

SUSTAINABLE HEALTH REVIEW PUBLIC SUBMISSION

OCTOBER 2017

Title	Medical Recovery Centre (MRC)
Organisation	Royal Perth Hospital, St Bartholomew's House, Homeless Healthcare and the Rotary Clubs of Heirisson and Perth
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Acronyms and Glossary

Emergency Department	ED
Homeless Healthcare	HHC
Key Performance Indicator	KPI
Medical Recovery Centre	MRC
Monitoring and Evaluation	M&E
Rotary Clubs of Heirisson and Perth	Rotary
Royal Perth Hospital	RPH
St Bartholomew's House	St Bart's
University of Western Australia	UWA

Introduction

This submission supports the plan for a 20 bed Medical Recovery Centre (MRC) to be established in East Perth using existing buildings, requiring annual operational funding of \$2.85 million.

The MRC plan aligns with the State Government 'Medihotel' model as described under the Putting Patients First policy. As well, it delivers in every context on the seven listed Sustainable Health Review focus areas.

While this MRC will be the first of its kind in Australia, it is based upon a proven model. There are more than 70 respite centres of a similar nature operating successfully in the US.

The project is extremely well researched and a detailed Business Case has been developed providing the justification for the MRC. The Business Case has been provided as a supplement to this submission.

The high-level numbers (annualised)

Current estimated cost to WA Health of street homelessness:	\$52 million
Funds required from State for operating cost of MRC:	\$2.85 million
Estimated savings based upon 20 bed MRC at 85% occupancy:	\$18 million

(These calculations are explained in more detail in the following sections and in the accompanying Business Case)

The Proponents are amongst the leading experts in homelessness and healthcare for homeless people and research in the nation. Each year, St Bart's provides 127,750 bed nights and associated support services to those experiencing homelessness.

HHC, being the largest Primary healthcare provider for homeless people in the Perth metropolitan region carries out in excess of **20,800** consults a year from the streets of Perth, drop-in centres, transitional accommodation services and in-reach services to RPH.

Through the MRC, St Bart's and Homeless Healthcare will deliver significant benefits to Western Australia. Together with Royal Perth Hospital, UWA and Rotary, this plan will deliver sustainable outcomes to all stakeholders.

Homelessness and Hospitalisation – The \$52 Million Problem

People experiencing homelessness, especially those sleeping on the streets, frequently have chronically high healthcare costs. The estimated cost to WA Health of this group of approximately 600 people is in the region of \$52 million pa (see following section for calculations).

The health of homeless people is characterised by chronic complex multi-morbidity. For a variety of reasons homeless people do not seek assistance with their health problems early in the course of disease. Instead they wait until overwhelmed by acute illness and present to the acute hospital setting.

Whilst doing an excellent job of managing their acute illness, underlying chronic illnesses are generally not addressed in an acute hospital setting and there is little capacity to deal with the underlying social determinants of the illnesses ie homelessness. With increasingly early discharges homeless people are discharged to the street when they are too unwell to manage their illness. Their health rapidly deteriorates again leading to a preventable readmission. The end results are increased admission, length of stay and preventable readmission rates well in excess of low income controls. The significant funding being spent by Tertiary hospitals, in particular RPH, is doing little more than maintaining the status quo.

Estimating the Cost of Street Homelessness to WA Health

There are approximately 600 identified cases of street homeless in the Perth metropolitan area. Taking this group's average annual ED visits, admissions and length of stay, it is estimated that the cost to WA Health of this cohort is in the region of \$52 million, as per the calculation below:

(600 ¹ x	11.2 ¹	X \$765) ³	+ (7.1 ³ x 600	X \$8082 ³	X 1.36 ²)	Total \$51,964,675
Estimated Number of street homeless Perth	Average ED visits per annum	Cost of each ED visit	Average number of admissions per annum	Average cost per admission for Metro Tertiary Hospitals	Homeless patients stay 36% longer per admission on average	Estimated cost to WA Health of street homeless every year

¹ Ruah Community Services, 2016, Perth Registry Week 2016 Less Homeless Report, Perth Western Australia

² Salit et al, 1998, New York USA, Hospitalization costs associated with homelessness in New York City

³ WA Health Department, 2016. Metropolitan Health Service Annual Report 2015- 2016.

Additionally, homelessness is a **Whole of Government** issue and there are many further financial and social costs that have not been included in this estimate. As well as for Health, there will be costs in the areas of Employment, Housing, Women's Interests, Community Services, Family and Domestic Violence, Policing and Corrective Services, Disability Services, Emergency Services, Seniors and Ageing, Aboriginal Affairs and Local Government. All have a stake in ending homelessness.

Please refer to [Appendix 1 – Case Studies](#) for detailed actual case studies as provided by Dr. Andrew Davies and his team at HHC. The case studies are compelling stories of lives caught in the cycle of homelessness and hospitalisation. These cases are not atypical. They are representative of the wider cohort of 600 street homeless in Perth.

Homelessness and Hospitalisation – The Solution

The proposed MRC will provide pre and post hospital care (as well as avoidance of hospitalisation), targeting the 600 street homeless people in the Perth CBD. The estimated average 14 day stay at the MRC, as shown in the accompanying Business Case, will not only address health issues but will create pathways out of homelessness, linking to accommodation services and associated supports.

Most importantly, by working together RPH and the MRC will achieve critically needed integration of Tertiary and Primary patient care, enabling patients and costs to be moved from the Tertiary system (RPH) to Primary care (MRC), with the MRC delivering a much more affordable, holistic and effective model of care.

This will result in benefits of around \$18 million per annum for the State.

Funding Requirement Overview

Investment Required

20 Bed Facility:	\$2.52 million – St Bart's will provide the property at 111 Kensington St, East Perth, already secured.
Facility Refurbishment / Project Costs:	\$737,000 – 'In Principal' pledge from Lotterywest and Potter Foundation, secured.
Annual Operating Costs:	\$2.85 million per annum (adjusted annually for CPI). This is the figure sought from WA State Government.

In summary

Current estimated cost to WA Health of street homelessness:	\$52 million
Funds required from State for operating cost of MRC:	\$2.85 million
Estimated savings based upon 20 bed MRC at 85% occupancy:	\$18 million

Alignment of MRC to Sustainable Health Review

In the context of the Sustainable Health Review Terms of Reference, the following sections demonstrate the strong alignment with the proposed MRC.

Focus Area 1.

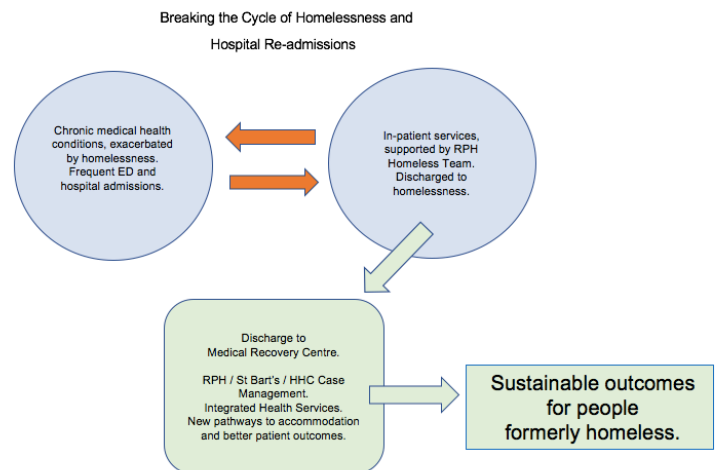
Leveraging existing investment in Primary, Secondary and Tertiary healthcare, as well as new initiatives to improve patient centred service delivery, pathways and transition;

New Initiative: Medical Recovery Centre (MRC)

Our objectives in breaking the cycle of homelessness and hospitalisation are to reduce the burden on the state health system and leverage the full range of health services available, thereby delivering improving outcomes for patients.

Tertiary hospitals, especially RPH, provide acute care for injury and illness for homeless people but do not deal with or fix the underlying causes for homeless people. The MRC will break the cycle of discharge to homelessness and recurrent readmissions to hospital – resulting in significantly improved outcomes for patients while also reducing the burden on the health system. We will leverage existing health services in order to intervene in the cycle prior to the point of discharge, thereby seizing the opportunity to avoid future readmissions.

The overall approach to the MRC is consistent with the government's introduction of Medihotels. The proposed facility is owned by St Bart's, located in East Perth and will accommodate 20 beds after some refurbishment. The additional aspect included in this MRC plan is the clinical team of Doctors and Nursing staff from HHC working alongside St Bart's team of case managers to provide integrated clinical and psychosocial services.



In addition, the MRC will provide pre-hospital care enabling homeless people to have hospital procedures which require special preparation not possible on the streets (eg colonoscopy) and will divert homeless people from GP clinics to the MRC thus avoiding hospitalisation altogether (eg cases of pneumonia).

While in the care of the MRC, the team will coordinate and deliver the wrap around services that are beyond the scope of the hospital. Patients will be linked through the MRC as coordination point to other external health services, including RPH out-patient services. The MRC will be the 'bridge' that links services and connects the patient to providers.

The MRC, together with WA Health, will pave the way to accommodation and associated supports with the aim of ultimately ending homelessness for the client.

Service Model Overview			
RPH, other hospitals and clinics	MRC – Delivery and Coordination		
Referral	Core Services	Aftercare	Outcomes
Triage by MRC nurse. Discharge / referral / transfer to MRC.	Admission and settling in, integrated care, health and homelessness support, pathways to housing following discharge.	Clinical support, community based support from homelessness services.	Monitoring and evaluation, continuous improvement.

Focus Area 2.

The mix of services provided across the system, including gaps in service provision, sub- acute, step-down, community and other out- of-hospital services across WA to deliver care in the most appropriate setting and to maximise health outcomes and value to the public;

Existing resources will be better utilised by the leveraging and linking of services across Tertiary care (RPH) and Primary care (MRC).

The MRC clinical team of Doctors and Nurses (provided by HHC) and RPH are already tightly integrated through the GP in-reach program to homeless people operated by HHC at RPH. Care will be highly coordinated between HHC clinicians and RPH's specialists and services, as required, eg toxicology, pathology, drug and alcohol services, sexual health services.

This equates to better outcomes for patients through improved management of chronic health conditions and by providing a greater level of overall support to the patient. The ultimate aim is to end homelessness for that person.

This is the intervention that will most dramatically improve the health of a homeless person. The MRC is the most appropriate setting for homeless persons to maximise outcomes and value to the public.

The establishment of the MRC will fill a substantial services gap by addressing the root causal factors of those suffering homelessness and their chronically high health-care needs.

The specialised homeless healthcare services that will be coordinated and delivered by the MRC are beyond the scope of Primary, Secondary and Tertiary healthcare. This is the gap in the health system for this group of patients.

The MRC is the most appropriate setting for clients who suffer homelessness as a causal factor of their chronic health problems and each will have a holistic support plan that recognises the challenges faced by the individual.

The MRC will work to build the capacity and the capability of individuals so that ultimately, they can emerge as people who can be sustainable tenants in an accommodation solution and contributing members of society.

This is the gap that the MRC will fill, with benefits flowing to the client and the state.

Focus Area 3.

Ways to encourage and drive digital innovation, the use of new technology, research and data to support patient centred care and improved performance;

We expect that information collected under the MRC plan will place the state of WA ahead of the nation as a leader in intelligence and insight into the causes, financial and social cost and remedies to homelessness. This in turn will facilitate knowledge sharing, and a large-scale expansion of the homelessness knowledge bank.

We will develop important intellectual property and data as a result of the work of the MRC.

This is highly valuable in contributing to state and national discussion on policy direction, sector leadership and broader alignment to strategic goals and tangible outcomes such as breaking the cycle of hospitalisation and ending homelessness.

The method of collection for this data is also an area that is ripe for development. There is an opportunity to utilise new technology available to capture data in real time. For example, hand held applications can gather data and share it immediately with those that need it.

Focus Area 4.

Opportunities to drive partnerships across sectors and all levels of government to reduce duplication and to deliver integrated and coordinated care;

Integration of health services is especially vital for this group of patients – many with multiple chronic health conditions, as they are intensive users of Tertiary health services, especially RPH.

The MRC will be the Care Coordinator that enables the State to supply existing services to this group in a much more efficient way.

Integration of Tertiary and Primary health services is integral to the MRC model, with the major partnership being between RPH and the MRC.

Health of homeless people is characterised by chronic complex multi-morbidity.

For a variety of reasons (including health not being a priority, illness preventing access and previous poor experiences) the healthcare of homeless people is highly fragmented.

Homeless people tend to get the majority of their healthcare from the acute hospital system. Whilst doing an excellent job of managing their acute healthcare needs, other chronic problems are not well managed when homeless people are in-patients of acute hospitals and access to out-patient services for homeless people is extremely difficult

Fundamental to the Australian healthcare system is the care coordination role of General Practice (Primary care). HHC already operates a highly effective multisite General Practice for homeless people in the central CBD which is tightly integrated with the homelessness sector and includes in-reach to homeless people who are inpatients of RPH. **This greatly reduces fragmentation.**

The MRC provides an opportunity to build on these partnerships which include:

- The broader General Practice community.
- Bulk-billing pathology, radiology and specialist medical providers.
- An already close relationship with RPH.

The single biggest factor in the poor health of homeless people is their homelessness. Re-housing a homeless person will often require extensive support.

With extensive experience in providing this support, St Bart's involvement in the clinical care of patients during and after their stay at the MRC will greatly enhance successful outcomes.

Focus Area 5.

Ways to drive improvements in safety and quality for patients, value and financial sustainability, including cost drivers, allocative and technical efficiencies;

The Proponents have projected measurable direct cost savings to Health in the region of \$18 million pa. The MRC project will deliver savings to the hospital system through:

- The avoidance of hospitalisation.
- Shifting current hospitalisation costs to the lower cost base of the MRC. MRC in-patient cost is around \$390 per day, compared to approximately \$1780 per day at RPH.
- Significantly reduced pressure on emergency departments and reduction in ambulance ramping.
- Significantly reduced length of in-patient stay.
- Significantly reduced rate of re-admissions.
- Freeing up beds to enable hospitals to reduce waitlists for elective procedures.
- Improved health outcomes for homeless people by:
 - Moving them away from the acute system to the Primary care system where chronic illness is better managed; and
 - Providing supported housing options.
- More efficient hospital system for all. Hospitals can use freed up beds to reduce waiting lists for surgical and medical procedures.

The cycle of meaningful continuous improvement is driven by Monitoring and Evaluation (M&E). This is critical to achieve improvements in outcomes. KPI drivers and the M&E model proposed will capture safety, quality, value and sustainability.

Focus Area 6.

The key enablers of new efficiencies and change, including, research, productivity, teaching and training, culture, leadership development, procurement and improved performance monitoring.

The key enablers of the new efficiencies and change that will be achieved by the MRC are:

- Integration of Tertiary and Primary patient care through the close working relationship between RPH and the MRC.
- Coordination across health, the homelessness sector and housing to provide pathways out of homelessness and sustainable outcomes.
- Delivery of improved information to drive performance monitoring and knowledge growth, which in turn drives improvement and new efficiencies for all stakeholders – better patient outcomes and lower cost to the state.

Under the MRC plan, homelessness client data and information as it relates to the health system, the client, the service provider and the government as a whole will be available, collected, shared, reviewed and analysed.

As outlined in Focus Area 3, we expect that information collected under the MRC plan will place the state of WA ahead of the nation as a leader in intelligence and insight into the causes, financial and social cost and remedies to homelessness.

This in turn will facilitate knowledge sharing, and large-scale expansion of the homelessness knowledge bank.

We will develop important intellectual property and data as a result of the work of the MRC. This is highly valuable in contributing to state and national discussion on policy direction, sector leadership and broader alignment to strategic goals and tangible outcomes such as breaking the cycle of hospitalisation and ending homelessness entirely.

Focus Area 7.

Any further opportunities concerning patient centred service delivery and the sustainability of the WA health system.

There are multiple opportunities that can be leveraged as a result of the MRC.

Firstly, the MRC is a transportable model that can be reproduced across the state, in other parts of the wider metropolitan area and also regional areas, thus multiplying the benefits to WA Health.

The Kimberley has the highest rate of homelessness in regional WA and this area could benefit tremendously from an MRC.

Secondly, and ultimately, the solution to end all homelessness is housing, along with the required support services. The MRC intervention in the homelessness hospitalisation cycle presents an opportunity to draw in state housing bodies to work together to find sustainable solutions to the accommodation problem.

Further, homelessness is a **Whole of Government** issue. Health, Mental Health, Employment, Housing, Women's Interests, Community Services, Family and Domestic Violence, Policing and Corrective Services, Disability Services, Emergency Services, Seniors and Ageing, Aboriginal Affairs, Regional Development and Local Government all have a stake in ending homelessness.

Summary

The estimate of \$52 million per year cost to the health system over this cohort of 600 street homeless is a conservative number. The reality is that the numbers are likely to be much higher.

Across government, the stakeholders are many. The problem of homelessness and its impact on our community reaches into every Ministerial portfolio. Therefore, the multiplier costs and the benefits of solving this problem are immense.

Against the cost of \$2.85 million per annum to fund the MRC, the state is positioned to realise substantial savings while delivering enormous improvements in outcomes for this group of patients, as part of the policy directives of Medihotels.

Supporting documents:

1. Appendix 1 Case Studies – Homeless Healthcare
2. Medical Recovery Centre Concept and Design Outcomes
3. Business Case - Kensington Street Medical Recovery Centre, July 2017

Appendix 1: Case Studies

The Case Studies following have been provided by Dr. Andrew Davies and his team at Homeless Healthcare. Names have been changed to protect identity.

William Rhodes

Background

(ie homelessness history, compounding issues).

Health issues

1. Presentations to RPH and WA hospitals:

- **During 2016, presented to RPH for:** cellulitis of lower leg, suicide attempt, arm abscess, hypothermia and assault injury.
- **During 2017, presented to RPH for:** sepsis, pneumonia, polypharmacy overdose, subdural rectal pressure ulcer, aspiration pneumonia.
- During 2017, presented also to Armadale hospital for: drug/alcohol.

7 of 10 presentations resulted in an inpatient stay.

2. Homeless Healthcare: The client first presented to HHC in mid-2016 but did not regularly seek or accept health care until January 2017. Since then he has interacted 71 times with HHC staff in the clinic, at hospital, at home or in a hostel or over the phone. Issues dealt with include:

- **2016:** opiate dependence
- **2017:** opiate dependence, back pain, major depression, abscesses, skin ulcers, suboxone program, wounds, dressing changes, drug overdoses, incontinence, constipation, benzodiazepine dependence, neuropathic pain, exacerbation of COPD.

3. Hospital costs (2016-2017)

Year	Admission type	Number admissions	of	Length of Stay	Cost
2016	ED	5		-	\$3,936
	Non-psych inpatient	3		8	\$19,320
	Psych inpatient	-		-	-
2017	ED	3		-	\$1,968
	Non-psych inpatient	2		50	\$120,750
	Psych inpatient	-		-	-
Total Cost					\$145,974

Why this client would benefit from a medical recovery service

This patient required two prolonged admissions for complex wound care in 2017. Due to the patient being a rough sleeper, he was required to stay in hospital for the totality of the wound healing process which included vacuum dressings and skin grafts. They were amenable to Hospital in the Home treatment. A medical respite service would have been a "Home" where wound care could be carried out for the majority of the 50 days of stay while simultaneously dealing with his lack of housing.

Henry Dalston

Background

(ie homelessness history, compounding issues).

Health issues

1. Presentations to RPH and WA hospitals:

- **During 2016, presented to RPH for:** vomiting, back pain, hallucinations, auditory issues, suicidal, benzodiazepine overdose, blood test, psych review, gastro.
- **During 2016, presented to SCGH for:** behavioural situational crisis, drug use/abuse.
- **During 2017, presented to RPH for:** pelvic fracture, pelvic injury, chest pain, slurred speech, pneumonia.
- During 2017, presented to FSH for: multi trauma, cellulitis, hip pain.

2. Homeless Healthcare: Since 2010, Homeless Healthcare has had 279 interactions with this client and his tri-morbid health. Many of his tri-morbidities are chronic and highly recurrent.

- **2010:** subdural haematoma, pneumothorax, schizophrenia, paranoia.
- **2011:** drug dependence, paranoia, dental pain, GORD, schizophrenia, benzodiazepine dependence, eczema.
- **2012:** schizophrenia, back pain, dental abscess, drug dependence, benzodiazepine dependence, bronchitis, paranoia.
- **2013:** methadone program, schizophrenia, drug dependence, prescriptions.
- **2014:** prescriptions, low back pain, cough, schizophrenia, drug dependence, depression, anxiety, benzodiazepine dependence.
- **2015:** dental problems, vomiting, wounds, benzodiazepine dependence, drug dependence, schizophrenia, prescriptions, depression, anxiety, febrile illness, cardiac abnormality.
- **2016:** benzodiazepine dependence, depression, anxiety, schizophrenia, drug dependence
- **2017:** benzodiazepine dependence, laceration repair, motor vehicle accident, drug dependence, low back pain, chest pain, abscess, pneumonia, iron deficiency anaemia, weight loss, aspiration pneumonia.

3. Hospital costs (2016-2017)

Health costs

Year	Admission type	Number of admissions	Length of Stay	Cost
2015	ED	28	-	\$18,368
	Non-psych inpatient	10	11	\$26,565
	Psych inpatient	1	1	\$1,175
2016	ED	11	-	\$7,216
	Non-psych inpatient	4	4	\$9,660
	Psych inpatient	-	-	-
2017	ED	9	-	\$5,904
	Non-psych inpatient	3	74	\$178,710
	Psych inpatient	-	-	-
Total Cost				\$247,598

Why this client would benefit from a medical recovery service

Complex patients such as this are “bouncing balls” in the hospital system with very short hospital stays which do not address the multitude of issues and result in further presentations. They also have catastrophic events, such as the motor vehicle accident in 2017, which lead to very prolonged admissions as shown here. When major injuries or illnesses strike a person who is homeless, the admissions are generally long and difficult and early discharge results in further complications and admissions. A medical respite service can markedly reduce the length of stay of these catastrophic events to that comparable to a housed person because they have a place of rest, supervision and access to home hospital services. The medical respite service will also use this time for stabilisation of mental health and AOD problems, which cannot be done on the streets, and therefore smooth the path to long term housing.

Larry Sutherland

Background

(ie homelessness history, compounding issues).

Health issues (2011-2017)

1. Presentations to RPH and WA hospitals:
 - o Exacerbation of asthma/COPD.
 - o Obstructive sleep apnoea.
2. **Homeless Healthcare:** This client has seen HHC since 2011 and has received healthcare regularly, aside from a 3 year period when in regional WA. Co-morbid mental health and respiratory issues dominate his 99 presentations, most of which have been in HHC clinics, with a number in the hospital. They include:
 - o **2011:** depression.
 - o **2012:** depression, asthma, anxiety, bipolar disorder, pneumonia, GORD, musculoskeletal injury, panic attacks, alcohol dependence.
 - o **2013:** bipolar disorder, anxiety, depression, asthma, prescriptions, alcohol dependence, foreign body removal, bronchitis, cracked heels, COPD, snake bite, hypertension, smoking cessation.
 - o **2016:** depression, asthma.
 - o **2017:** asthma, obstructive sleep apnoea, alcohol dependence, pneumonia, bipolar disorder, COPD, smoking cessation, morbid obesity.
3. Hospital costs (2016-2017)

Year	Admission type	Number of admissions	Length of Stay	Cost
2015	ED	3	-	\$1,968
	Non-psych inpatient	3	9	\$21,735
	Psych inpatient	0	-	-
2016	ED	20	-	\$13,120
	Non-psych inpatient	16	50	\$120,750
	Psych inpatient	-	-	-
2017	ED	12	-	\$7,872
	Non-psych inpatient	7	26	\$62,790
	Psych inpatient	-	-	-
Total Cost				\$228,235

Why this client would benefit from a medical respite service

This highly anxious man with severe lung disease has been a very frequent presenter to hospital but is discharged rapidly because of bed pressures with little time to work on the underlying issues which drive his presentations. A medical respite centre stay post discharge would give time in a safe environment to stabilise him in multiple ways, for example in setting up and using his night time CPAP machine, taking regular medications, reducing his smoking and dealing with his severe anxiety. This would be in parallel with intensive social inputs to find him suitable, stable accommodation and start him in community mental health and wellbeing programs.

Notes:

- *Costings from IPHA Round 19 WA average ED presentation cost \$656, \$2415 inpatient day cost.
- Mental Health Services in Australia, 2015, Expenditure on Mental Health Services, Table EXP.7 accessed [\\$1175/day psychiatric ward/unit/](https://mhsa.aihw.gov.au/resources/expenditure)