RCPA Standards for Pathology Informatics in Australia (SPIA) Survey Report 2018 Summary

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RCPA

The Royal College of Pathologists of Australasia

SPIA Survey Report 2018 Summary Contents

Glossary of terms and acronyms

ACRONYM	DETAIL
Cumulative report	A combined display of current and past pathology results for the same test(s)
LIS	Laboratory Information System
MSIA	Medical Software Industry Association
MyHR	My Health Record
PDF	Portable Document Format (Adobe file format)
PITUS	Pathology Information, Terminology and Units Standardisation
RCPA	The Royal College of Pathologists of Australasia
RCPAQAP	Royal College of Pathologists of Australasia Quality Assurance Programs
Rendered/ing	The format of a document or graphic as displayed or printed
SPIA	Standards for Pathology Informatics in Australia

1. Executive summary

The Royal College of Pathologists of Australasia (RCPA) Standards for Pathology Informatics in Australia (SPIA) Survey Report 2018 was designed to detail Australian pathology laboratory awareness and attitudes toward SPIA, including the level of adoption and utility of the existing RCPA SPIA information models and terminology reference sets within current laboratory practice. The Survey was designed as a self-reporting questionnaire comprised of 21 questions with an additional opportunity for further comment via free text at the conclusion of the Survey and the option to discuss any related SPIA topics. The Survey allowed participants to remain anonymous if they so desired and responses to the multiple-choice questions did not depend upon knowing the identity of the participant nor the laboratory or organisation.

Members of the RCPA Pathology Information, Terminology and Units Standardisation (PITUS) working group 1 developed the Survey content with email distribution undertaken by the Royal College of Pathologists of Australasia Quality Assurance Programs (RCPAQAP) via a broadcast 'campaign' email to the prospective participants on Friday 16 November 2018. The email contained a link to the online SPIA Survey which remained open for 30 days. A total of 155 prospective participants received the Survey, representing over 95% of accredited Australian pathology laboratories.
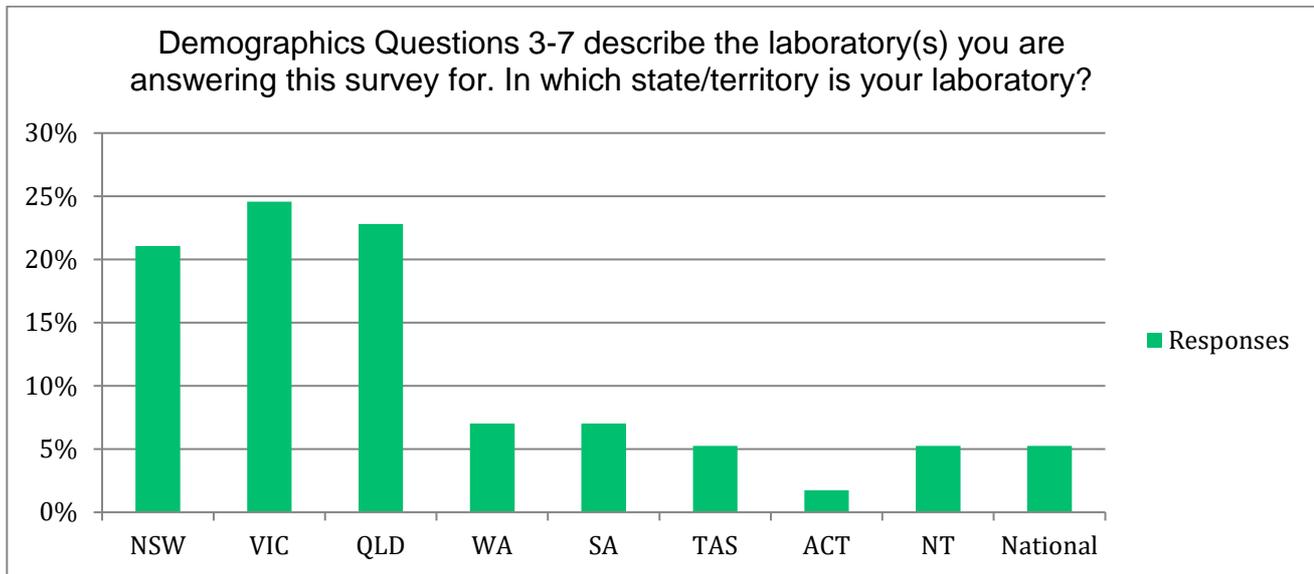
The overall Survey response rate was 56%, taking into account that in some instances the campaign email was originally sent to multiple individuals within the same laboratory group, and Survey responses were received from a single respondent on behalf of multiple laboratories utilising the same Laboratory Information System (LIS). Public and private sector responses were received for all states and territories; this combined with responses received on laboratory complexity and location indicate a wide cross-section of laboratory representation was received. 88% (57 Laboratories) of all respondents completed all or part of the Survey, with the more technical questions receiving fewer responses.

2. Detailed Survey Question analysis

Question 3: Demographics

Questions 3-7 describe the laboratory(s) you are answering this survey for. In which state/territory is your laboratory?

57 responded

Question 4: Which discipline(s) are you answering this survey for? Choose all that apply.

57 responded

ANSWER CHOICES	RESPONSES	PERCENTAGE
Anatomical Pathology	36	63%
Chemical Pathology	29	51%
Cytology	23	40%
Forensic Pathology	1	2%
Genetic Pathology	16	28%
Haematology	26	46%
Immunopathology	19	33%
Microbiology	23	40%
Serology	25	44%
Transfusion Medicine	24	42%
Molecular Biology	21	37%
All of above	7	12%
All the disciplines we do (please tick from above)	10	18%

Question 5: Which statement best describes the complexity and location of your laboratory(s)? In the case of multiple laboratories, choose all that apply.

57 responded

ANSWER CHOICES	RESPONSES	PERCENTAGE
Major referral laboratory	15	26%
Large, metropolitan laboratory	25	44%
Small, metropolitan laboratory	24	42%
Large, regional laboratory	13	23%
Small, regional laboratory	19	33%
Specialized laboratory	17	30%
Remote laboratory	7	12%

Question 6: Is your laboratory Public or Private? [NB: For the purposes of this Survey Private includes Catholic]

57 responded

ANSWER CHOICES	RESPONSES	PERCENTAGE
Public	21	37%
Private	36	63%

Question 7: The laboratory(s) I am answering this survey for is

56 responded; 1 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Part of a network of laboratories	39	70%
A single, stand alone laboratory	17	30%

Question 8: SPIA awareness

56 responded; 1 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
I am not aware of Standards for Pathology Informatics in Australia (SPIA, formerly APUTS) nor what it is about	28	50%
I am aware of SPIA and the current version is 2.0	4	7%
I am aware of SPIA and the current version is 3.0	24	43%
I am aware of SPIA and the current version is 4.0	0	0%
I am aware of SPIA and the current version is 5.0	0	0%

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Questions 9 to 12 refer to your System. Cumulative report definition: a combined display of current and past pathology results for the same test(s).

Question 9 : Can you provide cumulative columnar reports?

29 responded; 28 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Yes	25	86%
No	4	14%
Don't know	0	0%
If yes, can you choose the direction of time for results reporting (latest result to left or right of page)?	0	0%

Question 10: If yes, can you choose the direction of time for results reporting (latest result to left or right of page)?

24 responded; 33 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Yes	15	63%
No	9	38%

Question 11: Can your system render reports according to customer preference i.e. different renderings for different customers?

29 responded; 28 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Yes	17	59%
No	10	34%
Don't know	2	7%
If yes, do you use this?	0	

Question 12: If yes, do you use this?

16 responded; 41 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Yes	15	94%
No	1	6%

Question 13: Can your system send reports to My Health Record?

29 responded; 28 skipped this question.

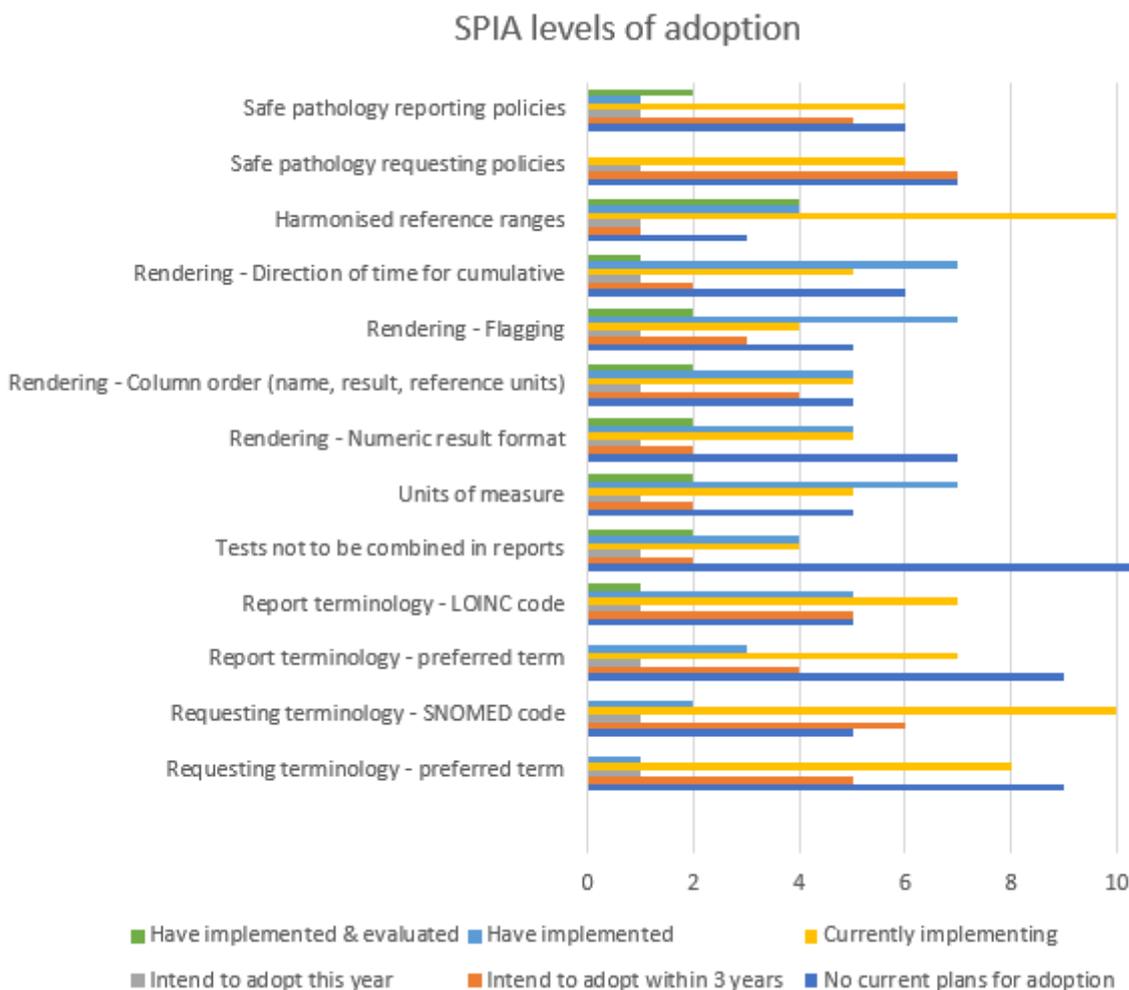| ANSWER CHOICES	RESPONSES	PERCENTAGE
Yes	18	62%
No	6	21%
Don't know	5	17%
If yes, is the report the same as those you return to the requesting practitioner?	0	0

Question 14: If yes, is the report the same as those you return to the requesting practitioner?

17 responded; 40 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Yes	11	65%
No	6	35%

Question 15: This question is seeking to establish the level of adoption of SPIA. Please answer for the laboratory(s) you are responsible for.

24 responded; 33 skipped this question.

Questions 16-18 relate to your feedback regarding SPIA

Question 16: What is right about SPIA?   Choose all that apply.

25 responded; 32 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Clear policy determination	13	52%
Formatted like NPAAC Standards	12	48%
College (RCPA) endorsed	18	72%
Required for interoperability	14	56%
Standards to improve safety in interpretation of reports from different laboratories	20	80%
Ease of results search	11	44%
Allows for use in practice software	10	40%
Other (please specify)	2	8%

Other:

- Provides an endorsed standards document to encourage decision-makers to adopt and comply, to shift the focus to interoperability and safety rather than printing to A4 page
- Don't know

Question 17: What is wrong about SPIA?

25 responded; 32 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Too many rules	7	28%
Difficult to understand	6	24%
Hard to check compliance	10	40%
Rules change too quickly	0	0%
Reduces competitive advantage in report style	6	24%
None to date	3	12%
Other (please specify)	10	40%

Other:

- Meeting demands of requesting clinicians
- Preferred Terms are not well known by requesting clinicians
- Many tests not yet normalised
- Gaps in 'do not combine' flags
- Gaps in the current content and lack of instruction of how to address these (x2)
- Not enough contribution from public labs to suit acute hospital EMR situation. Supporting HL7 standard leans toward private practice/GP use (e.g.: collection process done in EMR not explicitly supported)
- Challenge for LISs to comply with SPIA Standards (x2)
- Difficult for laboratories to implement SPIA Standards

Question 18: What makes uptake difficult?

24 responded; 33 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
System change is difficult	16	67%
Competition for IT resources	17	71%
Customer resistance to change	11	46%
Maintenance is labour intensive and tedious	9	38%
Low perceived value and little evidence of benefit	5	21%
Other (please specify)	7	29%

Other:

- Cost
- Assistance and support for the process of adoption; lack of understanding of laboratory management of the requirement to invest in informatics capability to ensure OERR safety
- Limitations with reporting software as dictated by LIS software vendor
- Lack of good interoperability between systems
- Changing ICT structure and understanding of the standard requirements, resources required to make the changes and importance of proper implementation
- Poor communication and low levels of awareness among anatomical pathologists; Nil or minimal consultation with small anatomical practices
- Standard remains unproven on a state-wide enterprise level

Questions 19 and 20 relate to outcomes.

Question 19: What benefits have been derived from adoption?

23 responded; 34 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
A common list for laboratory amalgamation	10	43%
Reduced error in requesting	4	17%
Reduced error in reporting	0	0%
There has been no adoption	7	30%
Other (please specify)	2	9%

Other:

- A common standard test catalogue for requesting and reporting for LIS amalgamation, but still some time off; risk is it's seen as too hard and one system configuration is used
- No real benefits yet; will change after HealtheNet clinical portal integration

Question 20:   What problems has adoption caused for your laboratory?

22 responded; 35 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
There has been none to date	5	23%
Cost on implementation	4	18%
Customer complaint	3	14%
Unforeseen consequence to system change	1	5%
Receiving system failure	0	0%
Misinterpretation of report	0	0%
There has been no adoption	7	32%
Other (please specify)	2	9%

Other:

- Adoption is minimal
- no resourcing to implement changes or for testing

Question 21: How would you rate your agreement to the following statement: I believe standardisation will improve the quality of pathology requesting and reporting.

24 responded; 33 skipped this question.

ANSWER CHOICES	RESPONSES	PERCENTAGE
Strongly Disagree	2	8%
Disagree	0	0%
Neither agree nor disagree	1	4%
Agree	7	29%
Strongly agree	14	58%

3. Report Conclusions

The Survey responses provided a baseline indicator of the current SPIA awareness and adoption rates in Australian pathology laboratories. To improve SPIA awareness and drive uptake of the RCPA SPIA information models and terminology reference sets in a profession where balancing competing priorities is a difficult task, the Project will engage with SPIA champions to facilitate the process of adoption and change.

In addition, efforts will be concentrated on engaging with members of the Medical Software Industry Association (MSIA) to develop activities such as workshops and webinars that can assist with promoting the benefits of interoperability for electronic implementation of the RCPA SPIA information models and terminology reference sets with the aim of encouraging uptake by LIS vendors.

The responses provided to Question 16 *'What is right about SPIA'* were positive, also indicating a clear understanding of SPIA's importance within current laboratory practice. Question 17 *'What is wrong about SPIA'* provided a better understanding of the current barriers to adoption. To facilitate SPIA compliance, a number of exemplar reports are being developed and will be made available to all laboratories, demonstrating each of the SPIA rules visually as opposed to interpretation of the RCPA SPIA Standards from the policy document.

The Survey has highlighted three significant areas for the PITUS Project to focus on going forward:

- The need to improve SPIA awareness in both the public and private pathology sectors;
- The need to improve compliance, seek opportunities for SPIA to be endorsed by NPAAC and/or via NATA/RCPA accreditors;
- The need to improve adoption rates where laboratories have indicated there are no plans to adopt any of the SPIA standards.

The PITUS 18-20 Project intends to undertake a subsequent SPIA Survey toward the end of 2020 aimed at LIS vendors to measure any changes to SPIA awareness and adoption brought about by this Project's activities.