LANDSCAPE PERFORMANCE SERIES
presented by the Landscape Architecture Foundation

Bendigo Hospital
Methods

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This investigation was conducted as part of the Landscape Architecture Foundation's 2022 *Case Study Investigation* (CSI) program. CSI matches faculty-student research teams with design practitioners to document the benefits of exemplary high-performing landscape projects. Teams develop methods to quantify environmental, social, and economic benefits and produce Case Study Briefs for LAF's *Landscape Performance Series*.

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The full case study can be found at: https://landscapeperformance.org/case-study-briefs/bendigo-hospital

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Research Strategy

Our research methods can be divided into three broad streams. The first stream is a desktop analysis of existing data which has been collected by the hospital. This data was collected from various Victorian government reporting statistics. This type of analysis is designed to utilise information which has already been collected by the hospital and allows for an opportunity to understand big picture trends and shifts. While significant learnings were gained from this type of analysis, there are clear limitations in terms of how direct links to the hospital landscape are determined.

For this reason the undertaking of surveys of hospital staff was planned as an important way to ascertain how the hospital landscape is perceived by staff. Unfortunately due to the demands on the hospital due to COVID-19 and flu impacts during the autumn and winter season, it was not possible to complete surveys in the timeframe.

The third stream of the research is the use of behaviour mapping and measurements on site. This is an important part of the research because it provides a spatial element, adding another layer to information gathered in the previous two streams.

The delivery structure of the project was a Public Private Partnership (PPP) (figure 1). In the case of Bendigo Hospital, the Victorian government contracted Exemplar Health to deliver the project. Exemplar Health is also responsible for the ongoing maintenance of the hospital landscapes. The interconnectedness of this structure introduced some complexity to the research strategy as information was not centralised and each stakeholder had different processes and protocols.

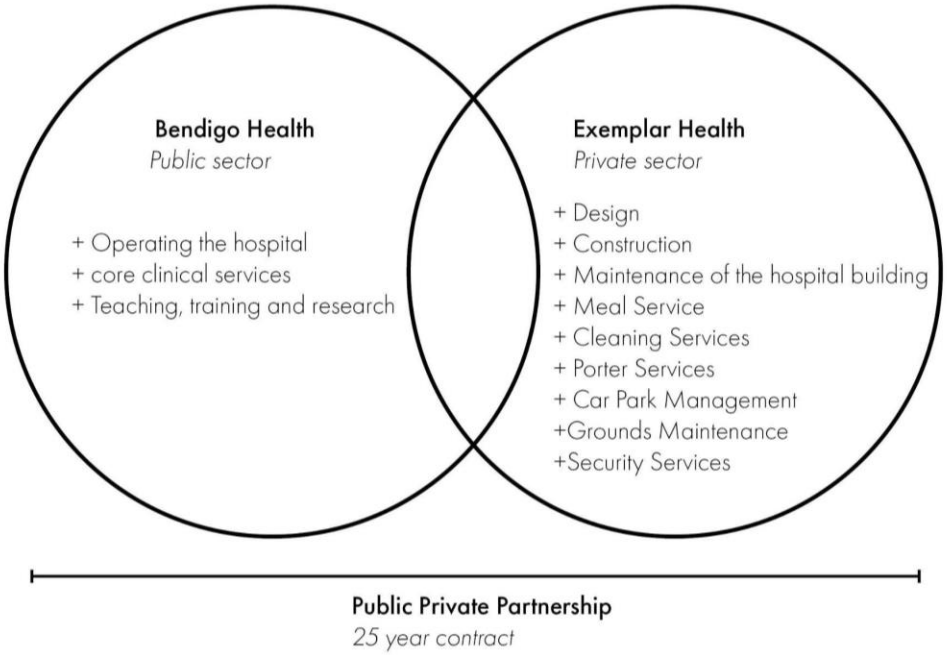


Figure 1: Diagram of Public Private Partnership

In light of this, the research strategy and possible research activities to measure benefits were continuously shifted due to changes between RMIT University ethics processes, limitations of the private partner, and ethics protocols of the Hospital itself. Rather than revise the research strategy, we thought it would be useful to map the intentions and outcomes for future researchers.

Environmental Benefits

- ***Saved 14.4 million gallons of potable water, equivalent to almost 22 Olympic-sized swimming pools, from opening in 2018 through 2021 by using harvested rainwater for irrigation and some building systems. This represents an average savings of over $19,000 per year, totalling $84,000 USD from 2018 to 2021.***

Background:
Rainwater is captured from surface runoff including roofs and several internal courtyards. Harvested water is stored in a 300,000-L (792512-gal) tank. Harvested rainwater is used primarily for irrigation of the landscape as well as toilet flushing and heat rejection systems.

Method:

The below figures show the amount of recycled water used from the water tanks as recorded and reported by Exemplar Health via email on Friday 27th May 2022.

Calculations:

The figures are converted to gallons for consistency in the *Landscape Performance Series* database using the following formula.

1kL x 264.172 = Gallons

Year	Rainfall Annual in mm	Recycled water used from tank	Gallons
2018	389.4	13,564kL	3,583,229 gal
2019	318.8	17,734kL	4,684,826 gal
2020	595.2	7,814kL	2,964,240 gal
2021	610.6	6,949kL	1,835,732 gal
2022 (January - April)	215.6	8,282kL	2,187,873 gal
TOTAL		**54,343kL**	**14,355,902 gal**

1 Olympic-sized swimming pool = 660,000 gallons
14,355,902/660,000 = 21.751 Olympic-sized swimming pools

Water supply All districts	$/kL
Treated	$2.2178

Total cost savings through the use of recycled water:

54,343 x $2.2178 = $120,521.91 AUD total

Exchange rate to USD on July 31, 2022: **$83,919.33 USD total**

Considering the data is spread across 4 years (2018-2021) and 4 months (2022 January to April), total cost savings per year are averaged across this period. Using the following equation:

$120,521.91 AUD / 4.33 years = $27,814.89 AUD saved per year

Exchange rate to USD on July 31, 2022: **$19,367.49 USD saved per year**

Sources:
Cost of water:
Coliban Water (2021) *Schedule of Fees and Charges 2021/22*, accessed 16 July 2022. <https://coliban.com.au/files/2021-07/Schedule%20of%20Fees%20and%20Charges%202021-22%20%28FINAL%29.pdf >

Limitations:

- There are a number of external factors that were noted by Exemplar Health which are worth elaborating as they influence how the data should be interpreted. 2018 and 2019 had lower than average rainfall, so increased demand on irrigation. In 2020 and 2021 COVID-19 impacted water use as visitors were not able to attend and administrative staff worked from home, decreasing demand on the water used for toilet flushing. For this reason, it is difficult to reliably measure the yearly average of recycled water used from year to year and the specific amount directed toward irrigation versus toilet flushing and heat rejection systems. However, it is clear that regardless of these external factors, a significant amount of water has been able to be reused on site, allowing significant operational cost savings for the hospital

- ***Projected to sequester an estimated 365,580 lbs of atmospheric carbon over the next 20 years through the retention of 79 existing mature trees. This is equivalent to 410,762 miles driven in an average passenger car.***

Background:

A close working relationship with the arborist was a significant part of the project. Through this relationship, many significant trees were able to be successfully retained on site. This is important because mature trees have the ability to sequester more carbon from the atmosphere than juvenile trees.

Method:

The research team focused on the existing trees as they were a key feature of the project to retain connection to the city of Bendigo through the axis lined with existing trees. Through a combination of existing conditions surveys and nearmap aerial images, the research team identified which trees were successfully retained through the construction process. Some information about existing tree sizes were available to us from existing condition surveys; where there were gaps, the team recorded measurements (including tree identification and DBH) on site. The retained trees are recorded on the map below (figure 2), with a corresponding table indicating the relevant information. Green text indicates trees for which DBH information was available to us through existing condition surveys, black text indicates trees where the research team identified each tree and recorded the diameter information on site.

To obtain the data in relation to carbon sequestration, the research team used the freely available software 'i-Tree Eco'. This software generates estimates including annual carbon sequestration and total carbon storage of individual trees, among a range of other benefits. i-Tree generates these outputs using the DBH measurement and tree species, paired with localised weather and climate data.

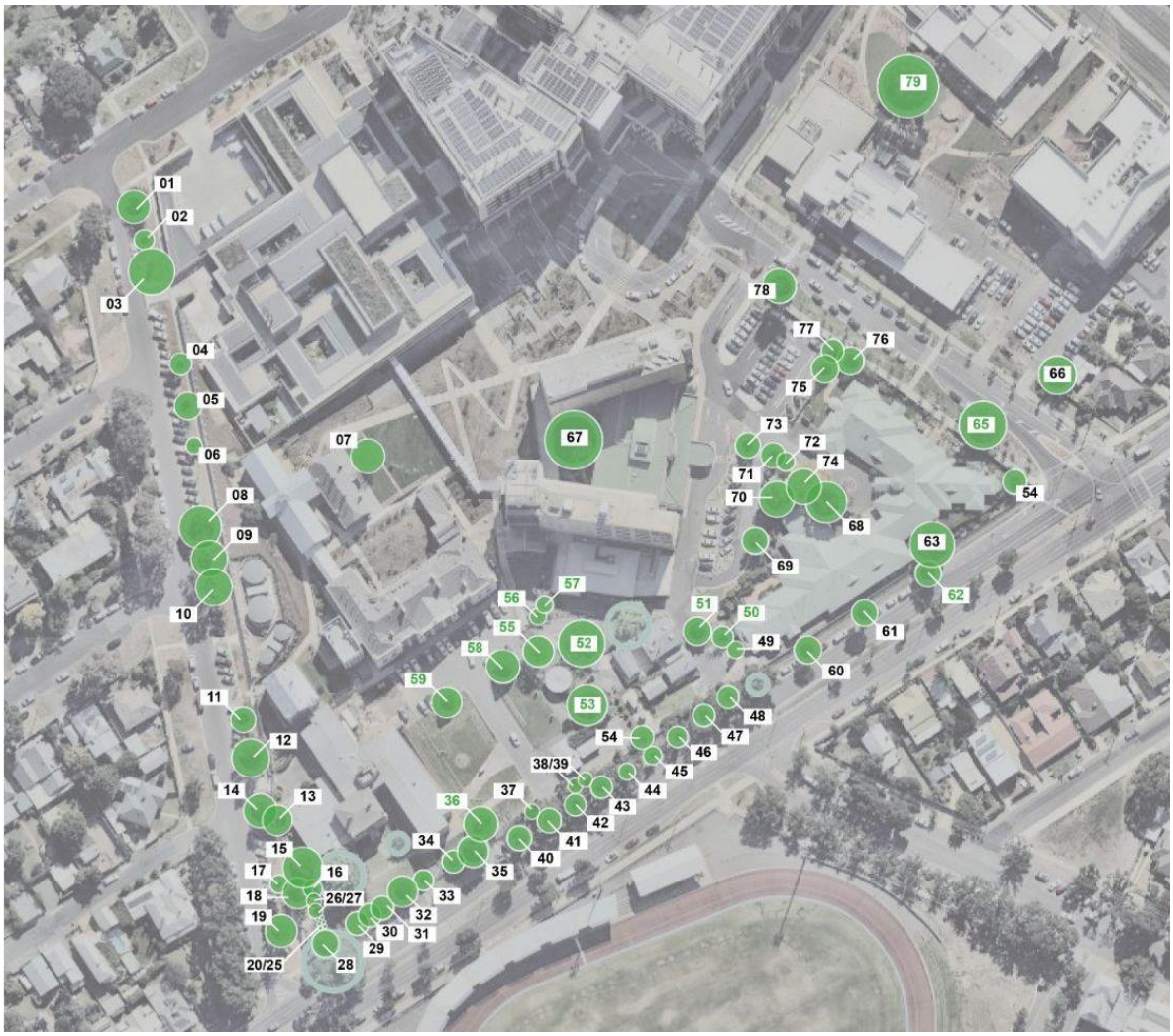


Figure 2: Plan of Remaining Existing trees

Calculations:

The below table shows the calculations as made by i-Tree. The i-Tree app was used on-site to generate the calculations. The location of each tree was noted on the Google Maps, and the tree species identified and entered. The condition of each tree was noted. Trunk circumference was measured and entered. Sun exposure and proximity to buildings were entered. Circumferences were converted to diameters for simplicity in the table to align with the DBH recorded in the original site survey. For more information about how these outcomes have been reached, see the link below under the sources heading.

New Tree ID	Species	Common Name	DBH (cm)	DBH (in)	CO2 sequestration over 20 years (lbs)	C02 Sequestration over 20 years (USD)
1	*Grevillea robusta*	Southern Silky Oak	31.8	12.54	4013.55	$93.34
2	*Grevillea robusta*	Southern Silky Oak	26.8	10.53	3292.75	$76.58

3	*Grevillea robusta*	Southern Silky Oak	22.3	8.78	2756.55	$64.11
4	*Corymbia maculata*	Spotted Gum	29.0	11.41	894.96	$20.81
5	*Corymbia maculata*	Spotted Gum	25.8	10.16	791.49	$18.41
6	*Corymbia maculata*	Spotted Gum	21.7	8.53	666.81	$15.51
7	*Betula pendula*	Silver Birch	24.5	9.65	5310.22	$123.50
8	*Eucalyptus sideroxylon*	Red Ironbark	58.9	23.20	2698.42	$62.76
9	*Eucalyptus sideroxylon*	Red Ironbark	61.1	24.07	2609.65	$60.69
10	*Eucalyptus sp. (unknown)*		86.9	34.23	606.73	$14.11
11	*Corymbia maculata*	Spotted Gum	32.2	12.66	1002.12	$23.31
12	*Corymbia maculata*	Spotted Gum	43.3	17.05	1385.77	$32.23
13	*Melaleuca linariifolia*	Narrow-leaved Paperbark	28.7	11.28	524.35	$12.19
14	*Corymbia maculata*	Spotted Gum	32.2	12.66	1002.12	$23.04
15	*Allocasuarina littoralis*	Black She-oak	46.2	18.18	365.89	$8.51
16	*Cupressus sp*		11.1	4.39	3073.29	$71.48
17	*Corymbia maculata*	Spotted Gum	32.8	12.91	1024.17	$23.82
18	*Grevillea robusta*	Southern Silky Oak	42.0	16.55	5717.47	$132.97
19	*Grevillea robusta*	Southern Silky Oak	55.4	21.82	7956.27	$185.04
20	*Cupressus sp.*		6.4	2.51	2298.86	$53.47
21	*Cupressus sp.*		6.4	2.51	2298.86	$53.47
22	*Cupressus sp.*		6.4	2.51	2298.86	$53.47
23	*Cupressus sp.*		6.4	2.51	2298.86	$53.47
24	*Cupressus sp.*		6.4	2.51	2298.86	$53.47
25	*Cupressus sp.*		6.4	2.51	2298.86	$53.47
26	*Washingtonia robusta*	Washington Palm	12.7	5.02	201.14	$4.68
27	*Washingtonia robusta*	Washington Palm	12.7	5.02	201.14	$4.68
28	*Prunus nigra*	Flowering Plum	23.9	9.40	2810.53	$65.36
29	*Pittosporum undulatum*	Sweet Pittosporum	33.4	13.17	1986.17	$46.19
30	*Lagerstroemia indica*	Crepe Myrtle	31.8	12.54	1835.65	$42.69
31	*Pittosporum undulatum*	Sweet Pittosporum	31.8	12.54	2113.2	$49.12
32	*Pittosporum undulatum*	Sweet Pittosporum	19.1	7.52	2026.64	$47.13

33	*Araucaria heterophylla*	Norfolk Island Pine	44.6	17.55	8966.02	$208.52
34	*Duranta erecta*	Duranta	35.0	13.79	1953.02	$45.40
35	*Syzygium australe*	Lilly Pilly	68.5	26.96	1670.16	$38.84
36	*Acer negundo*	Box Elder	74.0	29.13	9300.02	$216.29
37	*Cupressus sp.*		22.3	8.78	4876.91	$113.42
38	*Cupressus sp.*		22.3	8.78	4876.91	$113.42
39	*Cupressus sp.*		22.3	8.78	4876.91	$113.42
40	*Ulmus parvifolia*	Chinese Elm	79.6	31.35	16023.25	$372.66
41	*Ulmus parvifolia*	Chinese Elm	86.0	33.85	16289.06	$378.84
42	*Ulmus parvifolia*	Chinese Elm	73.2	28.84	15061.12	$350.28
43	*Ulmus parvifolia*	Chinese Elm	55.1	21.69	10786.06	$250.85
44	*Ulmus parvifolia*	Chinese Elm	54.1	21.32	10569.17	$245.81
45	*Ulmus parvifolia*	Chinese Elm	56.7	22.32	11150.32	$259.32
46	*Ulmus parvifolia*	Chinese Elm	65.9	25.95	13329.71	$310.01
47	*Ulmus parvifolia*	Chinese Elm	60.5	23.82	12038.57	$279.98
48	*Ulmus parvifolia*	Chinese Elm	71.7	28.21	14721.2	$342.37
49	*Fraxinus excelsior 'Aurea'*	Golden Ash	60.5	23.82	4813.58	$111.95
50	*Betula pendula*	Silver Birch	24.0	9.45	3947.3	$91.80
51	*Ulmus glabra*	Wych Elm	42.0	16.54	5819.2	$135.34
52	*Ulmus parvifolia*	Chinese Elm	49.0	19.29	9429.2	$219.30
53	*Waterhousea floribunda*	Weeping Lilly Pilly	57.0	22.44	2110.42	$49.08
54	*Lagerstroemia indica*	Crepe Myrtle	21.3	8.40	2118.94	$49.28
55	*Jacaranda mimosifolia*	Jacaranda	53.0	20.87	4015.53	$93.39
56	*Betula pendula*	Silver Birch	14.0	5.51	2424.17	$56.38
57	*Betula pendula*	Silver Birch	19.0	7.48	3153.89	$73.35
58	*Cupressus sp*		35.0	13.78	6911.94	$160.75
59	*Cupressus sp*		30.0	11.81	6115.95	$142.24
60	*Ulmus sp.*	Elm	41.4	16.30	7803.97	$181.50
61	*Ulmus sp.*	Elm	44.3	17.43	8404.84	$195.47
62	*Ulmus sp.*	Elm	35.0	13.78	6144.35	$142.90

63	*Unknown*		31.8	12.54	1904.63	$44.30
64	*Unknown*		31.8	12.54	1904.63	$44.30
65	*Eucalyptus sideroxylon*	Red Ironbark	82.0	32.28	3543.48	$82.41
66	*Acer negundo*	Box Elder	65.3	25.70	7701.75	$179.12
67	*Ulmus procera*	Golden Elm	63.7	25.08	9381.9	$218.20
68	*Angophora costata*	Smooth-barked Apple	71.0	27.96	2072.23	$48.19
69	*Ginkgo biloba*	Ginkgo	28.7	11.28	774.1	$18.00
70	*Ulmus sp.*	Elm	28.7	11.28	2982.81	$69.37
71	*Pyrus calleryana*	Ornamental Pear	28.0	11.03	3249.26	$75.57
72	*Pyrus calleryana*	Ornamental Pear	18.2	7.15	2064.54	$48.02
73	*Fraxinus excelsior 'Aurea'*	Golden Ash	30.3	11.91	3946.13	$91.78
74	*Ulmus sp.*	Elm	63.7	25.08	12462.57	$289.84
75	*Melaleuca linariifolia*	Narrow-leaved Paperbark	25.5	10.03	661.16	$15.38
76	*Melaleuca linariifolia*	Narrow-leaved Paperbark	31.8	12.54	578.32	$13.45
77	*Cupressus sp.*		63.7	25.08	8090.9	$188.17
78	*Corymbia maculata*	Spotted Gum	48.0	18.90	1541.76	$35.86
79	*Corymbia citriodora*	Lemon-scented Gum	110.0	43.31	2356.89	$54.81
				Total	**365578.96***	**$8,502.01**

*This value is the estimate for projected atmospheric carbon sequestration for retained trees alone. This does not consider additional trees or carbon created by the project itself.

For comparison figures an average of 404 grams of CO2 emissions per mile of a average passenger vehicle was used (source: https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle)

Convert grams to pounds: 404grams = 0.89lbs

Divide pounds by amount per mile: **365579 pounds / 0.89 = 410,762.92**

Sources:

i-Tree Eco. https://www.itreetools.org/support/resources-overview/i-tree-methods-and-files

EPA. Greenhouse Gas Emissions from a Typical Passenger Vehicle. https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle

Limitations:

- On-site we discovered that information on some trees was recorded only in part or missing from the existing conditions survey. So we identified and measured to accurately reflect the conditions on site.
- Several elm trees were difficult to fully identify, in that case, species group (*Ulmus*) was used rather than subspecies.
- i-Tree does not support the southern hemisphere for location in Australia. i-Tree data is calculated on pre-filled pollution and weather information rather than live information.

Social Benefits

- ***Provides a range of activity spaces within the therapeutic garden, with 7 activity types noted over 6 observation periods across 2 cold weeks in July. The spaces also encourage social interaction, with 40 groups of 2 or more people observed over the same period.***

Background:

The process of activity mapping observes and records how users (patients, visitors, staff) engage with healthcare landscapes at the hospital. Sachs (2017) describes this process as the researcher observing “who (type of user) is doing what (behaviour) when (times of the year/ month/ day) and where (specific locations in space).” Utilising a process of mapping and notations is a means of capturing how a public space is being used, which can inform how we understand its design. The process involved the research team spending time in the Therapeutic Garden at the Bendigo Hospital and recording on a map of the site how people are using the space.

Using the instrument as established by Sachs (2017) in which “two trained observers make place based, time-stamped notes about garden users and usage” on a pre-printed A4 plan of the area. The plan includes landscape features and clear boundaries, as well as entry and exit points. This process is undertaken across a number of different time brackets, across a range of days (ideally 2 consecutive weekdays in consecutive weeks). The behaviour mapping captures a 1-hour period, and the information is used to understand the different ways in which the subject site is used.

Method:

Activity Mapping was undertaken across 2 weeks in July. Researchers visited the site on different days and undertook manual recordings of activities in the site on a site plan. Each observation session was approximately 20 mins with a 10-minute break between observations. Stationary activities were noted, as well as the direction of movement through the site. Where possible activities were noted as staff, visitor, or patient through identifying factors such as for staff lanyards, uniforms and patient pyjamas and dressing gowns. See Appendix A for Activity Mapping details.

Calculations / Observations:

Overall observations:

- Despite the cold weather (temperature range 48°F to 54°F) the garden was consistently in use
- People occupying the garden (sitting, reading) tended to stay for relatively long periods of time (30 mins or more)
- Staff walking through the garden were often in groups, walking and talking with coffee as a social activity (COVID-19 limitations on tea rooms may have contributed to this)

- Patients sitting tended to occupy the spaces nearest to the entry, in particular a table which had space for a wheelchair to access the table.
- Visitors and those with children or prams tended to occupy the middle spaces
- Patient transport vehicles moved frequently in and out of the space - this seemed to work fluidly with the shared pathway. Patient transport staff waited in the garden.
- Patients on trolleys being transported in or out of the hospital in a number of observations had social exchanges with people sitting in the garden (including the observer on 2 occasions). Indicates that the location of transport activities in the shared space allowed for a social component.

The below maps show that **7** types of activities occurred in the therapeutic gardens during the observation periods. These included:

- Walking (passing through)
- Sitting and eating lunch
- Sitting and drinking coffee
- Sitting /waiting
- Talking on the phone
- Sitting and reading
- Patient wheeled out on trolley

The below mappings also show that in **40** instances, groups of more than 2 people were observed in the therapeutic gardens.

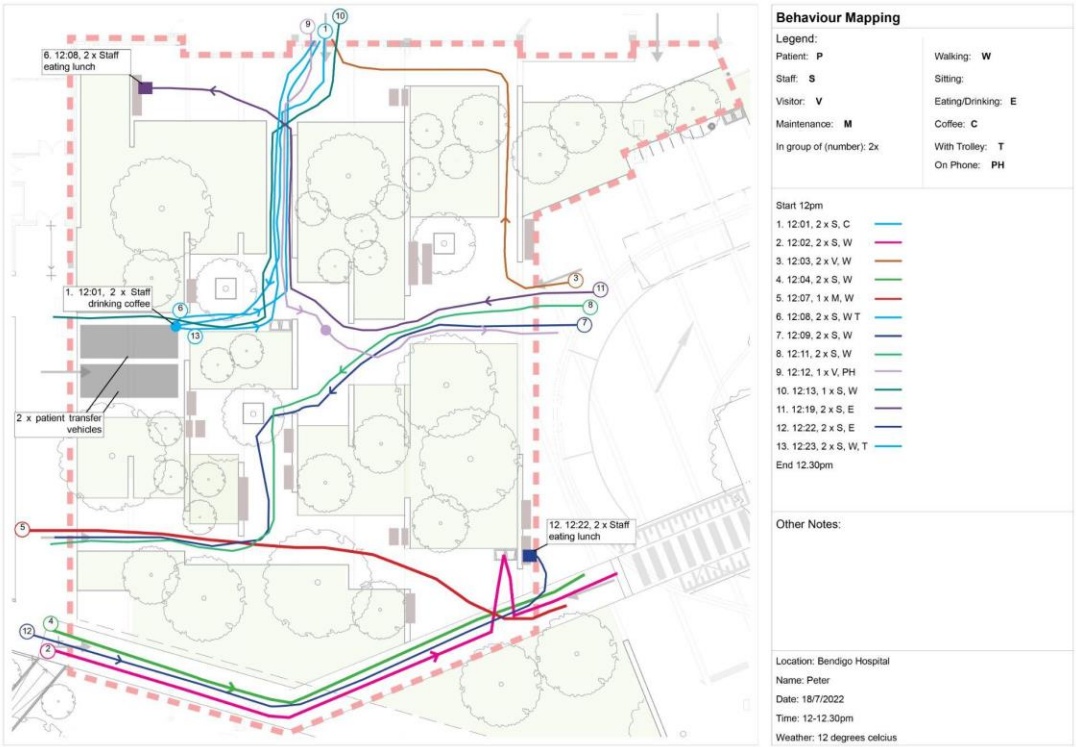


Figure 2: behaviour mapping

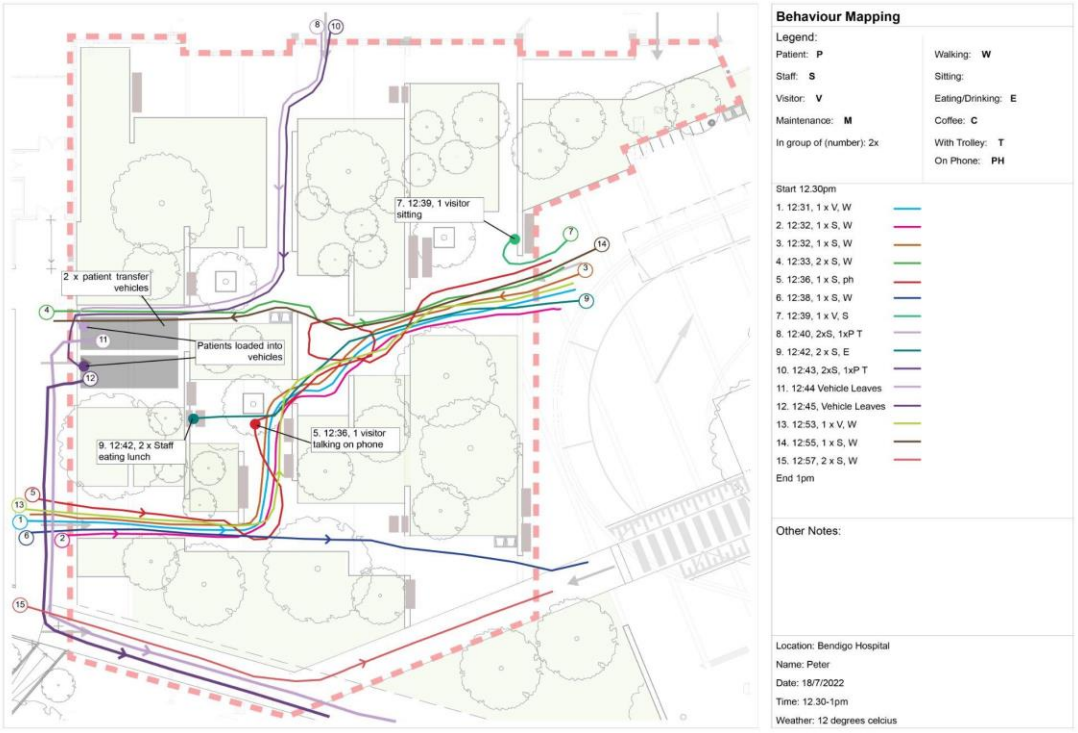


Figure 3: behaviour mapping

Sources:

Sachs, Naomi. (2017). *The Healthcare Garden Evaluation Toolkit: A Standardized Method for Evaluation, Research, and Design of Gardens in Healthcare Facilities.* Doctoral dissertation. 10.13140/RG.2.2.19314.43209.

Limitations:

- User mapping was conducted in limited times and days.
- Cold weather constrained the use of the garden (temperature range 48°F to 54°F). The majority of the garden is in full shade for much of the day at this time of year.
- COVID-19 restrictions on visitors to the hospital would have affected the activity types and groups.
- Sensitivities around identifying demographic or other information as defined in ethics processes means that information is related to activity only. More specific social behaviours were not able to be recorded.

- ***Supported a 67% increase in the number of Indigenous patients presenting to hospital per year from 955 in 2013/14 to 1,599 in 2018/19. This indicates increased comfort with seeking medical care, which is supported by features like the Aboriginal services courtyard with a smoking pit used in "Baby Welcome to***

Country" ceremonies.

- ***Supported an increase in the number of Indigenous Services Liaison workers from 0.8 to 3 Full-Time Equivalent positions, indicating higher demand for the specific Indigenous health services they provide.***

Background:

The design of the health service facility included specific internal and external spaces for Indigenous patients. Indigenous people in Australia are more likely to have poorer health outcomes than non-Indigenous people, with the result that Indigenous people may be reluctant to seek care. The design responds to this by including a culturally safe indoor space and connected external garden. Dedicated Aboriginal Health Liaison Officers work in both spaces, and the project was successful resulting in the employment of additional liaison workers. The garden has provision for Welcome to Country ceremonies and, prior to COVID-19, the garden hosted 'Baby Welcome to Country' events twice per year. The 'Baby Welcome to Country' ceremony connects the baby and family to their cultural community. The garden space contains a smoking pit for a smoking ceremony that is part of 'Welcome to Country' practices.

From the data, it is clear that the number of Indigenous patients presenting to the hospital has been generally trending upwards since 2013. However, after the construction of the new hospital and opening in 2018 the increase in presentations was 27% higher in the 2018/19 period than the average across the previous 3 years.

Method:

The research team used publicly available data from existing hospital reports as well as information gained provided by Exemplar Health.

Calculations:
Increase in the number of Indigenous Services Liaison workers from 0.8 to 3 Full Time Equivalent positions - figures provided by Exemplar Health.

Number of Indigenous patients has increased from 955 in 2013/14 to 1559 in 2018/19.

1599 / 955 x 100 = 167

This represents a 67% increase in hospital presentations of indigenous patients since 2013/14

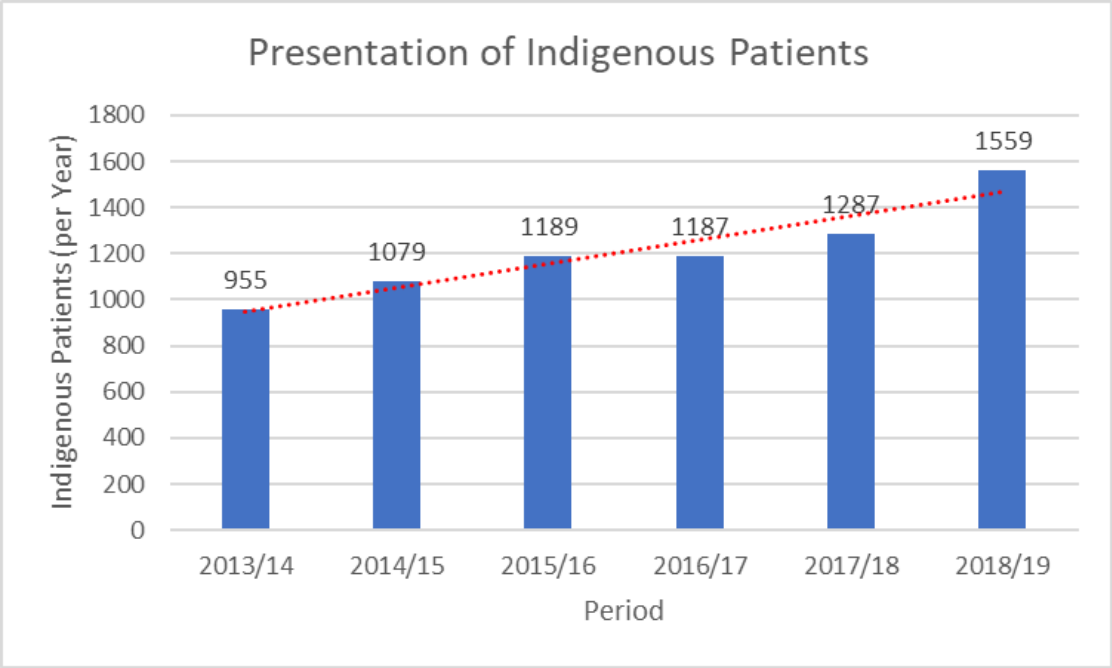


Figure 4: Increasing Presentation of Indigenous Patients (Bendigo Health, 2019)

Sources:

Indigenous patient numbers:
Bendigo Health (2019) *Quality Account 2018-19*, Bendigo Health, Accessed 14 July 2022. <https://www.bendigohealth.org.au/Assets/Files/Bendigo%20Health%20Quality%20Account%202019.pdf >
Baby Welcome to Country
https://www.monash.edu/__data/assets/pdf_file/0019/1442233/welcome-baby-to-country-report.pdf

Limitations:

- It is difficult to tie these figures explicitly to the internal courtyards without the anecdotal evidence obtained from planned surveys. Surveys were unable to be conducted due to COVID-19 and flu surges.
- The Indigenous garden landscape cannot be tied directly and individually to these increases, however anecdotally via Exemplar Health management we know the landscape continues to play a role in improving these relationships.

Economic Benefits

- ***Created 4.5 Full-Time Equivalent jobs to fulfil the maintenance requirements of the hospital landscape.***

Background:

This information was provided upon request from Exemplar Health via email on Friday 27th May 2022. As a part of the information that was provided to us, the employment of maintenance subcontractors includes staff from Access Australia, an organisation who provide “meaningful participation, training and employment opportunities for people living with disability or disadvantage”.

Method:

Information obtained via email from with Exemplar Health

Calculations:

After the hospital opening, 4.5 (Full Time Equivalent) were employed to provide for the maintenance requirements of the hospital landscape. Information provided by Exemplar Health.

Limitations:

- This data reflects the staff employed only by the private partner - Exemplar Health, who are responsible for the maintenance of the hospital landscapes.

Cost Comparison

The specification of most plants (excluding trees) at a minimum 150-mm (6-in) pot size cost an estimated $221,700 AUD ($153,170 USD), as compared to an estimated $95,000 AUD ($65,640 USD) if more common 50-mm (2-in) tubestock planting had been specified. The specification of larger plants resulted in less loss and less waste, with an estimated savings of $7,900 AUD ($5,470 USD) in replacement planting costs. While the estimated cost savings are significantly less than the difference in cost, the decision to use the more mature plant stock provided amenity value more quickly which, particularly in the therapeutic garden, had significant value.

Background:

The designers worked with planting specialist, Paul Thompson, to develop the planting plan for the hospital. The focus for the team was on ensuring that the therapeutic effects would be evident from the opening of the project. This was achieved through specifying the retention of existing trees where possible, specifying mature plant sizes for trees and tree ferns and

requiring a high level of establishment in the design specifications.

Method:

The total number of plants at 150-mm/6-in pot size used in the Barnard Precinct is **31,671**. The average cost of **150-mm pot plants is $7 AUD** per plant and the average cost of **50-mm tubestock plants was $3 AUD** (Landscape Association 2022), at time of construction. These prices are estimates for the average price at the time of construction because an exact cost figure was not able to be provided by Exemplar Health.

Typically, a 10-20% failure rate is common with 50mm tubestock. Spotless (the maintenance contractor) have identified the planting failure rate is approximately 5% on site with the use of 150-mm pots.

Calculations:

Planting type	**Cost**	**Number**	**Total Cost**
Tubestock (50-mm)	$3	31671	$95,013
150-mm Pots	$7	31671	$221,697

221697 - 95013 = 126,684

The decision to use 150mm pots rather than 50mm tubestock cost **$126,684** AUD more at the outset.

Planting type	**Failure Rate**	**No. of failed plants**	**Cost p/unit**	**Total Cost**
Tubestock (50-mm)	20%	6334	$3	$19,002
150-mm Pots	5%	1584	$7	$11,088

19002 - 11088 = 7,914

The decision to use 150-mm pots rather than 50-mm tubestock resulted in an estimated savings of **$7,914** AUD in replacement planting costs.

Sources:

Landscape Association (2022) *Rates Guide*, Accessed 19 July 2022. <https://ratesguide.landscapeassociation.com.au >

Failure rates: Landscape Specification *(information via Exemplar Health)*

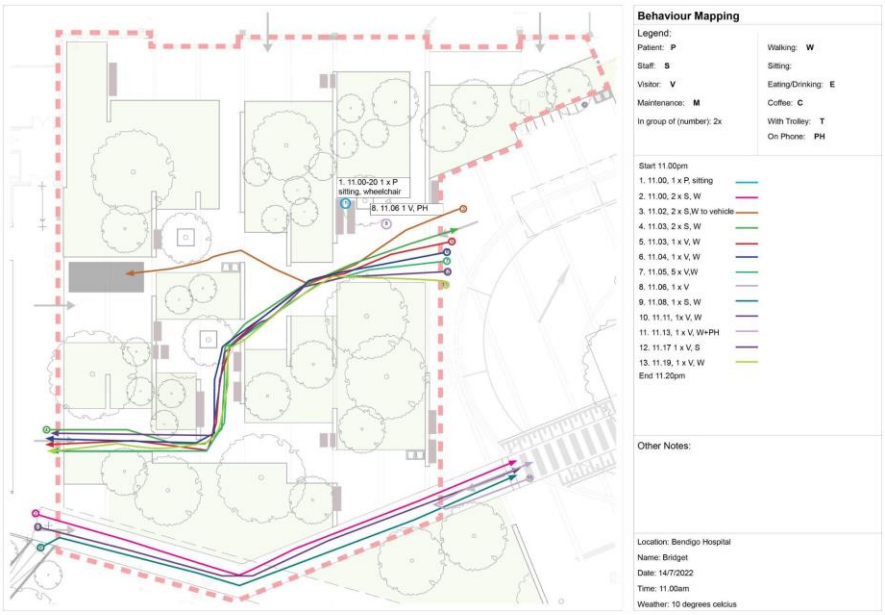
Limitations:

- Variance between actual purchase price compared to rates.

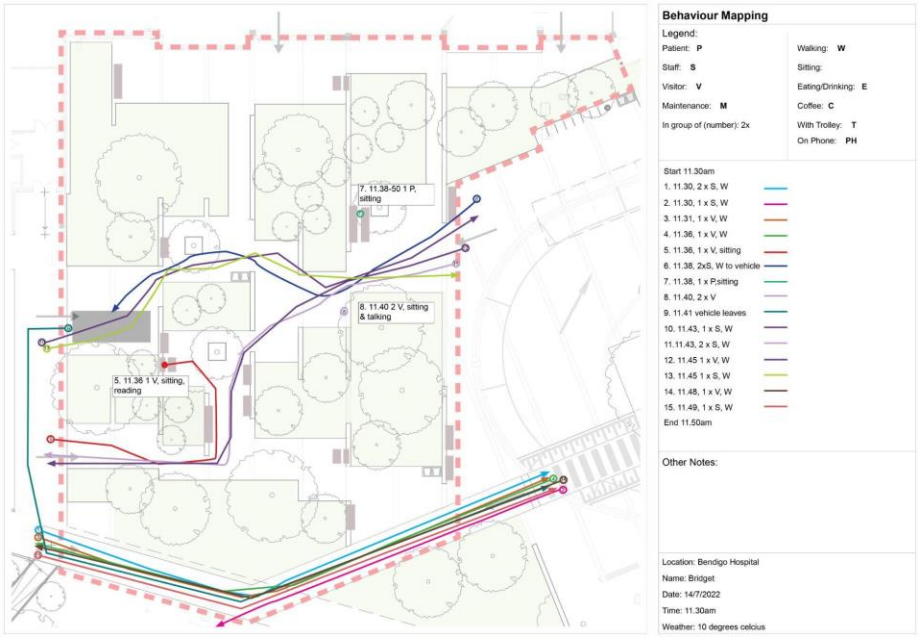
Appendix A

Activity Mapping - all maps

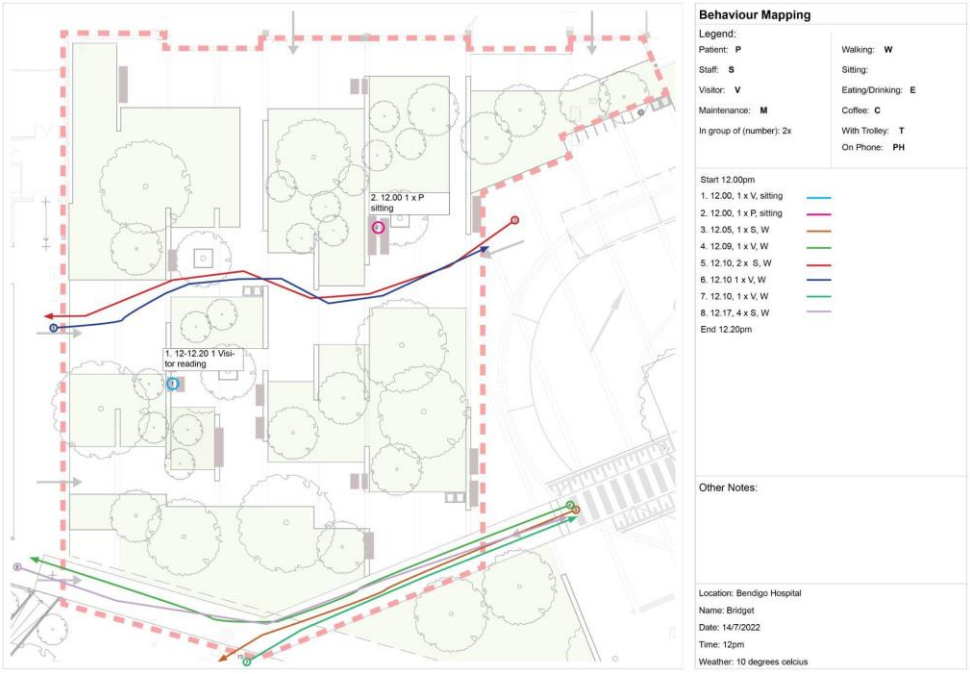
14/7/22 - 11.00 am



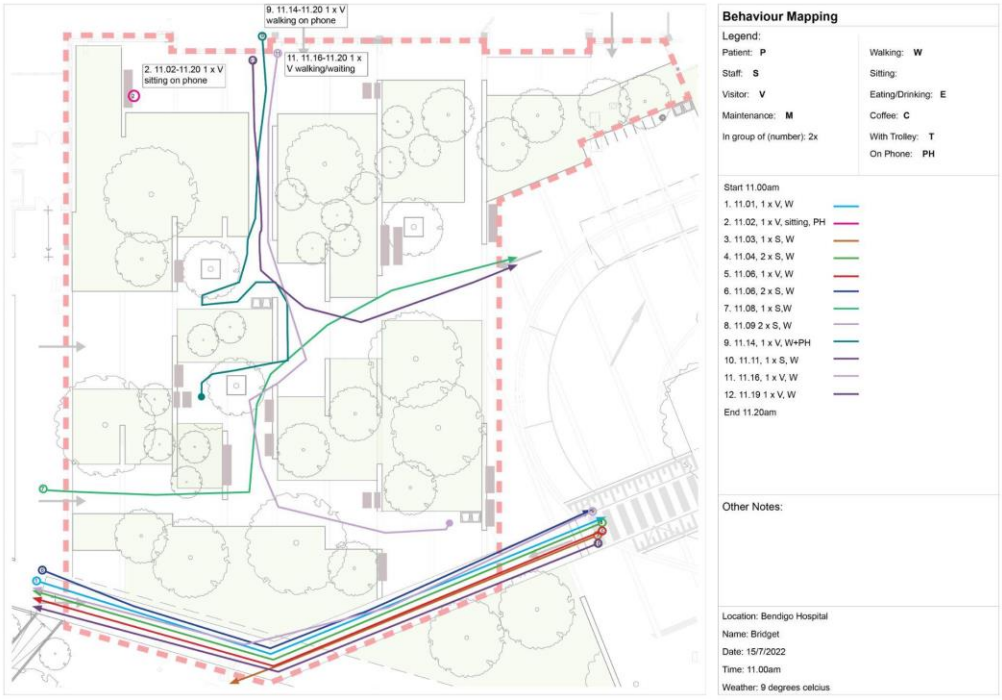
14/7/22 - 11.30 am



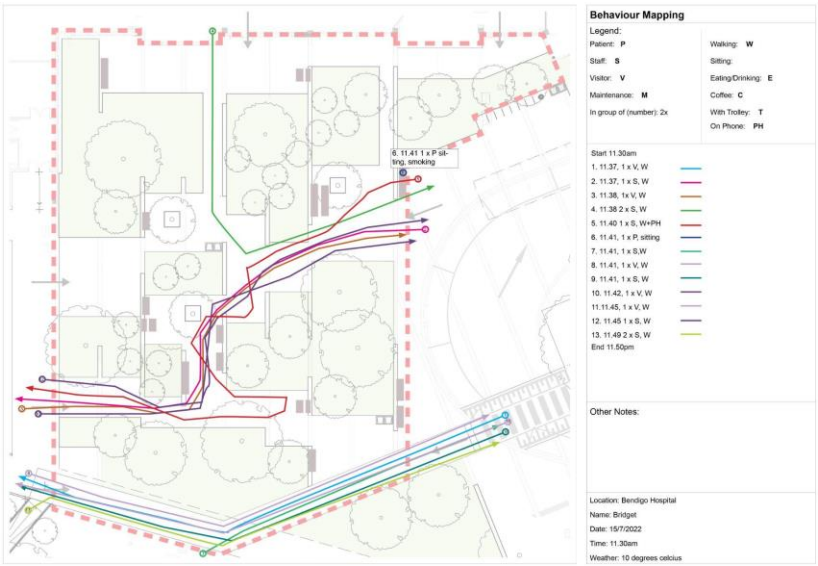
14/7/22 - 12.00pm



15/7/22 - 11.00am



15/7/22 - 11.30am



15/7/22 - 12.00pm