Case Study

NSW Health Pathology

Assurance Strategy

September 2020

NSW Health Pathology - Assurance Strategy

Why is this case study useful reading?

A lot has been written about the 3 Lines of Defence (3LOD) which may also be referred to as the 3 Lines of Assurance. The 3LOD model is useful as a clear and effective way to strengthen communications on risk management, assurance and control by clarifying essential roles and duties for various parts of governance, management and day-to-day business operations. Organisations generally undertake an assurance mapping exercise where its use is limited to aiding development of an internal audit plan.

Internal audit is only one assurance mechanism in a suite of assurance mechanisms. Ideally, all assurance activities and their effectiveness should be visible to the board of directors, audit committee and management. Assurance activities should not be limited to 3rd Line internal audit function doing them – there are opportunities for the 1st Line and 2nd Line functions to have identified assurance activities encapsulated in formal plans that can be overseen by management and deliver an assurance program across the whole organisation – breaking down the silos of assurance activity across the organisation as often associated with the 3LOD model.

This case study is how internal audit in a state government agency (public pathology service provider) in Australia supported the organisation's overall assurance requirements. This was done by taking the initiative and adopting a risk-based approach to identify the type and frequency of assurance activities across the 3LOD leading to a comprehensive assurance strategy and improvement plans to strengthen governance and assurance activities and oversight across the organisation.

What is combined assurance?

Assurance can be defined as internal control overview established to minimise risk. The 3LOD is a model used to identify the elements of an organisation's assurance environment. When used in conjunction with assurance maps, a documented combined assurance strategy can be developed to help inform management and the audit committee of effectiveness of the organisation's assurance activities. Refer Diagram 1 and Diagram 2 below.

Assurance has been shown to be an expensive investment in terms of time and human resources for organisations. For this reason it is important for organisations to get it right when determining the make-up of their assurance environment. Typically, a wide range of specialist risk and control areas undertake assurance activities. It is easy to expend more effort and money than necessary when there is no co-ordinated approach to assurance. Combined assurance incorporating the 3LOD is a concept used by organisations to define their assurance environment to:

› Establish boundaries and assign responsibilities to each risk and control group.

› Rectify control gaps.

› Avoid unnecessary duplication of assurance coverage.

› Deliver strong, integrated and cost-effective organisation-wide assurance activities.

Diagram 1: Combined Assurance Delivery

Policy and Coverage

Knowledge and Skills

Outcomes
- Strategic insights aid decision-making.
- Governing body assured on governance, risk, control.
- C-suite better equipped through mentoring
- Organisation compliant with legal obligations.
- Effective financial stewardship.

Effectiveness

Accountability

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Diagram 2: Combined Assurance Principles

Policy and Coverage	Effectiveness
› Understanding – Common language and consistent messaging applied. › Consistency – Implement repeatable processes and consistent design, assessment and reporting processes for assurance activities. › Engagement – Stakeholders actively engaged to undertake and report on assurance activities. › Risk-based – Risk assessment drives assurance activities.	› Efficiency – Diminishing rate of issues identified by assurance and audit activities. › Collaboration – Operational activities collaborate to undertake assurance activities and implement actions that promote improvement. › Improvement – Commitment to continuous improvement to identify improvement opportunities for design, assessment, reporting and delivery to develop more capable, accountable and effective assurance activities. › ICT-enabled – Technology tools used to support sampling and data analysis where appropriate. › Reduced impost – Compliance impost reduced.
Accountability	**Knowledge and Skills**
› Evidence-based – Evidence base built to analyse and report information to aid effective decision-making. › Results focus – Achievement of objectives supported through assurance activities. › Controls – Cost-effective controls strengthened and continually enhanced. › Oversight – Assurance oversight enhanced. › Reporting – Effective assurance reporting to aid timely decision-making. › Continuous improvement – Continuous focus on assurance improvement.	› Understanding – Common understanding of combined assurance across the organisation. › Risk awareness – Common view of risks. › Skills – People have necessary skills to enhance and promote combined assurance. › Empowerment – People are empowered to make decisions regarding assurance. › Personnel – The organisation's people are ambassadors for assurance.

What is an assurance strategy?

Assurance maps are generally the first step in an assurance strategy process and provide comfort that key organisation risks are adequately covered by assurance activities. An assurance strategy goes further, identifying strengths and improvements for all 3LOD, not just areas of focus for the internal audit plan. An assurance strategy is therefore a holistic approach to assurance across an organisation.

What is internal auditing?

Internal auditing is an assurance and advisory activity that lives within an organisation and is independent of management so it can preserve its independence. To do this it should ideally report functionally to the audit committee and administratively to the chief executive officer. Its mission is to enhance and protect organisational value by providing risk-based and objective assurance, advice and insight. It does this by applying a risk-based lens to organisation activities and then 'telling it like it is'. Internal audit can be a driver to help their organisation work out exactly what assurance activities they have, whether those activities are effectively co-ordinated, delivering value and steps to improve overall assurance.

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CASE STUDY – NSW HEALTH PATHOLOGY

ABOUT NSW HEALTH PATHOLOGY

NSW Health Pathology was formed in 2012 to bring together pathology and forensic services across NSW Health which up to that time were part of each individual health district. The objectives were to create a professional pathology organisation, enhance patient safety, ensure consistent approaches and look for efficiencies.

As NSW Health Pathology continues to mature, the organisation remains committed to the purpose of creating better health and justice systems. NSW Health Pathology is the largest provider of public pathology services in Australia, employing more than 5,000 staff and conducting more than 61 million tests per year. Services are based at public hospitals across NSW with over 60 public laboratories and around 200 community and home collection services available to ensure everyone can access services across NSW.

Pathology touches people at every stage of life. Even before we're born, antenatal screening helps provide insights on our development and well-being. Shortly after birth, every Australian newborn receives a heel prick test that screens for serious genetic conditions. Pathology continues to play a role throughout childhood, adulthood and old age. It helps diagnose and treat infections, viruses, allergies, chronic diseases, cancer and countless other medical conditions. Pathology also provides the answers families need when faced with unexpected and unexplained loss of a loved one.

Every day the NSW Health Pathology network of clinical and scientific experts uncover answers critical to the health, well-being and safety of communities across NSW. Pathologists are medically trained clinicians who work in public hospitals and modern laboratories. They are supported by scientists, technicians and support staff who quickly and accurately assess samples so clinical teams can make the best possible treatment decisions for patients.

The Clinical Operations Team delivers diagnostic pathology services to patients of the 18 NSW Local Health Districts and other referrers. Pathology work provides doctors with answers that can support clinical decisions to relieve pain and suffering to offer hope and a better quality of life. These answers can lead to life-changing or life-saving treatment – even prevention.

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They help justice partners solve crime, absolve the innocent and secure criminal convictions. For families experiencing the unexpected death of a loved one, they can provide a reason to help understand their tragic loss. Through the NSW Health Pathology partnership with the Office of the State Coroner they can even lead to recommendations to help prevent other families experiencing similar grief.

The Forensic and Analytical Science Service provides independent, objective analysis to the NSW criminal and coronial justice systems. It also provides environmental health testing to public health units in NSW and delivers services to the NSW Roads and Maritime Service, Local Government bodies and other organisations. Forensic services are used to provide independent, objective analysis to the NSW health and justice systems to help solve crimes.

NSW Health Pathology has been at the forefront of the COVID–19 response in NSW.

Introduction

NSW Health Pathology was formed by joining public pathology services and the Forensic and Analytic Science Services operating across NSW which were operating independently of each other but providing comparable services to their communities. The idea was to bring them together and create one unified organisation with consistent methods and systems to deliver timely, accurate and quality services to the broader NSW community.

This has required significant change and with that change comes significant risk. An assurance strategy exercise was planned to define the organisation's 3LOD and create an assurance map that would lead to a whole-of-organisation assurance strategy.

This would help NSW Health Pathology to meet its strategic priorities shown below:

Our planning framework

NSW 2021 – A PLAN TO MAKE NSW NUMBER ONE
STATE PLAN NSW 2021 – 10 year horizon

STATE HEALTH PLAN – Towards 2021 – 1 Year Service Compact
STRATEGIC PLAN – Towards 2025 & Clinical Services Plan – NSW Health Pathology

WHERE WE ARE HEADED – OUR STRATEGIC PRIORITIES*

01 Keep people healthy and safe

02 Deliver world-class services where safety is first

03 Integrate systems to deliver truly connected care

04 Develop and support people and culture

05 Support and harness research and innovation

06 Enable advances in technology, data and analytics

07 Deliver future-focused infrastructure and strategic commissioning

08 Maintain robust governance and financial sustainability

THE WAY WE'LL GET THERE – OUR STATEWIDE AND LOCAL PLANS

Annual Operational Plan | Strategic Program Plans (ICT, logistics etc)

HOW OUR PORTFOLIOS WILL HELP – TEAM / SERVICE PLAN ON A PAGE

OUR INDIVIDUAL ROLE – PERFORMANCE DEVELOPMENT WORKPLAN

*Align broadly with NSW Health's current 8 Strategic Priorities

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Background

NSW Health Pathology is headquartered in Newcastle NSW and is structured as shown below:

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Board  ────────►  Audit and Risk
  │               Management
  │               Committee
  ▼                   │
Chief                 ▼
Executive ──────► Corporate
  │               Governance
  ▼
Clinical Governance and Quality /
Chief Pathologist
Statewide Clinical Services / Chief
Medical Information Officer
Clinical Operations
Forensic and Analytical Science
Service
Medical Services
Scientific and Technical Strategy /
Chief Scientist
Strategy and Transformation
People and Culture
Finance and Corporate Services
Strategic Communications
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In addition, there are many projects ongoing and planned.

Assurance Strategy Objective

To provide management, the Chief Executive, the Board and the Audit and Risk Management Committee with:

› An assurance map which identifies and assesses effectiveness of activities across the 3LOD.

› An assurance plan which identifies and prioritises potential improvement activities using a risk-based approach.

› A risk-based internal audit plan.

Key steps

Phase 1 – Assurance mapping

› Define the NSW Health Pathology 3LOD.

› Rate effectiveness of the 3LOD.

› Prepare an assurance map.

Phase 2 – Assurance strategy

› Validate and rate the assurance map with relevant internal stakeholders.

› Develop improvement actions including an assurance plan.

› Prepare a combined assurance maturity assessment.

› Develop a self-assessment and compliance monitoring framework across NSW Health Pathology and use this to inform future internal audit plan development with consideration of in-house subject matter expert involvement.

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Approach

The step by step approach is show in Diagram 3 below. An agile audit technique was utilised to facilitate the review. Internal Audit gained access to the virtual Microsoft Teams site and over 30 key stakeholders were interviewed on-line seeking feedback on key response themes.

The short interviews were found to be highly effective for providing valuable insights into good practices and improvement opportunities, as well as maintaining a positive connection between key staff during a period of heightened change and uncertainty.

Step 1 – Define NSW Health Pathology 3LOD and rate effectiveness

Diagram 4 below shows how the 3LOD operates. The NSW Health Pathology 3LOD ended up containing many assurance activities, which is what you would expect from a health organisation. There is also a long list of external assurance providers continuously looking at NSW Health Pathology, more than would generally be found in non-health organisations.

Step 2 – Prepare an assurance map

A deliberate approach was to get away from use of traffic lights for assessing 3LOD effectiveness. In particular, the red traffic light seems to become the main focus. Instead, the approach shown in Diagram 5 was adopted.

Step 3 – Validate the assurance map with stakeholders and develop improvement actions

Interviews were held with Tier 1–4 managers across all services and executive portfolios. This was the lengthiest part of the engagement with the number of discussions required, but also the most important part to get input from the experts who provide the services.

Diagram 3: Assurance Strategy Approach

Step	Action	Description
Step 1	Define NSW Health Pathology 3 Lines of Defence Rate effectiveness of the 3 Lines of Defence	*This approach identifies and defines all assurance activities, rates effectiveness and assigns ownership.*
Step 2	Prepare an assurance map	*An assurance map shows where assurance is sound and also where it can be strengthened.*
Step 3	Validate the assurance map with stakeholders Develop improvement actions	*Improvement actions may be a 1st Line or 2nd Line assurance activity, or a 3rd Line internal audit activity.*
Step 4	Develop assurance plan Develop internal audit plan	*The two plans contain improvement actions allocated to (a) Management (b) Internal audit that are visible and can be tracked by the Executive Committee and the Audit and Risk Management Committee.*
Step 5	Implement improvement actions across all 3 Lines of Defence	*This provides a holistic approach to assurance improvement.*
Step 6	Periodically review and update the assurance strategy	*It is intended this be done annually.*

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Diagram 4: Three Lines of Defence

| 1st Line of Defence	2nd Line of Defence	3rd Line of Defence
Own and manage risk	*Review 1st Line - risk management effectiveness*	*Independently review 1st Line and 2nd Line - risk management effectiveness*
› Is concerned with management controls and generally has a real-time focus. › Is aimed at review of governance and compliance arrangements to demonstrate 'checks and balances' are working effectively.	› Centres on risk oversight and involves some degree of real-time activity with a mandate to review 1st line activities. › Encompasses the work of specialist areas such as risk management, technical compliance, regulatory compliance and safety. › Aims to confirm effectiveness of governance and compliance arrangements, and to identify and action improvements.	› Involves independent assurance that evaluates the adequacy and effectiveness of both 1st line and 2nd Line risk management approaches. › Is typically undertaken by internal auditors to independently confirm governance and compliance effectiveness, and to recommend improvements.

Step 4 – Develop an assurance plan and an internal audit plan

As mentioned previously, the vision was to obtain maximum value from the assurance mapping exercise. Rather then just use the assurance map to inform development of the internal audit plan, an assurance plan was also developed to assign relevant governance and assurance improvement actions to the responsible line managers. This was intended to increase accountability and visibility of portfolio assurance accountabilities.

Diagram 5: Assurance Effectiveness Ratings

Assurance Effectiveness	Definition
Embedded assurance	For the particular component, combined assurance activities across the lines of defence are considered to be mature, embedded into the process and working effectively.
Partially embedded assurance	For the particular component, combined assurance activities across the lines of defence are considered to be partially embedded into the process, generally working effectively and with incremental opportunity to further mature the assurance coverage.
Some assurance coverage	For the particular component, combined assurance activities across the lines of defence are considered to have some assurance coverage but with significant opportunity for improvement.
Limited assurance coverage	For the particular component, combined assurance activities across the lines of defence are considered to have limited assurance coverage that provides little in the way of assurance.
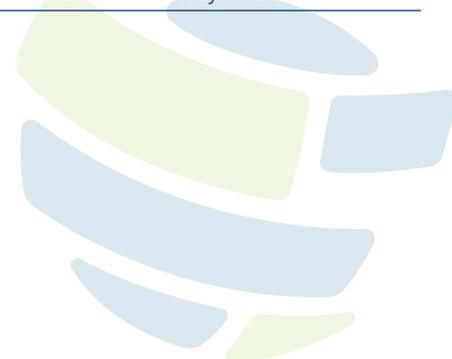
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The following redacted extract shows what the assurance map looked like.

No.	NSW Health Pathology Activities	Current Risk	Assurance Effectiveness 1st Line	2nd Line	3rd Line	External	Past assurance activities	Priority for Improvement / Further Assurance	Improvement Actions (May be a 1st line or 2nd line assurance activity, or a 3rd line audit activity)
<No>	<Business Portfolio area>								
<No>	<business activity>	L	Partial	Partial	Embedded	Embedded	**Assurance activities**	M	Assurance – <activity name>
<No>	<business activity>	L	Embedded	Embedded	Embedded	Embedded	› <assurance activity>	L	
<No>	<business activity>	L	Embedded	Embedded	Some	Embedded	› <assurance activity>	L	
<No>	<business activity>	M	Partial	Partial	Embedded	Embedded	› <assurance activity>	L	
<No>	<business activity>	L	Embedded	Embedded	Embedded	Embedded	› <assurance activity>	L	
<No>	<business activity>	L	Embedded	Some	Embedded	Some	› <assurance activity>	L	
<No>	<business activity>	L	Partial	Embedded	Some	Embedded	**3rd line internal audit** › <audit>	L	
<No>	<business activity>	L	Embedded	Embedded	Partial	Embedded	› <audit>	M	
<No>	<business activity>	L	Partial	Embedded	Some	Embedded	› <audit>	L	Assurance – <activity name>
<No>	<business activity>	L	Partial	Embedded	Some	Embedded		L	
<No>	<business activity>	M	Partial	Embedded	Some	Partial		M	Internal audit – <internal audit engagement name>

Priority for Improvement / Further Assurance

L	Low priority
M	Medium priority
H	High priority
E	Extreme priority

Assurance Effectiveness

Embedded assurance
Partially embedded assurance
Some assurance coverage
Limited assurance coverage

Current Risk

L	Low risk
M	Medium risk
H	High risk
E	Extreme risk

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The following redacted extract shows what the assurance map looked like.

Output

This led to the outputs shown below.

› NSW Health Pathology 3LOD

› Assurance Mapping

› Portfolio Assurance Plans

› Internal Audit Plan

› Combined Assurance Maturity Assessment

Lessons learned

› Understanding of assurance and related concepts varies and there needs to be an awareness component to an assurance strategy engagement.

› It is critical to actively engage with in-house experts if the exercise is to be successful.

› Having an assurance plan as a deliverable from the assurance mapping exercise now allows the Audit and Risk Management Committee and Executive Management to formally track implementation progress of governance and assurance improvements which was not previously available.

› Executive Management now have improved oversight of the extent of investment on assurance activities and can look now to redesign their programs where appropriate to reduce redundant or duplicate activities.

› The risk-based assurance plan will be used to inform annual operational planning.

› Finally, the answer to assurance improvement is not always an internal audit engagement.

Final comments

The Corporate Governance Portfolio at NSW Health Pathology took the leading role to develop an organisation-wide assurance strategy built around the 3LOD and an assurance mapping exercise. This had not been done before and resulted in two important outputs – an assurance plan and an internal audit plan. This 3LOD model is critical to building a mature risk culture within NSW Health Pathology in which risk is seen as everyone's responsibility and is actively considered in decision-making. The assurance plan has a risk-based focus and it is agreed will be used to inform annual operational planning.

Chief Executive Tracy McCosker said "Development of the risk-based Assurance Strategy has been a very worthwhile exercise that has educated many of us in the importance and utility of this aspect of governance. NSW Health Pathology is an ambitious organisation that might get easily distracted in its activities and this Assurance Strategy gives myself as Chief Executive, and the Board, comfort that we have considered and systematic oversight of the effectiveness of our assurance initiatives and are continuously tracking our improvements in this area."

The Audit and Risk Management Committee Chair Lyn Baker commented "This Assurance Strategy will allow the Audit and Risk Management Committee to have a more comprehensive view of the full range of risk and control activities undertaken across NSW Health Pathology. The Committee can then focus its attention where it is most needed".

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Acknowledgement

The IIA-Australia takes this opportunity to thank NSW Health Pathology and its Chief Executive Tracy McCosker PSM for contributing to this case study. Thanks also to Tammy Boone the Director of Corporate Governance and Dr Meredith Caelli the Manager of Audit and Risk at NSW Health Pathology for their input to this case study.

Helpful References

Fact sheet 'Combined Assurance Model', IIA-Australia

Fact sheet 'Three Lines Of Defence Combined Assurance Model', IIA-Australia

Fact sheet 'Corporate Governance', IIA-Australia

Fact sheet 'Evolution of Internal Audit', IIA-Australia

Fact sheet 'Value-Based Internal Audit', IIA-Australia

20 Critical Questions 'What Directors should ask of Assurance', IIA-Australia

20 Critical Questions 'What Directors should ask of Corporate Governance', IIA-Australia

White Paper 'Internal Audit Service Catalogue', IIA-Australia

'Combined Assurance Maturity Model'. IIA-Australia

'Internal Audit in Australia – second edition', IIA-Australia

'International Professional Practices Framework'; IIA Global

'Team Leader's Guide to Internal Audit Leadership', Internal Audit Foundation, 2020

Footnote

The IIA Global has recently issued 'The IIA's Three Lines Model - an update on the Three Lines of Defence'.