O'Connell Advisory

BLACKTOWN PRIVATE HOSPITAL INDEPENDENT MARKET ASSESSMENT

April 2018

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GLOSSARY

BCC	Blacktown City Council
BPH	Blacktown Private Hospital
CAGR	Compound Annual Growth Rate
FTE	Full time equivalent
FY	Financial Year
HSS	Hospital for Specialist Surgery
IRSD	Index of Relative Socio-economic Disadvantage
LGA	Local Government Area
PHI	Private Health Insurance
SA2	Statistical Area Level 2
SA3	Statistical Area Level 3
SLA	Statistical Local Area

DISCLAIMER

This report has been prepared in line with the scope highlighted in Section 1.1 of this report.

Responsibility and purpose

This report has been prepared for Blacktown City Council for the purpose of initial health planning for a proposed Blacktown Private Hospital.

Reliance on information

In preparing this market assessment report we relied on the information provided to us by Hardes being complete and accurate. We have not performed an audit on the information provided.

Market conditions

O'Connell's opinion is based on prevailing market, economic and other conditions as at the date of this report. Conditions can change over relatively short periods of time. Any subsequent changes in these conditions could impact upon the conclusion reached in this report.

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EXECUTIVE SUMMARY

Blacktown City Council (BCC) proposes to capitalise on the $700M (Stages 1 & 2) being invested in the Blacktown Hospital by the NSW government. A previously commissioned market analysis concluded there was strong potential for a co-located private hospital. This market assessment identifies the extent and nature of unmet demand for private health services in the Blacktown region using private hospital demand projections from Hardes and Associates. Our data analysis has explored options for a potential new colocated private hospital.

Catchment Demand Growth

The main catchment for a proposed Blacktown Private Hospital (BPH) was determined to be residents living in 5 Statistical Area Level 3s: Blacktown, Blacktown North, Mount Druitt, Baulkham Hills, Rouse Hill - McGraths Hill. These account for 90% of BPH's activity, with an additional 10% of activity coming from other areas. The key catchment demographics are:

- The population growth rate is high, growing from 556,321 in 2018 to 763,533 by 2032. The average annual growth rate of 2.3% is significantly higher than the 1.6% for the Sydney metropolitan area
- The 70+ age group is the fastest growing cohort, with an annual growth rate in excess of 4% and overall growth of 2.4 times by 2036. This group are the highest users of hospital services
- The private insurance rate of the catchment at 55% is above the average rate of Greater Sydney (52%) and should also drive demand for private hospital services.

The Hardes data projects an annual bed day growth in the catchment of 2.8% p.a. which is driven by strong growth of the older cohorts.

The rate of private beds per head of population in NSW supports the reasonableness of the Hardes data. Based on the NSW bed rate (1.07 per 1,000 population), the unmet bed demand in the catchment is currently 51 beds. Even though there are planned expansions at Westmead Private and Norwest Private Hospitals, the unmet bed demand is expected to increase to 209 beds by 2032.

There is strong private sector competition in the catchment, with expansions at Westmead Private and Norwest Private hospitals and multiple day surgery facilities. It is critical that BPH is co-located with Blacktown Hospital for the following reasons:

- Clinicians at Blacktown Hospital can be more readily recruited to BPH
- Co-location reduces the risk of unsustainable hospital activity and low occupancy
- Blacktown Hospital is an expanding hospital with approximately 10% private patients
- Synergies can be achieved with certain Blacktown Hospital specialties (e.g. bariatric surgery)
- Future competition would have a strong preference to be colocated with Blacktown Hospital.

Potential Private Hospital Scenarios

By allocating market shares to Hardes data (mainly to the market growth), four scenarios have been developed which include combinations of different speciality groups as shown below:

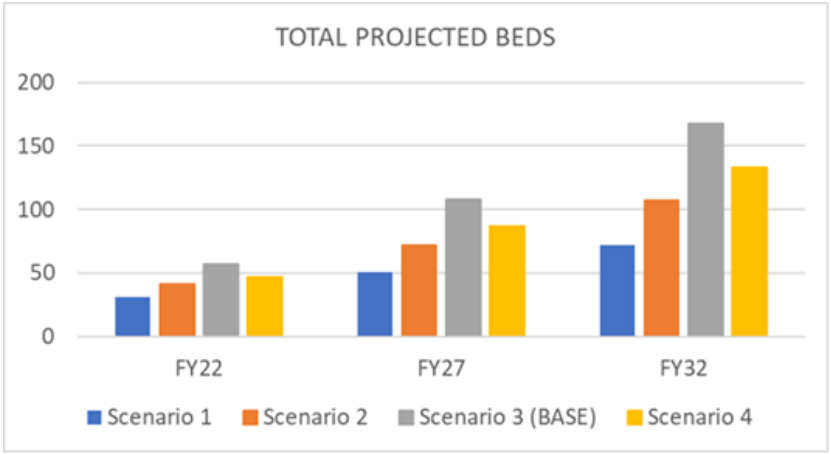
Scenario	Description
Scenario 1	Surgical/Medical
Scenario 2	Surgical/Medical + Psychiatry
Scenario 3 (BASE)	Surgical/Medical + Psychiatry + Rehabilitation
Scenario 4	Surgical/Medical + Rehabilitation

Our analysis indicates that the Hardes projections for chemotherapy, renal dialysis and obstetrics are conservative and higher market growth rate could be considered, resulting in more viable chair and delivery room numbers. These scenarios could be tested and refined at market sounding sessions with private operators.

The indicative infrastructure of the scenarios at FY32 is shown below:

FY32 PROJECTED POTENTIAL SCALE							
Scenarios	BEDS			Theatres	Chemo Chairs	Renal Chairs	Delivery Rooms
	Overnight	Same Day	Total Beds				
Scenario 1 Surgical/Medical	49	23	72	7.0	2.7	4.6	2.5
Scenario 2 Surgical/Medical + Psych	80	26	107	7.0	2.7	4.6	2.5
Scenario 3 (BASE) Surgical/Medical + Psych + Rehab	128	40	168	7.0	2.7	4.6	2.5
Scenario 4 Surgical/Medical + Rehab	97	36	133	7.0	2.7	4.6	2.5

The graph below shows the bed ramp up for each scenario, which may provide options for staging.



Of key importance to a proposed BPH are the clinicians and the ability of a hospital operator to attract and retain them. The Base Scenario requires approximately 48 surgeons in FY32, which appears to be achievable given the total number of doctors in the current market.

Benefits to Blacktown Community

The Base Scenario hospital would bring significant benefits to the local community, including but not limited to:

- Approximately 327 to 376 new skilled jobs in FY32
- A capital project in the range $124M to $142M delivering jobs and economic benefit during construction
- Creating greater scale on the health campus will attract clinicians (including allied health professionals) who will deliver more public and private health services for the local community
- Western Sydney Local Health District WSLHD would have potential to gain economies of scale, rental and recruitment benefits
- Teaching, training and research opportunities would be boosted.

Recommended Next Steps

The next steps could involve consideration of the following issues:

- Discussions with WSLHD re interest in supporting the progression of the project with focus on:
  - The availability of land co-located with Blacktown Hospital
  - The pro's and con's for WSLHD
  - The process to progress the private hospital opportunity and to agree what Council can do to support WSLHD.
- Market sounding with private operators to obtain feedback on the concept and hospital scenarios, with a focus on the detailed casemix outlined in the Appendix
- Decision whether to proceed to market or not with WSLHD as contracting party
- Blacktown Health Precinct Master Plan to provide a framework for the development of efficient and effective service delivery
- Information Memorandum
- Plan to go to market strategy.

An assessment of catchment demographics, Hardes data and unmet bed demand has provided evidence for the need of a co-located private hospital in Blacktown

1. INTRODUCTION

1.1. Scope

Blacktown City Council proposes to capitalise on the $700M (Stage 1 $300M, Stage 2 $400M) being invested in Blacktown Hospital by the NSW government. BCC has previously commissioned a high level Blacktown Health Precinct Market Analysis which concluded:

- The provision of overall hospital beds in the Blacktown LGA per head of population was lower than the national average;
- There was a strong potential for a private hospital adjacent to the public hospital; and
- This in turn would boost demand for private medical clinics, ancillary health services and supporting education and accommodation services.

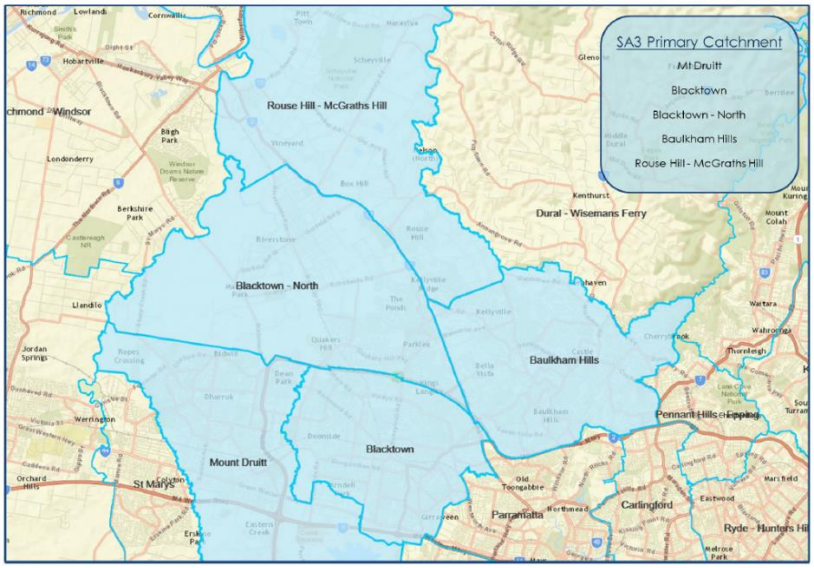
O'Connell Advisory has been engaged by BCC to confirm the extent and nature of unmet demand for private health services in the Blacktown region by using projection data from Hardes and Associates.

1.2. Recommended Approach to Market Assessment

The market assessment of Blacktown Private Hospital (BPH) relies on projections of private hospital activity from Hardes and Associates – the data source specified by BCC.

In determining the main catchment of a proposed BPH, factors of surrounding competition, insurance rates, population growth and road networks were taken to account. The main catchment is most likely to be residents living in 5 Statistical Area Level 3s: Blacktown, Blacktown North, Mount Druitt, Baulkham Hills, Rouse Hill - McGraths Hill, as highlighted in Figure 1. This would account for 90% of BPH's activity, with an additional 10% of activity coming from other areas.[1]

Figure 1: Catchment of BPH[2]



[1] Hardes & Associates 2018. 'Review of private hospital opportunities for the Blacktown catchment New South Wales'
[2] ibid.

1.3. Hardes & Associates Private Hospital Market Projections

A detailed analysis of the market opportunities in the catchment was performed. We specified market shares of the total market projected by Hardes, in order to generate an indicative casemix for BPH and an indicative infrastructure scope.

The Hardes data provides actual private hospital activity (admissions, bed days) in FY17 and projections to FY32 by specialty, which is summarised in Table 1. Their modelling uses data from various sources including:

- ABS historic and projected population projections
- State Government population projections
- Census data – socioeconomic status
- Australian Institute of Health and Welfare statistics and publications
- Private Hospital Data Bureau reports and statistics
- Private Health Insurance Administration Council
- State Health Department data
- De-identified private hospital data.

Table 1: Hardes total demand for catchment summarised by major specialty group

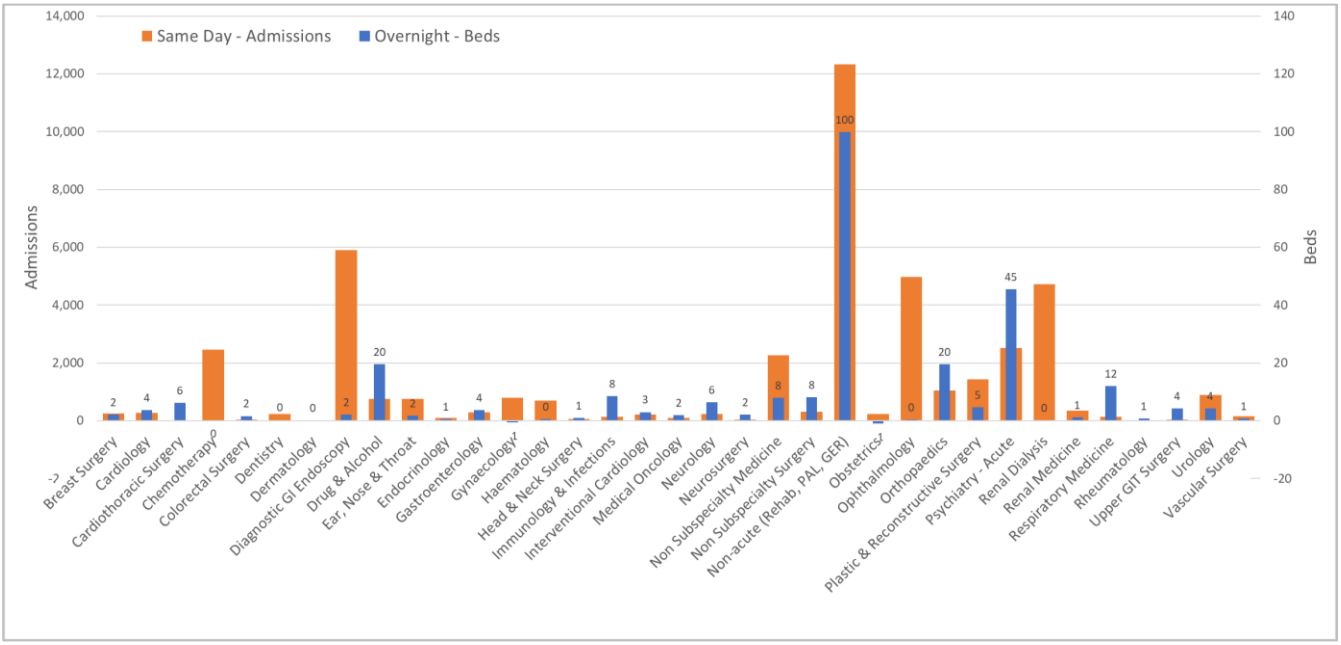
DEMAND - Total Market Projections Selected Catchment	Same Day Optimal Market Projected Admissions				Overnight Optimal Market Projected Admissions				Overnight Beds Optimal Market Projected O/N Beds			
Specialty Group	FY17	FY22	FY27	FY32	FY17	FY22	FY27	FY32	FY17	FY22	FY27	FY32
Surgical	35,537	40,780	46,419	52,622	16,112	18,099	20,132	22,316	194.4	214.3	234.3	255.4
Medical	7,405	8,733	10,251	11,960	5,125	6,233	7,427	8,811	90.4	103.8	119.3	137.6
Obstetrics	263	328	406	487	2,552	2,688	2,845	2,976	39.7	39.0	39.0	38.6
Chemotherapy	4,690	5,256	6,134	7,151	6	5	6	6	0.0	0.0	0.0	0.0
Renal Dialysis	5,375	6,854	8,374	10,103	5	8	10	18	0.0	0.0	0.0	0.1
Drug & Alcohol	1,316	1,547	1,793	2,072	313	394	490	595	18.1	23.5	30.1	37.7
Rehab	13,192	16,056	20,351	25,525	2,476	2,976	3,611	4,349	121.1	148.7	181.4	221.0
Psychiatry - Acute	3,747	4,456	5,295	6,252	961	1,140	1,326	1,533	68.1	81.5	96.5	113.5
Grand Total	**71,525**	**84,009**	**99,022**	**116,172**	**27,550**	**31,543**	**35,847**	**40,603**	**532.0**	**610.9**	**700.7**	**803.8**
CAGR (FY17 - FY32)	3.3%				2.6%				2.8%			
Total Growth (FY17 - FY32)	62.4%				47.4%				51.1%			

Figure 2 show the absolute growth in same day admissions and overnight beds by specialty group, projected by Hardes from FY17 to FY32 for the catchment.

The projected growth is not uniform across specialties: rehabilitation (non-acute activity) presents the highest growth in both overnight and same day activity (+12,300 same day admissions and +100 beds). High growth is also projected for diagnostic GI endoscopy, ophthalmology and renal dialysis for same day activity and psychiatry for overnight beds (+45 overnight beds). Obstetrics and gynaecology are projected to have the lowest growth in overnight admissions (+1% or under) for the primary catchment, primarily due to expected reductions in average length of stay.

We note that Hardes projected growth for some specialties (renal dialysis same day with +4.3% CAGR, chemotherapy same day with +2.9% CAGR, and obstetrics overnight with +1% CAGR) appears to be understated compared to other growth trends from our experience for the catchment.

Figure 2: Total growth in Hardes projected demand by specialty at FY32



Hardes projections by SA3 for same day and overnight activity are outlined in Figure 3 and Figure 4 respectively. Baulkham Hills SA3 accounts for the largest contribution of private hospital activity, due to its large population and high insurance rate (in FY17 this area had 47% of same day admissions and 44% of overnight admissions); the Rouse Hill - McGraths Hill SA3 accounts for the lowest proportion of activity (9% of both same day and overnight activity).

When looking at projected activity growth, we have grouped the SA3s in two subgroups:

- The Blacktown LGA SA3s are projected to experience the biggest growth in same day activity (Blacktown North with +4% CAGR, Mount Druitt with +3.9% CAGR, and Blacktown with +3.7% CAGR), while having a lower growth in overnight activity (+2.2% to +2.3% CAGR);
- The SA3s belonging to other LGAs (The Hills and Hawkesbury) are projected to experience intermediate growth (+2.8% to +2.9% CAGR) for both overnight and same day activity.

Figure 3: Hardes same day projections by SA3

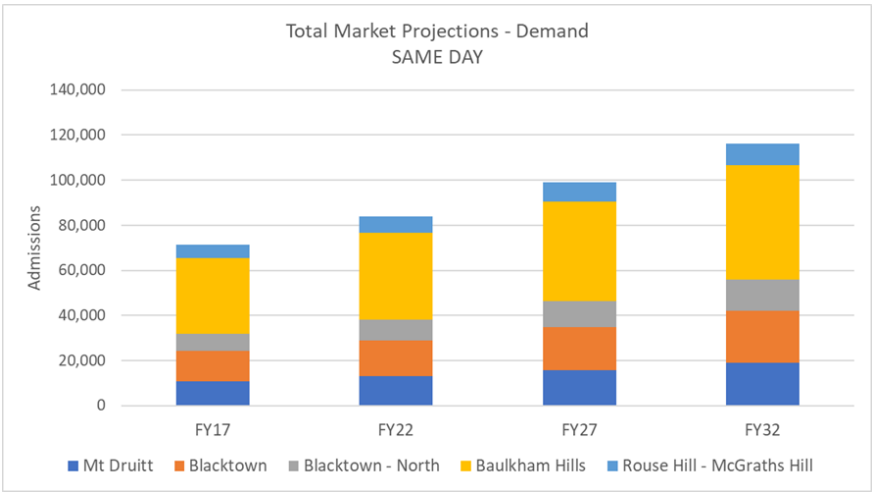
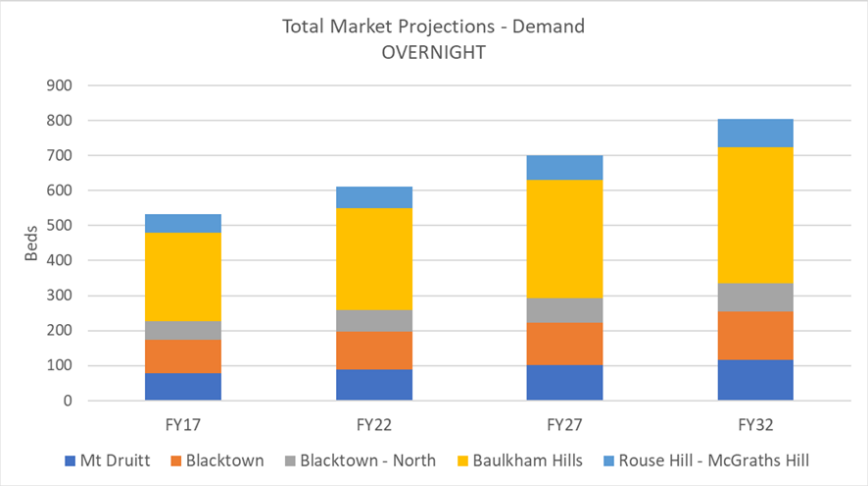


Figure 4: Hardes overnight projections by SA3



Hardes projections have an annual bed growth of 2.8% driven by strong growth in rehab, psychiatry, drug and alcohol, and orthopaedics

1.4. Co-located Blacktown Hospital

Blacktown Hospital is an expanding public hospital that will play a vital role for a co-located BPH by providing a source of clinicians and private patients.

Blacktown Hospital has recently undergone Stage 1 development which opened in May 2016 and is partially commissioned. This has involved new:[3]

- Cardiac Catheter lab
- Oncology and Haematology Centre including radiation therapy and chemo lounge
- Women's Health Clinics
- Stroke/Rehab Ward/Aged Care wards
- Coronary Care, Cardiology wards
- Lung and Sleep Centre
- Regional Dialysis Centre.

Some key facts of Blacktown Hospital are:

- From Oct-16 to Sep-17 there were 42,966 separations, an increase of 13% from the previous 12 months.[4] There were also 160,690 bed days recorded from Oct-16 to Sep-17.
- It is estimated that 10% of patients admitted to Blacktown Hospital elect to be private patients[5]
- There were 3,200 births in Blacktown Hospital in 2016[6]
- No high complexity cardiothoracic or neurosurgery, or ophthalmic surgery is performed at Blacktown Hospital.

The specialties at Blacktown Hospital will influence the casemix of choice for a colocated BPH

[3] NSW Government Health Infrastructure 2018. 'Projects', http://www.bmdhproject.health.nsw.gov.au/projects, visited 9.3.18
[4] BHI 2018. 'Healthcare Observer', http://www.bhi.nsw.gov.au/Healthcare_Observer/_nocache, visited 9.3.18
[5] Estimate based on other similar hospitals from My Hospital website
[6] NSW Government Health. 'Mothers and Babies Report 2016', http://www.health.nsw.gov.au/hsnsw/Pages/mothers-and-babies-2016.aspx, visited 8.3.18

The initial impact of Stage 1 can be seen in Figure 5 and Figure 6.

Figure 5 Historical separation activity of Blacktown Hospital[7]

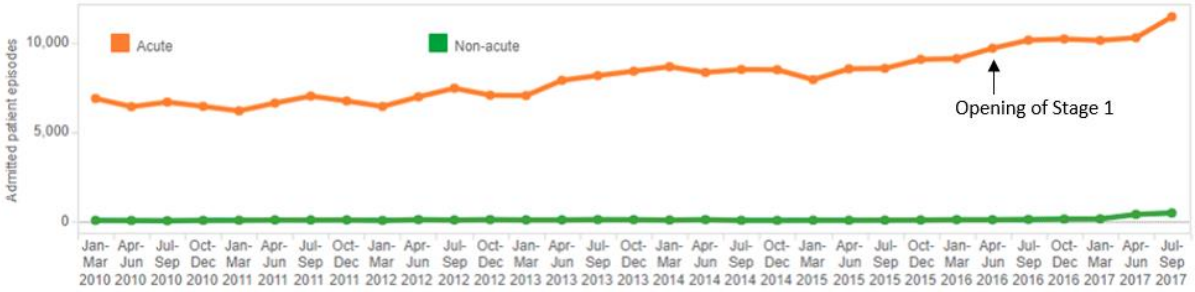
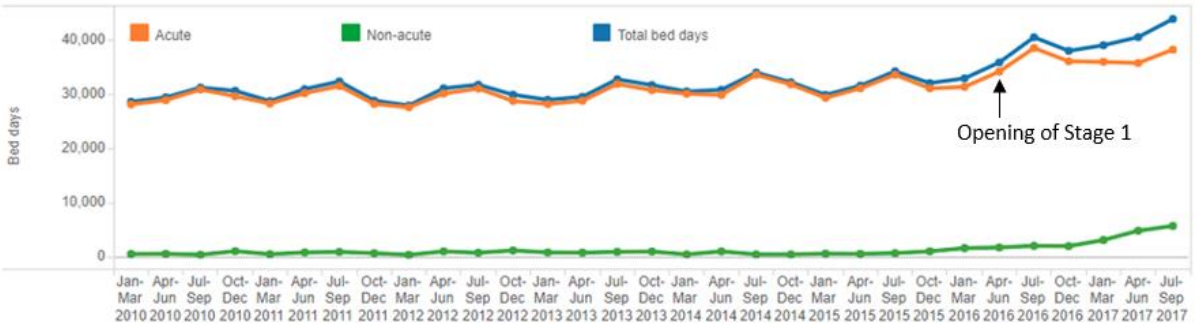


Figure 6 Historical bed day activity of Blacktown Hospital[8]



Stage 2 expansion is underway and is expected to be completed by June 2019.[9] It will include: [10]

- 15 new birthing rooms
- New Emergency Department including a short stay ward and Psychiatric Emergency Care Service
- New intensive care unit with more beds
- Eight additional operating theatres and space for future expansion
- New paediatric service with dedicated emergency department facilities, day stay and inpatient facilities
- Medical imaging, sterilising and non-clinical support services expansion
- Expanded haemodialysis unit for hospital inpatients
- Refurbished endoscopy, gastroenterology and additional outpatient clinics.

The hospital has recently opened a bariatric-metabolic surgery service and plans to deliver 50 procedures in the first year.[11]

[7] BHI 2018. 'Healthcare Observer', http://www.bhi.nsw.gov.au/Healthcare_Observer/_nocache, visited 9.3.18
[8] Ibid.
[9] NSW Government. 'Blacktown Hospital redevelopment enters its second stage', https://www.nsw.gov.au/news-and-events/news/blacktown-hospital-redevelopment-stage-2/, visited 12.3.18
[10] NSW Government Health Infrastructure 2018. 'Projects', http://www.bmdhproject.health.nsw.gov.au/projects, visited 9.3.18
[11] The Pulse 2017. 'First Blacktown patient receives life-changing weight loss surgery', http://thepulse.org.au/2017/12/14/first-blacktown-patient-receives-life-changing-weight-loss-surgery/, visited 9.3.18

We have taken these developments into account when determining the potential casemix for BPH, i.e.:

- Inclusion of obstetrics, gynaecology, bariatric surgery, chemotherapy and dialysis
- Exclusion of interventional cardiology because of it high cost and competition
- Exclusion of an Emergency Department due to a colocated public hospital Emergency Department and BPH's small size.

1.5. General Health Market

It is important to consider the underlying demand for private healthcare services and the broader healthcare environment, including pressures on funders. These are further explained in Appendix 4.1 with key points noted below.

It is widely recognised that the demand for private health services is being driven by four key factors:

- Population size and demographics
- Private health insurance (PHI) coverage
- Medical technologies & changing care models
- Broader healthcare changes.

Ageing Population

- Australia's population is growing and ageing. This trend is reflected in the Blacktown catchment
- Older people drive demand for hospital services and contribute to the bulk of hospital admissions and bed days
- Older people have longer lengths of stay
- The demand pressures will continue to impact payers and government policy.

Private Health Insurance

- PHI is the main funding source for private hospitals with government policy playing a pivotal role. 45.6% of the population are covered by PHI
- Despite some recent falls in PHI participation, a number of government initiatives are underway to reform PHI and improve the attractiveness e.g. lower cost of the product. Historically, reductions in PHI rates have not resulted in significant reductions in admission rates, as people likely to use hospital services retain their membership. Typically, younger healthier people are the most likely to discontinue their PHI membership
- The country's largest player Ramsay Health is positive about the outlook of the sector.

2. MARKET ASSESSMENT AND TARGET SERVICE PROFILE

2.1. BPH Catchment Demographics

Population size

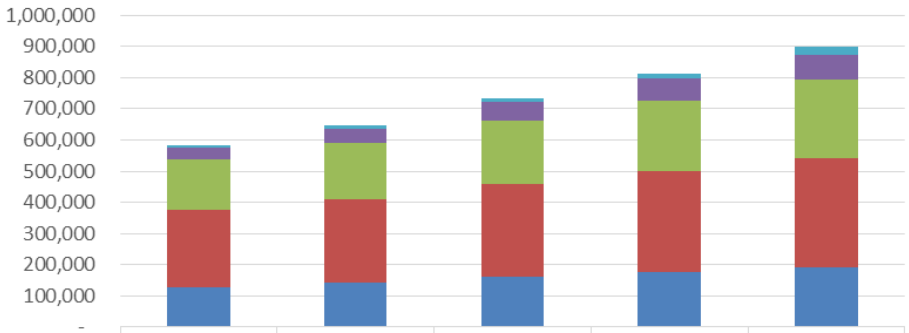
The population in the catchment is estimated at 556,321 people in 2018 and is projected to increase to 763,533 by 2032, representing a 37% increase (Table 2).[12] [13] The projected annual growth to 2032 of 2.3% is much faster than the Sydney metropolitan annual growth of 1.6%. The population growth is driven by high population growth rates in Baulkham Hills, Blacktown and Mount Druitt SA3s.

Table 2: Estimated population of catchment and projections

SA3	2016 (ABS proj.)	2018	2027	2032	Annual growth rate 2016-2032
Baulkham Hills	148,761	156,407	207,726	236,657	2.9%
Blacktown	139,391	145,296	176,369	193,521	2.1%
Mount Druitt	115,220	120,101	145,786	159,964	2.1%
Blacktown - North	95,745	99,801	121,145	132,926	2.1%
Rouse Hill - McGraths Hill	34,081	34,716	38,051	40,464	1.1%
Total	**533,198**	**556,321**	**689,077**	**763,533**	**2.3%**

The population projections by age group for Blacktown, The Hills and Hawkesbury LGAs are shown in Figure 7. The fastest growing age groups are 70-84 and 85+ which are growing at 4.1% and 6.1% per year respectively. The size of the 85+ age group will triple by 2036.

Figure 7: Population projection of Blacktown, The Hills and Hawkesbury LGAs by age group[14]



	2016 (Actual)	2021	2026	2031	2036
85+	7,000	8,800	11,800	16,500	22,950
70-84	36,450	47,650	59,900	71,200	81,150
45-69	163,050	179,000	201,350	225,800	252,600
15-44	246,950	266,700	298,700	322,550	350,850
0-14	129,000	143,600	161,750	176,100	189,750

The projected population annual growth rate of 2.3% is lower than the Hardes overnight bed growth rate of 2.8% (inflated by the higher growth in older cohorts) which appears reasonable.

[12] ABS 2017. '3218.0 - Regional Population Growth, Australia, 2016', http://www.abs.gov.au/ausstats/abs@.nsf/mf/3218.0, visited 7.3.18

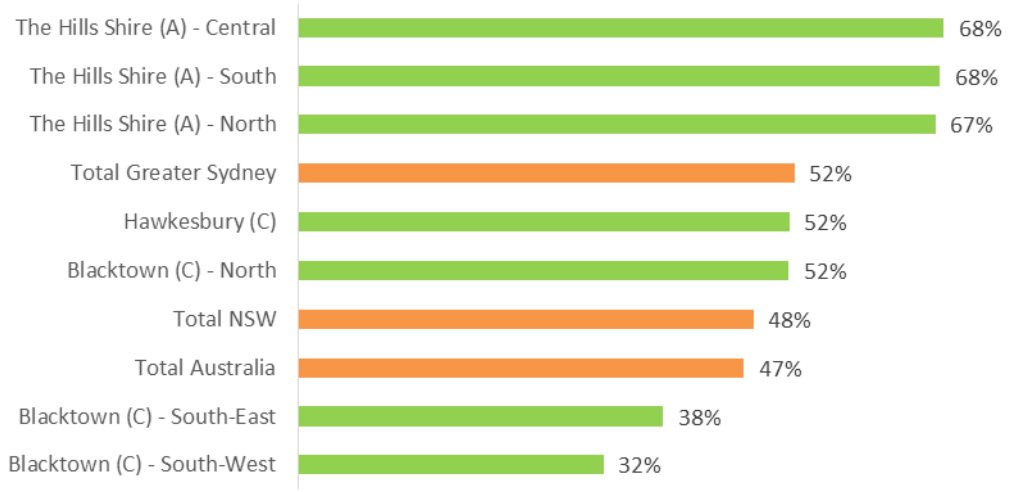
[13] NSW Government Planning & Environment 2017. 'Population projections', http://www.planning.nsw.gov.au/Research-and-Demography/Demography/Population-projections, visited 7.3.18

[14] NSW Government Planning & Environment 2017. 'Population projections', http://www.planning.nsw.gov.au/Research-and-Demography/Demography/Population-projections, visited 7.3.18

Private Insurance

A comparison of the insurance level by Statistical Local Area of the catchment and the broader geography is shown in Figure 8. The Hills Shire which generally corresponds with Baulkham Hills SA3 has the highest insurance rates (67-68%). Blacktown SLAs exhibit a range of insurance rates, with Blacktown South West having the lowest rate (32%) and Blacktown North having the highest rate (52%). On average, the catchment has an insurance rate of 55%, which is above the insurance rates of Greater Sydney (52%), NSW (48%) and the national average (47%).[15] This is expected to increase with the rise of household incomes (resulting from new housing developments) and an ageing population.

Figure 8: Private insurance rate by SLA (2007-08)[16]



Private insurance in the catchment is high and is expected to increase with higher average household incomes and an ageing population

Socio-economic Status

The Index of Relative Socio-economic Disadvantage (IRSD) is a general socio-economic index that summarises a range of information about the economic and social conditions of people and households within an area.

- A low score indicates relatively greater disadvantage in general. For example, an area could have a low score if there are (among other things): many households with low income, many people with no qualifications, or many people in low skill occupations.
- A high score indicates a relative lack of disadvantage in general. For example, an area may have a high score if there are (among other things): few households with low incomes, few people with no qualifications, and few people in low skilled occupations.

[15] Based on Blacktown, The Hills Shire and Hawkesbury SLAs.
[16] PHIDU 2014. 'Private health insurance (modelled estimates), persons aged 15 years and over 2007-08'

ABS provides an IRSD by SA2, based on data from 2011 Census. Although it is a few years old, it provides some insight into the level of socio-economic disadvantage across the catchment region.

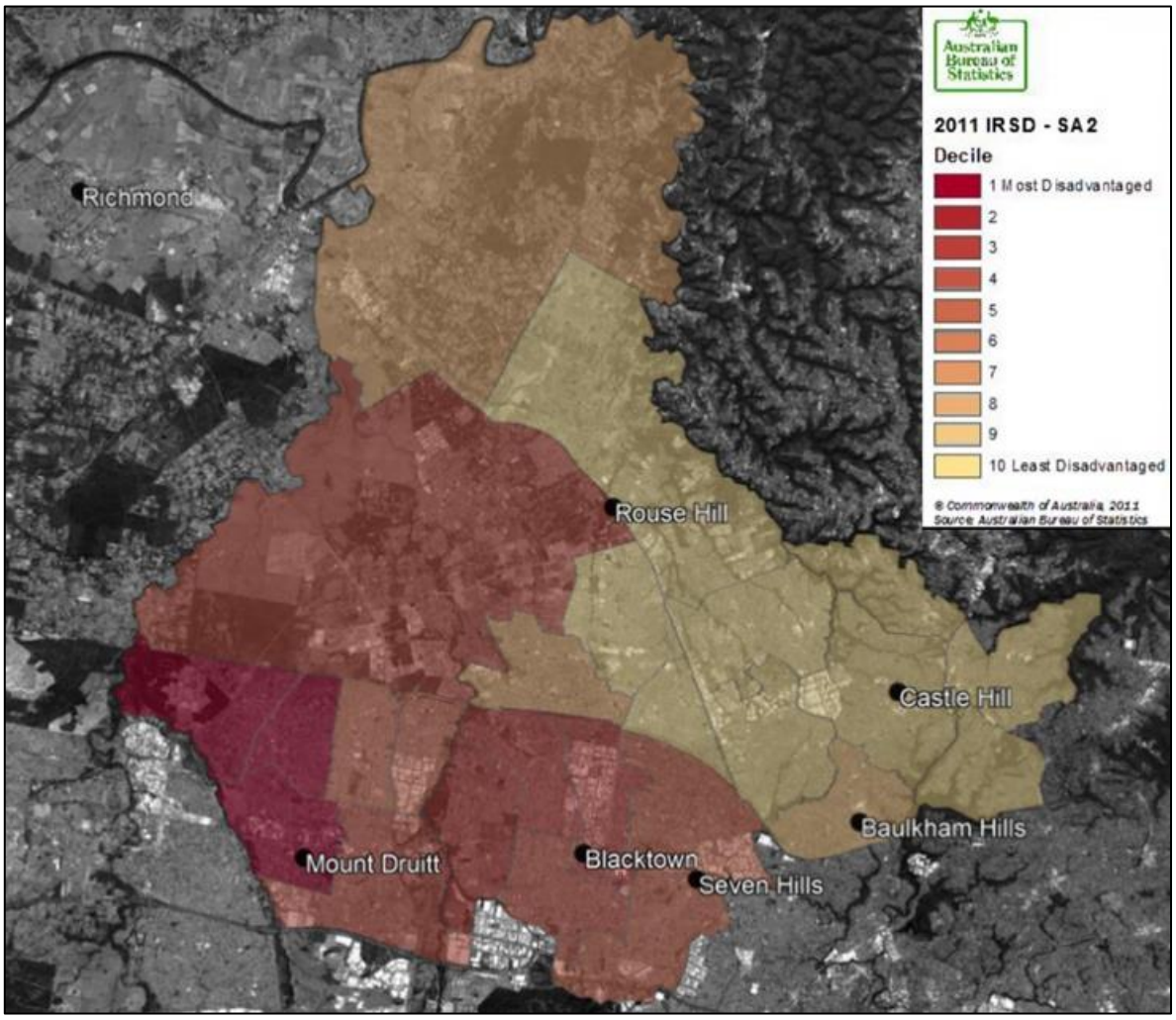
As seen in Figure 9, the catchment has a spectrum of socioeconomic disadvantage:

- Mount Druitt is the most disadvantaged
- Baulkham Hills and Rouse Hill - McGraths Hills have the least disadvantaged populations
- Blacktown North and Blacktown have moderately disadvantaged populations.

Generally, the lower the socioeconomic disadvantage, the higher is the level of private health insurance. These characteristics are reflective in the relative private health insurance coverage by SLAs in Figure 8.

The catchment is in a region of ongoing development, especially in Blacktown North, and it is expected that this will decrease the level of socioeconomic disadvantage and increase the level of private health insurance.

Figure 9: Socio-economic disadvantage by SA2 (2011)[17]



[17] ABS 2013. '2033.0.55.001 - Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011', http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/2033.0.55.0012011?OpenDocument, visited 8.3.18

Chronic disease

Chronic disease in the catchment (Blacktown, The Hills Shire, Hawkesbury LGAs) is similar to Greater Sydney, with high cholesterol, respiratory system diseases and musculoskeletal diseases representing the top 3 chronic diseases.[18] The rate of diabetes in Blacktown LGA (7.8 per 100) is slightly higher than the Greater Sydney average (6.3 per 100).[19]

High cholesterol, respiratory disease and musculoskeletal disease are the most common chronic diseases in the catchment, similar to Greater Sydney

2.2. Competitor Analysis

The geographical distribution of surrounding overnight and day private facilities are shown in Figure 10 and Figure 11. A full list of competitor hospitals with their details are shown in the Appendix 4.2 (Table 14).

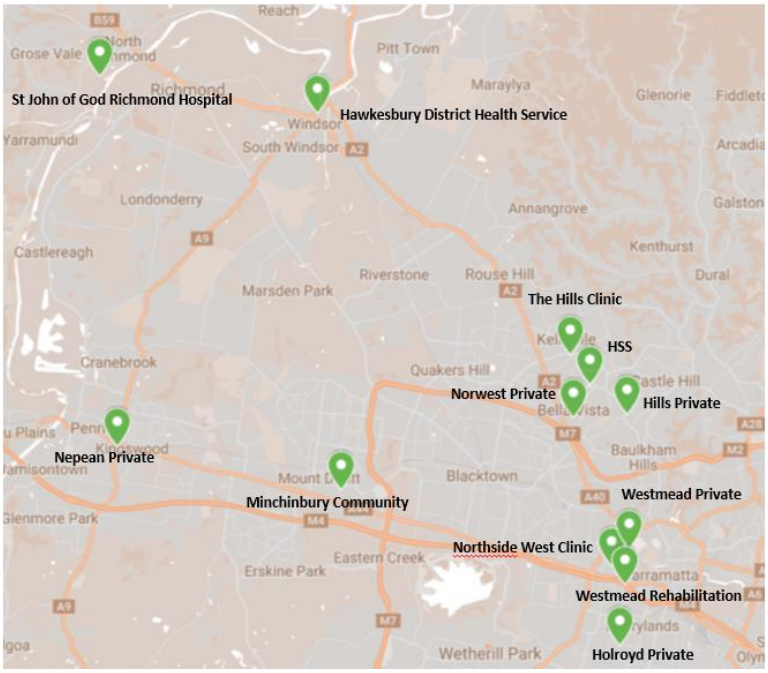
Most of the overnight facilities lie in the Bella Vista and Westmead suburbs, with a small surgical and rehabilitation hospital in Mt Druitt (Minchinbury Community Private Hospital). Two of the private hospitals, Norwest and Westmead Private, are large and sophisticated, with Norwest one of only three hospitals in the State providing private Emergency Department services.

Norwest Private Hospital underwent a recent expansion in 2016 increasing from 216 beds to 277 beds. Westmead Private Hospital will have 56 additional beds by mid-2019 (Stage 2 development).

There are plans by the State government to spend $300 million for the development of Rouse Hill Hospital.[20] This could be a potential competitor for BPH if it attracts private patients, especially if a co-located private hospital is part of the contract.

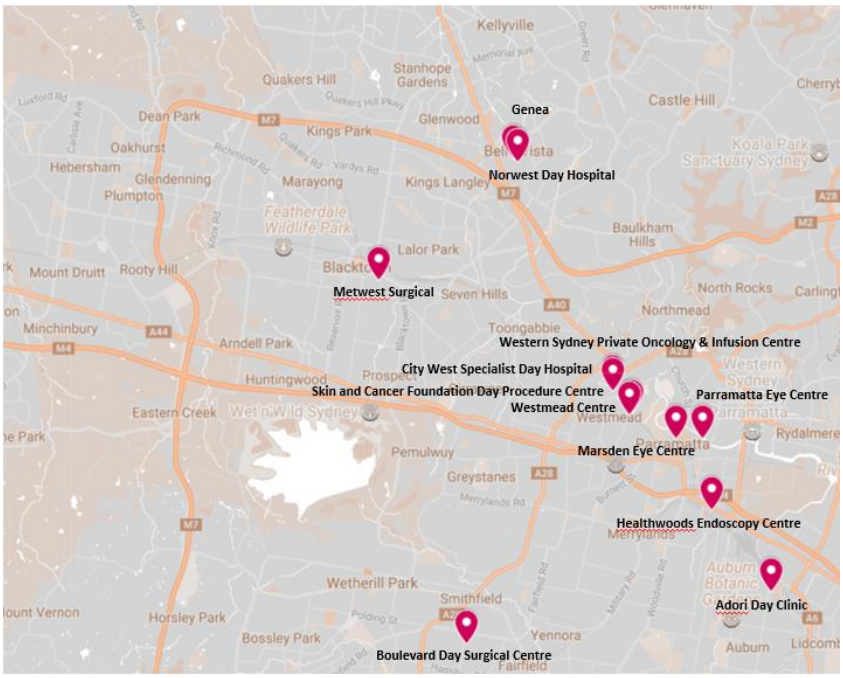
[18] PHIDU 2016. 'Social Health Atlas of Australia', http://phidu.torrens.edu.au/social-health-atlases/data#social-health-atlases-of-australia-local-government-areas, visited 8.3.18
[19] Ibid.
[20] Hawkesbury Gazette 2017. 'Rouse Hill Hospital gets funding in state budget', http://www.hawkesburygazette.com.au/story/4763852/planning-to-begin-for-new-hospital/, visited 8.3.18

Figure 10: Overnight private facilities



Most of the private day facilities lie in Westmead and Parramatta suburbs, with an ophthalmology clinic in Blacktown (Metwest Surgical). It is not known if there will be developments of new or existing day facilities.

Figure 11: Day only private facilities



There is strong competition in the catchment with capacity for existing hospitals to expand

2.3. Unmet demand based on average population bed rate

To test the reasonableness of Hardes data and the potential private bed gap, an estimation of the current unmet private hospital bed demand[21] in the catchment was calculated using:

- NSW average private hospital licensed bed population rate (1.07 per 1,000) for demand[22] [23]
- ABS population estimates by SA3[24]
- NSW Planning & Environment 2016 population projection growth rates by LGA[25]
- Current overnight bed days from Hardes (FY2017)
- Existing hospital beds and known planned expansions.[26]

With these assumptions, Table 3 shows a current undersupply of 51 overnight beds, which increases to 129 beds by 2027 and 209 beds by 2032. This is reasonably consistent with Hardes and clarifies the potential bed gap at 2017, which theoretically could be closed by spare capacity at Westmead and Norwest and other existing private hospitals.

Table 3: Estimation of unmet bed demand based on population utilisation rate and supply

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Beds required (demand)	583	595	608	621	634	651	668	686	704	722	737	753	768	784	801	817
Current overnight beds	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532	532
Westmead Private Hospital expansion			56	56	56	56	56	56	56	56	56	56	56	56	56	56
Norwest Private Hospital expansion		20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Total supplied beds	532	552	608	608	608	608	608	608	608	608	608	608	608	608	608	608
Unmet bed demand	**51**	**43**	**0**	**13**	**26**	**43**	**60**	**77**	**95**	**114**	**129**	**144**	**160**	**176**	**192**	**209**
Hardes data	532					611					701					804

[21] Unmet demand for all specialties, some of which may not be attractive to a private hospital operator
[22] AIHW 2017. 'Hospital resources 2015-16', https://www.aihw.gov.au/reports/hospitals/ahs-2015-16-hospital-resources/report-editions, visited 7.3.18
[23] Excludes private free-standing day hospital facilities
[24] ABS 2017. '3218.0 - Regional Population Growth, Australia, 2016', http://www.abs.gov.au/ausstats/abs@.nsf/mf/3218.0, visited 7.3.18
[25] NSW Government Planning & Environment 2017. 'Population projections', http://www.planning.nsw.gov.au/Research-and-Demography/Demography/Population-projections, visited 7.3.18
[26] Assumed that the recent expansion of Norwest Private has a 3 year ramp up of activity.

2.4. Target clinical services and market share

Following a detailed competitor analysis in the catchment, we determined the indicative market share assumptions in order to generate an indicative casemix and required infrastructure.

Market Share Assumptions

In determining the future opportunity for BPH we preferred taking a percentage of the growth rather than a percentage of the total market, as shown in Figure 12 and

Figure 13**.**

Figure 12: Share of same day admissions projection

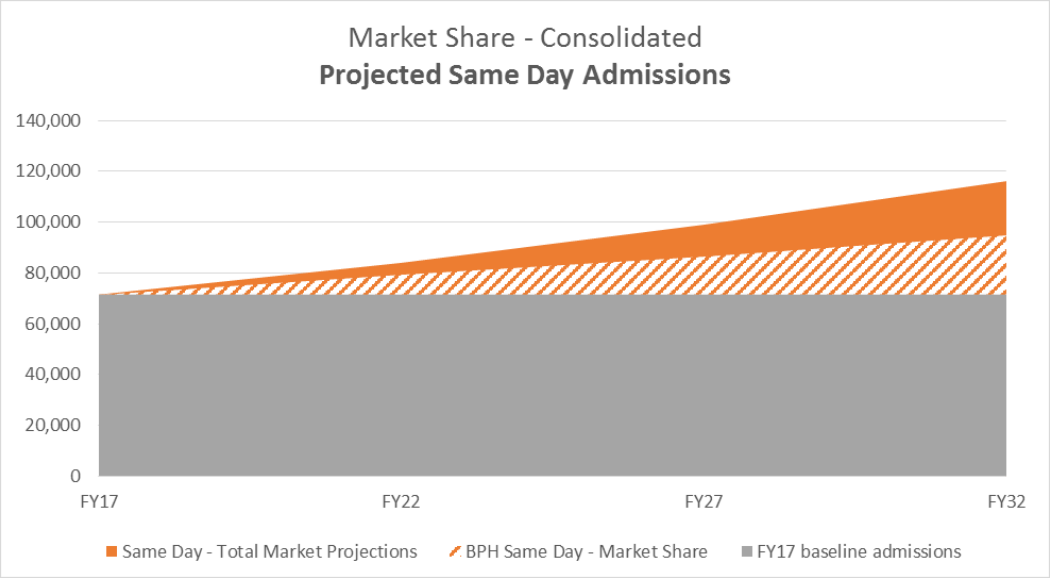


Figure 13: Share of overnight admissions projection

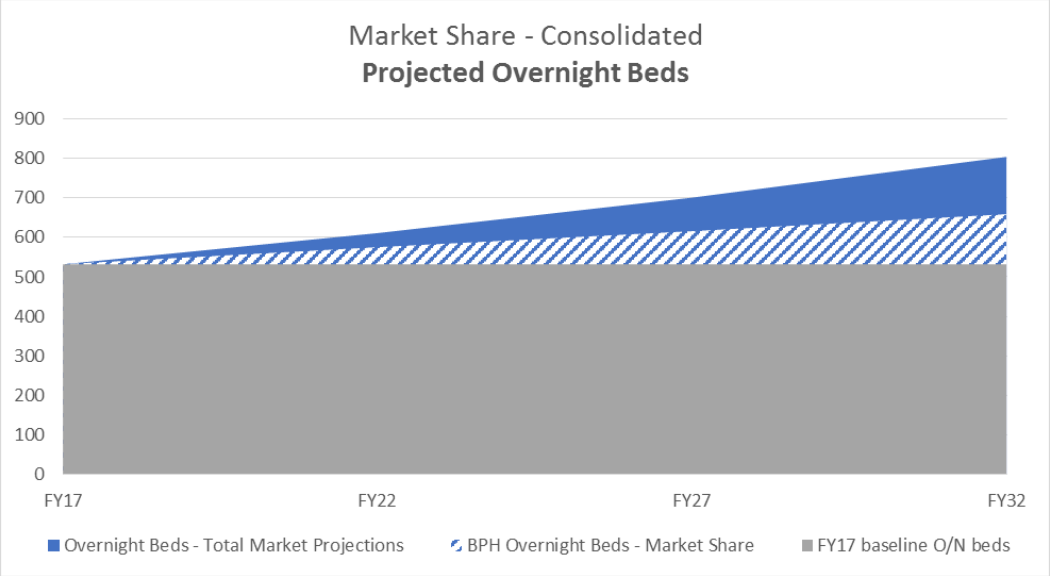


Table 4: Market share assumptions for each SA3

Market Share Assumptions		Mt Druitt	Blacktown	Blacktown - North	Baulkham Hills	Rouse Hill - McGraths Hill
Market Share	Obstetrics, Gynecology, Renal Dialysis	20% total market	20% total market	20% total market	20% total market	20% total market
	All Other Specialties	70% market growth	70% market growth	30% market growth	30% market growth	30% market growth
Inflows	Upper GIT Surgery	+20%	+20%	+20%	+20%	+20%
	All Other Specialties	+10%	+10%	+10%	+10%	+10%

- We assumed for most specialties, that the current demand for private hospital activity is fully met by current private hospital supply, so we have projected the market share for a potential BPH as a proportion of the growth in activity only, i.e. a proportion of any activity above current FY17 actuals (Figure 12,
- Figure 13). The remainder proportion of growth would be serviced by competitors, such as expansions of Westmead Private and Norwest Private Hospitals.
  - The market share varies by SA3: for Blacktown and Mount Druitt we applied a 70% share of projected growth, assuming less competition in these geographical areas, also reflecting the co-location with Blacktown Hospital.
  - For Blacktown North, Baulkham Hills, and Rouse Hill - McGraths Hill SA3s we applied a 30% market share of projected growth, assuming stronger competition by the existing and expanding private hospitals in the Baulkham Hills area (especially Norwest and HSS).
- Exceptions for market share: for 3 specialties (obstetrics, gynaecology and renal dialysis) we applied a projected market share of 20% of the **total market** across all five SA3s. We determined that a more "aggressive" approach would be necessary in these 3 areas **to achieve sufficient scale and viability**. With the less aggressive approach (i.e. share as % of growth only), the achievable scale would be too small for viability, especially for obstetrics (where the projected growth in bed days above FY2017 activity is almost nil due to expected reductions in average length of stay). We believe this approach is reasonable given the colocation with the public hospital and the large number of clinicians delivering services today at Blacktown.
- Inflows of activity from outside of the catchment: a default 10% factor was applied across all specialties. The only exception was bariatric surgery (included in upper GIT surgery), which is expected to attract higher inflows due to Blacktown Hospital being a centre of excellence in this specialty; for this reason a 20% inflow factor was used for this specialty.

Casemix Scenarios

Some specialities are more attractive than others to potential private operators and more/less inclined to be enticed away from Blacktown Hospital. Four casemix scenarios have been prepared for consideration in the next stage of market sounding (

Table 5). These include combinations of Surgical/Medical, Psychiatric and Rehabilitation specialities. The Base Scenario is Scenario 3 which includes all key specialty groups, and is presented in this section.

Table 5: Summary of Scenarios

Scenario	Description	Location of Details
Scenario 1	Surgical/Medical	Table 16 (Appendix)
Scenario 2	Surgical/Medical + Psychiatry	Table 17 (Appendix)
Scenario 3 (BASE)	Surgical/Medical + Psychiatry + Rehabilitation	Table 6
Scenario 4	Surgical/Medical + Rehabilitation	Table 18 (Appendix)

The number of theatres, delivery rooms, chemotherapy chairs and renal dialysis chairs do not vary across scenarios, since these requirements are not affected by rehabilitation or psychiatric activity.

Medical specialties were included in all scenarios (with the exception of Immunology and Infections because of the absence of an Emergency Department). Cardiothoracic Surgery and Neurosurgery were also excluded, because of their high complexity, their absence in Blacktown Hospital and because they generally only occur in larger private hospitals. In addition, Interventional Cardiology was excluded because of the existing competition delivering services in a small market and the scale that would be required to make the unit viable does not seem to be achievable.

The list of specialities in each scenario is presented in the Appendix (Table 15).

Table 6: Scenario 3 (Surgical/Medical + Psychiatry + Rehabilitation) projected activity and market shares – BASE

Scenario 3	Same Day			Overnight		
Surgical/Medical + Psych + Rehab	Market Share - Projected Admissions - incl. INFLOWS			Market Share - Projected Admissions - incl. INFLOWS		
Specialty Group	FY22	FY27	FY32	FY22	FY27	FY32
Surgical	3,392	6,175	9,282	1,065	1,914	2,837
Medical	604	1,302	2,098	425	881	1,412
Obstetrics	72	89	107	591	626	655
Chemotherapy	288	745	1,280	0	0	0
Renal Dialysis	1,508	1,842	2,223	2	2	4
Drug & Alcohol	122	251	400	34	75	120
Rehab	1,503	3,809	6,598	230	535	886
Psychiatry - Acute	380	824	1,339	86	175	276
Grand Total	**7,868**	**15,039**	**23,326**	**2,433**	**4,208**	**6,190**

% Projected Total Market	Same Day % Projected Admissions			Overnight % Projected Admissions		
Surgical	8%	13%	18%	6%	10%	13%
Medical	7%	13%	18%	7%	12%	16%
Obstetrics	22%	22%	22%	22%	22%	22%
Chemotherapy	5%	12%	18%	0%	0%	0%
Renal Dialysis	22%	22%	22%	22%	22%	22%
Drug & Alcohol	8%	14%	19%	9%	15%	20%
Rehab	9%	19%	26%	8%	15%	20%
Psychiatry - Acute	9%	16%	21%	8%	13%	18%
Grand Total	**9%**	**15%**	**20%**	**8%**	**12%**	**15%**

2.5. Indicative Infrastructure

To determine infrastructure requirements (i.e. size and scale), we have used throughput factors applied to the target casemix from Hardes data (Section 0 in Appendix).

Based on the market shares outlined in Section 2.4, the indicative infrastructure of BPH under the different scenarios is shown in Table 7. The number of overnight beds in the largest scenario (128) is 61% of the unmet bed demand calculated in Table 3. This allows competitors to account for the remainder market share as a result of expansion of existing private hospitals or new services.

Table 7: Indicative scale of infrastructure required for each scenario

FY32 PROJECTED POTENTIAL SCALE							
Scenarios	BEDS			Theatres	Chemo Chairs	Renal Chairs	Delivery Rooms
	Overnight	Same Day	Total Beds				
Scenario 1 Surgical/Medical	49	23	72	7.0	2.7	4.6	2.5
Scenario 2 Surgical/Medical + Psych	80	26	107	7.0	2.7	4.6	2.5
Scenario 3 (BASE) Surgical/Medical + Psych + Rehab	128	40	168	7.0	2.7	4.6	2.5
Scenario 4 Surgical/Medical + Rehab	97	36	133	7.0	2.7	4.6	2.5

Further scenarios for Chemotherapy, Renal Dialysis and Obstetrics have been considered given that Hardes projections for these specialties appear to be conservative. If higher market growth rates[27] were used, then the indicative infrastructure would be 7 renal dialysis chairs, 9 chemotherapy chairs, 4 delivery rooms and 11 overnight obstetric beds.

2.6. Benefits to Blacktown Community

The scale of the potential private hospital opportunity in Blacktown is substantial and would deliver a range of significant economic and other benefits to the local community, including but not limited to:

- A large number of new skilled jobs by FY32
- A substantial new infrastructure project of up to $142m which would deliver jobs and economic benefit during construction
- Creating greater scale on the health campus will attract clinicians (including allied health professionals) who will deliver more public and private health services for the local community
- Western Sydney Local Health District (WSLHD) would have potential to gain economies of scale, rental and recruitment benefits
- Teaching, training and research opportunities would be boosted.

[27] Dialysis CAGR 6.8%, Chemotherapy CAGR 7.7%, Obstetrics CAGR 2.7%

Allied health professionals will also be attracted to BPH, especially if there is rehabilitation and a full range of supporting facilities (e.g. gym, pool).

The indicative operating FTEs, floor space area and project cost of the Base Scenario is shown in Table 8:[28]

Table 8 Indicative operating FTEs, area and cost of Base Scenario

	Low	High
Operating FTEs	327	376
Area (m^2)	30,627	35,221
Project Cost	$124m	$142m

2.7. Clinicians Profile

Of key importance to a proposed BPH are the clinicians and the ability of a hospital operator to attract and retain sufficient high quality doctors. Co-location at Blacktown Hospital would make it a more straightforward task for the hospital operator to attract doctors and reduce the risk of uneconomic hospital activity and low occupancy.

The number of clinicians by specialty required for the Base Scenario in FY32 are shown in Table 9. In total, this is estimated at 48 surgeons and 19 anaesthetists.

Table 9: Projected clinicians for Base Scenario (Scenario 3) in FY32

Projected Surgeons + Anaesthetists in FY32	Est. Surgeons	Est. Anaesthetists	Est. Total Surgeons + Anaesthetists
Breast Surgery	1.5	0.5	2.0
Colorectal Surgery	0.4	0.1	0.6
Dentistry	0.7	0.2	1.0
Diagnostic GI Endoscopy	5.9	2.0	7.9
Ear, Nose & Throat	3.6	1.2	4.8
Gynaecology	6.0	2.0	8.0
Head & Neck Surgery	0.5	0.2	0.7
Non Subspecialty Surgery	2.8	0.9	3.7
Obstetrics	1.2	0.4	1.6
Ophthalmology	12.8	4.3	17.0
Orthopaedics	2.3	2.3	4.5
Plastic & Reconstructive Surgery	3.0	2.0	5.0
Upper GIT Surgery	2.4	0.8	3.2
Urology	3.9	1.3	5.2
Vascular Surgery	0.8	0.3	1.0
Grand Total	**47.8**	**18.5**	**66.3**

[28] Includes clinical suites and a 278 carpark spaces.

The number of clinician appointments at surrounding private hospitals is shown in Table 10.[29] Clinicians may have multiple appointments across hospitals. Norwest Private and Westmead Private Hospital have the largest number of appointed clinicians, reflecting high volumes of activity in the market.

Table 10: Number of clinician appointments by specialty in surrounding private hospitals[30]

Specialty	Norwest Private Hospital	Westmead Private Hospital	Nepean Private Hospital	HSS	Holroyd Private Hospital	Minchinbury Community Hospital	The Hills Private Hospital	Northside West Clinic	Hawkesbury District Health Service	Westmead Rehabilitation Hospital	The Hills Clinic - Castle Hill
Bariatric Surgery	4	4		4							
Breast Surgery	4	1	2	2							
Cardiology	26	21	12								
Colorectal Surgery	4	6	4	5							
Dentistry		1	6	1	7	2			1		
ENT	10	12	5	5	1	1			1		
Gastroenterology	16	7	8	13		3			1		
General Medicine		1	2	1					1		
General Surgery	22	16	18	7	5	3			3		
Head & Neck Surgery	3	3									
Neurosurgery	6	8	3								
Obstetrics & Gynaecology	34	45	11	5	3				3		
Ophthalmology	5	4	5	7	7	3					
Oral and Maxillofacial Surgery	3	11	6	1		1					
Orthopaedics	31	18	17	16	3	2			2		
Plastic Surgery	9	12	3	7	3						
Psychiatry				6			6	14			5
Rehabilitation	2		2	9	2	5	8		1	7	
Respiratory Medicine	5	6	3	1							
Urology	8	17	7	2	1						
Vascular Surgery	6	5	3								
Total	**198**	**198**	**117**	**92**	**32**	**20**	**14**	**14**	**13**	**7**	**5**

The number of doctors across all these hospitals is shown in Table 11. Large numbers of specialists are present in Obstetrics & Gynaecology, Orthopaedics, General Surgery, Gastroenterology and Cardiology, which may make it is easier to recruit clinicians for these specialities. These numbers indicate that the doctors needed to be recruited for BPH is achievable.

Table 11: Number of unique clinicians in each specialty in the surrounding private hospitals

Specialty	Number of Doctors
Bariatric Surgery	7
Breast Surgery	5
Cardiology	51
Colorectal Surgery	12
Dentistry	18
ENT	24
Gastroenterology	43
General Medicine	4
General Surgery	54
Head & Neck Surgery	4
Neurosurgery	13
Obstetrics & Gynaecology	84
Ophthalmology	29
Oral and Maxillofacial Surgery	18
Orthopaedics	70
Plastic Surgery	24
Psychiatry	25
Rehabilitation	26
Respiratory Medicine	14
Urology	28
Vascular Surgery	10
Total	**563**

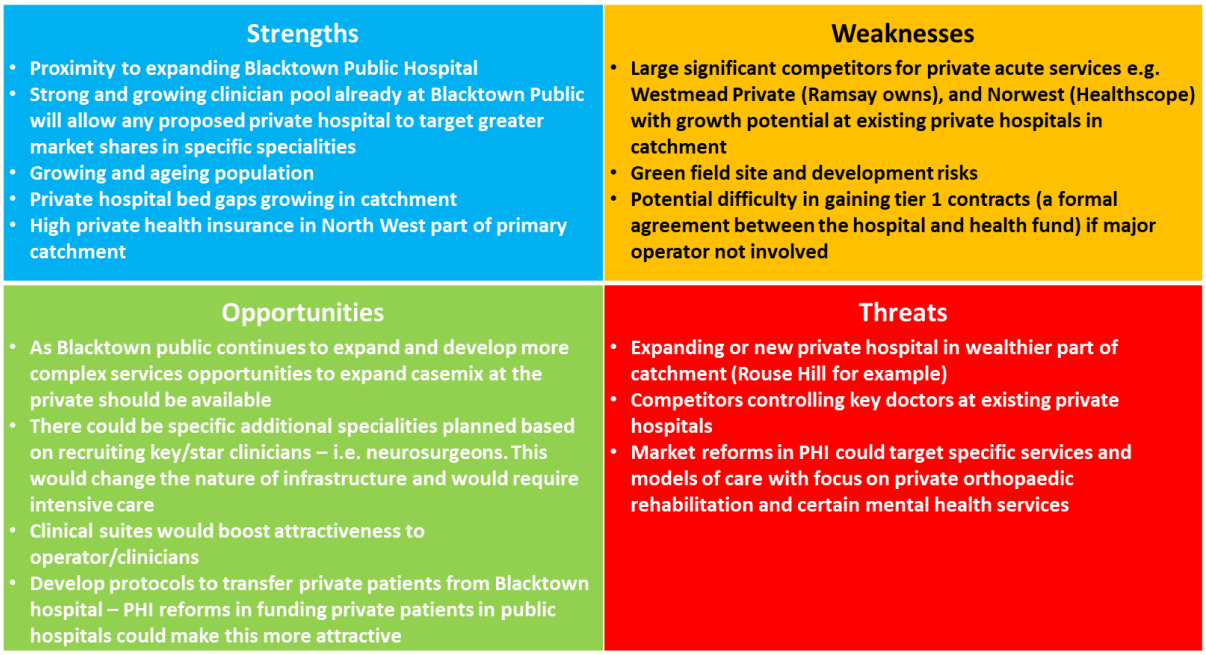
[29] Determined by web search

[30] Clinicians may have multiple appointments across hospitals.

2.8. SWOT Analysis

A SWOT analysis has been performed of a potential BPH (Figure 14). While there is significant competition servicing the catchment, the population is growing and ageing, and the private hospital bed gap is increasing. The proximity to an expanding and developing Blacktown public hospital will be highly attractive to a private hospital operator.

Figure 14 SWOT analysis



Key Risks and Mitigating Strategies

The key risks of BPH and mitigating strategies are shown in Table 12. The most important risk is the availability of co-located land for BPH.

Table 12 Key risks of BPH and mitigating strategies

Risk	Mitigation
Securing land co-located with Blacktown Hospital	Early consultation with WSLHD
LHD support	Early consultation to obtain LHD support
Scale of BPH	Consider additional specialties e.g. psychiatry, rehabilitation
Tier 1 contract agreement	Involve a major operator
Rouse Hill Hospital	Offer superior services to private patients
New and expanding private hospital developments	Monitor media releases and company reports
Clinician availability	Approach clinicians in Blacktown Hospital and market benefit of co-location

3. NEXT STAGES

This market assessment has identified potential services that BPH could provide and categorised them into four scenarios. The next steps could involve consideration of the following issues:

- Discussions with WSLHD re interest in supporting the progression of the project with focus on
  - The availability of land co-located with Blacktown Hospital,
  - The pro's and con's for the LHD
  - The process to progress the project and what Council can do to support
- Market sounding with private operators to obtain feedback on the concept and hospital scenarios, with a focus on the detailed casemix outlined in the Appendix
- Decision whether to proceed to market or not with WSLHD as contracting party
- Blacktown Health Precinct Master Plan to provide a framework for the development of efficient and effective service delivery
- Information Memorandum
- Plan to go to market strategy.

4. APPENDIX

4.1. General Health Market

It is important to consider the underlying demand for private healthcare services and the broader healthcare environment, including pressures on funders.

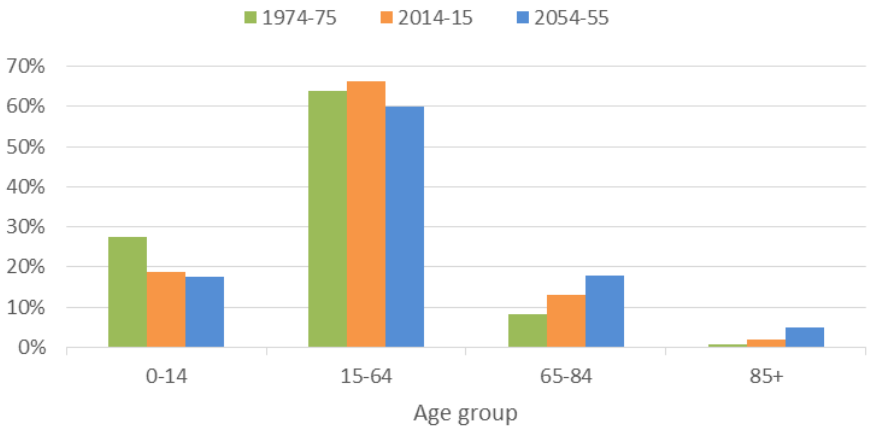
It is widely recognised that the demand for private health services is being driven by four key factors:

- Population size and demographics
- Private health insurance coverage
- Medical technologies & changing care models
- Broader healthcare changes.

Ageing Population

Australians will live longer and continue to have one of the longest life expectancies in the world. The graph below reveals that Australia is facing a significant increase in the number of older people over the next 40 years as highlighted below: [31]

Figure 15: Age profile change of Australia 1974 - 2055



The Government's latest intergenerational report highlights statistics of the Australian population by 2054-55:

- Population to grow to 39.7m
- Proportion over 65 will increase to 23% of the population
- Proportion over 85 will more than double to 4.9% of population.

[31] Australian Government, The Treasury. '2015 Intergenerational Report', https://treasury.gov.au/publication/2015-intergenerational-report/, visited 1.3.18

There are a number of factors that are combining to produce Australia's ageing population:

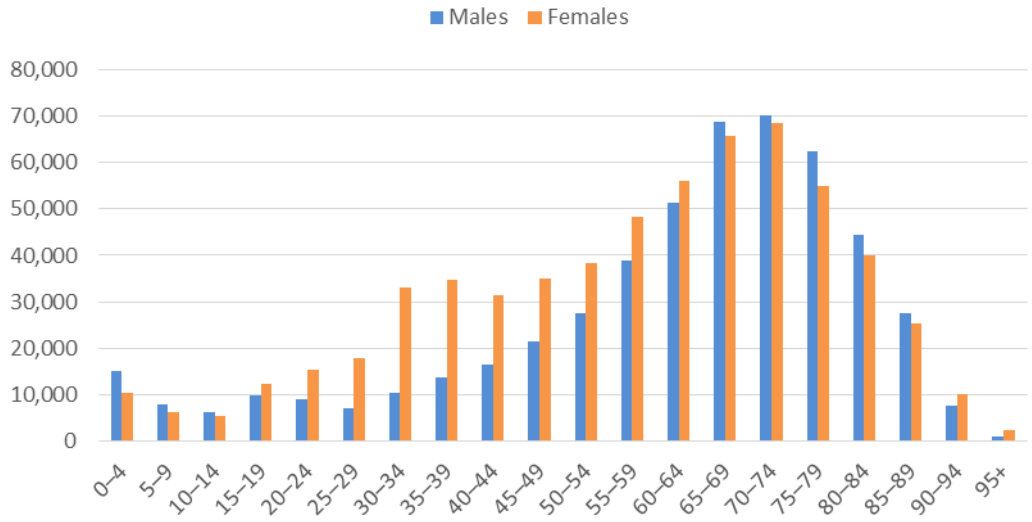
- The Baby Boom Generation refers to those people born between 1946 and 1965. This post-war period was marked by high levels of immigration and high birth rates which peaked at 3.6 babies per woman in 1961. This cohort of the population will be 65 – 84 years of age by the year 2031.

- Since this baby boom there has been a steady decline in fertility. Women have been choosing to have fewer children for many reasons including the introduction of oral contraception, women's increased participation in the paid workforce, and changes in the perception of the ideal family size. The decline in the birth rate means that there are fewer younger people. This combined with the ageing of the baby boomer generation means that overall the population is ageing.

- Due to medical advances and a higher standard of living, Australia's life expectancy has also continued to increase. It is projected that by 2054-55, life expectancy at birth will have increased by 3-4 years to 95.1 years for males and 96.6 years for females.[32]

The older age groups account for the bulk of hospital admissions and bed days as shown in Figure 16 and Figure 17.[33] With more comorbidities in the older age group, the average length of stay increases with age (Figure 18). The ageing population will therefore drive growth for private hospital services. Increased hospitalisations for females between the ages of 30 and 39 are mainly due to the obstetric admissions.

Figure 16: Private hospital episodes by gender and age group in December 2017 – Australia



[32] Ibid.
[33] APRA 2018. 'Private Health Insurance Membership and Benefits', http://www.apra.gov.au/PHI/Publications/Pages/Private-Health-Insurance-Membership-and-Benefits.aspx, visited 1.3.18

Figure 17: Private hospital bed days by gender and age group in December 2017 – Australia

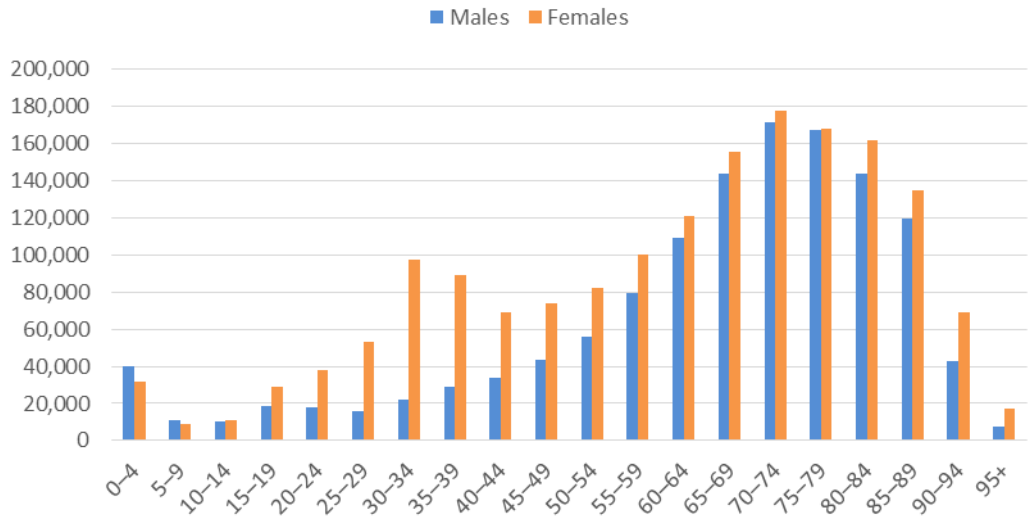
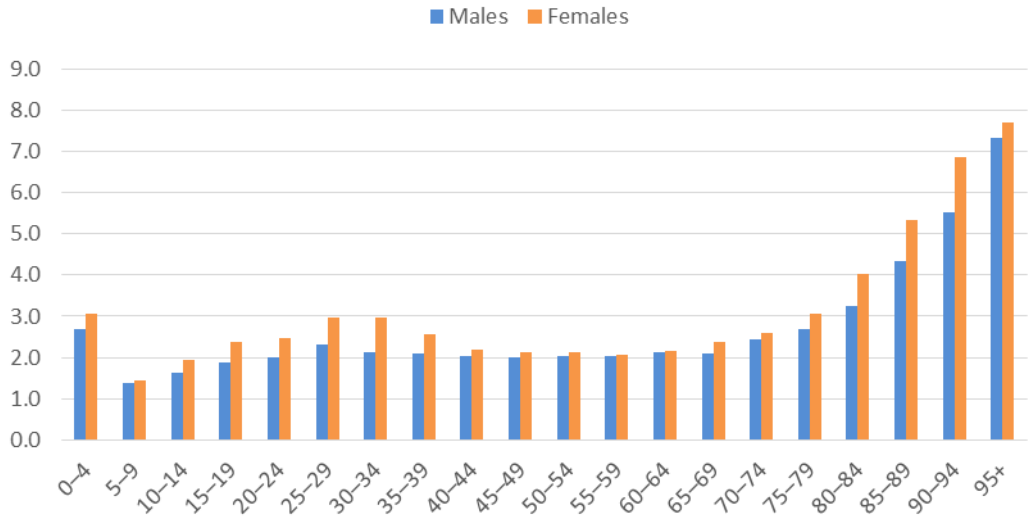


Figure 18: Private hospital average length of stay (days) by gender and age group in December 2017 - Australia



Private Health Insurance Cover

Private health insurance is the fundamental revenue source for private hospitals and is highly regulated. A strong private health care system takes pressure off the public health system and adds significant finance for the sector as a whole. As at 31 December 2017, there were 11.3m people with private hospital treatment cover in Australia (45.6% of the population), and 3.7m people in NSW (46.9% of the population).[34]

A previous Liberal Government developed a series of initiatives designed to not only increase membership of private health insurance, but also to secure long-term premium stability. These initiatives included the introduction of:

(a) the 30% private health insurance rebate;

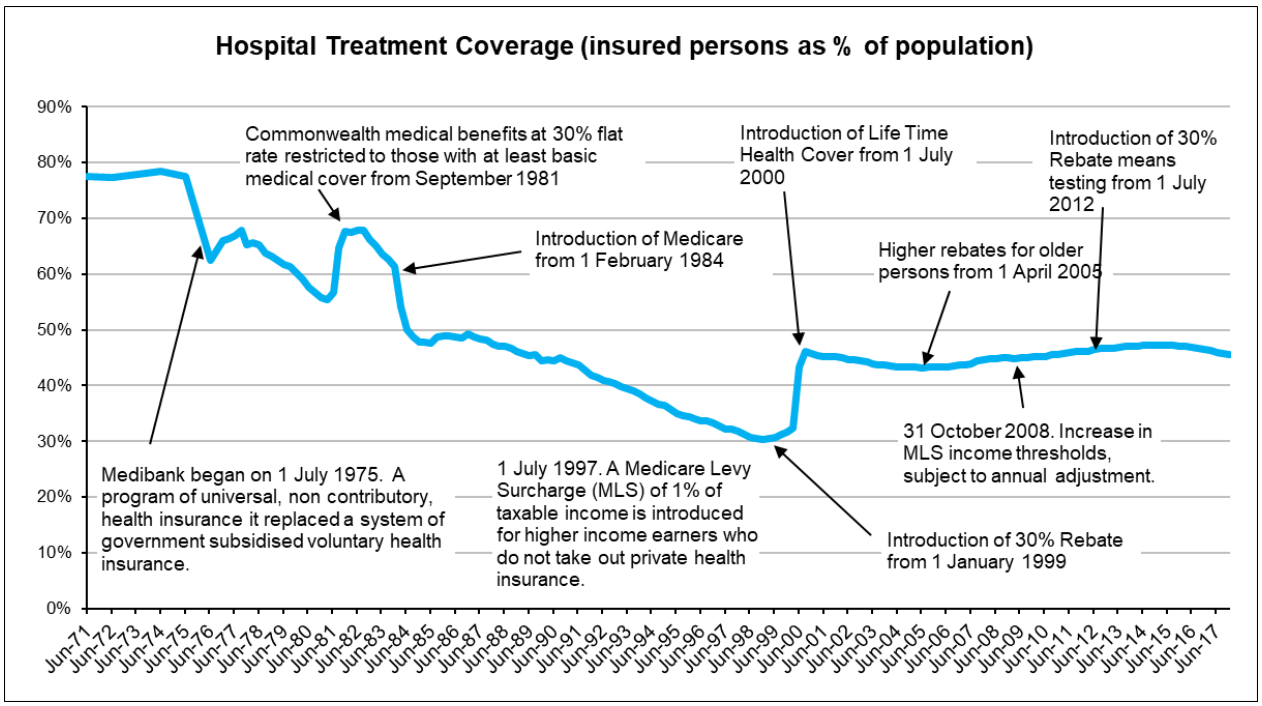
(b) Lifetime health cover; and

(c) Medicare levy surcharge for high-income earners without private health insurance.

Subsequently, private health insurance membership in Australia increased nearly 16 percentage points from a low of 30.3% in the December quarter 1998 to 46.6% of the Australian population for the December quarter 2016.

Despite some recent negative changes to private health insurance including means testing of the 30% rebate, health insurance participation rates for hospital cover have remained strong as demonstrated below:

Figure 19: Hospital treatment coverage in Australia[35]



[34] APRA, 'Statistics – Private Health Insurance Membership and Coverage December 2017 (released 13 February 2018)', http://www.apra.gov.au/PHI/Publications/Pages/Membership-and-Coverage.aspx, visited 7.3.18

[35] APRA 2018. 'Private Health Insurance Statistical Trends', http://www.apra.gov.au/PHI/Publications/Pages/Statistical-Trends.aspx, visited 1.3.18

Potential negative changes and impact

Whilst there remains significant uncertainty over future government policy, there will continue to be budgetary pressure on health expenditure as the population ages. Notwithstanding, the demand for quality service and rapid access for acute care services is likely to remain strong for private and self-insured patients given the pressures on the public system.

Further negative changes to health insurance policy are unlikely to have significant impact for BPH activity levels for the following reasons:

- The introduction of the levy and means testing of the rebate has had no obvious impact on health insurance participation rates as per above. Lifetime health cover had the most significant uplift impact in 2000
- The most likely impact will be on people under 30 dropping out of health insurance. This cohort are minimal users of private hospital services
- Older people in previous health insurance coverage drops tended to stay in as highlighted below:

In the 1990's when private insurance participation rates dropped to historical low levels, the volume of private hospital services did not fall, with older people remaining covered and representing the aged groups with highest demand for hospital and cancer care services.

This is highlighted by the graph below (Figure 20) which shows that the private insurance initiatives under the Howard Liberal government had the impact of attracting a large increase in younger people.

Figure 20: Average age of total people with hospital treatment membership by state – Australia[36]

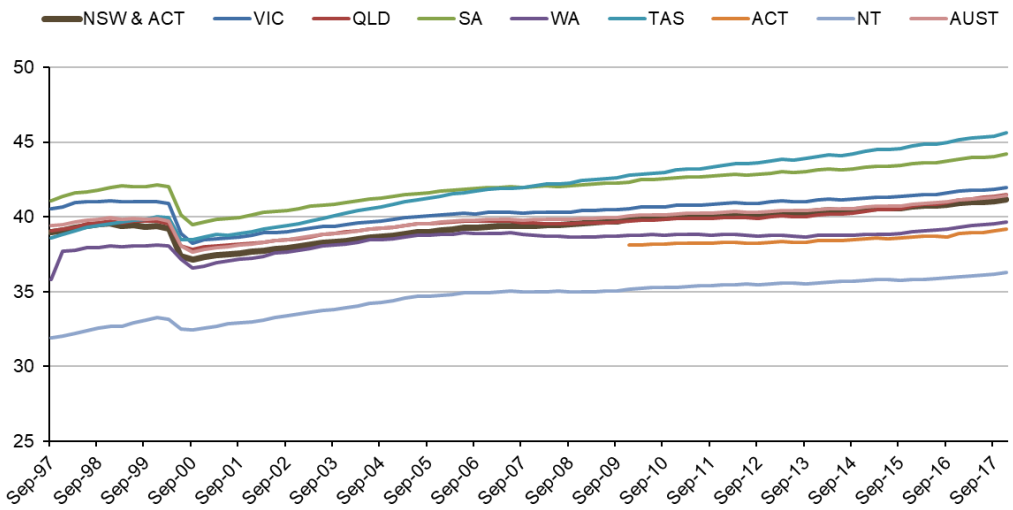


Figure 21 shows the number of insured persons by age cohort for Australia as at 30 June 2017. The highest number of insured persons is in the 45-49 age group. However, as expected the older age group of 65-69 has the highest percentage of the population coverage.

[36] APRA 2018. 'Private Health Insurance Statistical Trends', http://www.apra.gov.au/PHI/Publications/Pages/Statistical-Trends.aspx, visited 1.3.18

Figure 21: Hospital treatment insured persons by age cohort as at June 2017 – Australia[37] [38]

We would expect any negative drop in health insurance coverage will impact coverage by younger cohorts. This could have a significant impact on the financial performance of private health insurers who would then pressure private hospital service margins as occurred during the late 1990's.

Other macro industry issues with potential to pressure private hospital performance levels include:

- Private health insurance campaign focused on affordability & reform proposals which target private hospital costs with lower health insurance rebates. The proposed hospital will be able to continuously strive for lower lengths of stay to get greater throughput and cost efficiencies. This will require sound management
- Prosthesis pricing & rebates is currently subject to review
- MBS review and potential to impact certain surgical procedures with lower rebates
- Pressure from Department of Veterans' Affairs to reduce private hospital contracts to be more aligned to health insurers
- Increased reporting and quality requirements being pushed by PHI with penalties for avoidable readmissions etc.

[37] Ibid.
[38] ABS 2017. '31010DO002_201609 Australian Demographic Statistics, Jun 2017', http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Jun%202017?OpenDocument, visited 1.3.18

Private health insurance reforms 2017

The Minister for Health, the Hon Greg Hunt MP, announced a series of reforms to private health insurance on 13 October 2017 to make private health insurance simpler and more affordable for Australians. The changes will be phased in gradually with key reforms impacting private hospitals summarised below:

Table 13: Private health insurance reforms announced on 13 October 2017

Key Reform	Timing	Implication for Private Hospitals
Simplification of PHI products to Gold, Silver Bronze & basic	April 2019	Enhanced transparency to reduce loss of PHI members.
Upgrade of website to make it easier to compare PHI products	Dec 2019	Enhanced Transparency making PHI more attractive
Reduce benefits for prostheses	From Feb 2018	Lower PHI premiums should stem loss of members. Minimal impact on private hospital margins
Insurers required to allow members to upgrade PHI to access mental health service immediately	From Feb 2018	Will initially boost demand for private mental health services
Allow insurers to discount premiums by up to 10% for 18 to 29 year-olds	March 2018	Make PHI more attractive for younger people who typically do not use private hospitals but will assist in keeping premiums lower if successful
Allow insurers to cover travel & accommodation costs for people in regional/rural areas	March 2018	Positive especially for more complex private hospitals collocated to major teaching hospitals with inflows from non-metro areas
Streamline 2 tier default to protect consumers	Jan 2019	Assist new private hospitals gain initial PHI pricing if not contracted
Permit higher excesses	March 2018	Positive for choice and could lower premium costs making PHI more attractive for younger cohorts
Greater transparency for medical/specialist gaps	Dec 2018	Positive for private hospital volumes if specialists reduce patient fees
Review models of care – rehabilitation and day only mental health	Dec 2018	May have negative impact on hospital services where community or day only care models show better/similar outcomes
Reform use of public hospital by private patients	Dec 2018	Positive – with NSW public hospitals likely to see volumes transferred to private sector. Colocated private likely to convert most

It remains early days with only some of the reforms being recently implemented and there is a range of industry views. Ramsay was largely positive in its Half Year Result announcement on 28 Feb 2018 emphasising:[39]

> "Government reforms announced in the period, which aim to improve affordability of private health insurance in Australia, will overall, impact positively on the industry"

[39] Ramsay Health Care 2018. 'Results Briefing – Half Year ended 31 December 2017', http://www.ramsayhealth.com/-/media/Documents/RHC/Investor/2018/Market_Briefings_28022018c.pdf, visited 12.3.18

More specifically Ramsay highlighted:

Current Operating Environment

- Reduction in PHI membership but increasing demand in key market demographic – the over 65s
- Private patients in public hospitals - unsustainable
- Recent focus on private healthcare and improving value and affordability will impact positively overall
- Stable reimbursement environment with majority of funding arrangements negotiated in FY17 with multiyear terms.

Operational Outlook

- Volume growth continues to be driven by an ageing population rise in chronic disease and a growing mental health burden
- Non-hospital earnings growth opportunities emerging.

4.2. Competitor Private Facilities

Table 14: Private facilities and competitor information

Private Hospital	Location	Owner	Beds	Specialties	Notes (e.g. expansion, specialties, strengths)
Hawkesbury District Health Service	Windsor	St John of God	125	Anaesthesia Emergency Gastrointestinal Endoscopy Intensive Care Level 1 Maternity Medical Neonatal Paediatric Renal Dialysis Surgical	Takeover in July 2015 by St John of God Healthcare (one of the largest not-for-profit providers in Australia). Not in catchment but will currently draw patients from catchment. St John of God are sophisticated operator and would strongly defend market share.
Hills Private Hospital	Baulkham Hills	Healthscope	111	Medical Mental Health Rehabilitation	Older style hospital changed to current services offering after opening of Norwest. Healthscope have strong market position and will protect its position in mental health and rehabilitation and continue to benefit from flow on from Norwest
Holroyd Private Hospital	Guildford	Macquarie	48	Anaesthesia Cosmetic Surgery Gastrointestinal Endoscopy Medical Paediatric Rehabilitation Surgical	Older style hospital likely to be negatively impacted if BPH targets rehab work
Hospital for Specialist Surgery	Baulkham Hills	48 specialists	78	Anaesthesia Cosmetic Surgery Gastrointestinal Endoscopy Medical Paediatric Rehabilitation Surgical	Opened in 2015 with capacity to take on greater activity and expand. Expect the operator which is clinician owned to strongly encourage existing clinicians to not support BPH
Minchinbury Community Private Hospital	Mount Druitt	Macquarie	59	Anaesthesia Cosmetic Surgery Gastrointestinal Endoscopy Medical Paediatric Rehabilitation Surgical	Older style hospital likely to be negatively impacted if BPH targets rehab work
	Kingswood	Healthscope	109	Anaesthesia	

Private Hospital	Location	Owner	Beds	Specialties	Notes (e.g. expansion, specialties, strengths)
Nepean Private Hospital				Cardiac Catheterisation Cosmetic Surgery Gastrointestinal Endoscopy Intensive Care Level 1 Maternity Medical Neonatal Paediatric Surgical	Healthscope recently acquired land to expand. The facility is outside the catchment but will currently service patients from western side of primary catchment. Will have minimal impact on BPH
Northside West Clinic	Wentworth ville	Ramsay	73	Anaesthesia Medical Mental Health	Recent refurbishment including the re-launch of the drug & alcohol service with the addition of 5 single ensuite rooms. Ramsay sophisticated player who will strongly compete against BPH if mental health, drug & alcohol are targeted at BPH
Norwest Private Hospital	Bella Vista	Healthscope	277	Anaesthesia Cardiac Catheterisation Cardiac Surgery Chemotherapy Cosmetic Surgery Gastrointestinal Endoscopy Intensive Care Level 2 Maternity Medical Neonatal Paediatric Renal Dialysis Surgical	Newish (2009) facility in good position in relation to high insurance population and major roads. Likely to be the most significant competitor to BPH and has potential for expansion. Key attributes: • Emergency Department • In 2016, increased from 216 beds to 277 beds, with a total of 19 theatres and 19 ICU beds • 43 bed maternity unit, of which 37 are private rooms • Planning for extension to allow for 15 additional consulting suites
St John of God Richmond Hospital	North Richmond	St John of God	88	Anaesthesia Medical Mental Health	Facility is largely focused on private mental health. SJOG are sophisticated player who will protect its clinical base to avoid any seepage to BPH if mental health is part of BPH's casemix
The Hills Clinic	Kellyville	Healthe	59	Medical Mental Health	Acquired by Healthe in May 2017 Will be strong competitor if BPH targets mental health.
Westmead Private Hospital	Westmead	Ramsay	159	Anaesthesia Cardiac Catheterisation Cardiac Surgery Chemotherapy Cosmetic Surgery Gastrointestinal Endoscopy	Ramsay is strong operator with sophisticated approach to protecting its relationships with clinicians and will strongly protect its market share. The facility is also ideally positioned adjacent to Westmead Hospital. The hospital has expansion plans with Stage 2 ready by mid-2019: • 31 additional maternity rooms, including 8 spacious parenting suites

Private Hospital	Location	Owner	Beds	Specialties	Notes (e.g. expansion, specialties, strengths)
				Intensive Care Level 2 Interventional Neuroradiology Maternity Medical Neonatal Paediatric Renal Dialysis Surgical	• 14 cot special care nursery • 11 new surgical rooms.
Westmead Rehabilitation Hospital	Merrylands	Healthe	65	Medical Rehabilitation	Opened in 2005 and at full capacity. Unlikely to impact any BPH initiative
City West Specialist Day Hospital	Westmead	City West Day Surgery	N/A	Anaesthesia Cosmetic Surgery Gastrointestinal Endoscopy Paediatric Surgical	3 operating theatres with urology, ophthalmology, endoscopy and gynaecology Unlikely to have significant impact on BPH
Francis Street Ophthalmic Day Procedure Centre	Richmond	Luke Hazell	N/A	Anaesthesia Surgical	Small eye clinic Unlikely to have significant impact on BPH
Genea Bella Vista	Bella Vista	Genea	N/A	Anaesthesia Surgical	Fertility clinic Unlikely to have significant impact on BPH
Marsden Eye Surgery Centre	Parramatta	Various Doctors	N/A	Anaesthesia Surgical	Eye clinic with 19 Ophthalmologists Will not impact on proposed BPH casemix.
Metwest Surgical	Blacktown	Hereward	N/A	Anaesthesia Surgical	Eye clinic with 11 Ophthalmologists Will not impact on proposed BPH casemix.
Norwest Day Hospital	Bella Vista	AAC Norwest Day Surgery	N/A	Anaesthesia Cosmetic Surgery Paediatric Surgical	Includes Norwest Eye Clinic with 5 Ophthalmologists Will not impact on proposed BPH casemix.
Parramatta Eye Centre	Parramatta	Parramatta Eye Centre	N/A	Anaesthesia Surgical	Established in 2014 with 10 Ophthalmologists
Skin and Cancer Foundation (Westmead) Day Procedure Centre	Westmead	Skin & Cancer Foundation Australia	N/A	Anaesthesia Cosmetic Surgery Surgical	
Western Sydney Private Oncology & Infusion Centre	Westmead	Ramsay	N/A	Chemotherapy	Will not be significant competition for BHP given growth for this service.
Westmead Centre	Westmead	Marie Stopes Int	N/A	Women's health	Will have minimal impact from BPH.

4.3. Detailed Scenario Assumptions

Table 15: Specialities targeted in each scenario

Scenarios	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	Surgical /Medical	Surgical /Medical + Psych	Surgical /Medical + Psych + Rehab	Surgical /Medical + Rehab
Specialty	**Included in Scenario Y/N**	**Included in Scenario Y/N**	**Included in Scenario Y/N**	**Included in Scenario Y/N**
Breast Surgery	Y	Y	Y	Y
Cardiology	Y	Y	Y	Y
Cardiothoracic Surgery	N	N	N	N
Chemotherapy	Y	Y	Y	Y
Colorectal Surgery	Y	Y	Y	Y
Dentistry	Y	Y	Y	Y
Dermatology	Y	Y	Y	Y
Diagnostic GI Endoscopy	Y	Y	Y	Y
Drug & Alcohol	N	Y	Y	N
Ear, Nose & Throat	Y	Y	Y	Y
Endocrinology	Y	Y	Y	Y
Gastroenterology	Y	Y	Y	Y
Gynaecology	Y	Y	Y	Y
Haematology	Y	Y	Y	Y
Head & Neck Surgery	Y	Y	Y	Y
Immunology & Infections	N	N	N	N
Interventional Cardiology	N	N	N	N
Medical Oncology	Y	Y	Y	Y
Neurology	Y	Y	Y	Y
Neurosurgery	N	N	N	N
Non Subspecialty Medicine	Y	Y	Y	Y
Non Subspecialty Surgery	Y	Y	Y	Y
Non-acute (Rehab, PAL, GER)	N	N	Y	Y
Obstetrics	Y	Y	Y	Y
Ophthalmology	Y	Y	Y	Y
Orthopaedics	Y	Y	Y	Y
Plastic & Reconstructive Surgery	Y	Y	Y	Y
Psychiatry - Acute	N	Y	Y	N
Renal Dialysis	Y	Y	Y	Y
Renal Medicine	Y	Y	Y	Y
Respiratory Medicine	Y	Y	Y	Y
Rheumatology	Y	Y	Y	Y
Upper GIT Surgery	Y	Y	Y	Y
Urology	Y	Y	Y	Y
Vascular Surgery	Y	Y	Y	Y

4.4. Scenarios 1, 2 & 4

Table 16: Scenario 1 (Surgical/Medical) projected activity and market shares

Scenario 1	Same Day			Overnight		
Surgical/Medical	Market Share - Projected Admissions - incl. INFLOWS			Market Share - Projected Admissions - incl. INFLOWS		
Specialty Group	FY22	FY27	FY32	FY22	FY27	FY32
Surgical	3,392	6,175	9,282	1,065	1,914	2,837
Medical	604	1,302	2,098	425	881	1,412
Obstetrics	72	89	107	591	626	655
Chemotherapy	288	745	1,280	0	0	0
Renal Dialysis	1,508	1,842	2,223	2	2	4
Drug & Alcohol	0	0	0	0	0	0
Rehab	0	0	0	0	0	0
Psychiatry - Acute	0	0	0	0	0	0
Grand Total	**5,863**	**10,155**	**14,989**	**2,082**	**3,423**	**4,908**

% Projected Total Market	Same Day			Overnight		
	% Projected Admissions			% Projected Admissions		
Specialty Group	FY22	FY27	FY32	FY22	FY27	FY32
Surgical	8%	13%	18%	6%	10%	13%
Medical	7%	13%	18%	7%	12%	16%
Obstetrics	22%	22%	22%	22%	22%	22%
Chemotherapy	5%	12%	18%	0%	0%	0%
Renal Dialysis	22%	22%	22%	22%	22%	22%
Drug & Alcohol	0%	0%	0%	0%	0%	0%
Rehab	0%	0%	0%	0%	0%	0%
Psychiatry - Acute	0%	0%	0%	0%	0%	0%
Grand Total	**7%**	**10%**	**13%**	**7%**	**10%**	**12%**

Table 17: Scenario 2 (Surgical/Medical + Psychiatry) projected activity and market shares

Scenario 2	Same Day			Overnight		
Surgical/Medical + Psych	Market Share - Projected Admissions - incl. INFLOWS			Market Share - Projected Admissions - incl. INFLOWS		
Specialty Group	FY22	FY27	FY32	FY22	FY27	FY32
Surgical	3,392	6,175	9,282	1,065	1,914	2,837
Medical	604	1,302	2,098	425	881	1,412
Obstetrics	72	89	107	591	626	655
Chemotherapy	288	745	1,280	0	0	0
Renal Dialysis	1,508	1,842	2,223	2	2	4
Drug & Alcohol	122	251	400	34	75	120
Rehab	0	0	0	0	0	0
Psychiatry - Acute	380	824	1,339	86	175	276
Grand Total	**6,365**	**11,230**	**16,728**	**2,203**	**3,673**	**5,303**

% Projected Total Market	Same Day			Overnight		
	% Projected Admissions			% Projected Admissions		
Specialty Group	FY22	FY27	FY32	FY22	FY27	FY32
Surgical	8%	13%	18%	6%	10%	13%
Medical	7%	13%	18%	7%	12%	16%
Obstetrics	22%	22%	22%	22%	22%	22%
Chemotherapy	5%	12%	18%	0%	0%	0%
Renal Dialysis	22%	22%	22%	22%	22%	22%
Drug & Alcohol	8%	14%	19%	9%	15%	20%
Rehab	0%	0%	0%	0%	0%	0%
Psychiatry - Acute	9%	16%	21%	8%	13%	18%
Grand Total	**8%**	**11%**	**14%**	**7%**	**10%**	**13%**

Table 18: Scenario 4 (Surgical/Medical + Rehabilitation) projected activity and market shares

Scenario 4	Same Day			Overnight		
Surgical/Medical + Rehab	Market Share - Projected Admissions - incl. INFLOWS			Market Share - Projected Admissions - incl. INFLOWS		
Specialty Group	FY22	FY27	FY32	FY22	FY27	FY32
Surgical	3,392	6,175	9,282	1,065	1,914	2,837
Medical	604	1,302	2,098	425	881	1,412
Obstetrics	72	89	107	591	626	655
Chemotherapy	288	745	1,280	0	0	0
Renal Dialysis	1,508	1,842	2,223	2	2	4
Drug & Alcohol	0	0	0	0	0	0
Rehab	1,503	3,809	6,598	230	535	886
Psychiatry - Acute	0	0	0	0	0	0
Grand Total	**7,366**	**13,963**	**21,588**	**2,313**	**3,959**	**5,794**

% Projected Total Market	Same Day			Overnight		
	% Projected Admissions			% Projected Admissions		
Specialty Group	FY22	FY27	FY32	FY22	FY27	FY32
Surgical	8%	13%	18%	6%	10%	13%
Medical	7%	13%	18%	7%	12%	16%
Obstetrics	22%	22%	22%	22%	22%	22%
Chemotherapy	5%	12%	18%	0%	0%	0%
Renal Dialysis	22%	22%	22%	22%	22%	22%
Drug & Alcohol	0%	0%	0%	0%	0%	0%
Rehab	9%	19%	26%	8%	15%	20%
Psychiatry - Acute	0%	0%	0%	0%	0%	0%
Grand Total	**9%**	**14%**	**19%**	**7%**	**11%**	**14%**

4.5. Detailed Casemix – Scenario 3

Specialty	Same Day Projected Admissions			Overnight Projected Admissions			Overnight Projected Beds		
	FY22	FY27	FY32	FY22	FY27	FY32	FY22	FY27	FY32
Breast Surgery	30	78	133	29	65	107	0.3	0.7	1.0
Cardiology	32	70	115	35	65	99	0.5	0.9	1.5
Chemotherapy	288	745	1,280	0	0	0	0.0	0.0	0.0
Colorectal Surgery	29	26	21	18	29	39	0.3	0.5	0.6
Dentistry	60	99	131	3	6	10	0.0	0.1	0.1
Dermatology	3	6	10	2	5	7	0.0	0.0	0.1
Diagnostic GI Endoscopy	870	1,885	3,030	32	66	105	0.2	0.5	0.8
Drug & Alcohol	122	251	400	34	75	120	2.4	5.3	8.7
Ear, Nose & Throat	124	257	397	77	142	207	0.3	0.6	0.9
Endocrinology	18	31	45	10	19	29	0.1	0.2	0.2
Gastroenterology	33	79	131	43	90	143	0.4	0.9	1.4
Gynaecology	886	947	1,010	254	266	276	2.0	2.0	1.9
Haematology	93	200	325	8	14	20	0.0	0.1	0.1
Head & Neck Surgery	9	17	27	19	39	62	0.2	0.3	0.4
Medical Oncology	9	25	41	12	23	37	0.2	0.4	0.7
Neurology	28	62	100	54	114	186	0.7	1.5	2.4
Non Subspecialty Medicine	323	695	1,117	62	131	210	0.9	2.0	3.3
Non Subspecialty Surgery	50	97	147	117	232	356	1.2	2.3	3.5
Non-acute (Rehab, PAL, GER)	1,503	3,809	6,598	230	535	886	12.8	28.5	47.6
Obstetrics	72	89	107	591	626	655	8.6	8.6	8.5
Ophthalmology	785	1,648	2,626	12	22	32	0.1	0.1	0.2
Orthopaedics	169	331	505	255	518	800	3.2	6.3	9.3
Plastic & Reconstructive Surgery	211	447	722	39	82	133	0.7	1.4	2.3
Psychiatry - Acute	380	824	1,339	86	175	276	6.8	14.2	22.7
Renal Dialysis	1,508	1,842	2,223	2	2	4	0.0	0.0	0.0
Renal Medicine	50	102	163	13	27	43	0.2	0.3	0.5
Respiratory Medicine	15	32	51	180	378	612	1.0	2.5	4.5
Rheumatology	0	0	0	7	16	26	0.1	0.2	0.3
Upper GIT Surgery	6	14	22	89	201	329	0.6	1.4	2.2
Urology	143	287	444	101	210	333	0.6	1.2	1.9
Vascular Surgery	18	41	68	19	34	48	0.1	0.2	0.3
Grand Total	**7,868**	**15,039**	**23,326**	**2,433**	**4,208**	**6,190**	**44.7**	**83.3**	**128.0**

4.6. Infrastructure Assumptions

Overnight activity:

- Occupancy rate 80%
- 365 operating days per year

Same Day activity:

- Occupancy rate 80%
- 240 operating days per year (5 days/week for 48 weeks)
- 12 operating hours/day
- 2.6 day separations per day

Theatres:

- Occupancy rate 80%
- 240 operating days per year (5 days/week for 48 weeks)
- 11 operating hours/day
- C-sections account for 37% of obstetric separations[40]

Delivery rooms: 300 births per suite/year[41]

Renal & Chemo chairs:

- 2 patients per day per chair

240 operating days per year (5 days/week for 48 weeks).

[40] NSW Government Health. 'Mothers and Babies Report 2016', http://www.health.nsw.gov.au/hsnsw/Pages/mothers-and-babies-2016.aspx, visited 8.3.18
[41] NSW Government Health. 'Mothers and Babies 2014', http://www.health.nsw.gov.au/hsnsw/Pages/mothers-and-babies-2014.aspx, visited 8.3.18