

50 LIVES 50 HOMES

A HOUSING FIRST RESPONSE TO ENDING HOMELESSNESS



First Evaluation Report

June 2017

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This research was conducted by the Centre for Social Impact University of Western Australia and commissioned by Ruah Community Services.



A campaign to house
and support Perth's
most vulnerable
homeless people



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50 Lives 50 Homes: A Housing First Response to Ending Homelessness. First Evaluation Report.

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Disclaimer

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CONTENTS

List of Tables.....	vi
List of Figures.....	vii
List of Boxes.....	viii
Acronyms and Abbreviations.....	ix
Executive Summary.....	x
Background.....	x
Key Findings.....	x
Conclusion.....	xii
1. Introduction.....	1
1.1 Background.....	1
1.2 Evaluation Objectives.....	2
1.3 The 50 Lives 50 Homes Model.....	3
2. Methodology.....	5
2.1 Client Domain.....	6
2.1.1 VI-SPDAT Quantitative Data.....	6
2.1.2 Client Housing Data.....	6
2.1.3 In-depth Client Interviews.....	6
2.1.4 Client Case Studies.....	6
2.1.5 Analysis of Hospital and Health Data.....	6
2.2 Agency/Partner Domain.....	6
2.2.1 PARTNER Tool.....	6
2.2.2 Action Research around the Pattern of Engagement.....	7
2.2.3 After Hours Support Service.....	7
2.2.4 Working Group Case Studies.....	7
2.2.5 Client Satisfaction Survey.....	7
2.2.6 Data from Partner Organisations Relating to Housing and Other Non-Health Outcomes.....	7
2.2.7 Economic Evaluation.....	8
2.3 Homelessness Sector Domain.....	8
3. Homelessness and Wellbeing Profile of 50 Lives Clients.....	9
3.1 Background.....	9
3.2 50 Lives Cohort.....	9
3.3 Demographics.....	10
3.4 Homelessness History.....	11

3.5	Adverse Life Events and Trauma.....	11
3.6	Disability.....	12
3.7	Client Vulnerability.....	13
4.	Impact on Client Outcomes.....	15
4.1	Housing Outcomes.....	15
4.1.1	Rapid Access to Appropriate Housing.....	15
4.1.2	Sustaining of Tenancies.....	16
4.2	Risk of Returning to Homelessness.....	17
4.2.1	Types of Needs being met by AHSS.....	17
4.2.2	Referrals to Other Services.....	18
4.3	Health Outcomes and Health Service Use.....	19
4.3.1	Evaluation of Health Outcomes among 50 Lives Clients.....	20
4.3.2	Health Profile from VI-SPDAT Data.....	20
4.3.3	Health Service Engagement.....	24
4.3.4	Engagement with Homeless Healthcare.....	25
4.3.5	Royal Perth Hospital Data on Health Outcomes.....	26
4.4	Justice Outcomes.....	27
4.4.1	Self-reported Contacts with Police and Prison.....	28
4.4.2	Engagement with Support to Reduce Offending.....	28
4.4.3	Legal Issues.....	28
4.4.4	Client Case Study and Client/Staff Interview Data.....	28
5.	Collaborative Approach.....	29
5.1	PARTNER Tool Analysis.....	29
5.1.1	Introduction.....	29
5.1.2	Data Collection.....	29
5.1.3	Collaborative Achievements.....	30
5.1.4	Collaborative Benefits.....	30
5.1.5	Involvement in Collaborative.....	31
5.1.6	Implications for the Future.....	31
5.1.7	Network Mapping.....	32
5.2	Working Group Case Study.....	35
5.2.1	Introduction.....	35
5.2.2	Rough Sleepers Working Group.....	36
5.2.3	Summary.....	39
6.	Economic Evaluation.....	40
6.1	What Will the Economic Evaluation Entail?.....	40

7.	Challenges and Barriers.....	41
8.	Conclusion.....	42
9.	References.....	44
	Appendix 1: 50 Lives 50 Homes Program Logic.....	47
	Appendix 2: VI-SPDAT Questions for Analysis.....	48
	Appendix 3: Health Services People Report Accessing When Feeling Unwell.....	49
	Appendix 4: Proposed Impediments to Health Care Index.....	50
	Appendix 5: Preliminary Content Analysis from Rough Sleeper Working Group Minutes.....	51

LIST OF TABLES

Table 1: VI-SPDAT Sample; Registry Week Data and 50 Lives Clients	9
Table 2: Individual and Families Demographics	10
Table 3: Where Individuals and Families Sleep Most Often.....	11
Table 4: Individuals and Families Traumatic Life Events.....	12
Table 5: Individual and Families Disability.....	12
Table 6: VI-SPDAT Domain Scores	13
Table 7: Tobacco, Alcohol and Drug Use - Risk Behaviours.....	21
Table 8: Dual Diagnosis and Tri-Morbidity.....	22
Table 9: Physical Health Conditions	23
Table 10: ED Admissions and Hospital Admissions (self-report via VI-SPDAT).....	24
Table 11: Reason for HHC visit*	25
Table 12: Individuals' and Families Encounters with the Justice System.....	28
Table 13: Collective Impact Elements of the Rough Sleepers Working Group	38
Table 14: Cost Associated with ED Presentations.....	40

LIST OF FIGURES

Figure 1: Support Levels of the 50 Lives 50 Homes Project.....	4
Figure 2: Evaluation Domains, Sources of Data and Delivery Milestones.....	5
Figure 3: Overview Profile of 50 Lives and Other VI-SPDAT Responders.....	14
Figure 4: Housing Status for 50 Lives Clients between June 2016 – June 2017	15
Figure 5: Needs Sought by Different Client Groups (Relative %)	18
Figure 6: Referrals for Other Services Amongst Different Client Groups	19
Figure 7: Social Determinants of Health for People Experiencing Homelessness.....	20
Figure 8: Key Data Sources for Health Outcome Evaluation 50 Lives	21
Figure 9: Perceived Desired Outcomes of the Collaborative Approach (%)	30
Figure 10: Perceived Most Important Outcome Achievable by the Collaborative	30
Figure 11: Benefits Observed of the 50 Lives Collaboration to Date (%).....	31
Figure 12: Perceived Involvement in 50 Lives to Date.....	31
Figure 13: Organisations that Conduct Integrated Activities based on Level of Involvement in Project	33
Figure 14: Organisations that Meet at least weekly based on Level of Resource Contribution and Direct Client Support.....	34
Figure 15: Steering and Working Groups Involved in 50 Lives.....	35
Figure 16: Key Conditions for Collective Impact	36
Figure 17: Critical Success Factors of 50 Lives Working Groups.....	37

LIST OF BOXES

Box 1: Aims of the 50 Lives Project.....	1
Box 2: AHSS Case Study on Addressing Client Needs.....	18
Box 3: Providing Health Care as part of the AHSS for 50 Lives Clients – A Case Study.....	26
Box 4: RPH Client Engagement – A Case Study.....	27
Box 5: Potential to Reduce Health Service Use and Health Care Costs – A 50 Lives Case Study	40

ACRONYMS AND ABBREVIATIONS

AHSS	After-Hours Support Service
CBD	Central Business District
CRN	Centrelink Reference Number
CSI	Centre for Social Impact
DCPFS	Department for Child Protection and Family Support
DOB	Date of Birth
DSP	Disability Support Pension
ED	Emergency Department
FDV	Family and Domestic Violence
FTBA	Family Tax Benefit A
GP	General Practitioner
HHC	Homeless Healthcare
HoH	Head of Household
ICU	Intensive Care Unit
IHPA	Independent Health Pricing Authority
NPAH	National Partnership on Homelessness
RPH	Royal Perth Hospital
SD	Standard Deviation
US	United States
UWA	University of Western Australia
VI-SPDAT	Vulnerability Index and Service Prioritisation Decision Assistance Tool
WA	Western Australia

EXECUTIVE SUMMARY

Background

The aim of the 50 Lives 50 Homes project (hereafter referred to as 50 Lives) is to house and provide support to 50 of Perth's most vulnerable homeless people.

This research report constitutes the first of three reports for the evaluation of the 50 Lives. 50 Lives is a cross-sectoral collaborative project between a range of Perth-based agencies, including Ruah Community Services (which provides backbone support to the project) and, 27 other partner organisations to date, including, homelessness support services, community mental health services and government housing and health services.

The aims of this evaluation are to determine: 1) how effective and efficient the 50 Lives approach is in providing sustainable housing and wellbeing outcomes for the most vulnerable rough sleepers; 2) the impact of the 50 Lives project on client health, mental health, wellbeing, housing and justice outcomes; 3) the economic and social impact of the 50 Lives project; 4) the extent to which the 50 Lives collaboration enables improved service efficiencies and new innovative ways of working to improve client outcomes and addressing homelessness, and; 5) the main challenges and barriers to the 50 Lives project in efficiently and effectively providing sustainable housing outcomes for the most vulnerable rough sleepers.

The primary focus of this first evaluation report is to provide baseline data pertaining to objects 1 and 4. The evaluation of the 50 Lives project is being conducted by The Centre for Social Impact University of Western Australia (CSI UWA) with collaborators from Royal Perth Hospital (RPH), Homeless Healthcare (HHC) and the UWA School of Population and Global Health.

This evaluation has been designed as a longitudinal study and has utilised various sources and collection methods to measure the impact of the 50 Lives project. This includes data from the Vulnerability Index – Service Prioritisation Decision Assistance Tool (VI-SPDAT); client satisfaction surveys; de-identified administrative data from RPH and HHC; data from the Ruah After Hours Support Service

(AHSS); in-depth interviews with 50 Lives clients and case studies on the working groups. The VI-SPDAT will be re-administered with the 50 Lives clients in early 2018, enabling comparative analysis and measuring changes in outcomes over time.

Overall the evaluation takes a realistic evaluation approach and recognises that there are a range of factors that influence the extent to which positive outcomes are attained for a client and this will be monitored over the course of the evaluation.

Key Findings

Health and Vulnerability

The VI-SPDAT was used by the 50 Lives project to identify the most vulnerable rough sleepers in Perth and collect additional valuable data on demographics, homelessness history, health and adverse life experiences that provides a valuable baseline profile of clients against which changes can be measured.

Those experiencing chronic homelessness are over represented in a myriad of ill-health statistics, and this is reflected in baseline health information collected in the VI-SPDAT. The majority of 50 Lives clients reporting experiencing mental health issues, and in most cases this co-exists with alcohol or drug use problems. Clients also reported experiencing multiple health conditions which is often exacerbated by rough sleeping. Within the 50 Lives cohort, 80% of individuals and 43% of families at baseline were experiencing all three morbidities (mental health, alcohol or drug use and poor physical health) concurrently.

Disability also emerges as a significant issue among 50 Lives clients, and of concern, 30% of those who reported having a mobility, learning or cognitive disability indicated that they do not receive a Disability Support Pension.

Experiences of trauma are highly prevalent, and analysis of VI-SPDAT data suggests that a majority of 50 Lives clients have experienced high levels of trauma, including childhood trauma and being subjected to violence. Three quarters of 50 Lives clients reported experiencing emotional, physical, psychological, sexual or other types of abuse or

trauma which they have not sought help for, and/or which has contributed to their homelessness. This highlights the importance of trauma informed care and targeted support for those affected.

Four Key Outcome Domains

This evaluation will track over time, the impact on four outcome domains: housing, risks of returning to homelessness, health (physical and mental health) and contacts with the justice system. In this first evaluation report, available baseline data pertaining to these outcome domains is provided, and the process for measuring changes in these over time described.

Housing: Securing housing options for 50 Lives participants is fundamental given its ‘Housing First’ underpinnings, with the aim being to house people as rapidly as possible. This aim is ambitious given the lengthy waiting list for social housing in WA, and the shortage of affordable housing options. As at the end of June 2017, housing has been secured for 50 clients (42 individual clients and 8 families). This is a significant achievement, given the initial target of finding home for 50 Lives has been met within the first year of the project. However, there are an additional 53 clients that are currently being supported by services involved in the 50 Lives collaborative awaiting housing. Furthermore, there are hundreds more rough sleepers in Perth in acute need of housing and support; hence the project by no means considers that ‘its work is done’.

Moreover, improving the rapidity of housing the most vulnerable is a central tenet of 50 Lives, and this remains an ongoing challenge. Whilst the average time taken to house clients to date (23 weeks or 164 days on average) has been far quicker than a public housing waiting list application, reducing the average length of time to house people from 164 days is a key target for the 50 Lives project as it moves into its second year.

Risk of returning to homelessness: Critical to this is the provision of afterhours support and health care through the AHSS. The AHSS was established in mid-2016 to support clients as they transition out of homelessness. The large number of client contacts and breadth of support and assistance provided in the first seven months of AHSS operation highlights the vital need for this type of service; an element that has not existed to this extent in previous housing first initiatives elsewhere. Shifts in the type of support being requested and provided have been observed as clients move from rough sleeping to

transitional housing to their own accommodation; for instance there has been a reduced need for crisis service referrals among the 50 Lives clients that have been housed, and an increase in referrals for health and mental health services in the same group was reported.

Health: As the 50 Lives project is founded on a strong partnership with HHC and RPH, there is strong potential for the 50 Lives project to have a significant impact on health and wellbeing outcomes. Health outcome data (including WA hospital data) will be linked to VI-SPDAT data to examine changes in health and health service use over the course of the 50 Lives project. People who are homeless are substantially over-represented in ED presentations, inpatient admissions and mental health service use, and this equates to an enormous cost to the health system each year that could potentially be reduced. Whilst the hospital data for the economic analysis is not yet available, VI-SPDAT data on ED presentations among 50 Lives clients in a six month period signals the potential difference that could be made, with 570 ED presentations across 84 clients, equating to an estimated cost to the health system of \$340,860. Preliminary analysis of some individual case studies suggests that these figures are likely to reduce dramatically, however a more thorough economic investigation will probe this question in future reports.

Justice: Coupling housing and support for vulnerable rough sleepers has the potential to reduce the risk of contacts with the justice system. The VI-SPDAT data indicates that 62% of individual 50 Lives clients and half (50%) of the family clients have been to prison. Around three quarters of individual clients (74%) and 86% of family clients reported having been in police custody. Data on the provision of support to reduce risks of re-offending is collected by the AHSS and this will be analysed further in future evaluation reports.

Collaborative Model

The collaborative partnership model underpinning 50 Lives is a central tenet, but the effectiveness of collaborations is often more elusive to measure than client outcomes. The 50 Lives evaluation is nonetheless keen to build a measure of effectiveness and contribute sector learnings in this regard, and this report provides early insights from the first round of the PARTNER Tool and the first of four working group case studies. The 50 Lives working groups create a unique environment conducive to

information sharing that facilitates rapid response to various circumstances, which may otherwise not be possible without this environment. Overall individuals involved in these working groups indicated that the main outcome that can be achieved by this collaborative approach is improving client outcomes and coordinated access to services. Client perceptions of the collaborative partnership aspects of the 50 Lives will be explored in the client interviews to be undertaken over the next six months. Client satisfaction survey data will also be thematically analysed for the next evaluation report for feedback (explicit or implicit) about the 50 Lives collaboration.

Conclusion

Primary findings from this report show a group of extremely vulnerable individuals and families that have been impacted by a myriad of complex life circumstances have been identified for inclusion in

this project. Long histories of rough sleeping, complex medical problems (often exacerbated by homelessness), countless contacts with the justice system, and high rates of trauma all contribute to their vulnerability; this underscores the importance of coupling client centred support with finding suitable housing.

While the 50 Lives project has already made commendable progress and innovative inroads into finding more rapid housing solutions and client centred support, the availability of suitable housing remains a blockage point in achieving this.

It is eagerly anticipated that as we continue to track the outcomes of these clients over time, the synthesis of empirical, qualitative and economic evidence will further validate the principle benefits of the 50 Lives project and its campaign for the health and housing needs of the most vulnerable rough sleepers of Perth.



1. INTRODUCTION

“Homelessness is a systemic problem involving numerous sectors, institutions and agencies and, therefore, requires more integrated system responses in terms of governance, policy and programs³

1.1 Background

The 50 Lives 50 Homes project (hereafter referred to as 50 Lives) is a collaborative initiative that aims to provide long term housing and support to 50 of the most vulnerable individuals and families rough sleeping in Perth. The project is directly related to the Perth Registry Week survey and coordinates the prioritisation of those identified as the most vulnerable for housing and support using a Housing First approach.

In Australia and internationally, non-government organisations face increasing demands for information about the outcomes and cost-effectiveness of homelessness programs⁷, and robust evaluation data is increasingly needed to substantiate future funding. This is the first of three reports as part of the evaluation of the 50 Lives project which is being led by a multidisciplinary team of researchers at the Centre for Social Impact at the University of Western Australia (CSI UWA). Aiding in the evaluation are collaborators from Royal Perth Hospital (RPH), Homeless Healthcare (HHC)

Box 1: Aims of the 50 Lives Project

50 Lives 50 Homes aims to:

1. Sustainably house and support very vulnerable homeless people using a Housing First model
2. Use a collective impact model to harness existing supports and services
3. Evaluate the effectiveness and relevance of the Housing First Model in the Western Australian (WA) context to inform future funding decisions in homelessness in WA

and the UWA School of Population and Global Health.

Homelessness presents a complex and compounding mixture of personal, health, social and economic issues at both an individual and a community level. In 2011 in Perth, Western Australia, homelessness affected an estimated 10,000 people⁸, and has been on an upward trajectory since 2006. Whilst it is the straining homelessness sector that is most often at the coalface, there is growing recognition of the need for comprehensive cross-sectoral responses to reduce the cyclical and inter-generational nature of homelessness in Australia⁹.

Beyond the necessary moral and civic obligations to respond to homelessness, finding viable solutions is also imperative in light of the over-representation of people who are homeless in contacts with the health, welfare and justice systems, and the subsequent economic cost to society¹⁰.

The homelessness sector is among the first to acknowledge that conventional crisis-oriented services for people who are homeless (such as emergency accommodation or food) are the equivalent of an ambulance at the base of a cliff¹¹ and the imperative for more upstream interventions is compelling. Given this climate, Housing First approaches to ending homelessness have gained traction in recent years, with available evaluations in the literature increasing and the international evidence basis for Housing First approaches mounting.

As 50 Lives is founded on the Housing First model, which stipulates the primary need for individuals experiencing homelessness is to firstly acquire and maintain stable housing, it is pertinent to consider the evidence and evaluation to date of this approach. Previous evaluations of international Housing First programs have established that involvement in the program can change the pattern of clients’ healthcare utilisation, with reductions in emergency department (ED) admissions¹²⁻¹⁴ and a shift to increased attendance at outpatient appointments¹². An evaluation of a Housing First program in Seattle found that clients’ contact with health services for substance related issues reduced after they were housed¹⁴. Housing First approaches have been associated with significant cost savings

for health services, in particular the ED where the monetary burden of homelessness often falls^{10,12,15}. Clients of Housing First programs experienced reduced contact with the justice system^{16,17} and had higher levels of social functioning and involvement in the community¹⁷. In a randomised control trial of a Housing First program, clients housed under the Housing First approach had increased duration of tenancy compared to those housed through standard approaches¹⁸. Whilst a limitation of some of these studies have been the small sample size; longitudinal data over a period of up to two years have strengthened the reliability of their outcomes.

The link between Housing First interventions and improved outcomes for previously homeless clients is well established¹⁷⁻¹⁹. However, the impact of primary, allied health and social support services in conjunction with access to stable housing is relatively unknown. The majority of Housing First evaluations have not analysed the impact of support services provided to clients or have not provided sufficient details of the support programs. An exception to this gap is a group of studies stemming from the At Home/Chez Soi Project^{18,20} which specifically examined the impact of additional support services in a Housing First program in Canada²¹⁻²³. Kirst et al. found that intensive mental health support, provided according to clients' level of need, significantly improved mental wellbeing and optimism amongst clients of a Housing First approach²². Russolillo et al. found that providing primary health care services for Housing First clients resulted in improved health status and reduced use of the tertiary health system¹³.

The 50 Lives project has sought to build on the Housing First model; adapting it to the WA context. The project also aims to contribute to a wider and stronger evidence base for its efficacy, as reflected in the comprehensive evaluation embedded into it.

A realistic evaluation approach² will be taken as the 50 Lives project evolves. This recognises that there may be a raft of contextual and individual factors and mechanisms that can influence the extent to which positive outcomes are attained for a client's housing stability, health, employment and social engagement.

For example, clients may vary in their accessing of the After Hours Support Service (AHSS), or may encounter more barriers than others to sustaining their tenancy, and through the mixed methods

design of the evaluation, we can start to detect critical success factors at the individual, organisation and sector level.

Traditional research questions are often framed around "does this work?" or "what works", whereas a core question in realistic evaluation is "what works for whom and in what circumstances?". This recognises that when programs are implemented in real world community settings, with people who have widely varying life experiences and circumstances, that evaluation methods need to be able to consider the differing conditions that influence program impacts².

1.2 Evaluation Objectives

The components of the evaluation framework for the 50 Lives project were developed in consultation with Ruah to address the following research questions:

1. How effective and efficient is the 50 Lives 50 Homes approach in providing sustainable housing and wellbeing outcomes for the most vulnerable rough sleepers?
2. What is the impact of the 50 Lives 50 Homes project on client:
 - a. Health outcomes;
 - b. Mental health and wellbeing outcomes;
 - c. Housing outcomes, including risk of moving back into homelessness, and;
 - d. Risk of offending and crime behaviours.
3. What is the economic and social impact of the 50 Lives project?
4. To what extent has the 50 Lives 50 Homes collaboration enabled improved service efficiencies and new innovative ways of working to improve client outcomes and address homelessness?
5. What have been the main challenges and barriers to the 50 Lives 50 Homes project to efficiently and effectively provide sustainable

housing outcomes for the most vulnerable rough sleepers?

For this report a primary focus has been on providing some baseline data pertaining to Objective 1 with some preliminary analysis of project activity pertaining to Objective 2 also included.

1.3 The 50 Lives 50 Homes Model

Both rapid access to housing and wrap around support are fundamental components of the Housing First model that underpins the 50 Lives project. The identification and prioritisation of the most vulnerable rough sleepers to participate in the 50 Lives project is based around the collection of Registry Week data using the Vulnerability Index and Service Prioritisation Decision Assistance Tool (VI-SPDAT), which is widely used internationally.

Through the use of the Registry Week data to generate vulnerability scores, the 50 Lives Project is able to identify and triage those experiencing homelessness, classify their needs, and prioritise them for support using a Housing First approach; following this, other secondary issues can be addressed.

The project's theory of change has four main components:

1. Collaborative case management and housing allocation to enable rapid housing of vulnerable rough sleepers;
2. Collaborative working groups to enable smoother access to support from other services and transition to alternative support when service periods come to an end;
3. Effective collaboration across service agencies is facilitated through backbone support provided by Ruah Community Services, and;
4. Reducing vulnerability of returning to homelessness through wrap around support provided through the AHSS, working in an integrated manner with case managers.

Each of these is elaborated further below and will be considered as part of the evaluation.

Collaborative Case Management: Individuals and families identified as the most vulnerable (scored >10 on the VI-SPDAT) are provided case management by lead workers from over 40 agencies throughout Perth. Support is provided from a broad range of sectors (not only the homelessness and housing sectors), with a strong emphasis on partnership and collaboration between involved organisations.

Collaborative Working Groups: The establishment of four working groups (rough sleepers, youth, families and housing) and a steering group, made up of senior and executive staff provide overarching strategic direction provide overall direction of the project.

Three of the working groups (families, youth and rough sleepers) focus on providing rapid decision making to address clients' challenges to 1) being housed and supported and, 2) staying housed and supported. The housing working group is where potential housing allocations are discussed, with a core remit to secure appropriate accommodation for clients expediently, and provide ongoing support to address client needs and assist housed clients to remain in their tenancy.

Effective Collaboration through Backbone Support: Coordination by Ruah Community Services provides the support framework for effective collaboration across service agencies. Ruah also act as facilitator to the working groups and allocates resources for project management and coordination.

Having an organisation and staff to provide dedicated backbone support is critical in achieving collective impact, particularly in the homelessness arena where there is immense goodwill, but individual organisations are resource constrained, and all have their own traditional ways of working.

Vulnerability of Returning to Homelessness: It is recognised that 50 Lives clients have complex needs, and are typically low users of existing support services (e.g. primary health care services and mental health support services).

Fragmentation across homelessness services, challenges in accessing services and prevailing service gaps all contribute to long-term homelessness, and increased risk of losing tenancy once housed. The 50 Lives project tackles this challenge through its partnership model, and the establishment of the dedicated after-hours service

with HHC providing further support to clients' pre- and post- housing.

50 Lives is an ambitious collaboration with many partners and sectors involved, and helping coordinate, support and align these efforts is a vital

role in sustaining the collective vision and momentum of program delivery (see Figure 1).

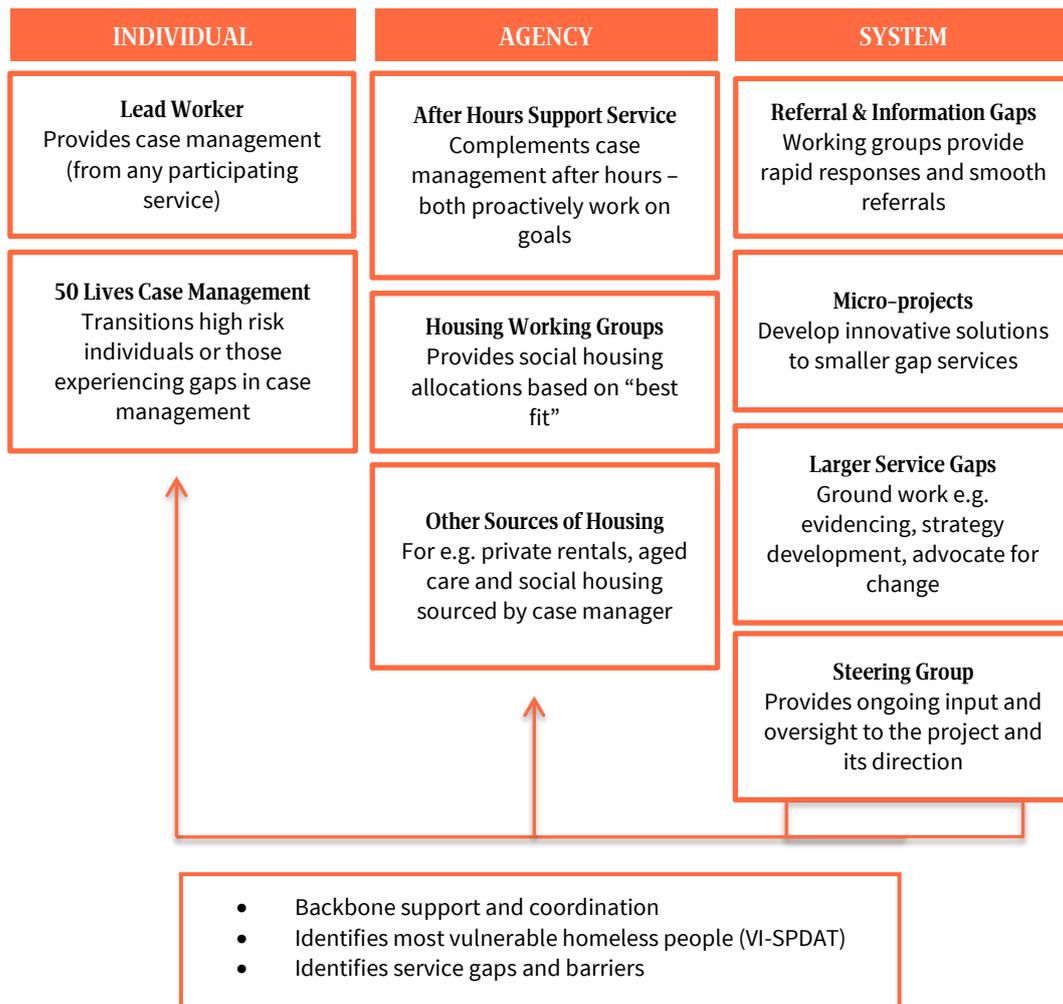


Figure 1: Support Levels of the 50 Lives 50 Homes Project

2. METHODOLOGY

The components of the overarching evaluation framework for the 50 Lives project were developed in response to the stated aims and program logic (Appendix 1) of the project, and in consultation with Ruah. This evaluation has been designed as a mixed methods, longitudinal study comprising of quantitative and qualitative research and an economic evaluation component.

The 50 Lives project is multifaceted, which has been mirrored in the evaluation of progress and outcomes across three domains; client, agency and partner organisations, and the wider homelessness sector.

The evaluation data sources and collection methods corresponding to these three domains are depicted in Figure 2, and summarised further below.

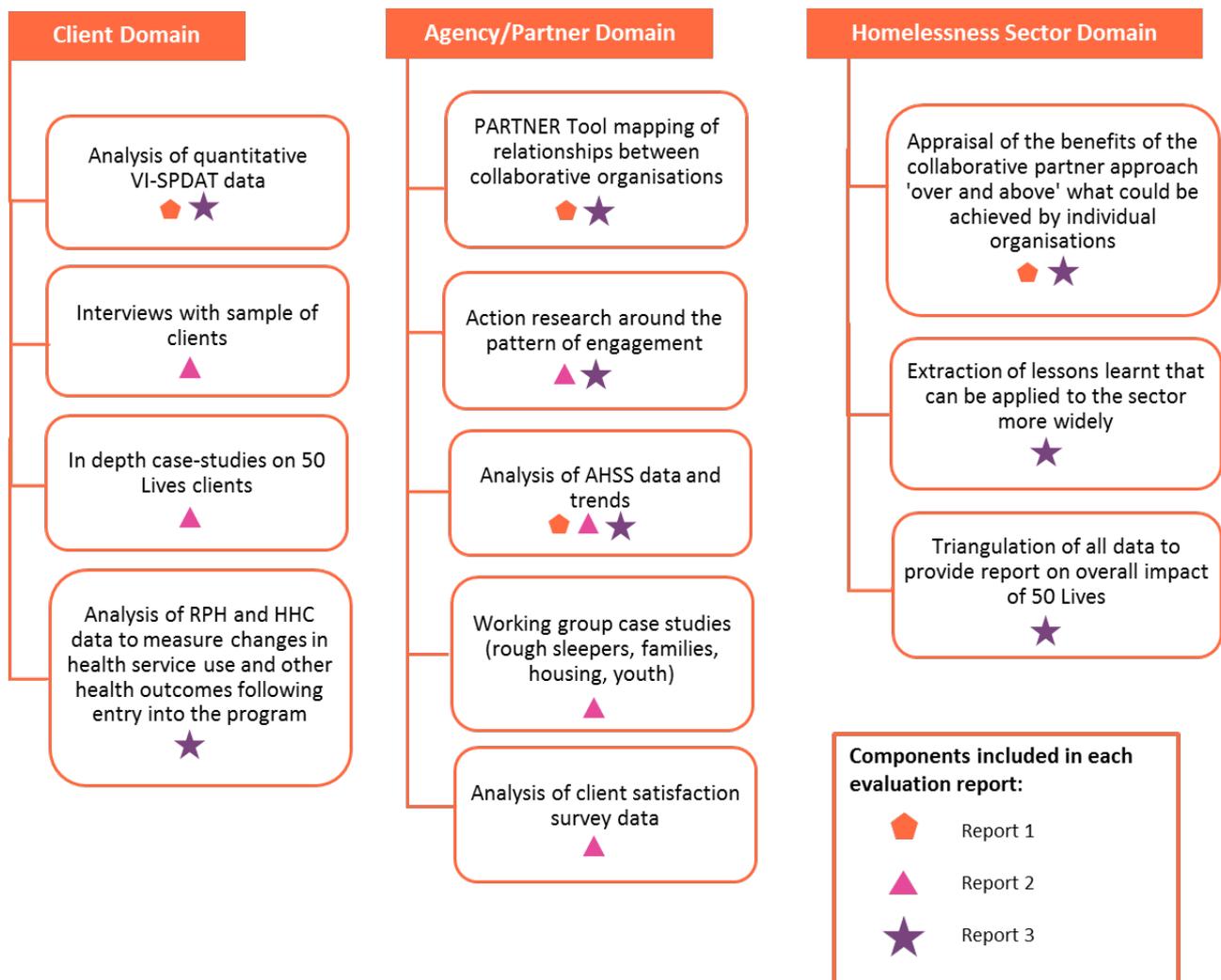


Figure 2: Evaluation Domains, Sources of Data and Delivery Milestones

2.1 Client Domain

2.1.1 VI-SPDAT Quantitative Data

All participants in the 50 Lives project completed a VI-SPDAT survey prior to being recruited and consenting to be a part of the project. The VI-SPDAT measures the vulnerability of individuals and families experiencing homelessness and the level of assistance from services required for them to exit homelessness²⁴. The VI-SPDAT collects information across the domains of history of housing and homelessness, risks, socialisation and daily functioning and wellness²⁵. The original Vulnerability Index (VI) instrument was developed based on research at the Boston Health Care for the Homeless program²⁶, to assess key mortality risk indicators that are prevalent in people who are long term homeless. The survey was later expanded to include the Service Prioritisation Decision Assistance Tool (SPDAT), an evidence-informed tool used to assess the acuity of homelessness and prioritise the appropriate intervention²⁵.

This first report presents VI-SPDAT data on the current 50 Lives clients and forms their baseline data. The VI-SPDAT will be repeated approximately two years after they commenced receiving support from 50 Lives and will be analysed to determine change in health service use, and changes in health and other social outcomes over this period.

2.1.2 Client Housing Data

The 50 Lives project team collates quarterly data on housing status and length of time taken to house individuals and this data will be provided to the evaluation team for analysis.

2.1.3 In-depth Client Interviews

Five in-depth client interviews will be conducted at two time points (n=10), and will help to capture the perceived benefits of the project, changes in outcome measures and how well they feel their needs are being met. A purposive sampling method is being used to recruit clients reflective of the breadth of 50 Lives clientele. Selection criteria (i.e. diverse demographics including length of time spent homeless, gender, mental health diagnoses, aboriginality etc.) will be applied and discussed with the 50 Lives Project Coordinator and Project Manager regarding appropriate participants. The 50 Lives Project Coordinator or Project Manager will

approach the lead workers about the potential for their client to be involved in the project and will be responsible for inviting clients to be interviewed as they already have established relationships of trust. The research team will work with lead workers to ensure they explain to clients that participation is voluntary and that they can withdraw at any time.

Client discussion guides will be developed in consultation with the Ruah Evaluation Adviser.

2.1.4 Client Case Studies

The evaluation will include in-depth client case studies to explore their experiences with the 50 Lives project, specifically relating to changes in outcome measures, type of support received and barriers and enablers to desired change. Lead workers at Ruah and partner agencies will assist with identifying case study clients to illustrate a range of homelessness and project experiences and outcomes, and where possible will build on client interviews.

2.1.5 Analysis of Hospital and Health Data

Report 1 presents the preliminary health profile and self-reported hospital admissions of 50 Lives clients (drawn from the VI-SPDAT) and, contacts with HHC via nurses in the AHSS. Future reports will analyse linked client health data from HHC, RPH and VI-SPDAT data. Linking these datasets will allow for a fuller picture to be captured in relation to an individual's contact with health services and to determine any changes in hospital service utilisation following participation in 50 Lives.

In addition to empirical healthcare data, a series of brief case studies will be collated to illustrate how the 50 Lives project contributes to changes in health service use over time.

2.2 Agency/Partner Domain

2.2.1 PARTNER Tool

The PARTNER Tool is a validated network analysis tool that maps connections, use of shared resources, perceptions of roles, responsibilities and involvement between organisation and stakeholders in collaborative projects²⁷. Analysis of the results gathered through this tool will provide insights into the operation of the 50 Lives collaboration and allow changes in the collaborative network to be examined over the time.

2.2.2 Action Research around the Pattern of Engagement

The action research component of this evaluation will be framed around monitoring and evaluation aspects of 50 Lives and the notion of organic evaluation. Feedback loops and reflective processes will look at how to best capture the impact and outcomes of the 50 Lives project; solving data and evaluation challenges collaboratively as the project evolves. Preliminary findings will form the basis of the action research dialogue between Ruah and the research team to establish a participatory action research framework which will be used as a basis of the action research evaluation. This will comprise four phases typically applied in action research: reflect, plan, act and observe. The action research process and evolving outcomes will be included in subsequent evaluation reports.

2.2.3 After Hours Support Service

The AHSS is a joint service between Ruah and HHC²⁸, that provides outreach workers and nurses outside of regular hours, on weekends and public holidays to 50 Lives clients to aid in improving their quality of life. In this first report, we examine aggregated use of the AHSS and changes in support provision over the first seven months of operation. Future reports will examine individual level use and the impact of AHSS on clients' health profile and usage of other health services.

2.2.4 Working Group Case Studies

There are four working groups that have been established as a part of the 50 Lives project that have a specific focus on different risk cohorts (i.e. rough sleepers, housing, youth and families). These working groups are made up of a diverse range of organisations that come together for specific clients to meet their needs. Due to the complex nature of the working groups and their clients, the impact of the groups is difficult to quantify; as a result a number of in-depth case studies will be created to capture the diverse roles and activities that these working groups are involved in over the project duration. Data collection includes holding a focus group with each of the four working groups.

2.2.5 Client Satisfaction Survey

The client satisfaction survey for 50 Lives is being administered by Ruah at approximately six-monthly intervals over the course of the project. The evaluation team has had input into the initial survey

questions and client survey data will be collated by Ruah and provided to the research team, to be triangulated with the other data for the synthesis of evaluation findings. Client satisfaction survey data will be included in the second evaluation report.

2.2.6 Data from Partner Organisations Relating to Housing and Other Non-Health Outcomes

The 50 Lives project is a collaboration across multiple organisations and services, with 27 different partner organisations to date, representing 40 different services. The number and breadth of collaborators is growing as the project continues to evolve, with an increasing number of organisations and services lying outside of the homelessness sector (e.g. housing, health, police and Centrelink.) As a number of these organisations collect rich sources of administrative data relevant to the evaluation of project outcomes, we are currently exploring scope to include some of these additional data sources in the evaluation to provide a richer picture of outcomes. For example:

Data from housing providers: The Housing Authority, Access Housing, Foundation Housing and Community Housing Ltd are all involved in the 50 Lives steering group and have committed to providing housing for project participants. Housing providers record the type of housing provided (e.g. duplex, supported accommodation, house, subsidised rental); duration of tenancy and any issues encountered with sustaining of tenancy. This latter data emerged as an initial gap in data collected that might signal that a client is at risk of losing their tenancy or current accommodation. At an aggregate level, this data enables patterns in risk factors for loss of tenancy (type of factors and frequency of occurrence) to be identified and examined across the 50 Lives cohort, with potential implications for strategies put in place to help avert this. In the final evaluation, data on risk factors for loss of tenancy will be linked to the composite data set to examine whether it predicted other client outcomes.

Data from WA Police: WA Police is an active participant in the project steering group and is supportive of relevant, de-identified police data to being included as part of the evaluation. The relevant approvals have been sought from WA Police in relation to accessing the following data: contacts with Police (cautions, move on orders, charges, court appearances, call outs); whether clients have

been a victim of crime, and; number of charges, summons and breaches of bail, in the two years prior to entry into the 50 Lives project compared with following entry into the project.

Ruah and the research team will continue to work with relevant partner agencies (such as Housing and WA Police as described above) to request permission to access relevant data that can be de-identified and linked to the master evaluation database.

2.2.7 Economic Evaluation

Building a robust evidence base for the economic benefits of 50 Lives is critical in the current policy and funding climate. With current evaluation funding and data access, the economic evaluation will focus initially on the potential cost savings associated with reduced use of health services, as it is the health system that bears much of the cost and consequences of recurring homelessness. Potential to source justice data for an additional economic component is currently being investigated.

The economic analysis is dependent on outcome data from two time points hence will not be

completed until the third evaluation report. In this first report, we have included a case study to illustrate the potential for economic benefits to be realised through the 50 Lives intervention. Costs associated with this case study have been estimated using Independent Health Pricing Authority (IHPA) national public sector estimated average costs for ED presentations, psychiatric admissions and other inpatient admissions.

2.3 Homelessness Sector Domain

For the final evaluation report, data will be triangulated in the analysis using an iterative process to describe the trajectory of client and service pathways to identify factors driving or impeding the health outcomes achieved. This data will be used to appraise benefits and challenges of the collaborative partnership approach and will form the basis of reflection around what lessons can be applied to the homelessness sector more widely.



3. HOMELESSNESS AND WELLBEING PROFILE OF 50 LIVES CLIENTS

3.1 Background

Baseline data for the 50 Lives clients and comparative data for other rough sleepers in Perth has been generated through approved access to the VI-SPDAT Registry Week data collected in WA since 2014. Between 2014 and March 2017, VI-SPDAT data has been collected from a cohort of 1,158 individual rough sleepers in Perth. For all of the people in the dataset, VI-SPDAT scores are computed to assess their vulnerability in homelessness and to guide them towards their most needed supports and services. This data has been an integral tool in the identification of Perth's most vulnerable homeless people and has informed the recruitment of participants for the 50 Lives project.

Registry Week collections focus on counts of rough sleepers (e.g., those sleeping on the streets, in parks or in cars) and emergency and crisis supported accommodation-based forms of homelessness in defined geographical areas. The data is collected using a standardised assessment tool originally developed in the US²⁹, and now widely used internationally³⁰ as an aid to prioritising housing, medical and other interventions for people who are homeless.

To date, the primary use of the VI-SPDAT for the 50 Lives project has been for the purposes of identifying the most vulnerable rough sleepers in Perth, and has focused on the comparative VI-SPDAT scores to assess eligibility for the 50 Lives initiative. However, within the VI-SPDAT, there is a wealth of other data collected that provides an insightful picture of their demographics and homelessness trajectory, health and welfare needs, and life experiences that have contributed to or occurred in tandem with their homelessness.

3.2 50 Lives Cohort

The 50 Lives cohort comprises primarily individual clients (n=90), but there are also a number of

families (n=14). These families may include a partner, children under the age of 18 or both.

Current 50 Lives clients (as of 4th quarter 2016) were identified within the VI-SPDAT database. Individuals and family heads of household (HoH) were initially matched with VI-SPDAT records through date of birth prior to de-identification. Where it was not possible to match through date of birth, the Centrelink Reference Number (CRN) of the client was used to match the data. Where duplicate VI-SPDAT records existed, the most recent information was used in the analysis.

In this section, we present the analysis of baseline data for the 50 Lives clients, and compare this to the larger cohort of rough sleepers in Perth for whom we have VI-SPDAT data for, between 2014- March 2017. As slightly different versions of the VI-SPDAT instrument are used for homeless individuals as compared with homeless families in Perth, the individual and family results are presented separately. The number of people included in the individual and family categories for 50 Lives versus the overall Registry Week sample are shown in Table 1 below.

Table 1: VI-SPDAT Sample; Registry Week Data and 50 Lives Clients

	Individuals	Families [^]
Perth Registry Week sample overall (2014- march 2017) ^{^^}	1,158 ^{^^^}	51
50 Lives clients (as at March 2017)	90	14

[^] With data from Head of Household

^{^^} Total VI-SPDAT sample (includes 50 Lives clients)

^{^^^} Of the 1,207 individuals in the VI-SPDAT dataset, 49 were duplicates hence the final sample size was 1,158.

3.3 Demographics

Among the **individual 50 Lives clients** (n=90), the majority are aged 25-55 (78%), with an average age of 40 years. Nearly two thirds (63%) of 50 Lives clients are male and over a third (36%) the 50 Lives clients identified as Aboriginal or Torres Strait Islander (Table 2).

The vast majority reported receiving an income (97%), with a significantly higher proportion receiving the disability support pension (DSP) when compared with the wider individual VI-SPDAT cohort (42% and 25% respectively, $p < 0.05$). Fewer individual 50 Lives clients were receiving unemployment benefits (47%) compared with other VI-SPDAT respondents (57%).

VI-SPDAT data was collected between 2014 and 2016 for 51 families; in 14 of these families, the HoH is a 50 Lives client. The demographic profile of these 14 heads of **50 Lives families** is shown in Table 2.

Whilst all of these families have children under 18 years (n=39, range of 1 to 6 children per family), only 12 (31%) of these children were living with the 50 Lives client at the time of their VI-SPDAT survey, with the remaining 27 living elsewhere. Children's ages ranged from 7-16 years. As indicated by 50 Lives staff, family reunification is a goal for many of these families, and this has implications for the type of housing suitable for them to be accommodated in.

All of the family client HoH indicated receiving some sort of income, with the most common sources being the DSP (36%), Newstart (36%) and parenting payments (14%).

In terms of profile demographics, the average age of the HoH for 50 Lives family clients is similar to that of 50 Lives individual clients. By contrast to the preponderance of males in the individual client cohort however, the majority (86%) of the 50 Lives family HoH were female.

Table 2: Individual and Families Demographics

n(%)	Individual clients		Family clients (HoH)	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Age (average, sd)	40.4(11.1)	41.7(11.7) [*]	40.5(9.4)	35.2(9.2)
Gender				
Male	57 (63.3)	833(78.0)	2(14.3)	9(24.3)
Female	30(33.3)	229(21.4)	12(85.7)	28(75.7)
Other/Not stated	3(3.4)	6(0.6)	0(0)	0(0)
Aboriginal or Torres Strait Islander	32(35.6)	347(32.5)	8(57.1)	19(51.4)
Receiving income	87(96.7) [*]	881(82.5)	-	-
Receiving DSP	38(42.2) [*]	263(24.6)	5(35.7)	3(8.1)
Receiving unemployment benefits	42(46.7)	607(56.8)	0(0)	0(0)
Receiving FTB A	0(0)	6(0.6)	1(7.1)	2(5.4)
Receiving Newstart	-	-	5(35.7)	17(45.9)
Receiving parenting payments	0(0)	4(0.4)	2(14.3)	13(35.1)

^{*} $p < 0.05$ (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

3.4 Homelessness History

Years Spent Homeless

On average, **individual 50 Lives clients** have spent 5.4 years homeless compared to 4.3 years for other individual VI-SPDAT respondents (SD 5.6). This average masks huge variability in the years spent homeless, which ranged up to 25 years among the individual 50 Lives clients, and a standard deviation of 5.6 years reflects the variability. Among the **50 Lives families**, the average years spent homeless was 3.3 (SD 2.8), which was nearly one and a half times that of other family VI-SPDAT respondents (mean 2.1 years). Again there is enormous variability in the time spent homeless among families, ranging from 20 days to 9 years.

Most Frequent Sleeping Location

Where people most often sleep is captured in the VI-SPDAT survey. Not surprisingly, given the focus of 50 Lives in housing long term rough sleepers, around two thirds of 50 Lives clients reported sleeping rough as their most frequent sleeping place (66% for individual and 43% for family). A further 12% of individual 50 Lives clients and 43% of 50 Lives families reported that they usually stayed with friends and/or family (Table 3).

Table 3: Where Individuals and Families Sleep Most Often

n(%)	Individuals		Families	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Sleeping rough	59(65.6)	631(59.1)	6(42.9)	13(35.3)
Boarding houses/hostels	2(2.2)	29(2.7)	2(14.3)	11(29.7)
Emergency/crisis accommodation	6(6.7)	104(9.7)	0(0)	0(0)
Friends/family	11(12.2)	189(17.7)	6(42.9)	6(16.2)
Other	12(13.3)	115(10.8)	0(0)	7(18.9)

3.5 Adverse Life Events and Trauma

Traumatic events of a varying nature are often antecedent to a person becoming homeless³¹. In some cases people will leave their home to escape continuing trauma, whilst in other cases trauma contributes homelessness because of its impact on mental health and social disadvantage of a person. As such, trauma places many on the precipice of homelessness, and can often be part of the root cause of leaving them ultimately without a home³¹.

The VI-SPDAT is by no means a comprehensive assessment of trauma, but has a number of questions that elicit insights into people's exposure to traumatic life events. Experiences of foster care in childhood are one such indicator with a greater proportion of individual 50 Lives clients reporting

previously being in foster care compared with other individual VI-SPDAT responders (40% compared with 30%).

Among other VI-SPDAT items related to trauma, a significantly greater proportion of **individual 50 Lives clients** reported attempted self-harm compared to other VI-SPDAT respondents (67% compared to 42%, $p<0.05$), had been a victim of an attack (73% compared with 49%, $p<0.05$) and had experienced emotional, physical, psychological, sexual or other type of abuse or trauma which they have not sought help for, and/or which has caused their homelessness (74% compared to 53%, $p<0.05$) (Table 4).

In the family client data, when compared to other family VI-SPDAT respondents, a significantly greater proportion of **family 50 Lives clients** reported attempted self-harm (86% compared to 32%, $p < 0.05$) and had been a victim of an attack (86% compared with 49%, $p < 0.05$). While not significant (due to sample size), a larger proportion of 50 Lives

family respondents reported experiencing emotional, physical, psychological, sexual or other type of abuse or trauma which they have not sought help for, and/or which has caused their homelessness (93% compared to 78%).

Table 4: Individuals and Families Traumatic Life Events

n(%)	Individuals		Families	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Foster care/ child protection	36(40.0)	316(29.6)	4(28.6)	13(35.1)
Attempted self-harm	60(66.7)	449(42.0)*	12(85.7)	12(32.4)*
Victim of attack	66(73.3)	518(48.5)*	12(85.7)	18(48.6)
Experienced abuse	67(74.4)	564(52.8)*	13(92.9)	29(78.4)

* $p < 0.05$ (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

3.6 Disability

The nexus between disability and homelessness is often under-recognised in homelessness data and those dually affected can 'fall through the cracks' in service provision; homelessness services are not often resourced or equipped to deal specifically with issues of disability, and conversely, disability services have not traditionally had an overt focus on homelessness. Yet disability (physical, cognitive or other) can have an enormous influence on journeys into homelessness and capacity to move out of homelessness.

Among the **50 Lives individual clients**:

- 22 (24.4%) reported mobility limits;
- 30 (33.3%) reported learning disability;
- 50 (55.6%) reported brain injury.

Among the **50 Lives family clients**:

- 6 (42.9%) reported mobility limits;
- 6 (42.9%) reported learning disability;
- 8 (57.1%) reported brain injury.

A disability fact sheet produced by the Brisbane 500 project relied primarily on VI-SPDAT data for a cohort of people who reported receiving a DSP³². However our analysis of the WA VI-SPDAT data shows that there is a substantial proportion of homeless people (including 50 Lives clients) with disabilities who are not receiving the DSP (Table 5).

Overall half of both **50 Lives individual and family clients** who reported having a disability, were not receiving the DSP at the time of survey (52% and 55% respectively). Barriers to accessing DSP for clients experiencing a disability will be further investigated in future reports. With the roll out of the National Disability Insurance Scheme, the nexus between homelessness, disability and access to beneficial supports is currently of heightened interest.

Table 5: Individual and Families Disability

n(%)	Individuals		Families (HoH)	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Receiving DSP	38(42.2)*	263(24.6)	5(35.7)	3(8.1)
Have any disability [^]	65(72.2)*	540(50.6)	11(78.6)	20(54.1)

* $p < 0.05$ (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

[^] i.e. learning, ABI, or mobility limits

3.7 Client Vulnerability

The total vulnerability index and domain scores were calculated using VI-SPDAT data for 50 Lives clients (individual and family) and other respondents.

The four domains that the VI-SPDAT collects information on are:

history of housing and homelessness (which asks questions regarding total length of time spent homeless, and the number of times been homeless); *risks* (questions on interactions with health and emergency services, physical harm experienced, legal issues and engaging in risky behaviours); *socialisation and daily functions* (questions on money, meaningful activities, relationships and living skills); and *wellness* (questions on healthcare, health conditions, substance use, mental health and cognitive functioning, and experiences of abuse and trauma).

The Risks, and Socialisation and daily functioning domains contribute disproportionately to the overall VI-SPDAT score.

The VI-SPDAT vulnerability score is used to prioritise people for permanent supportive housing, and this score is used by the 50 Lives project as a triage tool for identifying those who are assessed as most vulnerable. A total score of >10 is assessed as high vulnerability, but many of the 50 Lives clients have scores well over 10, with some with vulnerability scores of 17, 18 and for one to date, 19.

Given the use of the VI-SPDAT score to prioritise people for 50 Lives participation, it is not surprising that overall, 50 Lives individual clients had significantly higher average scores in all four domains of VI as compared to other VI-SPDAT responders (Table 6).

Table 6: VI-SPDAT Domain Scores

mean(sd)	Individuals		Families	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Pre-screen General information [^]	0.12(.32)	0.11(.32)	1.79(.97)	1.62(.83)
Domain 1: History of housing and homelessness	0.94(.23)	0.72(.45)*	0.64(.50)	0.51(.51)
Domain 2: Risks	3.16(.86)	2.52(1.2)*	3.50(.52)	2.57(1.1)*
Domain 3: Socialisation and daily functions	2.84(.87)	2.19(1.1)*	3.21(.89)	2.35(.98)*
Domain 4: Wellness	4.90(1.5)	3.38(1.7)*	4.29(.91)	2.97(1.7)*
Total VI score	12.0(2.4)	8.93(3.2)*	13.4(1.6)	10.0(3.1)*

* p<0.05 (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

[^]Age and Aboriginality have a weighting in the VI-SPDAT score

The preceding analysis indicates that the VI-SPDAT is effective in identifying those with multiple complex needs and highest vulnerability. It points therefore to the accuracy of the index score as a mechanism for filtering those of greatest vulnerability for entry into the 50 Lives project. Whilst this may not seem surprising (given the branding of the tool as a vulnerability index and its growing use in other countries), there has been very little formal validation of the VI-SPDAT in published research to date³³. Given the reliance on the VI-SPDAT scores as a marker for 50 Lives eligibility (and more widely as a flag for prioritised homelessness interventions), our empirical confirmation of the predictiveness of the

tool for 'vulnerability' is reassuring. Moreover, synthesising the patterns of VI-SPDAT data for 50 Lives versus non 50 Lives clients reveals a telling pattern of greater vulnerability across multiple social determinants of health and wellbeing as shown in Figure 3, where the arrows indicate higher vulnerability of 50 Lives clients when compared with other VI-SPDAT survey counterparts. Overall, 50 Lives clients (individual or family) were more vulnerable in all (except three) areas when compared to other VI-SPDAT respondents, providing evidence for the use of the VI-SPDAT as predictive of the most vulnerable rough sleepers.

	Individual 50 Lives clients [^]	Family 50 Lives clients [^]
Total time in years spent homeless	↑	↑
Interactions with crisis services	↑	↑
Been in foster care or child protection	↑	↓
Attempted self-harm	↑	↑
Victim of an attack	↑	↑
Experienced abuse	↑	↑
Currently sleeping rough	↑	↑
Mental health issue	↑	↑
Alcohol or substance issue	↑	↑
Dual diagnosis	↑	↑
Serious health condition	↑	↑
Tri-morbid health conditions	↑	↑
Trips to ED in last 6 months	↑	↓
Trips to hospital via ambulance in last 6 months	↑	↑
Been in prison	↑	~
Been in police custody	↑	↑

Figure 3: Overview Profile of 50 Lives and Other VI-SPDAT Responders

[^] When compared with other individual or family VI-SPDAT responders, with ↑ indicating higher.



4. IMPACT ON CLIENT OUTCOMES

Housing, health (physical and mental health), risks of returning to homelessness and contacts with the justice system are four key domains that 50 Lives seeks to impact on, hence the evaluation will look at outcomes and changes in these domains over time.

4.1 Housing Outcomes

4.1.1 Rapid Access to Appropriate Housing

Like other Australian states, WA has lengthy waitlists for public housing, and a shortfall of affordable housing, hence the homelessness and housing sectors have traditionally struggled to be able to house homeless people in a timely manner, particularly those with complex needs. As a result, the 50 Lives project seeks to reduce the time required to secure appropriate housing for its clients.

Number of Clients Housed to Date

Since 50 Lives began, housing has been secured for 50 clients (42 individuals and 8 families), and with the trend showing that more clients are being housed with each subsequent quarter (See Figure 4).

As at June 2017, there were a further 53 clients being supported by services within the 50 Lives collaboration to help them access long term housing. Of these, 5 clients were on the priority waiting list and a further 37 had completed a housing application (Figure 4).

Time Taken to House Clients to Date

It has taken an average of 164 days (approximately 23 weeks) from the date of consenting to participate in 50 Lives, to house clients¹. The average length of time, however, masks enormous variability, with some clients successfully housed within a few weeks, whereas others have been in transitional housing for months awaiting suitable accommodation (range 0 – 418 days). Whilst this compares positively to the average WA Housing Authority social housing wait time of 146 weeks³⁴, and the 59 weeks on average taken for those on their priority homelessness list³⁵, reducing the average length of time to house people from 164 days is a key target for the 50 Lives project as it moves into its second year.

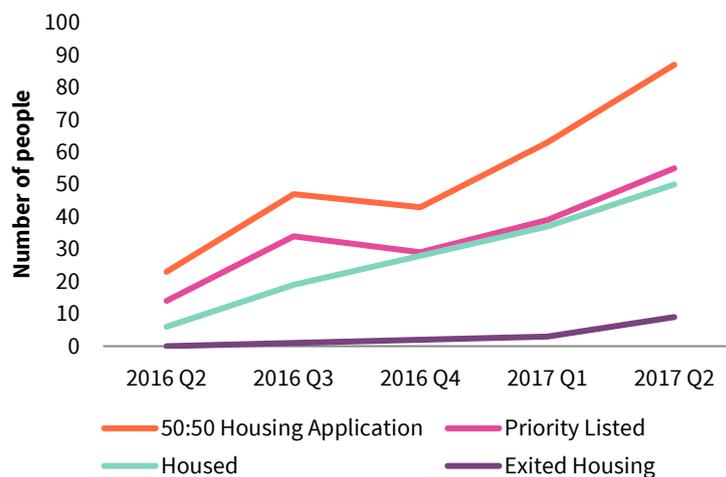


Figure 4: Housing Status for 50 Lives Clients between June 2016 – June 2017

¹ Time taken to house clients as at March 2017.

“The first and most obvious barrier to good health is the plethora of other pressing needs. According to Maslow’s hierarchy of needs, physiological needs—such as food, water, and a place to sleep—must be met first... pursuing good health is secondary to these basic needs. Health concerns usually get the attention of homeless persons only when these concerns become an emergency and literally threaten their lives”⁴

One of the aims of the 50 Lives project moving forward is to accelerate the pace at which clients move through each of the prerequisite steps to housing. This includes working to reduce the time taken to get clients on to priority listing. As Figure 4 shows there is quite a disparity between the number of clients who have a completed housing application, compared with the number who have made it to priority listing, and this is a major blockage to fast housing.

The availability of suitable housing is a blockage point in achieving rapid housing for 50 Lives clients. As the overall ethos of 50 Lives is to help people into housing that can be sustained, the type and location of the housing can be critical, and will vary with client needs. Thus some housing options that become available may not suit clients on the waiting list. For example, the prevalence of mobility disabilities is high among the 50 Lives cohort, and there are clients that need ground floor single level premises. For other clients, there is a need to be located away from social influences that might reduce the likelihood of them sustaining their tenancy. The impact of these social influences will be examined in the qualitative interviews. Over the course of the evaluation, challenges to housing will be tracked, along with documenting of the strategies instigated by the 50 Lives collaboration to address these challenges and barriers.

On a positive note, housing options additional to the 50 committed by the formal 50 Lives housing partners have been sourced for many of the clients housed to date), which means that a larger number of people will be able to be housed overall. Alternative housing options secured to date include private rentals, supported mental health accommodation,

aged care accommodation and housing sourced through the standard public housing pathway.

4.1.2 Sustaining of Tenancies

There is increasing attention in the homelessness and housing sectors on sustaining of tenancies as a critical measure of effectiveness. A 2015 AIHW report on transitions between homelessness and public housing found that loss of tenancy among previously homeless people often occurs in the first three to six months of tenancy commencement, and that loss of tenancy is more likely among people with complex and concurrent problems, including a greater need for drug and alcohol, mental health, gambling and legal support services³⁶. Hence tracking the following housing sustainability outcomes will be important.

Length of Tenancy

It is premature to assess any impact of 50 Lives on sustainment of tenancies, as over half have been housed in the last six months, however tenancies will be monitored over time and will be further explored in subsequent reports. In a recent WA study of previously homeless people who were housed through the Department of Housing, around 8% lost their public housing tenancy due to eviction or termination notice³⁷. In that same study, tenancy durations of one year or more were associated with significant reductions in health service use (including ED presentations, hospital admissions and psychiatric unit admissions) that represented a cost saving to government³⁷, hence length of tenancy is an important metric in the 50 Lives evaluation.

Averting Loss of Tenancy

In addition to the vital role of support that goes hand in hand with housing 50 Lives clients, there are a number of ‘warning signs’ for tenancies at risk that we advocate be monitored over the remainder of the project. These include struggles to pay rent (or bills); cautions/eviction warnings; Housing Authority strikes; complaints made against the tenant; and failure to comply with conditions of tenancy³⁷.

4.2 Risk of Returning to Homelessness

There is emerging evidence that loss of tenancy and eviction rates are higher when chronic homeless are housed but not provided with ongoing support. A 2013 study found that 50% of men in a public tenancy without ongoing support were evicted³⁸. This is a significant figure and it highlights the complexity of homeless tenancies and the need for support. Thus, a key premise of 50 Lives is that housing needs to go hand in hand with support if people are to successfully transition out of homelessness.

Whilst other Housing First initiatives have coupled housing with wrap-around support to varying degrees, a unique aspect of the 50 Lives project is the dedicated after hours service with its integral partnership between Ruah support workers and Homeless Healthcare, and the close working relationship with the lead case workers of each client.

The AHSS delivers important support for housing, health and psychosocial needs, encourages community connections for 50 Lives clients and is closely integrated with the case management support provided to clients by partner agencies.

In the analysis of AHSS data for this first report, we look at aggregate patterns of demand and support provision for the first seven months of operation. In subsequent evaluation reports, AHSS data will be linked to HHC and other client data (such as hospital use) and this will yield a richer understanding of the extent to which the AHSS has contributed to changes in outcomes such as ED presentations.

While the 50 Lives project hopes to precipitate a shift over time in client demand for crisis services and basic material needs, for many who have been long term rough sleeping, the fundamentals associated with Maslow's hierarchy of needs⁴ initially still require assistance to be met. As such, data collected by the AHSS in its first seven months has been analysed to compare patterns of support provided to 50 Lives clients who are still rough sleeping

(awaiting housing), with those who are in transitional housing, and those who have been housed.

4.2.1 Types of Needs being met by AHSS

All support and assistance provided by the AHSS is allocated to a 'type of need' category, as shown in Figure 5. Material needs include the provision of food, blankets, and clothing. As a percentage of total needs, the amount of basic material items being responded to was highest among rough sleepers (50%), followed by those in transitional housing (29%) and was lowest among the 50 Lives clients who had been housed (15%). Conversely, medical assistance and information provision increased as a proportion of needs met among those who have been housed. Information provision in this context refers to information provided to clients to assist them with needs (for example suggestions as to where they can access support of a particular nature) but does not include actual referrals to other services.

The decreasing trend in requests for material needs once people are housed, and the corresponding increase in informational support seems to suggest that there is greater independence around basic material needs once people are housed, and that the stability of housing means that clients are more likely to seek information about other types of support and services once their most fundamental needs (housing, warmth and food) are being met. Similarly, the increase in medical assistance support once people are housed is seen as a positive in the 50 Lives project, as anecdotal evidence to date suggests that previously unmet health needs may now be getting addressed as people move along the housing continuum. The health support provided in the home via the AHSS is also thought to be a marker of outreach based healthcare replacing previous reliance on hospital EDs as a first port of call when ill. These hypotheses will be explored in the forthcoming qualitative research and in future AHSS and HHC data.

Additionally, AHSS nurses work with 50 Lives clients to address other needs and work on individualised goal setting. For example, Box 2 provides a practical example of how an AHSS nurse is assisting a 50 Lives client in her goal of family reunification.

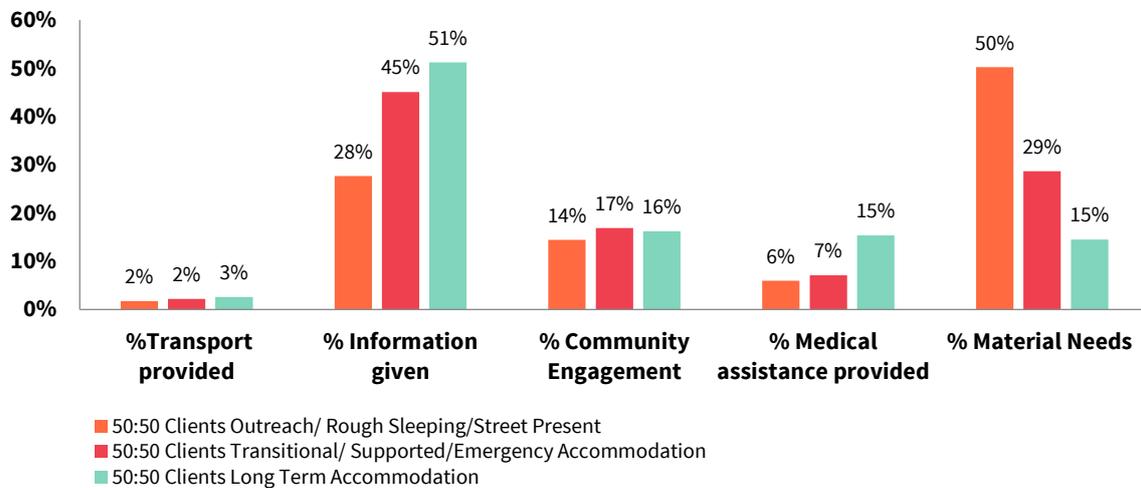


Figure 5: Needs Sought by Different Client Groups (Relative %)

~Note data from June 2016–Jan 2017

Box 2: AHSS Case Study on Addressing Client Needs

The breadth and client focused nature of support provided by the AHSS is illustrated in a client who has several older children but her youngest is in the care of the Department for Child Protection (DCP). She has a complex history of health issues, exposure to domestic violence and homelessness. Since being housed through 50 Lives in October 2016, she has been working with the DCP to progressively have more contact with her youngest child, with plans to eventually regain custody. To help her meet DCP requirements to resume custody of her child the client has been attending a parenting program at Relationships Australia. An AHSS nurse has driven her to and from the parenting classes, and observes that the drive home has provided a valuable opportunity for the client to debrief on what she had learnt, often reflecting on how far she has come, with the AHSS nurse able to positively reinforce the ground she has made. The drives have also seen her sharing about her children, her aboriginal culture and her passion for her art. As articulated by her AHSS nurse; *"It is a small contribution on our part, but I really enjoy this kind of simple, practical intervention and the larger impact these small gestures make over time as part of our consistent engagement and building rapport."*

4.2.2 Referrals to Other Services

In conjunction with support needs met directly by the AHSS, client referrals across a range of categories, including crisis, accommodation, mental health, health and housing authority services are also instigated. As shown in Figure 6, the demand for crisis support is greatest amongst those not housed, with 28% referred to crisis services, compared to 5% of those with transitional or long-term housing.

Referrals for health and mental health services were higher among the clients who are housed. This is

congruent with the predicted capacity of services and clients to provide greater priority to health and mental health needs once the more basic needs of shelter, food and warmth are met⁴. Additionally, what HHC hopes to observe over time is a shift towards more preventive and primary health care needs as management of previously undiagnosed or poorly managed chronic conditions improve or at least stabilise. The extent to which this occurs will be examined through HHC and RPH data.

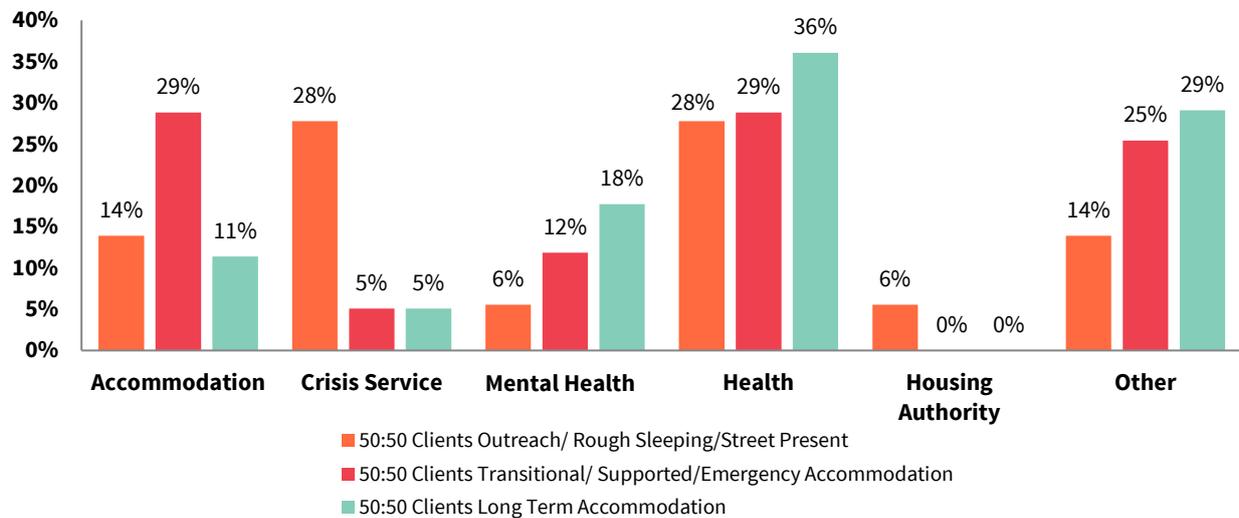


Figure 6: Referrals for Other Services Amongst Different Client Groups

4.3 Health Outcomes and Health Service Use

Homelessness is often accompanied by poor mental and physical health, with health conditions and homelessness compounding and exacerbating each other when not addressed. Moreover, as the health sector bears much of the cost and consequences of recurring homelessness in Australia³⁸, there is a strategic imperative to demonstrate the potential for homelessness interventions to simultaneously yield benefits to other sectors such as health.

The strong relationship between homelessness and poor health is difficult to ameliorate unless the wider constellations of social determinants of health (such as housing, addiction, social isolation) are also addressed. Sadly, many of the well documented social determinants of health (Figure 7) cluster together in the lives of people who have endured chronic homelessness, as borne out by the VI-SPDAT profile of 50 Lives clients described further in this section.

Coupling the addressing of health, housing and social issues therefore has greater potential to avert the revolving door between homelessness and poor health.

Published evaluations of Housing First initiatives in the US and Canada have demonstrated a number of tangible health outcomes. Fewer ED presentations are the most often reported impact¹²⁻¹⁴, with an associated economic benefit of reduced ED use^{10,13,15,39}. Additionally, one study to date has reported a reduction in alcohol related problems among participants in a Housing First approach¹⁴.

The impact of Housing First models on other health problems commonly seen among housing homeless people (including mental health and psychiatric hospital admissions) has not been well evaluated to date, and the capacity to link longitudinal WA health system data with other client health and housing data in this evaluation provides a unique opportunity. Thus the comprehensive 50 Lives project and evaluation has enormous potential to build robust evidence for impact across a spectrum of mental health and physical health outcomes. As the 50 Lives project is founded on a strong partnership with HHC and RPH, and since mid-2016 has provided access to after-hours healthcare to clients via the AHSS, there is strong potential for the 50 Lives project to have a significant impact on health and wellbeing outcomes.

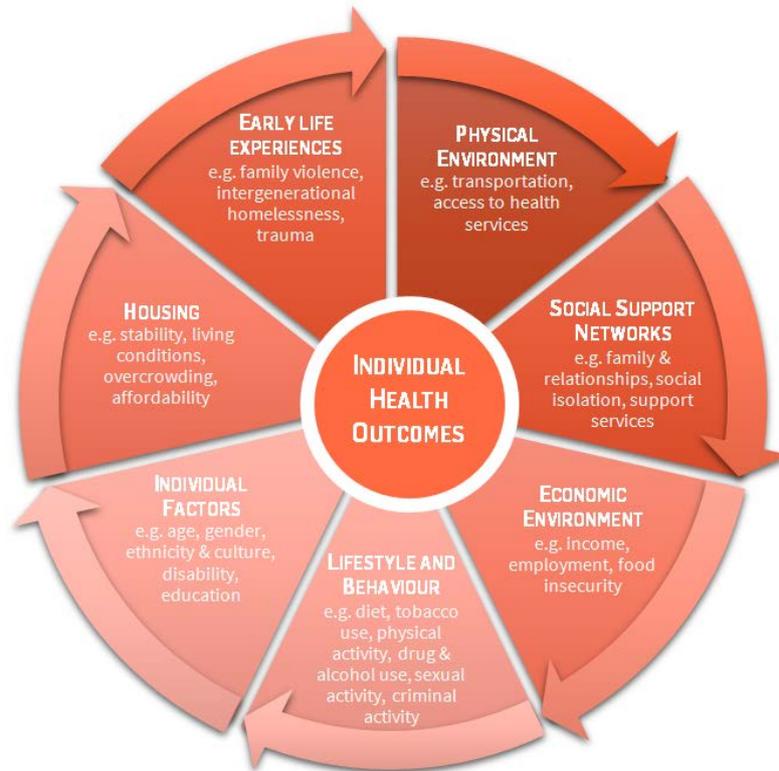


Figure 7: Social Determinants of Health for People Experiencing Homelessness

4.3.1 Evaluation of Health Outcomes among 50 Lives Clients

The evaluation draws on three key sources of health data for clients as shown in Figure 8. In this first report, baseline data on the health profile of clients is summarised, and some preliminary service use statistics from HHC are presented. As UWA and RPH ethics approval had to be obtained to access hospital data and to link the different sources of health data, subsequent evaluation reports will include more detailed findings relating to the health of 50 Lives clients, and examining how health and health service use changes once participants are housed.

4.3.2 Health Profile from VI-SPDAT Data

The VI-SPDAT collects an array of health data, and as clients completed this survey prior to or early in 50 Lives recruitment it provides rich baseline data against which changes in health outcomes and health service use can be assessed. In this first evaluation report, the health profile of 50 Lives clients is compared with that of the wider WA VI-SPDAT responder's cohort.

Health vulnerability is one factor that is incorporated into the vulnerability score, and is mirrored in a higher prevalence of a range of health issues among 50 Lives clients.

<p style="text-align: center;">VI-SPDAT Data</p> <ul style="list-style-type: none"> • Mental health • Dual diagnosis and tri-morbidity • Physical health conditions • Disability • Health behaviours • Health service use
<p style="text-align: center;">HHC Data</p> <ul style="list-style-type: none"> • Type of HHC contact • Number of contacts • Location of contact e.g. AHSS, HHC clinic, RPH in-reach etc. • Referrals to other services • Health conditions treated • ED presentations averted
<p style="text-align: center;">WA and RPH Hospital Data</p> <ul style="list-style-type: none"> • ED presentations (number, reason) • Patient morbidity burden (physical, psychological, alcohol and drugs) • Inpatient admissions (length of stay and reason for admission) • Psychiatric unit admissions and length of stay • Outpatient referrals

Figure 8: Key Data Sources for Health Outcome Evaluation 50 Lives

Substance Use

Analysis of VI-SPDAT data shows that **50 Lives individual clients** are more likely to have problems with substance use, compared with other VI-SPDAT respondents (98% compared to 82%). Similarly, substance use was higher among the **50 Lives family** respondents compared with other family responders (100% and 57% respectively). The substance use measure as computed by the VI-SPDAT includes respondents' self-reported use and observed use by the VI-SPDAT interviewer.

Alcohol, tobacco and illicit drug use are all prevalent risk factors for health among 50 Lives clients in the baseline VI-SPDAT data (Table 7). While significant reductions in tobacco use have been seen in the general Australian population over recent decades, and with only 14.5% of WA adults listed as current smokers in 2015⁴⁰; this is not mirrored in homeless populations, with more than two thirds of 50 Lives participants reporting to be a current smoker at the time of VI-SPDAT survey completion. The prevalence of injecting drug use, daily alcohol consumption (past month) and self-reported problematic drug and alcohol use were all higher among 50 Lives participants compared with the larger VI-SPDAT cohort (see Table 7), again contributing to higher health vulnerability overall.

Table 7: Tobacco, Alcohol and Drug Use – Risk Behaviours

n (%)	Individuals		Families	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Problematic drug and alcohol use	83(92.2)*	761(71.3)*	14(100)	21(56.8)*
Daily alcohol use – last month	53(58.9)	427(40.0)*	5(35.7)	10(27.0)
Injected drug use – past 6 months	51(56.7)	428(40.1)*	11(78.6)	11(29.7)*
Current smoker	60(66.7)	529(49.5)*	13(92.9)	27(73.0)

* p<0.05 (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

Given the high prevalence of substance use and substance use issues among 50 Lives participants prior to becoming part of the project, it is important to track changes in these health behaviours over time. In addition to repeating these questions in the follow up VI-SPDAT, changes in hospital admissions relating to alcohol and drugs will be examined,

along with information on support provided to clients around tobacco, alcohol or drug use by HHC, the AHSS or other support services during the course of the 50 Lives project. Client interviews will also explore the interplay between substance use and homelessness and whether clients feel this change in light of housing and support provided

Mental Health

The strong association between mental health and homelessness is well established, with each compounding and amplifying the other. From VI-SPDAT data, the majority of both individual (99%) and family (86%) 50 Lives clients were found to have some form of mental health problem (Table 8) and are more likely to experience mental health issues than other individual and family VI-SPDAT respondents (83% and 49% respectively).

It is pertinent to note that the scoring methodology for the VI-SPDAT defines mental health quite broadlyⁱⁱ, drawing on self-reported responses and the observations of the interviewer. As people who are homeless can often have undiagnosed or untreated mental health issues, formal diagnosis of mental health issues are likely to be lower and this will be investigated through RPH and HHC data in subsequent evaluation reports.

Dual Diagnosis and Tri-morbidity

A dual diagnosis of both mental health and substance use issues is common among people who are homeless for a raft of reasons. When the 50 Lives participant cohort was compared to the larger VI-SPDAT cohort, dual diagnosis was considerably more prevalent among 50 Lives participants (97% compared to 71% for individuals and 86% compared to 41% for family respondents).

Tri-morbidity refers to the co-existence of a mental health condition, a substance use issue and a chronic physical health or medical condition. This trifecta is a recognised marker of complex health needs in people who are homeless. For **individual 50 Lives clients**, tri-morbidity was significantly higher compared to other individual VI-SPDAT responders (80% and 47% respectively). For **50 Lives family client's** tri-morbidity was also higher than other family responders (43% and 19% respectively).

Table 8: Dual Diagnosis and Tri-Morbidity

n(%)	Individuals		Families	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Mental health issue	89(98.9)	881(82.5)*	12(85.7)	18(48.6)
Substance use issue	88(97.8)	854(80.0)*	14(100)	24(64.9)*
Dual diagnosis (mental health and alcohol/drugs)	87(96.7)	755(70.7)*	12(85.7)	15(40.5)*
Serious health condition	73(81.1)	651(61.0)*	12(85.7)	24(64.9)
Tri-morbid (substance use, serious medical problem and mental illness)	72(80.0)	503(47.1)*	6(42.9)	7(18.9)

*p<0.05 (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

See Appendix 2 for VI-SPDAT items used to calculate figures in this table.

Physical Health

As shown in Table 8, a significantly greater proportion of individual 50 Lives clients when compared to other individual VI-SPDAT respondents reported having experienced a serious health condition (81 % compared with 61%). The same pattern was evident across the main types of health conditions, with **individual 50 Lives clients** significantly more likely than other individual VI-SPDAT respondents to have experienced heat stroke, heart disease, emphysema, asthma and brain injury (see Table 9).

50 Lives family clients, while more likely to experience all listed health conditions, were only significantly more likely than other family VI-SPDAT respondents to experience heat stroke (71% and 19% respectively).

Over the course of the evaluation, this self-reported health information will be compared with hospital and HHC data on each participant to provide a richer picture of health issues and the extent to which healthcare access facilitated by the 50 Lives project helps people to receive appropriate treatment for these.

ⁱⁱVI-SPDAT considers the respondent to have a mental health issue if they have reported ever been taken to a hospital against their will for a mental health reason; have gone to ED because they weren't feeling well emotionally; have spoken with a mental health professional in the last 6 months because of their mental health; have had a serious brain injury or

trauma; have ever been told to have a learning or developmental disability; have problems concentrating or remembering things; OR if the surveyor reported detecting signs or symptoms of severe, persistent mental illness or severely compromised cognitive functioning.

Table 9: Physical Health Conditions

n(%)	Individuals		Families	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Heat stroke	41(45.6)	238(22.3)*	10(71.4)	7(18.9)*
Heart disease	29(32.2)	174(16.3)*	5(35.7)	6(16.2)
Emphysema	16(17.8)	81(7.6)*	3(21.4)	5(13.5)
Diabetes	13(14.4)	136(12.7)	4(28.6)	4(10.8)
Asthma	44(48.9)	294(27.5)*	9(63.4)	21(56.8)
Cancer	3(3.3)	50(4.7)	2(14.3)	2(5.4)
Hepatitis C	25(27.8)	214(20.0)	8(21.6)	5(35.7)
Tuberculosis	1(1.1)	10(0.9)	0(0)	0(0)
Brain injury	50(55.6)	326(30.5)*	8(57.1)	9(24.3)
Mobility limitations	22(24.4)	155(14.6)	6(42.9)	8(21.6)

* p<0.05 (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

Hospital ED and Admissions

There is a substantial body of evidence in Australia and internationally, indicating that both the likelihood and frequency of attending an ED is much higher among people who are homeless. Inner city hospitals in Australia such as RPH and St Vincent's Hospital in Melbourne recognise that people who are homeless are among their most frequent ED presenters, and that there is often a revolving door between homelessness and ED presentations.

The VI-SPDAT includes two items that capture self-report data on ED and hospital use. On average, **50 Lives individual clients** made a significantly greater number of trips to ED in the last six months (6.0 compared to 2.8 respectively, $p<0.05$), with a greater number of 50 Lives clients having 11 or more visits to ED in this period. Trips to hospital via ambulance in the last six months were also higher among 50 Lives clients (average 3.3 compared to 1.3 respectively, $p<0.05$), and they were more likely to have been

admitted as an inpatient for at least one night, compared to other VI-SPDAT respondents (Table 10).

Among the **50 Lives family clients**, the average number of trips to ED in the last six months was less than the number for other family VI-SPDAT respondents (1.9 trips compared to 3.3), but more trips were made to hospital via ambulance in the last six months (1.1 compared to 0.9) (Table 10).

Ambulance transportation to hospital is a relevant metric for this type of research for several reasons: firstly it is a marker of hospital attendance of a more crisis and unplanned nature, and secondly, it represents an additional resource demand on the health system. Among the 50 Lives family clients, the average number of admissions to hospital in the last six months was also less than the number for other family VI-SPDAT respondents (1.4 admissions compared to 1.8).



Table 10: ED Admissions and Hospital Admissions (self-report via VI-SPDAT)

		Individuals		Families	
		50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Trips to ED in last 6 months	Mean(sd)	6.0 (6.9)	2.8(6.9)*	1.9(1.9)	3.3(4.1)
	Range	0-50	0-120	0-6	0-20
	Total	544	2,958	26	121
Trips to hospital by ambulance in last 6 months	Mean(sd)	3.3(6.3)	1.3(4.0)*	1.1(1.6)	0.9(1.1)
	Range	0-40	0-78	0-4	0-4
	Total	293	1,346	16	32
Number of times admitted to hospital as an inpatient	Mean(sd)	3.2(6.7)	1.4(3.5)*	1.4(1.6)	1.8 (2.5)
	Range	0-40	0-72	0-5	0-10
	Total	289	1,442	20	68

* p<0.05 (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

4.3.3 Health Service Engagement

The rough sleeping population is notoriously difficult to engage in health services because of their high levels of traumatic life experience and previous negative experiences with health services which are not adapted to understanding of their specific needs. Opportunities to intervene early in the course of illness or injury are lost and by the time they reach hospital care, their conditions are serious and require extensive and expensive treatments. People who are street homeless often end up in ED in a pattern of repeated crisis presentations, without the continuity of care or early intervention that they really need.

Dr Amanda Stafford, RPH Homeless Team

International and Australian evidence indicates that people experiencing homelessness are typically less likely to access preventive or primary health services (e.g. GP or dentist), and more often wait until illness has progressed before presenting to an ED. This can lead to longer hospitalisation and complications than if the health condition had been diagnosed or addressed earlier. Emergency Departments are also frequently used by people who are homeless in lieu of a GP^{41,42}.

The reliance on hospitals as the 'go to' place if feeling unwell is borne out in the VI-SPDAT survey data. Over half of the 50 Lives clients (57%) indicated that they would go to a hospital if feeling unwell, with RPH the most frequently mentioned hospital. This contrasts with the general population in Australia where GPs are more often the first port of call if feeling unwell, and EDs reserved for matters of a more urgent nature. Of the public hospitals in

Perth, RPH was the most frequently mentioned which corresponds to the clustering of street homeless in the Perth CBD. Appendix 3 summarises responses from the VI-SPDAT as to the various health services where people who were homeless indicated they would go to if unwell. The importance of GP services targeted to homeless people is evident in the fact that HHC and Street Doctor were most commonly mentioned as primary care services if feeling unwell.

Given the high prevalence of mental health and substance use among people who are homeless in Perth, it is pertinent to note that the proportion of people reporting that they access alcohol and drug or mental health services if feeling unwell is fairly low, albeit higher among the 50 Lives cohort (Appendix 3).

There are a number of other questions asked in the VI-SPDAT that provide some further insight into potential impediments to accessing appropriate health care or maintaining health treatments among people who are homeless. This includes questions relating to:

1. Practical impediments, such as whether people have a healthcare card, or whether they have ever had prescribed medications stolen or lost, whether they have a phone or email they can be contacted on.
2. Other barriers, such as cognitive impairment, and past experiences of trauma.

The evaluation team is in the process of developing and testing the usefulness of a 'impediments to healthcare' index from such existing questions in the VI-SPDAT survey (Appendix 4), and this will be reported on in the final evaluation to examine

whether the number of impediments reduces once people are housed. Impediments and enablers to timely and appropriate healthcare are also being explored as part of the qualitative interviews with 50 Lives clients.

4.3.4 Engagement with Homeless Healthcare

“The health of people experiencing homelessness is characterised by complex chronic multi-morbidity that ideally would be managed by primary care, but [they] often avoid accessing healthcare until late in the course of their illness, and end up being seen in hospital rather than by a GP. We estimate that many ED and hospital admissions have been prevented among the people we see at our clinics, but we need to be able to quantify this impact, and demonstrate the economic and health benefits of the Homeless Healthcare model.”

Dr Andrew Davies, founder of HHC in Perth

Homelessness can also contribute to exclusion from mainstream healthcare, a devalued identity and a limited ability to be heard and benefit from treatment⁴³. Homeless Healthcare was established in Perth eight years ago, working across a number of settings to meet the needs of clients who often experience barriers in accessing traditional health services. A number of clinics are operational at various homelessness service providers, including two drop in clinics in the CBD area, and since mid-2016 HHC has been providing in-reach services at RPH as part of the RPH Homeless Team.

Homeless Healthcare is an integral partner in the 50 Lives project, providing GP and holistic nursing care to homeless clients and supporting them to remain housed. Some 50 Lives clients were known to HHC prior to the commencement of the 50 Lives project, and indeed HHC has been important conduit for engaging some highly vulnerable clients with complex health needs in the project.

People experiencing homelessness are less likely to access primary health care, and are far more likely to engage with the acute and more costly end of the health service spectrum¹.

Homeless Healthcare is also an integral part of the AHSS service, with its staff working in conjunction with AHSS workers. Client needs and requests or referral for support are triaged, and staff respond to clients' health needs either by telephone or in an outreach capacity. With funding from WA Primary Health Alliance there is an emphasis on preventive primary care along with responding to more crisis oriented health needs that are common among homeless people. Within this primary care and preventive focus, a key role of the AHSS is to support clients' health education, ownership of their health conditions and independence in managing medications and self-care. Homeless Healthcare staff in the AHSS also provide support and advocacy to clients navigating the health system, including assistance with creating and attending health related appointments, and provide progress reports at the 50 Lives working groups meetings.

HHC Engagement with 50 Lives Clients to Date

For the purposes of this first evaluation report, some summary aggregate AHSS data for HHC is presented (Table 11), with fuller HHC medical record data to be de-identified and linked for future analysis.

Table 11: Reason for HHC visit*

Reason for Visit	Total (July – Dec 2016)
Support/Counselling	501
Psychology	300
Wound Care	142
Situational Crisis	75
Medication Counselling	74
Musculoskeletal	42
Gastrointestinal	39
Other [^]	38
Endocrinology	33
Respiratory	29
Anxiety	28
Alcohol Dependence	26
Neurology	19
ENT	18
Forms	12

Note: more than one reason per visit can be selected

[^] Other category was selected when the 6 monthly totals tallied less than 10. It includes: Cardiovascular, Dermatology, Digestive, Eye, Febrile Illness, Prescriptions, Renal and Trauma

In the first six months of the AHSS, the most common services provided by HHC nurses as part of the AHSS were support/counselling (n= 501), followed by psychology (n=300) and wound care

(n=142). During this period, contacts related to mental health issues accounted for the greatest proportion of total service contacts (n=829) (Table 11).

As with many aspects of the 50 Lives evaluation, case studies and qualitative data provides a vital complement and insight into the people behind the statistics, as illustrated in Box 3.

Box 3: Providing Health Care as part of the AHSS for 50 Lives Clients – A Case Study

In early 2016 an Aboriginal woman in her forties who was rough sleeping came into contact with HHC, and was able to be housed through the 50 Lives project in October that year. She had a complexity of health issues, including depression and anxiety, cancer, alcohol and drug use, and had a lower limb amputation. As with many rough sleepers health issues co-existed with other trauma and adverse experiences for this client, with a history of exposure to domestic violence, troubled family circumstances and child custody issues.

Since being housed the client has received strong support from the AHSS, including weekly home visits from one of the HHC nurses and regular telephone calls. Her medical notes indicate a significant improvement over this time in the treatment and management of most of her health issues, both mental and physical. She has remained sober and there has been a positive trajectory in her mental health. The regular contact and support from AHSS has been beneficial for her anxiety, and she has felt able to talk through her problems and burdens with the help of the AHSS team. As her health has improved, so too have her relationships with immediate family, and she is working towards regaining custody of her child. Art has been a cherished hobby for the client and a positive outlet for her mental wellbeing. In her recent contacts with HHC she describes herself as doing 'really well'; marking the significant changes in her health and life since through the housing and support of the 50 Lives project.

4.3.5 Royal Perth Hospital Data on Health Outcomes

"To discharge a homeless patient back to the street with no primary care or community service input in place represents a failure of our system to change the dismal health outcomes and reduced life expectancy. The 50 Lives project provides us with a unique opportunity to help some of our most vulnerable homeless patients' access the housing and support they need to break the cycle of homelessness and poor health."

*Dr Amanda Stafford, ED Consultant and RPH
Homeless Team Doctor*

Royal Perth Hospital is a key health service provider to homeless clientele, as well as an active partner in the 50 Lives intervention. The team at RPH are important collaborators in the Rough Sleepers Working Group where knowledge is shared and dialogued among stakeholders. A large number of homeless patients attend RPH primarily because of the easily accessible inner city location. In the 2016 Registry Week data, 47% of rough sleepers in Perth accessed health services at RPH (up from 37% in 2014)⁴⁴. In 2016, RPH recorded a total of 2,287 presentations to ED among the 928 people listed as having no fixed address; making up 3% of all RPH ED presentations. Of the 100 most frequent attenders to ED at RPH in 2016, 51 were homeless and accounted for a total of 1,159 presentations to ED in the past year.

People who are homeless are also over-represented in hospital inpatient admissions, which reflect not only unaddressed health care needs but also a resource burden on the health system. The average length of stay for homeless patients is also greater – this has been the observation at RPH, but is also mirrored in data from the WA Department of Health that shows that in 2014/2015, the average length of an inpatient stay in a tertiary public hospital for a person who was homeless was 5.4 days, compared with an average length of stay of 3.3 days for all patients within the same hospitals⁴⁵.

The high number of homeless people with a VI-SPDAT of 10 or more seen by RPH alone demonstrates a compelling rationale for more rapid scaling up of 50 Lives and its capacity to provide housing and support for vulnerable rough sleepers.

The high prevalence and health service burden associated with homelessness at RPH was impetus for the establishment of the RPH Homeless Team in June 2016, through an in reach partnership with HHC GP practice. The RPH Homeless Team comprises Dr Amanda Stafford (Clinical lead, RPH), the GPs and Registered Nurses from HHC and, since February 2017, the addition of part-time case worker support provided by Ruah. In their first 10 months of operation, the RPH Homeless Team saw 454 individuals experiencing homelessness. Within this cohort, 23% (n=106) had a VI-SPDAT score of 10 or higher, ensuring their eligibility for the 50 Lives project, but this is of course contingent on the availability of appropriate housing and case workers.

Due to the frequency of contact with homeless people at RPH and the now dedicated Homeless Team based there, RPH now provides an important conduit for the identification and management of vulnerable people eligible for 50 Lives (Box 4).

Potential Cost Savings

Beneath the calculated vulnerability scores of homeless patients seen at RPH lies a raft of complex health and social issues that medical care alone is unable to address, hence recurrent patterns of presentations are often witnessed by the RPH Homeless Team. In a sample of data for just six homeless patients, ED presentations and inpatient admissions in the 2015/16 year were estimated to cost the health system \$557,000, an average of \$92,800 per patient in one year⁴⁶.

Whilst mental health and self-harm were often the principle reason for diagnosis, other conditions evident among these six patients included alcohol dependence, anorexia, drug use, pneumonia, injury, wound infection, dehydration and suicide attempts.

Ethics approval for linking of RPH and WA Hospital data for 50 Lives clients has recently been approved. An analysis of hospital and health service use among 50 Lives clients prior to entry into the 50 Lives project will be included in the second evaluation

report, and changes in health service use followed up in the following year for inclusion in the third evaluation report.

Box 4: RPH Client Engagement – A Case Study

A 39 year old male with a long history of homelessness (almost 20 years), and a complex medical history including multiple chronic physical and mental health conditions (including cirrhosis and hepatitis C and paranoid schizophrenia) was housed by 50 Lives in July 2016. He scored 11 on the VI-SPDAT, which also indicated an untreated history of trauma; being the victim of attack and previously self-harming. His health was observed to be deteriorating prior to moving into his unit, and attendance at scheduled medical appointments erratic.

His journey to housing was aided by the advocacy of the mobile clinical outreach team and RPH who had concerns for his welfare and health issues. Once established in his home, he was able to be regularly contacted and seen by HHC and the AHSS, and a team approach has been taken to develop a co-case management plan to ensure he receives regular medication, support with developing life skills and mental health services. Prior to being housed, the client stated that he felt like he *'would die on the streets and that he cannot cope any longer'*. Whilst he has faced challenges in adjusting to living in a unit, and continues to wrestle with alcohol use and mental health issues, his health and wellbeing is stabilising and significantly, to date it is the longest he has been housed in the last 20 years.

4.4 Justice Outcomes

Coupling housing and support for vulnerable rough sleepers has the potential to reduce the risk of contacts with the justice system and is one of the desired outcomes of 50 Lives project. Several overseas evaluations of Housing First interventions have reported reductions in offending and imprisonment^{12,15,16}. An evaluation of a Housing First program in Brisbane found significantly reduced contact with the justice system in the form of reduced arrests, court appearances and contact with police, after clients had been housed for one year⁴⁷.

4.4.1 Self-reported Contacts with Police and Prison

The VI-SPDAT data indicates that 62% of **individual 50 Lives clients** and half (50%) of **family 50 Lives clients** have been to prison before and that around three quarters (74%) of the individual clients and 86% of family clients reported having been in police custody in their lifetime (Table 12).

In the six months prior to completing the VI-SPDAT, a large majority of all responders reported having some form of interaction with the police; over two thirds of both individual and family 50 Lives clients reported having at least one (71% and 86% respectively). While we do not have specific information on the type of interaction experienced (i.e. move on notice, taken into custody, assistance

with reporting a crime etc.) this places enormous burden on police and their resources. A research request has been made to WA Police to access this type of data to include in the evaluation, which will enable a more nuanced understanding of the types of police engagement with 50 Lives clients and where the greatest potential for prevention and resource savings lie.

On average individual 50 Lives clients have had a significantly greater average number of interactions with the police in the past six months compared to other individual VI-SPDAT respondents (8 and 6 respectively). On average family 50 Lives clients had slightly fewer interactions with the police in the past six months compared with other family VI-SPDAT respondents (11 and 14 respectively) (Table 12).

Table 12: Individuals' and Families Encounters with the Justice System

n (%)	Individuals		Families	
	50 Lives (n=90)	Other (n=1,068)	50 Lives (n=14)	Other (n=37)
Been in prison (lifetime)	56(62.2)	608(56.9)	7(50.0)	16(43.2)
Been in police custody (lifetime)	67(74.4)	732(68.5)	12(85.7)	20(54.1)
Police interactions past 6 months, average (sd)	8.4(28.7)	6.1(22.4)*	10.8(22.0)	14.3(55.8)
Clients with a police interaction in the last 6 months	63(70.8)	675(63.6)	12(85.7)	22(59.5)

* p<0.05 (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

4.4.2 Engagement with Support to Reduce Offending

The first five months, the AHSS data to date indicates that support for criminal offending was provided 15 times amongst those housed by 50 Lives, whilst for those who are yet to be housed, offending-related support was provided 23 times.

4.4.3 Legal Issues

The VI-SPDAT survey asked respondents if they were currently experiencing any legal issues at the time of interview that may result in them being locked up or having to pay fines: an overwhelming 483 responded yes. Of the 50 Lives clients, 48% had reason to

believe they could be locked up or asked to pay a fine.

4.4.4 Client Case Study and Client/Staff Interview Data

Whilst empirical data can measure changes in contacts with the justice system, a fundamental evaluation question is always to understand how and why a program may have influenced this outcome. These insights will come from future interviews with lead agency staff working with clients to reduce offending and client interviews and will be reported in the third evaluation report.

5. COLLABORATIVE APPROACH

As partnerships and collaborative approaches are a central platform of the 50 Lives project, it is critical to evaluate the contributions and effectiveness of the collaboration over time. The evaluation will look at the effectiveness and learnings of the collaborative model in a number of ways:

- Social network analysis via the PARTNER Tool;
- Working group case studies, and;
- Client perceptions of the collaborative partnership aspects of 50 Lives (via interviews and client satisfaction survey data).

For collective impacts to demonstrate their effectiveness, particularly in order to demonstrate their effectiveness to funders, they need to consider evaluation as one of their core functions. Developmental evaluation, which focuses on the relationships between individuals and organisations, partnerships formed and how these change over time, provides the most effective means of evaluating collective impacts. Reflecting the nature of collective impacts themselves, developmental evaluation provides on-going evaluation, uncovering developing partnerships and changes that affect solutions or resources⁴⁸.

5.1 PARTNER Tool Analysis

5.1.1 Introduction

Despite the increase in collaborative networks and projects within the health sector, and the increased recognition of developing cross-sector collaboration to increase reach and sustainability of projects, few collaborative projects fully investigate the complex and multifaceted relationships that develop between partner organisations over the course of a project⁵. The PARTNER Tool is a validated online social network analysis tool that maps connections, use of shared resources, perceptions of roles, responsibilities and involvement, between organisations and stakeholders in collaborative projects²⁷. The insights gained through this analysis allow for better understanding of the complex

networks that develop in collaborative projects and enable greater efficiency in resource use⁵. The PARTNER Tool provides a mechanism for 50 Lives partners to:

- Indicate their perceived level of involvement, types of contributions and views on the key outcomes and achievements of the project to date, and;
- Map working relationships and the nature of interactions between stakeholders and collaborators, providing a basis for assessing changes in collaborative relationships over time²⁷.

The results reported here are derived from data collected as part of the first wave of the PARTNER Tool data collection. The tool will be re-administered in early 2018 and will measure any changes in perceived involvement in the collaborative. It is hypothesised that as the 50 Lives project evolves, levels of involvement and perceived contribution will increase, with associated benefits for seamless service delivery for clients and more easily accessible resources and information for agencies.

5.1.2 Data Collection

Forty-one key stakeholder and partner organisations involved in the 50 Lives project were identified by the 50 Lives Project Coordinator. Emails were sent to the identified organisations, inviting them to complete the survey regarding their involvement in 50 Lives. To minimise organisational burden, where identified organisations were involved in 50 Lives in more than one capacity, a single respondent was asked to answer on behalf of the whole organisation.

The PARTNER Tool was sent out as an online survey in early 2017, and participants were sent two reminders to complete the tool before being individually followed up by the 50 Lives Project Coordinator. Overall, 66% of participants completed the survey, with a further 15% partially completing the survey.

5.1.3 Collaborative Achievements

Many of the PARTNER Tool questions focussed on what can be achieved by the collaborative approach instigated through the 50 Lives project, and by the breadth of partners involved. When asked to identify

the outcomes that they believed the collaborative approach could achieve for clients, improved client outcomes and the creation of more coordinated access to services for clients were most often mentioned (Figure 9).



Figure 9: Perceived Desired Outcomes of the Collaborative Approach (%)

Note: respondents could choose multiple responses for this question.

When asked to identify the most important outcome that can be achieved by the collaborative approach, the majority (52%) stated it was to improve client outcomes over various domains such as health, housing, social and justice, with the next most common answer being to create innovative solutions for ending homelessness (27%) (Figure 10). Future qualitative interviews with organisations and case workers involved in the project will provide insight into why those involved believe the project results in improved client outcomes (e.g., better access to services, improved service quality, more efficient services delivery etc.).

50 Lives project. What will be telling however, are any changes in perceived benefits over time, as captured in the follow up PARTNER Tool survey.

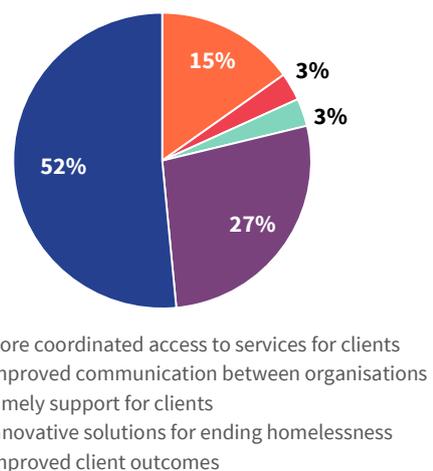


Figure 10: Perceived Most Important Outcome Achievable by the Collaborative

5.1.4 Collaborative Benefits

Participants were asked to identify benefits of the collaborative approach that they have observed to date, with the most common observation of communication between organisations (79%) and achieving client outcomes (73%) (Figure 11).

The most commonly reported benefits here are encouraging and are congruent with the aims of the

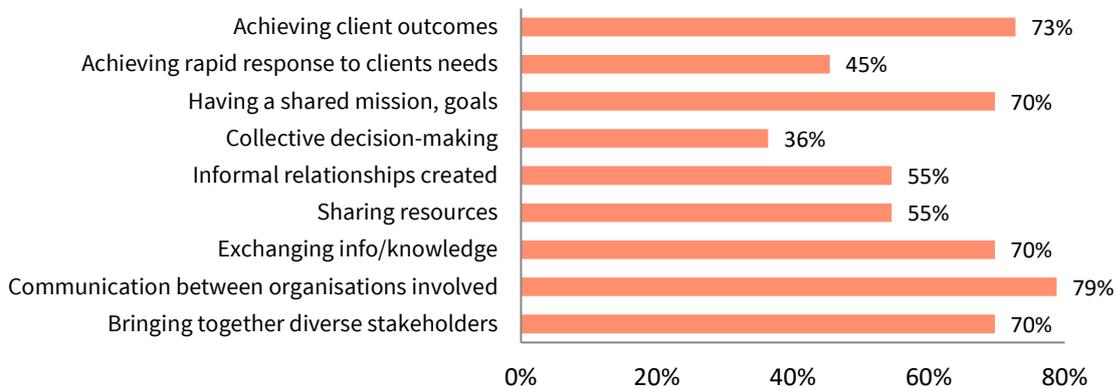


Figure 11: Benefits Observed of the 50 Lives Collaboration to Date (%)

Note: respondents could select multiple responses for this question.

5.1.5 Involvement in Collaborative

The majority of participants indicated that they felt involved (52%) or very involved (15%) in getting the 50 Lives project to where it is to date (Figure 12). Only a small percentage (9%) indicated that they did not feel very involved. Of the organisations that said they felt they could contribute more, the majority noted that they felt they could either provide more direct client support or additional links to other networks/support services.

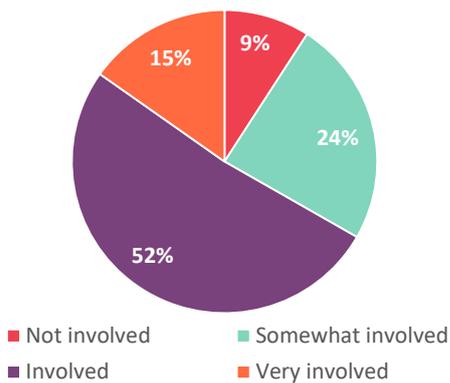


Figure 12: Perceived Involvement in 50 Lives to Date

5.1.6 Implications for the Future

Organisations were asked to identify if there were other organisations they felt could contribute to the project; suggestions included additional presence from mental health, family, disability, Aboriginal drug and alcohol and youth engagement services. However, discussions with the 50 Lives Project Co-Ordinator noted that participation in working group or steering group meetings may not be the most appropriate setting for additional organisations to be involved due to the highly individualised-client approach in these forums (i.e. if these organisations did not have a specific client being discussed on the day the meetings may not be very relevant). Therefore careful consideration of where involvement would be most useful needs to occur.

When asked if there was anything that could be done to strengthen the project, a large number of respondents had positive feedback in regards to how it was currently tracking, with multiple respondents noting that they felt they met often enough.

... the coordination from Ruah is excellent. The buy-in from all levels and organisations are paramount with the main focus of client outcomes.

I think the collaboration is strong and what can be done is being done.

However some respondents provided suggestions, with a few noting that they currently feel they could offer more to the collaborative but haven't been given the opportunity.

Whilst expressing strong support for the efforts of the 50 Lives collaborative, several respondents noted time constraints from existing obligations as a barrier to increasing their involvement.

5.1.7 Network Mapping

The PARTNER Tool can be used to produce network maps, which can be produced using a number of differing elements:

1. Types of service e.g. mental health or housing services (depicted by the colour of nodes);
2. Frequency of working together, e.g. yearly, monthly, weekly contact (depicted via a line between nodes);
3. Type of activity (those with integrated activity are connected via a line between nodes):
 - a. *Cooperative activities*: involves exchanging information, attending meetings together, and offering resources to partners (e.g. Attending working group meetings, referrals to/from service);
 - b. *Coordinated activities*: includes cooperative activities in addition to ongoing, intentional efforts to enhance each other's capacity to achieve improved outcomes (e.g. joint case management of a client, shared client management notes, working together on a safety plan);
 - c. *Integrated activities*: in addition to both cooperative and coordinated activities, this is a more formal agreement or procedure to working together to enable program delivery (e.g. MOU, formal in-reach/outreach procedures, shared funding for projects, shared information systems).
4. Attributes of organisation e.g. perceived level of involvement, reliability, resource contribution, overall value (depicted by size of node);
5. Contributions made by organisation e.g. funding, in-kind resources, client support (depicted via diagonal lines within the nodes), and;
6. Most important contribution of organisations (depicted via node colour).

For the purpose of this report, only selected maps have been displayed.

Figure 13 illustrates a map of three different elements: 1) types of service (colour); 2) level of involvement (i.e. one of many attributes that can be selected) in the 50 Lives project (size of node); and 3) those who currently have integrated activities (connected by a line). As can be seen, the size of the nodes are all very similar (with the exception of three nodes which are slightly smaller), indicating that of those who answered the survey they rated themselves as being highly involved in the project. The lines between organisations indicate the highest level of activity between services (i.e. integrated activities), which doesn't explicitly mean other organisations aren't connected where there is no line displayed but may indicate that they operate at a lower level of activity (i.e. cooperative or coordinated).

Figure 14 illustrates a map depicting four different elements: 1) type of service (colour); 2) frequency of working together (weekly or more than weekly, connected by a line); 3) the level of overall resource contribution (size of node, with larger nodes indicating more contribution); and 4) broken down by organisations that provide direct client support (diagonal colour in node).

As can be seen, fewer services appear in this map compared with that in Figure 13, this is because fewer organisations work with each other either weekly, or more than weekly and therefore do not appear in this map. As a result, node size is very similar between organisations. This is largely due to the exclusion of organisations that don't work as frequently with other services (i.e. only involved services remain), and therefore, unsurprisingly those with continuous frequent working relationships contribute high levels of resources. When computed with all working frequencies (i.e. even those who only work together once per year), there is much more variability in terms of node size, and connections between agency.

The PARTNER Tool will be readministered in 2018 and graphs will be compared to determine changes in relationships over time.

Figure 13: Organisations that Conduct Integrated Activities based on Level of Involvement in Project

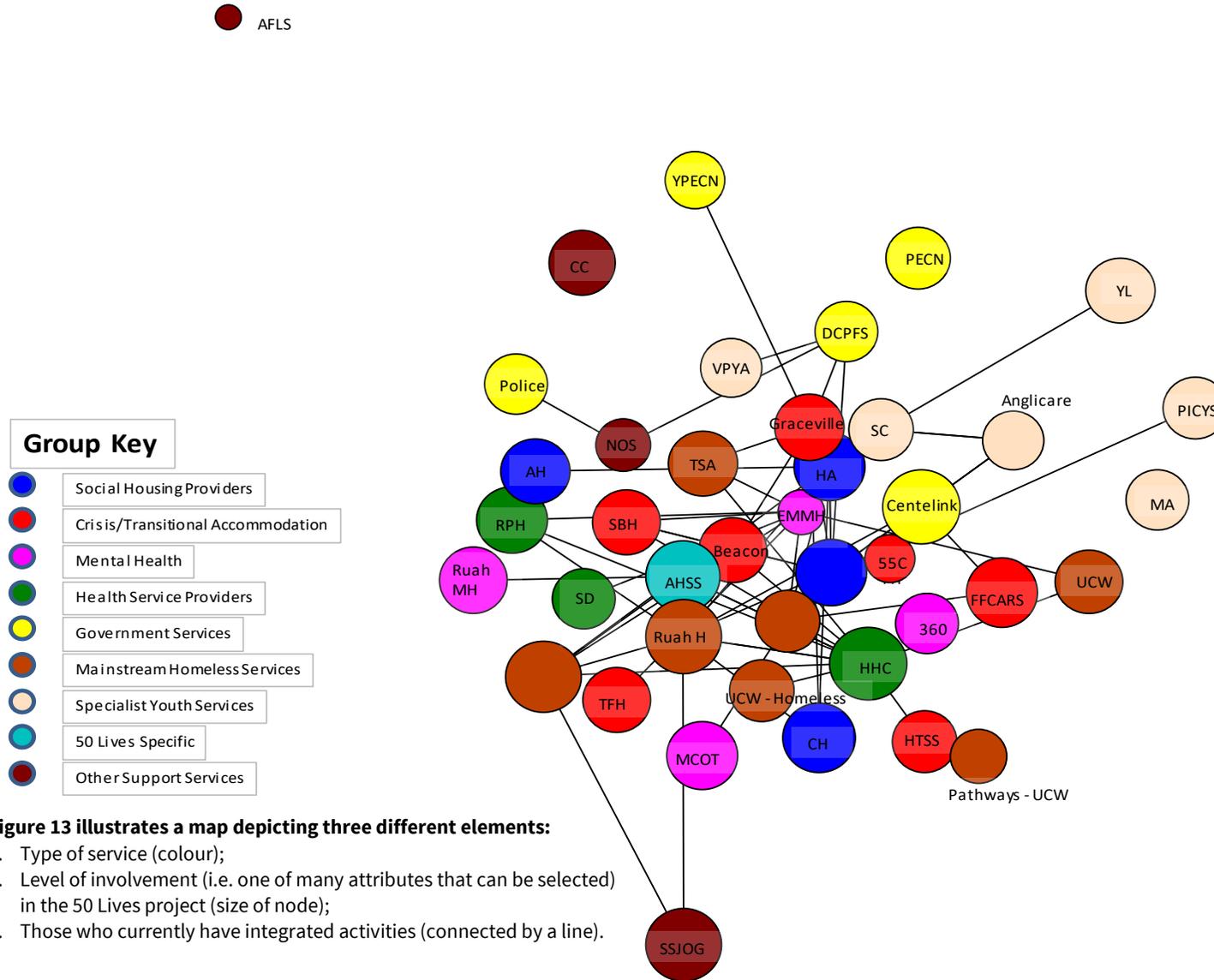
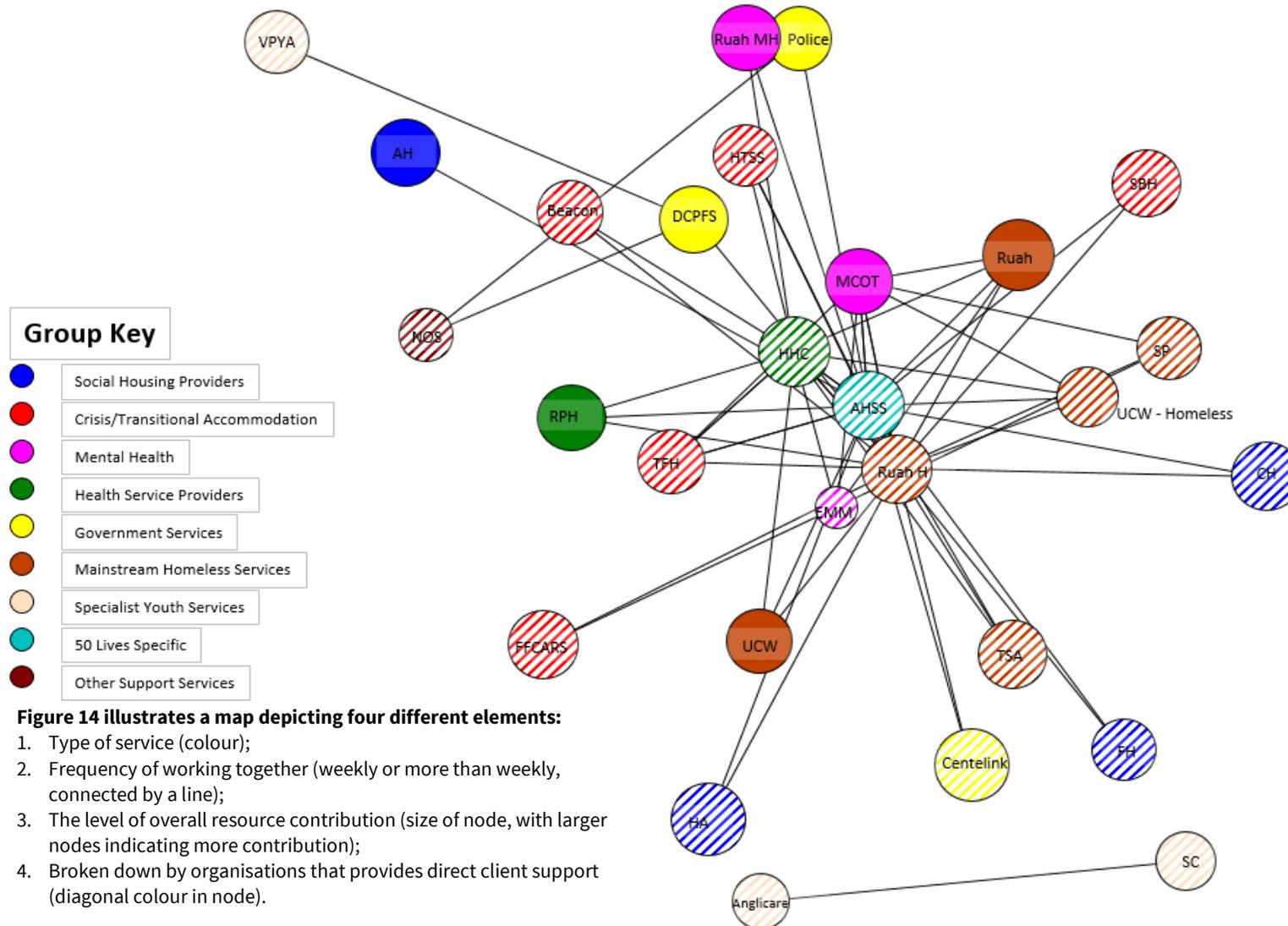


Figure 13 illustrates a map depicting three different elements:

1. Type of service (colour);
2. Level of involvement (i.e. one of many attributes that can be selected) in the 50 Lives project (size of node);
3. Those who currently have integrated activities (connected by a line).

Figure 14: Organisations that Meet at least weekly based on Level of Resource Contribution and Direct Client Support



5.2 Working Group Case Study

5.2.1 Introduction

Case study methodologies are valuable for evaluations that seek to go beyond the traditional measurement of outcomes at the individual client level, and takes into consideration the broader real-life context that can shape activities, progress and outcomes⁴⁹. For example the availability of housing options is a real-life factor that can significantly impact on the ‘success’ of interventions in the homelessness sector⁷.

Historically, human service delivery has been siloed across sectors (e.g., health, housing, social services etc.) with separate funding streams, operational practices and service locations. Such silos and fragmentation within and between the sectors interacting with people who are homeless can result in gaps in service provision and individuals feeling as though they are bouncing from one service to another, regardless of how well services operate individually⁵. One of the key aspects of the 50 Lives project is the establishment of four working groups; rough sleepers, youth, families, and housing, and the steering group (Figure 15).

Steering Group	
<ul style="list-style-type: none"> • Meets every two months • Meeting since April 2016 • 18 services involved • Looks at strategic issues • Senior/executive level 	
Working Groups	
Rough Sleepers <ul style="list-style-type: none"> • Meets fortnightly • Meeting since December 2015 • 29 services involved 	Housing <ul style="list-style-type: none"> • Meets monthly • Meeting since May 2016 • 5 services involved
Youth <ul style="list-style-type: none"> • Meets monthly • Meeting since July 2016 • 16 services involved 	Families <ul style="list-style-type: none"> • Meets monthly • Meeting since April 2016 • 7 services involved

Figure 15: Steering and Working Groups Involved in 50 Lives

These working/steering groups bring together agencies beyond the usual housing and homelessness sector players including (but not limited to) hospitals, police, Centrelink, and domestic violence services. Bringing together these diverse services allows for increased coordination, resource sharing, improved decision making and ultimately improved outcomes for the individual.

The working group model used in the 50 Lives project was adapted from the model and learnings from the Brisbane 500 Lives 500 Homes program⁵⁰. What 500 Lives and other Housing First models have recognised is that no single organisation can achieve its goals in isolation and that by bringing together the expertise of all these agencies they are able to transform isolated impact into a collective systematic response to end homelessness⁵⁰. In order to elicit large-scale social change across a broad range of sectors (in this case, the goal of achieving zero homelessness in Perth), there needs to be a systematic approach focussing on relationships between organisations and the progress towards a shared objective^{48,51}.

A key problem is that most services and programs within this realm have been developed incrementally and have evolved in parallel: housing separate from social services which are separate from health services, corrections, mental health or employment and each has a separate funding stream, different set of rules and usually a separate service location. The resulting patchwork of services can be replete with gaps and inefficiencies that undermine efforts to help citizens exit from homelessness, no matter how well each program may function individually⁵.

Effective collective impact efforts can also provide unified advocacy and a cohesive voice for policy change where required. For the purposes of this report we have used Kania and Kramer’s collective impact model (Figure 16) to demonstrate how the collaborative effort of the working groups can provide rapid response to referral and prioritisation of the most vulnerable clients, and to address challenges of service delivery in by identifying gaps, avoiding duplication and working together.

Achieving Change through Collective Impact – Key Conditions for Success*

Common Agenda

- Participants have a shared vision for change, including a common understanding of the problem and collaborative approach to solutions;

Shared Measurement

- Participants collect data and outcomes using shared measures across services to ensure consistency and accountability;

Mutually Reinforcing Activities

- Participants operate in their areas of expertise while still coordinating with other collaborators;

Continuous Communication

- Open and regular communication builds strong collaborative relationships and reinforces shared objectives;

Backbone Support

- The creation and management of a collective impact requires a dedicated backbone role with sufficient skills and resourcing to support the entire collective impact efforts and measurement.

Figure 16: Key Conditions for Collective Impact

*Kania and Kramer 2013⁴⁸

While the idea of working across sectors is by all means not a new or revolutionary concept, there is limited evidence of its effectiveness due to the rarity of working in this way.

Working across the sector between agencies is not a new idea. In the [study] it was found that many service providers already have informal networks with colleagues working in other organisations.

Integrated care seeks to build upon these relationships by making them more formal and standardised. Best practices that have been shown to be effective in this regard include communication between service providers, practitioner familiarisation with the range of homeless services in the community⁶.

In this report we explore key components of the rough sleepers working group according to the Collective Impact framework as seen in Figure 16. Future reports will explore the effectiveness and impact measured across and within all four working groups.

5.2.2 Rough Sleepers Working Group

The rough sleepers working group has met on 29 occasions since the start of 2016 and February 2017, with 29 different services/organisations participating. Between 10 and 19 people attend the working group each fortnight, with an average attendance of 15 people. Every second meeting (i.e. twice per month) includes a segment that specifically discusses clients that have been housed.

Preliminary content analysis of a sample of eight minutes records from the rough sleepers working group show various positive outcomes, issues raised and general challenges encountered by lead workers in relation to 50 Lives clients (Appendix 5).

The majority of positive outcomes noted are around that clients are doing well or looking happy once they have received housing, with issues and problems mainly around multiple hospital presentations or observed concerns over client's physical or mental health. The main challenges faced by lead workers are around client disengagement, clients going missing and generally denying support offered.

Critical Success Factors

In addition to the collective impact framework, from the observations of the rough sleeper working group

to date, we have identified a number of other critical success factors that enable the working group to operate in a functional and purposeful manner, including the need for effective operational processes, participation of a broad range of

stakeholders that offer different expertise, flexibility in program delivery and the ability to actively adapt and respond to individual situations. Figure 17 depicts these emergent critical success factors.

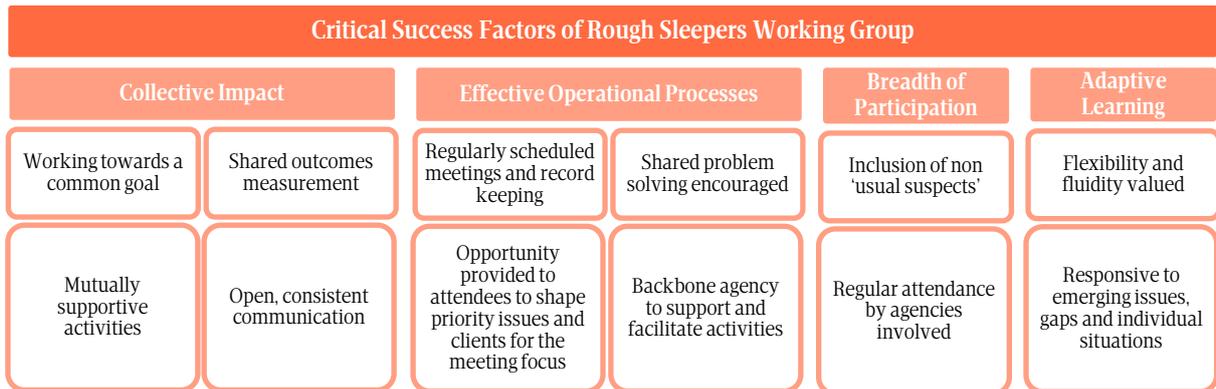


Figure 17: Critical Success Factors of 50 Lives Working Groups

Collective Impact

The 50 Lives project is congruent with a collective impact ethos, hence it seems applicable to draw in this evaluation on the five key conditions for success through collective impact identified through the seminal work of Kania and Kramer⁵¹: a common agenda, shared measurement, mutually reinforcing activities, continuous communication, and backbone support.

This model is particularly powerful as a lens to examine how the 50 Lives working groups contribute to the 50 Lives aim of determining how effective and efficient the 50 Lives 50 Homes approach is in achieving client outcomes.

In Table 13 we explore key components of the rough sleepers working group according to this collective impact framework and provide illustrative examples.



Table 13: Collective Impact Elements of the Rough Sleepers Working Group

Rough Sleepers Working Group Examples	
Common Agenda	<p><i>Participants have a shared vision for change including a common understanding of the problem and a joint approach to solving it through agreed upon actions.</i></p> <p>Agencies involved in the 50 Lives collaborative have an overarching goal to achieve zero homelessness in Perth. Specifically within the rough sleepers working group they are working together to find housing for some of the most vulnerable rough sleepers in Perth and once housing is found, to provide support for them to maintain their tenancy. Observation of working group attendees is that they are genuinely passionate about improving their clients' circumstances and finding alternative solutions to achieve this. This passion shown by attendees and working towards a common agenda enables quick and appropriate decisions making for clients to achieve the best possible individual outcomes. A common agenda and shared vision is proving critical to this working group as it keeps client needs foremost, and continually challenges the group to 'think outside the square' to find innovative and timely solutions.</p>
Shared Measurement Systems	<p><i>Collecting data and measuring results consistently across all participants ensures efforts remain aligned and participants hold each other accountable.</i></p> <p>This is one area of the collaborative that could be improved as currently agencies record and capture information in many different mediums, and systems are not well set up for rapid information sharing. Organisations also often have differing outcome measures which is an impediment to measuring collective impact; for example only some organisations capture Outcome Star data. Inconsistencies in data collection and reporting of client outcomes, makes comparison of client progress difficult, and may mean the impact of the 50 Lives approach is underestimated or not captured. A core set of shared process and outcome measures across involved agencies would help to ensure that the right data is collected a timely fashion to demonstrate the key outcomes. As all partnering organisations are time poor, discussion of shared measurement can also help to identify the most critical data to collect and report in a standardised way, and more efficient ways of collecting and extracting such data for evaluation purposes can be collectively problem solved.</p>
Mutually Reinforcing Activities	<p><i>Participant activities must be differentiated while coordinated through mutually reinforcing actions</i></p> <p>Agencies are able to bring together their unique knowledge, experiences and access to resources and information to the group to fill gaps in each other's knowledge about a specific client. There were multiple examples observed where attendees were able to use their positions to assist other attendees, one example where activities were mutually reinforcing was around hospital, Centrelink and lead workers were able to achieve rapid outcomes for a client:</p> <p>A lead worker raised the issue that they believed their client was eligible for the DSP in a working group meeting, but was experiencing difficulties getting it approved. A hospital worker was able to look up the patient records in the meeting room via her laptop, write the client a referral and the Centrelink attendee was able to lodge the clients' application on the spot. This process enabled a rapid response to an issue that could of taken days to achieve outside of this setting.</p>

Rough Sleepers Working Group Examples	
Continuous Communication	<p><i>Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and appreciate common motivation</i></p> <p>Not only are the agencies coming together every fortnight for the rough sleepers working group to discuss clients, but they also have each other’s contact information to communicate with one another if they have any questions. For example:</p> <ul style="list-style-type: none"> • Enquiring whether hospital or transitional housing services have seen a particular client; • Finding out what other lead workers have done in a similar circumstance; • Notifying other services that have regular contact with the same client of changing circumstances (i.e. admitted to hospital, approved for housing, separated from partner, incarcerated etc.); <p>Having open communication streams allows for agencies to address problems, source relevant information and update each other rapidly in response to client needs, enabling all relevant players to be on the same page at all times.</p>
Backbone Support Organisations	<p><i>Creating and managing collective impact requires a separate organisation and skills to serve as the backbone for the entire initiative and coordinate participating organisations and agencies</i></p> <p>Ruah and the 50 Lives Project Coordinator play the role of the backbone organisation and provide overall coordination of the project. Regarding the 50 Lives working group and the effectiveness of this collaborative approach, one attendee highlighted the unifying role played by the backbone support:</p> <p><i>“As well as fulfilling the important administrative function of the group of setting agendas and minutes, the 50 Lives project manager and supporting team, have been able to bring diverse stakeholders together, encourage collaboration, identify opportunities, unify the group, keeping everyone client focused. She has also been able to offer different perspectives and introduce/encourage new ideas in the working group to deal with homelessness- this is critical in terms of stimulating the innovation that is required to break through institutional and social barriers to homelessness”.</i></p> <p>As noted in the collective impact literature, many collaborations flounder in the absence of a dedicated role facilitating dialogue, coordinated actions, and feedback loops across participating organisations. Having Ruah provide this backbone role is particularly valuable given the many elements, working groups and partners involved in 50 Lives.</p>

5.2.3 Summary

The working group model being used by 50 Lives creates a unique forum that cuts across traditional sectorial silos and facilitates more rapid information sharing and decision making. Client centred care is popular in service delivery policy and vernacular at present, but is genuinely evident in the way that the rough sleepers working group is operating. For example, attendees demonstrate a robust understanding of the unique circumstances of each client, and express genuine concern when they haven’t seen their client for an extended period of time.

Without the regular working group mechanism in 50 Lives to facilitate rapid response to issues or to provide insight into certain circumstances, it is highly unlikely that the focus and wheels of so many different agencies could be garnered so collectively, nor actioned so rapidly.

Future focus groups with working group attendees will explore how these groups contribute to effectiveness and impact both within and across groups and how they contribute to the overall project.

6. ECONOMIC EVALUATION

Whilst the key objective of 50 Lives is to end homelessness and improve the quality of life for vulnerable rough sleepers, building a robust evidence base for the economic benefits of such targeted interventions is critical. The 50 Lives evaluation will focus initially on the potential cost savings associated with reduced use of health services, as it is the health system that bears much of the cost and consequences of recurring homelessnessⁱⁱⁱ. Significant health system cost offsets arising from effective homelessness and housing interventions have been found in a broad range of studies and evaluations in the Australian context over the past decade^{37,52-56}.

6.1 What Will the Economic Evaluation Entail?

The frequency and type of hospital and health service use will be compared 1-2 years pre and two years post project participation^{iv}. In addition to changes in ED presentations, inpatient admissions and bed-days, client use of HHC services via AHSS and community settings will also be examined, and compared to the operational costs of providing these services.

Among the 50 Lives clients who went to ED in this period (n=84) there was a total of 570 presentations. Using Independent Health Pricing Authority (IHPA) national public sector estimated average costs the estimated costs associated are shown in transition out of homelessness (see Table 14).

Table 14: Cost Associated with ED Presentations

Clients (n)	84
Total ED visits in 6 months prior to VI-SPDAT survey	570
Average Cost* per Occasion (\$)	\$656
Total Estimated Cost (\$)	\$373,820

* IHPA national public sector Round 19 estimated average costs

The case study in Box 5 powerfully illustrates the importance of trust and collaboration among RPH,

ⁱⁱⁱ We are currently exploring the scope to also access costs associated with the justice system.

^{iv} Ideally, a longer time frame would be allowed as health costs may rise in the short term as the long-standing health needs of the

HHC and the 50 Lives project in supporting vulnerable people to transition out of homelessness.

Box 5: Potential to Reduce Health Service Use and Health Care Costs – A 50 Lives Case Study

A male client has a complex history including mental health, alcohol and drug use, physical health conditions and time spent in prison. He came into contact with RPH in late 2015, and frequently presented at ED, often being admitted. His deteriorating mental health has culminated in several suicidal attempts and psychiatric admissions in 2016. For a long time he was reluctant to engage with support services, but in mid-2016 he expressed to the RPH Homeless Team that he wanted to stop rough sleeping, and agreed to engage with the HHC GP practice. Subsequently the frequency of his presentations to hospital began to settle, albeit with an increase in September associated with increasing stress about housing circumstances. In early October 2016 the client was offered a Housing Authority unit, and with the support of a caseworker and the Ruah AHSS, moved in quickly. Over the next three months he continued to present to ED in crisis but less frequently. As at mid-March 2017, the client had not presented to any ED for over three months, is continuing to be supported by the 50 Lives project, and doing well.

Impact on health services used and costs to date:

During 2016, the client presented to the ED 28 times and had 14 inpatient admissions. Of these inpatient admissions, four were in psychiatric or mental health units (for a total of 53 days).

- ED presentations: 28 days @ \$656 average cost ED presentation
- Psychiatric admissions: 53 days @ \$1,175 average cost Psychiatric admission WA
- Inpatient admissions (other): 25 days @ \$2,415 average cost
- **Total cost estimated associated with health service use in 2016 for client: \$141,018**
- During 2017 (as at end of June 2017) – no ED presentations

**Based off IHPA 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)*

chronically homeless are finally addressed. Two year post analysis is pending additional funding

7. CHALLENGES AND BARRIERS

As an action learning approach underpins the 50 Lives model and its evaluation, the emergence of barriers and challenges to achieving project outcomes will be monitored, and the ways in which the 50 Lives project and its partners respond to these explored via the working group case studies, staff and client interviews. Over the course of the evaluation, there may be challenges and barriers encountered that lie beyond the scope of influence of 50 Lives, but nonetheless are important to document, as they can have a significant bearing on outcomes. The recent uncertainty looming over the future of NPAH funding for the homelessness sector is an example of this.

Challenges and barriers will be captured under the three domains; system level, service provider and partner level; and client level. Examples of these include:

Systems level – e.g. lack of appropriate housing, gaps in availability of services needed by clients

Service provider/partner level – e.g. challenges to timely sharing of client data between services, variability in partner engagement, time and resource implications for partners, different data collection tools (for example some using Outcome Star, others not)

Client level – e.g. needs not met by current service provision, high levels of trauma, disability prevalence including the impact on suitability of housing options, the number of individuals not currently receiving DSP

In this first evaluation report, we expand below on some of the challenges associated with the complexity of client needs, as elucidated through the analysis of the VI-SPDAT data and early case study work.

Client Level Needs Identified through Baseline Data

There are enormous needs and issues in relation to 50 Lives clients, many of which are being addressed by the project already. However, one of the

challenges identified from the analysis of the baseline VI-SPDAT data for 50 Lives clients relates to the high levels of childhood and other trauma among this cohort. The Journey to Social Inclusion program in Melbourne has a similar cohort and has intentional trauma informed care service delivery³¹. A trauma informed care response recognises the complexities and experiences of those they are assisting and responds in a way that contributes to the development of psychosocial stability and strengthens their pathway to recovery within various support agencies³¹. This may be already happening at a case worker level, however from interviews with homelessness services for another project, there appears to be strong recognition for greater capacity building around trauma informed or trauma aware care. The imperative to address this more explicitly is one of the early action learnings from this evaluation.

Another challenge that has been found is in relation to the high proportion of clients with a disability that are currently not receiving the DSP. The nexus between disability and homelessness is often under-recognised in homelessness data and those dually affected can ‘fall through the cracks’ in service provision with homelessness services not often equipped to deal specifically with issues of disability, and conversely, disability services have not traditionally had an overt focus on homelessness. Yet disability (physical, cognitive or other) can have an enormous influence on journeys into, and capacity to move out of homelessness.

Whilst most participants within the cohort are individuals, there are a number of families involved, to date the majority of homelessness interventions and evaluations have focused on individuals, and there is a relative paucity of evidence around what works for families³⁷. This is an important consideration in both project delivery and the overall evaluation, and differences in family experiences, support needs and service response implications will be considered further in the client interviews, case studies and working group focus groups.

8. CONCLUSION

This first evaluation report has provided baseline indications of the housing, health and wellbeing needs of the 50 Homes 50 Lives clients. The analysis of VI-SPDAT data collected prior to client engagement in the 50 Lives project reveals immense and widespread vulnerability across multiple social determinants of health and wellbeing and provides a solid baseline profile of clients. The repeat of the VI-SPDAT survey with 50 Lives clients at the beginning of 2018 will enable the evaluation to detect changes between the two time points as a result of the project. Whilst past traumatic life experiences of clients cannot sadly be altered, there is scope for positive change in many of the VI-SPDAT measures, including housing, health behaviours, health service use, contacts with police and other vulnerability risk factors.

The rich data being collected by the AHSS, HHC and RPH will also provide further insight into the barriers and enablers to client outcomes. The second round of VI-SPDAT data will also be enriched by objective health system client data from HHC, RPH and the AHSS. These additional sources of data will be linked to the VI-SPDAT data to create a comprehensive account of a clients' service engagement. For example access to RPH and WA health system data will provide detailed data regarding clients' past levels of hospital use, ED presentations and admissions; and mental health unit contacts. The integral involvement of HHC and RPH in the 50 Lives project and as active supporters of the evaluation provides a unique and robust foundation for evaluating the longer term impacts of 50 Lives; not only at the individual client level, but in terms of the potential to reduce demand on the health sector, which currently bears much of the costs associated with the revolving door between homelessness and poor health. This first evaluation report has briefly outlined the economic evaluation that will accompany future reports, and scope to add justice and other data is currently being explored.

There have been very few Housing First evaluations that have included objective health system data and linking this with VI-SPDAT data will enable us to assess the 'accuracy' of VI-SPDAT health measures. This is valuable to ascertain, as obtaining and linking hospital data is costly and time consuming,

hence if self-reported data via the VI-SPDAT is equally predictive, then this is a more expedient option for homelessness organisations. Conversely, hospital administrative data is reliant on recordings by a third party, and the extent to which this marries with the health experiences as held by homeless people themselves is relatively unknown.

The coupling of housing with comprehensive support is a central tenet of the 50 Lives 50 Homes project, and one of the aims of the AHSS is to support clients to shift away from 'crisis' patterns of help-seeking, and to encourage and support clients to take a more planned, proactive and preventive approach to their goals and ways of living. This can be immensely challenging for people who have been long term homeless and surviving on a day to day basis, who now find themselves housed, but early data from the AHSS suggests that this shift is beginning to occur.

The collaborative partnership model underpinning 50 Lives is also a central tenet, but the effectiveness of collaborations is often more elusive to measure than client outcomes. The 50 Lives evaluation is nonetheless keen to build measures of effectiveness and contribute sector learnings in this regard, and this snapshot provides early insights from the first round of the PARTNER Tool and the first of four working group case studies. Whilst the PARTNER Tool and working group case study in this and future reports provide valuable insights into the operation of the 50 Lives collaboration over time, it is important to stress that feedback and data collected from the partner organisations is but one measure of the role and effectiveness of the collaboration.

As noted by Public Health England: "*Ultimately, it will be people who use the services who will decide whether partnerships are working and are relevant to their needs*³".

To this end, client perceptions of the collaborative partnership aspects of the 50 Lives will be explored in the client interviews to be undertaken over the next six months. Client satisfaction survey data will also be thematically analysed for the next evaluation report for feedback (explicit or implicit) about the 50 Lives collaboration.

Primary findings from this report show a group of extremely vulnerable individuals and families that have been impacted by a myriad of complex life circumstances have been identified for inclusion in this project. Long histories of rough sleeping, complex medical problems (often exacerbated by homelessness), countless contacts with the justice system, and high rates of trauma all contribute to their vulnerability; this underscores the importance of coupling client centred support with finding suitable housing.

While the 50 Lives project has already made commendable progress and innovative inroads into

finding more rapid housing solutions and client centred support, the availability of suitable housing remains a blockage point in achieving this.

It is eagerly anticipated that as we continue to track the outcomes of these clients over time, the synthesis of empirical, qualitative and economic evidence will further validate the principle benefits of the 50 Lives project and its campaign for the health and housing needs of the most vulnerable rough sleepers of Perth.



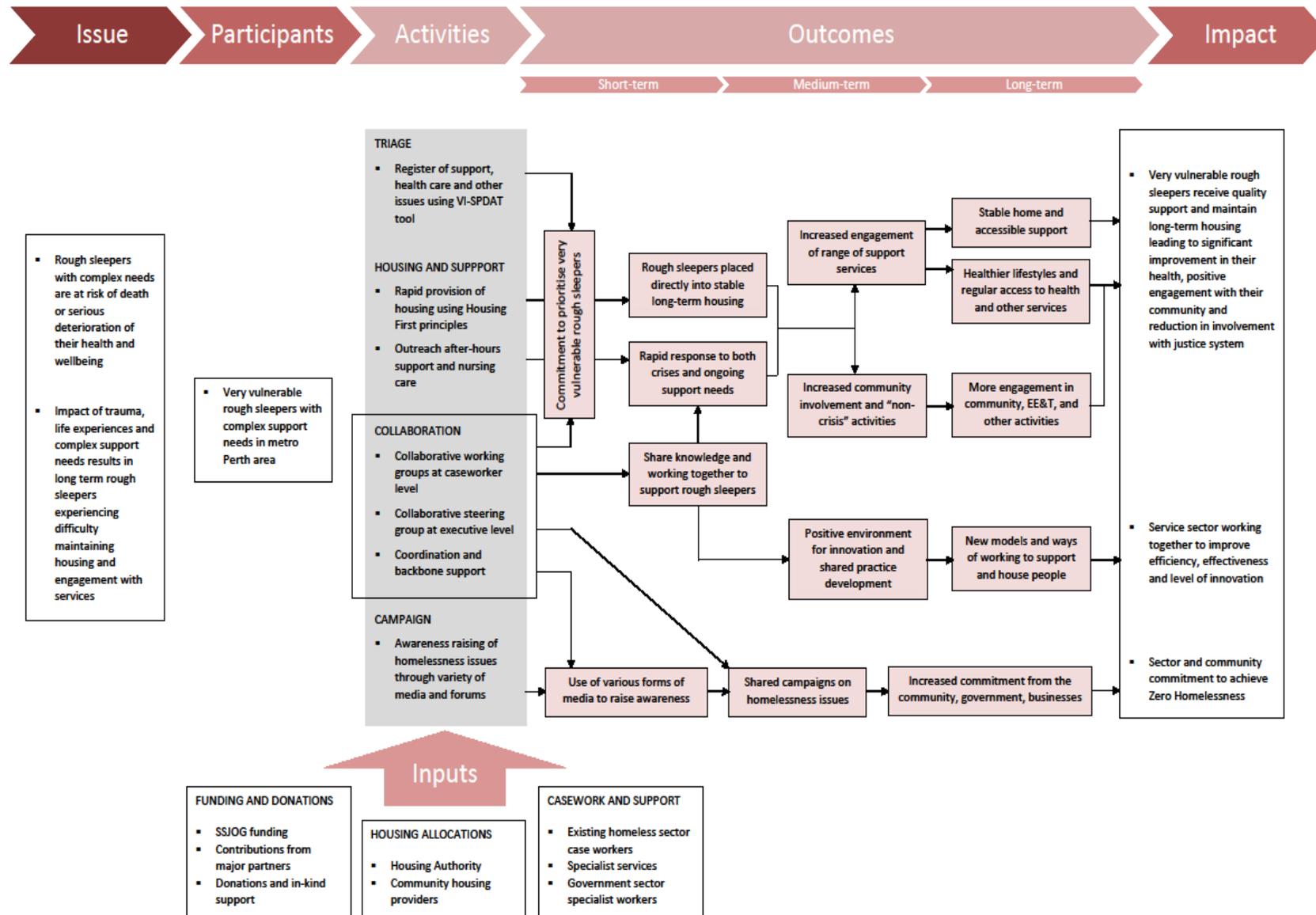
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APPENDIX 1: 50 LIVES 50 HOMES PROGRAM LOGIC



APPENDIX 2: VI-SPDAT QUESTIONS FOR ANALYSIS

Item	Question asked – VI-SPDAT
Physical Health Issue	Question 22–33 – Do you have now, have you ever had, or has a healthcare provider ever told you that you have any of the following medical conditions? <i>Yes, no or refused</i> Question 34 – observation of physical health condition
Substance Use Issue	Question 35 – “Have you ever had problematic drug or alcohol use, abused drugs or alcohol, or been told you do?” Question 36 – “Have you consumed alcohol and/or drugs almost every day or every day for the past month?” Question 37 – “Have you used injection drugs or shots in the last six months?” Question 38 – “Have you ever been treated for drug or alcohol problems and returned to drinking or using drugs?” Question 39 – “Have you used non-beverage alcohol like cough syrup, mouthwash, rubbing alcohol, cooking wine, or anything like that in the past six months?” Question 40 – “Have you blacked out because of your alcohol or drug use in the past month?” Question 41 observation of substance use issue
Mental Health Issue	Question 42 – “Ever been taken to a hospital against your will for a mental health reason?” Question 43 – “Gone to the emergency room because you were not feeling 100% well emotionally or because of your nerves?” Question 44 – “Spoken with a psychiatrist, psychologist or other mental health professional in the last six months because of your mental health – whether that was voluntary or because someone insisted that you do so?” Question 45 – “Had a serious brain injury or head trauma?” Question 46 – “Ever been told you have a learning disability or developmental disability?” Question 47 – “Do you have any problems concentrating and/or remembering things?” Question 48 – Observation of MH illness...
Tri-Morbidity	Tri-Morbidity occurs when the person has a physical health issue, mental health issue and substance use issue at the same time. The presence of Tri-Morbidity is determined by examining the respondent's scores in the sections of the Wellness domain that address Physical Health, Mental Health and Substance Use.

^Information taken from the VI-SPDAT scoring manual⁵⁸

APPENDIX 3: HEALTH SERVICES PEOPLE REPORT ACCESSING WHEN FEELING UNWELL

n(%)	50 Lives	Non-50 Lives
Reported using one or more health services	79 (87.8)	922 (86.3)
<i>Of these:</i>		
Hospitals		
- Royal Perth Hospital	43 (54.4)*	379 (41.1)
- Sir Charles Gardiner Hospital	19 (24.1)*	84 (9.1)
- Fremantle Hospital	7 (8.9)*	43 (4.7)
- Bentley Hospital	3 (3.8)*	21 (2.3)
- Rockingham General Hospital	9 (11.4)*	139 (15.1)
- Joondalup Health Campus	10 (12.7)*	135 (14.6)
- Other hospital	3 (3.8)*	61 (6.6)
Street Doctor	23 (29.1)*	240 (26.0)
Mobile GP	8 (10.1)*	100 (10.8)
Homelessness Healthcare		
- Clinics at Accommodation Services	31 (39.2)*	180 (19.5)
- Clinics at Drop in Centres	16 (20.3)*	115 (12.5)
- In parks (outreach)	16 (20.3)*	105 (11.4)
Aboriginal Health Service	7 (8.9)*	78 (8.5)
GP	15 (19.0)*	262 (28.4)
Community Health Centre	0 (0.0)*	10 (1.1)
Drug and alcohol service	6 (7.6)*	30 (3.3)
Mental Health Service	13 (16.5)*	48 (5.2)
Other	5 (6.3)*	77 (8.4)

* p<0.05 (denotes significant difference between 50 Lives clients and the other VI-SPDAT respondents)

^ Information taken from the VI-SPDAT survey data

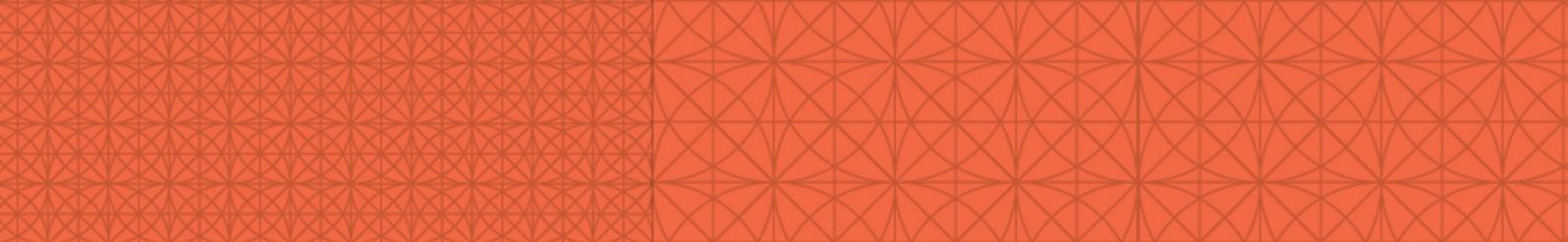
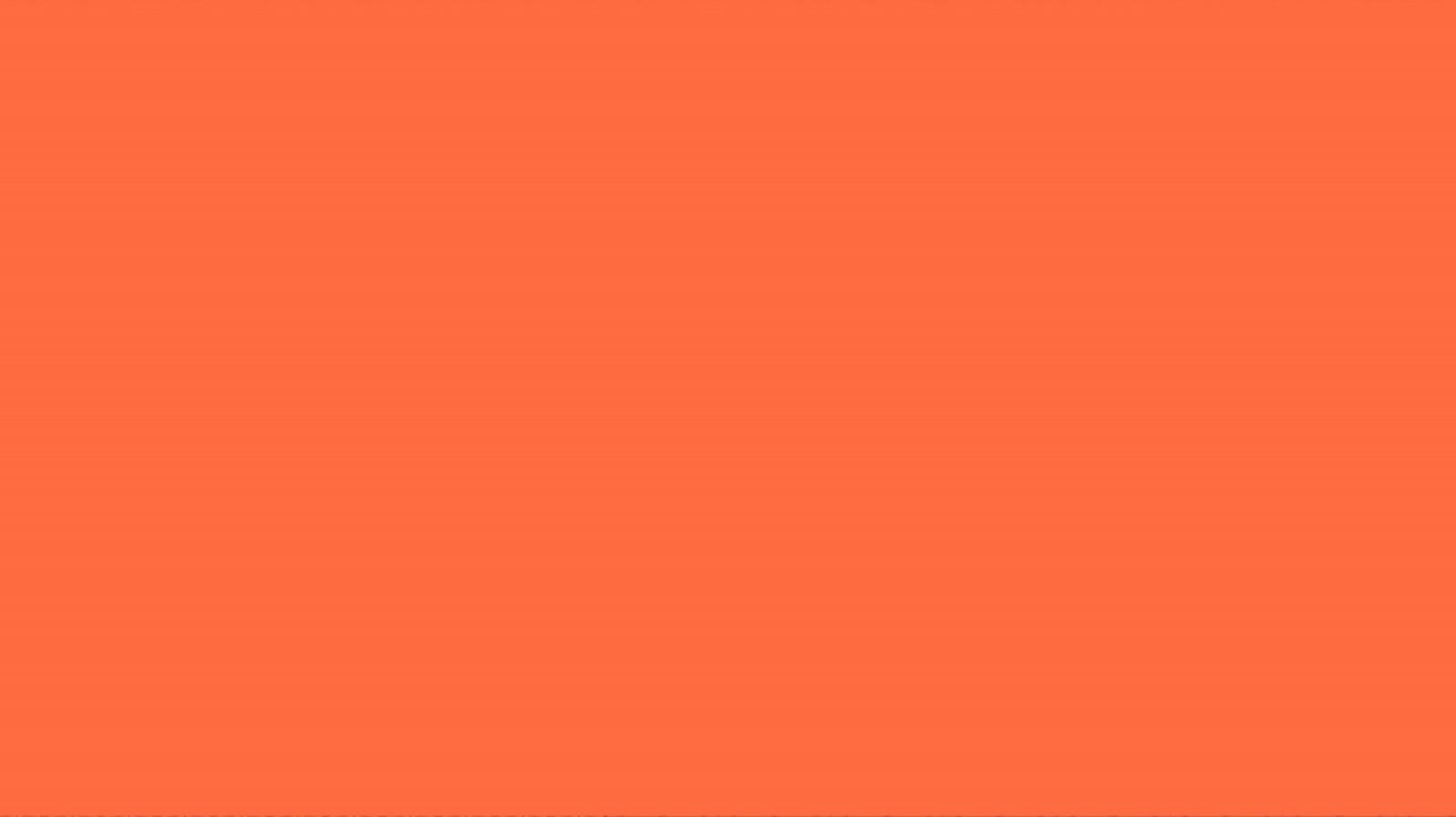
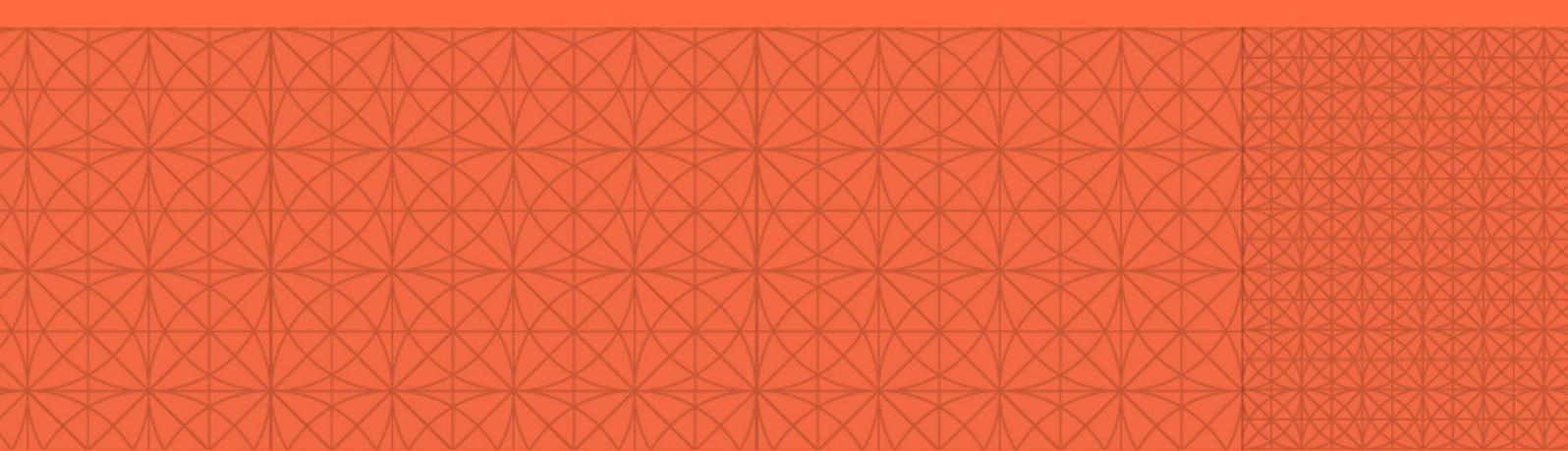
APPENDIX 4: PROPOSED IMPEDIMENTS TO HEALTH CARE INDEX

Impediments to Health Care Index ^a	
1. Do you have enough money to meet all of your expenses and debts on a fortnightly basis?	Yes (+1)
2. Where do you usually go for healthcare or when you're not feeling well?	<i>Street Doctor, Homeless Healthcare at Day Centres, Homeless Health Care at Accommodation Services, Homeless Healthcare in the parks (Outreach) (+1)</i> <i>Don't go anywhere (-1)</i>
3. Have you had a serious brain injury or head trauma?	No (+1) Yes (-1)
4. Have you had any medicines prescribed to you by a doctor that you do not take, sell, had stolen, misplaced, or where the prescriptions were never filled?	No (+1) Yes (-1)
5. What kind of health insurance do you have, if any?	Medicare, DVA (+1) None (-1)
6. Do you have a healthcare card?	Yes (+1) No (-1)
7. Yes or No – have you experienced any emotional, physical, psychological, sexual or other type of abuse or trauma in your life which you have not sought help for, and/or which has caused your homelessness?	No (+1) Yes (-1)
8. Is there a phone number and/or email where someone can get in touch with you or leave you a message?	Yes (+1) No (-1)

^aQuestions taken from the VI-SPDAT

APPENDIX 5: PRELIMINARY CONTENT ANALYSIS FROM ROUGH SLEEPER WORKING GROUP MINUTES

Positive outcomes observed in clients	Issues and problems being experience by clients	Challenges encountered by staff
<ul style="list-style-type: none"> • Lead workers mentioned that clients are “doing well” or “happy” in private rental/community housing • Clients responding well to medication (pain killers, Depo & oral medication) • set up bill payment plan • Client remaining drug and alcohol free • Client engaged in social and community activities (playing tennis; community garden) • Lead worker general observation of client looking healthier • Client paying off / managing debt • Engaging well with staff • Client reuniting with family 	<ul style="list-style-type: none"> • Hospital presentations (injuries; pressure sores; self-harm; traffic accident; pneumonia; drinking) • Workers raise general concerns for client’s health/weight/mental health • Client lost ID • Client over threshold for financial assistance, housing assistance • Client lost support of various support services due to program no longer being funded. • Police involvement (incarceration; altercations where police called; breaking and entering) • Children and friends stealing from client • DCP issues with children • Unsupportive family • Increased drug and alcohol use / commenced using again/ overdose • Client received complaints from neighbors (drug use; disruptive behavior) • Client at risk of eviction for no payment of rent. • Client assaulted • Client with large unmanaged debt 	<ul style="list-style-type: none"> • Not engaging with staff • Client does not want to receive medication, non-compliant, self-medicating • Client AWOL/missing • Housing applications denied (form not approved; inappropriate ID) • Client banned from various support services due to abusive and threatening behaviour (state trustees; Centrelink; temporary housing providers) • Clients not wanting to move into accommodation (want to stay with friends; responsibilities on the street) • Client denied support from their lead worker • Client is unhappy in their unit • Client passed away • Client unable to remember personal history
		<p style="text-align: center;">Key</p> <ul style="list-style-type: none"> Mentioned 5+ times Mentioned 2-4 times Mentioned once



A campaign to house and support Perth's most vulnerable homeless people

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