Independent Review of the Australian Institute of Health and Welfare

Findings and Recommendations Report – Confidential

2 December 2015
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# Glossary of terms

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<th>Term/ Acronym</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<td>ACSQHC</td>
<td>Australian Commission of Safety and Quality in Health Care</td>
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<tr>
<td>AGILE</td>
<td>Attract, Grab, Inform, Lean, Explore. An internal Institute product planning and preparation process</td>
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<td>AHMAC</td>
<td>Australian Health Ministers’ Advisory Council</td>
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<td>AIC</td>
<td>Australian Institute of Criminology</td>
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<td>AIFS</td>
<td>Australian Institute of Family Studies</td>
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<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<td>APS</td>
<td>Australian Public Service</td>
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<tr>
<td>Big data</td>
<td>A broad term for data sets that are so large or complex that traditional data processing approaches and systems are inadequate.</td>
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<td>CIHI</td>
<td>Canadian Institute for Health Information</td>
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<td>DoH</td>
<td>Department of Health</td>
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<td>DISC</td>
<td>Data Integration Services Centre</td>
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<td>DSS</td>
<td>Department of Social Services</td>
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<tr>
<td>FTE</td>
<td>Full Time Equivalent</td>
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<tr>
<td>HSSG</td>
<td>Housing and Specialised Services Group, a group within the Institute</td>
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<td>ICT</td>
<td>Information and Communications Technology</td>
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<tr>
<td>IHPA</td>
<td>Independent Hospital Pricing Authority</td>
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<tr>
<td>The Institute</td>
<td>The Australian Institute of Health and Welfare</td>
</tr>
<tr>
<td>KLE</td>
<td>The key lines of enquiry are the three key questions that the review sought to answer.</td>
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<tr>
<td>MBS</td>
<td>Medical Benefits Schedule</td>
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<td>METeOR</td>
<td>Australia’s registry of national metadata standards for the health, community services and housing assistance sectors.</td>
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<td>NHIA</td>
<td>National Health Information Agreement</td>
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<td>NHISSC</td>
<td>National Health Information Standards and Statistics Committee</td>
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<td>NHPA</td>
<td>National Health Performance Agency</td>
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<td>PAF</td>
<td>Performance Accountability Framework</td>
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<td>PBS</td>
<td>Pharmaceutical Benefits Scheme</td>
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<td>RoGS</td>
<td>Report on Government Services</td>
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<td>Term/ Acronym</td>
<td>Explanation</td>
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<tr>
<td>SAS</td>
<td>Statistical Analysis System</td>
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<td>SES</td>
<td>Senior Executive Service</td>
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<tr>
<td>Validata</td>
<td>The Institute’s online data receipt and validation product designed to improve the quality and timeliness of data supplied by jurisdictions and non-governmental organisations.</td>
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1 The Institute on a page

Figure 1 summarises the key findings related to the current and future state of the Australian Institute of Health and Welfare (the Institute). It also presents the over-arching recommendation from the review. The icons relate to each of the areas that Nous Group (Nous) examined as part of the review (see Section 4 for the methodology).
The Institute now

- The Institute is a trusted data custodian, that could better align with emerging trends and stakeholder requirements.
- Products are high quality, but the usefulness of some products is impacted by the dense format and out-dated data.
- The Institute’s strategic approach to its work is limited by its large proportion of external, at-risk funding.
- The Institute has strong relationships but it must better prioritise and manage these to fulfil its future role.
- There are opportunities to accelerate process streamlining and automation.
- The workforce is expert in key content areas but needs more ‘cutting-edge’ data analytics and integration capability.
- The culture values independence and quality, sometimes at the expense of innovation and a customer focus.
- The Institute has a fit-for-purpose office space in Canberra and will need to integrate NHPA’s Sydney offices.
- The structure and functions support its diverse products and target content areas but result in silos and duplication.
- METeOR and Validata are vital to the Institute’s role as national data custodian.
- The Board’s membership is diverse but there are opportunities to improve its effectiveness.

The Institute in 2020

- The Institute is an international leading, agile and influential information agency that drives strategic reform.
- The suite of products and services are contemporary, timely and suit the needs of diverse stakeholders.
- The funding model supports the transferred NHPA functions, a strategic approach and clear priorities.
- The Institute has collaborative relationships and communicates strategically.
- The Institute’s processes are streamlined, efficient and enable organisational outcomes.
- The Institute attracts and develops critical capabilities, and retains key NHPA capabilities.
- The culture is cohesive and emphasises innovation, customer focus and international excellence/best practice.
- The office(s) facilitate collaboration between geographically dispersed staff.
- The Institute’s structure ensures collaboration between units and offers career development.
- The Institute has upgraded METeOR and it has automated systems and data supply arrangements that support and its current and new functions (transferred from NHPA).
- The Institute’s Board is strategic, skills based and reflects both the health and welfare sector; and the legislation enables the new performance reporting functions.

The Institute must undertake a major organisational transformation program to reinstate full stakeholder confidence and secure its future role as an indispensable, leading international information organisation in the health and welfare sector.
2 Executive summary

Nous Group (Nous) was engaged by the Department of Health (DoH) to review the Australian Institute of Health and Welfare (the Institute). The Review followed a sustained period of uncertainty about the future of the Institute, change in the senior management team and uncertainty regarding membership of the Institute Board. Recent Government decisions regarding the architecture of health information agencies have resolved some of that uncertainty but the salience of the Review remains high.

The environment within which the Institute works has changed radically over recent years. The Australian Bureau of Statistics (ABS) no longer restricts itself to census and survey activity, increasing its activity in relation to analysis of administrative data. Analysis within policy agencies has increased with policy officers accessing data and analytics software to an unprecedented extent. This raises fundamental questions about the role of the Institute into the future. The Institute has both a challenge and opportunity to reposition itself in the health and welfare information landscape. It no longer enjoys a virtual monopoly on integrative analysis of survey and administrative data.

To support consideration of the Institute’s optimal future contribution, Nous reviewed its function at three levels: its role and purpose; its business model, product range and funding model; and its internal governance and organisation. To support this analysis Nous used our format for organisational reviews, breaking each of these levels into constituent components. We gathered evidence from approximately 40 interviews and 140 key documents and validated preliminary findings with a Departmental reform management board and the Institute’s Board and management team.

The Institute is well positioned for its future in a number of key dimensions. It is well respected for its independence and ethical frameworks, its professional staff and the quality of its products. Stakeholders value each of these features highly and do not want to see any changes that imperil these qualities. It needs to be acknowledged also that many of the directions recommended in the Review are in areas already the subject of work within the Institute. Considerable effort and progress has been made in a number of these. The Government decision to transfer the performance reporting role currently performed by the National Health Performance Agency (NHPA) to the Institute creates an opportunity decisively to build on this solid foundation.

That said, the Review’s fundamental finding is that the Institute needs to undertake a major organisational transformation program to reinstate full stakeholder confidence and secure its future role as an indispensable, internationally leading information agency in the health and welfare sector. Elements of this transformation program include working proactively and collaboratively with partners to refresh its charter, business models and product range. A comprehensive set of recommendations are provided in the following section.

In order to support this transformation program a number of reforms are needed within government departments and collectively by health and welfare administrations. The budget for the Institute needs to move from being based on 30% appropriated core funding (and 70% fee for service income) to at least 50%, preferably closer to 70%, appropriated funding. Funding departments need to much better coordinate their engagement with the Institute and to prioritise their requirements from increased appropriation funding. From a whole of government perspective the Institute and Commonwealth departments need to align the development of data sets, processes and trusted user arrangements with developments underway across the Commonwealth. A review of information plans across different sectors is also needed.

Jurisdictions collectively, also need to engage at a more strategic level with each other and then with the Institute regarding priorities. The Review noted that this presents particular challenges in the welfare sector, with separate welfare information coordination mechanisms now in place across different aspects of the welfare spectrum – housing, community and disability services. Jurisdictions – both
Commonwealth and State and Territory – need to support the optimal contribution of the Institute by improving the timeliness of data provision and reconsidering the restrictive basis of data provision to the Institute. Otherwise the Institute will not be able to meet the expectations of jurisdictions for improved timeliness and salience of Institute products and services.

The Review was commissioned by the Commonwealth and, therefore, addresses its recommendations to the Commonwealth. It recommends the Commonwealth provide leadership by engaging with States and Territories to advocate these collective improvements.

Finally the Review team would like to acknowledge the high level of cooperation and professionalism of the Institute staff and management as well as that of the departmental staff and stakeholders with whom we have interacted during the process.

Conclusions and recommendations

The Review concludes that:

The Institute must undertake a major organisational transformation program to reinstate full stakeholder confidence and secure its future role as an indispensable, internationally leading information organisation in the health and welfare sector.

Specifically, the organisational transformation program must ensure that the Institute effectively, and without disruption, continues the functions transferred from NHPA. The transformation must take into account the fundamental differences between the current work of the AIHW and that of the NHPA and the implications this will have for governance, data access, internal processes and external relationships.

We have identified the key elements to deliver the transformation in the following recommendations.

Key recommendations – Key line of enquiry 1

What opportunities exist to enhance the Institute’s role as a provider of whole-of-system health and welfare information, analysis and statistics? (Future purpose and strategy)

Future role

R1. The Institute’s Board, in consultation with all its stakeholders, should establish a charter for the Institute’s enhanced international and national role and for the value it offers the nation.

R2. The Institute should provide Government, within one year, with a five year strategy to fulfil its Charter.

R3. The Institute should re-launch itself to reflect a refreshed charter, strategy and communications approach.
### Key recommendations – Key line of enquiry 2

**What business model will enable the Institute to deliver its future purpose and strategy? (Service and value delivery)**

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<th>Products and services</th>
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<tr>
<td><strong>R4.</strong> The Institute should, within one year, conduct a full stocktake of its products and services, and the NHPA products and services it will acquire, to rationalise, modernise and digitise its product suite.</td>
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<td><strong>R5.</strong> The Institute should continue to produce Australia’s health and Australia’s welfare reporting and continue the NHPA health system performance reporting conducted under the Performance Accountability Framework (pending the outcomes of the current review of the framework).</td>
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<td><strong>R6.</strong> The Institute should develop a new service offering that provides well organised data and structured training to clients.</td>
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<td><strong>R7.</strong> The Commonwealth should work with states, territories and other stakeholders to modernise Australia’s health performance frameworks to support a whole-of-system approach to performance analysis, monitoring and reporting.</td>
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<td><strong>R8.</strong> The Commonwealth, with jurisdictions, should develop agreed roles and responsibilities for health and hospital classifications to remove duplication.</td>
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<td><strong>R9.</strong> The Institute should identify, in consultation with jurisdictions, new and priority health and welfare data linkage projects to better inform public policy and service redesign.</td>
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<th>Funding model</th>
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<td><strong>R10.</strong> The Commonwealth should implement a revised funding structure for the Institute, which facilitates a more strategic, long-term and flexible approach to its priorities and work program.</td>
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<td><strong>R11.</strong> The Institute should develop a financial strategy, a published pricing policy and a process for prioritisation and signoff of commissioned work by the Commonwealth and jurisdictions. The pricing policy should be more transparent about relationship to cost.</td>
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<td><strong>R12.</strong> DoH and DSS should establish a new governance and coordination mechanism for DoH and DSS to manage the development, implementation and monitoring of the work program funded by the Departments (including a single coordination point).</td>
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**Key recommendations – Key line of enquiry 3**

*What organisation design will most efficiently and effectively support the Institute’s future purpose, strategy and business model?*

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<th>External alliances</th>
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<tr>
<td><strong>R13.</strong> The Institute should establish a multilateral collaboration arrangement with the ABS, ACSQHC, IHPA and the Productivity Commission for RoGS to eliminate duplication and drive opportunities for cooperation.</td>
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<td><strong>R14.</strong> The Institute should prioritise its partnerships (current and future) and identify how key partnerships will be developed and maintained for strategic purposes.</td>
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<td><strong>R15.</strong> The Institute and the jurisdictions should define their respective roles and responsibilities in relation to the implementation of existing sub-jurisdictional performance reporting agreements.</td>
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<th>Processes</th>
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<td><strong>R16.</strong> The Institute should ensure business continuity of all processes related to the delivery of NHAP products and services, including performance reporting.</td>
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<td><strong>R17.</strong> The Institute, in collaboration with data providers, should ensure its data collection and linkage processes promote ‘single provision, multiple use’.</td>
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<td><strong>R18.</strong> The Institute should reform its report production process to allow for more timely release of products.</td>
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<tr>
<td><strong>R19.</strong> The Institute should establish regular evaluations of its products and services including customer satisfaction measures.</td>
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<td><strong>R20.</strong> The Institute should continue to reform its project management framework.</td>
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<th>Workforce</th>
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<td><strong>R21.</strong> The Institute should develop, attract, recruit and retain critical capabilities, especially in relation to ‘cutting edge’ data modelling and analysis, performance reporting, communications, and transformation.</td>
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<th>Culture</th>
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<td><strong>R22.</strong> The Institute should build on its internal culture, and that of NHAP, to develop clear values and behaviours for staff engagement outside the organisation.</td>
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<tr>
<th>Office space</th>
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<td><strong>R23.</strong> DoH should determine the long term forward plan for office accommodation in Sydney, in consultation with the Institute and NHAP.</td>
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<th>Structure and functions</th>
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<td><strong>R24.</strong> The Institute should revise its structure to accommodate the transfer of NHAP functions and be consistent with agreed design criteria.</td>
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<td><strong>R25.</strong> The Institute should actively look for opportunities to share corporate services with DoH and other agencies as appropriate.</td>
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### Information management

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<th>Key Recommendation</th>
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<td><strong>R26.</strong> The Institute should accelerate the upgrade of METeOR.</td>
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<td><strong>R27.</strong> The Institute should expand membership of Validata to increase the quality of data collection in Australia.</td>
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<tr>
<td><strong>R28.</strong> The Institute should ensure continuity of NHPA information systems and data supply and additionally draw on NHPA’s expertise to accelerate and automate data analysis and report production.</td>
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<tr>
<td><strong>R29.</strong> In consultation with the Institute, DoH should implement full access to MBS and PBS data as soon as practical in order to identify trends and correlations across health and welfare data sets.</td>
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### Governance

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<td><strong>R30.</strong> DoH and DSS, through the relevant ministerial councils, should each establish strategic information planning and funding structures to better direct the Institute’s work program.</td>
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<td><strong>R31.</strong> The Institute should rationalise and align all their advisory committees with the forward work program.</td>
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<tr>
<td><strong>R32.</strong> The Commonwealth should urgently move to fill current and soon to be vacant Board positions to ensure leadership stability for the Institute.</td>
</tr>
<tr>
<td><strong>R33.</strong> DoH and the Institute should urgently move to fill current and soon to be vacant Executive positions to ensure leadership stability for the Institute.</td>
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<td><strong>R34.</strong> The Commonwealth should develop an improved governance model for the Institute which reflects the new NHPA functions, a smaller, skills-based rather than representative Board, longer term Board appointments and a clearer definition of the role and responsibility of each Board member.</td>
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<tr>
<td><strong>R35.</strong> The Commonwealth should propose the necessary amendments to the <em>Australian Institute of Health and Welfare Act 1987</em> (Cth) to implement the revised arrangements and functions.</td>
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3 Background and purpose

The Department of Health (DoH) engaged Nous to undertake an independent review of the Australian Institute of Health and Welfare (the Institute). The Review sought to identify opportunities to enhance the Institute’s role as a provider of whole-of-system health and welfare information, analysis and statistics to all Australian governments, industry, health and welfare sectors, higher education and research bodies and the Australian and international community.

This section sets the scene for the Review and outlines the purpose and structure of this report.

3.1 Background to the Review

Under the Smaller and More Rational Government agenda, the Government announced in the 2014-15 Budget that it would consider merging health portfolio agencies to form a proposed Health Productivity and Performance Commission. Following further investigation, the Government decided to rationalise the existing health portfolio agencies, rather than forming a new merged entity.

Subsequent to that, the Commonwealth announced a number of important changes to the Health Portfolio Agencies. Specifically, the:

- closure of the National Health Performance Authority (NHPA) on the 1 July 2016 and the transfer of some of its performance functions respectively to the Australian Commission on Safety and Quality in Health Care (ACSQHC) and the Institute
- closure of the National Health Funding Body and the Administrator in 2017-18
- retention of the Independent Hospital Pricing Authority (IHPA) Board and its Chief Executive Officer (CEO), with the transfer of IHPA functions to DoH from 1 July 2016
- retention of the Australian Commission on Safety and Quality in Health Care (ACSQHC) with additional functions from NHPA
- retention of the Institute with additional functions from NHPA.

These changes were in line with the Government’s commitment to reduce the total number of government bodies and to make the operations of the remaining bodies more efficient and effective for the benefit of the health system. DoH is now working closely with all agencies to ensure smooth transition to the new arrangements.

3.2 Purpose of the Review

Within this context, DoH commissioned Nous to conduct an independent review of the Institute and ensure that the organisation is best positioned to continue to efficiently and effectively meet its mandate.

The purpose of the Review was to determine “what changes would enable the Institute to operate effectively and efficiently as a contemporary, agile and leading practice organisation?”

The approach to the Review was consistent with the Government’s policy objective to increase the efficiency of public sector organisations through review and reform of their operations.
3.3 Report structure

In this report Nous presents the findings and recommendations from document analysis, literature review and stakeholder interviews. It presents the:

- key findings in relation to the Institute’s future purpose and strategy, service and value delivery and organisation design and governance
- key opportunities to enhance the way the Institute operates
- recommendations that will enable the Institute to operate as a contemporary, agile and leading practice organisation in the future.

This report also includes the following appendices:

- the detailed methodology (Appendix A)
- the terms of reference for the Review (Appendix B)
- literature review (Appendix C) including emerging trends in the health and welfare information sectors
- supplementary data to support the key findings and recommendations (Appendix D through Appendix G).
4 Methodology

Nous conducted the Review between September 2015 and December 2015. The project involved a detailed document and literature review, data analysis and extensive stakeholder consultation. An overview of key project activities and timing is shown in Figure 2. A detailed description of the methodology is provided in Appendix A.

The Review was guided by three key lines of enquiry (KLEs):

1. What opportunities exist to enhance the Institute’s role as a provider of whole-of-system health and welfare information, analysis and statistics? (Future purpose and strategy)

2. What business model will enable the Institute to deliver its future purpose and strategy? (Service and value delivery)

3. What organisational design will most efficiently and effectively support the Institute’s future purpose, strategy and business model? (Organisation design and Governance)
Within each KLE, Nous investigated a number of sub-areas. These are shown in Figure 3. The KLEs and sub-areas guided all project research, consultation activities and analysis.

Nous mapped the KLEs and sub-areas to the Terms of Reference for the Review to ensure all the key areas were addressed (see Appendix B).

Figure 3: Key lines of enquiry and sub-areas for investigation

Limitations of the methodology

The consultations for the Review focused on key stakeholders in states and territories, Australian Government agencies and the Institute’s Executive and Board. The consultations did not include:

- data users such as researchers, clinicians etc.
- the Institute’s non-executive staff.

These stakeholders will need to be engaged in due course by the Institute and the Departments during the implementation phase.
5 Findings

This section presents the key findings from the document review, literature review and stakeholder consultations. The key findings are structured in line with the KLEs (see Section 4).

Each section opens with a summary of the findings followed by a more detailed explanation in the sub-sections.

5.1 Purpose and strategy

This section identifies the key strengths and capacities of the Institute and opportunities to enhance its role as a provider of whole-of-system health and welfare information, analysis and statistics. Table 1 summarises the main findings in response to the first KLE.

<table>
<thead>
<tr>
<th>Sub-questions</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>What opportunities exist to enhance the Institute’s role as a provider of</td>
<td>• The Institute has built a strong reputation but faces some complex changes that challenge its future role.</td>
</tr>
<tr>
<td>whole-of-system health and welfare information, analysis and statistics?</td>
<td>• The Institute has substantial opportunity to enhance its national and international role in data custody, analytics and linkage, performance reporting and strategic communications.</td>
</tr>
<tr>
<td>(Future purpose and strategy)</td>
<td></td>
</tr>
</tbody>
</table>

5.1.1 Future role

The Institute has built a strong reputation but faces some complex changes that challenge its future role.

The review found a strong appetite amongst stakeholders for the Institute to build on its strengths and capabilities and adopt an enhanced role in the provision of health and welfare information, analysis and statistics.
The Institute is highly regarded by the sector and brings a range of strengths to its work with clients.
The Institute was established in 1987 to provide reliable, regular and relevant information and statistics on Australia’s health and welfare\(^1\). In that time the organisation has developed a strong reputation with many stakeholders as a trusted data custodian. Figure 4 presents the qualities that were reported by many health and welfare sector stakeholders as the Institute’s key strengths.

![Figure 4: The Institute’s key strengths](image)

- **Authoritative and trusted reputation**
- **Legislation provides a strong foundation**
- **Quality and independence**
- **Subject matter expertise**
- **Products inform the public**
- **Leadership in data standards and metadata**

The Institute has and will invest in a number of initiatives that are important for its future role.
The Institute has undertaken and is planning to implement in the future, a range of actions to ensure its role and contributions remain relevant\(^2\). A number of recent actions that are relevant to this Review include:

1. **The development of new publications on topics of emerging interest.** This includes new publications on private hospitals, the use of homelessness services by clients with a disability, burden of disease estimates for the Aboriginal and Torres Strait Islander population.

2. **Ongoing investment in its data analysis and linkage capability.**
   a. The Institute has and is currently undertaking numerous data analytical projects, including a study to produce burden of disease (BoD) estimates for Australia and for the Aboriginal and Torres Strait Islander population.
   b. The Institute is building its analytics and statistical methods capability through a new unit and by recruiting staff specifically with this capability.
   c. The Institute has completed a large number of data linkage projects for academic researchers, government departments and research agencies.

3. **Continuous improvement for national data assets and information infrastructure.**
   a. The Institute’s Executive recently approved further investment in and focus on the use of geospatial data and enabling technology for mapping and reporting at small area levels of geography.
   b. The Institute is investigating and presenting on trends in big data.

4. **A small number of performance reporting pilot reports** for testing with providers.

The Institute’s strengths, recent achievements and planned actions indicate the organisation is moving in the right direction. They set a good foundation for further enhancement of the Institute’s role.

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\(^2\) The Institute is currently undertaking a review to obtain stakeholder input into its Strategic Directions.
The Institute faces and will continue to face significant complexity in its operating environment and this will greatly challenge its future role and purpose.

A number of important factors and emerging developments have and will impact on the Institute’s environment and operating model:

1. **The transfer of NHPA functions and the Institute’s new role in performance reporting.** The Government’s decision to transfer NHPA functions to the Institute means that it must find a way to not only continue these functions but also to effectively integrate them into its service model and operating environment.

2. **The development of new data capability at a Commonwealth level.** Currently, a cross-government process is underway to deliver greater Commonwealth benefit through improved data capability and capacity. The work seeks to address siloed data collections, single agency focus, dispersed expertise and systems and the need for stronger analytics capability strategy.

3. **Complex data sharing relationships with the jurisdictions.** To date, the data sharing arrangements with the jurisdictions have been highly conditional and conservative. Obtaining jurisdictional consensus on important national matters has been fraught with issues as jurisdictions have diverse and sometimes divergent requirements. Furthermore, the Institute has lacked the powers and influence to drive jurisdictional compliance; thus limiting its overall ability to perform its role in an effective and timely manner.

4. **An increased focus by jurisdictions to build their in-house data analytics capability.** Many jurisdictions continue to invest solidly in their data analytics capability in order to enhance intragovernmental data sharing between their agencies and strengthen local decision making. For example, NSW recently announced the establishment of the NSW Government Data Analytics Centre in August 2015. Whilst, it will be the first of its kind in Australia, many jurisdictions are following suit.

5. **The fragmented nature of the welfare sector.** The welfare sector, in its current form, is highly disaggregated. This means the Institute must navigate and manage an extraordinarily large number of stakeholder interests and numerous datasets to produce holistic insights. This has been particularly challenging in the disability and community services segments as a result of the ongoing implementation of the NDIS.

6. **The trend toward ubiquitous data sources.** Increasingly data is coming from variety of sources, including ABS and the jurisdictions, where it has been pre-used. This presents obvious challenges to the Institute’s current model of data custodianship. It also makes it critical that the Institute has a presence and equal voice at the national table of decision makers for these data sources.

Each of these developments has important implications for the Institute. They suggest that the Institute will need to, in collaboration with its stakeholders, actively shape its destiny. Furthermore, they mean that absolute clarity about the Institute’s role and the value it brings has never been more crucial.

The Institute has a substantial opportunity to enhance its national and international role in data custody, analytics and linkage, performance reporting and strategic communications.

Stakeholders reported that the Institute has the potential to be the authoritative source for health and welfare statistics and information both nationally and internationally. They felt the Institute could achieve this through a focus on four key roles (summarised in Figure 5): acting as a data custodian; undertaking performance reporting; providing strategic communications; and providing data analytics and linkage services. These are described in further detail below.

If the Institute does transform its role in the following ways, one stakeholder suggested that the organisation might consider re-launching itself to signal a refreshed mandate and approach.
There is an immediate opportunity for the Institute to optimise its data custodian role.

Stakeholders were positive about the Institute’s role as a national data custodian and as the ‘source of truth’ for health and welfare information. A number of stakeholders referred to the Institute as the keeper of the nation’s authoritative record on the health and welfare of Australians. They suggested that the Institute could further leverage this role to shape current trends towards virtual data and open data access. Given the Institute houses some of the largest datasets in Australia, it is also in a unique position to drive national and international thinking and practice about:

- the potential value of ‘big data’ (including the management of large volumes of administrative data and new data types)
- the rapid expansion of new systems, tools and technologies to capture, house and share data.

Some stakeholders also advocated for the Institute to go beyond its current custodian role to be a ‘portal’ that facilitates data access to others in the sector, for example government, clinicians, professionals, researchers and the general public.

The literature review additionally highlighted two trends that are relevant to the Institute’s future data custodian role:

1. Data analytics is becoming a more widespread activity in government and private sector organisations
2. Data sources and categories are converging.

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3 Insights on emerging trends are based on the literature review (of like organisations and other grey literature), complemented by stakeholder interviews.
Consequently, two changes confront the Institute. One is a loss of natural dominance in health and welfare information collection and analysis. The other is the increasing number of users of powerful tools with the capacity (but not necessarily the capability) to analyse information. The Institute would previously have had closer to an interpretive monopoly in this area.

Some stakeholders saw a possible resolution to this dilemma through the Institute becoming an authoritative and accessible source of advice to new players. This would require new capabilities and a new positioning as authoritative advisers on the data itself to other users. The proposition raises serious challenges for the Institute’s current workforce capabilities, with some stakeholders already expressing concern about the Institute’s capacity to undertake its current roles. These issues are discussed in more detail under Section 5.3.3 below.

There is an immediate opportunity for the Institute to optimise its data analytics and linkage role.

Numerous stakeholders indicated the Institute should have a stronger role in advanced data analytics and the linkage of national datasets. Stakeholders wanted the Institute to apply cutting-edge analytics and technologies to generate richer insights on the sector (rather than just statistical reporting). They also indicated the Institute could have a highly valuable role identifying and informing them about possibilities and trends that are not yet known to the sector.

With regards to data linkage, stakeholders identified the opportunity for the Institute to take the national lead in bridging information silos (especially in the welfare sector) and driving a holistic view across the health and welfare sectors.

Findings from the literature review also indicated that the sector is currently experiencing significant change in the form of the following trends:

- The convergence of data types: better data integration to address siloed data means traditional survey-type data (e.g. mortality and disease incidence data) is more frequently linked and interpreted alongside administrative data (e.g. electronic medical records).
- The ubiquitous nature of analytics\(^4\): analytics capability is more widespread and the expectations of clients on what analytics can provide are higher.
- The impact of metadata\(^5\): there is more data available than ever before but the challenge is how to effectively use it to inform decision making.

These trends suggest that the Institute could have a highly unique and influential role to drive thinking about data, its use and its value.

\(^{4}\) Ibid.
\(^{5}\) Ibid.
There is an immediate opportunity for the Institute to contribute to the performance reporting agenda.

With the addition of NHPA’s hospital performance reporting functions, the Institute is well placed to take up a role in reporting performance across the health and welfare sector. However, stakeholders expressed mixed views about this. A small number thought the performance reporting role could jeopardise the Institute’s independent status. In particular they were concerned that performance reporting could lead the Institute into policy commentary, which has always been beyond the Institute’s mandate. Most would, however, concede that a properly undertaken performance reporting role can avoid a drift into policy advising while being a significant stimulus to good policy making and continued service delivery reform.

A large number of stakeholders actively welcomed the performance reporting role and felt it would bring a new ‘edge’ to the Institute’s work and force a renewed freshness in relationships with jurisdictions.

Jurisdictional stakeholders also referred to their experience of working with the NHPA, an agency specifically set up to undertake a performance reporting function. Some jurisdictions were critical of aspects of the NHPA’s performance reporting function. Others were supportive of the NHPA’s work overall.

There is an immediate opportunity for the Institute to enhance its role in strategic communications.

Stakeholders acknowledged that the Institute has an important role to play in raising the public’s awareness about Australia’s health and welfare. They suggested the Institute could upgrade its media, design and communications expertise to better tailor its messages to specific audiences. The literature supported this opportunity by revealing a substantial rise in social media and web-enabled use of information. Furthermore, a specialist skillset has emerged in using curated content to generate online ‘buzz’ (e.g. through social media campaigns).

There is an immediate opportunity for the Institute to more actively drive strategic reform and change.

Stakeholders had mixed views about the extent to which the Institute should have an active role in developing and driving the health and welfare policy agenda and reform. Some stakeholders argued that this is firmly the role of the Commonwealth and jurisdictions. Others believed that driving reform and change is crucial if the Institute is to have a meaningful role in the health and welfare sector.

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6 Ibid.
5.2 Business model

This section identifies the key strengths of the Institute’s business model and the key opportunities to enhance its product and service suite, work program and funding model. Table 2 summarises the key findings in response to the second key line of enquiry.

Table 2: Key findings – KLE 2

<table>
<thead>
<tr>
<th>Sub-question</th>
<th>Key finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What <strong>products and services</strong> should the Institute deliver in the future?</td>
<td>• The Institute’s products and services provide an authoritative source of health and welfare information and are highly valued by clients and consumers.</td>
</tr>
<tr>
<td></td>
<td>• The Institute has a significant opportunity to modernise its product and service offering, better to meet the evolving and diverse needs of different consumer groups.</td>
</tr>
<tr>
<td>At a high level, what should the <strong>future work program</strong> of the Institute look like?</td>
<td>• The priority areas of the Institute’s current work program are aligned with the needs and expectations of stakeholders, with less but more powerful published reports.</td>
</tr>
<tr>
<td></td>
<td>• The Institute’s future work program could be more strategic, less driven by specific funders and less duplicative of the work of other health and welfare organisations.</td>
</tr>
<tr>
<td>How can the Institute’s <strong>funding model</strong> more efficiently respond to emerging strategic requirements?</td>
<td>• Historically, the Institute has successfully maintained a large amount of annually recurring and externally funded project work.</td>
</tr>
<tr>
<td></td>
<td>• A higher proportion of appropriated funding would enable the Institute to more effectively and efficiently respond to strategic requirements and evolving stakeholder needs, provided funders become more strategic in their engagement.</td>
</tr>
</tbody>
</table>

5.2.1 Products and services

The Institute’s products and services provide an authoritative source of health and welfare information and are highly valued by clients and consumers.

The Institute offers a broad variety of data and information-related products and services to a diverse range of clients, either through ongoing funding agreements or on a fee-for-service basis. Detailed information on the number and type of products and services the Institute provided in 2015-16 is detailed at Appendix D.
The Institute has experienced consistent and enduring demand for some of its products and services, particularly its flagship reports and data linkage services.

Nous assessed the demand for the Institute’s products and services through analysis of both qualitative (stakeholder consultations) and quantitative (website visits, product downloads and media statistics) data sources. Stakeholder consultations indicated there was ongoing demand of and use for the Institute’s flagship reports (Australia’s health and Australia’s welfare), including as a source of historical health and welfare information. There were mixed views amongst stakeholders on the demand for the Institute’s other products. Some stakeholders indicated they had little to no use for the historical, academic-style reports, whilst other stakeholders reported high demand for at least a significant core set of these same products.

The Institute has and continues to assist researchers and governments through its role as an accredited Data Integration Services Centre. It is one of only three agencies in Australia accredited to link sensitive Commonwealth data sets, meaning it meets stringent criteria for data linkage work. Stakeholders consistently reported the Institute’s data linkage services as highly useful. In support of this, stakeholders also reported high demand for the Institute’s METeOR service (the Institute’s Metadata Online Registry). This was supported by insights from the document review, which also indicated a relatively high demand from clients for METeOR. METeOR had over 800 unique visitors per day, contained more than 1,500 standard data element definitions, 183 data set specifications and 128 national performance indicators.

Figure 6 provides quantitative information on the demand for products and services in 2014-15. Overall, sessions on the Institute’s website increased from 2013-14 to 2014-15, however the total number of downloads (of the top ten reports and mobile apps) remained relatively low (based on 2014-15 data).

Figure 6: Demand statistics for the Institute’s products and services

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7 Little Oak, METeOR redevelopment business case, 2014.
8 Figure 10 is predominately based on 2014-15 data, substituted by 2013-14 data where more recent data was not available.
Amongst the top ten most downloaded reports in 2014-15, the majority (70%) were predominantly health-related and typically were based on two-to-three year old data (see Figure 7).

Figure 7: Top ten most downloaded products 2014-15

![Figure 7: Top ten most downloaded products 2014-15](image)

The Institute products are highly valued as an authoritative source of historical health and welfare data, but are less suitable for informing future-focused decisions or driving change.

This Review was not able to provide a comprehensive assessment of the overall suitability of the Institute’s current product and service offering, as the Institute does not employ a standardised, systematised process for evaluating its products and services. Rather, this Review provided a high-level assessment of the suitability of the Institute’s products and services based on insights from stakeholder consultations and previous reviews/evaluations of specific products/services.

Key themes from stakeholder consultations and the document review (including of previous reviews and evaluations on the suitability of specific products and services) are provided in Figure 8. Overall, stakeholders reported the Institute’s products, particularly the two flagship reports (*Australia’s health* and *Australia’s welfare*), were highly valuable as a credible and authoritative source of historical health and welfare information. Stakeholders typically stated that most of the Institute’s products were less useful as timely source of future-focused predictive modelling or complex analysis (e.g. to support decision-making or drive change). The Institute highlighted that it has made a concerted effort to improve the timeliness of its products through recent enhancements in its report production systems.

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The Institute has a significant opportunity to modernise its product and service offering to better meet the evolving and diverse needs of different consumer groups.

The Institute has historically met the needs of its clients and consumers, but stakeholders indicated the demand from users of health and welfare data and information was changing. As users become more variable and segregated, so do their needs for and uses of health and welfare analysis. Some users’ needs will continue to be met by the academic, detailed, descriptive-style reports the Institute has historically focused on producing. Other users will increasingly demand more diverse content, formats and delivery of products and services.

Suitability of products

The Institute’s products were:
- useful as one source of truth for historical health and welfare information
- a credible and authoritative source of health and welfare information
- effective at describing historical broad trends in the health and welfare sectors
- useful for national comparisons of jurisdictional performance
- useful in providing information on comorbidities, risk factors and target populations (rather than siloed information on single diseases)
- highly valued and well-respected, but could better reflect the needs of stakeholders and data providers

Suitability of services

The Institute’s services
- data linkage services were highly valued in the health and welfare sectors
- METeOR held a unique and highly valued place in the national information infrastructure arrangements
- METeOR was a ‘one of a kind’ service for information management/meta-data storage
- METeOR was somewhat outdated and not keeping pace with contemporary needs. It would be improved by a simpler interface, faster functionality and improved search capability.

Stakeholder consultations highlighted the critical importance of the Institute seizing the opportunity to modernise its product offering to better meet the current and future needs of its clients and consumers. The future requirements of consumers and clients (based on stakeholder consultations and Nous’ review of relevant documentation) are illustrated in Figure 9 and detailed below.

Figure 9: Future product and service requirements of clients and stakeholders

- Diversified product suite
- More raw data
- More timely products
- Better and earlier stakeholder engagement
- Additional or enhanced subject matter
- More data linkage within and across sectors
- Alignment with the government’s priority areas
- More analytical products
- More local level analysis
- Use of new and emerging data sources

Stakeholders reported their key future product and service needs included:

- **A diversified product suite.** Products are provided in a diverse range of formats and utilise multiple delivery mechanisms.

- **More raw data.** Consumers can customise and manipulate raw data cubes, blend them with their own data sets and conduct their own analysis.

- **More timely products.** Products are timelier and the majority of products use more current data.

- **Better and earlier stakeholder engagement.** Consumers are engaged in the planning and development phases of products (e.g. through co-design). Jurisdictions have access to products prior to public release (when appropriate).

- **Additional (or enhanced existing) subject matter.** Products provide information and insights that fill current gaps in the health and welfare information sectors. These include primary health care, chronic diseases, health expenditure, return-on-investment, mental health (e.g. on interagency areas such as mental health and housing), international comparisons (e.g. with comparable health systems’ performance) and standardisation of Indigenous indicators and definitions.  

- **More data linkage within and across sectors.** Data is better linked within health and welfare sectors and across other relevant sectors.

- **Products aligned with the government’s priority areas.** Products and services align with government priorities to provide policy relevant analysis, inform policy change and assess new policies and programs. This is not always straightforward, for example, the National Disability Insurance Scheme is a current government priority and its implementation will impact on the approaches to data collection on disability services and outcome measures. The Institute is actively working to achieve the level of engagement with the National Disability Insurance Agency needed to plan for this.

- **More analytical products.** Products provide value-added analysis, including predictive modelling, data visualisation, geospatial and longitudinal analysis. Analyses focus on the whole patient/client journey, morbidities, risk factors and target populations.

- **More local level analysis.** Analytical products illustrate how and why performance differs across jurisdictions, regions, localities and facilities.

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1. Development of standardised definitions for Indigenous identification overlaps with the work of the ABS.
• **Use of new and emerging data sources.** Products and services leverage emerging data sources and types, such as administrative data collected from electronic health records, payment systems and personalised devices.

- CIHI undertakes benchmarking to provide performance comparisons at an international, national, jurisdictional and sub-jurisdictional level. It provides:
  - interactive benchmarking data to provinces, territories, regions and facilities including national averages
  - an online tool that shows trends for 45 health system and health care indicators. Using the tool, the public and health system managers can assess the performance of more than 600 hospitals Canada-wide.
  - international benchmarking reports that assess aspects of Canada’s health system against other comparative countries.

- THL produces multiple interactive tools that support the development of the health and welfare sector, including:
  - TEAvisari: An online benchmarking system that depicts municipalities’ activity in promoting their inhabitants’ health
  - Human Impact Assessment (HuIA): A tool to anticipate the effect of a decision on human health and welfare
  - ITHACA toolkit: The toolkit assists monitoring of human rights and health care in mental health and social care institutions.

### 5.2.2 Work program

The priority areas of the Institute’s current work program are aligned with the needs and expectations of stakeholders, with less but more powerful published reports.

The Institute’s work program is described in the AIHW Work Plan 2015-16, which provides a description of the Institute’s planned publications, outputs and activities for the coming year (2015-16) (e.g. publication of the reports required by law including Australia’s welfare and the AIHW Annual Report, other outputs, and specific activities including data development, collation and analysis). The AIHW Work Plan 2015-16 detailed the role, objective, activities and major projects of each operating group (both statistical and corporate) and collaborating centres against the work program’s themes and focus areas.

The Institute’s 2015-16 work program was guided by three themes and ten associated focus areas aimed at ensuring consistency across the Institute’s operating groups. The three high-level themes in 2015-16

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12 The Institute defines a publication as ‘a public release of data or information on a discrete topic that was not previously publicly available. It may be in the form of a written report, data tables or other communication products, including interactive web products’.

13 Collaborating centres refer to the research organisations the Institute has long-standing business arrangements with. These included the Australian Centre for Asthma Monitoring at the Woolcock Institute of Medical Research Limited, Dental Statistics and Research Unit at The University of Adelaide, the National Injury Surveillance Unit at Flinders University of South Australia, and the National Perinatal Epidemiology and Statistics Unit at the University of New South Wales.
were to deliver timely products, position the Institute in a changing environment and improve internal processes (as described in Figure 10). Stakeholders consistently reported the themes of the current work program aligned with their expectations on the activities and outputs the Institute should prioritise. Key themes from stakeholder consultations indicated stakeholders expected the Institute to:

- deliver high-quality and reliable products and services based on more timely data
- undertake a leading role in the health and information welfare sector (e.g. through maintaining predictable funding, making better use of data and improving stakeholder engagement)
- operate efficiently as an organisation (e.g. through streamlining its business process, monitoring its performance and developing staff capability).

Figure 10: Work program themes and focus areas 2015-16

The Institute’s future work program could be more strategic, less driven by specific funders and less duplicative of the work of other health and welfare organisations.

There is an opportunity to reduce the duplication that currently exists between the work program of the Institute and other organisations working in the health and welfare sectors.

Based on stakeholder interviews and the document review, specific components of the Institute’s work program duplicate or overlap with the activities of other relevant government organisations.  

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15 Areas of duplication were informed predominately by insights from stakeholder consultations, supplemented where needed by a review of organisational planning documents (e.g. reporting plans, business plans) and/or a review of publically available information on organisations’ websites.
Table 3 outlines the organisations and identified areas of duplication. Detailed information is provided in Appendix E.

Table 3: Summary of areas of duplication between the work program of the Institute and selected other organisations

<table>
<thead>
<tr>
<th>Government organisation/agency</th>
<th>Degree of duplication</th>
<th>Area of duplication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Bureau of Statistics (ABS)</td>
<td>Moderate</td>
<td>• There is some overlap caused by the convergence of interests between the ABS and the Institute, with the ABS more interested these days in administrative and metadata for example. The Institute does still focus exclusively on analysis of health and welfare information. The Institute also does some surveys which can overlap with ABS surveys.</td>
</tr>
<tr>
<td>Australian Commission on Quality and Safety in Health Care (ACQSHC)</td>
<td>None</td>
<td>• Stakeholders reported the Commission’s planning process purposefully ensured there is no duplication in reporting.</td>
</tr>
<tr>
<td>Australian Institute of Criminology (AIC)</td>
<td>Minimal</td>
<td>• There appear to be minimal duplication in reporting.</td>
</tr>
<tr>
<td>Australian Institute of Family Studies (AIFS)</td>
<td>Minimal</td>
<td>• AIFS reports referenced AIHW data sets as well as conducting their own research for their publications.</td>
</tr>
<tr>
<td>DoH</td>
<td>Minimal</td>
<td>• There is potential for duplication although little evidence of the Department undertaking the kind of work in areas of mutual interest.</td>
</tr>
<tr>
<td>IHPCA</td>
<td>Moderate</td>
<td>• Stakeholders reported some duplication in hospitals classifications and hospital reporting data (e.g. IHPCA collected the same hospital reporting data as the Institute as the timeframe the Institute releases the data in did not meet IHPCA’s needs).</td>
</tr>
</tbody>
</table>
| NHPA | Significant | • Stakeholder interviews and the document review indicated duplication between the Institute and NHPA on:
  - data collection usage. The Institute used fifty-four data collections. Of these, 15 were also in use by NHPA (see Appendix E).
  - reporting against the Performance Accountability Framework (PAF). Stakeholders indicated potential overlap in hospital performance reporting on elective surgery wait times, healthcare associated Staphylococcus A infections and emergency department data. |
| Productivity Commission | Moderate | • There appears to be some duplication between the Institute and the Productivity Commission’s Report on Government Services (ROGS), particularly in relation to child care, health, community services and housing and homelessness. Jurisdictional stakeholders indicated they report the same welfare data to both the Institute and the Productivity Commission. Some stakeholders also indicated ROGS reports the same data/information as the Institute, but they referred to ROGS rather than the Institute as the data was in a more suitable format (e.g. downloadable Excel documents). |

The areas of overlap between NHPA and the Institute were significant, with the transfer of NHPA functions to the Institute providing an opportunity to resolve duplication (for example, there is strong alignment of NHPA’s functions in geospatial analysis and in reporting on primary health care). Some stakeholders suggested this as an efficiency argument to integrate the NHPA work program into the Institute (rather than continuing to operate as two separate work streams). Even these stakeholders, 16

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however, noted the importance of continuing NHPA’s existing reporting against the PAF, but also the opportunity to reduce overlap between the Institute and NHPA’s reporting against PAF indicators (as illustrated in Figure 11 and detailed in Appendix E). Other stakeholders took the opposite view, for effectiveness reasons, highlighting the importance of building a new set of skills and approaches in the Institute. These stakeholders urged caution in losing the distinct value offered by the NHPA staff and work program joining the Institute from mid next year.

DoH reported that the development of policy responses to emerging whole-of-health system needs, across both the public and private sectors is hampered by the current analytical frameworks. This is especially true in areas of Commonwealth interest such as in primary care, aged care and mental health. Furthermore, they stated that there is an appetite among clinicians, health service managers and planners, including PHNs, for whole-of-system health performance information, particularly at the local level. They argue that the states and territories are particularly keen to have more information about Commonwealth out-of-hospital services to complement the information they have about their own services.

While there has been some duplication in data use and indicator analysis between the Institute and the NHPA, it would be a mistake to assume that there is a simple resource saving potential here. There is a strong case to maintain the full NHPA performance reporting skill set, capacity and disposition, within the Institute and to use any freed analytic resources to improve work with jurisdictions’ own data analytic capacity. Certainly, the new NHPA capability should not be lost. Furthermore, the Commonwealth will have a crucial role in supporting the smooth transition of NHPA functions to the Institute and in working with States and Territories to confirm the government’s future expectations regarding PAF reporting and governance.

Figure 11: Duplication in reporting against the PAF indicators between the Institute and NHPA

Overall, we note the need for a comprehensive examination of health reporting across the Commonwealth, not only to eliminate specific overlaps and address gaps between organisations, but also to ensure reporting across all organisations is efficient and effective for all parties.

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21 DoH, The approach for maintaining functions of the NHPA, 2015.
There is an opportunity for the Institute’s future work program to be more strategic and have an enhanced focus on identified priority areas.

Stakeholders indicated the Institute had an opportunity to adopt a more strategic approach to its future work program to ensure greater alignment with its purpose and strategy and broader government priorities. Stakeholders reported that historically, the Institute’s current funding model had limited the ability of the Institute to have a strategic approach to its work program. The large proportion of funding from external (fee-for-service) sources (primarily DoH) had resulted in the work program being largely ad-hoc and funder-driven, rather than strategic, coordinated and responsive to future needs and priorities of the health and welfare information sectors. The high proportion of external funding (from a small number of funders) has also meant the work program has been largely determined by the funding available in major funders for specific health programs.

Stakeholders identified a number of specific priority areas for the future work program (based on continuing or enhancing focus areas of the current work program). Suggested priority areas for the Institute’s future work program included:

Evaluation of products and services. Stakeholders reported the Institute had an opportunity to implement a standardised and systematic approach to evaluating the usefulness and effectiveness of its products and services.

Stakeholder engagement. Stakeholders indicated stakeholder engagement should be a specific priority area of the Institute’s future work program. Stakeholders suggested more regular and earlier engagement of users (particularly jurisdictions) during the development of the work program would ensure it is prioritised and focused on the current and future needs of clients and consumers (e.g. using a jurisdictional advisory committee to agree on specific priority areas of the future work program).

Expert support. Stakeholders indicated the Institute had an opportunity to provide expert support to and build the capability of analysts working within the jurisdictions. The provision of training, support and capability building to jurisdictional analysts would ensure a growing cohort of analysts dispersed across a larger range of agencies could safely and accurately use, interpret, analyse and manipulate the Institute’s health and welfare data. Stakeholders indicated the Institute was best placed to provide this service, incorporating both data analytics support and health and welfare information advice.

Data access. The Institute was well placed to address the significant barriers in accessing data (as indicated in stakeholder consultations). Stakeholders suggested a priority of the Institute’s future work program should be addressing the barriers to accessing data, ensuring data access processes, systems and protocols are consistent with what ABS, AIFS and other Commonwealth data holders, integrators and analysts are doing (for example, more open systems and protocols for trusted data access), streamlining ethics approval processes and facilitating access to key national data sets for research purposes.

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22 The icons indicate the area of the current work plan the suggested focus area relates.
Geospatial and longitudinal analysis. Stakeholders typically agreed new types of analysis, specifically geospatial and longitudinal, were an important future requirement to inform decision-making in the health and welfare sector. Stakeholders indicated the Institute should include building capability and undertaking these types of analysis (where relevant) as a priority in the future work program.

Specific content areas. The Institute’s current work on the Global Burden of Disease, disease expenditure and health classifications were considered critical by stakeholders. Stakeholders also indicated the Institute was best placed to carry out this work (based on their current capabilities and mandate). Data and information on primary health care, health care financing and funding (e.g. physician-level data) and efficiency were areas of the current work program stakeholders reported should be enhanced going forward. Stakeholders reported a continued focus on these specific content areas should be a part of its future work program.

5.2.3 Funding model

Historically, the Institute has successfully maintained a large amount of annually recurring and externally funded project work.

The majority of the Institute’s total revenue is from external, at-risk sources (and largely from just two clients).

The Institute’s current funding model comprises mostly of external (fee-for-service) revenue and a relatively smaller proportion of Commonwealth appropriated funding. In 2014-15, 32% of the Institute’s funding was Commonwealth appropriation funding and 66% was from external, at-risk sources.23 Stakeholders reported the Institute’s ability to maintain a consistent and high-level of external, fee-for-service funding reflects the clients and consumers’ ongoing demand for and satisfaction with products and services.

However, the majority of stakeholders also indicated the Institute’s high dependence on external, at-risk funding has limited its ability to initiate new services and products and undertake a longer-term planning approach to its work program.

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23 The remaining 2% of revenue was from other revenue sources, such as interest. Based on the Institute’s financial results summary (2012-13 to 2014-15) data provided in October 2015.
There is also a downside for jurisdictions. The fee-for-service activity meets needs of individual purchasers of those services but, in aggregate, flood the market with reports on which individual ministers must comment, each as an individual new issue regardless of overall health and welfare priorities agreed with other ministers across jurisdictions. Figure 12 illustrates the Institute’s high proportion of external funding compared to appropriated funding over the three years from 2012-13.

Figure 12: Total revenue by source, 2012-13 to 2014-15

The Institute’s external funding was heavily reliant on the revenue provided by just two clients, as illustrated in Figure 13. In 2014-15, almost 70% of the Institute’s external revenue was provided by DoH and jurisdictional housing departments.

Figure 13: External revenue by client or client-group, 2014-15

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24 Based on the Institute’s financial results summary (2012-13 to 2014-15) data provided in October 2015.
25 Based on the Institute’s data on external revenue by customer (2015) provided in October 2015.
As at 31 August 2015, the Institute’s had 131 commissioned (contracted) projects totalling $34.67 million. DoH was the Institute’s most significant commissioning body based on a number of measures including the:

- **Total number of contracts**: Almost 30% of the Institute’s contracted work was from DoH (37 contracts)
- **Total value of contracts**: The combined value of DoH’s commissioned work was approximately $21.5 million, which is almost three times greater than the next largest commissioning body (various state and territory housing departments)
- **Average value of contracts**: The average value of DoH contracts was almost $580,000, which is more than double (55% greater) than the average value of DSS contracts (approximately $262,000).

Figure 14 provides key statistics on the Institute’s top four clients by number of contracts, value of contracts and average value of each contract.

**Figure 14: External revenue by customer (top four customers only), 2015**

<table>
<thead>
<tr>
<th>Client</th>
<th>No. of contracts</th>
<th>Total value of contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Health</td>
<td>37</td>
<td>$21,439,936</td>
</tr>
<tr>
<td>Various State and Territory housing departments</td>
<td>22</td>
<td>$5,511,320</td>
</tr>
<tr>
<td>Ad hoc projects</td>
<td>16</td>
<td>$2,358,832</td>
</tr>
<tr>
<td>Department of Social Services</td>
<td>9</td>
<td>$57,345</td>
</tr>
</tbody>
</table>

**There are opportunities for efficiencies in the funding approach between the Institute and DoH.**

Stakeholders reported the Institute had a relatively large number of funding agreements with DoH that were for ongoing work but were renegotiated annually. Stakeholders reported inefficiencies in this approach due to the transaction cost of regularly renegotiating contracts and the unpredictability of longer term funding. The Institute had a total of 60 active contracts with DoH for the period between 2013-14 and 2017-18 (as at October 2015). Of these, 18 contracts (30%) were for a period of less than 12 months and a total of 42% were for less than 24 months. Stakeholders also reported that efficiencies could be made through creating a central contracting arrangement between the DoH and the Institute. This would reduce the need to negotiate separate contracts for each engagement.

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26 Based on the Institute’s data on external contracts (as at 31 August 2015) provided in October 2015. The values include unspent funds carried over from the prior year plus 2015-16 new funding. The various state and territory housing department projects typically related to Housing and Homelessness Data Network work.

27 Based on the Institute’s data on commissioned work provided in October 2015. ‘Active contracts’ were defined as a contract that had an end date between 2013-14 and 2017-18.

28 Nous was not able to determine, from the available data, how many contracts were renegotiated annually.
According to DSS informants, the current funding model arrangements between the Institute and DSS were operating effectively, particularly in supporting the Institute’s role as a data custodian.

A higher proportion of appropriated funding would enable the Institute to more effectively and efficiently respond to strategic requirements and evolving stakeholder needs, provided funders become more strategic in their engagement.

A funding model based on a higher proportion of appropriated funding would enable the Institute to be more strategic, innovative and capable.

The majority of stakeholders agreed there was an opportunity to enhance the Institute’s funding model to enable it to more effectively and efficiently respond to strategic requirements going forward. Stakeholders agreed the most significant opportunity was to increase the total amount of Commonwealth appropriated funding. Stakeholders indicated a higher proportion of appropriated funding would enable the Institute to:

- adopt a more strategic approach to its work program. More predictable longer term funding would enable the Institute to better explore and plan for clients’ long term health and welfare information needs, i.e. for the provision for public good costs such as the upgrade of METeOR. It reduces the risk of undertaking lower priority fee-for-service work and neglecting higher priority core work to maintain revenue flows.

- trial/adopt new and innovative products and services. More appropriated funding would enable the Institute to explore different, emerging and innovative ways of providing products and services that best meet the continually evolving needs of clients and consumers (e.g. exploring the use of new technologies to provide data and information to clients).

- invest in growing and enhancing new and existing workforce capabilities. A higher proportion of appropriated funding would allow the Institute to further develop and enhance the skills and capabilities of its workforce to ensure it is able to continue to produce contemporary and quality analysis (e.g. to undertake more advanced analytics techniques and new types of analysis).

In addition to this, the Institute needs to consider the impact of the transferred NHPA functions in its future funding model arrangements.

A review of the funding approaches adopted by other similar organisations in Australia and other jurisdictions supported stakeholder views on the need to shift the Institute’s funding model to comprise a higher proportion of core/appropriated funding (see Figure 15).

Figure 15: Comparison of proportion of appropriated funding (of total revenue, 2013-14)\(^\text{29}\)

<table>
<thead>
<tr>
<th></th>
<th>AIHW</th>
<th>NHPA</th>
<th>CIHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion</td>
<td>30%</td>
<td>100%</td>
<td>78%</td>
</tr>
</tbody>
</table>

DoH and the Institute have an opportunity for efficiency gains through rationalisation of their funding agreements.

Stakeholders reported there was an opportunity to enhance the funding arrangements between DoH and the Institute to enable a more strategic approach to the work program and a predictable funding model. They cited the large number of ongoing (and often annually renegotiated) funding agreements between DoH and the Institute as inefficient and unnecessarily costly (e.g. due to transaction costs in continually renegotiating reoccurring annual contracts).

Stakeholders indicated there was an opportunity for components of DoH’s commissioned work to be incorporated into the Institute’s core work program and the associated funds to be provided as appropriated funding. Thus an improved funding model could enable the Institute to be less ad hoc, lift the relevance of the suite of products and prioritise its planned activities and outputs.

Fundamentally, this also requires, that the Commonwealth and states and territories reinvigorate their roles as funders and partners of the Institute, to input coherently and usefully into the Institute’s work plan. Otherwise the Institute’s priorities could become more strategic while still failing to satisfy the providers of a more generous appropriation.

A number of stakeholders acknowledged that the growing fee-for-service revenue achieved by the Institute had ensured a high degree of responsiveness to those providing those contracts. This was seen as a positive for partners of the Institute. The worst case of increased appropriation without a new client engagement model would be a less responsive Institute that is still not doing more strategic work. The responsibility for change here fundamentally sits with funders and jurisdictions. Senior DoH staff made the point that they themselves do not know the range of engagements DoH has with the Institute, as its overwhelmingly dominant funder.

Stakeholders reported that neither DoH nor DSS currently have a central mechanism or method for deciding their strategic priorities for the Institute. Both DoH and DSS need internal governance mechanisms for information and data issues that, among other responsibilities would ensure negotiation of a set of priorities relating to core Institute funding. These should each relate to information priorities negotiated with health and welfare jurisdictions, that themselves relate to strategic policy priorities.

It will be important, in turn, that the priorities settled do not relate only to high immediacy issues in the funding area but also to population health and welfare status and changes over time. Both portfolio areas need to establish a balanced and genuinely national set of long term investment priorities for the national health and welfare information agency.
The Institute’s current pricing model is based on recovery of both direct and indirect costs, including a large number of charges for corporate overheads and other corporate costs.

The Institute’s prices are based upon the recovery of costs incurred directly by Groups/Units and costs incurred indirectly by corporate areas (e.g. costs associated with infrastructure and corporate support). Figure 16 provides a summary of the multiple components of the current pricing model (see Appendix F for detailed information).

Figure 16: Components of the Institute’s current pricing model

The pricing arrangements for the provision of statistics and strategic information services between the Institute and DoH and DSS are outlined in their respective Memorandums of Understanding (MoUs). The MoUs outline specific principles that underpin the calculation of fees and the final fees are expected to reflect a mutually agreed understanding of the expected outputs.

A more viable pricing model for the Institute’s products and services could incorporate a streamlined process for recovery of corporate overhead costs and greater transparency for clients.

There is an opportunity to clarify and streamline the Institute’s current approach to pricing its product and service offering (as cited by stakeholders). Stakeholders indicated the Institute’s current pricing model is expensive in comparison to industry standards, does not currently provide value-for-money and seems to be applied inconsistently. Nous’ review of the pricing model template revealed a relatively high level of complexity in calculating the final fee for products/services, including a multi-faceted approach to calculating cost recovery for corporate overheads. The complexity of the current fee structure (particularly for corporate overheads), combined with the lack of transparency on the fee structure, has likely contributed to the reported confusion about the Institute’s pricing approach (as reported by stakeholders).

Many stakeholders suggested similar strategies to improve the Institute’s approach to pricing its products and services. Stakeholders indicated the Institute’s pricing model could be improved through the following:

- **A review of the overall approach to pricing.** Some stakeholders reported the current pricing model is too expensive compared to other organisations that provide similar services (e.g. universities, other public service departments).

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30 AIHW, AIHW Pricing Template, October 2015.
31 Ibid.
**An increase in transparency on its approach to pricing.** Stakeholders reported confusion around the current approach to pricing. Stakeholders reported there was the limited visibility on the composition of quoted fees for products and services (e.g. some stakeholders reported they are only quoted the total cost, but do not have any visibility of the individual components). Stakeholders reported confusion on whether current prices included charges for Senior Executive Staff (SES) time.  

**Streamlined corporate overhead costs.** Document reviews and stakeholder interviews indicated the Institute currently employed a complex, multi-faceted approach to calculating the recovery of overhead costs. This was opposed to a more streamlined approach to charging for corporate overheads (e.g. the use of a single all-inclusive fee).

**A consistent approach to applying the pricing model.** Stakeholders reported the pricing model was sometimes applied inconsistently (e.g. it was not clear why some clients received discounted prices and other clients did not).

### 5.3 Organisation design and governance

In this section Nous identifies the key strengths of the Institute and opportunities to enhance its organisational design to support its strategic direction and service delivery. Table 4 overleaf summarises the key findings in response to the third line of enquiry.

<table>
<thead>
<tr>
<th>Sub-question</th>
<th>Key finding(s)</th>
</tr>
</thead>
</table>
| **What external alliances can the Institute leverage to strengthen its position?** | • The Institute maintains many positive relationships particularly on data standards and technical matters.  
• The Institute has an opportunity to better prioritise and manage its partnerships to fulfil its future role. |
| **What are the optimal business processes for the Institute?** | • The Institute has made substantial progress in transforming its business processes.  
• There is an opportunity to make internal processes more efficient, which will result in more useful products and services for customers. |
| **What workforce capability is required to ensure that the Institute can perform its role?** | • The workforce has deep expertise in key health and welfare content areas and strong data infrastructure skills.  
• The Institute has an opportunity to invest in more ‘cutting-edge’ capability related to data, analytics, technology and communication. |

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32 This Review notes that according to the MOUs between the Institute and DoH and DSS, SES time was not meant to be charged on DoH and DSS projects commissioned under the MOU schedules. SES time was able to be charged on other work where the SES made a substantial direct contribution to the project.
What organisational design will most efficiently and effectively support the Institute's future purpose, strategy and business model (organisation design and governance)?

<table>
<thead>
<tr>
<th>What cultural practices will impede or enable the Institute to deliver its future purpose and strategy?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The current culture emphasises quality and independence and staff are highly satisfied.</td>
</tr>
<tr>
<td>• The Institute has the opportunity to build a future culture that prioritises innovation, international excellence and a stronger customer focus.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>What office space considerations are required to ensure integration of NHPA functions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The Institute has a newly built fit-for-purpose office space in Canberra.</td>
</tr>
<tr>
<td>• The Institute has an opportunity to operate a satellite office in Sydney.</td>
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<table>
<thead>
<tr>
<th>What structures and functions will most effectively allow the Institute to carry out its strategy?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The current structure allows staff to be subject matter experts in particular fields of experience.</td>
</tr>
<tr>
<td>• The Institute has a significant opportunity to revise its structure to ensure functions are more streamlined and duplications are removed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What changes to information management infrastructure are required to enable the Institute to carry out its functions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• METeOR and Validata are important strategic assets of the Institute and NHIA (National Health Information Agreement) creates a collaborative platform for data sharing.</td>
</tr>
<tr>
<td>• There are opportunities to upgrade the Institute’s systems and expand its role in information management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What governance model is required to best support the Institute?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The Institute’s governance is complex and the Institute’s broad legislative functions allow it to respond to emerging opportunities.</td>
</tr>
<tr>
<td>• There is a great opportunity to revise both the makeup and role of the Board and to fill Executive vacancies.</td>
</tr>
</tbody>
</table>

5.3.1 External alliances

The Institute maintains many positive relationships particularly on data standards and technical matters.

The Institute operates in a highly complex and diverse stakeholder environment, with numerous national ministerial councils and individual governance bodies for many of its core subject areas (i.e. housing, homelessness, children and families, disability and aged care). Within this context, it actively maintains strong relationships with a significant number of stakeholders. Consequently, many stakeholders reported high regard for the Institute and noted that it commands legitimacy in its role, especially in relation to technical and data infrastructure matters.
The Institute has an opportunity to better prioritise and manage its partnerships to fulfil its future role.

The review found that stakeholders desired the following from its partnerships with the Institute:

- **More transparency with stakeholders** (including data suppliers) about how data has been treated and interpreted.
- **A clear description of the respective role and strategic intent of the Institute, DoH and DSS** in order to facilitate a more collaborative and productive relationship. Stakeholders were supportive of DoH’s greater investment in data and analytics and believed it would enable DoH to be better informed to influence and shape the Institute’s work priorities.
- **Greater delineation regarding the roles and contributions of ABS, ACQHC and IHPA and the Productivity Commission (for RoGS)** as there is currently duplication between these organisations. Notably, consultations with the Executive in the Department of Prime Minister and Cabinet (PM&C) revealed that the Commonwealth is convening work to align similar developments across Commonwealth agencies (for example, through the alignment of the notion of ‘trusted users’ across agencies). Going forward, the Institute will need to ensure it is consistent with these directions and also positioned as an equal partner in these strategic discussions.
- **More flexible partnership arrangements with the Institute**, given the increasingly ‘open’ nature of data and analytics. The current MOU and inter-jurisdictional agreements present a very complex and time consuming stakeholder environment for all parties to navigate.
- **Clarity about how the Institute (including the newly merged NHPA functions) will interact with the jurisdictions in relation to performance reporting**. Some stakeholders report that the current arrangements under the NHIA, where the Institute has more of a facilitative relationship with jurisdictions, are not conducive to innovation and international best-practice.
- **More focus on international partnerships**, specifically there was strong criticism in one interview of the Institute’s lack of attention to Australia’s obligations as members of the World Health Organisation and the Organisation for Economic Co-operation and Development (OECD).
- **Increased input from clinicians, professionals and the private sector**.

In summary there was a view that the Institute may be too reactive in its management of partnerships. Stakeholders reported that there was opportunity to reshape these relationships from a more strategic perspective to enable the Institute to focus its efforts and resources.

There also appears to be a tension with regards to the Institute’s relationships with jurisdictions. On one hand, jurisdictions called for more transparency, open collaboration and flexibility with the Institute. Simultaneously, some stakeholders felt that the Institute currently prioritises its jurisdictional relationships too highly, which limits its ability to lead on important national issues where jurisdictional consensus is challenging.

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33 J Birch, Functional and Efficiency Review – Summary, March 2015
5.3.2 Processes

The Institute has made substantial progress in transforming its business processes.

The Business Transformation Program consists of initiatives driving positive change in the Institute.

The Business Transformation Program was established in December 2011 with the broad aim of defining and implementing more efficient and effective business processes and supporting technologies and infrastructure. Since then, substantial progress has been made to transform the Institute through various initiatives. These include:

- **Institute Projects**: a system that supports the project management process, including project briefings, status reporting and tracking milestones.
- **Electronic workflows and MyTasks**: a task aggregator to support the process of managing document workflow and creating more efficiencies.
- **Streamlined production system**: provides a standard statistical processing environment, including version control and fingerprinting.
- **Data request tracking application**: to support the process of tracking and approving data requests from DoH.

The Institute has a strong project management framework.

The Institute has recently implemented a comprehensive project management framework. The framework is broadly consistent with globally accepted project management frameworks. It allows tailoring to different types of projects and it has been designed to be fit-for-purpose for the Institute. The capacity to tailor project management to the complexity of the project ensures that:

- risk is managed
- quality is assured
- cumbersome processes are not unnecessarily imposed.

The Institute has already demonstrated capacity to support greater data linkage processes.

The Institute is the data custodian for over 140 data sets and therefore is in the unique position to set up efficient processes to link multiple sources of information. The *Australian Institute of Health and Welfare Act 1987* (Cth) provides critical safeguards for data providers to ensure that remains confidential unless strict processes are followed. The Institute has established processes to support its confidentiality obligations through the Data Integration Services Centre (DISC). The DISC is a physically secure area within the Institute that can only be accessed by authorised, specialist staff. It ensures all projects are conducted on a separate secure network and stringent processes are applied.

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38 See s.9 *Australian Institute of Health and Welfare Act 1987* (Cth)
39 AIHW, *Data Governance Framework*, 2014
There is an opportunity to make internal processes more efficient, which will result in more useful products and services for customers.

The Review considered the various process steps carried out at the Institute, from data collection to providing services to customers and evaluation of products. Figure 17 highlights the six key areas of opportunity where the Institute can improve its processes.

Figure 17: Areas of opportunity to improve the Institute’s processes

There is an opportunity to reduce duplication in data collection processes and become a leading agency in coordinating data collection.

The Review identified areas of duplication in the data sets that are used by both NHPA and the Institute. Of the Institute’s 54 data sets listed in the AIHW Annual report as at 30 June 2014, 15 of these are also used by NHPA. It is understood that the Institute holds approximately 140 data sets in total, so there is potential for even further areas of duplication. It would be useful to examine these data sets in further detail to understand the extent of duplication and then streamline data collection processes.

There are opportunities for the Institute to become the centralised agency for data collection to fulfil the principle of ‘single provision, multiple use.’

There are a number of agencies that collect the same data sets. One example is the data for selected indicators in the National Standards of Out of Home Care, which is collected by both the DSS and AIFS. The number of committees managing national performance indicators could be reduced if data collection was streamlined to a single agency, such as the Institute.

There is an opportunity to design data collection processes to allow for longitudinal analysis.

Stakeholders reported that the Institute generally analyses data on an annual basis, rather than examining trends over time. Customers would like to know outcomes of service provision and funding through longitudinal analysis. However some staff members felt limited in their capacity to achieve this. There is an opportunity to design data collection processes that consider before collection if the data will be used for longitudinal analysis. Pre-established processes could then be applied as appropriate. The Housing and Specialised Services Group (HSSG) recently reviewed its data collection processes for homelessness data. Now the HSSG has a continual large data set that is added to annually, allowing staff members to analyse trends over time and link the data and analysis with policy changes.

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40 AIHW, Corporate Plan 2015-16 to 2018-19, 2015
41 Section B86(d) of the National Health Reform Agreement states that: “each body must support the concept of ‘single provision, multiple use’ of information to maximise efficiency of data provision and validation where practical, in accordance with privacy requirements. Council of Australian Governments, National Health Reform Agreement, http://www.federalfinancialrelations.gov.au/content/npa/health_reform/national-agreement.pdf
There is an opportunity to develop an Institute-wide quality management framework to assist quality assurance processes.

States and Territory stakeholders requested that the Institute provides greater support throughout the process of preparing and cleansing data. This will ensure that the data is sufficient for analysis at the point of collection. It will also reduce the need for the Institute to continue handling the data once it has been submitted.

The Institute currently does not have a formal approach to managing data quality across the Institute.

In 2014 the HSSG underwent a restructure. The process of bringing the data collections together highlighted variations in collection processes and risks associated with existing data quality assurance. Consequently, the HSSG developed a quality assurance framework. The HSSG Framework was developed based on international best practices and with the intention of it being rolled out across the Institute. Implementing an Institute-wide Quality Assurance Framework is an opportunity to ensure that data validation processes at the point of collection are streamlined and consistent across the Institute. There is an opportunity for the Institute to continue to develop processes that support data linkage.

Stakeholders stated that they desire increasingly sophisticated and integrated information to improve understanding of person-centred care and outcomes. As recognised by the Institute itself, the full potential of data linkage is still to be realised. There are certain opportunities to develop the processes to support data linkage, which are outlined in Figure 18:

Figure 18: Stakeholder opinions on improving data linkage

The Institute’s process for data linkage approvals takes too long. Opportunities to speed up the process could include getting classes of approvals.

(stakeholder interview)

Once data is collected, it should be a standard process to clean data of identifying information. All identifiable data should be housed on its own server with enhanced protection.

(stakeholder interview)

Our structure is siloed, so our data linkage is siloed. Our processes should be standardised to allow for strong data linkage and analysis.

(stakeholder interview)

The Institute could create streamlined processes to support data linkage through processes such as classes of pre-approvals and standardised processes to cleanse and link data.

42 AIHW Executive Committee, Assuring the quality of AIHW data. Meeting No: 8/2015, 17 August 2015

43 AIHW, Corporate Plan 2015-16 to 2018-19, 2015
There is an opportunity to customise and automate the production process to ensure products report against current data.

State and Territory departmental stakeholders stated that Institute reports are often published that analyse out of date data. Consequently, departments invest substantial time explaining the results, rather than using the reports to contribute to policy making. The production process (the time from the report being drafted to it being released) is one of the key obstacles to timely and nimble report distribution.

The Institute’s production process is applied universally to the majority of products. Some stringent processes are applied to low value and low risk projects, which lock in lead times and extensive reviews. There is an opportunity to ensure resources are targeted to high profile projects and a standardised approach is applied to lower value and low risk projects. Such a system has been applied to the project management process at the Institute. Projects are categorised as light, basic, standard or advanced and then a tailored project management process is applied.

A further opportunity to improve the Institute’s production process is through automating processes. Recognising that the Institute has recently made important improvements to its report production timelines (through enhanced validation), compared to NHPA, the Institute’s production process is still much longer, as outlined in Figure 19:

Figure 19: Comparison between AIHW and NHPA of average time taken to publish reports

NHPA has implemented automation systems to support more timely and efficient production. For example, the Information Management and Strategy team at NHPA has automated approximately 100 different types of tables, graphs and maps of Australia. Furthermore, website verification is fully automated to expedite production. Results are uploaded to NHPA’s website relationship databases and visualisation software provides all data for website users. There has been some progress in the Institute towards automation through processes such as single source publishing and SAS Graphs and Tables.

The amalgamation of NHPA and the Institute will allow the Institute to leverage and adopt NHPA’s automation processes. This would result in a more agile method to approve, edit, produce and release products. Certainly, the Institute acknowledged that further gains to its timelines are possible if some of the enabling features of NHPA’s reporting model are effectively transitioned.

44 AIHW, Product Planning and Review: Project Team Research Report, November 2014
45 AIHW, Project Management Framework Guide, September 2012
46 AIHW, Annual Report, 2014 and qualitative information obtained from NHPA. Data collection is the period from the end of data collection up until the release of the product.
47 NHPA, NHPA Report Production Process – at a Glance (no date provided)
There is an opportunity to improve the Institute’s products and services by developing and implementing a structured evaluation process.

Internal stakeholders reported that it is difficult to ensure that the Institute’s products and services are meeting customer expectations. Currently, most feedback is obtained in an ad hoc manner through advisory committees, web grabs and some surveys. The current evaluation approach is not cohesive and does not solicit robust information to drive improvements. A survey relating to the Closing the Gap Clearinghouse received a 9% response rate. Other stakeholders reported that survey results were not able to be analysed due to a lack of responses. A standard approach to product evaluation would assist the Institute in recognising opportunities to increase the usability of its products.

There is an opportunity to further implement the Institute’s Project Management Framework.

While a Project Management Framework has recently been implemented, there is some degree of resistance to its consistent application. One stakeholder who had worked with both the health and welfare units noted that project management was less effectively applied in the welfare units. A recent review of the Project Management Framework found that:

- governance over the Framework implementation is inadequate to drive conformance and achieve desired outcomes
- staff engagement with, and conformance with the Framework is incomplete, but is improving
- the transparency of responses to identified improvement opportunities to Framework was limited
- the Institute does not have criteria to measure all aspects of project outcomes.

There is an opportunity for the Institute to ensure its project management framework is more effectively applied to all projects.

5.3.3 Workforce

The workforce has expertise in key health and welfare content areas and strong data infrastructure skills.

The Institute’s staff and their subject matter expertise were highly recognised by stakeholders. The APSC State of the Service Employee Survey results showed that the Institute has a highly educated workforce. Of the 223 AIHW staff who responded to the survey, 192 (86%) reported having tertiary-level education.

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49 The survey was sent to all 1,341 Closing the Gap Clearing House e-newsletter subscribers and 119 responses were received. AIHW, Closing the Gap Clearing House: User Satisfaction Survey, (no date provided)

50 Protiviti, Internal Review of the Implementation of the Project Management Framework, August 2015

51 Ibid.
qualifications (see Figure 20) in areas such as health sciences, social sciences, education, information technology and business.

Figure 20: Staff qualifications at the Institute

Many jurisdictions (especially the smaller ones) highlighted the importance of having a ‘central’ workforce with deep expertise in information and data. Even the larger jurisdictions, many of whom are building their analytics functions, felt that the Institute’s capability (focused on national data and issues) is complementary to their local capability (focused on state data and issues).

A number of stakeholders did also raise concerns about current capability, particularly partial skills in teams to undertake complex analyses. For example they cited examples when Institute staff were able to perform the data linkage needed to undertake a project but not to correctly formulate the research question against which to link the data and perform the analysis. Similar problems have apparently been exposed with the emphasis on sub-jurisdictional analysis in relation to the PAF, since NHPA started its work.

The Institute has an opportunity to invest in more ‘cutting-edge’ capability related to data, analytics, technology and communication.

In relation to workforce capability stakeholders reported that:

- **the Institute needs to address a perception from some stakeholders of key current workforce deficits.** The Institute is valued greatly for the key strengths it has maintained to fulfil its core roles over a long period now. However, examples were also cited of weaknesses, for example in research question formulation or particularly complex forms of analysis across multiple data sets. Key person dependency is an issue for some stakeholders. These examples and concerns speak to both a current challenge and increasingly challenging workforce requirements.

- **the Institute needs to invest further in the latest, ‘cutting-edge’ capability,** namely predictive analytics and modelling, longitudinal analysis, geospatial mapping and big data analysis. If the Institute’s role also expands to incorporate strategic reform and change, stakeholders felt it must also grow and modernise its research, communications and transformation/ change capabilities. This would represent a significant shift away from current workforce focus on data infrastructure and descriptive analytical skills.

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• **there is an opportunity to leverage NHPA’s workforce capability.** NHPA is expected to bring substantial expertise in hospital performance reporting, innovation and the use of new technologies. Stakeholders felt the Institute would strongly benefit from these additional capabilities and it would be important that these are disseminated throughout the organisation rather than ‘segregated’.

CIHI has identified the need to equip their workforce with specialist skills for the digital age. Specifically, they are building specialist skills in social media, that is “people who are really adept at social media campaigns, generating buzz with curated content.”

• **career pathways and development are limited.** The Institute’s current structure (see Section 5.3.6) means that workforce capabilities relating to data analytics and modelling are housed in content areas in separate parts of the organisation. This arrangement may be limiting the mobility and development of staff with these skills.

5.3.4 Culture

The current culture emphasises quality and independence and staff are highly satisfied.

Stakeholders reported that the Institute’s culture has some important qualities which must be maintained. These include its strong focus on quality, independence and its collaborative approach with jurisdictions. Stakeholders additionally noted that different Groups in the Institute have very different work cultures.

“**The focus on quality is impressive.**
(stakeholder interview)

“**We really like the fact that the Institute is independent.**
(stakeholder interview)
The Institute’s staff engagement levels are above APS averages (see Figure 21) and staff reported that the Institute is a good place to work.

Figure 21: Employee engagement results, 2015

The Institute has the opportunity to build a future culture that prioritises innovation, international excellence and a stronger customer focus.

To support the future role and service model of the Institute, stakeholders reported it is essential that the Institute’s future culture emphasises:

- **collaboration** - stakeholders want a more integrated (less siloed) approach across the Institute’s Groups and with its customers.

- **innovation and creativity** - stakeholders stated that the current culture is very “academia-like” and quite risk adverse. Some noted the Institute would benefit from a rapid learning approach that emphasises trialling new approaches and skills.

- **customer focus** - some groups in the Institute were reported as rigid, unresponsive and inward looking. Some stakeholders conjectured the Institute’s inward focus was due to its monopoly position in the sector. New mechanisms to capture responsiveness to external data requests would help to create a more outward focus.

- **international excellence** - stakeholders thought an international perspective would enable the Institute to draw on best practice and develop a greater focus on excellence.

A key concern expressed by numerous stakeholders was how the integration of NHPA would be managed, especially due to its separate geographic location. They observed that the two organisations have very different cultures and it will be vitally important to build one organisation that maintains the best parts of both. Stakeholders felt that NHPA’s strong cultural focus on innovation and the early adoption of new technology would inject some new energy into the Institute’s culture.

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53 APS, Employee Census, 2015
5.3.5 Office space

The Institute has a newly built fit-for-purpose office space in Canberra.
In June 2014, the Institute staff progressively moved into a newly built, fit-for-purpose office building in Canberra. The new single office space was purposely built large enough to co-locate all current staff, with the potential for more (as opposed to the three separate office buildings staff were previously split across). The new office space was designed so its day-to-day operations have minimal environmental impact (e.g. provision of amenities for staff who cycle to work, use of energy efficiency lighting and movement activate lighting).

The Institute has an opportunity to operate a satellite office in Sydney.
The transfer of NHPA functions to the Institute means that the Institute will gain additional office space in Sydney (on the site of NHPA’s previous office). The Institute has made a commitment to maintain a presence in Sydney. The Institute has an opportunity to operate a satellite office in Sydney to house NHPA’s existing capability, and potentially additional Institute staff in the future. Operating a satellite office also offers the opportunity to better understand views of stakeholders located outside of Canberra. For example, CIHI operates a number of regional offices across Canada. Reported benefits included a more comprehensive understanding of regional views and greater local knowledge (e.g. of relevant research programs).

Stakeholders raised important aspects for the Institute to consider in maintaining a new Sydney office including potential collaboration issues between Sydney-based and Canberra-based staff, cultural misalignment and management of Sydney-based staff (e.g. day-to-day management, performance management).

5.3.6 Structure and functions

The current structure allows staff to be subject matter experts in particular fields of experience.
Stakeholders reported that the Institute’s staff are very knowledgeable in particular specialist areas, such as indigenous and children’s health and welfare and community services. Many staff have been at the Institute for a number of years and have developed a wealth of knowledge some relating to niche areas.

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54 DoH, The approach for maintaining functions of the NHPA, September 2015
The Institute has a significant opportunity to revise its structure to ensure functions are more streamlined and duplications are removed.

There is an opportunity to revise the Institute’s structure to align it to its functions and remove duplication.

The Institute’s structure is based on content areas, with functions embedded within each unit. This structural arrangement facilitates content area specialisation, but disperses key skillsets across the organisation such as data collection, analysis and reporting. Opportunities are lost to share learnings, efficiencies and business improvement ideas. It also results in silos and functional duplication across Groups.

Further duplication will result following the amalgamation with NHPA. Specific areas of duplication for consideration are publishing and communications and the subject areas of hospitals and primary care. The number of staff in each unit at both the Institute and NHPA are outlined in Table 5. Through the amalgamation process, it will be critical to take into consideration the functions and capacities of both organisations.

<table>
<thead>
<tr>
<th>Function</th>
<th>AIHW (#FTE)</th>
<th>NHPA (#FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publishing and digital communications</td>
<td>11</td>
<td>19.6</td>
</tr>
<tr>
<td>Hospitals, classifications, Population health and primary care 55</td>
<td>56</td>
<td>19</td>
</tr>
</tbody>
</table>

The Institute’s recent review of HSSG resulted in a redesign of its structure to allow management across housing and homelessness collection along functional lines. NHPA’s structure is a matrix whereby subject areas are supported by communications and information management teams. Further detail is provided in Appendix G.

Stakeholders reported that there is an opportunity for the Institute to adopt a matrix structure. A matrix structure could support the Institute by:

- reducing siloes across the institute and allowing learnings and efficiencies to be shared across functions, thus building more depth in key data analysis skill sets
- supporting greater integration of analysis and reports, as staff in different subject areas will have greater oversight of data collection and analysis in different subject areas. For example, hospital safety results could be presented alongside hospital expenditure information
- upgrading media and communications functions in line with NHPA. The revised strategy stipulates the need to link media and communications to the Institute’s strategic direction and therefore capabilities will need to be developed in this area. Media and communications should be considered a core part of the project56 and the planning and be applied consistently throughout a project. While the AGILE method is a step in this direction, a revised structure will ensure the process is embedded across the lifecycle of projects

55 This consists of all FTE in the Hospitals, Resourcing and Classifications Group and the Population Health and Primary Care Unit
56 Currently digital and media communications and publishing are considered corporate services. See AIHW, AIHW Work Plan 2015-16, p25
• **moving corporate services to one Group**, rather than dispersed across two Groups (corporate services are currently dispersed across Business and Governance Group and Chief Information Officer Group)

• **removing duplications in functions between the Institute and NHPA**, specifically relating to publishing and digital communications and hospitals, population health and primary care.

A high level example of a matrix structure that could be applied to the Institute is provided in Figure 22.

Figure 22: High level matrix structure that could be applied to the Institute

There is an opportunity to share corporate services with DoH and other suitable agencies as appropriate.

Stakeholders noted that there will be duplication in corporate services between the Institute and NHPA when the organisations merge. Table 6 outlines the number of FTEs in each corporate service.

Table 6: Number of FTE in corporate services in the Institute and NHPA

<table>
<thead>
<tr>
<th>Corporate Service</th>
<th>The Institute (#FTE)</th>
<th>NHPA (#FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Unit</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td>Corporate Services</td>
<td>-</td>
<td>3.5</td>
</tr>
<tr>
<td>Financial Management</td>
<td>5</td>
<td>3.5</td>
</tr>
<tr>
<td>People and Facilities</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Governance</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Business Transformation</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Technology and Transformation</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>ICT Operations</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>52</strong></td>
<td><strong>11.8</strong></td>
</tr>
</tbody>
</table>

57 AIHW staff establishment data provided October 2015 and NHPA corporate structure provided October 2015
There is an opportunity to reduce the number of staff across these corporate services when the organisations are combined.

There is also an opportunity to share services with DoH and other suitable agencies. A benchmarking study conducted by the National Commission of Audit\(^{58}\) showed that the Institute’s corporate expenditure is 22% of its total expenditure. This is comparable to twelve similarly sized agencies, whose average corporate expenditure was 21%, as outlined in Figure 23.

Figure 23: Percentage of corporate services expenditure compared to total expenditure of agencies\(^{59}\)

The Institute is currently a part of a DoH shared services review being conducted by the Department of Finance. The Institute should actively explore the opportunity to share services with DoH or other suitable agencies to reduce duplication in services, reduce costs and streamline services.

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There is an opportunity to revise the Institute’s staffing levels.

Figure 24 highlights the structure of the Institute according to APS level. Nous’ analysis indicated that the Institute is very “top heavy”, with 48% of its staff being EL1 and above. NHPA currently has 73% of its staff at EL1 and above, meaning the combined organisation could potentially have 51% of its workforce at EL1 level and above.

Figure 24: Number of staff at the Institute and NHPA according to APS level

The Institute has the opportunity to revise its staffing levels in line with the revision of its structure. In that process, the Institute may also want to consider its Executive structure including the lack of an obvious deputy to the Director.

5.3.7 Information management

METeOR and Validata are important strategic assets of the Institute and NHIA creates a collaborative platform for data sharing.

The Institute houses METeOR, which is the only national data standard system. METeOR creates standards for the health, community services and housing assistance sectors. Through METeOR users can find, view and download over 2,600 data standards. Stakeholders reported that from a strategic point of view it is a fundamental asset, as it places the Institute at the beginning of the data development cycle.

60 AIHW, Staff establishment data, October 2015
61 METeOR is Australia’s registry of national metadata standards for the health, community services and housing sectors.
62 AIHW, Data governance – in Brief, 2014
Validata\textsuperscript{63} is the Institute’s online data receipt and validation product which enables data providers to check and validate the quality of their data submissions against a set of validation rules.\textsuperscript{64} Validata has allowed the Institute to become a vital data collection agency. It assists the Institute by ensuring data collected is ready to be shared and analysed.

Stakeholders reported that the National Health Information Agreement (NHIA) is the key agreement underpinning information management between states and territories and other health agencies. It provides the Institute with key functions, including receiving, cleansing and disseminating information and managing collected data.\textsuperscript{65} However, the NHIA stipulates that the owner of the information is the original collecting jurisdiction. As a result, access to data is “subject to any jurisdictional legislative requirements, ethical guidelines and practices and/or contracts to protect the privacy of any individual and/or organisation to which it may refer.”\textsuperscript{66} The Agreement provides the Institute with key functions and establishes avenues to collect and share data amongst key health players and contributors.

There are opportunities to upgrade the Institute’s systems and expand the Institute’s role in information management.

There are a number of opportunities to improve information management at the Institute. These include the:

- **upgrade of METeOR**: While the strengths of METeOR have been highlighted above, stakeholders also described METeOR as “clunky”, “antiquated” and “in need of updating.” A business case outlining the process to redevelop METeOR was written in April 2014 and it proposed that the redevelopment of METeOR, subject to funding, could be in place by October 2015.\textsuperscript{67} While this timeline has not been met, it is understood that the Institute is gaining support from AHMAC to redevelop METeOR. Accelerating the METeOR redevelopment will require identification of a suitable source of funding.

- **expansion of metadata standards into eHealth and welfare**: stakeholders reported that it would be valuable if the Institute extended its metadata standards into eHealth. It was also recognised that there was an opportunity to further expand its standards into the welfare sector.

- **expansion of Validata membership**: there are more than 500 organisations that use Validata and there are currently 34 data collections in production through Validata. There is an opportunity and appetite to expand its membership even further. It is understood that there are seven more data collections that are being on-boarded in the near future.\textsuperscript{68}

- **Implementation of access to MBS and PBS data**: details relating to access to MBS and PBS data are not finalised and further discussions with DoH are required. Yet there is an opportunity for the Institute to gain greater access to these additional data sets. The Institute will need to consider its readiness to use the data, such as who will be the internal data custodian.

- **identification of opportunities to learn from NHPA**: there are opportunities to learn from NHPA’s use of technology to accelerate and automate data analysis and report production. Some of these opportunities are outlined in Section 7.3.2.

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\textsuperscript{63} Validata is the Institute’s online data receipt and validation product designed to improve the quality and timeliness of data supplied by jurisdictions and non-government organisations.

\textsuperscript{64} AIHW, *Data governance – in Brief, 2014*

\textsuperscript{65} Cl.5.3 National Health Information Agreement, 30 September 2013

\textsuperscript{66} Schedule of data sharing in *National Health Information Agreement, 30 September 2013*

\textsuperscript{67} Little Oak Pty Ltd, *METeOR redevelopment – business case for external audience, April 2014*

• adoption of a leadership role in data collection: stakeholders emphasised the need for the Institute to play a greater leadership role in data collection, as enabled to do so through the NHIA. This role needs to be conducted while noting jurisdictions still own the data they provide.

5.3.8 Governance

The Institute’s governance is complex and its broad legislative functions allow it to respond to emerging opportunities.

In 2014-15, the Institute participated in over 100 national committees.

Figure 25 shows how these committees are distributed across the Institute’s Groups.

Figure 25: The Institute’s participation in national committees

At present, the Institute:

• is the parent body for 22 committees
• has the role of chair, secretariat or both for an additional 31 committees
• participates in an additional 13 international committees, 27 working groups, 18 inter-jurisdictional or Ministerial committees, and 46 advisory committees.

Clearly, the engagement of states and territories, as data providers, funders and partners, is critical to the ongoing work of the Institute. The Institute did acknowledge that the complexity of the current stakeholder environment and the governance mechanisms to engage jurisdictional stakeholders, do adversely impact on its ability to carry out national data governance and information priority setting.

The Board’s broad membership provides a platform to promote the work of the Institute.

Internal stakeholders reported that it is advantageous that the Board consists of so many different stakeholders, as it allows the Board to fulfil an advocacy role. It is a means through which the Institute can communicate developments and keep other departments abreast of key developments.

The legislation outlines the Institute’s broad functions that allow the Institute to be agile.

The functions of the Institute are outlined in Section 5 of the AIHW Act 1987 (Cth). Its functions are broadly defined, which allows the Institute to undertake a wide range of information and statistical activities across both health and welfare subjects. For example, the Institute was able to quickly respond to the Government’s request to establish MyHospitals due to the broad functions bestowed on the
Institute. The confidentiality requirements outlined in the Act\(^69\) also provide clear protections around release and reporting of identifiable information. The Institute’s Ethics Committee enables the Institute to provide timely access to unit record data under appropriate privacy protections.

**There is a great opportunity to revise both the makeup and role of the Board and to fill Executive vacancies.**

**There is a pressing need to change Board constituency to reflect required expertise.**

The Institute’s Board members are selected based on the agency or stakeholder group they represent, rather than the experience or skills they possess. This approach is different to similar health organisations, whose Board members are chosen based on the individual’s skills and knowledge, as outlined in Figure 26.

**Figure 26: Criteria used to select Board members of similar organisations and the number of Board members**

The *AIHW Act, 1987* (Cth) includes prescriptive detail relating to the terms of appointment, the appointment process and who each Board member must represent.\(^70\) There is an opportunity to change the way in which Board members are chosen, so that they are broadly selected based on their skills, knowledge and experience.\(^71\) The types of skillsets and experience that would be suitable on the Institute’s Board may include:

- experience and knowledge in the health sector, including hospitals, primary care, population health, mental health, diseases, disability and ageing
- experience and knowledge in indigenous health and welfare
- experience and knowledge in welfare, such as housing and homelessness

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69 S.29 Australian Institute of Health and Welfare Act 1987 (Cth)
70 See Division 2 of the *AIHW Act 1987* (Cth)
71 This review notes changes to how Board members are selected would require amendments to the existing legislation (*AIHW Act 1997*).
specialist expertise in big data analysis and infrastructure
specialist expertise in data linkage
specialist expertise in performance reporting.

The Institute should ensure that the Board reflects the range of users that the Institute services, including those from both the health and welfare sector. Revising the makeup of the Board could result in a reduction in Board numbers. Compared to other like organisations, the Institute’s Board consists of more members, which may result in inefficiencies (see Figure 26).

There is a need to urgently move to fill and stabilise both the Board’s current membership and Executive team vacancies.

There is a pending risk of instability in the Institute’s Board due to the large number of upcoming vacancies in membership. Of the fifteen members of the Institute’s Board:
- Eight expire in February 2016 or earlier
- Four are vacant
- One (Chair) expires in July 2016
- Two are continuing ex officio appointments.

There is a need for the Institute to urgently move to fill and stabilise its Board positions. Future stability could be ensured through extending the duration of Board appointments, including the Chair.

At the time of writing, the CEO and three additional Executive roles were also to be shortly vacated. Similarly, these roles will need to be urgently filled to ensure ongoing leadership for the Institute.

There is an opportunity and need to invest in re-establishing a relationship with DSS and ensure welfare requirements are considered in the strategic and policy direction of the Institute.

The relationship between the Institute and the welfare sector has been weakened for a number of reasons:
- There is no DSS representation on the Board: while the Act allows for DSS, state and territory housing departments and welfare consumer representation, the three welfare related member positions are vacant.
- The Community and Disability Services Ministerial Advisory Committee (CDSMAC) has been abolished: as a result, there is no equivalent to the AHMAC principal committee considering health information.
- DSS no longer plays a leading role in funding the Institute: as discussed in the funding section, the majority of Institute funding is from DoH.

Consequently, the welfare system, including DSS and state and territory departments, have less influence on the Institute compared to the health system. There is an immediate opportunity to re-appoint welfare Board members until the makeup of the Board is revised.

There is an opportunity to review the role of the Board and increase its strategic focus.

The Board’s role is to set the overall strategic direction of the Institute. Stakeholders reported that in practice, the role of the Board is ambiguous. While the Board has governance responsibilities under its legislation, in practice they act more like an advisory Board. Stakeholders also stated that the Board has tended to focus on operational issues.

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72 Australian Institute of Health and Welfare Act 1987 (Cth)
73 AIHW, Charter of Corporate Governance, (no date provided)
A review conducted in 2013 recommended that the Board devote a portion of each meeting to consideration of one or more strategic issues for the longer term future of the Institute.\footnote{ACIL Tasman, AIHW Board Review, June 2013} The Board reported that this has occurred. However it was evident that there remains an opportunity for the Board to carry out a stronger strategic role. The Board should invest in the Institute’s future capacity and long term decision making.

**There is a critical need for stronger and coherent engagement by governments with the Institute and its Board.**

As discussed in relation to the Institute’s funding model, a revitalization of the Board as a smaller, skills based and strategic governance body needs also to be complemented with more effective coordination and priority setting within government and among governments.

Within both DoH and DSS there needs to be fundamentally better coordination and a clear point of coordination with the Institute. More than that, from health jurisdictions and welfare jurisdictions each collectively, there needs to be a shared set of priorities, a strategic information strategy which creates a clear set of priorities to which the Institute can respond.

Within the wider Commonwealth government system also there is a growing interest in coordinated and strategic information strategy, one component of which will need to be a structured engagement of ABS and key central agencies with other information agencies in the Commonwealth system. One of those is the Institute.

*Therefore, the Review’s vision of Institute governance would extend beyond a reform to the makeup and practice of the Institute Board to parallel improvements within each of DoH and DSS, the establishment or better engagement of ministerial council advisory structures and evolution of the coordination of all Commonwealth information agencies.*
6 Recommendations

This section contains a detailed description of the recommendations for each key line of enquiry. Figure 27 then provides a high level timeframe for the implementation of the recommendations.

The Review concludes that:

**The Institute must undertake a major organisational transformation program to reinstate full stakeholder confidence and secure its future role as an indispensable, internationally leading information organisation in the health and welfare sector.**

Specifically, the organisational transformation program must ensure that the Institute effectively, and without disruption, continues the functions transferred from NHPA. The transformation must take into account the fundamental differences between the current work of the AIHW and that of the NHPA and the implications this will have for governance, data access, internal processes and external relationships.

We have identified the key elements to deliver the transformation in the following recommendations.
6.1 What opportunities exist to enhance the Institute’s role as a provider of whole-of-system health and welfare information, analysis and statistics?

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Detail</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>The Institute’s Board, in consultation with all its stakeholders, should establish a charter for the Institute’s enhanced international and national role and for the value it offers the nation.</td>
<td>Dept.</td>
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<tr>
<td></td>
<td>The charter should be a short, compelling statement that includes:</td>
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<td></td>
<td>• recognition of the rapidly changing information environment, the need for big data management and cross sector analytics capability at national, jurisdictional, regional and local level in both health and welfare systems</td>
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<td></td>
<td>• a continuing role as an independent, authoritative leader in national data standards and infrastructure, data linkage (as a Data Integration Authority), data custody and maintenance of the national record for both welfare and health</td>
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<td></td>
<td>• an enhanced role to drive innovation, change and systems reform in the health and welfare sector, which will require strategic agility, and the use of its trusted data custodian role to shape emerging trends towards virtual data, open data access and big data</td>
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<td></td>
<td>• a new role in performance reporting and performance information in both health and welfare, at jurisdictional and sub-jurisdictional levels and for individual institutions and significant providers</td>
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<td></td>
<td>• a national and international role, with key international information agencies in health and welfare, including WHO, Organisation for Economic Co-operation and Development (OECD), International Labour Organisation (ILO), Association of South East Asian nations (ASEAN), Educational Access Schemes (EAS) and others as decided.</td>
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<tr>
<td>R2</td>
<td>The Institute should provide Government, within one year, with a five year strategy to fulfil its Charter.</td>
<td>Dept.</td>
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<tr>
<td></td>
<td>The strategy should explicitly:</td>
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<tr>
<td></td>
<td>• embrace new technologies to support data linkage, geospatial analysis and leading edge presentional sharpness</td>
<td></td>
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<tr>
<td></td>
<td>• incorporate renegotiated collaborative working relationships and renewed services, including supporting others to do strategic analytics within health service organisations, and new alliances and partnerships with research and standards setting bodies in the health and welfare sectors</td>
<td></td>
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<tr>
<td></td>
<td>• address contemporary approaches to strategic communication – with a renewed relationship to client Ministers, health and welfare organisations and the general public</td>
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<td></td>
<td>• include objective measures of Institute performance.</td>
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<tr>
<td>Recommendation</td>
<td>Detail</td>
<td>Responsibility</td>
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<tr>
<td>R3</td>
<td>The Institute should re-launch itself to reflect a refreshed charter, strategy and communications approach. The re-launch should present the Institute as a modern, internationally-oriented organisation with a refreshed mandate and contemporary and innovative approaches to partnering with its stakeholders.</td>
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</table>
6.2 What business model (service and value delivery) will enable the Institute to deliver its future purpose and strategy?

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Detail</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>R4</td>
<td>The Institute should, within one year, conduct a full stocktake of its products and services, and the NHPA products and services it will acquire, to rationalise, modernise and digitise its product suite.</td>
<td>Dept. Inst. Comm. Jurisdictional involvement</td>
</tr>
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</table>

The stocktake should lead to a transparent streamlining of its product range away from the traditional published report format to more online and interactive data holdings. The wider range of product formats and delivery mechanisms should better meet the needs of current and future clients including for policy makers, planners, service organisations, clinicians, professionals and citizens.

The outcome of the stocktake should be a revised and prioritised forward work program that is focused on the priorities of the health and welfare sectors including primary care, mental health, patient experience and integration of welfare data (across health, housing, disability, children and families).

Suggested principles to underpin the Institute’s future approach to its work program should include the following:

- User segmented products are available in a diverse range of formats (e.g. in-depth research reports, regular but briefer targeted snapshots/‘in briefs’, interactive web-based infographics and maps, posters, customisable and downloadable slide packs, case studies, journal articles, newsletters and multimedia products (e.g. podcasts and videos)).
- The majority of products and services are based on timely data and information (e.g. through increased use of automated reporting).75.
- Products and services provide sub-jurisdictional analysis (e.g. regional, local and facility level analysis).
- Products and services provide geospatial and/or longitudinal analysis, where relevant.
- Data and information is linked within and across sectors (see also Recommendation 9 on data linkage).
- Products and services are client-focused (e.g. provide insights on the whole client/patient journey).
- Products and services better use administrative data (e.g. the Institute explores opportunities to collect more (relevant) administrative data and exploits the increased amounts of administrative data to inform its analysis).
- Products and services provide policy relevant analysis, particularly in priority areas identified by governments (e.g. analysis of ‘frequent flyers’, safety and quality, efficiency and effectiveness).

75 It will still be appropriate for some products to be based on older/historical data and information (e.g. reports that look at specific historical trends in the health or welfare sectors).
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<tr>
<th>Recommendation</th>
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<th>Responsibility</th>
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</thead>
<tbody>
<tr>
<td>R5</td>
<td>The Institute should continue to produce Australia’s health and Australia’s welfare reporting and continue the NHPA health system performance reporting conducted under the Performance Accountability Framework (pending the outcomes of the current review).</td>
<td>I</td>
</tr>
<tr>
<td>R6</td>
<td>The Institute should develop a new service offering that provides well organised data and structured training to clients. The data should be: • provided in a format that enables clients and consumers to manipulate, customise, blend with their own data sets and use to suit their own analytic purposes • de-identified, geo-coded (where relevant) and granular. The Institute should consult with clients (particularly jurisdictions) to develop a priority list of specific health and welfare data/information that should be provided as a product first. The Institute should develop structured training programs (e.g. in the form of online modules and/or face-to-face training) to build the capability of its clients to conduct their own data analysis and exploit maximum benefit from the Institute’s new service offering (e.g. well organised data as a product).</td>
<td>I</td>
</tr>
<tr>
<td>R7</td>
<td>The Commonwealth should work with states, territories and other stakeholders to modernise Australia’s health performance frameworks to support a whole-of-system approach to performance analysis, monitoring and reporting. Performance frameworks should be reviewed to ensure: • they do not result in an overlap in reporting requirements • that key gaps in reporting are addressed • that the overall approach to health reporting across the Commonwealth and for jurisdictions is optimally efficient and effective, especially in terms of duplicate sources of reporting and multiple reporting timeframes. DoH, via AHMAC, should then establish key responsibilities in reporting against the performance frameworks to ensure there is no duplication in reporting between organisations.</td>
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76 Since February 2015, the National Health Information Standards and Statistics Committee (NHISSC) have been planning to undertake a review of the NHPF. At a similar time, NHPA was planning to review the PAF. Given the potential overlap between these work items, NHISSC’s focus was on identifying overlaps between NHPA’s review of the PAF and AIHW’s review of the NHPF to avoid duplication of effort and burdening stakeholders. NHISSC also agreed NHPA and AIHW would consult on the two independent reviews. As at October 2015, the review processes were still underway.
## Recommendations

### R8

**The Commonwealth, with jurisdictions, should develop agreed roles and responsibilities for health and hospital classifications to remove duplication.**

Both IHPA and the Institute have functional capability through the relevant agreements to conduct health classifications. DoH should consult with both IHPA and the Institute to reach an agreement outlining which organisation is best placed to carry out health classifications, particularly relating to public hospitals classifications and ICD 11 work.

**Responsibility:**

| C |

### R9

**The Institute should identify, in consultation with jurisdictions, new and priority health and welfare data linkage projects to better inform public policy and service redesign.**

The Institute should consult with jurisdictions to identify a priority range of data linkage projects to address data siloes within and across national health and welfare data sets. These should include opportunities to enhance linkage of existing linked data sets and to develop new data linkage projects across priority data sets. Redevelopment of METeOR and data linkage standards for eHealth should support new data linkage opportunities.

**Potential data linkage projects include:**

- projects to link data across primary and acute health care settings and aged care to provide better opportunities for analysis and insights on the patient journey.
- projects to link data across welfare data sets to support more comprehensive analysis of and insights on client-centred care (e.g. across housing and child protection data sets).
- projects that link data sets across the health and welfare sectors to better inform the cross-sector analysis and provide insights on clients/patients who utilise services across both sectors (e.g. homelessness and drug and alcohol data sets).
- projects aimed at better linking a range of priority data sets across health, welfare and other relevant sectors (e.g. acute health care settings, justice, housing and mental health).
- projects that provide temporary data linkage services to clients to support specific, short-term initiatives.

**Responsibility:**

| I |

### R10

**The Commonwealth should implement a revised funding structure for the Institute, which facilitates a more strategic, long-term and flexible approach to its priorities and work program.**

The revised funding structure should be aimed at achieving a ratio of two thirds appropriated funding to one third fee-for-service funding. It should also ensure adequate provision for public good costs such as the upgrade of METeOR. Offsets should be taken from the range of DoH programs that have commissioned work from the Institute over the past five years. The offsets should be proportional to the value of work commissioned within the last two months of each of the last three financial years.

The revised funding structure should also take account of the transfer of NHPA functions to the Institute.

**Responsibility:**

| C |

### R11

**The Institute should develop a financial strategy, a published pricing policy and a process for prioritisation and signoff of projects.**

The Institute should develop a financial strategy that outlines a consistent, transparent and contemporary approach to its fee structure and approach to pricing its products and services. The Institute should also develop and publish a pricing policy, informed by the financial strategy, which more clearly outlines the fee structure to clients and consumers.

**Responsibility:**

<p>| I |</p>
<table>
<thead>
<tr>
<th>Recommendation</th>
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<tbody>
<tr>
<td>R12</td>
<td>The Institute should develop a process for determining the commissioning of contracted work that includes formal prioritisation and signoff by DoH, DSS and jurisdictions.</td>
<td></td>
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</tbody>
</table>
|                | As part of the development process of the new governance and coordination mechanism, DoH and DSS should:  
  - rationalise the number of funding agreements (contracts) between the Institute and DoH  
  - agree, together with the Institute, on the projects that should be included in core appropriated funding and develop a three-year agreed work program (to be reviewed based on annual appropriation)  
  - link the future funding model for the Institute to an agreed performance agreement. | D            |
6.3 What organisation design will most efficiently and effectively support the Institute's future purpose, strategy and business model?

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Detail</th>
<th>Responsibility</th>
<th>Jurisdictional involvement</th>
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<tbody>
<tr>
<td><strong>External alliances</strong></td>
<td></td>
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<tr>
<td>R13</td>
<td>The Institute should establish a multilateral collaboration arrangement with the ABS, ACSQHC, IHPA and the Productivity Commission for RoGS to eliminate duplication and drive opportunities for cooperation. The arrangement should clarify the respective roles and contributions of each organisation as well as key areas or points of joint interest and work to avoid duplication of effort.</td>
<td></td>
<td>Institute</td>
</tr>
</tbody>
</table>
| R14 | The Institute should prioritise its partnerships (current and future) and identify how key partnerships will be developed and maintained for strategic purposes. The development of the partnership plan should:  
  • consider increasing private sector and provider level partnerships  
  • review and possible rationalise the Institute’s existing Memoranda of Understanding  
  • look to implement a refreshed approach to working with the jurisdictions  
  • establish a means for evaluation of the Institute’s efficacy as a partner on a regular basis. | | Institute | ✓ |
| R15 | The Institute and the jurisdictions should define their respective roles and responsibilities in relation to the implementation of existing sub-jurisdictional performance reporting agreements. Assuming mandatory participation by all jurisdictions, the statement would focus on how parties will collaborate to implement performance reporting, including:  
  • respective responsibilities for collection and analysis  
  • data ownership, access, usage and publication  
  • data security, confidentiality and transparency  
  • agreement of measures to be reported and timeframes  
  • expectations regarding granularity of sub-jurisdictional data etc. Where there is a role for DoH and DSS, this should also be specified. | | Institute | ✓ |
<table>
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<tr>
<th>Recommendation</th>
<th>Detail</th>
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<tbody>
<tr>
<td><strong>Processes</strong></td>
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<tr>
<td>R16</td>
<td>The Institute should ensure business continuity of all processes related to the delivery of NHPA products and services, including performance reporting.</td>
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</table>
| R17            | The Institute, in collaboration with data providers, should ensure its data collection and linkage processes promote 'single provision, multiple use'. The Institute should enhance its data collection and linkage processes to ensure 'single provision multiple use'. To do this the Institute should:  
  - develop processes that make data cleansing a standard process at the point of data collection.  
  - build on Validata and providing greater support to States and Territories in preparing and cleansing of data, which will ensure that the data is sufficient for analysis at the point of collection.  
  - design data collection processes that consider if the data will be used for longitudinal analysis and apply pre-established process as appropriate.  
  - examine the Institute’s and NHPA’s data sets to understand the extent of duplication of usage and remove duplications  
  - embed a data quality framework into the Institute’s data collection processes to standardise the Institute’s approach to ensuring data quality standards.  
  - improve data linkage processes by developing data linkage pre-approvals. | I |
| R18            | The Institute should reform its report production process to allow for more timely release of products. The reform should incorporate:  
  - automation of currently manual steps to create tables, graphs and maps (learnings from NHPA)  
  - design of tailored publication processes to the degree of complexity and risk of the project. | I |
| R19            | The Institute should establish regular evaluations of its products and services including customer satisfaction measures. This should involve steps to:  
  - establish an evaluation framework and measures upfront during the design phase  
  - collect customer satisfaction and evaluation data through the delivery phase  
  - review and revise products at regular intervals in response to evaluation data. | I |
| R20            | The Institute should continue to reform its project management framework. This should aim to:  
  - ensure stronger governance and buy in to drive conformance  
  - revise the measures of success of projects to ensure that they are effectively measured  
  - build in engagement with communications and publications staff early in the project. | I |
<table>
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<tr>
<th>Recommendation</th>
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<tbody>
<tr>
<td><strong>Workforce</strong></td>
<td>The Institute should develop, attract, recruit and retain critical capabilities, especially in relation to ‘cutting edge’ data modelling and analysis, performance reporting, communications, and transformation.</td>
<td>T</td>
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<tr>
<td><strong>Culture</strong></td>
<td>The Institute should build on its internal culture, and that of NHPA, to develop clear values and behaviours for staff engagement outside the organisation.</td>
<td>I</td>
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<tr>
<td><strong>Office space</strong></td>
<td>DoH should determine the long term forward plan for office accommodation in Sydney, in consultation with the Institute and NHPA.</td>
<td>D</td>
</tr>
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</table>

77 DoH, *The approach for maintaining functions of the NHPA, 2015*
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Detail</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>R24</td>
<td>The Institute should revise its structure to accommodate the transfer of NHPA functions and be consistent with agreed design criteria.</td>
<td>Draft design criteria is provided below:</td>
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<tr>
<td></td>
<td></td>
<td><strong>Strategy</strong></td>
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<td></td>
<td>• The design should support the delivery of the strategic goals and allow the organisation to operate effectively</td>
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<td></td>
<td>• Does the design allow the Institute to operate effectively and efficiently as a contemporary, agile practice organisation?</td>
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<td></td>
<td></td>
<td><strong>Streamlined</strong></td>
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<td>• The design should eliminate duplication and allow for single provision, multiple use of data and decision making at the lowest level possible</td>
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<td>• Are functions carried out in a streamlined manner and is data disseminated for analysis across the Institute effectively?</td>
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<td></td>
<td></td>
<td><strong>People and capability</strong></td>
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<td></td>
<td>• The design should allow staff to use skillsets that support the strategy such as communication and digital skills, longitudinal analysis and geospatial mapping and develop through a career path</td>
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<td>• Does the design build career paths and strengthen the skillsets required in line with the APS Capabilities Framework?</td>
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<td></td>
<td><strong>Communication and collaboration</strong></td>
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<td></td>
<td>• The design should enable units to work together and effectively communicate to reduce silos and external collaboration with customers</td>
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<td>• Does the design facilitate collaboration between different units and Groups and allow staff to link communications to the Institute’s revised strategic direction?</td>
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<td><strong>Legislation and governance</strong></td>
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<td></td>
<td>• The design should support the AIHW to meet its governance, legislative and performance requirements, including the protection of confidential information of individual persons</td>
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<td></td>
<td>• Does the design allow the AIHW to effectively govern and meet its legislative requirements relating to performance and accountability?</td>
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<td></td>
<td><strong>Innovation</strong></td>
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<td></td>
<td>The design should not be restrictive and should support innovation and new business opportunities.</td>
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<td></td>
<td>Does the design facilitate the development of new strategies to adapt to change and support innovation?</td>
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<tr>
<td></td>
<td></td>
<td><strong>Streamlined</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Are functions carried out in a streamlined manner and is data disseminated for analysis across the Institute effectively?</td>
</tr>
<tr>
<td>R25</td>
<td>The Institute should actively look for opportunities to share corporate services with DoH and other agencies as appropriate.</td>
<td>The Institute, DoH and NHPA should work together to reduce duplication in corporate services and look to establish cost saving initiatives across the agencies.</td>
</tr>
<tr>
<td>R26</td>
<td>The Institute should accelerate the upgrade of METeOR.</td>
<td>The review and upgrade should include:</td>
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<tr>
<td></td>
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<td>• enhancement of the METeOR user experience</td>
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<td>• opportunities to increase the provision of data standards (particularly in the welfare sector and eHealth).</td>
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<tr>
<td>Recommendation</td>
<td>Detail</td>
<td>Responsibility</td>
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</table>
| **R27** | The Institute should expand membership of Validata to increase the quality of data collection in Australia.  
Validata is an effective system to cleanse and validate data and the Institute should focus on broadening the membership of Validata to ensure that as much data as possible is usage ready at the point of collection. | I |
| **R28** | The Institute should ensure continuity of NHPA information systems and data supply and additionally draw on NHPA’s expertise to accelerate and automate data analysis and report production.  
The Institute should collaborate with NHPA to leverage its systems and processes that allow for greater automation and streamlined systems and functions. | I |
| **R29** | In consultation with the Institute, DoH should implement full access to MBS and PBS data as soon as practical in order to identify trends and correlations across health and welfare data sets.  
DoH and the Institute should consider the necessary actions required to ensure the Institute is ready to use MBS and PBS data. | D |
| **Governance** | **R30** | DoH and DSS, through the relevant ministerial councils, should each establish strategic information planning and funding structures to better direct the Institute’s work program.  
The approach should:  
- ensure agreed plans for the utilisation of the Institute’s appropriated budget and support both strategic policy and technical engagement with the Institute over the course of each funding cycle  
- ensure the jurisdictional committee for health (NHISSC) has a stronger strategic connection to AHMAC  
- facilitate establishment of a jurisdictional advisory committee for the welfare sector. | D | ✓ |
<table>
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<tr>
<th>Recommendation</th>
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<th>Responsibility</th>
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<tbody>
<tr>
<td><strong>R31</strong></td>
<td>The Institute should rationalise and align all their advisory committees with the forward work program.</td>
<td><strong>I</strong></td>
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<td>The review should:</td>
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<td></td>
<td>• consider rationalising the number of committees, their membership (to include more clinical, professional, customer and client representation) and their area of focus. A charter should be established for each committee identifying their terms of reference, operation (including timeliness of meeting papers) and their term of operation</td>
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<td></td>
<td>• consider integration of the existing NHPA advisory arrangement</td>
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<td>• facilitate clear delineation of governance groups, inter-jurisdictional and ministerial groups, advisory groups and technical working groups</td>
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<td></td>
<td>• establish a review/evaluation mechanism for all advisory committees</td>
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<td></td>
<td>• establish clearer mechanisms for the effective and continual engagement of clinicians and professionals.</td>
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<tr>
<td><strong>R32</strong></td>
<td>The Commonwealth should urgently move to fill current and soon to be vacant Board positions to ensure leadership stability for the Institute.</td>
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<td></td>
<td>The Commonwealth should:</td>
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<td></td>
<td>• fill the four vacant Board positions</td>
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<td></td>
<td>• advertise and plan to fill the eight Board positions expiring by February 2016.</td>
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</tr>
<tr>
<td><strong>R33</strong></td>
<td>DoH and the Institute should urgently move to fill current and soon to be vacant Executive positions to ensure leadership stability for the Institute.</td>
<td><strong>D I</strong></td>
</tr>
<tr>
<td></td>
<td>DoH and the Institute should advertise and plan to fill the CEO and the three vacant Executive positions as soon as possible.</td>
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<tr>
<td><strong>R34</strong></td>
<td>The Commonwealth should develop an improved governance model for the Institute which reflects the new NHPA functions, a smaller, skills-based rather than representative Board, longer term Board appointments and a clearer definition of the role and responsibility of each Board member.</td>
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<td>This should include:</td>
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<td>• a skills-based rather than representative Board that is reflective of stakeholders of the Institute</td>
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<tr>
<td></td>
<td>• a clearer definition of the role and responsibility of the Board</td>
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<td></td>
<td>• longer Board appointments to ensure greater stability.</td>
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</tbody>
</table>
Recommendation | Detail | Responsibility
---|---|---
R35 | The Commonwealth should propose the necessary amendments to the *Australian Institute of Health and Welfare Act* 1987 (Cth) to implement the revised arrangements and functions. | The Institute should consider the changes required, particularly concerning the Constitution of the Institute at Section 8 of the *AIHW Act*. In particular, legislative changes will be required to reflect the new performance reporting functions, i.e. the Institute’s powers to obtain and publish jurisdictional data (potentially without the supplier’s permission). | C

Figure 27 provides a high level timeframe for the implementation of the recommendations.
The Institute must undertake a major organisational transformation program to reinstate full stakeholder confidence and secure its future role as an indispensable, leading international information organisation in the health and welfare sector.

**Stage 1: by June 2016**
- R1 Aspirational charter
- R2 Five year strategy
- R4 Full stocktake
- R5 Continued products
- R6 Health and hospital duplication
- R8 Revised funding
- R10 Financial strategy
- R11 Coordinating mechanisms for work program
- R15 Benchmarking agreement

**Stage 2: by June 2018**
- R3 Re-launch
- R6 New service offering
- R7 Health reporting duplication
- R9 Data linkage projects
- R12 Multilateral collaboration arrangement
- R13 NHPA process continuity
- R16 Data processes
- R17 Office space
- R18 Revised structure
- R20 PM framework
- R21 Workforce capability
- R22 Internal culture
- R26 METeOR
- R27 Valdata
- R28 NHPA systems and data supply
- R29 Advisory committees
- R30 Revised governance model
- R31 Legislative amendments

**Stage 3: From July 2018**
- Conduct post-implementation review

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**Figure 27: Proposed timeframes for implementation**
Appendix A  Detailed methodology

Appendix B contains the detailed methodology for the Review.

The Review was conducted between September 2015 and November 2015, as shown in Figure 28.

Figure 28: Project methodology

Key elements of the methodology are described below.

A.1  Key lines of enquiry

The methodology was designed to answer the three central questions or key lines of enquiry (KLE) for the Review:

1. What opportunities exist to enhance the Institute’s role as a provider of whole-of-system health and welfare information, analysis and statistics? (Future purpose and strategy)
2. What business model will enable the Institute to deliver its future purpose and strategy? (Service and value delivery)
3. What organisational design will most efficiently and effectively support the Institute’s future purpose, strategy and business model? (Organisation design and Governance)

The KLEs informed the document review, stakeholder consultation activities, and guided the synthesis of the key findings.

A.2  Document review and data analysis

Nous undertook a thorough document review of DoH and Institute’s documents and materials. Documents were reviewed with reference to the key questions detailed above. This provided a clear
structure through which relevant information and data for each of the key review questions and sub-
questions could be collated and analysed.

A.3 Literature review

Nous undertook a literature review to identify:

- trends in national health information capture and analysis
- strategies for maximising effectiveness, efficiency and utilisation of such information analysis to
  support national health performance and reform
- trends and examples of national architecture to support these functions.

The literature review looked at comparable organisations in Canada, New Zealand, Scotland and the
United States. Detailed findings of the literature review are provided in Appendix C.

A.4 Stakeholder consultation

Nous undertook a total of 38 interviews for this review (see Table 7 for all organisations involved). All
interviews were guided by an agreed stakeholder engagement plan, including established principles of
engagement. Interviews were structured in accordance with the key lines of enquiry. Interviewees were
provided with an interview guide and questions prior to the interview.

<table>
<thead>
<tr>
<th>#</th>
<th>Stakeholder organisation</th>
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<tbody>
<tr>
<td>1</td>
<td>DoH</td>
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<tr>
<td>2</td>
<td>DSS</td>
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<tr>
<td>3</td>
<td>The Institute</td>
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<tr>
<td>4</td>
<td>NHPA</td>
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<tr>
<td>5</td>
<td>ACSQHC</td>
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<td>6</td>
<td>IHPA</td>
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<tr>
<td>7</td>
<td>Queensland Births, Deaths and Marriages</td>
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<td>8</td>
<td>ABS</td>
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<tr>
<td>9</td>
<td>Jurisdictional health and welfare departments</td>
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<td>10</td>
<td>Canadian Institute of Health Information</td>
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<td>11</td>
<td>Department of Prime Minister and Cabinet</td>
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</table>
# Appendix B  Terms of reference

Table 8 outlines DoH’s Terms of Reference with Nous’ key lines of enquiry.

<table>
<thead>
<tr>
<th>Key lines of enquiry</th>
<th>Terms of Reference for the Project</th>
<th>Reference</th>
</tr>
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<tbody>
<tr>
<td><strong>What opportunities exist to enhance the Institute’s role as a provider of whole of system health and welfare information, analysis and statistics?</strong></td>
<td><strong>Conduct an analysis of the current structure, functions and processes of the Australian Institute of Health and Welfare (AIHW), including, but not limited to:</strong></td>
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<tr>
<td></td>
<td>1. Building on AIHW’s existing strengths, identify where the AIHW may be best placed to improve the value of national data assets and information infrastructure for health and welfare. This will include an analysis of the history of the AIHW, and the changes in scope, role and data analytics capacity within the AIHW and within the broader health sector</td>
<td>Section 7.1</td>
</tr>
<tr>
<td></td>
<td>2. Emerging trends in data acquisition, data integration and analysis including big data, and the AIHW’s recognised capability and capacity in these areas</td>
<td>Section 7.1 and Appendix C</td>
</tr>
<tr>
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<td>3. The ability of the AIHW to contribute to a benchmarking agenda through the optimisation of data</td>
<td>Section 7.1</td>
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<td>4. Consider any existing reviews or projects that may impact on the integrity of the analysis and associated findings and recommendation</td>
<td>Section 7.1</td>
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<td>5. A review of the literature, including:</td>
<td>Appendix C</td>
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<tr>
<td></td>
<td>a. Identifying trends in national health information capture and analysis;</td>
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<td></td>
<td>b. Identifying strategies for maximising effectiveness, efficiency and utilisation of such information analysis to support national health performance and reform;</td>
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<td></td>
<td>c. Trends and examples of national architecture to support these functions</td>
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<tr>
<td><strong>What business model (service and value delivery) will enable the Institute to deliver its future purpose and strategy?</strong></td>
<td>6. The AIHW’s current funding model, including providing recommendations of alternative models for critical national information infrastructure (such as the metadata standards repository METeOR which is funded annually from the AHMAC cost shared budget), that might provide certainty and opportunities to better respond to emerging strategic requirements</td>
<td>Section 7.2.3</td>
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<tr>
<td></td>
<td>7. The utility and frequency of the AIHW’s products (such as reports and data cubes) and determine whether these appropriately suit client needs and audiences</td>
<td>Section 7.2.1 and Appendix D</td>
</tr>
<tr>
<td></td>
<td>8. Duplication between the current and future work programme of the AIHW and the work programmes of other agencies, including but not limited to data collection, analysis and reporting</td>
<td>Section 7.2.2 and Appendix E</td>
</tr>
<tr>
<td><strong>What organisational design will most efficiently and effectively support the Institute’s future purpose, strategy and business model?</strong></td>
<td>9. Health and welfare data collections that could be enhanced by simplification of handling processes, consistent with the principle of ‘single provision, multiple use’</td>
<td>Section 5.3.2</td>
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<td></td>
<td>10. The functions of the AIHW with the greatest potential to be delivered more efficiently and effectively, and how this might occur</td>
<td>Section 5.3.6</td>
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<td></td>
<td>11. The AIHW’s governance arrangements, and the ability of these arrangements to cope with, and meet the needs of, a complex organisation that must meet the expectations of clients and key stakeholders</td>
<td>Section 5.3.8</td>
</tr>
</tbody>
</table>
Appendix C Literature review

Nous conducted this literature review was conducted to answer the question ‘What emerging trends are relevant to AIHW’s future role and organisation?’ Specifically, this review provides:

- a summary of what is working well in international jurisdictions related to:
  - national health information capture and analysis
  - strategies for maximising effectiveness, efficiency and utilisation of information analysis to support national health performance and reform
  - examples of national infrastructure to support national health information capture and analysis
- a description of emerging trends in data acquisition, data integration and analysis (including big data)
- a description of good practice examples of benchmarking being undertaken by international organisations similar to the Institute.

C.1 What appears to be working well in other jurisdictions?

This literature review examined a number of organisations similar to the AIHW that operate in international jurisdictions. The jurisdictions and associated organisations were selected based on recommendations from the Department of Health and other key stakeholders and Nous’ existing knowledge of good practice in the use of health data and analytics internationally. The organisations included in this literature review are outlined in Figure 29.

Figure 29: Jurisdictions and organisations included in the literature review

- Canada
  - Canadian Institute for Health Information
    - CIHI is an independent, not-for-profit organisation that plays a leadership role in the development and coordination of a common approach for health information in Canada.
- United States
  - Centers for Disease Control (CDC)
    - The CDC works to protect America from foreign and domestic health, safety and security threats.
  - The Commonwealth Fund
    - The Commonwealth Fund’s health system tracking team draws from an array of data sources to monitor such key performance metrics as health care access and quality, use and cost of services, health care outcomes, and population health.
  - National Institute of Health (NIH)
    - NIH’s seeks and applies knowledge about the nature and behaviour of living systems to enhance health, lengthen life, and reduce illness and disability.
  - United States Office of the Surgeon General
    - The Surgeon General provides Americans with information on how to improve their health and reduce the risk of illness and injury.
- Scotland
  - The Farr Institute
    - The Farr Institute delivers high-quality, cutting-edge research linking electronic health data with other forms of research and routinely collected data and builds capacity in health informatics research.
  - Information Services Division (ISD), National Health Service Scotland
    - ISD provides health information and intelligence and statistical services and advice to support the NHS in progressing quality improvement in health and care and facilitates robust planning and decision making.
  - Scotland Public Health Observatory (ScotPHO)
    - ScotPHO provides a picture of Scottish population health and factors that affect it. It contributes to collection and use of routine data on health, risk factors, behaviours and health determinants to determine future public health information needs.
- New Zealand
  - Ministry of Health
    - The NZ Ministry of Health provides key infrastructure support to the health and disability system through the provision of national information systems.
This section provides a summary of trends across these organisations in: national health information capture and analysis; strategies for maximising utilisation of analysis; and national infrastructure to support national information capture and analysis.

C.1.1 What are the trends in national health information capture and analysis?

Canada
CIHI aims to examine the effectiveness and efficiency of the Canadian health care system, connect health system performance measurement to health outcomes and population health, and evaluate the impact of changes in policies, practices and processes. CIHI’s products from 2015-2017 are guided by the Analytical Plan, which outlines CIHI’s data collection requirements to support planned products across six key categories: access to care; cancer; efficiency; international comparisons; population health; and quality of care and patient safety. Across these six categories, CIHI is focused on improving the comprehensiveness and completeness of data, improving data integration and enhancing the patient-centred focus. The approach to support this includes capturing new and emerging data sources (e.g. electronic medical records). The Analytical Plan also guides the planning of analyses to ensure new products/services are aligned with strategic direction and priorities, relevant to diverse stakeholder needs and transparent to partners to avoid duplication.

Scotland
The Scottish Public Health Observatory (ScotPHO) is a collaboration co-led by Information Services Division (ISD) Scotland and NHS Health Scotland. It aims to contribute to the collection and use of health data and health determinants data to provide a picture of the health of the Scottish population and the factors that affect it. Key national data schemes in use by ScotPHO include primary care data (collected by ISD Scotland) including Quality and Outcomes Framework, secondary data (collected by ISD Scotland) including hospital general and acute inpatients and day cases, maternity inpatient and day cases and cancer registrations, and mortality data collected by National Records Scotland. The Innovative Healthcare Delivery Programme (IHDP), based at the Farr Institute in Scotland, aims to translate cutting-edge research into measureable health and wealth improvements for patients and populations. The IHDP initial focus is on cancer data, but will eventually extend to other clinical areas on a rolling basis (e.g. rare diseases and coronary heart disease). The IHDP intends to deliver rapid analyses that deliver value to patients, healthcare professionals and the wider NHS through broad collaboration across the United Kingdom (UK) government, funding bodies, academia, international health systems (e.g. Intermountain) and industry.

United States
The CDC collects and analyses health data to determine how specific health events affect specific populations. Its previous products have resulted in the roll-out of effective interventions that protected the population from public health threats and lowered health care costs. The CDC’s recent focus areas for health information capture and analyses included: speeding up processing of national mortality data; releasing new data on physician supply and implementation of electronic health records systems; releasing the first data from the national survey on youth fitness and releasing 2014 data on the impact of the Affordable Care Act on health insurance coverage.

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79 CIHI, CIHI’s Provisional Analytical Plan 2015-17, 2015
The US Surgeon General provides the American population with the best scientific information and analysis on how to improve their health and reduce their risk of injury and illness\(^8^3\). Its current analyses focus on delivering on its strategic priorities, which include tobacco and drug free living, mental and emotional wellbeing, health eating, active living and prevention.

**Finland**

The Finnish National Institute for Health and Welfare (THL) conducts an annual survey which obtains information about changes in health and health behaviour among the working age population. This survey has been conducted since 1978 and all results are comparable, allowing for monitoring of short and long term changes. Recently this data collection method was integrated into the Regional Health and Wellbeing Study, which provides municipalities with necessary prerequisites to monitor their residents’ health and wellbeing. Precise information on residents’ health and wellbeing makes it easier to plan services in the area and evaluate the influence of health promotion actions.

**C.1.2 What are successful strategies for maximising effectiveness, efficiency and utilisation of information analysis to support national health performance and reform?**

**Canada**

CIHI has implemented a range of strategic and specific tools aimed at increasing the use and understanding of its data\(^8^4\). These include:

- Increasing the emphasis on matching products and services to the needs of customers (e.g. products focused on supporting population health and health system decision making)
- Providing more timely information
- Providing analyses that suit the local context and better meets the needs of stakeholders (e.g. analyses that show the appropriateness of care and links between health services and health outcomes)
- Producing analyses that focus on health system priorities such as efficiency, equity, patient safety, primary care and frequent users
- Increasing use of linked data and emerging data sources (e.g. physician level, medication, cost and patient experience data)
- Increasing use of interactive web tools (e.g. interactive maps to assess local health system performance).

**Scotland**

The Farr Institute in Scotland has implemented a range of methods to better communicate with different audiences about its products and service offering. These include undertaking improvements to the Farr Institute website, presenting at over 140 events in the UK and internationally about its work, hosting dedicated Farr Institute events and producing regular newsletters to provide updates on current work\(^8^5\).

The Farr Institute has also recruited Patient and Public Engagement Coordinators to improve engagement between patients, the public, clinicians and researchers.

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\(^8^5\) The Farr Institute, *Annual Report 2013-14 summary*, 2015
Finland

The Finnish National Institute for Health and Welfare (THL) produces multiple interactive tools that support the development of health and welfare. For example, TEAviisari is an online benchmarking system that depicts municipalities’ activity in promoting their inhabitants’ health. The service supports the planning and management of municipal and regional health promotion. The Human Impact Assessment (HuIA) is a tool for anticipating the effect of a programme, a project or a decision on human health and welfare. The ITHACA toolkit has been developed to monitor human rights and health care in mental health and social care institutions.

C.1.3 What are the trends and examples of national architecture to support these functions?

This review examined the proportion of core/appropriated funding and external/fee-for-service funding of selected international organisations (i.e. those for which funding information was available and most relevant for comparison purposes with the AIHW). Based on 2013-14 data, CIHI received 78% of its total revenue from core/appropriated funding and 22% from external/fee-for-service sources. Similarly, the New Zealand MoH received 94% of its total revenue from core/appropriated funding and 6% from external/fee-for-service sources.

C.2 What are the emerging trends in data acquisition, data integration and analysis (including big data)?

Data acquisition

New data streams (both structured and unstructured) are emerging, including personal fitness devices, social media, genetics and genomics. Many health information systems and organisations internationally are adapting to leverage the benefits from acquiring new and emerging data sources and improving the acquisition of existing data in existing data sets.

In Canada, CIHI is focussing the acquisition of new data in priority areas (e.g. patient experience in acute care and patient reported outcome measures, and mental health and addiction data and the implementation of strategies aimed at addressing gaps in data and information in priority areas. For example, CIHI has rolled out a data submission offering to community-based clinics that promotes the use of CIHI data content standards embedded in electronic health records. CIHI plans to launch a patient experience survey holding for acute care and explore the potential to collect patient-reported outcome measures. CIHI will also collect more comprehensive information on Canada’s physicians (e.g. patient-level and physician-level billing data, data about physicians on alternate payment plans), health care financing/funding (e.g. in the long-term and home care sectors and for health human resources) and population-level pharmaceutical data and reporting.

In New Zealand, the MoH is leading internationally with the implementation of an electronic health record for all individuals, which will contribute to more efficient and comprehensive data acquisition. The electronic health records will be able to be accessed across a range of settings including primary care, emergency department care and by patients themselves.

86 CIHI. Annual Report 2013-14, 2014
89 CIHI. Business Plan 2015 to 2018, 2015
In Scotland, the Farr Institute has recently acquired new national health and education data sets including the national prescribing data base, extended education attainment and attendance data and microbiology data (blood and urine cultures).

Data integration
In Canada, CIHI is prioritising better linking data within health and across relevant sectors to report on pathways of care. This includes supporting the development of common standards and on grouping methodologies. CIHI plans to continue work to acquire Vital Statistics death data, and expand mental health and addiction data.

In New Zealand, integrated information technology systems between hospitals, general practices, pharmacies and other community-based facilities support clinical integration and enable information sharing across and between regions. Access to linked and up-to-date health information has increased patient safety, reduced the need for repeat tests, saved time for clinicians and patients and contributed to savings due to reduced acute admissions and readmissions. The MoH is implement new technology systems that will support multidisciplinary care, including shared care plans.

In Scotland, the ISD-linked database contains information on records for acute specialty day cases and inpatient hospital discharges, cancer registrations, death registrations, and mental health admissions. Records are linked at an individual patient level. The database is used to look at patient pathways and follow-up (such as readmission to hospital and survival) and co-morbidities and relationships between diseases.

Data analytics
Some international health systems, organisations and providers are at the forefront of integrating analytics into decision making. At a system level, the NHS in the UK is leveraging analytics to improve system performance and drive innovation. In response to financial constraints and increased demand, the NHS has committed to better using data and technology to improve health care delivery (e.g. through unique patient identifiers, data integration, and clinical support systems). For example, cardiac surgeons in the UK have shared data on individual outcomes since 2005. Recent analysis has confirmed real-time record-sharing can reduce care costs, improve safety and halve treatment waiting times (e.g. mortality rates in some procedures have fallen by a third and there are around 1,000 fewer avoidable deaths each year).

The Farr Institute in Scotland is connecting rich amounts of data with specialists who can analyse and interpret it to inform decision making.

At a clinical level, hospitals and health care providers are increasingly realising the benefits of increased use of analytics. Kaiser Permanente, Intermountain Health Care, Toronto Hospital for Sick Children and the Ottawa Hospital are examples of health care providers that have used best-practice deployment of real-time data and clinician support tools to provide safer, more efficient care.

The increased amount of ‘big data’ in the health sector presents huge opportunities for health systems that are equipped to exploit it. Potential applications of big data analysis in healthcare include: (1) using advanced analytics for patient profiles to identify individuals who would benefit from preventative care or lifestyle changes; (2) statistical tools to better match treatments to individual patients; (3) analyse disease patterns to improve public health surveillance, response and prevention; (4) more efficient and

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91 CIHI. Canadian Institute for Health Information: 2012 to 2017 Strategic Plan. 2015
92 CIHI. Business Plan 2015 to 2018. 2015
effective genomic analysis; (5) capture and analyse in real-time large volumes of data from in-hospital and in-home devices.\(^{96}\)

**C.3 What best practices in performance reporting should the Institute consider?**

**Canada**

CIHI undertakes benchmarking to provide performance comparisons at an international, national, jurisdictional and sub-jurisdictional (down to facility) level. It provides interactive benchmarking data to provinces, territories, regions and facilities against national averages on its website. CIHI has developed an online tool that shows trends for 45 health system and health care indicators. The tool is available in two formats: one for the public and a more detailed tool for health system managers. Using the tool, the public and health system managers can assess the performance of more than 600 hospitals Canada-wide.\(^ {97}\) CIHI also produces international benchmarking reports (e.g. benchmarking aspects of Canada’s health system against other comparative countries).\(^ {98}\)

**New Zealand**

The New Zealand MoH public website provides benchmarking data for identified health system targets (e.g. shorter stays in ED, improved access to elective surgery, faster cancer treatment, and better help for smokers to quit, more hear and diabetes checks). The public can view how District Health Boards and primary health organisations are performing against each target. Performance against the targets is assessed and reported four times a year. The six key health targets are reviewed annually to ensure they align with Government priorities.\(^ {99}\) The source data is presented in the form of an interactive excel spreadsheet. Comparative ranking results are available by health target area, including by ethnicity for some targets, and/or by District Health Board. The source data also includes a time series of national performance against each target and graphs of regional performance against the health targets.

**Scotland**

ISD Scotland manages at least two benchmarking services. National Services Scotland Discovery is a browser-based system that contains indicators linked to the overall strategic plan’s priorities (e.g. Efficient, Safe, Timely, Person Centred, Effective and Equitable). Authorised users (e.g. NHS Scotland Boards) can determine their performance against specific criteria compared to their peers (English and Scottish) and identify areas for driving improvement. It also facilitates the identification of areas where deployment of resources could be targeted more effectively to better address local populations’ health and care needs.\(^ {100}\) NHS Performs is a website that brings together a range of information on how hospitals and NHS Boards within NHS Scotland are performing.\(^ {101}\) It compares 30 hospitals in Scotland which have an emergency department against their peers. Comparative indicators include emergency department performance, hospital waiting times, number of cancelled operations, health care associated infections, delayed discharges, number of hospital beds, and hospital deaths.

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\(^{101}\) Ibid.
United States

The NIH Office of Quality Management (OQM) identifies and publishes best practices in public and private sector services through its public website. OQM can also facilitate benchmarking studies for internal NIH divisions pursuing their goal of providing excellent services to their customers. Through sharing with other organizations it seeks to identify and incorporate practices that will contribute to better performance. The NIH uses benchmarking to forecast industry trends, discover emerging technologies, simulate strategic planning, enhance goal setting, to maximise award winning potential, comply with Executive Orders. The NIH undertakes different types of benchmarking including internal, competitive (direct competitor-to-competitor comparison), functional (comparison to similar or identical practices) and generic benchmarking (broadly conceptualises unrelated business process/functions). The NIH has published multiple reports relating to benchmarking (e.g. performance benchmarks for screening mammography, benchmarking of urinary tract infection rates, and benchmarking patient satisfaction).

The Commonwealth Fund produces online ‘health system score cards’ that provide performance benchmarking and improvement targets at a national, state and community-level. Score cards are produced across a range of indicators including on state-level health system performance, local-level health system performance and health system performance for specific populations (e.g. low income populations). The Commonwealth Fund also produces interactives and data that customers, clients and the public can use to compare states, regions and facilities through the Commonwealth Fund website.

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Appendix D  The Institute’s current product and service suite

This document provides detailed on the products and services provided by the Institute in 2015-16. The Institute’s product and service offering included:

- research and publication of health and welfare reports
- program and/or policy reviews, including impact analysis and modelling
- national standard and/or indicator development
- management of disease registers and information clearinghouses
- evidence-building to inform policy development
- data cleansing, customisation and storage
- data linkage, including the provision of access to data sets and management of technical data linkage processes.

Current product offering

In 2014-15 the Institute produced 249 outputs, which included products (print and web-based), journal articles and conference presentations and papers (see Figure 30). Of the 179 products produced, 84% (n=149) were print or print-ready products, whilst only 17% were web-based (e.g. dynamic displays and web snapshots).

Figure 30: The Institute’s outputs, 2014-15

The Institute has begun exploring additional formats and mechanisms for providing and welfare information, including mobile apps and social media. In 2014-15, the Institute released three free mobile apps: OzHealth, OzWelfare and Indigenous Health and Welfare Statistics. The Institute launched a twitter account in 2009 as a new mechanism of communicating its products and services with stakeholders, clients and the broader community.

104 Unless otherwise referenced, the information in this appendix is based on internal data provided by the Institute in October 2015 for the purposes of this review.
105 Outputs included products (print, print-ready and web-based), journal articles by AIHW staff and AIHW collaborating centres and conference paper and presentations by AIHW staff and AIHW collaborating centres.
106 Based on 2015-16 data provided by the Institute in October 2015.
The Institute’s products covered twenty-two separate health and welfare-related subject areas. The top five most common subject areas products focused on were Aboriginal and Torres Strait Islander health and welfare, youth justice, population health, health and welfare services and care and children (as summarised in Figure 31).

The Health Group produced a number of additional publications and products not included in the Institute-wide quoted statistic in Figure 31 (due to differences in definitions). The additional publications included reports, web snapshots, working papers, flagship reports, fact sheets and unpublished reports/papers for DoH. The Health Group’s additional products focused on a range of subject areas including burden of disease, cancers, cardiovascular disease, diabetes and chronic kidney disease, public health and population health.

Core service offerings
The Institute provided a number of core services in managing and providing national health and welfare information to consumers. Its core services included:

- **the development of specialised health and welfare standards, classifications and indicators.** The Institute typically consulted with the ABS in development of these standards, classifications and indicators. One of the main methods the Institute used to promote national data standards and consistency is through its ownership and management of METeOR\(^\text{108}\). The Institute used METeOR to manage national health, community services and housing assistance metadata items and standards.

- **the management and maintenance of national data collections.** The Institute managed 85 data collections (based on 2014-15 data). The Housing and Specialised Services Group managed a third off all data collections (27 data collections), followed by the Hospitals, Resourcing and Classifications Group, which managed approximately one quarter (22 data collections). The Institute held 10 of the 74 ABS essential statistical sets for Australia, covering housing, homelessness, perinatal health, disability, cancer, hospitals and hospital activity, alcohol and other drugs and mortality data. Two of the largest data sets the Institute maintained were the National Death Index and the Australian Cancer Database.

- **the provision of data linkage services.** The Institute has and continues to assist researchers and governments through its role as an accredited Data Integration Services Centre. It assists can assist clients with the establish the scope of data linkage projects, navigate the ethics approval

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\(^{107}\) Based on 2015-16 data provided by the Institute

\(^{108}\) METeOR is Australia’s registry of national metadata standards for the health, community services and housing assistance sectors. It was developed by the Institute and launched in 2005.
process, negotiate access to data sets, manage/advise on the technical processes to safely and securely link complex data sets and securely store data. It is one of only three agencies in Australia accredited to link sensitive Commonwealth data sets, meaning it meets stringent criteria for data linkage work.\textsuperscript{109} A selection of recent data linkage projects that the Institute has conducted is provided in Figure 32.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure32.png}
\caption{Example of the Institute’s recent data collection projects}
\end{figure}

\textbf{The Institute’s recent data linkage projects}

- The linkage of \textit{residential aged care data sets and hospital data sets} to reveal new info about transitions between the two types of services for people who have had aged care assessments.
- The linkage of \textit{child protection, juvenile justice and homelessness data} to explore patterns of behaviour and service use.
- The assessment of the effectiveness of the \textit{cervical cancer vaccine} in Victoria using data linkage techniques.

\textsuperscript{109} The Institute, ABS and Australian Institute of Family studies are the three accredited Commonwealth Data Integrating Authorities. The three organisations meet stringent criteria for data linkage work covering project governance, capability, data management, security and the protection of privacy and confidentiality (AIHW 2015 Corporate Plan).
Appendix E  Duplication between the Institute and other government entities

This document provides detailed information on areas of duplication between the Institute’s work program and the work programs of government entities working in the health and welfare sector.

The areas of duplication outlined in Table 9 were identified through stakeholder interviews, supplemented where necessary by a review of relevant documentation (sourced either from the organisation (e.g. work programs, corporate plans) or from publically available information on organisations’ websites.

Table 9: Detailed description of areas of duplication between the work program of the Institute and selected other organisations

<table>
<thead>
<tr>
<th>Government organisation/agency</th>
<th>Degree of duplication</th>
<th>Area of duplication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Bureau of Statistics (ABS)</td>
<td>Some duplication</td>
<td>• There is some overlap caused by the convergence of interests between the ABS and the Institute, with the ABS more interested these days in administrative and metadata for example. The Institute does still focus exclusively on analysis of health and welfare information. The Institute also does some surveys which can overlap with ABS surveys.</td>
</tr>
<tr>
<td>Australian Commission on Quality and Safety in Health Care (ACQSHC)</td>
<td>No duplication</td>
<td>• Stakeholders reported the Commission’s planning process purposefully ensured there is no duplication in reporting.</td>
</tr>
<tr>
<td>Australian Institute of Criminology (AIC)</td>
<td>Minimal duplication</td>
<td>• Based on a review of a small sample of publically available AIC reports, there appears to be minimal duplication in reporting. Whilst some AIC reports referenced the Institutes data (e.g. child protection and national opioid pharmacotherapy statistics, the focus of the reports were different to the Institutes (i.e. much more targeted and predominantly more relevant to the justice sector).</td>
</tr>
<tr>
<td>Australian Institute of Family Studies (AIFS)</td>
<td>Minimal duplication</td>
<td>• There is minimal duplication between the AIFS’ research area and the Institute (based on a review of publically available AIFS reports). AIFS referenced AIHW data sets as well as conducting their own research for their publications.</td>
</tr>
</tbody>
</table>

## Government organisation/agency | Degree of duplication | Area of duplication
--- | --- | ---
Department of Health (DoH) | Minimal duplication | There is potential for duplication although little evidence of the Department undertaking the kind of work in areas of mutual interest. Based on a review of relevant documentation, the institute and are both undertaking work across a number of areas, but the type and complexity of analysis differs. For example, common work areas include:

- **Cancer screening**: DoH is establishing a new cancer screening registry for cervical cancer. The Institute is responsible for linking three existing cancer registries and monitoring cervical cancer screening programs.

- **Mental health**: DoH is developing and implementing options for policy and programme changes following the conclusion of the National Mental Health Commission’s (NHMC) Review of Mental Health Programmes and Services. The Institute provides the National Mental Health Commission with mental health data processing and analysis capability, including on data development activities on mental health and suicide prevention related care data advice.

- **International health**: DoH is developing a new International Health Strategy that will outline its goals for engagement on global health issues and health-related aspects of Australia’s trade and investment policy. The Institute participates in international health-related work such as supplying data for Organisation for Economic Cooperation and Development (OECD) and World Health Organisation data requests and reviews of methodology and indicators for OECD health care related indicators.

Independent Hospital Pricing Authority | Some duplication | Stakeholders reported some duplication between reporting of IHPA and the Institute. Reported duplication included on hospitals classifications and hospital reporting data (e.g. IHPA collected the same hospital reporting data as the Institute as the timeframe the Institute releases the data in did not meet IHPA’s needs).

Based on a review of relevant documentation and in support of stakeholder comments, the legislation implies potential overlap in classifications functions of the Institute and IHPA. Section 5 of the AIHW Act (*AIHW Act 1997*) states the Institute develops ‘specialised statistical standards and classifications relevant to health and health services’. Section B3a of the Health Reform Agreement indicates IHPA develops and specifies the ‘national classifications to be used to classify activity in public hospitals for the purposes of activity based funding’.

National Health Performance Authority | Significant duplication | Stakeholder interviews and the document review indicated duplication between the Institute and NHPA on:

- **data collection usage**. The Institute used fifty-four data collections. Of these, 15 were also in use by NHPA (see Table 10).

- **reporting against the Performance Accountability Framework (PAF)**. Stakeholders indicated potential overlap in hospital performance reporting on elective surgery wait times, healthcare associated *Staphylococcus A* infections and emergency department data.

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There appears to be some duplication between the Institute and the Productivity Commission’s Report on Government Services (ROGS), particularly in relation to childcare, health, community services and housing and homelessness. Jurisdictional stakeholders indicated they report the same welfare data to both the Institute and the Productivity Commission. Some stakeholders also indicated ROGS reports the same data/information as the Institute, but they referred to ROGS rather than the Institute as the data was in a more suitable format (e.g. downloadable Excel documents).

The areas of duplication between NHPA and the Institute were particular significant, given the transfer of NHPA functions to the Institute. Stakeholders cited the critical importance of fully integrating the entire NHPA work program into the Institute (rather than continuing to operate as two separate work streams). In particular, stakeholders noted duplication between the organisations due to:

- **the overlap in data set usage.** The Institute used fifty-four data collections\(^{117}\). Of these, 15 were also in use by NHPA (see Table 10).

- **the overlap in the Institute and NHPA’s reporting against the PAF.**\(^{118}\) Nous review of relevant documentation revealed significant overlap between the Institute’s and NHPA’s reporting against PAF indicators (see Figure 33 overleaf).

### Table 10: Data collection usage, the Institute and NHPA\(^{119}\)

<table>
<thead>
<tr>
<th>Duplication in use</th>
<th>Data collection</th>
</tr>
</thead>
</table>
| Data collections used by the Institute and NHPA | - Mental Health Establishments National MDS  
- Australian Cancer Database  
- BreastScreen Australia Database  
- National Cervical Cancer Screening Database  
- National Bowel Cancer Screening Database  
- National Diabetes Register  
- National Public Hospital Establishments Database (including Local Hospital Networks)  
- National Elective Surgery Waiting Times Data Collections (Removals and Census)  
- National Non-admitted Patient Emergency Department Care Database  
- National Emergency Access Target Database (NEAT)  
- National Elective Surgery Target Database (NEST)  
- Hand Hygiene Audit Data Collection |
| Data collections used by the Institute only | - Juvenile Justice MDS Collection  
- National prisoner Health Data Collection  
- Adoptions Australia Data Collection  
- Intensive Family Support Services Data Collection  
- Child Protection National Minimum Data Set Collection |

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\(^{118}\) The NHPF was developed in 2001 and was designed to support comparisons of Australia’s performance internationally. It is an enduring framework and not linked to the health reform agenda nor designed to support performance assessment relating to a specific policy agenda. The PAF was developed in 2011 and was designed to support improved local level performance assessment to contribute towards the achievement of these objectives.
<table>
<thead>
<tr>
<th>Duplication in use</th>
<th>Data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disability Services National Minimum Data Set Collection</td>
</tr>
<tr>
<td></td>
<td>Admitted Patient Mental Health Care National MDS</td>
</tr>
<tr>
<td></td>
<td>Residential Mental Health Care National MDS Collection</td>
</tr>
<tr>
<td></td>
<td>Palliative Care Performance Indicators Data Collection</td>
</tr>
<tr>
<td></td>
<td>AIHW National Mortality Database</td>
</tr>
<tr>
<td></td>
<td>Adult Vaccination Survey Data Collection (legacy datasets)</td>
</tr>
<tr>
<td></td>
<td>Pandemic Vaccination Survey Data Collection</td>
</tr>
<tr>
<td></td>
<td>Chronic Disease Indicators Database (legacy collection)</td>
</tr>
<tr>
<td></td>
<td>Database on sources of anthropometric, alcohol and tobacco data (legacy collection)</td>
</tr>
<tr>
<td></td>
<td>Bettering the Evaluation and Care of Health (BEACH) survey</td>
</tr>
<tr>
<td></td>
<td>Australian Infant Feeding Survey</td>
</tr>
<tr>
<td></td>
<td>Risk Factor Prevalence Surveys</td>
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<tr>
<td></td>
<td>Active Australia Surveys</td>
</tr>
<tr>
<td></td>
<td>National Survey of Blood Lead Concentration in Pre-School Children (legacy datasets)</td>
</tr>
<tr>
<td></td>
<td>Australian Spinal Cord Injury Register</td>
</tr>
<tr>
<td></td>
<td>National Hospital Morbidity Database</td>
</tr>
<tr>
<td></td>
<td>National Outpatient Care Database</td>
</tr>
</tbody>
</table>

Figure 33: Duplication in reporting against the PAF indicators between the Institute and NHPA

![Figure 33](image)

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## Appendix F  The Institute’s pricing model

This document provides detailed information on the Institute’s current pricing model for calculating its fees for products and services. Table 11 provides a summary of the components of the current pricing model.

### Table 11: The Institute’s current pricing structure (for products and services)

<table>
<thead>
<tr>
<th>Component of price</th>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct costs incurred by Groups/Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Direct salary costs</td>
<td>Salary costs</td>
<td>Based on classification of staff $^{122}$</td>
</tr>
<tr>
<td>2. Costs linked to salary</td>
<td>• Superannuation</td>
<td>17% of direct salary</td>
</tr>
<tr>
<td></td>
<td>• Long service leave</td>
<td>2.5% of direct salary costs</td>
</tr>
<tr>
<td></td>
<td>• Workers compensation</td>
<td>1.2% of direct salary costs</td>
</tr>
<tr>
<td></td>
<td>• Staff development</td>
<td>1% of direct salary costs</td>
</tr>
<tr>
<td>3. Project specific costs</td>
<td>• Committee and subcommittee costs (including travel, allowances and meeting expenses)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Project travel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Publications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Launch costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Publicity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Non-standard IT costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consumables and other (legal, library materials)</td>
<td></td>
</tr>
<tr>
<td>Indirect costs incurred by corporate areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Corporate overheads</td>
<td>Corporate salary costs</td>
<td>25% of direct salary costs</td>
</tr>
<tr>
<td></td>
<td>Corporate non-salary costs</td>
<td>Set amount per direct FTE depending on whether it is AIHW based or DoH based</td>
</tr>
<tr>
<td>5. Senior Executive management fee</td>
<td>Senior executive oversight and administration</td>
<td>7.5% of total direct and indirect costs</td>
</tr>
<tr>
<td>6. Corporate costs</td>
<td>• Library services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Computing services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Finance and accounting expenses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Property expenses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Office services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Staff related expenses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pay roll expenses</td>
<td></td>
</tr>
</tbody>
</table>

$^{121}$ AIHW, *AIHW Pricing Template*, October 2015.

$^{122}$ Salary costs are set out in the AIHW Enterprise Agreement 2012-2014, with a 1.5% increased estimated for 2015-16.
Appendix G  The structure of HSSG and NHPA

This document provides the key learnings from both HSSG and NHPA’s structures that could inform the restructure of the Institute (see Figure 34).

Figure 34: Learnings from the restructure of HSSG and the structure of NHPA

NHPA’s structure consists of 5 report teams supported by two sections: information management strategy (IMS) and communications. IMS ensures that all teams benefit from organisation-wide, data related policy and procedures, standardisation of data driven analytic website tools and centralised automation of the production of performance information. The IMS section enables report production teams to design reports that integrate data from multiple sources, by enabling report production teams to access a wide talent pool of analysts. Communication staff are engaged early in report production processes to ensure that all branding, design, layout and text is uniform across products; that a wide array of audiences are able to access and interpret reports and websites and that media engagement is centralised and uniform. Communication staff are also responsible for conceiving and designing online interactive tools for specific report releases.

The new structure was designed for the HHSG to enable management across housing and homelessness collections along functional lines. The Housing and Homeless (HH) Collections Operations Unit manages the data collection and liaison with data providers up to the point of data submission. The HH Collection Processing Unit validates data, resolves data queries, runs derivations and estimation, and produces tables and other outputs. The HH Reporting and Development Unit prepares publications and other data releases, undertakes data development and analysis and manage committee relations.

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123 NHPA report production process and ‘a new structure for housing homelessness and drugs group