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Dear Julia

Independent review of Royal Rehab cost estimates – DRAFT

This draft replaces the draft dated 7 April 2023 and includes significant revisions from the previous version due to a scope expansion to include analysis of in-scope cost allocation.

The NSW Ministry of Health has engaged Taylor Fry to review the appropriateness of costs reported by Royal Rehab Hospital to North Sydney Local Health District ('NSLHD'). Specifically, we have been asked to review the cost information in excel reports provided by Royal Rehab to NSLHD. NSLHD uses these reports to allocate costs to patients and complete reporting to the NSW Ministry of Health.

We review reports for financial years 2018-19, 2020-21 and 2021-22. We exclude 2019-20 from our scope due to COVID-19.

The scope has the following limitations:

- We consider the correctness of reported data only – we do not make any assessment of the cost efficiency of Royal Rehab Hospital.
- We consider costs only – we do not review revenue unless it affects cost estimates.
- We have not performed an audit of the trial balance used by Royal Rehab to prepare its costing reports to review compliance with accounting standards. Our review assumes that Royal Rehab's trial balance is compliant with accounting standards. Royal Rehab Group as a whole is subject to external audit, but the legal entities within it are not audited in isolation
- We assume NSLHD remove visible out-of-scope costs when reporting in-scope costs for the purpose of activity based funding.

This document includes the following sections:

1. Background
2. Summary of findings
3. Our methodology for reviewing costs
4. Cost inclusions and exclusions
5. Cost allocation excluding facility and IT overhead
6. Facility and IT overhead
7. Other findings.

1 Background

The Royal Rehab Group provides rehabilitation services, disability support services and supported accommodation across Sydney and NSW. It can be broken into five divisions, shown in Table 1. As of 2021-22, divisions 3 to 5 are structured as separate legal entities within the Royal Rehab Group.

MetroRehab and Breakthru are recent acquisitions – MetroRehab was acquired in 2019-20 and Breakthru in 2021-22.

In this report when we use the term 'Royal Rehab', we are referring to the Royal Rehab division (as in Table 1). When referring to the group as a whole, we use the term 'Royal Rehab Group'.

Table 1 – High level divisions of the Royal Rehab Group

Division	Description
1. Royal Rehab **(focus of this review)**	Hospital services – public and private (Ryde) Other services
2. Royal Rehab Disability Services	Disability services
3. Sargood on Collaroy	Accessible holidays, short-term accommodation, and other assistance
4. MetroRehab	Hospital services – private (Petersham)
5. Breakthru	Disability services

Royal Rehab is the only division in Table 1 that receives funding from NSW Health. This funding is for public hospital services. Royal Rehab specialises in:

- Rehabilitation services, with a focus on supporting people with a spinal cord or brain injury. Most NSW Health funding relates to services delivered at Royal Rehab's public hospital at Ryde.
- Supporting health service delivery for people with spinal cord and brain injury across NSW. This includes outreach programs and support to staff at other hospitals.

Figure 1 provides more detail on the structure of the Royal Rehab division. The business units labelled 'public' in Figure 1 are all in scope of our review. Royal Rehab is funded to provide these services as an Affiliated Health Organisation (AHO) under Schedule 3 of the NSW Health Services Act 1997.

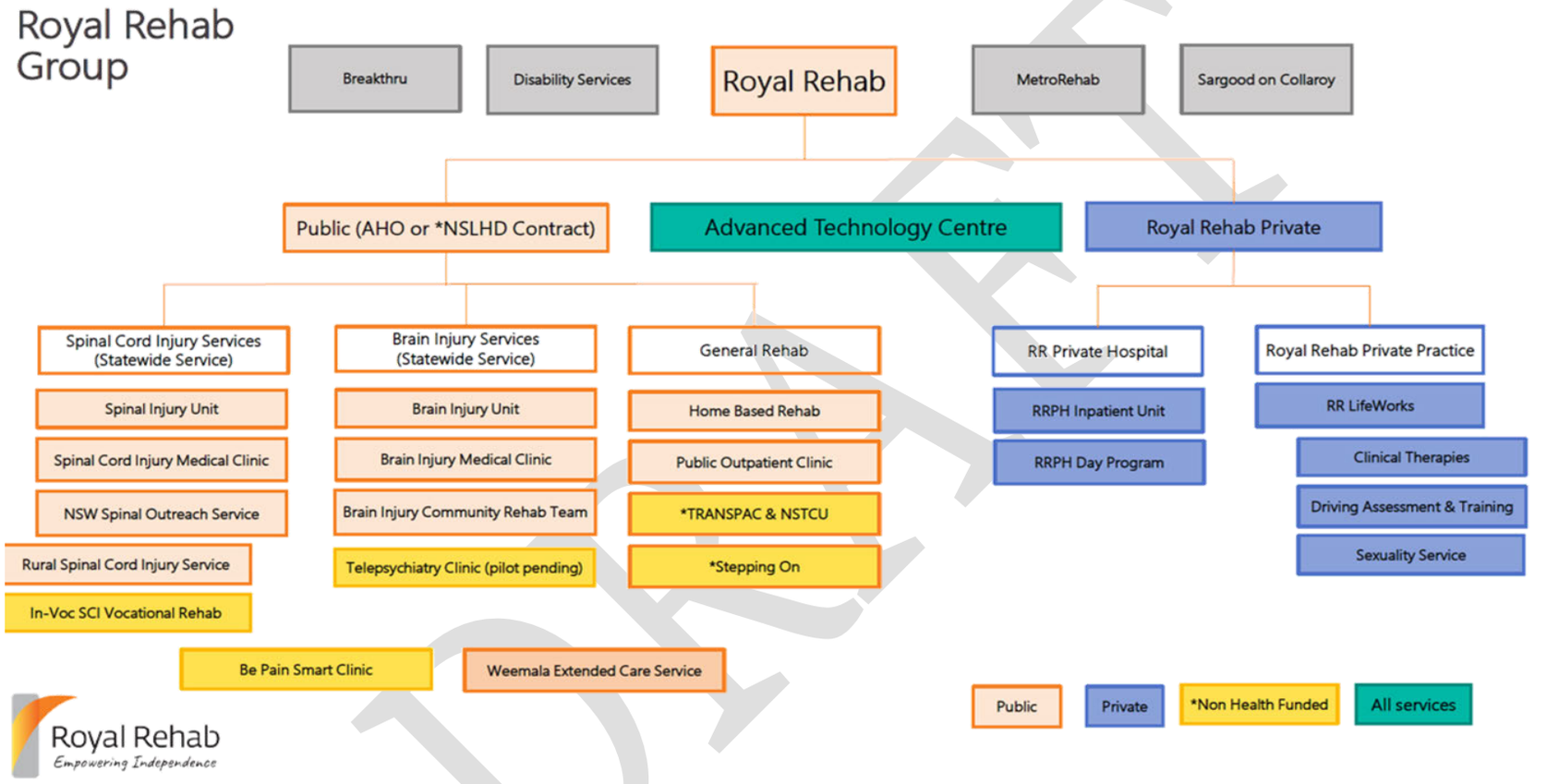
The areas in scope of our review are:

- **Spinal Cord Injury Statewide Services**, including the Spinal Injury Unit, Spinal Injury Medical Clinic, Spinal Outreach Service and Rural Spinal Injury Service
- **Brain Injury Statewide Services**, including the Brain Injury Unit, Brain Injury Medical Clinic and Brain Injury Community Rehab team
- **General Rehabilitation**, including Home Based Rehab and the Public Outpatient Clinic.

We refer to these areas of Royal Rehab as its 'public hospital business' throughout this report.

The other services shown are not within our scope. This includes Royal Rehab Private (also based in Ryde), the Advanced Technology Center, the Weemala Extended Care Service (a group home service), and the other programs shown in yellow. The Weemala Extended Care Service is funded by NSW Health, but it is out of scope as it has separate funding arrangements.

Figure 1 – Structure of the Royal Rehab division[1]



[1] Source: Royal Rehab Group internal documentation

2 Summary of findings

2.1.1 Overview

Our scope is to review the cost information provided by Royal Rehab to NSLHD in annual cost reports for 2018-19, 2020-21 and 2021-22 (see Appendix A). These cost reports contain:

- Total direct and overhead cost by business unit (in line with the business units in Figure 1)
- Disaggregation of cost, as required by NSLHD to allocate costs to patients.

In reviewing these reports, we have considered[2]:

- The types of costs included and excluded
- Treatment of overhead costs
- Treatment of direct costs
- The categorisation of costs
- The process used to prepare the reports.

Table 2 summarises our findings within each area of our review. We break our findings into:

- Cost inclusion and exclusion – This refers to whether appropriate costs have been included in the costing process.
- Cost allocation excluding IT and facility overheads – This is made up of two main components:
  - Corporate overhead, including executive management, finance, HR, IT staff costs and other supporting functions. This is the largest component.
  - Direct costs requiring allocation, including nursing, allied health and medical staff who do not work in a single ward (e.g. senior staff who manage multiple functions), along with ancillary functions such as the medical clinic and hydrotherapy pool.[3]
- IT and facility overhead – IT overhead relates to computer products, contract support services and the cost of IT equipment. It excludes the cost of IT staff (as these are counted under corporate overhead). Facility overhead relates to the building and contents of the Royal Rehab Hospital at Ryde.
- Cost categorisation – This considers whether costs are allocated into appropriate categories. Of particular importance is whether the cost report allows out-of-scope costs such as depreciation to be excluded from analysis. This is required to ensure costs that are not in scope for the relevant funding mechanism can be excluded from cost submissions when NSLHD populate the District and Network returns.

[2] Terminology such as 'direct' and 'overhead' are defined in line with the Australian Hospital Patient Costing Standards version 4.1. See Independent Hospital and Aged Care Pricing Authority (IHACPA), 2021, https://www.ihacpa.gov.au/resources/australian-hospital-patient-costing-standards-version-41.

[3] Consistent with Royal Rehab documentation, we refer to these as direct costs even though they require allocation. They could be considered indirect costs in other contexts.

Table 2 – Key findings of our review

Area of costing	Key findings[4]	Whether total cost is under or overstated	Whether dollar impact has been estimated
Cost inclusions and exclusions	1. **Some direct costs have been excluded in error, mainly in 2021-22.**	**Understated**	Yes
Cost allocation excluding facility and IT overhead	2. **Royal Rehab currently allocate overheads to activities based on the share of revenue the activity generates.** We recommend it instead allocates corporate overheads based on share of direct expenditure. 3. **Royal Rehab currently over-allocates corporate overhead to its public hospital business.** This is primarily because all overhead is allocated to the Royal Rehab division and none to the others (e.g. Disability Services, MetroRehab). 4. **Non-employment corporate overhead costs, e.g. head office running costs, are not counted**	Roughly neutral **Overstated** **Understated**	Yes, approx.-imately
Facility overhead	5. **Royal Rehab's allocation of facility costs does not consider use of floor space in the Advanced Technology Centre area on level 3.**	**Overstated**	Yes, indicative estimate only
IT overhead	6. **Royal Rehab only allocate IT costs within the Royal Rehab division, and allocation is performed by revenue.** We recommend a method be developed for allocating costs to the rest of the Group.	**Overstated**	Yes, indicative range only
Cost categorisation	7. **Some out-of-scope costs are not placed into the appropriate expense categories.** This means it is not possible to remove some types of costs from analysis, such as depreciation. 8. **Employment costs are not always assigned to the correct category.** In particular, senior nursing and other staff are reported as admin staff, rather than under their profession. This may affect comparison of staff costs against other hospitals.	No effect on total cost, but in-scope costs are **overstated** No effect on total or in-scope costs	Yes

[4] These apply to all three years – 2018-19, 2020-21 and 2021-22 – unless otherwise stated.

We have quantified the dollar impact of each finding (see Section 2.1.2). However, the quantified impact is indicative only for overheads. In particular, Royal Rehab currently allocate all corporate, IT and facility overheads to the Royal Rehab division, and no methodology has been developed to allocate a share of overheads to Royal Rehab Disability Services, MetroRehab, Sargood or Breakthru. We do not develop a full methodology for allocating costs across the Royal Rehab Group. Instead, we have:

- Performed approximate allocation of corporate overheads, excluding IT overheads, to provide an indicative estimate of the impact of our findings
- Provide a mid-point of an indicative range for the allocation of IT overheads because Royal Rehab's IT overhead cost structure is more complex in this area, noting it operates more than one IT system across its business and the systems differ in size and complexity.

The Ryde private hospital took on public patients during the pandemic to free up hospital capacity. These were funded through separate arrangements to Royal Rehab's normal Affiliated Health Organisation (AHO) funding for its public facility. We do not include the cost of these patients in any of our estimates (i.e. it is excluded from both total cost and in-scope costs), as all costs were recorded under the Ryde private hospital.

As part of our review we also considered the process used to estimate cost. We found that the process could be strengthened by adding a reconciliation step and comparing treatment of overhead costs to the prior year. These changes would reduce the risk of costs being missed inadvertently.

Also, we:

- Met with Royal Rehab to understand the process used to record direct costs. We found the process to be reasonable and did not have any specific recommendations.
- Noted that Royal Rehab do not include any rental costs in their submissions for the Ryde hospital building. However, they include depreciation of this building.

2.1.2 Quantification of findings

Table 3 summarises the impact of our findings in aggregate of total costs and in-scope costs. The in-scope costs estimated impact assumes NSLHD removed visible out-of-scope costs. We emphasise that the contribution of Finding 6 (IT overhead) to the mid-point of an indicative range and could impact the fundings by ±$0.2M-$0.3M.

Table 3 – Impact of findings

Year	Total costs		In-scope costs	
2018-19	-$0.9M	-3%	-$2.3M	-9%
2020-21	-$2.3M	-8%	-$4.0M	-15%
2021-22	+$0.2M	1%	-$1.9M	-7%

Table 4 and Table 5 details the estimated impact of our findings on total cost and in-scope costs respectively. We split costs into direct costs and overheads (facility, IT and cooperate overheads together). We provide a mid-point indicative estimate of IT overhead costs (Finding 6) because the correct allocation cannot be reliably estimated. In Table 5, we assume all visible out-of-scope costs were removed by NSLHD.

Findings 1-6 differ between Table 4 and Table 5 because some findings impact out-of-scope costs.

Finding 8 has no impact on total or in-scope costs.

Table 4 – Impact on total costs by finding

	2018-19			2020-21			2021-22		
	Direct	**Overhead**	**Total**	**Direct**	**Overhead**	**Total**	**Direct**	**Overhead**	**Total**
Initial total costs	**$18.6M**	**$7.5M**	**$26.1M**	**$19.3M**	**$9.2M**	**$28.5M**	**$18.5M**	**$8.8M**	**$27.3M**
Findings:									
1. Exclusion of direct costs in error	+$0.0M	-	+$0.0M	+$0.1M	-	+$0.1M	+$1.7M	-	+$1.7M
2. Overheads allocated based on revenue rather than expenditure[5]	+$0.3M	-$0.2M	+$0.1M	-$0.0M	-$0.4M	-$0.4M	+$0.0M	+$0.2M	+$0.2M
3. Overallocation of corporate overhead to its public hospital	-$0.0M	-$1.3M	-$1.4M	+$0.0M	-$2.2M	-$2.2M	+$0.0M	-$2.3M	-$2.2M
4. Non-employment corporate overhead costs not counted	-	+$0.8M	+$0.8M	-	+$0.5M	+$0.5M	+$0.0M	+$1.0M	+$1.1M
5. Revised treatment of Advanced Technology Centre	-	-$0.1M	-$0.1M	-	-$0.1M	-$0.1M	-	-$0.2M	-$0.2M
6. Overallocation of IT costs (mid-point indicative)	-	-$0.3M	-$0.3M	-	-$0.2M	-$0.2M	-	-$0.3M	-$0.3M
Change in total costs	**+$0.3M** **1%**	**-$1.1M** **-15%**	**-$0.9M** **-3%**	**+$0.1M** **1%**	**-$2.4M** **-26%**	**-$2.3M** **-8%**	**+$1.8M** **10%**	**-$1.6M** **-18%**	**+$0.2M** **1%**
Revised total costs	**$18.9M**	**$6.4M**	**$25.2M**	**$19.4M**	**$6.8M**	**$26.2M**	**$20.4M**	**$7.1M**	**$27.5M**

[5] For simplicity we have included the impact of moving the IT charge from a revenue basis to expenditure basis in this category. Moving from revenue to expenditure basis for the IT charge increases costs by $0.03 million in 2018-19, decreases costs by $0.06 million in 2020-21, and increases costs by $0.03 million in 2021-22.

Table 5 – Impact on in-scope costs by finding

	2018-19			2020-21			2021-22		
	Direct	**Overhead**	**Total**	**Direct**	**Overhead**	**Total**	**Direct**	**Overhead**	**Total**
Initial total costs	**$18.6M**	**$7.5M**	**$26.1M**	**$19.3M**	**$9.2M**	**$28.5M**	**$18.5M**	**$8.8M**	**$27.3M**
Remove visible out-of-scope costs	-$1.6M	-	-$1.6M	-$1.9M	-	-$1.9M	-$1.5M	-	-$1.5M
Initial in-scope costs	**$17.0M**	**$7.5M**	**$24.5M**	**$17.4M**	**$9.2M**	**$26.6M**	**$17.0M**	**$8.8M**	**$25.8M**
Findings:									
1. Exclusion of direct costs in error	+$0.0M	-	+$0.0M	+$0.1M	-	+$0.1M	+$1.0M	-	+$1.0M
2. Overheads allocated based on revenue rather than expenditure	+$0.3M	-$0.2M	+$0.1M	-$0.0M	-$0.3M	-$0.3M	+$0.0M	+$0.1M	+$0.2M
3. Overallocation of corporate overhead to its public hospital	-$0.0M	-$1.2M	-$1.3M	+$0.0M	-$2.0M	-$1.9M	+$0.0M	-$2.1M	-$2.0M
4. Non-employment corporate overhead costs not counted	-	+$0.8M	+$0.8M	-	+$0.5M	+$0.5M	+$0.0M	+$1.0M	+$1.1M
5. Revised treatment of Advanced Technology Centre	-	-$0.1M	-$0.1M	-	-$0.1M	-$0.1M	-	-$0.1M	-$0.1M
6. Overallocation of IT costs (mid-point indicative)	-	-$0.3M	-$0.3M	-	-$0.2M	-$0.2M	-	-$0.3M	-$0.3M
7. Incorrect categorisation of out-of-scope costs	-$0.3M	-$1.3M	-$1.6M	-$0.4M	-$1.6M	-$2.0M	-$0.2M	-$1.5M	-$1.7M
8. Employment cost miscategorisation	-	-	-	-	-	-	-	-	-
Change in in-scope costs	**-$0.0M**	**-$2.3M**	**-$2.3M**	**-$0.3M**	**-$3.7M**	**-$4.0M**	**+$0.9M**	**-$2.8M**	**-$1.9M**
	0%	**-31%**	**-9%**	**-2%**	**-40%**	**-15%**	**5%**	**-32%**	**-7%**
Revised in-scope costs	**$17.0M**	**$5.2M**	**$22.2M**	**$17.1M**	**$5.5M**	**$22.6M**	**$18.0M**	**$5.9M**	**$23.9M**

3 Our methodology for reviewing costs

As part of our review we:

- Attended Royal Rehab's Ryde hospital, where we received a briefing on the structure of the hospital and a walkthrough of the hospital facilities
- Attended walkthroughs of the costing process with Royal Rehab staff
- Reviewed spreadsheet calculations used to prepare cost reporting to NSLHD. These included extracts of Royal Rehab's trial balance for all years in scope.[6]

We used a set of structured questions to assess the reasonableness of Royal Rehab's cost estimates. Table 6 outlines these questions and the testing we conducted to address each question.

Table 6 – Approach to reviewing Royal Rehab's costing process

Review question	Testing conducted by Taylor Fry
1. Have any costs been included or excluded from analysis in error?	▪ Mapped all material costs to the organisational structure diagrams provided (as shown in Table 1 and Table 2) ▪ Reconciled direct and overhead costs back to the trial balance ▪ Reviewed cost accounts included in analysis for any errors
2. Have Royal Rehab correctly classified costs as **direct** or **overhead**?	▪ Discussed cost allocation process with Royal Rehab to understand methodology ▪ Reviewed largest 25 cost line items (e.g. basic pay, food – 90%+ of total cost) to ensure allocation between direct and overhead was reasonable
3. Are direct costs being correctly counted?	▪ Discussed how direct costs are measured with Royal Rehab, including employment and goods/service costs ▪ Queried the treatment of private patients in the public facility, and compensable patients ▪ Compared Nursing Hours Per Patient Day between the public and private hospital
4. Are overhead costs being allocated appropriately?	▪ Walkthrough of methodology with Royal Rehab ▪ Step by step review of overhead allocation calculations
5. Is reported expenditure correctly itemised?	▪ Review of calculations used to itemise expenditure
6. Do the calculation files supplied reconcile with the original reports submitted to NSLHD?	▪ Reconciliation of submitted reports
7. Are out-of-scope costs for the purpose of activity based funding visible?	▪ Identification and interrogation of out-of-scope costs ▪ Consultation with Royal Rehab and NSLHD to identify poorly identified out-of-scope costs.

[6] Trial balances were provided for the Royal Rehab division only, as per Table 1.

4 Cost inclusions and exclusions

We reviewed whether the costs included in analysis are appropriate. From our discussions with Royal Rehab and review of calculations, we:

- Identified a number of costs that had been excluded from the calculations in error (Finding 1).
- Could not identify any costs that had been included in the analysis in error.

In this section we break Finding 1 into two components:

- Finding 1a shows costs excluded in error in 2021-22. The vast majority of costs excluded in error were in this year.
- Finding 1b shows costs excluded in error in 2018-19 and 2020-21.

4.1 Finding 1a – costs excluded in error, **2021-22** financial year

In 2021-22, we found:

- The single largest impact was from a calculation error, which led to expenditure in a number of accounts being excluded from the costing analysis. This appears to have been introduced during some changes to the process made in 2021-22.
- Administration and management of Allied health professionals, along with patient transport costs, were also omitted. These should have been allocated across the business units that use these services.
- A minor calculation error meant that a small amount of workers compensation costs were excluded.[7]

The above findings impacted direct costs only, as shown in Table 7. A substantial proportion of the omitted costs were depreciation – approximately $0.51M – meaning the impact on in-scope costs is lower.

Table 7 – Impact of Finding 1 in 2021-22

Finding	Total cost impact (direct costs)	In-scope cost impact (direct costs)
Calculation error leading to some parts of the trial balance being excluded	$0.86M	$0.35M
Omission of Allied health management and administration, patient transport, COVID-19 and workers compensation costs	$0.84M	$0.70M
Total	**$1.70M**	**$1.05M**

4.2 Finding 1b – costs excluded in error, **2018-19** and **2020-21** financial years

A minor amount of cost was also excluded in the other two years. We found that:

- In 2018-19, hydrotherapy and some pharmacy costs were excluded. These should have been allocated across business units.
- In 2020-21, hydrotherapy and medical outpatients costs were excluded. These should have been allocated across the business units that use these services.

[7] Specifically, these workers compensation costs were not assigned a Payroll Sub Account code, which led to a portion of them being excluded from the calculations later in the process.

Table 8 shows the relatively small impact of these omissions.

Table 8 – Impact of Finding 1 in 2018-19 and 2020-21

Year	Total cost impact (direct costs)	In-scope cost impact (direct costs)
2018-19	$0.03M	$0.02M
2020-21	$0.09M	$0.08M

5 Cost allocation excluding facility and IT overhead

In this section we outline findings from our review of:

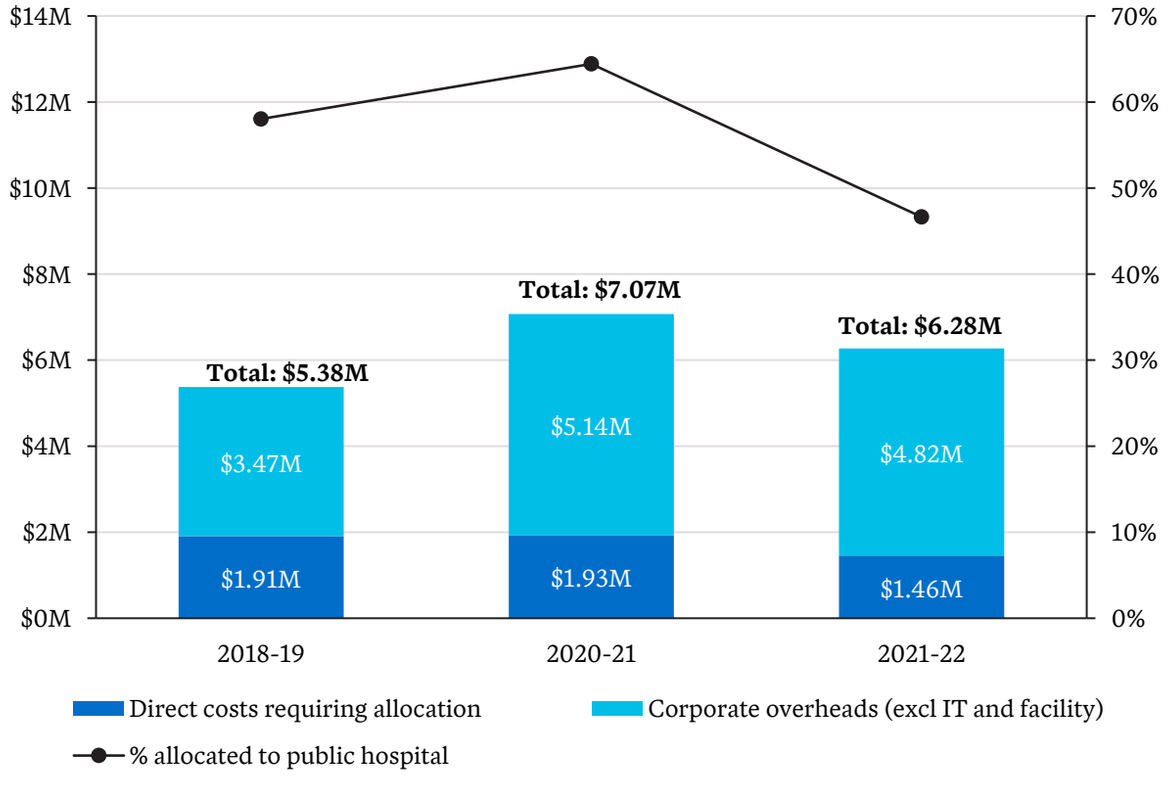
- **Corporate overhead** – This includes executive management, HR, finance, risk, IT staffing costs, administrative functions based at Ryde and clinical information system staff. It excludes facility and non-employment IT overhead costs.
- **Direct costs requiring allocation** – This includes nursing, allied health and medical staff who are not assigned to a specific ward, as well as the cost of ancillary functions such as the medical clinic and hydrotherapy pool.

These components of the cost allocation are considered together as the approach to allocating them is similar and inter-related (as outlined in Section 5.3).

5.1 Overview of overhead costs

Figure 2 shows the amount and share of overhead costs that Royal Rehab has allocated to its public hospital business. The share of overheads allocated is similar in 2018-19 and 2020-21, and declines in 2021-22. The decline is primarily the result of overheads being allocated to Weemala for the first time in this year, as well as some increases in non-employment costs (rental costs for head office and higher than unusual recruitment costs).

Figure 2 – Amount and share of corporate overheads and direct costs requiring allocation, based on Royal Rehab allocation methodology



Total overhead costs prior to allocation are shown in Appendix B. The largest change over time is a growth in corporate overheads, which is consistent with growth in the size of the Royal Rehab Group (noting it made acquisitions of MetroRehab in 2019-20 and Breakthru in 2021-22).

5.2 Existing allocation methodology

Table 9 shows how Royal Rehab currently allocate costs. We show the amount of cost to be allocated in 2021-22 to give an indication of the size of each item. Amounts are shown prior to allocation assumptions being applied.[8]

All costs are allocated to business units based on revenue share. For example, if a cost applies to inpatient wards, and the spinal injury unit earns 34% of the total revenue received by all inpatient wards, then 34% of the overhead cost would be allocated to the spinal injury unit. Costs are allocated across Royal Rehab's business in one of four ways:

- **Public hospital units:** Costs are allocated to the public hospital business units within the scope of this review.[9]
- **Ryde operating units:** In 2021-22, this includes all units in the previous dot point, plus Weemala and the private hospital at Ryde. In prior years, Weemala was not included.
- **Inpatient units:** Includes the spinal injury unit, brain injury unit, Weemala and the Ryde private hospital only.
- **Other:** Medical clinic costs are allocated between the spinal and brain injury clinic, hydrotherapy costs are shared widely across most business units in the Royal Rehab division.

Table 9 – Royal Rehab's current overhead allocation methodology

Cost type	Allocation method	Business units the cost is allocated to	Total cost, prior to allocating to business units, 2021-22
Direct costs requiring allocation			
Medical and allied health administration	Revenue	Public hospital units	$1.06M
Nursing administration	Revenue	Inpatient units	$1.42M
Pharmacy and patient transport	Revenue	Inpatient units	$0.48M
Other costs	Revenue	Other	$0.14M
Corporate overhead			
Executive management, risk and quality, finance, IT staffing, HR, other[10]	Revenue	Ryde operating units	$10.45M
Total			**$13.55M**

[8] We show costs in this way, instead of the allocated cost, as the allocated cost in 2021-22 omitted Allied Health Administration.

[9] The Spinal Injury Unit, Spinal Injury Clinic, Brain Injury Unit, Brain Injury Clinic, the Spinal Outreach Service, Brain Injury Community Rehab, Home Based Rehab, and Outpatients.

[10] Other includes administrative functions based at Ryde, clinical information staff, and volunteers. Note $100,000 for volunteers was allocated to inpatient units rather than all Ryde operating units in 2021-22 (1% of total overhead).

5.3 Finding 2 – allocation uses revenue rather than expenditure

Finding

Royal Rehab use a revenue to allocate overhead costs across the business. We find that:

- The use of a single measure is appropriate, given the small size of the hospital
- **However, direct expenditure rather than revenue should be used to allocate costs.**

Allocating overhead and other costs based on revenue creates the risk that funding decisions are affected by 'circular logic'. For example, if Royal Rehab were underfunded in one area of its business:

- This underfunding will mean revenue is lower than it otherwise would be.
- As a result, less overhead cost would be allocated to that part of the business in Royal Rehab's cost reports, and the cost of that part of the business would be under-estimated.
- As Royal Rehab's cost reports inform funding allocations, this could lead to perpetuating low funding levels and/or further decreases in funding.

A revenue-based approach makes it difficult to allow for interaction between overhead cost centres (e.g. accounting for that the HR function supports employment in other overhead cost centres) because overhead cost centres do not generally attract revenue. Accounting for interactions between overhead cost centres is a requirement under IHACPA's National Patient Costing Standards Part 1, Section 3.2.3.2.

Interaction between overhead cost centres

Moving to a direct cost-based allocation allows Royal Rehab to take account of interactions between cost centres, where these are considered material. It is beyond the scope of our review to develop a new methodology encompassing all material interactions, although we identify some key examples:

- The use of corporate overhead in direct allocated cost centres, such as nurses who are not allocated to a specific ward.
- The use of some Ryde facility space by head office during 2018-19 and 2020-21.

We suggest Royal Rehab reviews its cost base to identify any other material interactions between overhead costs. Some interactions between overheads are unlikely to be material – for example, while the HR and Finance functions support each other, costs in each cost centre are allocated to business units in a very similar way and so any changes are unlikely to impact total reported cost.

If Royal Rehab and/or NSW Health require all interactions to be allowed for (not just a subset deemed most material), Royal Rehab may need to implement specialist activity based funding software for this.

Estimated impact

To estimate the impact of this finding, we assume Royal Rehab implement a two-step process for allocating overhead costs:

1. **Direct costs requiring allocation** (e.g. nursing, medical and allied health admin) are allocated to business units based on **other direct costs**.
2. **Corporate overheads** are allocated based on total direct cost.

This accounts for the interaction between direct allocated costs and corporate overheads. The interaction is important as if it is not allowed for, costs may be under-allocated to the public hospital business as this uses a large share of direct costs requiring allocation.

Table 10 shows our estimated impact of changing from a revenue-based allocation to an expenditure-based allocation.[11] As the impact is not large and varies from year to year, we consider it approximately cost neutral on average.

Table 10 – Impact of Finding 2

	Total cost impact			In-scope cost impact		
Year	**Direct**	**Overhead**	**Total**	**Direct**	**Overhead**	**Total**
2018-19	$0.26M	-$0.17M	**$0.09M**	$0.31M	-$0.17M	**$0.14M**
2020-21	-$0.02M	-$0.35M	**-$0.37M**	-$0.01M	-$0.32M	**-$0.34M**
2021-22	$0.04M	$0.15M	**$0.19M**	$0.03M	$0.14M	**$0.17M**

5.4 Finding 3 and 4 – over-allocation to public hospital business

Finding

Overall, we find Royal Rehab has overestimated the share of overhead costs that relate to the public hospital business. Table 11 explains this finding. This overestimate of costs is the net effect of our estimates of two offsetting issues in their current methodology.

Table 11 – Overhead allocation findings

Current approach used by Royal Rehab	Impact	Recommended changes
Finding 3: Royal Rehab overestimate the share of overheads that relates to the public hospital business because no amounts are allocated to: ▪ Other divisions in the group, including Breakthru, Disability Services, MetroRehab and Sargood. ▪ Some smaller programs within the Royal Rehab division, including Lifeworks community therapy, Transpac/NSTCU, SOS In-voc, the sexuality clinic, the pain clinic and driving assessment program.	Overstatement of costs	A reasonable level of corporate overhead should be allocated to the other parts of the business.
Finding 4: Royal Rehab only allocate employment-related overhead costs (e.g. salaries, on costs). Non-employment costs, such as the cost of electricity or rent for Royal Rehab's head office, are not allocated. This leads to an underestimate of total overhead costs.	Understatement of costs	All corporate overheads should be allocated, not just the employment-related component.

While we find that the current approach overstates costs in all three years in scope of our review, it is possible that it produced appropriate estimates when it was first developed. We have not reviewed estimates prior to 2018-19.

[11] Note that in 2018-19 Royal Rehab had internal allocation charges in its trial balance, which moved costs from its overhead cost centers to the rest of the business with no net impact on Group expenditure. We used costs prior to internal allocation charges and allocated this based on direct expenditure.

Estimated impact

To estimate the impact of this finding, we reviewed the components of Royal Rehab's corporate overhead to assess which should be allocated more widely across the business. We have allocated the following costs across the whole business in our estimates:

- Executive management
- Finance
- HR
- Risk
- One third of IT staff costs. This is the share of staff that are not dedicated to supporting the Ryde hospital clinical systems.[12]

Together these comprise about **85%** of corporate overhead costs (excluding IT non-staff costs and facility costs). We refer to these as 'head office overheads'. The remaining 15% includes Ryde-based administration functions, clinical record-keeping, volunteer costs and two thirds of IT staffing costs. We refer to these as 'Ryde overheads'.

Direct costs requiring allocation (as shown in Table 9) are unaffected by this finding. We have confirmed with Royal Rehab that these are only used by the Royal Rehab division, and that the allocation method is appropriate (once it is moved to an expenditure, rather than revenue, basis).

To allocate head office overheads to the public hospital business, we:

- Estimate the share of Royal Rehab Group expenditure that relates to the public hospital business. We exclude head office overhead and some other minor items[13] from this calculation.
- Apply this share to head office overheads. For example, if the public hospital business made up 25% of total group expenditure, we would allocate 25% of the head office overhead to the public hospital business.
- Apply other minor adjustments as required.

To estimate this share, we determine our revised costs excluding corporate overheads including the impact of other findings. Table 12 shows the components of our revised estimate of the cost.

Table 12 – Revised estimates of the cost of Royal Rehab hospital

	2018-19	2020-21	2021-22
Direct cost	$18.88M	$19.42M	$20.36M
Facility overhead	$2.19M	$2.76M	$2.72M
IT overhead	$1.27M	$0.72M	$0.74M
Costs excl. corporate overhead *used in Table 13*	$22.33M	$22.90M	$23.82M
Corporate overhead	$2.91M	$3.28M	$3.69M
Total: costs incl. corporate overhead	**$25.25M**	**$26.18M**	**$27.51M**

[12] Royal Rehab data suggests 4 out of 6 IT staff support the Ryde campus. The share of staff is high as Ryde uses clinical information systems that are not required in the other areas of Royal Rehab.

[13] We also exclude loss/gain on fair value revaluation of financial assets and gain on bargain purchase. Royal Rehab advised these are unrelated to its reporting on the public hospital business.

There has been growth in the estimated corporate overhead since 2018-19, reflecting:

- Increases in the size of the Ryde administrative team in 2021-22. The team was expanded due to a view that more administrative support was required at the Ryde facility, noting COVID-19 and other general workload pressures on administrative staff. The hires included a director of clinical services at Ryde (who took over some responsibilities of the GM), a quality and risk officer at Ryde, a member of staff to focus on client relations and complaints, and an office manager who also oversaw the Ryde fleet.
- Additional hires into the clinical documentation team in 2020-21. Some increase was also due to variation in the share of head office overhead allocated to Ryde public from year to year, noting the Royal Rehab Group was growing rapidly over this year.

Table 13 shows our estimate of the share of Royal Rehab Group expenditure that relates to its public hospital business.

Table 13 – Share of Royal Rehab Group expenditure that relates to the public hospital business[14]

		Expenditure excluding corporate overhead and other items[15]		
Royal Rehab Group Expenditure		**2018-19**	**2020-21**	**2021-22**
Public hospital services	A	$22.33M	$22.90M	$23.82M
Other services in the Royal Rehab division trial balance[16]	B	$12.12M	$15.59M	$16.07M
Services in other divisions	C	$25.97M	$34.26M	$52.89M
Total	**D**	**$60.42M**	**$72.75M**	**$92.78M**
Public hospital services as a % of total group expenditure	**E = A / D**	**38%**	**32%**	**26%**

The share of expenditure that relates to public hispital services has declined over time. This is consistent with growth observed outside the hospital division, noting Royal Rehab made two acquisitions in the period under review.

Figure 3 shows our estimated share of head office overheads that relate to the public hospital business. This is compared to Royal Rehab's existing allocation, which does not explicitly allocate cost outside the Royal Rehab division and only includes employment-related overhead costs. There are small differences between the blue and teal columns due to minor adjustments made to the allocation calculation. [17]

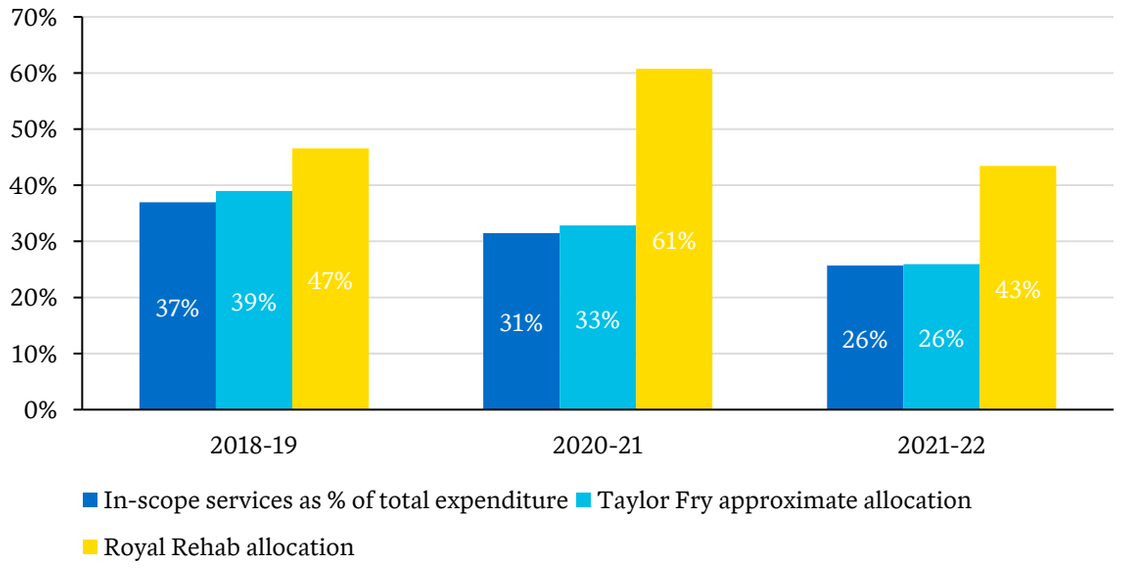
[14] In 2018-19 Royal Rehab has a practice of recording transactions to move overheads from overhead cost centers to other cost centers within its trial balance. These transactions had no net effect on the Group as a whole. We have removed these transactions in order to calculate total overheads in 2018-19.

[15] As per previous footnote

[16] Includes Royal Rehab Private, Weemala and other non-health funded programs in yellow in Figure 1.

[17] Minor adjustments are made for recording of a small number of staff in the correct business unit, in line with Royal Rehab. We make two further adjustments for issues identified in the allocation calculation. This includes: removal of double counting of nursing administration overhead costs observed in Royal Rehab's estimates for 2018-19 (reducing total expenditure by $180,000), and fixing a calculation error that led to medical administration costs being allocated to Weemala in 2021-22 (increasing cost by $50,000).

Figure 3 – Proportion of overheads allocated to in-scope business units – including executive administration, finance, HR, risk and one third of IT staffing



Ryde overhead methodology

We allocate the Ryde overhead to the same areas of the business as in Royal Rehab's original model (that is, to the Ryde operating units shown in Table 9). The main change made is that we allocate the entire overhead, while Royal Rehab only allocated the employment-related cost.

Estimated impact

Based on the approach above, we find the share of total corporate overhead allocated to the Royal Rehab public hospital business is:

- 2018-19: 44%, compared to 55% assumed in Royal Rehab's original costing
- 2020-21: 38%, compared to 63% assumed in Royal Rehab's original costing
- 2021-22: 35%, compared to 46% assumed in Royal Rehab's original costing.

Table 14 shows our estimates of the impact of our findings. We differentiate between the impact of under-allocating costs (Finding 3) and the impact of using only employment-related costs in the calculation (Finding 4). We provide separate estimates for each finding as follows:

- First using our assumptions above to allocate employment-related costs. This leads to a reduction in overhead cost, which we report as the impact of Finding 3.
- We then adjust our estimates to use all overhead costs, rather than just the employment-related component. We report this as the impact of Finding 4.

Table 14 – Estimated impact of Findings 3 and 4

	Total cost impact			In-scope cost impact		
Year	Direct	Overhead	Total	Direct	Overhead	Total
Finding 3						
2018-19	-$0.02M	-$1.34M	**-$1.36M**	-$0.02M	-$1.24M	**-$1.26M**
2020-21	$0.04M	-$2.23M	**-$2.18M**	$0.04M	-$1.97M	**-$1.93M**
2021-22	$0.05M	-$2.27M	**-$2.23M**	$0.03M	-$2.07M	**-$2.03M**

	Total cost impact			In-scope cost impact		
Finding 4						
2018-19	-	-$0.81M	**-$0.81M**	-	$0.81M	**$0.81M**
2020-21	-	$0.51M	**$0.51M**	-	$0.51M	**$0.51M**
2021-22	$0.04M	$1.02M	**$1.06M**	$0.04M	$1.02M	**$1.06M**

6 Facility and IT overhead

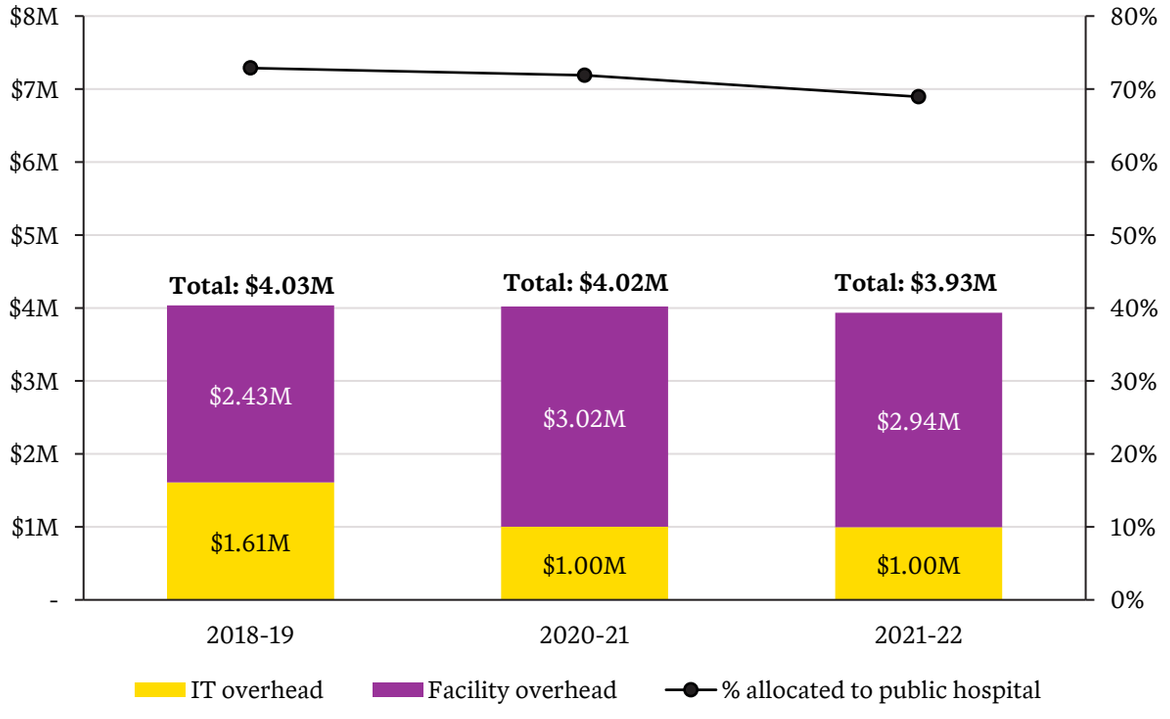
In this section we outline findings from our review of:

- Facility overheads – costs relating to Royal Rehab's Ryde hospital building.
- IT overheads – all non-employment costs relating to IT, such as IT system costs and IT contractors.

6.1 Overview of overhead costs

Figure 4 shows the amount and share of overhead costs that Royal Rehab has allocated to its public hospital business. The dollar value and share of overhead costs has been relatively stable over time.

Figure 4 – Amount and share of costs allocated to in-scope areas of business – Royal Rehab allocation methodology



6.2 Finding 5 – Facility overhead costs

Existing approach

Table 15 shows how Royal Rehab allocates its facility overhead based on the floor space percentages. These were derived historically and rolled forward from year to year, likely from floor plan data. While we have obtained a floor plan from Royal Rehab to support our review, we have not been provided with a conversion of the floor plan into quantitative floor space measures for each business unit. As a result, we cannot confirm if the floor space measurements in Table 15 are correct, though we have no reason to doubt them.

Table 15 – Floor space measures

Unit	Share of floor space
Spinal Injury Unit (SIU)	35%
Spinal Outreach Service	1%
Brain Injury Unit (BIU)	28%
BICRT	1%
Public Outpatients	1%
HBR	1%
Ryde Private Hospital (PIU)l	29%
Other	1%
Total	**100%**

The floor space measures in Table 15 only consider functions that report direct expenditure. The following large functions are excluded:

- A number of support functions that are located on the bottom floor of the hospital, including purchasing, pharmacy and the hydrotherapy pool. These support the rest of the Ryde hospital.
- The Assistive Technology Centre area, which we understand occupies approximately 50% of space on the top floor. This space has had different functions over time:
  - In 2018-19 and 2020-21, it was used to house a number of head office staff
  - During 2021-22, it was a construction site as the Advanced Technology Centre was under construction in this year.

Royal Rehab do not allocate any facility overhead towards the above two functions – all is allocated to the functions in Table 15.

Finding

Royal Rehab's existing approach does not allocate any amounts to the support functions on the bottom level, or to the Advanced Technology Centre on the top level. Implicitly, this means Royal Rehab is assuming these functions support Royal Rehab in line with the percentages in Table 15.

We find that:

- This assumption appears reasonably realistic for the functions located on the bottom floor of the hospital. We understand that these functions primarily support the activities shown in Table 15.
- **The assumption is not realistic for the functions located in the Advanced Technology Centre area.** Specifically:
  - In 2018-19 and 2020-21, head office staff were located in this space. These staff support some activity at Ryde hospital, however as shown in Section 5.4, a large part of their work supports other areas of Royal Rehab's business.
  - In 2021-22, the construction site was not supporting any public patients. We also note that the Advanced Technology Centre is not funded by NSW Health. In our view, costs associated with it, including its construction, should not be reported as a cost of the public hospital business.

Estimated impact

To estimate the impact of this finding, we:

- Reviewed the components of the facility overhead to assess whether they were consumed by the Advanced Technology Centre area. We assumed that:
  - Building depreciation and maintenance costs are consumed by the Advanced Technology Centre area
  - All other costs are not. We understand that Royal Rehab's building management contract and cleaning costs, which comprise the bulk of the remaining costs, mostly relate to hospital wards with strict cleaning requirements. Additionally, we assumed that utility costs (e.g. electricity, water) mostly relate to the hospital wards, noting research finds hospitals consume a large amount of this per square meter relative to other businesses.[18]
- The Advanced Technology Centre comprises one sixth of total floor space. This assumes each of the three floors is approximately equal in size, and the Advanced Technology Centre occupies about half of one floor. This assumption is uncertain, in the absence of floor space estimates.
- Estimated the share of facility costs that should **not** be counted towards the public hospital business as follows:
  - In 2021-22, we assume all costs associated with the Advanced Technology Centre area should not be counted towards the public hospital business.
  - In 2018-19 and 2020-21, we reallocate all facility costs associated with the Advanced Technology Centre area to the corporate overhead category. As only 35-44% of corporate overhead costs relate to the public hospital, this leads to a reduction in expenditure.

Table 16 shows our estimated impact of this finding. We consider these estimates approximate, as they rely on an assumption about the floor space occupied by the Advanced Technology Centre.

Table 16 – Impact of Finding 5

Year	Total cost impact (overhead costs)	In-scope cost impact (overhead costs)
2018-19	-$0.09M	-$0.06M
2020-21	-$0.11M	-$0.09M
2021-22	-$0.22M	-$0.14M

6.3 Finding 6 – IT overhead costs

Existing approach

In Royal Rehab's costing calculations and this report, 'IT overhead' refers to non-employment IT expenses. Primarily these costs include:

- Computer products
- Contract support services

[18] See for example https://www.mdpi.com/1996-1073/12/19/3775/htm, https://www.eia.gov/consumption/commercial/reports/2012/water/. Utility consumption would be above zero for the Advanced Technology Center, however we note we have assumed maintenance per square meter of floor space is the same as for patient-facing functions, and this is likely an overestimate. In the absence of other information, we assume these two items offset each other.

- Expenditure on items such as phones, landlines and internet.

The computer products and contract support services expense disproportionally support Royal Rehab's public hospital business, as it uses a clinical system (Kyra) that attracts significant IT cost. Other parts of the business use separate systems, e.g. the ePas billing system in the private hospital.

Currently Royal Rehab allocate all the overhead cost to Ryde operating units, with none allocated to other divisions or smaller programs within the Ryde Rehab division (in line with the allocation approach for corporate overhead). The allocation is performed based on the share of revenue.

Finding

We recommend the following changes are made to the existing allocation approach:

- IT expenses should be allocated across the Royal Rehab Group as a whole, rather than just to the Royal Rehab division. Reasonable assumptions should be derived that take into account the disproportionately high use of IT services by the public hospital business, as well as the systems used in Royal Rehab's private hospitals.
- Royal Rehab should not base its cost allocation on revenue share. Allocation should be based on either:
  - Direct expenditure
  - Measures of IT system use.

Estimated impact

Royal Rehab does not have an existing allocation of IT costs across the Group as a whole, and it was beyond the scope of this project to develop a new methodology for doing so (noting Royal Rehab operates several different IT systems and has some costs that apply to the whole business). To illustrate the impact, however, we produce an indicative range of impact based on:

- A lower bound being Royal Rehab's existing methodology of allocating 100% of cost to Ryde public, Ryde private and Weemala disability group home
- An upper bound of pro rata allocation across whole Royal Rehab Group.

This indicative impact is for illustration and should not be relied upon.

Table 17 provides the range and the mid-point used for our aggregate summaries.

Table 17 – Estimated impact of Finding 6 (total and in-scope costs)

Year	Lower	Upper	Mid-point
2018-19	*nil*	-$0.69M	-$0.35M
2020-21	*nil*	-$0.45M	-$0.22M
2021-22	*nil*	-$0.59M	-$0.29M

7 Cost categorisation

7.1 Finding 7 – Some out-of-scope costs are not placed into the appropriate expense categories

Finding

In the cost reports Royal Rehab provides to NSLHD, some costs are not isolated or not allocated into cost categories appropriately. We assume that NSLHD require the explicit isolation of proper allocation of out-of-scope costs per the purpose of activity based funding to determine in-scope costs.

We assume NSLHD remove visible out-of-scope costs when determining the in-scope costs. For clarity, Table 18 shows the visible out-of-scope costs in Royal Rehab cost reports that we assume are removed by NSLHD.

Table 18 – Assumed removal of visible out-of-scope costs by NSLHD

Year	Direct	Overhead	Total
2018-19	-$1.6M	-	-$1.6M
2020-21	-$1.9M	-	-$1.9M
2021-22	-$1.5M	-	-$1.5M

We find that:

- This is likely appropriate for corporate overhead. The IHACPA National Patient Costing Standards Version 4.1 Business Rules state that corporate overhead should all be allocated to a single line item, 'All Other Goods and Services'. However, Royal Rehab's definition of corporate overheads is likely broader than expected in the standards. The standards allow for hospital management to be included as corporate overhead (for example, they state that a standalone hospital CEO would be considered corporate overhead), however it appears to us that the administrative functions based at Ryde and clinical record keeping expenses would not be included in this definition.
- From our reading of the standards, it appears that the Royal Rehab's facility costs are not considered corporate overhead and should be itemised into cost categories.
- Some direct expenses are not isolated, including some leave provisions.

Estimated impact

We engaged with Royal Rehab to identify potential out-of-scope costs. Our estimated impact relies on the accuracy of the information provided.

Finding 7 has no impact on total costs.

Table 19 breaks isolate the impact of Finding 7 on in-scope costs. These are costs that the NSLHD is unlikely able to identify as out-of-scope. Greyed items are irrelevant or immaterial for Royal Rehab.

Table 19 – Impact on in-scope costs for Finding 7

	2018-19			2020-21			2021-22		
Out-of-scope costs	Direct	Overhead	Total	Direct	Overhead	Total	Direct	Overhead	Total
Depreciation	-	-$1.02M	-$1.02M	-	-$1.02M	-$1.02M	-	-$1.05M	-$1.05M
Blood	-	-	-	-	-	-	-	-	-
Annual leave provision expense	-$0.18M	-$0.22M	-$0.40M	-$0.13M	-$0.46M	-$0.59M	-$0.12M	-$0.35M	-$0.47M
Long service leave provision expense	-$0.06M	-$0.02M	-$0.08M	-$0.08M	-$0.10M	-$0.17M	-$0.05M	-$0.07M	-$0.12M
Medical indemnity insurance	-$0.09M	-	-$0.09M	-$0.07M	-	-$0.07M	-$0.04M	-	-$0.04M
Redundancy payments	-$0.00M	-$0.03M	-$0.03M	-$0.00M	-$0.02M	-$0.02M	-$0.00M	-$0.00M	-$0.00M
Highly specialised drugs (s100)	-	-	-	-	-	-	-	-	-
Isolated Patients Travel and Accommodation Assistance Scheme	-	-	-	-	-	-	-	-	-
Interest on public-private partnerships	-	-	-	-	-	-	-	-	-
Collaborative care purchased from private facilities	-	-	-	-	-	-	-	-	-
COVID-19 funding	-	-	-	-$0.10M	-	-$0.10M	-	-	-
Total	**-$0.33M**	**-$1.28M**	**-$1.62M**	**-$0.38M**	**-$1.59M**	**-$1.97M**	**-$0.21M**	**-$1.47M**	**-$1.69M**

7.2 Finding 8 – Employment costs are not always assigned to the correct category

Finding

The costing reports Royal Rehab provide to NSLHD disaggregate employment costs by employment category (administrative staff, allied health staff, medical staff, etc).

We reviewed whether expenditure has been allocated to the right employment category, and found that:

- Allied health, nursing and medical costs that cannot be assigned to a specific ward are currently recorded under the 'administration' employment category. These costs should be itemised based on the professions of the staff employed. The largest impact is on nursing, as there is a sizeable nursing expense in each year that cannot be assigned to a specific ward.
- We also identified some other corrections:
  - In 2018-19, the spinal injury unit staffing estimates inadvertently referred to the brain injury cost centre.
  - In 2021-22, a formula error led to $80,000 overstatement in the medical employment cost.[19]

Estimated impact

Table 20 sets out the impacts of our findings on expenditure by employment category. We have quantified the **combined** impact of the following on cost by employment category[20]:

- The issues outlined above (Finding 8).
- Findings 1-7.

Importantly, we have **not quantified** the impact of Royal Rehab allocating its overhead costs into employment categories. This is because Royal Rehab currently does not allocate its overhead costs into any of the required IHACPA cost categories, and it has been beyond the scope of our review to undertake this for the first time. We recommend Royal Rehab does this to assist with cost categorisation and removal of out-of-scope costs.

Table 20 – Revisions to employment cost itemisation

Employment category	2018-19	2020-21	2021-22
Administration	-$0.89M	-$1.77M	-$0.99M
Allied Health	-$0.47M	$0.55M	$0.47M
Clinical Support	$0.04M	$0.00M	$0.00M
Medical	-$0.80M	$0.07M	$0.01M
Nursing	$1.77M	$0.97M	$1.10M
Pharmacy	$0.15M	$0.13M	$0.20M
Total	**-$0.20M**	**-$0.05M**	**$0.80M**

[19] The formula was an omission of employment classification codes for some workers compensation account balances.

[20] We note that total employment cost is impacted by findings 1-7. It is not affected by finding 8.

8 Review of cost allocation process

In reviewing the appropriateness of the process used to estimate cost, we find that:

- Key strengths of Royal Rehab's cost allocation process are:
  - As of 2021-22 there are clear, documented instructions for extracting data and updating the estimates. This reduces the risk of error in data extraction and processing.
  - Across all years there is a clear audit trail, allowing a reviewer to easily trace estimates back to the source data.
  - There is centralised documentation of the assumptions made (though this could be improved in some areas – see below).
- Areas of Royal Rehab's cost allocation can be improved are:
  - The process should include a reconciliation back to source data, as recommended in IHACPA costing standards. This would minimise the risk of excluding costs from analysis in error.
  - The process should also include a comparison of the treatment of overhead cost categories against the prior year. We noticed in several cases cost categories were omitted in error – for example, the cost of allied health administration was omitted in 2021-22. A comparison of cost categories included and excluded to year 2020-21 would have identified this issue.
  - The rationale for each assumption could be better articulated in the documentation. This includes:
    - Documenting the evidence and/or judgements used to set each assumption
    - Discussing the allocation of overheads across the Royal Rehab Group as a whole
    - Ensuring supporting documentation is on file, for example quantitative measures of floor space were not available for our review.

8.1 Review of direct costs

We held discussions with Royal Rehab to understand how direct costs are recorded in the costing process. We found that the process they described was appropriate and did not have any specific findings.

We confirmed that:

- For employment costs, staff time is itemised against each business unit. Where the same staff work in multiple parts of the hospital, their time is still itemised separately for each business unit. This does not apply to the 'direct allocated costs' described in Section 5, which includes costs for staff whose time cannot be allocated to a specific ward. We have assessed the allocation of these costs in Section 5.
- For goods and services costs, we found that costs for medical supplies, including gases and drugs, are itemised to specific business units. This is generally performed by the supplier, or by Royal Rehab's contracted facility manager Medirest (with sign off from the manager of the cost centre for each business unit). Where costs can't be itemised, they are assigned to the Ryde Administration cost centre. We reviewed the allocation approach for Ryde Administration in Section 5.
- Food and laundry costs are itemised at the cost centre level by Royal Rehab's contracted facility manager Medirest.
- Our review of the share of each cost category classified as direct and overhead did not identify any material concerns. As expected, some categories include a mix of both direct and overhead costs (e.g. salary and wage expenses). Royal Rehab classify some costs as direct that cannot be attributed to a specific business unit (e.g. nursing costs that aren't linked to a specific ward). These costs

could be considered overheads in some contexts, but we adopt Royal Rehab's terminology in this report.

We also queried the nursing staffing ratios in place in the public hospital, and how this compares to the Royal Rehab's private hospital at Ryde. We found that:

- The Nursing Hours Per Patient Day (NHPPD) in the public hospital is higher than the private hospital. Public hospital NHPPD ranges from 7.1-7.6, while NHPPD in the private hospital is 4.5 or less.
- The NHPPD in the public hospital is higher than the minimum level required under the Public Health System Nurses and Midwives (State) Award 2022 (6.0 for specialist spinal or brain injury rehabilitation).

Royal Rehab advised that the high NHPDD in the public hospital, relative to the private hospital and award, reflects the complexity of patients in the public hospital. Royal Rehab's private hospital provides general rehabilitation, which is less resource intensive than spinal and brain injury rehabilitation. Royal Rehab also noted that the NHPPD in the Award is a minimum staffing level, and that this can be exceeded if patient acuity and complexity necessitate it.

8.2 Other items

Additional points of note identified in our review are:

- As discussed during our meeting with Royal Rehab, Royal Rehab do not include any costs for rent or other fees for the Royal Rehab main building, as this is owned by Royal Rehab. However, we note that depreciation for the building is included in the cost data.
- There was a small difference between Royal Rehab's internal records of expenditure for 2018-19 and the data reported to the LHD (a $100,000 difference in allocation between rural and metro outreach services). The cause of this discrepancy could not be identified. We also identified a larger discrepancy in revenue reporting, which appears to have been due to an error in submission.

9 Reliances and limitations

These services are provided to the NSW Ministry of Health for the purpose of assessing the reasonableness of cost allocation procedures in place at Royal Rehab.

In conducting this review, we have relied upon the attestation of Royal Rehab employees and inspection of available documents. Of specific importance, we have relied upon:

- Extracts from Royal Rehab's trial balance for 2018-19, 2020-21 and 2021-22, as supplied by Royal Rehab. We have performed reasonableness checks of this data where possible, however have not conducted an independent audit of this data to assess its compliance with accounting standards and internal operating procedures.
- The accuracy of responses to our queries provided by Royal Rehab.

Our advice may differ if any of these prove to be false.

We understand the report may be shared with third parties, for example Royal Rehab. Third parties should not place any reliance on our advice or this report which would create any duty or liability by Taylor Fry to that third party.

Yours sincerely

Ash Evans
Principal

James Vincent
Director

Appendix A Excel files subject to our review

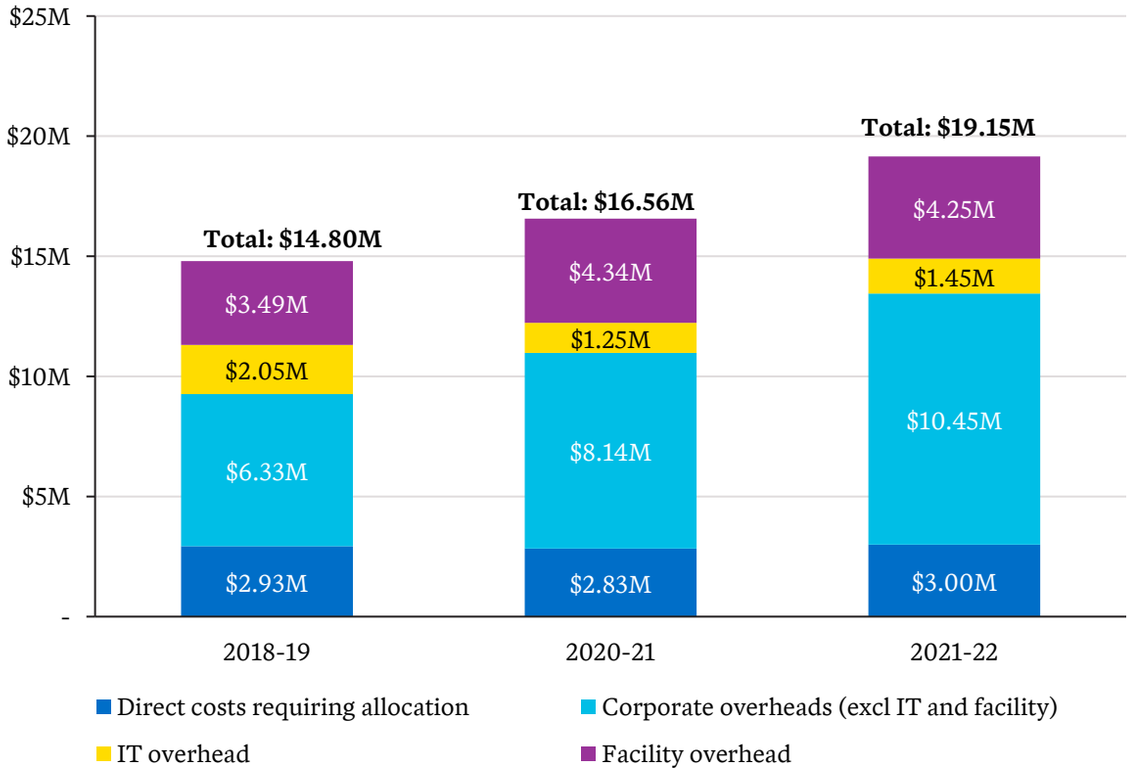
Our review considers cost information supplied by Royal Rehab to NSLHD in the following three excel files:

- *'Clinical costing - RR submission 30.06.2022.xlsx'*, covering the 2021-22 financial year
- *'Clinical Costing - Expenses FY21 Submission 31082021.xlsx'*, covering the 2020-21 financial year
- *'FINAL Costing working YE30 Jun 2019 - submission 20190923.xlsx'*, covering the 2018-19 financial year

Appendix B Total direct cost requiring allocation and overhead

Figure 5 sets out the total direct cost requiring allocation and overhead. The numbers below are the total amounts reported **prior** to allocation to business units by Royal Rehab.

Figure 5 – Total direct cost requiring allocation and overhead



Appendix C Estimate of Royal Rehab Group expenditure outside of the Royal Rehab division

Table 21 shows our estimate of Royal Rehab Group expenditure outside the Royal Rehab division. This expenditure relates to a combination of Disability Services, Sargood, MetroRehab (2020-21 onwards) and Breakthru (2021-22 only).

Total Group expenditure is sourced from published Royal Rehab financial statements. Other expenditure data is sourced from Royal Rehab division trial balances used for this project.

Royal Rehab confirmed that its divisions do not trade with each other and so there is no elimination of intra-group transactions when reporting at the group level.

Table 21 – Estimate of expenditure outside the Royal Rehab division

	Royal Rehab Group expenditure		
	2018-19	**2020-21**	**2021-22**
Total expenditure	**$67.09M**	**$84.14M**	**$109.69M**
Corporate overhead (excl facility, IT non-staff costs)	-$6.67M	-$8.52M	-$10.45M
Less: Other expenditure in the Royal Rehab division trial balance	-$34.45M	-$38.49M	-$39.89M
Less: Misc items - revaluation of financial assets, gain on bargain purchase	-	-$2.86M	-$6.46M
Approx expenditure outside the Royal Rehab division	**$25.97M**	**$34.26M**	**$52.89M**