

# Primary Health Insights Value and Benefits

## Usage, scope and the benefits of centralisation

Since going live in early 2021, utilisation of the PHI Platform has grown to:



**30 of 31** PHNs + AIHW participating  
**1,000** active users  
**9,000** sign-ins per month  
 (April 2023-March 2024)

**30** lock boxes  
**>700** data storage locations  
**80.5 Tb** of data stored (3,500 times the volume of all Wikipedia articles text)

## Scaleable platform design has enabled the PHI products and services to grow to:



### Products:

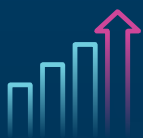
- PHI Platform – participants’ storage, access controls, collaboration zones, common zone
- Applications – including Primary Sense and PHOCUS
- data and analytics products



### Services:

- Technology management
- User capability support
- Collaboration support
- Hosting and integration
- PHI Services Team management and support capabilities

## Centralised functions and capabilities are delivering many benefits:



**Responsiveness to growth:** active users +400% and PHI Services Team +1000% in 3 years.



**Agility and cost effectiveness:** PHI Services Team matrix structure is based on skills not on product/service specialisation.



**Efficiency and modernity:** many new products and services become available to participants simultaneously, replacing outdated tools and methods with modern, more efficient alternatives.



**Preserves autonomy:** PHI Platform and Services Model preserves participants’ autonomy and their control over and access to the data they choose to store in PHI.

## Cost saving and cost avoidance



PHI participants are leveraging the scale and capabilities of the PHI Platform (including security, access control and governance structures) to develop, host and share their own cloud-based solutions, avoiding significant costs.

**Total cost avoidance  
\$250k-400k+**

### Estimated saving of \$200k-300k

WAPHA's Commissioned Services Reporting Portal is hosted on PHI and used by commissioned service providers to submit their performance data.

### Estimated saving of \$50k-100k

Utilising PHI for the development of PHOCUS, which is now hosted on PHI and used by all 31 PHNs.

### Efficiency gains

Queensland PHNs now use PHI in place of SharePoint to securely receive and host DHAC data, enabling advanced data transformation and visualisation, and reducing duplication in activities like needs assessments.

### Further opportunities

Discussions between WAPHA and WA Department of Health are in progress for using PHI to host data linkage application Co-Nexus data, initially for the chronic heart disease patient journey.

### Saves at least \$250k

Each project of this nature saves at least \$250k that would otherwise be required to set up and operate a secure cloud-environment with comparable data capabilities.

## Better quality + reduced cost of centralised cloud services



**Saved**

Total estimated cost saving across all participating organisations in FY25 **\$15m**

- Small PHNs are paying 10-20% of the cost of an equivalent independent platform
- Large PHNs are paying <50% of the cost of an equivalent independent platform

Centralised data storage, management and security provide a consistent and higher standard of service for all PHI Participants at a vastly reduced cost.

## Data security and data governance

### Data security

PHNs store large volumes of de-identified health data, which, though not 'personal' under the Privacy Act, is still sensitive. Additionally, some PHNs store identified health information for commissioned service providers. Therefore, the risk associated with PHN data holdings is high.

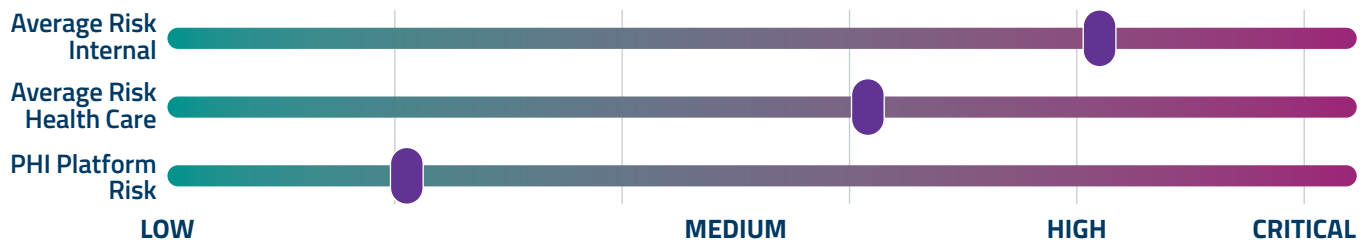
Annual penetration testing (an assessment of current vulnerability of PHI) has consistently rated the overall risk as 'low' (based on the number of potential vulnerabilities identified).

Centralised data storage and services provide a higher standard of cyber security than could be afforded by PHNs individually.



PHI substantially lowers the risk of a data breach and the consequential reputational risk for all PHNs, the AIHW and DHAC.

- **Number of data breaches = 0**
- **Number of critical or high risk vulnerabilities ever detected in penetration testing = 0**



Comparison of the assessed PHI Platform risk in FY24 against the average risk ratings from thousands of other penetration test results in Australia, and within the Australian health care industry.

### Data governance

Onboarding and using PHI has required participants to adopt *the National Data Governance Framework* that protects the confidentiality and privacy of patient data used by PHNs.



This includes passing a data governance audit prior to joining the platform, and all new datasets stored in participants' individual storage areas (lock boxes) being subject to a privacy impact assessment.

PHI has enabled the achievement of high standards of data governance nationwide, underpinning trust and confidence in PHNs.

- **PHNs passed data governance audit = 31**
- **PHNs audited prior to PHI = 0**

## Data sharing and Mental Health Data Collaboration Project

### Data sharing

The PHI Services Team support participants with ways of securely and efficiently sharing data that:

- Allows Queensland Health and the AIHW to provide data to PHNs securely, at no set up cost and minimal ongoing charges.
- Facilitates the AIHW demonstration projects, initially using PHNs' sourced general practice dementia data but progressing to new projects in 2025.
- Will allow DHAC to directly use the PHI platform to share datasets with PHNs via the PHI Common Zone. This represents DHAC's first direct use of, and benefit from, the Platform.
- Provides direct data feeds for data linkage projects such as LUMOS in New South Wales.



### Mental Health Data Collaboration Project

19 PHNs currently share mental health minimum data sets to generate new insights from aggregated data. PHNs have easy-access reporting via a dashboard. More PHNs are expected to join.

This data collaboration has enabled:

- Centralised data engineering with standardised data specifications across PHNs provides a more accurate national picture.
- Benchmarking of commissioned service delivery, costs and patient outcomes.

New insights include:

- The more acute the initial psychological distress, the more likely a client is to have a positive outcome.
- The principal focus of treatment services differs greatly between PHNs.
- Telehealth consults have grown since 2021, while in-person consults remained stable.
- The time from referral to first contact has decreased.



## Fostered learning and collaboration



PHI fosters relationship building and collaboration among PHNs and the AIHW by providing products and services for sharing knowledge, capabilities and analytics solutions, including:

1. Data and Analytics Community of Practice sessions, **40 – 80 attendees monthly**
2. Technology Community of Practice sessions, **10 – 40 attendees monthly**
3. PHI GitHub Enterprise (code sharing and management suite) - 204 users, 246 code repositories and >1000 code projects
4. PHI Talent Learning Management System (LMS) has 558 users, >100 courses. >1200 course completions
5. Peer-driven Micro Learning resources best practice use of analytics software
6. National Staff and Skills Directory for PHN Data & Analytics Teams identifies individuals with expertise for peer learning
7. National Data and Analytics Role Framework provides common job descriptions to support PHNs' recruitment

8. A Queensland PHNs/PHI Services Team collaboration project used PHI analytics tool Synapse to develop best practice data processing solution for the Queensland emergency data project. This solution is under consideration by the AIHW to streamline the PHNs' PIP QI data submission process.

Fostered learning and collaboration by PHI has:

- Improved learning and development of PHNs' staff (points 1-4)
- Reduced unnecessary duplication of effort (5 and 1,2)
- Supported the uplift of PHNs' capability maturity in data and analytics (all)
- Significantly improved data processing times resulting in efficiency gains across Queensland PHNs. (7)
- Potentially made significant improvements in data processing times resulting in efficiency gains across PHNs and the AIHW. (8)

## AIHW partnership

As a non-member partner in PHI, the AIHW has the same entitlements as PHNs but no ownership stake.



- The AIHW GP Data Demonstration Project on dementia data has developed a consolidated snapshot of national general practice data from 19 PHNs relating to the prevalence of dementia and characteristics of people with dementia including comorbidities.
- To be continued in 2025 for other data sets.

The AIHW is funded to develop the National Primary Health Care Data Collection (NPHCDC), filling a long-standing information gap in primary health care data for population health monitoring, research, policy, and planning. The AIHW will be using PHI products and services to build and store the NPHCDC.

The AIHW lacks general practice data in its collection. Its membership of PHI provides access to this sector in a secure and robustly governed environment.

GP demonstration projects support PHNs in generating up-to-date data sets to use for resource planning. Many more PHNs expressed their interest in participating, but were resource constrained.

By using PHI the AIHW has a ready built platform for collating, storing, analysing and managing access to NPHCDC data, eliminating the cost and inefficiency of duplication.