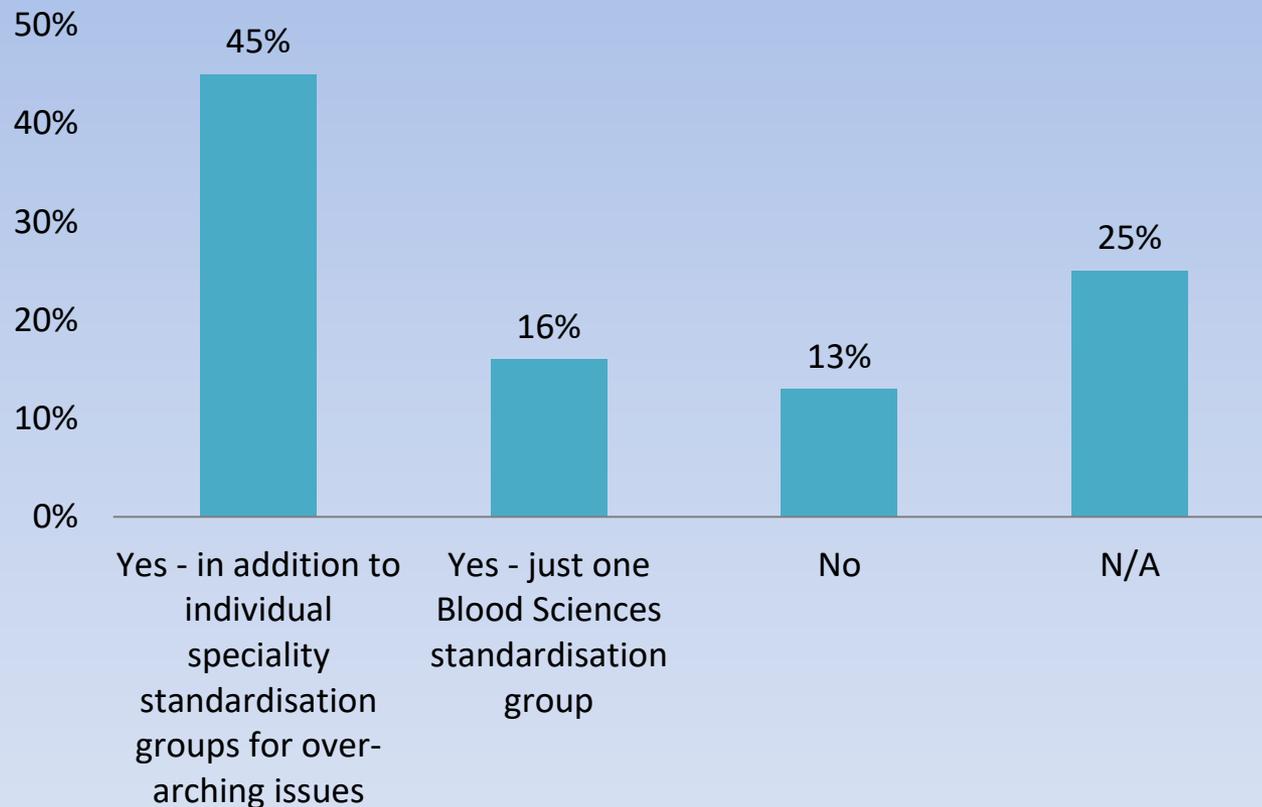
Q12: Do you agree all laboratories should abide by national decisions regarding standardisation?

- 3 in 5 staff (60%) agreed that all laboratories should abide my national decisions regarding standardisation.
- A further 15% disagreed and 25% were unsure.
- Results were similar to 2019.



Q13: Should there be a single Blood Sciences standardisation group involving Biochemistry, Haematology, and Immunology?

- Over 3 in 5 (61%) agreed that there should be a single blood sciences group. However, the majority of these (45%) felt that this should be in addition to individual speciality standardisation groups.
- This was higher than in 2019 where 48% agreed.



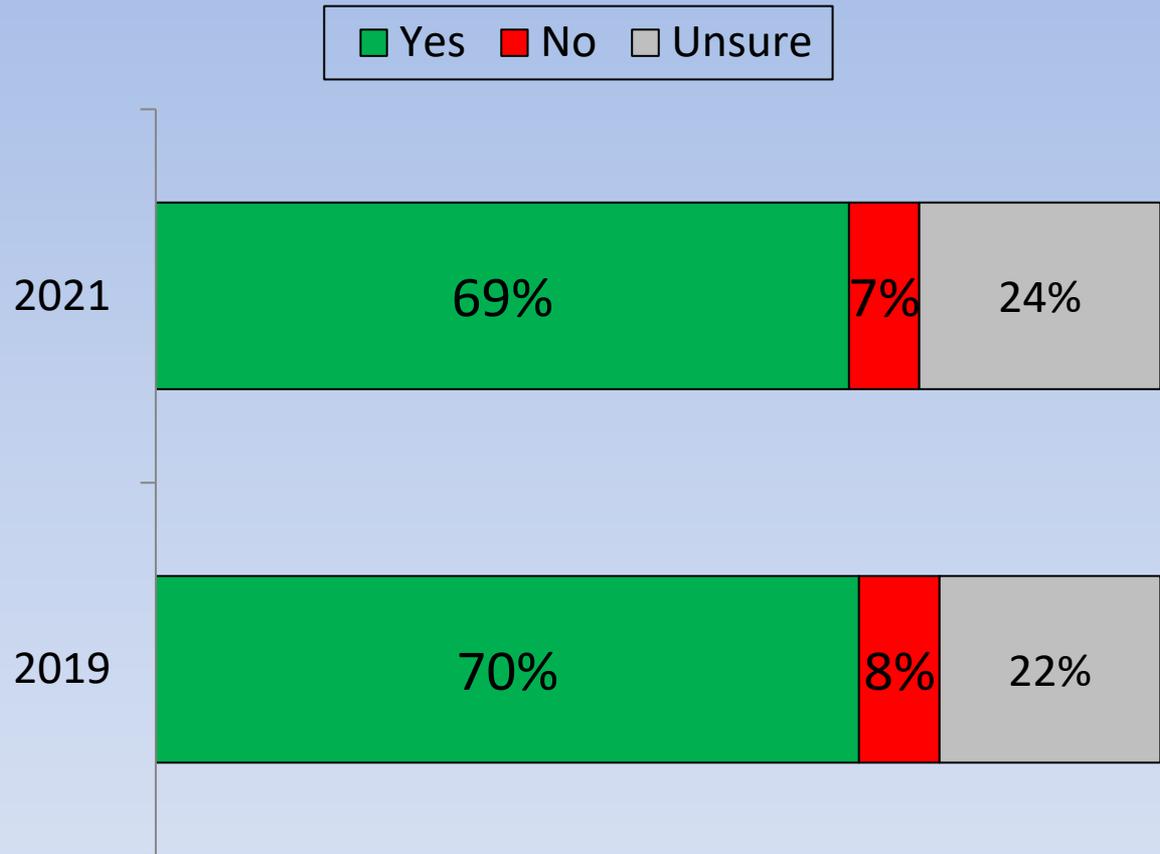
Q13: Should there be a single Blood Sciences standardisation group involving Biochemistry, Haematology, and Immunology?

Discipline	% Yes – total	% Yes – in addition to individual groups	% Yes – just one group
Blood Sciences	87	48	39
Haematology	82	68	14
Blood Transfusion	80	70	10
Biochemistry	69	64	5
Microbiology	44	25	19
Cellular Pathology	30	13	17
Screening	28	14	14

- Those working in Blood Sciences were most in favour of a single blood sciences group (87% - split 48% in addition to individual groups and 39% just one group).

Q15: Will there need to be a culture change among clinicians and service users to enable standardisation?

- A high percentage (60%) agreed that there needs to be a culture change amongst clinicians and service users to enable standardisation.
- This was similar to 2019.



Summary and Conclusions

Summary

This is a summary of the findings of the 2021 survey with reference to the corresponding figures for 2019 in brackets where relevant.

Awareness of the Laboratory Information Network Cymru LINC Programme

- Overall, 85% of staff were aware of the Laboratory Information Network Cymru (LINC) Programme (80% in 2019).
- 67% had seen the Laboratory Information Network Cymru (LINC) newsletter (56% in 2019).

Progress of the Laboratory Information Network Cymru (LINC) Programme

- Just 19% rated the progress that LINC is making as very good or good, increasing to 53% when you include those rating it as fair.
- This was higher than in 2019 where only 42% rated the same.
- Just less than 1 in 10 (9%) felt that the progress being made was poor or very poor (12% in 2019).
- However, a high proportion (38%) did not know, although a lower proportion than in 2019 (47%).

Views on current levels of standardisation

- Over a half (57%) felt that the service is either very or fairly standardised and a further 31% felt that it is not very or not at all standardised (58% very/fairly standardised in 2019).

Benefits of standardisation

- The main benefits of standardisation are enhance patient safety (74%) and avoids duplication and waste (71%).

Challenges in achieving standardisation

- The main challenges of achieving standardisation are equipment and laboratory practices are not standardised throughout Wales (76%), followed by different requirement in Health Board of different sizes (65%).
- The majority agreed that the following had an impact on the degree of standardisation that can be achieved - available equipment (95%), available workforce (94%) and increased costs (88%).

Views on future standardisation

- Over a half (55%) think that a standardised all Wales Laboratory Information Management System (LIMS) will reduce the risk of configuration errors and 12% said that it won't (53% agreed that it would in 2019).
- 59% think that a standardised All Wales Laboratory Information Management System (LIMS) will reduce clinical risk and 15% said that it won't (59% also agreed in 2019).
- Just 37% said that the right structure was in place to deliver standardisation within their discipline and a similar proportion (22%) said that it wasn't in 2019 30% said that the right structure was in place.
- 60% agreed that all laboratories should abide by National decisions regarding standardisation and 15% disagreed (63% agreed in 2019).
- 45% felt that there should be a single blood sciences group in addition to individual specialty standardisation groups (38% in 2019), and 16% felt that there should be just one group (10% in 2019).
- 69% agreed that there needs to be a culture change amongst clinicians and service users to enable standardisation (70% in 2019).

Conclusions

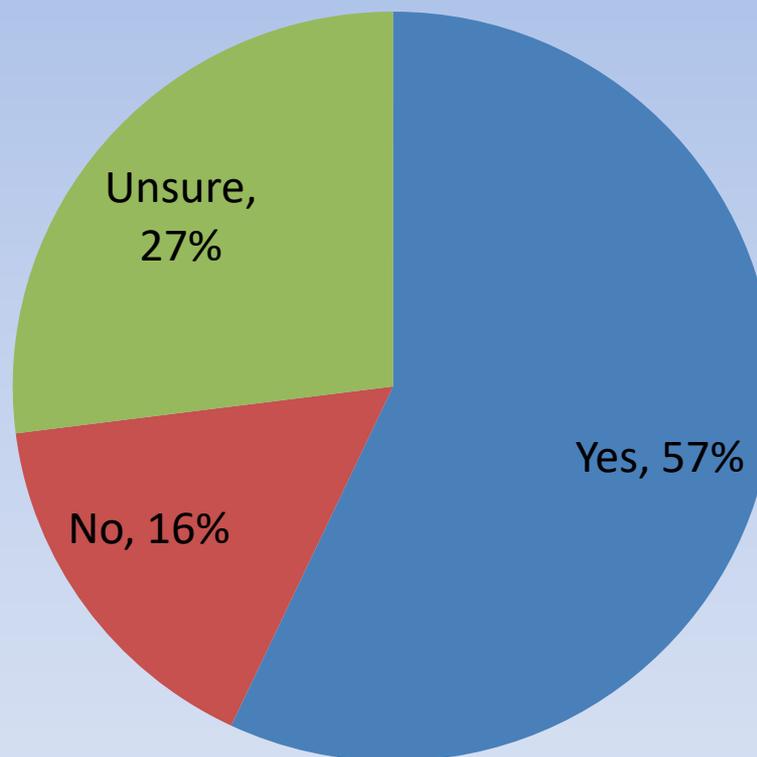
- A high percentage were aware of the LINC programme, a slight increase since 2019 (85% from 80%).
- Over a half think that LINC is making at least fair progress, which again is higher than in 2019 (53% from 42%)
- A majority also think that the current level of service is standardised (57%) which is consistent with 2019 (58%).
- The challenges were also considered to be the same now as they were in 2019, mainly equipment and laboratory practices are not standardised throughout Wales and different requirements in Health Board of different sizes . This is in additional to the challenges of available equipment, available workforce and increased costs.
- There was still agreement on the benefits of standardisation, particularly in terms of patient safety and avoiding duplication and waste. The majority were also in agreement that standardisation will reduce the risk of configuration error and will reduce clinical risk.
- However, many still believe that they is need for a structural change and cultural change for standardisation to work at its best.

APPENDIX 1

Biochemistry and Blood Sciences

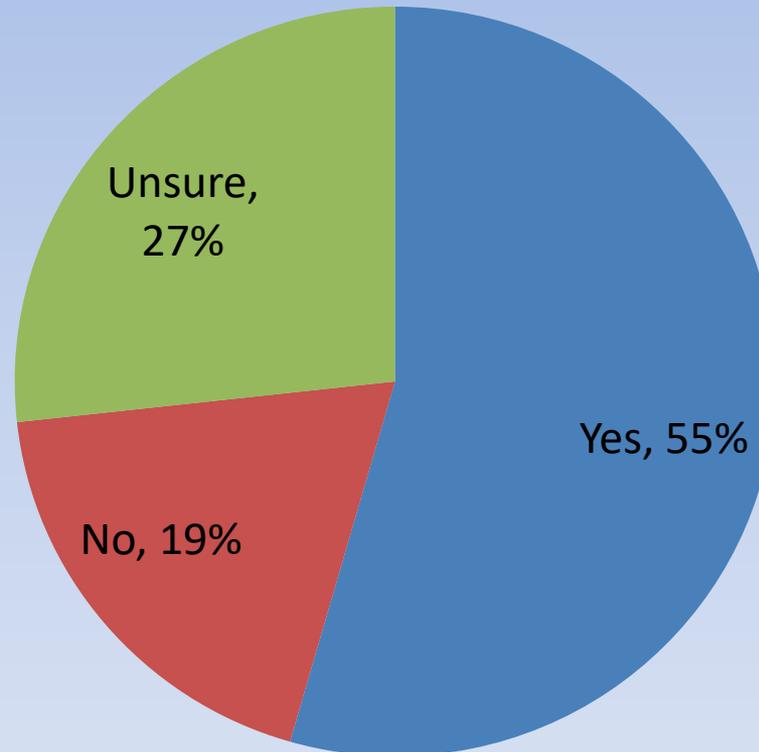
Biochemistry1: Should the process of technical validation be undertaken in the same way for Biochemistry results in all laboratories across Wales?

- 57% of staff felt that the process of technical validation should be undertaken in the same way for Biochemistry results in all laboratories across Wales.
- 16% disagreed.



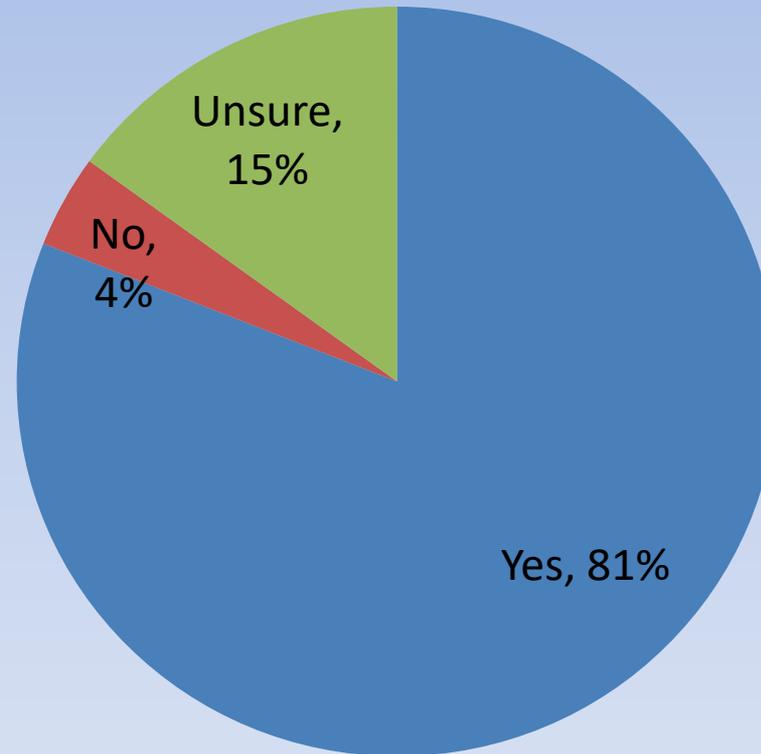
Biochemistry2: Should there be standardisation of which rules sit in middleware and which rules sit in the LIMS?

- 55% of staff also felt that there should be standardisation of which rules sit in middleware and which rules sit in the LIMS.
- 19% disagreed.



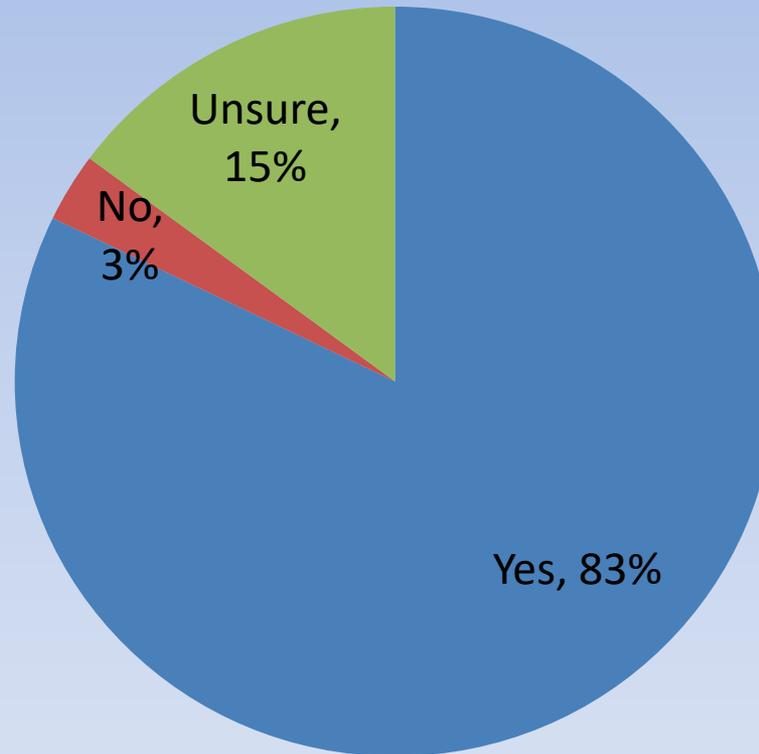
Biochemistry4: Should the same detection limits be used across Wales for the same assay and manufacturer?

- 81% think that the same detection limits should be used across Wales for the same assay and manufacturer. Just 4% did not think that they should.



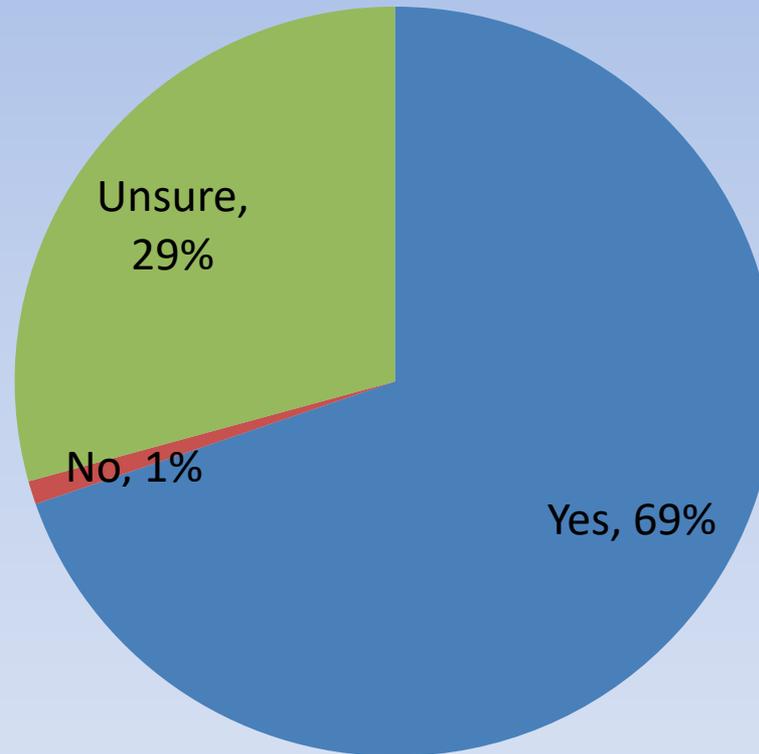
Biochemistry5: Should the same upper limit of reporting be used across Wales for the same assay and manufacturer?

- 83% agreed that the same upper limit of reporting should be used across Wales for the same assay and manufacturer.
- Just 3% disagreed.



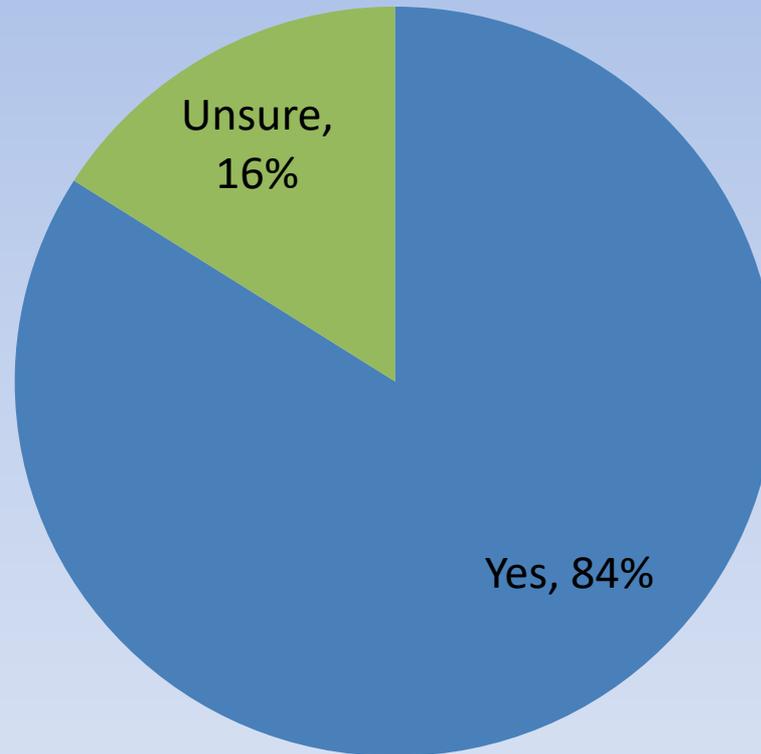
Biochemistry6: Should the same delta changes be used across Wales for the same test?

- 69% agreed that the same delta changes should be used across Wales for the same test.
- Just 1% disagreed.



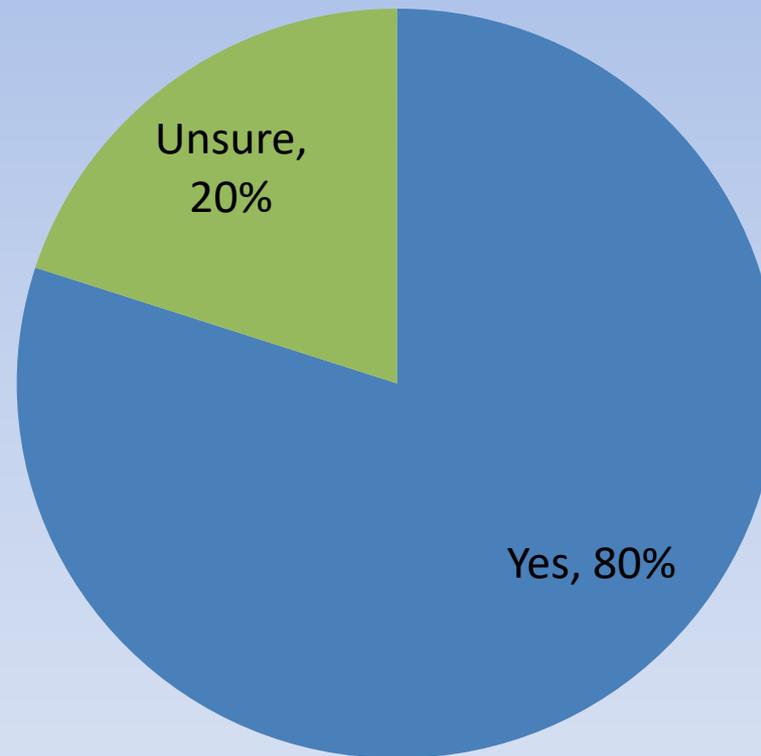
Biochemistry7: Should the same units for indices (where applicable) be used across Wales for the same manufacturer?

- 84% said that the same units for indices (where applicable) should be used across Wales for the same manufacturer.
- No-one disagreed.



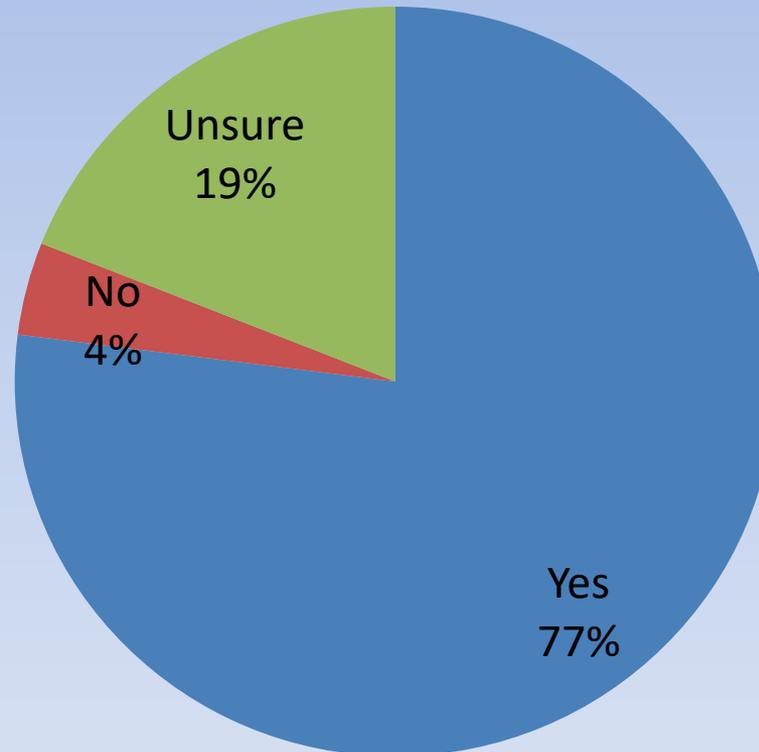
Biochemistry8: Should the manner in which manual dilutions are reported (e.g., for tumour markers) be the same across Wales?

- 80% think that the manner in which manual dilutions are reported (e.g., for tumour markers) should be the same across Wales.
- No-one disagreed.



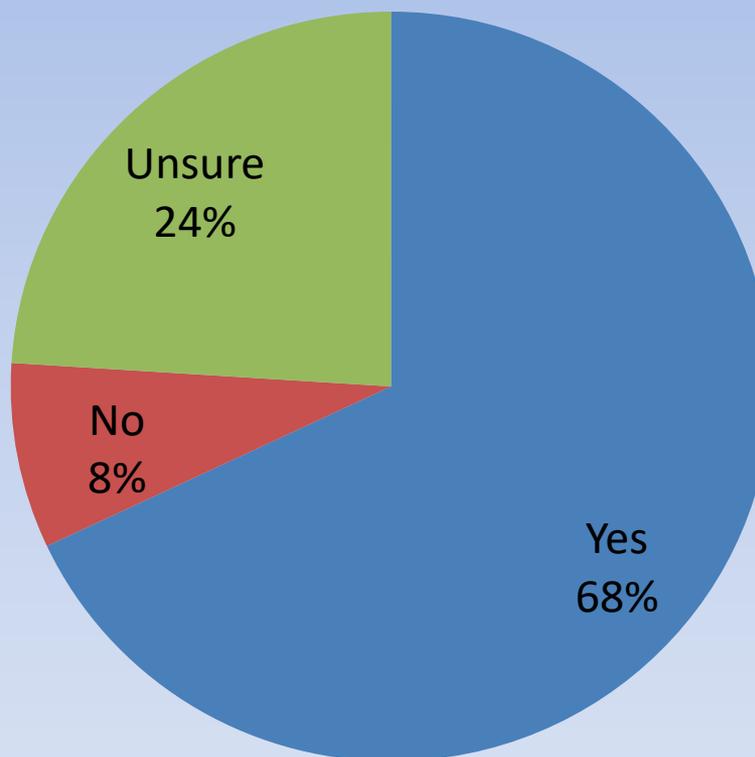
Biochemistry9: Should complex algorithms (e.g., AKI alerts) be the same for all laboratories across Wales?

- 77% agreed that complex algorithms (e.g., AKI alerts) should be the same for all laboratories across Wales.
- Just 4% disagreed .



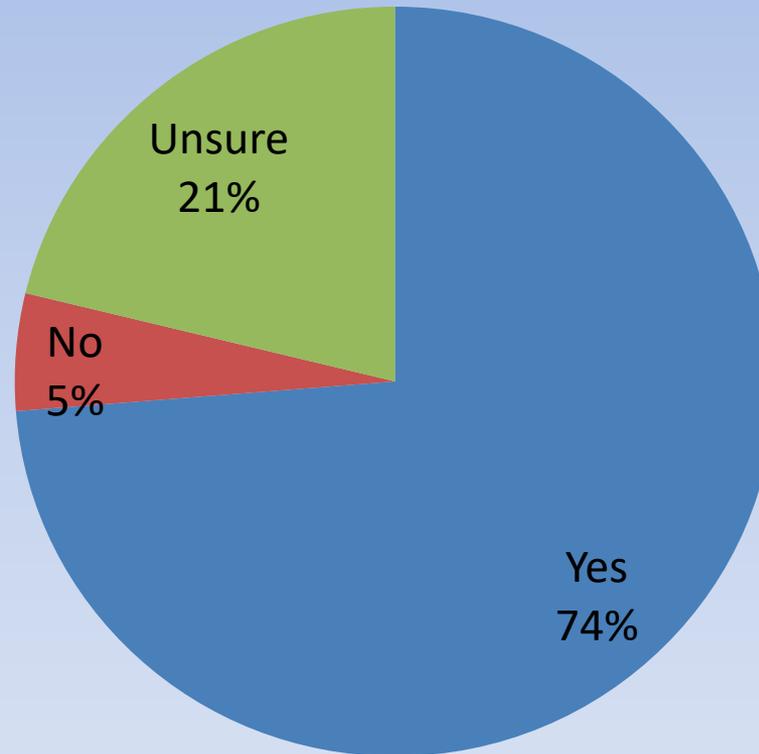
Biochemistry10: Should the clinical verification/ validation queues be the same for all Health Boards across Wales in terms of type?

- 68% think that the clinical verification/validation queues should be the same for all Health Boards across Wales in terms of type.
- 8% did not think that it should be.



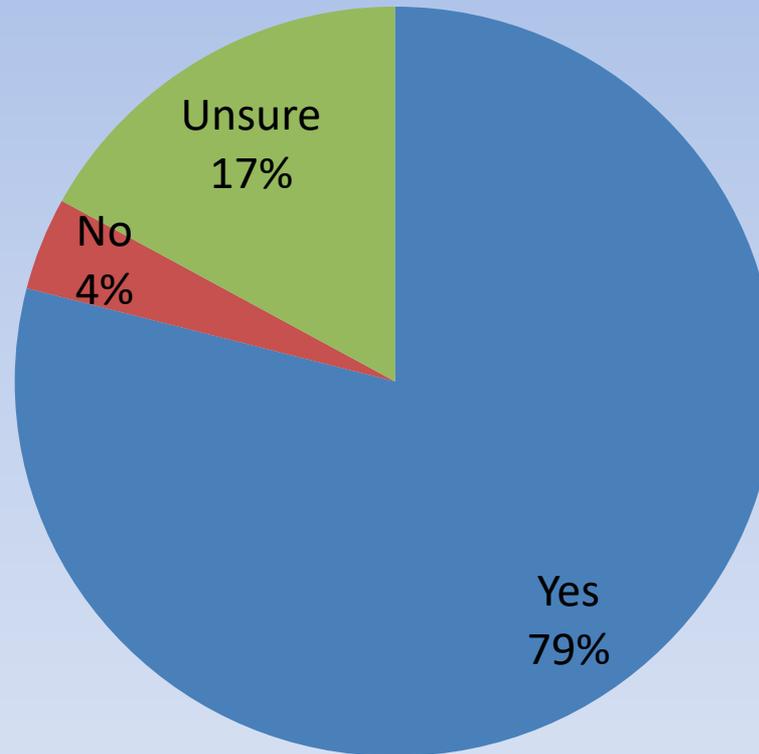
Biochemistry11: Should the configuration of clinical verification/validation queues be the same for all Health Boards across Wales, in terms of trigger limits for results entering queues?

- 74% feel that the configuration of clinical verification/validation queues should be the same for all Health Boards across Wales, in terms of trigger limits for results entering queues.
- 5% disagreed.



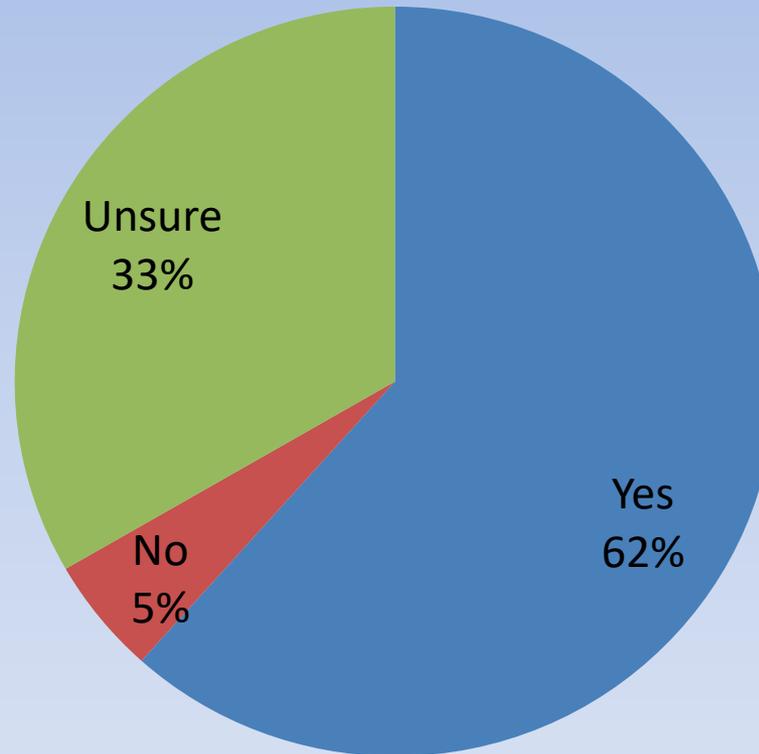
Biochemistry12: Should minimum retest intervals be the same for each Biochemistry test across Wales?

- 79% believe that minimum retest intervals should be the same for each Biochemistry test across Wales.
- Just 4% disagreed.



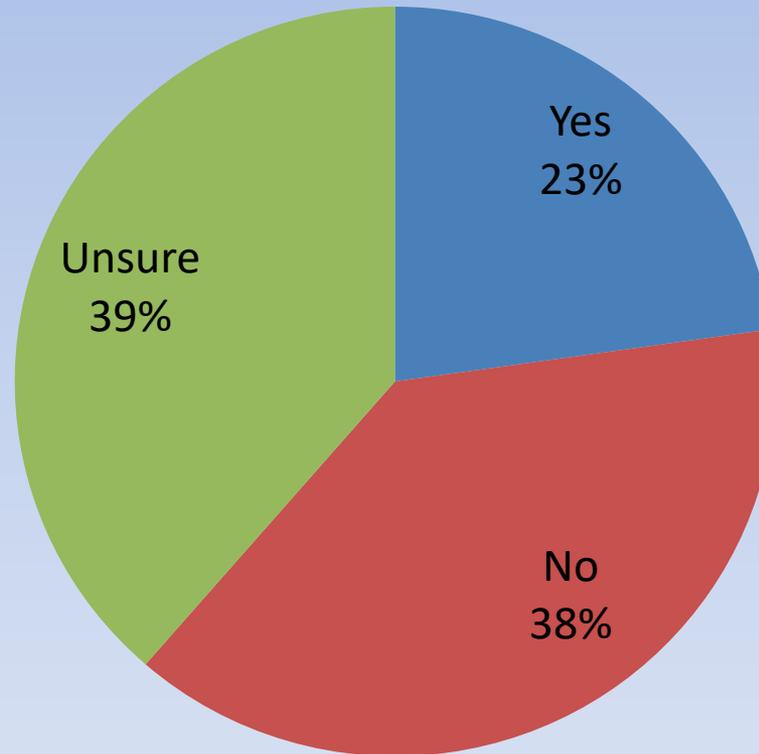
Biochemistry13: Should tests subject to demand management be handled in the same way in LINC for all Blood Sciences disciplines?

- 62% think that tests subject to demand management should be handled LINC for all Blood Sciences disciplines.
- Just 5% disagreed.



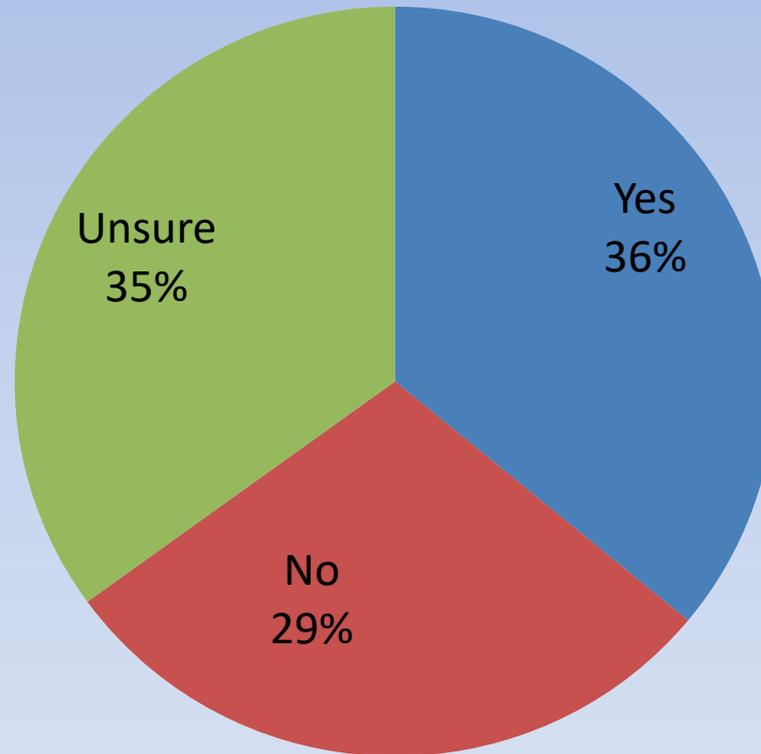
Biochemistry14: Are you happy with the current workflows in TrakCare Lab 2016?

- Just 23% said that they are happy with the current workflows in TrakCare Lab 2016.
- 38% said that they weren't happy.



Biochemistry15: Should LINC only include coded comments that have been agreed on a standardised All Wales basis?

- 36% felt that LINC should only include coded comments that have been agreed on a standardised All Wales basis.
- 29% disagreed.

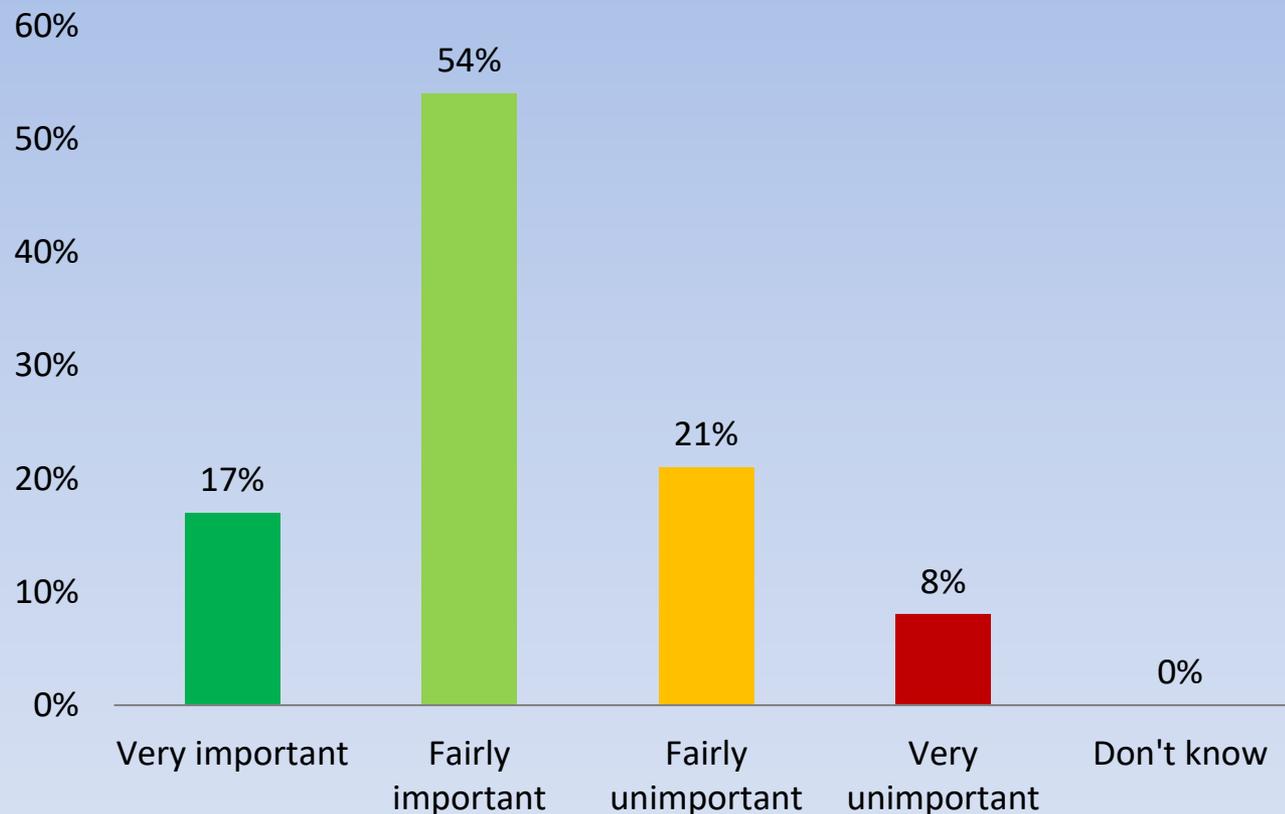


APPENDIX 2

Cellular Pathology

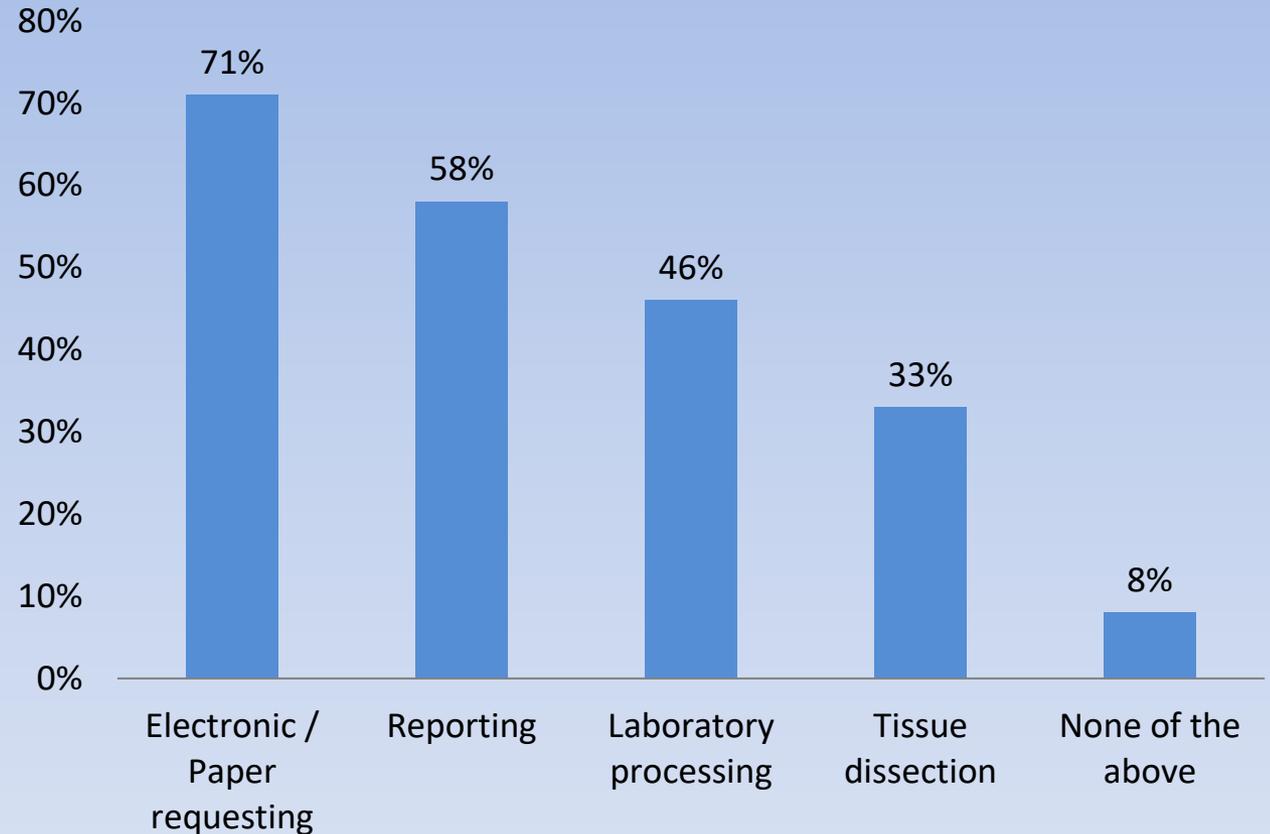
Q1: How important is standardising Cellular Pathology laboratories in Wales to you?

- 71% thought it was either very or fairly important that Cellular Pathology laboratories in Wales are standardised.
- However, 29% felt that it wasn't important.



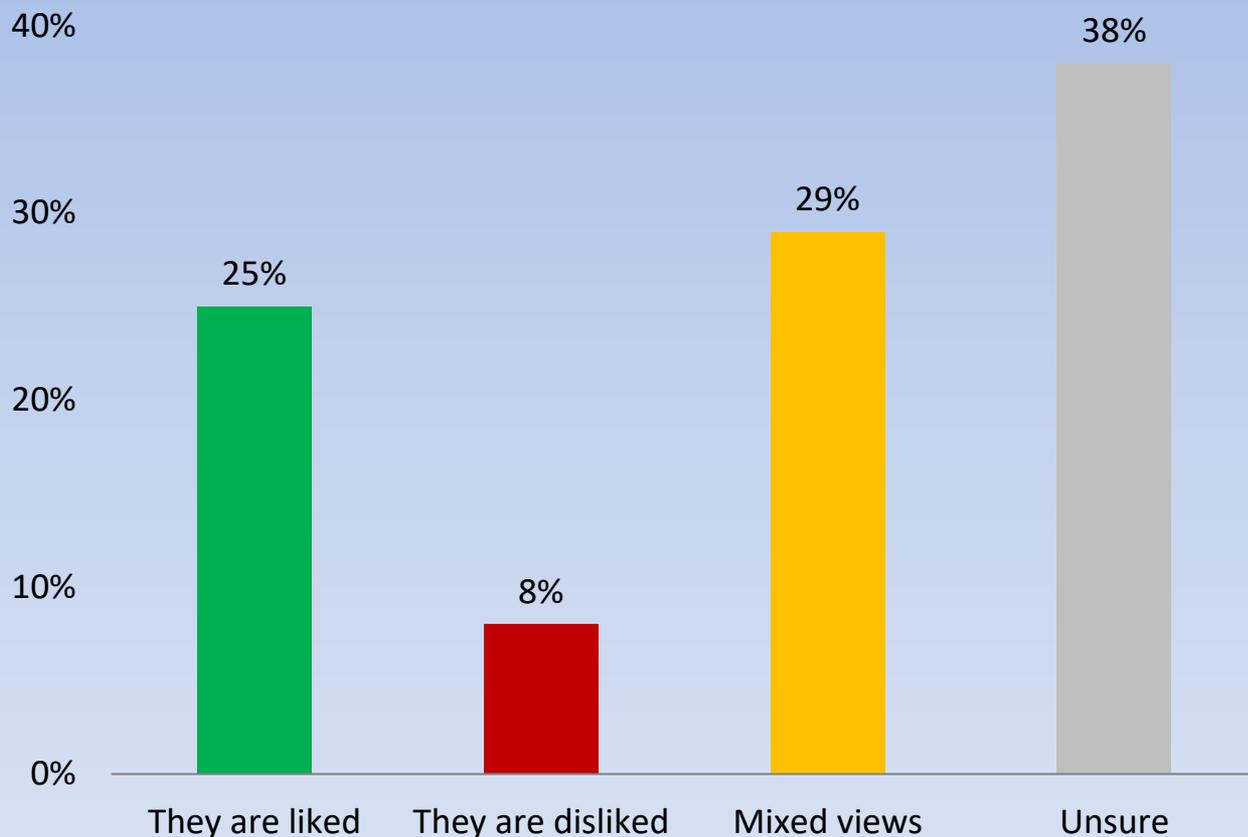
Q2: Which parts of Cellular Pathology should take priority to be standardised? (Select as many as applicable)

- The most mentioned were electronic/paper requesting (71%) and reporting (58%).



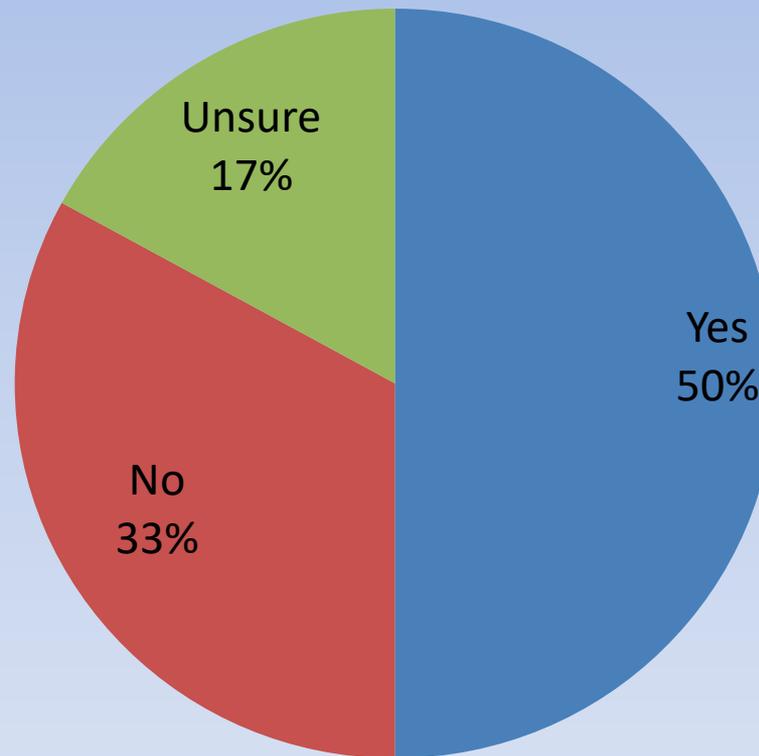
CellularPathology3: What is the perception of the National Pathology Datasets by users in your hospital?

- A quarter (25%) said that the datasets were liked and just 8% said that they were disliked.
- Just under a third (29%) said that views were mixed and 38% were unsure.



CellularPathology4: Do you think Cellular Pathology standardisation takes advantage of modern technologies like digital slide scanning and integrated voice commands?

- A half (50%) think that standardisation takes account of modern technologies.
- 33% said that it doesn't.

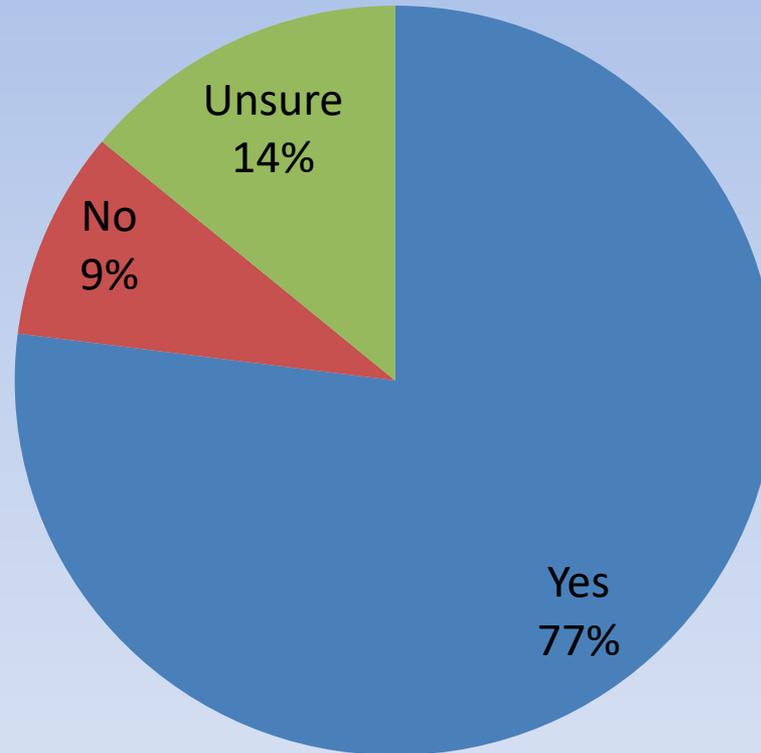


APPENDIX 3

Haematology

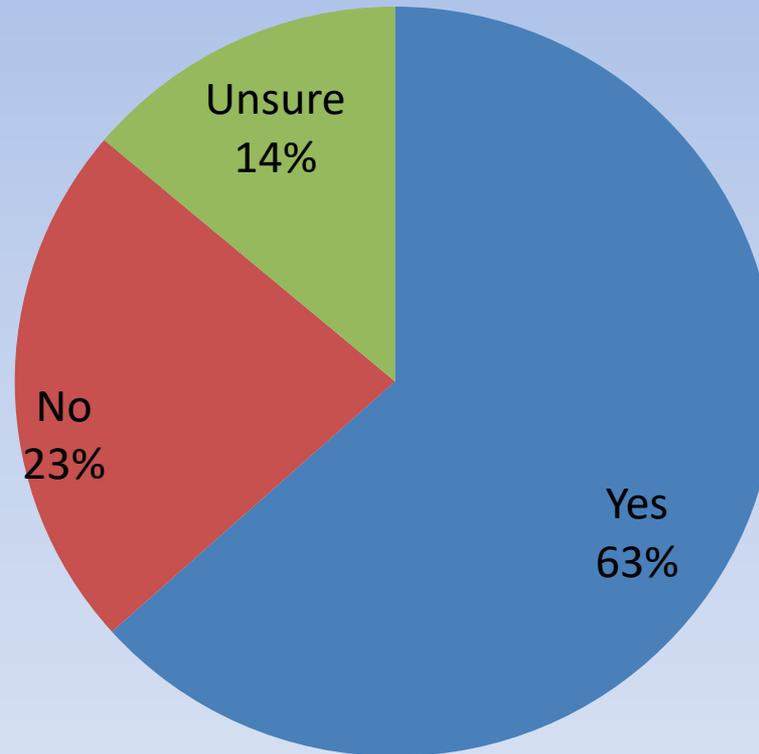
Haematology1: Should the process of technical validation be undertaken in the same way for Haematology results in all laboratories across Wales?

- 77% of staff felt that the process of technical validation should be undertaken in the same way for Haematology results in all laboratories across Wales.
- Just 9% disagreed.



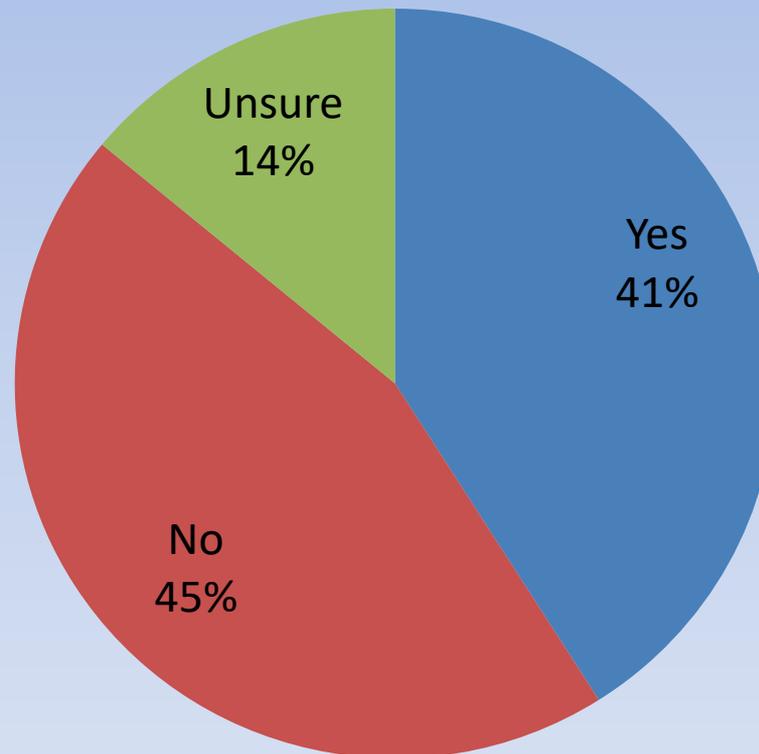
Haematology2: Should there be standardisation of which rules sit in middleware and which rules sit in the LIMS?

- 63% of staff also felt that there should be standardisation of which rules sit in middleware and which rules sit in the LIMS.
- 23% disagreed.



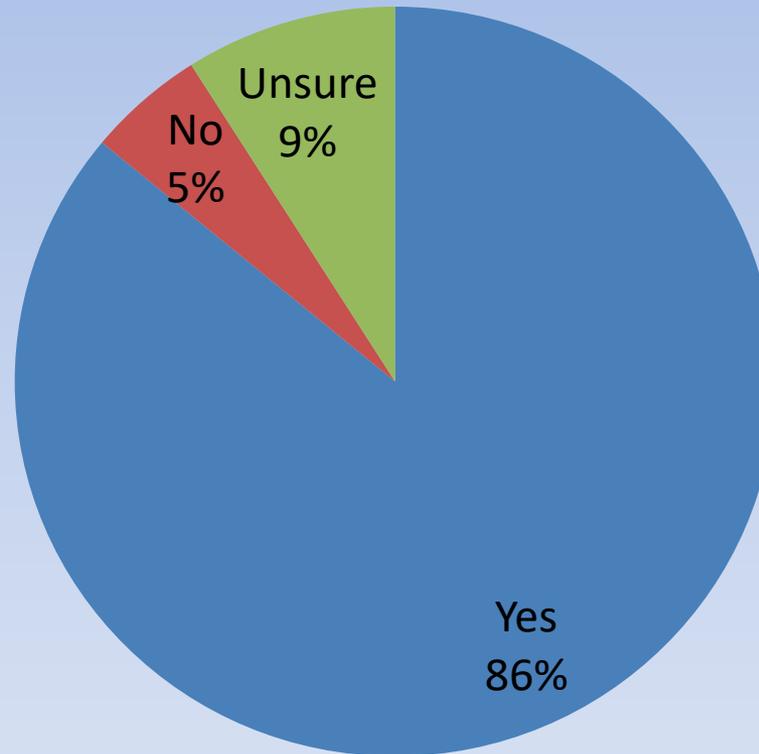
Haematology3: If one manufacturer has multiple assays/methods for one test, should all laboratories using that manufacturer's equipment use the same assay?

- 41% agreed that if one manufacturer has multiple assays/methods for one test, all laboratories using that manufacturer's equipment should use the same assay.
- 45% disagreed.



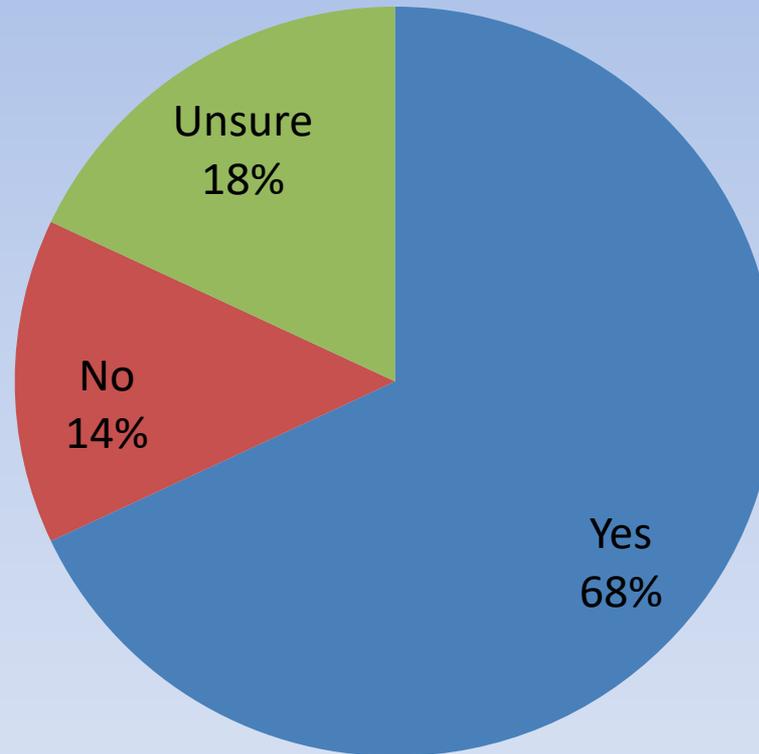
Haematology4: Should the same detection limits be used across Wales for the same assay and manufacturer?

- 86% think that the same detection limits should be used across Wales for the same assay and manufacturer.
- 5% did not think that they should.



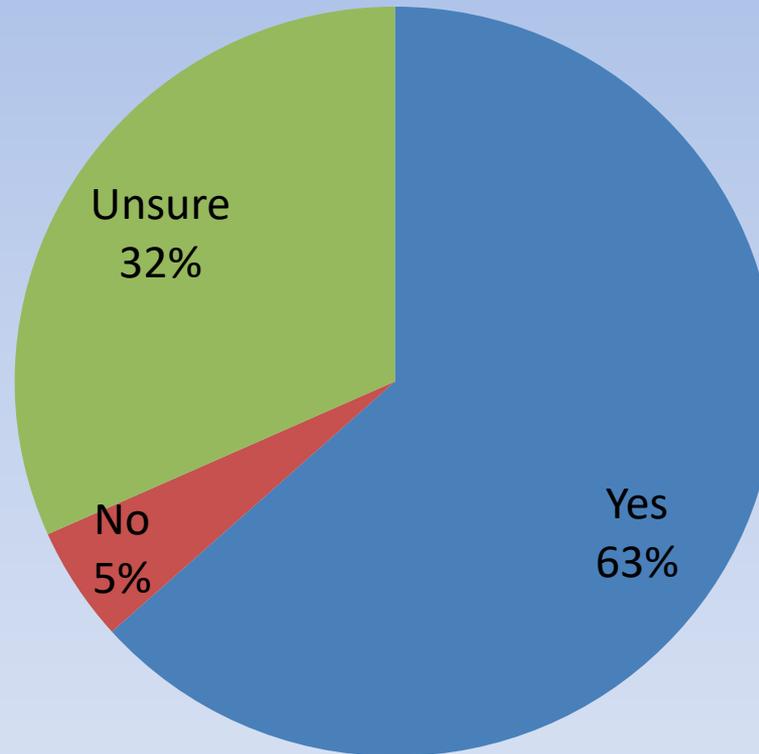
Haematology5: Should the same upper limit of reporting be used across Wales for the assay and manufacturer?

- 68% agreed that the same upper limit of reporting should be used across Wales for the same assay and manufacturer.
- Just 14% disagreed.



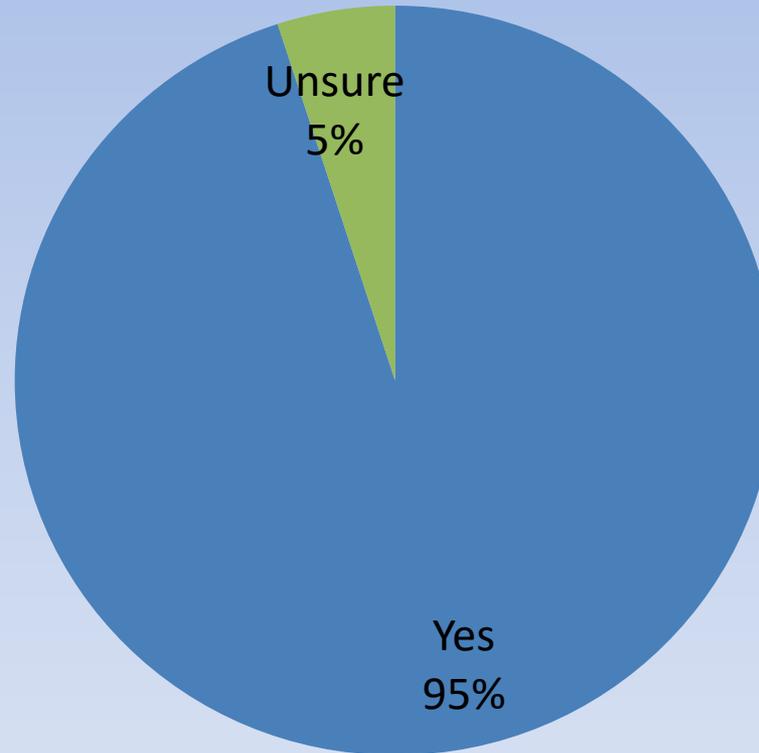
Haematology6: Should the same delta changes be used across Wales for the same test?

- 63% agreed that the same delta changes should be used across Wales for the same test.
- Just 5% disagreed.



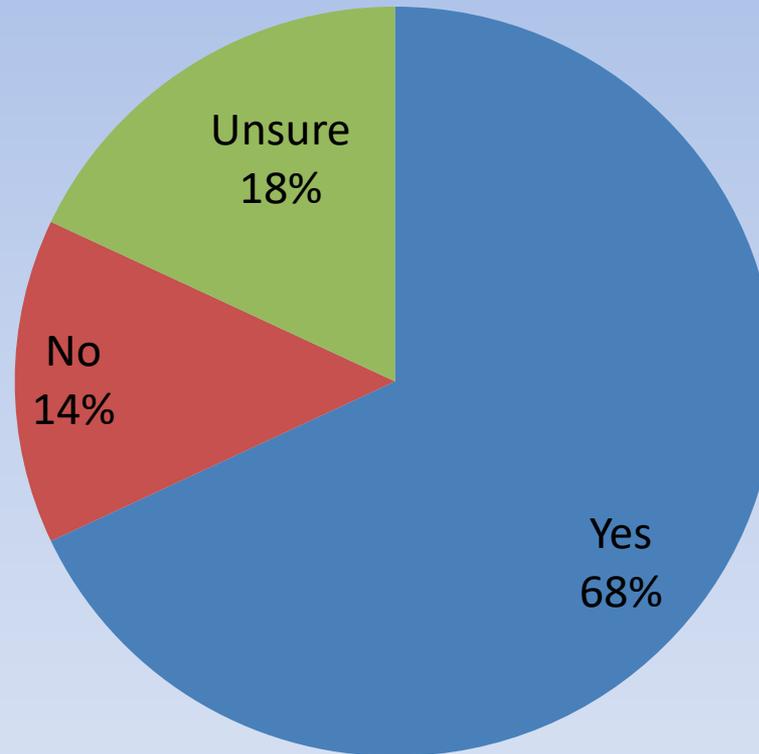
Haematology7: Should the same units for indices (where applicable) be used across Wales for the same manufacturer?

- 95% said that the same units for indices (where applicable) should be used across Wales for the same manufacturer.
- No-one disagreed.



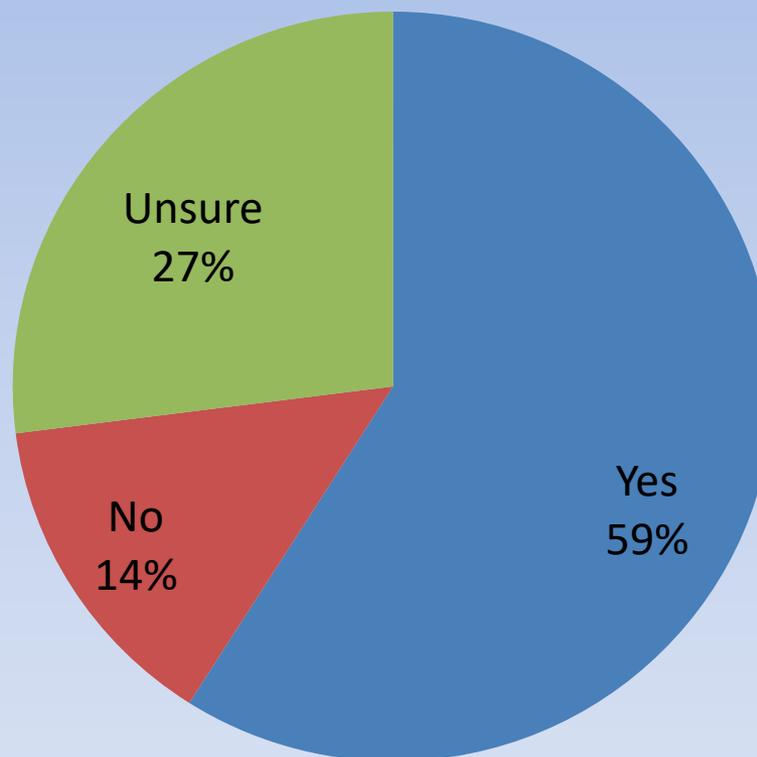
Haematology8: Should the clinical verification/validation queues be the same for all Health Boards across Wales in terms of type?

- 68% think that the clinical verification/validation queues should be the same for all Health Boards across Wales in terms of type.
- 14% did not think that it should be.



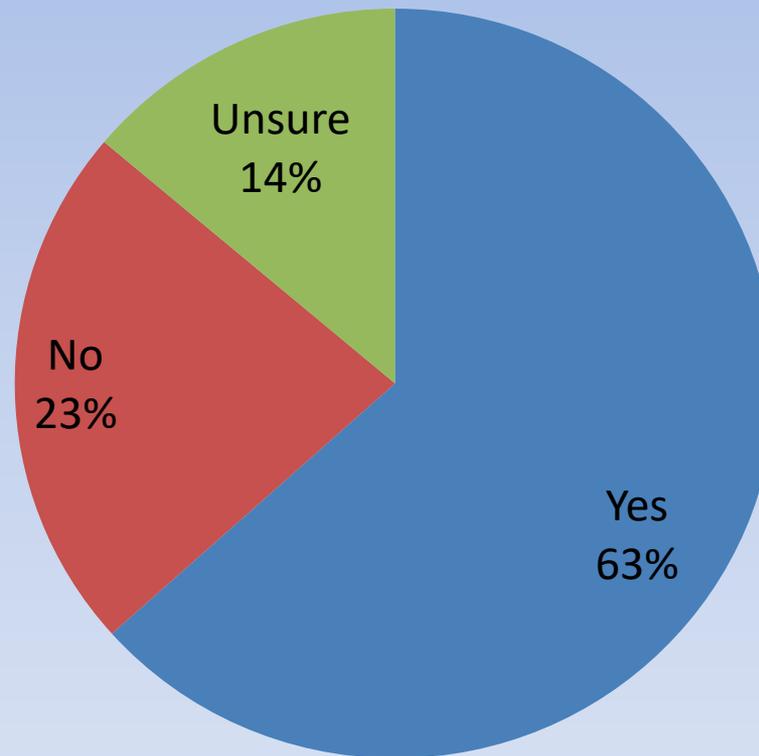
Haematology9: Should the configuration of clinical verification/validation queues be the same for all Health Boards across Wales, in terms of trigger limits for results entering queues?

- 59% feel that the configuration of clinical verification/validation queues should be the same for all Health Boards across Wales, in terms of trigger limits for results entering queues.
- 14% disagreed.



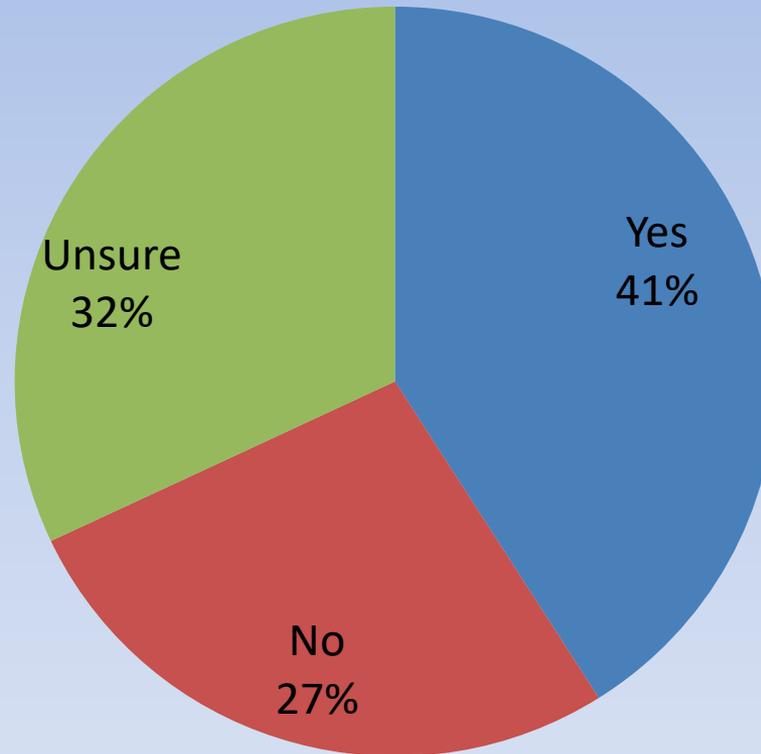
Haematology10: Should minimum retest intervals be the same for each Haematology test across Wales?

- 63% believe that minimum retest intervals should be the same for each Haematology test across Wales.
- Just 23% disagreed.



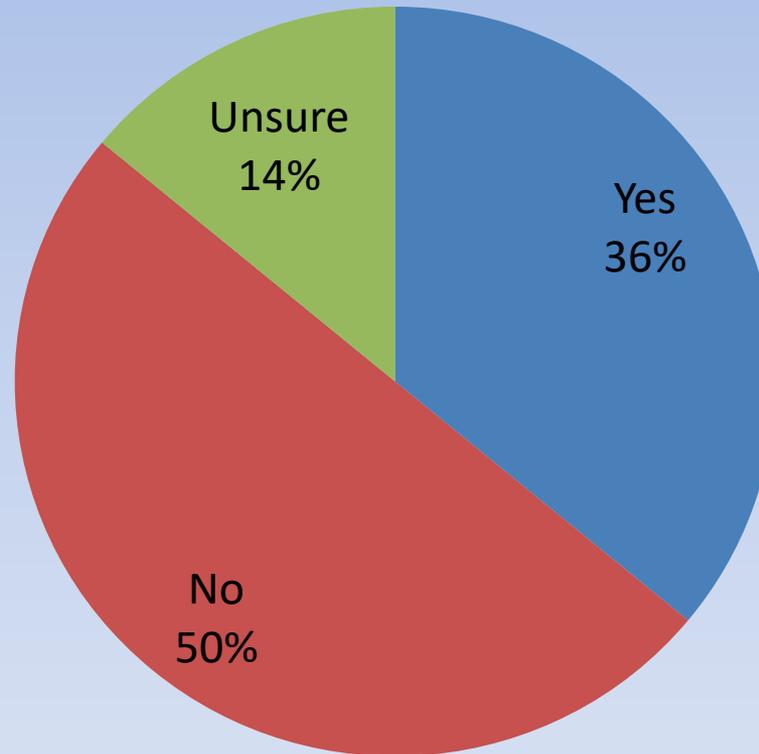
Haematology11: Should tests subject to demand management be handled in the same way in LINC for all Blood Sciences disciplines?

- 41% think that tests subject to demand management should be handled in the same way in LINC for all Blood Sciences disciplines.
- 27% disagreed.



Haematology12: Are you happy with the current workflows in TrakCare Lab 2016?

- 36% said that they are happy with the current workflows in TrakCare Lab 2016.
- 50% said that they weren't happy.



Haematology13: Should LINC only include coded comments that have been agreed on a standardised All Wales basis?

- 41% felt that LINC should only include coded comments that have been agreed on a standardised All Wales basis.

