An evaluation of an assertive community linkage intervention for patients presenting to the Sunshine Hospital Emergency Department with suicidal behaviours.

Alex Pleban

Submitted in partial fulfilment of the requirements of the degree of Master of Advanced Social Work (Research) (with coursework component)

April 2017

Produced on archival quality paper
Acknowledgements

I have been enlightened by the strength and resilience of those who often face and overcome enormous personal challenges. I would like to sincerely thank the patients at Sunshine Hospital Emergency Department who participated in this study. Your generosity and time is the foundation of this thesis.

I would also extend my heartfelt gratitude to my supervisors Associate Professor Lynette Joubert and Associate Professor Carol Harvey whose passion and commitment to research have inspired me to undertake this project. You have both been generous with your time, providing me with ongoing encouragement and invaluable guidance.

I also extend my appreciation to the Mid-West Area Mental Health Service management particularly Gary Monkley and Donal Twomey who have been enthusiastic supporters of this study. I would also like to acknowledge the Sunshine Hospital Emergency Department Director, Peter Ritchie for his ongoing support and the Enhanced Crisis Assessment Team clinicians who actively participated in the recruitment of all the study participants.

Finally I am grateful to my partner Alison and son Dylan who have provided great support, encouragement and much patience during the completion of this thesis.
Abstract

According to much of suicide prevention literature the strongest risk factor predictive for suicide is previous suicide attempt or deliberate self-harm. While many assessed at Sunshine Hospital Emergency Department are deemed to be in the low to medium risk category upon discharge, longitudinal risk factors remain. In 2009 Mid West Area Mental Health Service (MWAMHS) management identified an opportunity for service development and funding was secured to employ a senior clinician to provide a post ED Assertive Linkage Service (ALS). A primarily phone based community linkage service was considered the most sustainable model. In an effort to evaluate the efficacy of the ALS intervention and ultimately inform the design of the service a program evaluation was undertaken which posed the question;

Does an assertive linkage service intervention for clients presenting to the Sunshine Hospital Emergency department with deliberate self-harm improve service access, quality of life and client satisfaction?

The aim of the Assertive Linkage Study was to conceptualise a social work intervention that involved assertive follow-up, support and therapeutic linkage for those who presented to the Sunshine Hospital emergency department with deliberate self-harm, suicidal ideation or suicide attempt. Demographic and clinical characteristics of patients in this cohort were identified and the impact of the intervention was measured.

Many of the findings were consistent to those of other comparable studies. The sample population risk for repeat suicidal behaviours was significant and the ED representation rates were high. The needs profile of the ALS cohort was generally diverse and sometimes complex demanding a flexible and eclectic approach from the ALS clinician. Social work practice needed to be client-centred and the ALS clinician could not assume that all who presented would be receptive to or perceive the need for formal community-based support. On balance the ALS intervention appeared to have made a positive difference to the clients’ experience after their emergency
department presentation. It also had a positive impact on emergency department representation rates, client satisfaction and quality of life outcomes.
Declaration of Authorship

This is to certify that:

(i) The thesis comprises only my original work towards the Masters degree except where indicated in the Preface;

(ii) Due acknowledgement has been made in the text to all other material used;

(iii) The thesis is 30579 words in length inclusive of footnotes but exclusive of tables, figures, references and appendices.

Signed: Alex Pleban

Date: 20/04/2017
# TABLE OF CONTENTS

Abstract ........................................... i
Declaration of Authorship ....................... iii
Preface ............................................. iv
Acknowledgements ................................ v
Table of Contents ................................ vi
List of Figures .................................... xi
List of Acronyms .................................. xii
Glossary ........................................... x

## Chapter 1: INTRODUCTION AND LITERATURE REVIEW 1

1.1 Introduction ................................ 1
1.2 Western Area Suicide Prevention Service 3
1.3 Assertive Linkage Model ..................... 3
1.4 Background .................................. 5
1.5 Suicide and self-harm ....................... 5
1.6 Emergency Department presentation as a predictor of risk for suicide 7
1.7 Help seeking behaviour ...................... 9
1.8 Suicide Prevention .......................... 11
1.9 Interventions after the ED presentation 12
1.9.1 ED referrals to follow up care ......... 13
1.9.2 Mail contact after the ED presentation 14
1.9.3 Telephone contact after the ED presentation 15
1.9.4 Engaging the young person after the ED presentation 17
1.9.5 Assertive Outreach after the ED presentation 18
# Therapeutic Interventions after the ED presentation

1.10 Therapeutic Interventions after the ED presentation 20
1.10.1 Eco-map 20
1.10.2 Motivational interviewing 21
1.10.3 Psychological interventions 23

# Contribution of Social Work research

1.11 Contribution of Social Work research 25
1.10 Conclusion 28

## Chapter 2: RESEARCH METHODOLOGY 30

2.1 Study questions and aims 30
2.2 Research questions 30
2.3 Design 31
2.3.1 Sample 31

### Phase 1
2.3.2 Recruitment 31
2.3.3 ALS Intervention 33
2.3.4 Single Session 34
2.3.5 Phone Based contact 35
2.3.6 Terminating ALS involvement 35

### Phase 2
2.3.7 Program evaluation 35
2.3.8 Goal Attainment evaluation 36
2.3.9 Measures 37
2.3.10 The ALS social - work intervention. 38
2.3.11 Data analysis 38

2.4 Ethical considerations 39
2.4.1 Human Ethics Approval 39
2.4.2 Risks and benefits 40
2.4.3 Voluntary participation 41
2.4.4 Informed consent, confidentiality and provision of results 41
Chapter 3: RESULTS

3.1 Key Findings

3.2 Demographic Data
3.2.1 Recruitment of study participants
3.2.2 Age and gender
3.2.3 Occupation
3.2.4 Country of Birth
3.2.5 Living situation

3.3 Characteristics of ED presentation
3.3.1 Mode of ED presentation
3.3.2 Alcohol and Other Drugs
3.3.3 Time of ECAT Assessment
3.3.4 Self Injury and stated intent
3.3.5 Method employed in self-harm/suicide attempt
3.3.6 Precipitants to ED presentation
3.3.7 Previous Diagnosis
3.3.8 Previous Mental Health related ED presentations.
3.3.9 Length of ED admission
3.3.10 ECATT recommendations for follow up care.

3.4 Help Seeking
3.4.1 Linkage pre ED presentation
3.4.2 Linkage post ED presentation
3.4.3 GP attendance
3.4.4 Linkage to other community based services

3.5 SHED representation Rates
3.5.1 Comparison of intervention and control groups
3.5.2 Non-intervention group representation rates
3.5.3 Profiles of re-presenters 63
3.5.4 Reason for representation 63
3.5.5 Disposition of those who represent to the SHED 64
3.5.6 Those who have multiple representations 64

3.6 Assessment of Quality of Life measures 65

3.7 ALS Social Work practice 67
3.7.1 Thematic analysis of notes and eco-map 67
3.7.2 Engaging young people 68
3.7.3 Woman over the age of 25 69
3.7.4 Men with AOD dependency 71
3.7.5 Findings from ALS Practice 73
3.7.6 Value of the eco map 75

3.8 Client satisfaction 76

Chapter 4: DISCUSSION 78
4.1 Limitations of the study 78

4.2 ALS Study Outcomes 79
4.2.1 MW Area Mental Health Service Outcomes 79
4.2.2 Emergency Department Outcomes 81
4.2.3 Consumer Outcomes 82

4.3 ALS Social work Practice 83
4.3.1 Characteristics of sample population 83
4.3.2 Social inclusion and ALS social work practice 84
4.3.4 Provide timely intervention and monitoring risk 85
4.3.5 Facilitate help seeking and linkage.
  • Young person 87
  • Substance Dependent Male 88
4.3.6 Working with Ambivalence 89
4.3.7 Building pathways to primary care

- North West Medicare Local
- Private Practitioners
- WMheadspace
- Psychiatrists
- Community Health Services

4.4 Assertive Linkage Recommendations

4.4.1 “Opt out” service model
4.4.2 Implementing a safety plan
4.4.3 “Warm linking”
4.4.4 Continued use of single session
4.4.5 Target population
4.4.6 HARP
4.4.6 Building ALS capacity
4.4.7 Improving pathways to AOD services
4.4.8 E- Health

4.5 Conclusion

References

Appendices

Appendix 1: Literature Search process
Appendix 2: Melbourne Health Ethics approval
Appendix 3: AQoL Questionnaire
Appendix 4: Health Service Usage Questionnaire
Appendix 5: Client satisfaction Survey
Appendix 6: Participant Consent Form for SPED/ALS study
Appendix 7: Eco-Map template 125
Appendix 8: Case Vignettes 126
  - Case study 1 Suy 126
  - Case Study 2 Lena 129
  - Case Study 3 Rob 133
Appendix 9: Client satisfaction Survey comments 136

List of figures

Chapter 2
Figure 2.1 Recruitment Flowchart 32

Chapter 3
Figure 3.1 Consent status of study cohort 46
Figure 3.2 ALS Study recruitment Flowchart 47
Figure 3.3 Age and Gender of study cohort 48
Figure 3.4 Occupation profile of study cohort 48
Figure 3.5 Birth country of study participants 49
Figure 3.6 Living situation of study sample 49
Figure 3.7 Mode of presentation 50
Figure 3.8 AOD dependent cohort: type of use 51
Figure 3.9 AOD dependent cohort: motivational stage. 51
Figure 3.10 Suicidal behaviour: Stated intent at ED presentation. 53
Figure 3.11 Suicide/Self Harm cohort: method of attempt 54
Figure 3.12 Precipitating event/s for ED presentation 55
Figure 3.13 Diagnostic profile of study cohort 55
Figure 3.14  Number of previous mental health related presentations to SHED for total ALS study sample  55

Figure 3.15  Number of previous mental health presentations to SHED; comparison Intervention and Control group  56

Figure 3.16  ED Length of ED stay by category  56

Figure 3.17  ECATT recommendation for follow up care  57

Figure 3.18  Proportion of study cohort linked to formal support before ED presentation  58

Figure 3.19  Linkage pre baseline ED presentation by type of service  59

Figure 3.20  Attendance at formal support post baseline ED presentation; ALS intervention group  61

Figure 3.21  SHED representation rates comparison between Control and Intervention  62

Figure 3.22  Re-presentation rates for non-intervention cohort.  63

Figure 3.23  Profile of those who re-present  63

Figure 3.24  Reason for re-presentation: comparison between intervention and control group  64

Figure 3.25:  Disposition of the cohort who represent to SHED  64

Figure 3.26  Number of representations: comparison of Intervention and non-intervention groups.  65

Figure 3.27  Post baseline multiple SHED re-presenters: previous mental health ED presentations  65

Figure 3.28  Quality of Life Measure change in Social Domain score.  66

Figure 3.29  Quality of Life Measure change in Mental Health domain Score.  66

Figure 3.30  Measure of Client satisfaction with ALS  77

Chapter 4

Figure 4.1  ALS intervention flowchart  91
List of Acronyms

AOD  Alcohol and Other Drug
ALS  Assertive Linkage Service
AQoL Assessment Quality of Life
CASA Centre Against Sexual Assault
ATAPS Access to Allied and Psychological Services
CHS Community Health Service
ECAT Enhanced Crisis Assessment Team
ED Emergency Department
MH HARP Mental Health Hospital Admission Risk Program
MWAMHS Mid West Area Mental Health Service
D2 Assessment Dual disability AOD Assessment
PHaMPS Personal Helpers and Mentors Program
SPED Suicide Prevention in the Emergency Department
SUQ Service Usage Questionnaire
WMheadspace Western Melbourne headspace
WROS Western Region Outreach Service
SHED Sunshine Hospital Emergency Department
Glossary

**Psychosocial** - Refers to the role of emotional, psychological and social factors in a person’s functional ability.

**Psycho-education** – refers to the education provided to someone experiencing psychological or emotional distress to assist him or her to manage and cope with symptoms and to seek additional support if required.

**Self-Harm** - Refers to deliberate injury to oneself without suicidal intent, typically as a manifestation of a psychological or psychiatric disorder.

**Suicide attempt** A non-fatal, self-directed, potentially injurious behavior with an intent to die as a result of the behavior which might not result in injury.

**Suicidal ideation:** thoughts about how to kill oneself, which can range from a detailed plan to a fleeting consideration and do not include a suicide or self-harm attempt.
Chapter 1: Introduction and Literature review

1.1 Introduction

According to World health organization figures almost one million people die from suicide each year; a global mortality rate of 11.4 per 100,000 (WHO 2014) or one death every 40 seconds, “suicidal behaviour is a complex phenomenon that is influenced by several interacting factors – personal, social, psychological, cultural, biological and environmental” (WHO 2014) and is estimated to count for 1.4% of the all deaths worldwide, “making it the 15th leading cause of death in 2012”. (WHO2014) Suicide is also the second most common cause of death among young people worldwide. (WHO 2013)

The ABS reports the incidence of suicide in Australia as 12 per 100000 people each year. (ABS 2013) With an average of 2461 registered suicide deaths per year between 2009-2013 it is the second leading cause of death by injury after traffic accidents. (ABS 2013) Males are over represented at a rate of almost 4:1 while seventy two per cent of people who have harbored serious suicidal thoughts have a pre-existing mental illness. Of this group 77% had a diagnosed anxiety disorder, 63% had a mood disorder and 34 per cent had a substance abuse disorder. (ABS 2013) These figures represent a significant co-morbidity.

Western metropolitan burden of disease information indicates that the incidence of depression in the city of Brimbank is higher than for the states average (3.0% compared to 3.6%). (Victorian Government 2009) In 2006 Brimbank had the eighth highest suicide toll of the 33 metropolitan councils with western Melbourne region (Brimbank Leader 2006) recording an incident rate of 12.7 suicide and self-inflicted injuries per 100000 people compared to 11.4 % for greater Melbourne. (Regional Governance and Strategy Project 2005)

The Sunshine Hospital is a 600 bed tertiary hospital in Western Melbourne providing a
comprehensive range of services including acute services in emergency medicine. The Sunshine Hospital Emergency Department Enhanced Crisis Assessment and Treatment Team (ECATT) assessed 855 people who presented to the Sunshine Hospital Emergency Department (SHED) between July 2008 and June 2009. Forty one per cent or 350 were not referred onto a public mental health Service for follow up treatment or support. Of this group 75% were assessed due to suicidal ideation, suicide attempt or self-harm attempt. (Pleban 2009) ECATT involvement is limited to the ED stay and service as usual for this group has been to fax a notice of attendance to the patients regular GP and to provide information to the patient about other relevant community based support agencies. There has been no capacity to provide ongoing support or to monitor short to medium term outcomes for this group.

While this cohort are deemed to be in the low to medium risk category upon discharge longitudinal risk factors remain. Dieserud & Loeb (2000) have noted that “research focus as well as treatment focus should be on the large number of low to moderate risk -for -suicide patients with the goal of preventing them from becoming high risk patients”

According to much of the suicide prevention literature the strongest risk factor predictive for suicide is previous deliberate self-harm (Hawton, Zahl & Weatherall 2003). It is also important to note that in the above mentioned cohort who present at Sunshine hospital emergency department

- 42% do not have a regular G.P
- 13% attend counselling with a private practitioner or psychiatrist.
- 35% were identified as having D&A issues.
- 27.5% are aged between 18-25 years of age

The majority of this cohort does not have regular professional support and a significant number have an AOD history suggesting an added complexity of need. This profile also reflects the prospective risk factors for this group and highlights the opportunities for early intervention, particularly given the significant proportion of patients who are under 25 years of age.

In recognition of the increased risk exposure for the ED patients who transition to
community based care the Mid-West Area Mental Health Service Executive have identified an opportunity for service development and secured ongoing funding for an Assertive Linkage Clinician. While the Assertive Linkage Service (ALS) clinician will need to provide an intervention to the entire ALS cohort there needs to be particular recognition of the significant number of people in the “low to medium” risk group who are presenting after deliberate self-harm, suicidal ideation or after an actual suicide attempt. Therefore, in an attempt to inform the design of the intervention model it will be necessary to draw from recent service precedents and current suicide prevention literature.

1.2 Western Area Suicide Prevention Service

The Western Area Suicide Prevention service (WASP) was a three-year project to pilot an innovative model developed by Western Health in 2003. It incorporated aspects of primary and secondary prevention, including strategic and brief intervention counselling with an emphasis on crisis intervention and problem-solving components. It also facilitated linkage to General Practitioners, Community Health Services, housing services, social support services, employment services and financial aid. WASP clinicians provided an intensive service offering a mix of outpatient psychotherapeutic counselling and assertive linkage for a period of up to six months. WASP provided an invaluable example of a post ED intervention model, it impacted positively in regards to E.D re-admission rates and meaningful reductions in levels of clinical depression for service users (Stevenson et al. 2005). The WASP project however was time limited and there was no control group to compare treatment as usual outcomes.

Since the completion of the WASP project in 2006 the opportunities to access community based psychological funding have been greatly enhanced. The Commonwealth Governments ‘Better Access’ initiative has increased opportunity to access Medicare funded psychologists and social workers. Given the resource parameters the Assertive Linkage Service will not be able to replicate the outpatient aspect of the WASP model and project sponsors have identified the phone based community linkage component of WASP as a more sustainable approach.

1.3 Assertive Linkage Model

The ALS intervention model will predominantly incorporate primary prevention. It will
provide a predominately telephone based service to maintain contact with the patient after their ED presentation for up to six weeks and will incorporate three main components:

(i) Provision of single session that incorporates completion of an eco-map with the client at the time of or soon after the emergency department presentation then at one week and four weeks post the single session via phone contact. The ALS will use the eco-map with the aim of assisting the client to reflect on the quality of their relationships with significant others as well as identify any other factors which are impacting either positively or negatively on their lives. It will assist in identifying the present and potential resources both in their personal network and the local community.

(ii) Provide brokerage and assist with linkage to appropriate community-based services such as G.Ps, private psychologists and social workers (via the better access pathway) and drug and alcohol services.

(iii) Provide supportive counselling as required with problem solving, brief cognitive behavioural interventions and crisis intervention components.

The WASP project provided a valuable precedent for post ED care for the low to medium risk for self-harm and suicide group. The ALS intervention model will place more emphasis on the linkage aspect and will be comparatively short term. It was therefore important to pilot and evaluate the ALS model by posing the question; 

Does an assertive community linkage service intervention for clients presenting to the Sunshine Emergency Department with deliberate self-harm improve service access quality of life and client satisfaction?

To address this question a program evaluation of the Assertive Linkage Service was undertaken using a variety of measures. The following literature review examines self-harm and suicide prevention particularly in context of the emergency department setting. It will provide an important context to the subsequent study methodology and findings.
1.4 Background of Literature Review

An initial review of recent literature that examines theories of self-harm and suicide will aim to facilitate a broader understanding of the etiology while the subsequent focus on help seeking behaviors for those who have self-harmed or who harbor suicidal ideation, will highlight the need for suicide prevention initiatives. A broader examination of suicide prevention theory will then be undertaken before determining whether there have been other national or international examples of a phone based assertive linkage model (or components of the model), that have been evaluated in the context of suicide, or self-harm prevention in the emergency department. The focus will then shift to other post ED interventions that have been trialed and evaluated as well as interventions that relate to relevant subgroups.

A crucial aspect of the ALS intervention will be to provide interim support to the client while facilitating onward referral that is tailored to client need. It will therefore be relevant to review the efficacy of the therapeutic interventions that could be utilized by either the assertive linkage clinician or by the treating community practitioner.

Another important aim of this study is to conceptualize a social work intervention that will complement the Assertive Linkage Service model. To this end there will be an examination of social work research and the extent to which it has contributed to practice knowledge on self-harm and suicide prevention generally and more specifically in the emergency department.

1.5 Suicide and self-harm

Theories of suicide are divergent and reflect its complex aetiology. Perspectives range from the biological, psychodynamic, cognitive behavioural, developmental and systemic. Mann & Stanley (1986) and Van Praag (2001) cited the dual roles of serotonin imbalance and a triggering psycho-social stressor as the cause of subsequent suicidal behaviour. The psychodynamic emphasizes the role of unconscious drives; existential drives for meaning or disturbed attachment states. Schneidman (1998) referred to the concept of psychache and the need to escape unbearable psychological pain. Cognitive behavioural models posit underlying roles for hopelessness, perceptions of entrapment and emotional dis-regulation. Durkheim highlighted the role of disturbed ‘AVE’ social forces such as dysfunctional family
systems. (Schneidman 1998)

In an effort to recognise its complex nature Van Orden and Witte (2010) acknowledged these different theories but also argued that any theory of suicide should be able to account for the whole range of risk factors rather a single factor in isolation. Their subsequent literature review identified associations between specific risk factors and suicide. History of mental disorders, previous suicide attempts, social isolation, physical illness, unemployment and family conflict were all identified as being the subject of 15 or more studies which demonstrated strong association. Ultimately social isolation was considered the strongest and most reliable indicator of suicidal ideation, attempt and lethal attempt. (Van Orden & Witte 2010) Their review provided the basis for the “interpersonal theory of suicide” which posits that; “three constructs are central to suicidal behaviour, two primarily related to suicidal desire—thwarted belongingness and perceived burdensomeness—and one primarily related to capability— acquired capability for suicide”. (Van Orden & Witte 2010 pp.575) The theory reflects the causal pathway between social connectedness as an unmet need, the perception of being a burden on family or others and the increased capability that develops from previous suicide or self-harm attempts. Given that each of these conditions are rare and the convergence of all even rarer this theory reflects the relatively exceptional nature of suicidal behaviour itself.

While Joiner and Ribeiro (2012) highlight the discreet nature of suicidal and non-suicidal injurious behaviours their review utilizes the interpersonal theory of suicide to conceptualize the relationship between them. Non-suicidal self-injury (NSSI) is considered to be distinct from suicidal behaviour in that it generally serves to alleviate aversive states and provides relief however it is also associated with increased risk of suicide. The authors assert that the problems and distress associated with increased NSSI (like the unmet need for belongingness and or burdensomeness) may also eventually serve to increase suicidal desire.

The interpersonal theory of suicide provides a template that helps identify a causal pathway for suicidal behaviour. It highlights the relationship between common risk
factors or precipitants that are likely to increase the risk of suicide and provides a useful framework for assessing future risk. Of those who actually attempt suicide at least 70% will subsequently attend an emergency department. (Pagura et al 2009, De Leo 2005) It is necessary then to consider the E.D presentation itself as subsequent predictor for a suicide or self-harm attempt.

1.6 Emergency department presentation as a predictor of risk for suicide

Recent literature indicates that future risk for those who present with self-harm or suicide attempt at emergency departments increase exponentially (Hawton, Zahl & Weatherall 2003). The weeks following discharge from an ED are recognized as particularly higher risk period for further self-harm (Coghlan, Lawrence & Holman 2001, Kapur et al. 2005). Kapur et al (2005) monitored the rate of repetition for a cohort of 7460 deliberate self-harm patients who presented to four different emergency departments in the UK over a four-year period. The study found that subjects in the cohort had a greatly elevated risk of dying from suicide, especially during the twelve months following deliberate self-harm. Completed suicide occurred in 0.7% of the sample population, a risk 66 times that of the suicide rate in the general population. (Kapur et al. 2005)

Gairin, House and Owens (2003) identified that a high proportion of suicides were preceded by accident and emergency attendance (39%) in the year before death, with over one-third of these people (15% of all suicides) attending an emergency department because of a self-harm episode. Another study of those discharged from a short-term psychiatric unit after a self-harm attempt found that while risk of further self-harm was lower upon discharge it subsequently increased to the index admission risk level within 12 months after discharge. While not specifically based on ED presenters their conclusions highlighted the importance of a suicide prevention strategy which included linkage with community based supports after an episode of self-harm. (MacNeill & Binder 1997)

Beautrais (2004) monitored a group of 312 ED patients who had made a ‘medically serious’ suicide attempt for five-year periods post their index attempt. Of this group 6.7% had died by suicide within 5 years while 37% had made at least one other suicide
attempt. Most of the 6.7% who had completed a suicide did so within two years of the index attempt. About a quarter of the cohort had made 4 or more attempts within the 5-year period. Apart from those who present for overt reasons numerous studies have also identified a hidden at risk population which presents to the emergency department. Up to 11% of those waiting in an emergency department acknowledged having passive suicidal thoughts and more than 8% admitting that they had thought about killing themselves (Claasen & Larkin 2005).

It has also been demonstrated that the risk factors for this group are not only confined to future self-harm. Ostamo and Lonnqvist (2001) examined the overall mortality rates for a group of 2782 ED patients in a 5 year follow up study. Mortality from all causes was 15 times higher than average among men and 9 times higher in woman with overall mortality highest in the first follow-up year. Deaths from suicide accounted for 37% excess deaths in males and 44% excess deaths in females. Alcohol dependence played a central role in causation of death (diseases of the liver and pancreas, alcoholic cardiomyopathy and diabetes) for a significant number of this cohort. Findings such as these are significant in highlighting the global risk factors associated with this group and have the potential to inform any suicide prevention initiative in a more wholistic way. They may serve to promote awareness and improve screening skills by ED staff that may in turn increase opportunities for preventative interventions.

There are other related studies that are pertinent in regards to ongoing risk for the cohort who present to the ED. Yoshimasu and Kiyohara (2008) conducted a meta-analysis of 24 studies to evaluate common contributing factors for suicide as potential indicators of risk. Co-morbid substance related and mood disorders were most commonly associated with suicidal risk. While social factors such as marital status, unemployment and social isolation were not as significant they remained strong predictive factors for suicide. Recommendations from this study included affording “maximum attention” to the co morbid substance dependence and depression in any suicide prevention strategy. It also prescribed an ‘interactive’ intervention model rather than a disease model. The interactive model firmly places the person in their social context and intervention aims to maximize their social capital and connection.
While previous history of suicide or self-harm was also strongly associated with future risk of suicide in the Yoshiman study, Runeson et al. (2010) have focused more specifically on method of attempted suicide or self-harm as a predictor of subsequent completed suicide. Their retrospective study of 49649 individuals admitted to hospital after a suicide attempt between 1973 and 2003 found that individuals who attempted suicide by hanging strangulation or suffocation had the worst prognosis; 54% of men and 57% of women in this group subsequently died by suicide. This was compared to 12.3% for those who used the most common method, self-poisoning. It was important to note that the percentage of people who made a suicide attempt by the former method was a small minority, i.e. only 1% of the sample population. Given its lethal nature and the lower survival rate it is likely that suicide attempt by hanging or strangulation is more common than this data reflects compared to that of self-poisoning. Nevertheless while a history of attempted suicide by hanging remains the most powerful predictive factor for death by suicide the one in eight probability of future suicide for those that self-poisoned also presents a significant risk.

Given the preceding context the role of the emergency department in suicide prevention has long been recognised and there are numerous studies that have highlighted the potential value of ED interventions. It is nevertheless, according to many reports, an underutilized site of opportunity (Larkin & Beautrais 2010). The challenges in providing post ED interventions are partly related to the willingness of the patient to seek help or follow through with recommendations for ongoing care.

1.7 Help seeking behaviour

Given the high rate of recidivism for those who self-harm or attempt suicide (Larkin & Beautrais 2010) and the demonstrated importance of timely follow up it will be important to examine the studies which measure the help seeking rate or the frequency to which this cohort attend recommended care.

Gunnell et al. (2002) found that out of a group of 681 patients who had attended an emergency department for self-harm in the UK 31% had consulted their G.P within a week after the episode and a cumulative total of 53% within four weeks, although it was not stipulated whether the consultation was related to the self-harm incident.
117 people had made a repeat attempt within 12 months with 33 re attempting in the first four weeks. Only 40% of the 33 had consulted with their G.P during this time. While the study did not account for other types of help seeking that may have occurred these findings reflect a potential window of opportunity on two fronts:

- The role of ALS in brokerage and facilitating linkage to a GP.
- Supporting the G.Ps role in ongoing prevention or in referring to more specialised care.

Jauregi et al. (1999) found that 75 % of patients who were referred to mental health centre after a suicide attempt did not attend their appointment. The study findings characterised the non-attender group as those whose main motive for self-harm was associated with family discord. The researchers posited that there could have been a misfit for the patient between self-perceived service needs and the mental health services offered. Similarly Ostamo and Lonnqvist (2001) examined the formal and informal help people received for the 12-month period after a suicide attempt. It found that while formal help provided for psychological needs at one and twelve months was generally rated as high it was lower in areas related to social needs particularly in regards to companionship and daytime activities. A further comparison made between repeaters to non-repeaters found that while repeaters had accessed more formal help they had tended to have less access to informal networks and had lower satisfaction scores in regards to their needs being met. These studies highlighted the importance of providing a tailored and flexible approach to client follow up that could either maximise opportunities for social connection or linkage to more specialised care. This could include facilitating referrals to community support options such as Personal Helpers and Mentors Program (PHaMP) or Men’s Sheds.

The effect of depression and suicidal ideation on help seeking behaviours has also been examined in various studies; (Rudd, Joiner & Rajab 1995, Wilson & Deane 2010). The main findings of these studies involving mainly younger age groups of 15-25 suggested that there was evidence that the suicidal thought process “impedes the cognitive help seeking process”. (Wilson & Deane 2009) The likelihood of help seeking also appears to be inversely related to the level of depressive symptoms, i.e young
people become more reluctant to seek help as their levels of depressive symptoms and suicidal ideation increase.

In a systematic review of literature undertaken by Michlemore and Hindley (2012) the vast majority of 17 examined studies found that help seeking rates for professional support were below 50% for young people who self-harmed. Rates were even lower (40%) for those who actually accessed the support as opposed to those who merely sought it out.

It is also important to consider related studies (De Leo et al. 2005), which have reported that a minority of people attend the ED after their suicidal behaviour. A recent Canadian study (Pagura et al 2009) reported that 48 % of the individuals who reported suicidal ideation and 24% of those who reported a suicide attempt did not seek help nor perceive the need for help during the previous year. This result was not specifically related to ED presenters but a self-reported response to a community health survey (only 5% of the study sample reported attending an emergency department). Those who had made a suicide attempt may have been more likely to seek help compared with those who experience suicidal ideation because of the subsequent contact they may have had with a G.P or health service for medical issues. The findings for the subgroup that did have a presentation to an ED were not available but it is possible that help seeking behaviours for this group may have been higher after the ED intervention. In any case there is a significant proportion in both groups (40% of those with suicidal behaviours and 60% of those with suicidal ideation) who do not seek help. De Leo et al. (2005) conducted a randomised telephone survey of 11,572 subjects in Queensland to determine lifetime prevalence of suicidal ideation. Only 42.1% of those who reported suicide attempts (n=399) sought formal help, 28.4 received treatment in a hospital and 19.2 % attended a G.P clinic. After this initial contact 39.4 % of people did not receive any further formal support. Again these findings reflect the potential challenges associated with engaging the ALS cohort in initial linkage and ongoing care.

1.8 Suicide prevention

In 1983 the “Operational classification of disease prevention” (Gordon 1983 in Life Matters 2007 pp.24 ) was introduced in the U.S. This model accounted for the
complexity of the factors that influence any illness (risk, protective, contextual, personal) and focused on different groups or subgroups rather than treatment modalities. Prevention measures were classified as universal (whole populations) selective (subgroups) or indicative (individual).

The Australian National suicide prevention strategy (2005) is an adaptation of a model developed by Mrazek and Haggerty (1994) (Australian Government 2008 pp.24) that modified the Gordon model to include the whole spectrum of interventions – prevention, treatment, maintenance and recovery. The Australian strategy further enhanced the Mrazek and Haggerty model to emphasise both the importance of the individual context “recognising that people respond and cope differently and vary in their vulnerability and resilience” (Australian Government, 2008 pp.27). It also shifted the emphasis away from pathologising “normal human reactions to stressful circumstances” (Australian Government, 2008 pp.27). The Australian National Suicide Prevention strategy (2005) focuses on eight domains of activity; universal interventions, selective interventions, indicated interventions, symptom identification, finding and accessing early care and support, standard treatment, longer-term treatment/support and ongoing care and support. It also placed great significance on the transition or handover points between different treatment settings where people are most exposed to risk. In Victorian mental health policy there has also been a renewed emphasis on seamless and integrated service delivery between levels of care (Victorian Government 2009 pp. 55) The Mid-West Area Mental Health Service has, in this context, identified an opportunity for service development and established the Assertive Linkage Service. The ALS qualifies as a ‘indicated intervention’- one that targets people who are at risk of suicide or are presenting symptoms of an illness that heighten the risk of suicide.

1.9 Interventions after the ED presentation

Articles reviewing literature on self-harm and suicide prevention interventions in the ED have concluded that the majority of studies have been unable to provide adequate evidence of intervention efficacy due to limited sample sizes. (Hawton & Fagg 1998, Repper 1997, Crawford & Kumar 2007, Larkin & Beautrais 2010)
Crawford and Kumar have estimated that “over 600 people would be needed in a standard two arm trial in order to have an 80% chance of demonstrating a clinically significant reduction from 15 to 10% in the repetition of self-harm at a .05% level.” (Crawford & Kumar pp.38 2007) Reviewers have also pointed to the disparate nature of the cohort who present to emergency departments with suicidal or para-suicidal behaviours. Complex and numerous variables such as gender, culture, age, diagnosis, and drug and alcohol factors will always impact on the broader validity of study findings. (Larkin & Beautrais 2010)

Suicide prevention intervention studies have examined a broad array of interventions including; pharmacological, psychosocial, psychological and simple interventions. Different subgroups have also been the subject of suicide prevention studies. This literature review will be examining those that are either based on emergency department populations or interventions that have a potential application post the ED presentation.

1.9.1 ED referrals to follow up care
After ensuring safety one of the most obvious potential roles of the emergency department mental health clinician is to encourage and motivate at-risk people to attend follow up care or prevention programs (Beautrais 2010). An RCT study which monitored the follow-up and outcomes of 658 people who had presented to 4 Manchester hospitals with self-poisoning found that being referred to active specialist follow up care was associated with one half the risk of repetition (Kapur et al. 2004). The report acknowledged the important limitations in accurately identifying all repetition (not all who self-harm present to ED) and not being able to verify if those who were referred actually attended follow up care. Nevertheless the referral status was one constant variable and differences between groups were statistically significant, highlighting the potential value of follow-up care in reducing risk.

Contact by a mental health professional soon after a treatment for suicidal behaviour has long been recognized by many studies as a worthwhile intervention strategy. For those in the low to medium risk category the nature of this contact has ranged from assertive outreach to letters, postcards or telephone.
1.9.2 Mail contact after the ED presentation

Motto and Bostrom (2001) conducted a random control trial involving patients who decline follow-up treatment after a hospital admission for a depressive or suicidal state. This study has been recognized as “the only controlled study to show a significant difference between experimental and usual care conditions for completed suicide” (Comtois & Linehan 2006 pp.163). A total of 843 patients were randomized into a ‘contact’ or ‘no contact’ group. Those in the contact group were contacted by mail four times a year for five years while those in the control received no contact. A personalized letter enquired whether the person was ‘getting along alright’ and invited a response if the person wished to send one. Suicide rates were monitored for the next 15 years. Suicide rates in the intervention group were significantly lower with the greatest differences apparent in the first two years petering out to no difference between both groups after five years. This study was based on the hypothesis that the intervention would promote the suicidal persons “feeling of being joined to something meaningful outside oneself” (Motto et al. 2001 pp.831) acting as a stabilizing force in someone’s life. Another similar RCT study conducted in Australia (Carter et al. 2005) targeted 772 people who had deliberately self-poisoned. Participants were identified via the records of a regional toxicology service and randomized into an intervention /control group. Intervention group participants were sent eight post cards over 12 months enquiring about their wellbeing. The intervention was shown to be ineffective in reducing the number of individual repeaters however it did reduce the number of events per patient by a clinically and statistically significant amount (nearly 50%). Interestingly the effect of the intervention was more noticeable with women with only a third of the number of women in the intervention group having 3 or more repeat episodes compared with control group. While the authors hypothesized that the postcard contact may have impacted positively by engendering an enhanced feeling of being connected they also contended that “it may be that a service model that emphasizes respect for the patient, high quality medical and psychiatric management and follow up arrangements on discharge [as well as the post card intervention] is able to reduce the lack of social connectedness” (Carter et al 2005 p.378)
1.9.3 Telephone contact after the ED presentation

Telephone contact has also been used with mixed results as an intervention to encourage people to attend at follow-up treatment attendance and as an intervention to engender a sense of social connectedness for at risk groups. De Leo et al. (1995) evaluated a Tele- help/Tele -check service for the elderly population in Italy that proved to be very effective. 12135 individuals were provided with telephone contact twice per week to monitor their wellbeing and to provide emotional support. The client was also able to contact the tele-help service at any time. Suicide rates for this group were measured at one person for the entire sample over a four-year period. This compared favourably with the rate of 7.44 for the general same age population. While the average age of this population was 79 the criteria for referral to tele-check mirrored the traditional suicide risk factors for the broader population, i.e. isolation, low income and issues around autonomy.

A more recent Spanish RCT study evaluated the effectiveness of a ‘telephone management program’ that provided early intervention for patients discharged from an emergency department after a suicide attempt (Cebria et al. 2012). The intervention consisted of a systematic phone based follow up at 1 week then 1,3,6,9 and 12 months to assesses risk and subsequent adherence to treatment and follow up options. The phone contact also served to encourage and promote attendance at post Emergency Department follow-up including G.Ps and counsellors. The control group included a large proportion of patients who were considered low risk. This group was discharged and left to the care of their family and G.P. The outcome measure was time elapsed between baseline and subsequent attempt. The intervention reduced the re-attempts in the baseline year by over 50% (6% in the intervention and 14% in the control group)

Fleischmann et al. (2008) also measured the effectiveness of a brief intervention and ongoing phone contact for suicide attempters in an RCT multi-site study in 5 countries. The intervention included a one-hour single session at baseline and then 9 follow up contacts at 1,2,4,7, &11 weeks then at 4,6, 12 &18 months. The initial session “aimed to include information about suicidal behaviour as a sign of psychological and/or social distress, risk and protective factors, basic epidemiology, repetition, alternatives
to suicidal behaviours, and referral options” (Fleischmann et al. p705). Whenever an interviewer realized that a patient needed more intensive treatment, the relevant referral to help was made. The follow up phone calls were used to monitor the participants progress and to assist in redirecting to supports as needed. Findings at the 18 month time point indicated a significant difference in suicide rates, with .2 % of the intervention group (n=872) completing suicide compared to 2.2% for the control (n= 827).

Similarly Vaiva et al. (2006) evaluated two different interventions consisting of contacting patients by telephone at one month or contacting patients at three months after discharge from an emergency department for attempted suicide. Both interventions were compared to a control group. The intervention was provided by psychiatrists whose aim was to enhance compliance with treatment and provide brief crisis intervention if needed. Control patients received treatment as usual, in most cases referral back to their general practitioner. The group who were contacted in the first month had significantly lower rates of suicide attempts over the subsequent 13-month monitoring period; 12 % (one month intervention) vs. 22% (control group) and 17% (3 month intervention). Their findings attested that this intervention may help reduce the number of reattempted suicides over one year. However for the reader it was even more pertinent to note that 48 of all the attempted suicides occurred before the telephone contact at one month highlighting the value of testing an even earlier intervention contact to see if a larger number of repeat suicide attempts could have be prevented.

A number of other studies have also tested the value of phone contact post a suicide attempt although the extended time lag between the suicide attempt and the provision of the intervention in these studies have possibly compromised the outcomes. Cedereke, Monti & Ojehagen (2002) conducted an RCT to determine whether telephone contact at four and twelve months after a person’s suicide attempt had any impact on subsequent treatment attendance. All participants were also contacted one month after their presentation to the emergency department to conduct an initial assessment. The telephone interventions were designed to have a motivational influence for ongoing treatment. The interviewers also provided advice
about relevant support services and could also assist in the linkage process. Ultimately results were negative with no discernible difference in attendance to treatment rates, repetition of suicide rates or ideation, global functioning or psychological symptoms. The authors posited that the initial one-month contact may have served as an intervention for the control group and that the time lapse for initial intervention was probably too long. Within one month two individuals had committed suicide, 7% already had a repeated suicide attempt and 11% could not be reached. These findings highlighted the importance of earlier intervention. “To prevent loss in after care it is suggested that supportive action including problem solving should be delivered within 2-3 days” (Cedereke, Monti & Ojehagen 2002 p. 89).

1.9.4 Engaging young people after the ED presentation

At the other end of the age spectrum a trial of telephone services to increase young people’s utilization of health care for psychosocial problems proved to be largely ineffective (Stevens et al. 2009). Participants with depressive symptoms, suicidal ideation or substance abuse were recruited. Of the 179 participants, 89 were assigned to receive 3 brief phone calls; one call a week after their attendance at the adolescent unit, another call a week before their follow up appointment and another a week after the follow up appointment. The intervention mainly consisted of motivational interviewing and limited case management. The major finding was that the telephone support service intervention did not increase subsequent utilization of either medical or mental health services for adolescents who were contacted.

Grupp-Phelan and McGuire (2012) undertook a pilot RCT study to measure an intervention to engage adolescents who were assessed to be at risk of suicide in post ED care. Adolescents who presented for non-psychiatric complaints were screened at a U.S paediatric emergency department using the Columbia Suicide Screen. Of the cohort of 204, 24 were screened positive and of these 11 were randomized to intervention and 13 to control. The intervention involved a short motivational interview, referral to outpatient appointment and then subsequent encouragement to attend appointments. The control group received the telephone number for an outpatient mental health service while in ED.
There was a significant difference in post ED attendance rates between the two groups; 15.4% of the control group attended follow-up compared to 63.6% of the intervention group. While promising, these results obviously need to be treated with caution given the small sample size. The sample pool was also recruited from those who presented for non-psychiatric reasons and were not initially seeking help for mental health needs.

Similarly while Asarnow and Baraff (2011) findings in regards to post ED treatment attendance were promising other associated measures were not as encouraging. It evaluated an intervention for young people between the ages of 10 and 18 who presented to the emergency department with suicidal ideation and self-harm. The intervention consisted of family based CBT while the patient was in the emergency department combined with post ED care linkage telephone calls. The CBT was designed to increase motivation to attend follow up treatment. Measures included post ED service usage, suicide attempts and clinical outcomes. It found a significant statistical difference in treatment adherence after the ED presentation with 92% of those in the intervention group attending treatment compared to 76% in the control. Furthermore 76% of the intervention group subsequently engaged in psychotherapy compared to 49% of the control. Despite the difference in treatment engagement numbers there was no statistically significant difference in post ED suicide attempt rates or clinical outcomes at 2 months post baseline. Given the nature and course of psychological treatment more longitudinal measures may have borne out greater differences in clinical outcomes between control and intervention groups.

1.9.5 Assertive Outreach after the ED presentation

Other studies have also measured the value of earlier and more assertive linkage to outpatient or community services after a suicide attempt or hospitalization. The importance of outreach and continuity of care have been heralded as early as the 1970s (Welu 1974). Termansen and Bywater (1975) evaluated an innovative intervention for suicide attempters who presented to Vancouver General Hospital emergency department. The study design compared four different groups; two of which received an assertive follow up. This consisted of daily contacts (telephone and direct) for the first week after the presentation then every second day for week two,
twice a week for week three, once a week for weeks 5-8 then every two weeks from weeks 9-12. The purpose of the intervention contact was to “assist in patient significant other relations” (Luxton, June & Comtois p.36), facilitate linkage to community supports and provide supportive counselling. The study outcomes indicated a statistically significant reduction in suicide attempts for group 1 at three months. The same clinician who conducted the initial assessment provided all follow up contacts for group 1. This may have maximized the effectiveness of the intervention and highlights the value of continuity in care. Both intervention groups showed decreased impairment on variables such as social isolation, coping behaviour, anxiety and depression. While these results are encouraging they need to be treated with some caution given the small sample (a total of 128 patients were included in the final analyses). The intervention was resource intensive and may be difficult to replicate in many settings- although many aspects are worth adopting as part of any intervention.

Other studies have found that a more rapid and assertive response led to improvement in subsequent attendance and adherence to treatment (Currier, Fisher & Caine 2010, Greenfield et al. 2002). However findings have diverged when measuring clinical outcomes. Curriers study involved a small sample of 120 people who presented with self-harm to a metropolitan ED. There were 56 in the intervention group who were provided with a referral to an outpatient clinic and the services of a Mobile Crisis Team (MCT) intervention 48 hours after a self-harm episode. The control group was provided with an appointment at an outpatient clinic within 5 days of presentation without MCT involvement. While the researchers demonstrated that attendance rates for the intervention group were significantly higher there was no difference in symptomatic or functional outcomes. Differences in outcome may have been compromised by the fact that the Control group also received a therapeutic intervention. Expected clinical improvements for the intervention group within the 3-month follow up period may also have been unrealistic given that many were diagnosed with clinical depression.

Van Heeringen et al. (1995) tested a similar intervention with patients who declined standard follow up from an ED. A nurse made a home visit to those in the intervention
group who then assessed reasons for non-compliance and encouraged to attend follow up support. This approach had a positive impact on referral compliance and lower repetition of suicidal behaviour. Hvid and Wang (2009) achieved similar results when they evaluated a suicide prevention team model that provided assertive linkage and advocacy for “parasuiciders” post discharge. Similarly a rapid response outpatient model for adolescents (Greenfield et al 2002) demonstrated that similar clinical outcomes could be achieved. While these studies report generally positive results on a clinical level there has been limited consideration for the complex aetiology of suicidal behaviour when measuring the efficacy of these interventions. Quality of life or improvements in social and relationship aspects or drug and alcohol use have not been given due consideration.

1.10 Therapeutic Interventions after the ED presentation

The Assertive Linkage Service (ALS) clinician will endeavour to engage the client in completing an eco-map and to effectively consider the factors and relationships that are impacting in a positive or negative way. This process facilitates a dialogue between the practitioner and client seeking out “points of intervention” and helps prioritize referral options. The ALS clinician may subsequently employ motivational interviewing techniques to attend to any ambivalence the client has about follow up support. While the aim is to ‘hold the client’ until successful linkage with community based supports interim treatment modalities may also be employed given the potential time lag. These are likely to include problem solving and solution focused approaches. It is worth considering literature that examines the efficacy of each of these interventions both in the initial engagement process and in the context of self-harm and suicide prevention.

1.10.1 Eco-Map

There has been little research undertaken measuring the efficacy of the eco map in the context of therapy. A survey of counsellors who rated the utility of the eco-map in vocational counselling found that, for their purposes, the tools took too much time to administer and “were more appropriate for intensive therapeutic interventions “ (Goodluck 1991 pp1) The eco systems perspective is not generally perceived as a therapeutic model. It does however “ensure that the practitioner pays attention to
the multiple interacting elements that always present in a case, particularly in assessment.” (Mattaini 1998 pp.14)

Given that the eco-map is essentially considered to be an assessment tool it is appropriate to examine its utility as a complimentary antecedent to other assertive linkage interventions. This is particularly relevant when considering the problem solving and solution focused interventions. The use of an eco-map enables the client to reflect on the quality of their relationships with significant others as well as identify any other factors that are impacting on their lives in either a positive or negative way. It assists the client in identifying the present and potential resources both in their personal network and the local community. It is a visual representation that may assist him or her in “developing a better understanding of his or her own situation and ultimately reveals strategies for resolving the dilemma” (Brandell 2011 pp. 562). It also provides an important measurement tool for the both the client and practitioner in reviewing and tracking changes in the clients’ situation.

1.10.2 Motivational Interviewing

The recent ‘D2’ initiative in mental health services has meant that assessment of AOD conditions have become an integral part of the mental health examination. The assertive linkage clinician will have information about the extent to which alcohol and other drug use are contributing factors and where the client is at on the stages of change model. Whether the person is at the pre-contemplative, contemplative or determination stage there may be opportunities to employ motivational interviewing techniques during or after the completion of the eco-map. It will be clearly apparent if the client identifies drinking or drug use as having a positive or negative impact on their life. “Clients will be less defensive if drinking or drug use are discussed as part of exploration of other aspects of the clients history” or integrated into the psychosocial assessment. ...”This minimizes the possibility that the client may feel singled out or interrogated.” (Brandell 2011 p.562). The ALS intervention will occur during ‘a window of opportunity’ soon after a crisis presentation when there may be less resistance or ambivalence to change. Asking the client “why they would want to make a change and how they might do it rather than telling them they should,” (Rollnick & Miller 2008 p.9) could be a timely intervention.
A number of studies have focused on specific clinical interventions that are designed to enhance treatment engagement for those who have substance dependence issues. (In a cursory audit, 30% of those who were assessed by ECATT at Sunshine hospital identify substance misuse as a significant contributing factor to their crisis) (Pleban 2011) Motivational interviewing (MI) has been found to be effective in improving treatment engagement for substance abusers (Mcambridge & Strang 2004). Aubrey 1998 found MI to be especially valuable in treatment adherence whereas Brown and Miller (1993) found that treatment retention in a drug and alcohol outpatient unit was higher for adolescents who received a single session of motivational interviewing at intake.

Given the low help seeking rates (Gunnell & Bennewith 2002, Jauregi & Martinez 1999, Michlemore & Hindley 2012 ) for this cohort engaging those who have either self-harmed or experienced suicidal ideation in considering treatment becomes especially pertinent for the ALS clinician.

A significant component of the ALS intervention will also involve attending to any ambivalence the client has in regards to follow up treatment or indeed to life itself. While there are no known studies that have specifically examined the efficacy of motivational interviewing interventions in reducing suicidal behaviour it is considered to have worthwhile application. (Lizardi & Stanley 2010, Zerler 2009, Britton & Patrick 2011) ‘The development of a positive therapeutic relationship that recognizes ambivalence and provides support for engagement in further care are essential for safety planning and viable treatments for suicidality’ (Zerler H 2009 p1208).

Motivational interviewing is a client-centred method. Its fundamental principles include expressing empathy for the clients circumstance, ‘rolling with resistance’ rather than challenging the client, developing discrepancy between actual and desired behaviour and promoting a belief that change is possible; i.e “helping clients align with reasons for stopping harmful behaviour and seeking treatment” (Britton and Patrick 2011 pp.18). MI is based on the principles of self-determination theory that highlights the importance of autonomy competence and relatedness. The ALS clinician will endeavour to “hold” the client in the interim period between ED presentation and subsequent follow-up. In addressing any ambivalence for follow-up treatment the
clinician can utilize open-ended questions to respect autonomy, promote self-efficacy to recognize competence and use reflective listening to engender relatedness (Britton and Patrick 2011). In the context of the ALS intervention MI provides a logical antecedent to other follow up therapies such as cognitive behavioural therapy. “Because reasons for living and treatment engagement are critical to both MI and CBT approaches, clients who receive MI will also be oriented to CBT” (Britton & Patrick 2011 pp.19).

1.10.3 Psychological interventions

The ALS will be linking many to ongoing private psychological counselling via the Better Access pathway. The ALS clinician would endeavour to tailor the intervention and link the client with a practitioner whose practice approach would most compliment their needs so it will be important to examine the studies that have evaluated the efficacy of specific psychological interventions. A number of studies have demonstrated the efficacy of Cognitive Behavioural Therapy (CBT) in reducing suicide and self-harm attempts. In a seminal study Brown et al. (2005) evaluated a CBT intervention that aimed to address the ‘core beliefs’ that contributed to the suicide attempt and assist the client in developing more adaptive ways of coping. The sample consisted of 120 people and was deemed to have sufficient statistical power. Only those who harboured suicidal intent at the time of their attempt were eligible for the study. The treatment group received 10 follow up weekly sessions of CBT compared to the control which received treatment as usual. Participants in both groups were still referred to other community supports as required. The intervention was found to have effected a significant decrease in repeat attempts (24.1% Intervention compared to 41.6% Control) and the probability of no attempt in the 18 month follow up period being .78 for the intervention compared to .58 for the control group. Interestingly while there were no difference in suicidal ideation levels between groups at all time points there was a significant decrease in hopelessness for the intervention group. This apparent contradiction reflects the likelihood that those in the intervention group had learned more adaptive ways of coping with suicidal thoughts.

Rudd et al (2008) reviewed 60 clinical trials that targeted suicidality; 30 of these were cognitive behavioural interventions. In a subsequent review Rudd (2012) identified
nine trials, (which used subsequent suicide attempts as the main outcome measure) that were deemed particularly pertinent in providing a foundation for a brief cognitive behavioural therapy treatment model. Common elements of each of the nine study interventions were identified. These included the use of an “easy to understand model of suicidality” which could be easily explained to the patient in plain language, a focus on treatment compliance with clear plans on what to do if non-compliance emerges, the targeting of identifiable skills, ensuring patients take responsibility for treatment and use of a safety plan with easy access to crisis services. Three phases of a brief CBT model were subsequently identified – the first being ‘orientation’, which introduces self-management of emotional regulation skills. This phase involves introduction to the use of problem solving, mindfulness, cognitive appraisal and relaxation skills. The next two phases focus on skill development and mastery in the clients’ own environment. The clinician and patient develop a ‘survival kit’ that contains a crisis plan and ‘reasons for living’ coping card. A “commitment to treatment” agreement is also used which also incorporates a six-month “commitment to living agreement”

Townsend et al. (2001) report that brief problem solving therapy had effected an “improvement in scores for depression, hopelessness and improvement in problems” (Townsend et al. 2001 p.984) for those who had self-harmed. McLeavey & Daly (1994) targeted a more specific cohort of those who self-poisoned regardless of whether it was a self-harm or suicide attempt. The intervention consisted of “interpersonal problem solving and skills training” (IPSST) and was compared to brief problem solving approach that aimed to resolve current problems but did not involve skills training. While both approaches were effective in reducing the number of presenting problems and levels of hopelessness at the 6 month time point the IPSST approach effected significantly greater improvement in measures of interpersonal problem solving, perceived ability to cope with ongoing problems and self-rated personal problem solving ability.

Dialectical Behavioural Therapy (Linehan 1991) and Cognitive Analytic Therapy (Chanen et al. 2008) are other approaches that have been demonstrated to have positive effect with people who are diagnosed with borderline personality disorder and who engage in suicidal behaviours.
1.11 Contribution of Social Work research

Apart from the previously cited WASP study there are no studies that have evaluated social work specific suicide prevention interventions in the emergency department context. There is also a paucity of more general suicide prevention research.

A systematic review of social work research and suicide prevention conducted in 2008 found that the majority of studies were exploratory or descriptive in nature. Only ten out of 131 studies were random control trials. (Neidemeier 2008 p.512) There were no Australian based articles included in the review.

Some of the more pertinent descriptive studies explore the differences in the impact of risk and protective factors for men and women. Factors such as a history of sexual abuse, physical abuse, domestic violence and divorce have all, respectively, been found to have a positive correlation with increased suicide risk. Risk and protective factors appear to impact differently on men and women; while males have a higher rate of death by suicide females have a much higher rate of suicide attempts.

Other social work studies have qualified many of these correlations. For example while people with a history of sexual abuse have a significantly increased risk of suicidal ideation and attempts the relationship between suicidality and sexual abuse for women was “completely mediated by hopelessness depression and family dysfunction.” (Neidermeier 2008 p.512) Another 2003 study of homelessness and substance abusing veterans found that the relationship of sexual abuse and risk of suicide to be stronger for women compared to men. (Benda 2003 cited in Neidermeier 2008)

Other factors such as unemployment, (Fernquist2001, Pritchard 1990, 1992, 1995, Rodell et al. 2003 all cited in Neidermeier 512-515) history of mental illness and substance abuse have also been examined in social work research and found to be significant in increasing risk for suicidal ideation and suicide attempt. (Benda 2003, Wandrei, 1985 cited in Neidermeier 2008 pp. 512 - 515)

Control studies conducted by social work researchers have included evaluation of community education initiatives and educating professionals who work with suicidal and depressed clients (Deykin et al. 1986 cited in Neidermeier 2008). One of the more pertinent control studies reviewed by Neidermeier involved an evaluation of a group
therapy program for woman to improve self-esteem and increase social support. The intervention affected a decrease in depression levels; increase in self-esteem and in the ability to identify supports in times of stress or crisis. The improvements were maintained at a 5-year follow up. (Bagley & Young cited in Neidermeier 2008 p.517)

The overall conclusion of the Neidermeier review noted the dearth of rigorous control studies and highlighted the need for social work research to undertake studies that test interventions that can be replicated and used in evidence based practice. It recommended that prevention efforts be targeted towards older adolescents and young adults- particularly males, while suicide risk assessment and management should be focused on those who experience significant social stress such as divorce, unemployment or who have been incarcerated. (Neidermeier 2008 pp.519)

Studies not included in the Neidermeier review are mainly qualitative in nature. Gair and Camilleri (2003) conducted a small qualitative study into the help seeking behaviours of nine young people who had made a suicide attempt. The study found that young people are more likely to rely on peers and many experienced difficulty in identifying pathways to professional help. Main barriers identified were the young person’s concerns about potential confidentiality issues and in the case of males’ perceptions of traditional roles and expectations. The study recommended that the social worker be mindful of resourcing the young person and their families with information about depression and relevant community resources.

Other social work literature focuses on practice and working with specific cohorts of people who are at increased risk of suicide or self-harm. These cohorts include those who are diagnosed with personality disorder and depression. Gilzean (2011) highlighted the value of journal writing for the patient who self-harms. Many clients who use writing in therapy consider it a more effective way of communicating and believe it would engender a better understanding of their experience. Given the potential counter-transference issues involved in working with the self-injuring client the use of his medium could increase the likelihood of “less aversive’ responses on the part of the practitioner. It effectively promotes the ideal that ‘it is not so much the nature of the act that counts but its meaning’ (Chasseguet-Smirgel, 1990, p. 77). Similarly, Brown and Kimball (2013) conducted a qualitative study of the experience of
eleven people who had self-harmed. Their findings stressed the significance the clients attach to the role of self-harming behaviours and being treated in a non-judgmental way. Judgemental responses by practitioners tend to be counterproductive. These observations are particularly important to consider for the social worker who aims to engage this cohort in ongoing treatment.

Kondrat and Teater (2010) focus on the assessment process in the emergency department for those who present with suicidal ideation. Their article highlights an opportunity for the mental health practitioner to capitalize on the therapeutic alliance, to utilize a solution-focused approach and to attend to suicidal risk factors that are amenable to immediate therapeutic change. An integral part of the psychiatric assessment process involves identifying precipitating factors and gauging the level of hope for positive change. If client perception of the problem has not shifted at the time of assessment it is likely that ongoing risk remains. The opportunity to engage the client in identifying solutions and problem solving during the assessment can result in an improvement in levels of hope that make the difference for safe disposition to the community. “This type of client outcome is characterized by being able to formulate goals, identify exceptions or coping strategies, move in a positive direction on the scaling question related to self-harm and have an increase in hope” (Kondrat and Teater 2010, pp.11). While the authors acknowledge that no research studies have been conducted to test the efficacy of this approach, they do stress that timely post ED linkage to community-based supports will maximize the probability that the person remains a low risk. The assertive linkage clinician is in an ideal position to provide this follow-up and continue with a solution-focused framework.

Wharff, Ginnis and Ross (2012) measured the efficacy of a family based crisis intervention (FBCI) in the emergency department for suicidal young people. The intervention consisted of a single session with the family and patient and incorporated CBT, narrative and family systems and problem solving approaches. The goal of FBCI is “to effect changes that will reduce the acute symptoms that brought the adolescent to the ER and increase the family’s awareness of the problem and sense of efficacy to help their child” (Wharff et al. 2012 p.157) The intervention also consisted of follow
up assessments at one day, one week, two weeks, one month and three months. The purpose of the follow up assessments was to monitor progress and facilitate linkage to other supports if needed. Subsequent hospital admission rates for the intervention group (n= 67) were compared with a retrospective sample and found to be significantly lower (35% compared to 55%). While this intervention specifically targeted young suicidal people and combined a structured emergency department intervention with post ED follow up it incorporated many of the same therapeutic approaches and aims as that of the ALS intervention.

1.12 Conclusion
Many of the interventions examined in this review, are simple, cost effective and could be adopted as part of an Assertive Linkage model. While the bulk of study results are promising there are only a few with sufficient sample size that can make convincing claims. The main strategies that resonate from the literature are

- provision of early intervention post ED presentation,
- regular post ED contact with the client
- provision of encouragement and motivational interviewing
- recognition of subjective needs and unique precipitants
- timely tailored linkage to ongoing support and appropriate psychological counseling as required.

At this point of time there are no studies that have demonstrated the efficacy of an Assertive Linkage Service intervention model in a comparable environment using quality of life and client satisfaction measures. “The minimal approach of using regular visits, postal, or telephone contacts appears to be a promising low-cost intervention that is worthy of further investigation” (Daigle M & Pouliot 2011 p.62).
Chapter 2: Research Methodology

2.1 Study questions and aims

The aim of the study was to conceptualise a social work intervention that involved assertive follow-up, support and therapeutic linkage for those who presented to the Sunshine Hospital emergency department with deliberate self-harm and suicide ideation and attempt. This study will aim to contribute to Social work direct practice and knowledge.

2.2 Research Questions

- Does an assertive linkage intervention for clients presenting to the Sunshine Emergency Department with deliberate self-harm improve service access quality of life and client satisfaction?
- What are the demographic and clinical characteristics of patients who present to Sunshine ED after self-harm, suicide attempt or ideation?
- What kind of social work practice is needed to provide an effective assertive linkage service for those patients who present to Sunshine ED after self-harm, suicide attempt or ideation?

In addition the study aimed to

- Contribute to the knowledge about help seeking and service usage pre and post the emergency department presentation for suicidal and self-harming patients.
- Contribute to the knowledge about the impact of a targeted linkage intervention on the subsequent community based service usage, emergency department representation rates and quality of life outcomes for the suicidal and self-harm patients.

2.3 Design

This Masters study is nested in a larger funded Australian Research Council RCT study; Suicide Prevention in the Emergency Department (SPED), (Linkage Grant LP0668216), (Joubert, Harvey, Spittal, Jespersen, Cementon) that focused on the contribution of
psychosocial factors to deliberate self-harming behaviours. It is a program evaluation of an Assertive Linkage Service (ALS) social work intervention. The intervention was partially adapted from the community linkage model used by the Western Area Suicide Prevention (WASP) study (Barton, Jespersen and Joubert) which was funded by Commonwealth Suicide Strategy. Lynette Joubert decided on the use of eco-map assessment format and the form used in the study was developed by University of Melbourne biostatistician Associate Professor Graham Hawthorne and Nicole Hill. Randomisation procedure for recruitment to the study was designed in collaboration with Graham Hawthorne and subsequent data analysis was undertaken under his direction.

2.3.1 Sample
People who presented to the Sunshine emergency department with self-harm, suicidal attempt or ideation, were assessed by the Emergency Crisis Assessment Team and not subsequently referred on to formal mental health services were identified to be eligible for the study. The aim was to recruit 85 participants for both the ALS intervention and SPED control group. All eligible patients were included in the Phase 2 “diagnostic evaluation” part of the study.

Phase 1

2.3.2 Recruitment
Consent protocol (appendix 5) and documentation for participation in Assertive linkage service study was developed in conjunction with the SPED study. All people who present to the Sunshine hospital ED with mental health issues were initially assessed by an ED physician who subsequently referred the patient to the ECAT service if a more in depth risk assessment was required. The assessing ECAT clinician identified the patient as being eligible for the study if they were low to medium risk for self-harm and did not require follow up by a formal mental health service. The ECAT clinician provided the eligible patient with written and verbal information about the Assertive Linkage/ SPED study then requested their consent to receive subsequent contact from the ALS researcher, either directly in the ED or later by phone (depending on availability of the ALS researcher). The ALS
clinician made subsequent contact with those who consented providing an initial introduction and an explanation of the SPED/ALS study.

Hello my name is Alex Pleban; I am a research clinician who works with the ‘ECAT’ or mental health team at Sunshine Hospital Emergency Department. I am phoning because you presented at the emergency department on .......the ... and were assessed by the ECAT. I understand that the ECAT clinician informed you that I would be contacting.

A brief risk assessment was conducted by asking the client to rate their wellbeing compared to when they presented to the emergency department. If the risk had increased to a high level a referral was made to the appropriate Crisis Assessment and Treatment Service. If the risk level continued to be low or moderate the client was invited to participate in the study;

Do you have 10 minutes to answer a few questions?

If agreeable...

Firstly, could you tell me about how you are coping now compared to when you attended at the ED?

If the client rates no deterioration or an improvement in mental state then they will be invited to participate;

Pleased to hear, ...  

I would like to provide you with more information about the study we are undertaking at the Sunshine Hospital Emergency department. It’s called the Suicide Prevention in the Emergency department or SPED study. We are interested in finding out more about how you progress after your presentation at the emergency department. If you agree to participate you will be allocated to either one of two groups- one that receives the usual follow up service or one that receives a different kind of follow up. Our SPED researcher will also contact you to arrange an initial meeting at a time that is convenient for you. She will then continue to monitor your progress on three occasions over the next six months. Would you be interested in participating?
Figure 2.1: Recruitment Flowchart

**ED Presentation**
- Patient presents at Sunshine Hospital Emergency Department by either Ambulance, Police or self presentation with suicidal ideation, self harm or after suicide attempt.

**ED Triage**
- Triaged by Triage Nurse

**ED Assessment**
- Assessed by ED Physician - eligible for assessment by ECAT

**ECAT Assessment**
- Referral to ECAT

**ECAT Assessment**
- ECAT Assessment

**Eligibility**
- If assessed as low to medium risk and eligible for ALS study Information about SPED/ALS study provided by ECAT clinician patient consent obtained for follow up call from ALS research clinician

**Consent**
- Patients ID (bradmar label) placed in ALS diary to indicate referral

**Consent**
- Phone call to patient by ALS research clinician within 72 hours to obtain consent for participation in study

**Contact**
- If patient consents, then provide them with more information about subsequent allocation to either intervention or "service as usual" group. Patient informed that SPED researcher will contact within 48 hours

**Randomise**
- After consent provided randomisation procedure is carried out and patient is assigned to either control or intervention group. Those assigned to intervention group will be invited to ALS single session.
If the person provided verbal consent a randomisation procedure was undertaken to determine either allocation to the intervention or SPED control group. (The numbers between 1 and 400 were randomised to a table, using a computerised randomisation program. The first lot of 200 numbers were allocated to control envelopes and the second lot of two hundred numbers were allocated to the intervention envelopes. Each number was written on the outside of the envelope and a paper with the applicable ‘intervention’ or ‘control’ written on it placed inside the envelope. The envelopes were then arranged in numerical order and opened in order as participants consented to the study.

If the study participant was randomised into the intervention group further information was provided about the assertive linkage service and about the study protocol. If the patient was recruited via the phone an appointment time was subsequently arranged for the single session. The client was given the option of attending this appointment at the clinic or hospital. If they did not have access to transport or encounter other associated barriers a home visit was offered. If they were recruited directly in the ED they were invited to complete the single session during their ED stay. Participants allocated to the intervention group would meet with the ALS clinician and the SPED researcher at different times.

If the participant was randomised into the control group the research clinician would inform the participant about study protocol; i.e. that the SPED researcher would be in contact to arrange a time for a home visit or meeting at the hospital to enable completion of relevant questionnaires. Participants allocated to the intervention group would meet with the ALS clinician and the SPED researcher at different times.

Further information about the ALS was subsequently provided to those allocated to the intervention group and a time was arranged for the initial single session.

2.3.3 ALS Intervention
The ongoing assertive linkage service intervention included at least one phone call to each eligible patient post the baseline ED presentation to screen level of need and identify any ongoing risk factors. The ECAT clinician role was to

- Inform the patient of the ALS role
• Confirm contact details
• Arrange appointment time for follow up phone call (ALS diary)

The ALS clinician also ensured ongoing liaison with the treating GP, provided both verbal and written information on the patients presentation, the discharge plan as elucidated in the ECATs assessment and the ALS clinician role. The aim was to collaborate with the treating G.P to facilitate the pathway from the ED to other primary care providers such as private practitioners or relevant community based services.

2.3.4 Single Session

An initial single session was provided for the majority of clients. Those who were restricted for time or reluctant to meet were given the opportunity of only phone based follow up. The use of the eco-map (appendix 2) was an essential component of the ALS intervention during the study phase and provided an ideal structure for the initial single session. The eco-map:

• Enabled the service user to reflect on the quality of their relationships with significant others as well as identify any other factors which are impacting either positively or negatively on their lives.
• Assisted the client in identifying the present and potential resources both in their personal network and the local community.
• Provided a visual representation, which assists in; “developing a better understanding of their own situation and ultimately reveal strategies for resolving the dilemma” (Brandell p. 562)
• Provided an important measurement tool for the both the client and practitioner in reviewing and tracking changes in clients’ situation.

After completion of the eco-map, the ALS clinician reflected and summarised with the client. The ensuing process entailed solution focussed or problem solving approaches that aimed to assist the client in developing strategies and prioritise referral options. Information about community resources and referral pathways was provided and a plan of action developed. While the client was encouraged to take responsibility for self-referral the ALS clinician aimed to facilitate the process by providing referral
letters and other relevant assistance.

### 2.3.5 Phone based contact

Phone contact was then made with the client each week for the first four weeks of the follow up period. The clients’ progress was monitored by assessing changes in mental state and by performing a brief risk assessment during each call. A follow up eco-map was also completed at week one and four post baseline. Linkage progress was also monitored. If the client encountered any barriers to service access the ALS clinician would aim to offer assistance by advocating on their behalf. If the client became more ambivalent about accessing relevant community based services aspects of motivational interviewing were employed to assist in the process of considering options and the possible benefits of ongoing support.

### 2.3.6 Terminating ALS involvement

ALS contact lasted from four to six weeks and depended on complexity of client need. ALS involvement was terminated when the client was engaged with ongoing relevant community based services and supports. If the client chose not to seek out a community-based service and they remained a low to medium risk for self-harm or suicide ALS involvement was terminated after six weeks.

### Phase 2

#### 2.3.7 Program evaluation

This study was essentially a program evaluation of the newly established Assertive Linkage Service at the Sunshine Hospital Emergency Department. The initial phase of the study incorporated ‘diagnostic’ program evaluation, “to assess the extent and location of the problems that the program seeks to ameliorate as well as the target populations characteristics....“Given that there was no research precedent for this particular cohort at Sunshine Hospital ED it was important to initially examine the characteristics of the ALS client group; “evaluators may assess a programs target population in order to enhance program planning” (Rubin & Babbie 2011, p.337) Presentation rates, demographic information, diagnostic history and existing links to community based services were obtained by

- Clinical Data mining (CDM) from ECAT clinician Assessments,
• CDM from ALS assessments and case notes
• CDM from Hospital Administration Software Solutions-Emergency Department (HASS-ED) data

Analysis of Sunshine Hospital emergency department dataset (HASS) and ECATT Assessments were undertaken to identify;

• Pre-baseline ED representation rates for intervention, control and decline groups specifically related to mental health, deliberate self-harm, suicide attempt and suicidal ideation.
• Post baseline ED representation rates for intervention, control and decline groups specifically related to mental health, deliberate self-harm, suicide attempt and suicidal ideation.

Analysis of ECATT assessments for each of the 410 eligible patients was undertaken to identify and code demographics of age, gender, employment status, living situation, and relationship status. Nature of presentation was recorded; this included deliberate self-harm, suicidal ideation and suicide attempt. A needs profile including precipitating factors, previous diagnosis, treatment history, AOD history and level of community-based supports prior to the ED presentation was also documented on an excel spread sheet.

2.3.8 Goal attainment program evaluation

To determine whether the ALS had achieved the desired outcomes the goal attainment model of evaluation was utilised, “(this) refers to the goals and mission of the program…it attempts to assess causal connections between program efforts and indicators of program outcome”. (Rubin & Babbie 2011, p.329) What is considered an indicator of a beneficial outcome however depends on the viewpoint of the stakeholder. Stakeholders in the ALS study include the Mid-West Area Mental Health Service, the Sunshine Hospital Emergency Department and the ED patients who present after self-harm or suicidal behaviours. Other stakeholders include G.P’s and private practitioners. The measures used in this study were designed to reflect the interests of a broad range of stakeholders and include:

Measures collected by SPED researcher;
• Service Usage Questionnaire for intervention and (SPED) control group
• Australian quality of life (AQoL) survey for intervention and SPED control group
• Client Satisfaction survey
• Help seeking questionnaire

Measures collected by the ALS study clinician

• Intervention group linkage rates to community based services post the baseline presentation.
• Representation rates to the Sunshine ED post the baseline presentation for both intervention and control groups.

2.3.9 Measures

Analysis of the intervention group participant’s dataset was undertaken to measure:

• Uptake of Assertive Linkage Service, i.e. number of consumers who provided consent for follow up by the assertive linkage service.
• Contact with follow up service up until the six week post ED presentation time point. This will include visits to the G.P, private social work and psychologist practitioners, community health services, financial counselling, psychiatric disability rehabilitation support services,
• Resources required for the provision of the assertive linkage service, including direct contact time, number of phone calls, number of home visits and clinic visits, time used for written and verbal liaison with follow up services.

Information from this phase of data collection was tabled on a excel spreadsheet. A unique de-identified code was allocated to each participant in order of recruitment date and time.

In addition to these measures the study will also be able to access data from the SPED* study measures which include:

• Rating consumer and service provider satisfaction with the ALS. Provide a feedback mechanism for consumers of the ALS. (Appendix 9)
• Help seeking intentions at baseline ED presentation and at 6 weeks post baseline for both intervention and SPED control group.
• Australian Quality of Life (AQoL) measure at baseline and 6 weeks (Appendix 3)
• Service Usage Questionnaire. Measure level of community based service usage post the ED presentation for both the intervention and SPED control groups. (Appendix 4)

Service usage for the intervention group will also be measured by using a data from the SPED questionnaire together with an examination of ALS client data.

2.3.10 The ALS Social Work Intervention.
To further conceptualise the social work intervention used during the study the subsequent methodology involved a qualitative analysis of the ALS clinicians practice, this included;

• Undertaking a thematic analysis of ALS clinicians case notes
• Identifying 3 of the most common client groups who present to the ED and provide case vignettes that represent each of these groups. (The young person, AOD dependent patient, female patient)
• Examining the ALS clinician role, other than direct practice.

Common practice themes were identified and classified.

ALS intervention group data was also analysed to measure the range of resources required for the provision of the ALS service. This included direct contact time, number of phone calls, number of home visits to the participant and clinic visits by the participant, time used for written and verbal liaison with follow up services.

2.3.11 Data analysis
Information from this phase of data collection was tabled on an excel spread sheet. A unique de-identified code was allocated to each participant in order of recruitment date and time.
2.4 Ethical considerations
Those who have presented to the Sunshine Hospital emergency department with suicide attempt, suicidal ideation or deliberate self-harm, who were assessed by the Enhanced Crisis Assessment and Treatment Service and who were not subsequently referred on to a tertiary mental health service would meet criteria for the participation in the study.

Suicide research involving minimal care and intervention arms posed particular ethical concerns in a survey of Ethics Committee members (Lakeman & Fitzgerald 2009). It was considered to be particularly problematic given the risks involved. However methodology that compared a new intervention and ‘treatment as usual’ group was considered to be an ethical option if there is no reason to believe on the basis of existing knowledge that the new treatment is better. One is able to assume that the control group is not exposed to added risk.

Historically, treatment as usual for this cohort at Sunshine Hospital ED has not involved any further contact by the ECATT service post the ED presentation. The methodology employed in this study ensured that all participants received at least one follow up phone call within the 72-hour period after their presentation. A brief assessment was undertaken to ensure that risk factors did not increase. If the risk has increased to an unacceptable level the person was not deemed eligible for the study and was referred to an appropriate service such as a CAT team. Those allocated to the SPED control group received at least four follow up contacts in the six months post the baseline to complete measures. If the researcher had any concerns about clinical risk the client was be referred back to the mental health service for assessment. The ‘control’ or treatment as usual group therefore received an enhanced type of risk monitoring.

2.4.1 Human Ethics Approval
This ALS project was nested in the larger ARC study; Suicide Prevention Emergency Department (SPED). Both studies required contacting patients after a mental health related ED presentation, the accessing of patient data, speaking directly with patients, and eventually publishing research findings. The SPED study investigators were required to gain ethics approval from Melbourne Health and The University of
Melbourne. The Melbourne Health Mental Health Human Research & Ethics Committee was the primary committee required to provide approval, with the University being able to accept Melbourne Health approval due to association between the two organisations. Approval was provided on 30/09/2009 (HREC Number 2007.652) (Appendix 2)

2.5 Risk and benefits


Profound ethical considerations are inherent in any research that includes participants who have engaged in suicidal behaviour. The study methodology needs to ensure that there are no adverse consequences for a particularly vulnerable group. This study involved the participation of a cohort who would otherwise receive no ongoing follow up after their visit to the emergency department. Service as usual for this group involves provision of information to the patient and their families about community based resources and crisis phone numbers. The ECAT also liaises with the GP via a faxed summary of the patients’ presentation. The client receives no follow up beyond the ED stay.

In contrast the intervention being evaluated by the study ensured that each eligible patient was contacted after his or her stay in the emergency department. The clinical researcher who contacted the prospective participant was also able to conduct a risk assessment and if necessary make a referral to the CAT team. The clinical researcher attempted to contact the prospective participant on at least three occasions after their discharge to the ED. If they were unable to be contacted directly and confidentiality was not an issue, next of kin (as documented in the client file) were contacted. If contact was made and the person consented to participate they were
allocated to either control or intervention groups. The control group had subsequent contact with the SPED researcher on four more occasions to complete the suite of measures. If the SPED researcher was concerned about the participants’ safety at any time they informed the ALS clinician who was able to fast track a referral to the CAT Team.

The Sunshine Hospital ED also provides a service to paediatric patients. The eligible age range for the study was >15 years of age. The parents of any prospective participant aged between 15 and 18 years of age were involved in the consent process or informed if there were any adverse events.

While the control group received no formal clinical follow up the methodology effectively provided an enhanced level of monitoring compared to ‘service as usual’. The intervention group also received an enhanced service with ongoing contact and follow up.

While completion of measures may have involved the recalling of negative events there is no evidence that asking about suicide or suicide related behaviours increases the risk of suicidal ideation. (Dazzi et al. 2014). The researcher however needed to give careful consideration to the way the relationship with the study participant was terminated. “The relationship that develops between the researcher and participants brings with it additional ethical demands especially insofar as it can share some features of a therapeutic relationship” (Gibson, Benson & Brand 2012 p.19). Both the SPED researcher and the ALS clinician are qualified social workers who were able to provide the appropriate counselling when required and referred back to formal mental health services to provide the appropriate follow up as needed.

2.6 Voluntary participation

Participation in the research project was entirely voluntary; patients were given the option of declining to participate before or after providing verbal and written consent.

2.7 Informed consent, confidentiality and provision of results.

Study participants were clearly informed about the project and its purposes; respecting the participants’ involvement and experience was of main importance. All patient information collected was de-identified and remains confidential; information
collected was used for this research project only. All information collected is now stored in the Sunshine Hospital emergency Department, and once the Masters’ thesis component of this project is completed a copy will be placed in the Mid-West Area Mental Health Library. Information will be kept until the youngest participant is 25 years of age, as per Freedom of Information Act 1982 (Vic), and after this time will be destroyed. The only people who can access the information are the research team and the North West Mental Health and University of Melbourne Ethics Committees. The results of the project may be presented at conferences and published in professional journals.
Chapter 3 : RESULTS

3.1 Key findings

3.1.1 Characteristics of baseline ED presentation

1. 410 people who presented with suicidal ideation, self-harm attempt or suicide attempt were subsequently identified as being eligible to participate in the RCT study.
2. The proportion of patients who presented to the ED after hours was 70% while 73% were discharged between 5.00 pm and 9.00am.
3. Compared to the general population the fifteen to twenty-five year old age group is over represented in proportion to other age groups. 30% of the sample population is under 25 years of age. (Proportionate representation is 19%)

3.1.2 Help Seeking

4. The overwhelming majority of intervention participants were receptive to the offer of ALS support.
5. Those who had more complex needs were more likely to engage with formal support after their ED presentation.
6. Woman engaged more readily in active problem solving and in considering ongoing formal community-based support
7. While generally receptive to ALS contact young people were usually more ambivalent about connecting with ongoing formal community-based support.
8. 70% of those in the intervention group attended a community-based support other than their GP post their ED presentation.
9. While 87.5% of people nominated a follow up medical clinic only 58% could nominate a regular treating G.P.

3.1.3 Clients with AOD dependency

10. The proportion of those who were identified with drug and alcohol dependency is 32%, only 3.5% of this group were linked into a D&A service. Half of this cohort (52%) acknowledged some problems with their drug and alcohol use, while a
further 20% expressed commitment to change and 6% were actively taking steps.

11. The majority of the intervention participants with AOD dependency subsequently attended a formal community based support.

12. Study participation rates for those who presented involuntarily or in an intoxicated state were the same as for the overall sample population.

**3.1.4 Crisis Resolution**

13. The ALS intervention was an extension of the crisis intervention initiated by the ECAT clinician in the emergency department.

14. There were a significant number of intervention group participants who reported ongoing unresolved issues at the time of initial contact.

15. The ALS intervention was the only formal support for 20% of those in the intervention group. This group tended to report greater resolution of the issues that led to their index ED presentation and were satisfied with the help of friends and family.

16. Compared to other cohorts a greater majority of young people reported resolution of the issues that precipitated their index ED presentation at the time of initial ALS contact.

**3.1.5 ED Re-presentation rates**

17. There was a significant representation rate for the overall sample population with 25% representation rate for the non-intervention cohort (combined control and decline groups) during 12 months post baseline. Seventy-five per cent of those who represented did so with suicidal behaviour.

18. Some participants re-presented more than once after the baseline presentation.

A total of 250 representations for a sample of 329.

19. The ALS intervention made a statistically significant difference to representation rates for both individual re-presenters and overall representation numbers. There was a significant reduction in representations for those in the intervention group at the 6, 12 and 24-month time points. There was a 13.5% representation rate for the intervention sample compared to a 25% representation rate for the control group at the 12-month time point.
20. Re-presenters had a higher degree of complexity in the baseline presentation with an average of 3.3 identified precipitants compared to 2.5 for the overall sample. They were more likely to be male with a mental health diagnosis, drug and alcohol dependence and experiencing relationship conflict. The proportion of re-presenters who were linked with a community based support was 39% this was compared to 35% overall. More of this cohort arrived in an intoxicated state.

3.1.6 AQoL and Client satisfaction outcomes

21. A greater proportion of the intervention group reported an improvement in both the social and mental health domains of the Assessment of Quality of Life measure compared to the control group. The differences were significantly more pronounced in the social domain.

22. Client satisfaction with the ALS service was overwhelmingly positive.
3.2 Demographic Data

3.2.1 Recruitment of study participants

Those consumers who were assessed by ECAT after presenting at the Sunshine Hospital ED with self-harm, suicide attempt or suicidal ideation, who were subsequently deemed to be in the low to medium risk category and did not meet the criteria for formal follow up by a public mental health service were eligible to participate. Four hundred and ten people were eligible for the study during the 24-month recruitment phase from 05/10/2009 until 05/11/2011.

Figure 3.1 Consent status of study cohort

<table>
<thead>
<tr>
<th>Status</th>
<th>N=</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide verbal and written consent</td>
<td>135</td>
<td>37.00</td>
</tr>
<tr>
<td>Verbal consent provided then withdrew</td>
<td>124</td>
<td>29.00</td>
</tr>
<tr>
<td>Decline</td>
<td>74</td>
<td>14.00</td>
</tr>
<tr>
<td>Unable to contact</td>
<td>44</td>
<td>12.00</td>
</tr>
<tr>
<td>High risk: Referred to centralized Triage</td>
<td>7</td>
<td>1.60</td>
</tr>
<tr>
<td>Withdrew after verbal and written consent</td>
<td>4</td>
<td>1.30</td>
</tr>
<tr>
<td>Safety concerns</td>
<td>6</td>
<td>1.30</td>
</tr>
<tr>
<td>Completed suicide</td>
<td>2</td>
<td>.48</td>
</tr>
<tr>
<td>Not competent</td>
<td>2</td>
<td>.48</td>
</tr>
<tr>
<td>Subsequently req. interpreter*</td>
<td>1</td>
<td>.24</td>
</tr>
<tr>
<td>Moved Out of Area</td>
<td>11</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>410</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*Interpreters were not available for use during the course of the study. People who required an interpreter were not eligible for the study*

Of all eligible patients 263 or 64% initially provided verbal consent for participation, 124 of this group (47.1%) subsequently withdrew from the study before providing written consent. While 38% of the total cohort provided verbal and written consent 1% (4) of this group withdrew during the course of the study. The remaining 37.00% of eligible patients participated in the study. The participation rate was comparable to other relevant studies (Rudd & Joiner 1995, Wilson & Deane 2010) and possibly reflected the low help seeking rates for this cohort. Of those who were randomised to the intervention group 64% subsequently provided written consent and participated in the study, this was compared with 46% in the control group.
Figure 3.2 ALS Study: recruitment flowchart

410 Low to medium risk patients eligible for study

Invitation to participate either by direct contact in ED or phone call post ED

74 Decline

44 Unable to contact
11 Moved Out of Area

7 High Risk
Refer to CATT

263 or (64%) Provided Verbal consent

6 Worker safety concerns

2 Not competent
1 req. interpreter

2 Completed suicide before contact was made

Randomisation

134 Control
Verbal Consent

129 Intervention
Verbal Consent

72 Withdraw after verbal consent
3 After verbal & written consent

59 Verbal and written consent
CONTROL GROUP

52 Withdraw after verbal consent
1 After verbal & written consent

76 Verbal and written consent
INTERVENTION GROUP
3.2.2 Age and Gender

Most demographic fields were comparable for both intervention and non-intervention groups but there were some notable differences in regards to age and gender.

Figure 3.3 Age and Gender of study cohort

<table>
<thead>
<tr>
<th>Age %</th>
<th>Eligible= 410</th>
<th>Control = 59</th>
<th>Interv’n = 76</th>
<th>*Decline= 198</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;24=30</td>
<td>&gt;24=70</td>
<td>&lt;24=35</td>
<td>&gt;24=65</td>
<td>&lt;24=22</td>
</tr>
<tr>
<td>&gt;24=78</td>
<td>M=38</td>
<td>F=62</td>
<td>M=28</td>
<td>F=72</td>
</tr>
<tr>
<td>&gt;24=67</td>
<td>M=45</td>
<td>F=55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Decline denotes all those who declined initial invitation to participate in study and all of those who subsequently withdrew after verbal/written consent

The 15-24 year old age group comprised 30% of the sample and was proportionally over-represented compared to the Brimbank population. (14.1%) (ABS 2014) While there was an under representation of men and young people in the intervention group the differences were not statistically significant, reflecting the randomized nature of the samples. Of all eligible patients 75% reside within the Mid-West Area Mental Health Service catchment zone while a significant proportion reside out of area.

3.2.3 Occupation

Of the 410 patients who were eligible for the study 262 people identified a specific occupation and 43% of people were employed. One quarter of this sample is unemployed and a further 10 per cent are in receipt of disability allowance. Financial stressors are identified as the main precipitant for at least 15% of the sample population.

Figure 3.4 Occupation profile of study cohort

<table>
<thead>
<tr>
<th>Occupation</th>
<th>N=</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community and Personal Services</td>
<td>68</td>
<td>26</td>
</tr>
<tr>
<td>Trade workers</td>
<td>41</td>
<td>15</td>
</tr>
<tr>
<td>Professionals</td>
<td>41</td>
<td>15</td>
</tr>
<tr>
<td>Sales Workers</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td>Labourers</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>Machinery Operators and Drivers</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Clerical and Administration</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Managers</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>262</td>
<td>100</td>
</tr>
</tbody>
</table>
3.2.4 Country of Birth

Overall 29% of people in the study sample were born overseas. A greater proportion of those in the SPED control group were born overseas.

Figure 3.5 Birth countries of study participants

<table>
<thead>
<tr>
<th>Country of Birth</th>
<th>Intervention</th>
<th>SPED Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>52</td>
<td>38</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

3.2.5 Living situation

Most people in the sample population lived with family, which, depending on the family dynamic could either increase or minimise the patients post discharge risk profile. Relationship and family conflict are a precipitant for 37% of presentations in this sample population. Conversely 15% of the overall sample lived alone, which for many in this cohort is a post discharge risk factor. (Judd 2006, Bille-Brahe & Jensen 2004, De Leo 1998) For the group who are dependent on alcohol and even more vulnerable 22% lived alone (5 % of overall sample) Frequency of ALS contact was adjusted to provide an appropriate level of monitoring and support according to associated risk. The initial eco-map was used to help assess the quality of relationships in the clients living environment and the strength of their support networks.

Figure 3.6 Living situation of study sample

<table>
<thead>
<tr>
<th>Lives with</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/ partner</td>
<td>46</td>
</tr>
<tr>
<td>With Parents</td>
<td>25</td>
</tr>
<tr>
<td>Alone</td>
<td>12</td>
</tr>
<tr>
<td>Single Parent</td>
<td>9</td>
</tr>
<tr>
<td>Friends</td>
<td>5</td>
</tr>
<tr>
<td>Homeless</td>
<td>3</td>
</tr>
</tbody>
</table>
3.3 CHARACTERISTICS OF ED PRESENTATION

3.3.1 Mode of ED presentation

Of the overall sample 46% arrived by ambulance, 8.7% self-presented, 13.0% presented with friends and family and 33% were brought into the emergency department involuntarily with police under Section 10 of the Mental Health Act. Of this latter group 35% were intoxicated. Being brought into an emergency department by police is often a traumatic experience. Patients are more likely to be distressed and unco-operative. They are held in the ED involuntarily until a mental health assessment is carried out. Given the context a lower proportion of this cohort could be expected to consent to subsequent participation in the study or to ALS follow up. This however does not seem to be the case. Of this group 35% provided verbal and written consent for involvement in the study, equal to the average consent rate of the whole sample population. Of the intervention cohort 35% were involuntary presentations.

Figure 3.7 Mode of presentation.

<table>
<thead>
<tr>
<th>Mode of presentation</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAS</td>
<td>195</td>
<td>47.5</td>
</tr>
<tr>
<td>Police</td>
<td>126</td>
<td>30.7</td>
</tr>
<tr>
<td>Family and Friends</td>
<td>54</td>
<td>13.1</td>
</tr>
<tr>
<td>Self</td>
<td>35</td>
<td>8.7</td>
</tr>
<tr>
<td>Total</td>
<td>410</td>
<td>100.0</td>
</tr>
</tbody>
</table>

3.3.2 Alcohol and Other Drugs

Of the total study sample 33% were identified as being drug or alcohol dependent, 26% of this group or 36/136 identified use of more than one substance. Only 3.5% of those with substance dependence were linked into an AOD service before their ED presentation. Of this cohort 52% acknowledged some problems with their substance use, while a further 20% expressed commitment to changing their use and 6% were actively taking steps. According to much of the relevant literature those who present to the ED in an intoxicated state with ongoing AOD dependence are more likely to complete suicide after discharge from an ED and present a particular risk for ongoing follow up
(Yoshimasu & Kiyohara, 2008; Lester, 2008; Beutrais & Collings et al., 2005). Of the 35% (142/410) who presented in an intoxicated state 69% were identified as being drug and alcohol dependent.

**Figure 3.8 AOD dependent cohort: type of use**

For those who are dependent on more than one substance most are using a combination of alcohol and cannabis.

The ECATT clinician is required to complete a drug and alcohol assessment (D2 assessment) for each person who is substance dependent. There were 59 D2 assessments completed for the 136 patients in this cohort. At least 26% of this sample was assessed to be considering change or were actively taking steps to reduce or cease substance use. This suggests opportunities for timely interventions such as motivational interviewing or referral to D&A agencies.

**Figure 3.9 AOD dependent cohort: motivational stage.**

<table>
<thead>
<tr>
<th>Motivational Stage</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not considering change</td>
<td>20.7</td>
</tr>
<tr>
<td>Acknowledges some problem with use</td>
<td>52.8</td>
</tr>
<tr>
<td>Commitment to change</td>
<td>20.7</td>
</tr>
<tr>
<td>Actively taking steps</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**3.3.3 Time of ECAT Assessment**

Of the overall sample 20% of patients are discharged between 9-5 Monday to Friday while 80% are assessed after hours. These findings emphasised the importance of the ECATT clinicians’ role in initiating the linkage process in the ALS clinicians absence and
while the patient was in the ED. This included informing the client of the ALS clinicians’ role, obtaining correct client contact details, arranging contact time and providing a discharge plan. During the study period the ALS clinician was able to meet prospective participants in the ED on only 7.5% of occasions. For the overwhelming majority the initial engagement process took place on the phone. Given the importance of timely engagement it was important for the ALS clinician to make the first phone call within the 72 hour period after the ED presentation and for the sake of continuity identify themselves as part of the ECAT service by referring to the name of the ECATT clinician who made the initial assessment.

3.3.4 Self injury and stated intent
Eligibility for the study was determined by the patients stated intent as documented in the ECATT assessment. Identifying the nature of intent is an integral part of the risk assessment and is always documented. The ECAT clinician would usually ask a question such as “what did you expect to happen after you took the tablets?’ or ask a more direct question-“Did you intend to suicide?” These questions may elicit the responses like “I wanted to escape for a while”, “I just saw the tablets and took them without thinking” or “I wanted to die and not wake up”. On occasions patients had left a note before their suicide attempt stating their intentions.

Of those who were eligible for the study 45.5% had engaged in deliberate self-harm, 12% had attempted suicide and 40% voiced suicidal ideation before their baseline ED presentation. While this ratio is to be expected for low to medium risk patients a significant one out of eight of the cohort had suicidal intent at the time of their attempt. A history of a suicide attempt is a major risk factor for both repeated non-fatal suicidal behaviour and suicide “approximately 1% of individuals who attempt suicide repeat their suicidal behaviour with a fatal outcome within one year after the initial attempt.”(Australian Government, Department of Health and Ageing 2007 p.66)

While self-harm is usually distinguished from suicidal behaviours individuals who engage in this type of behaviour are more likely to make repeat attempts and are also at a higher risk of suicide (Hawton et al 2003). These findings emphasise the unpredictable nature of clinical risk and the need for ongoing monitoring. A further
analysis of the self-harm or suicide attempt methods employed by those in the study
cohort will shed more light on this.

**Figure 3.10 Suicidal behaviour: Stated intent at ED presentation.**

<table>
<thead>
<tr>
<th>Reason for presentation</th>
<th>N=</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Harm</td>
<td>192</td>
<td>46.7</td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>168</td>
<td>40.8</td>
</tr>
<tr>
<td>Suicide Attempt</td>
<td>50</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>410</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**3.3.5 Method employed in self harm /suicide attempt**

Some of those who presented to the ED after deliberate self-harm had employed
more than one method. The most common method of self-harm was overdose of
prescribed medication (73%), cutting was the next most common method (23%) while
standing in traffic was the third most common with 5%. For the group that made
suicidal attempts an overdose was also the most common method. Of all suicide
attempters 10% used hanging as a method. Hanging is the most lethal form of
attempt and out of all of the methods it is the strongest indicator for future
completed suicide. Miller & Hempstead 2013 found that 54% of those who attempt to
suicide by hanging go on to complete suicide. By the same token a significant one out
of eight people who attempt suicide by self-poisoning complete suicide at a later date.
(Miller & Hempstead 2013).

This risk profile has obvious practice ramifications for the ALS clinician. While those in
the ALS cohort are considered safe to return home after their ED presentation
longitudinal risks remain. ECAT clinicians are thorough in their assessments and
consider collateral information from significant others to corroborate the patients
protective factors. Nevertheless many “low risk” patients ultimately return to their
usual living environment with its inherent unpredictability and associated triggers for
repeat crisis. During this study there were some who remained exposed to pre-
existing stressors and who lapsed into maladaptive coping styles and risk for repeating
self-harm. During the course of their intervention the ALS clinician needed to assess any changes in the patients’ outlook or environment and if needed provide timely support to help mitigate any risk.

**Figure 3.11 Suicide/Self Harm cohort: method of attempt**

<table>
<thead>
<tr>
<th>Self harm/Suicide attempt Method</th>
<th>N=</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdose</td>
<td>177</td>
<td>73</td>
</tr>
<tr>
<td>Cutting</td>
<td>56</td>
<td>23</td>
</tr>
<tr>
<td>Traffic</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Poisoning</td>
<td>9</td>
<td>1.5</td>
</tr>
<tr>
<td>Hanging</td>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td>Gassing</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td>Bridge</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Suffocation</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Train Tracks</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Building</td>
<td>1</td>
<td>0.25</td>
</tr>
</tbody>
</table>

*can be multiple

**3.3.6 Precipitant to ED presentation**

This profile reflected a likely complexity in regards to ongoing service requirements with each client averaging 2-3 precipitants. Main contributing factors to ED presentations as identified on the ECAT assessment revealed a strong situational component in the majority of presentations. The ALS study found that 55% of those who presented identified either family discord, relationship loss or relationship conflict as one of a number of main contributing factors. The significant majority (65%) of this cohort had a pre-existing mental illness as diagnosed by a GP or mental health professional while 56% had a diagnosed mental illness that was identified as a main contributing factor to their baseline ED presentation. The multiplicity of precipitants across the cohort reinforces the importance of the ALS brokerage role and being client centred. The ALS clinician will need to maintain both a broad knowledge of community resources and build relationships with key agencies.

**3.3.7 Previous Diagnosis**

Of the overall sample population 65% of people have a previous diagnosis of a mental health related disorder as diagnosed by G.P or mental health professional and over 50% were using related medications. There were 68.7% in SPED Control and 72.2% in the intervention group. Depression and anxiety were the most prevalent disorders.
with drug and alcohol dependence being another significant contributing factor. While only 8% had a pre-existing personality disorder diagnosis there were many who were identified by ECAT as having “emerging personality disorder”.

### Figure 3.12 Precipitating event/s for ED presentation

<table>
<thead>
<tr>
<th><em>Precipitant</em></th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Diagnosis</td>
<td>232</td>
</tr>
<tr>
<td>Drug and Alcohol</td>
<td>110</td>
</tr>
<tr>
<td>Relationship Loss</td>
<td>96</td>
</tr>
<tr>
<td>Anxiety/Panic</td>
<td>91</td>
</tr>
<tr>
<td>Relationship conflict</td>
<td>91</td>
</tr>
<tr>
<td>Grief</td>
<td>80</td>
</tr>
<tr>
<td>Family conflict</td>
<td>64</td>
</tr>
<tr>
<td>Finances</td>
<td>57</td>
</tr>
<tr>
<td>Job Loss</td>
<td>37</td>
</tr>
<tr>
<td>Domestic Violence</td>
<td>20</td>
</tr>
<tr>
<td>Accommodation</td>
<td>15</td>
</tr>
<tr>
<td>Custody Issues</td>
<td>15</td>
</tr>
</tbody>
</table>

*Client can identify more than one contributing factor

### Figure 3.13 Diagnostic profile of study cohort

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>N=</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>106</td>
<td>26.0</td>
</tr>
<tr>
<td>Depression &amp; Alcohol dependence</td>
<td>55</td>
<td>13.5</td>
</tr>
<tr>
<td>Personality disorder</td>
<td>34</td>
<td>8.0</td>
</tr>
<tr>
<td>Depression/anxiety</td>
<td>33</td>
<td>8.0</td>
</tr>
<tr>
<td>Anxiety</td>
<td>15</td>
<td>4.0</td>
</tr>
<tr>
<td>D&amp;A Dependence</td>
<td>9</td>
<td>2.0</td>
</tr>
<tr>
<td>BPAD</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>PTSD</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Chronic Pain</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>No Diagnosis</td>
<td>132</td>
<td>35.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>410</td>
<td>100.0</td>
</tr>
</tbody>
</table>

#### 3.3.8 Previous mental health related ED presentations:

A significant proportion of those who were eligible for the study had at least one prior mental health related presentation to the Sunshine Hospital ED.

Intervention and control groups had comparable numbers of people who had had multiple presentations prior to their baseline ED presentation. Of those who participated in the study 43.7% have had at least 1 previous mental health related presentation to Sunshine ED while 17% had 3 or more previous presentations. Of the overall sample of 410 people, 12% (N=49) had more than three previous mental health related presentations, of these 25% presented within the week previous to the baseline presentation, 34% were within the last 6 weeks and 69% were within the last 6 months.
Figure 3.14 Number of previous mental health related presentations to SHED for total ALS study sample (n=410).

<table>
<thead>
<tr>
<th>No. of previous presentations</th>
<th>N=</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>113</td>
<td>113</td>
</tr>
<tr>
<td>2</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>54</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>167</strong></td>
<td><strong>275</strong></td>
</tr>
</tbody>
</table>

Figure 3.15: Number of previous mental health presentations to SHED; comparison Intervention and Control groups

<table>
<thead>
<tr>
<th>No. of previous ED presentations</th>
<th>No. of people</th>
<th>Total prev. Pres’n</th>
<th>No. of previous ED presentations</th>
<th>No. of people</th>
<th>Total Prev. Pres’n</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5</td>
<td>15</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>12</td>
<td>4</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>6</td>
<td>9</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>7</td>
<td>20</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>63</strong></td>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>63</strong></td>
</tr>
</tbody>
</table>

3.3.9 Length of ED admission

The average length of stay in the ED at baseline presentation for the overall study sample was 6.4 hours; this increased to 7.3 hours for those who were intoxicated or who had taken an overdose. The national target for the ED length of stay is 4 hours. (Emergency Care Institute, NSW 2014) After medical clearance the aim is to complete a mental health assessment and formulate a discharge plan for all of those who present to the ED within this time frame. There is consequently considerable time pressure on the ECAT clinician who often accepts referrals with only a fraction of the 4 hours remaining.

Figure 3.16 ED Length of stay by category

<table>
<thead>
<tr>
<th>Patient category</th>
<th>Under 4 hours</th>
<th>Average hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>33%</td>
<td>6.4</td>
</tr>
<tr>
<td>Intoxicated</td>
<td>27%</td>
<td>7.3</td>
</tr>
<tr>
<td>OD</td>
<td>18%</td>
<td>7.3</td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>40%</td>
<td>5.6</td>
</tr>
</tbody>
</table>
3.3.10 ECATT recommendations for follow-up care:

The ECATT clinician makes recommendations for follow up care as part of each assessment. The majority of recommendations were for linkage to a private psychologist or social worker via a GP referral to the ATAPS Better Access scheme. The second most common recommendation was for follow up by the patients existing service provider (usual care) and third most common was referral to a drug and alcohol service. This would include recommendations for AOD counselling and detox admissions. Detox unit beds would not usually be readily available at the time of the patients ED presentation so patients requiring detox would be usually discharged home to await a vacancy.

Figure 3.17 ECATT recommendations for follow up care

<table>
<thead>
<tr>
<th>ECATT recommendation</th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist</td>
<td>115</td>
</tr>
<tr>
<td>Usual Care</td>
<td>68</td>
</tr>
<tr>
<td>D&amp;A service</td>
<td>58</td>
</tr>
<tr>
<td>Headspace</td>
<td>40</td>
</tr>
<tr>
<td>GP</td>
<td>30</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>16</td>
</tr>
<tr>
<td>Relationship Australia</td>
<td>16</td>
</tr>
<tr>
<td>Other Counsellor</td>
<td>7</td>
</tr>
<tr>
<td>CASA</td>
<td>2</td>
</tr>
</tbody>
</table>

3.4 HELP SEEKING

Help seeking intentions were also measured at both baseline and at six-week post baseline by the SPED study. There was a significant difference between intervention and control group on this measure although these figures need to be treated with some caution given the dropout rates for completing measures at the six-week mark. Of those in the intervention group 75% stated their intention to seek help at baseline and at the 6-week mark. It is important to note that 12 out of 16 participants who initially indicated that they would not seek formal help at baseline subsequently indicated that they would do so at the six-week measure. This is compared to the SPED control group where only one out of the 19 people who indicated that they would not seek help in baseline subsequently stated that they intended to seek formal help at six weeks. (3 people who indicated that they were not help seeking at baseline did not complete the six-week measure). These figures represent a notable difference
and suggest that the ALS intervention had a positive impact on overall help seeking intentions for the intervention group after their emergency department presentation.

3.4.1 Linkage pre ED presentation

The ALS clinician surveyed ECAT assessments to determine pre-baseline linkage rates for both intervention and control groups. Of the overall study sample 147/410 or 35.6% had pre-existing links to support. There was however, a marked difference in pre-existing linkage rates between intervention and non-intervention groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>% Already linked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>38.0</td>
</tr>
<tr>
<td>SPED Control</td>
<td>48.0</td>
</tr>
<tr>
<td>Decline</td>
<td>35.0</td>
</tr>
</tbody>
</table>

Figure 3.18 Proportion of study cohort linked to formal support before ED presentation

Having a pre-existing link to a service may have negated the perceived need for many for ongoing referral or linkage to an alternate service. For the cohort in the control group who did have existing links only 6% were subsequently linked into another service, this was compared to 10% in the intervention group. A significantly larger proportion of those in the intervention with no links subsequently attended a follow up support service compared to the same group in the control cohort. There was a 17% increase in linkage rates for those in the intervention who had no pre-existing links.

For those who had a formal diagnosis 53% were not linked with a primary care provider apart from their G.P while 28% had more than one link: 4 patients had 3 links and 19 patients had 2 links. Of those who declined to be involved in the study during recruitment phase 35% were already linked while 40% of those who withdrew after initially being allocated to the intervention group also had pre-existing links. A common reason for declining was the perception that the study would create a competing demand or may conflict with existing therapy. Some people perceived involvement in the study as potentially counterproductive to their recovery.
Figure 3.19 Linkage pre baseline ED presentation by type of service

<table>
<thead>
<tr>
<th>Linkage pre-baseline ED presentation (n=410)</th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist</td>
<td>73</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>55</td>
</tr>
<tr>
<td>Other Counsellor*</td>
<td>29</td>
</tr>
<tr>
<td>D&amp;A service</td>
<td>14</td>
</tr>
<tr>
<td>Relationship Australia</td>
<td>2</td>
</tr>
<tr>
<td>Norwood Association</td>
<td>2</td>
</tr>
<tr>
<td>Western Region Outreach Service</td>
<td>2</td>
</tr>
<tr>
<td>CASA</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>180</td>
</tr>
</tbody>
</table>

*Other denotes: School Counsellor, TAC, Centrelink case manager, Mental Health Care Nurse at GP clinic, Maternal Health Nurse.

Of those who were already linked to a formal support 55% presented with self-harm, 13% presented with suicide attempt and 32% presented with suicidal ideation.

**3.4.2 Linkage post ED presentation**

Timely linkage to ongoing formal supports after an episode of self-harm or suicide attempt or ideation is considered to be an important first step in helping to protect the person from a repeat episode. (Beautrais, 2010). It is critical that the client is engaged in the linkage process as soon as possible after their ED presentation. While linkage provides no guarantee of preventing a repeat episode an increase in relevant support and opportunity for problem solving will presumably go some way in alleviating the crisis thereby reducing the chance of repeat suicidal behaviours. A vital aspect of the ALS clinician role was to facilitate client engagement with follow up services and to work with any ambivalence around help seeking.

The ALS study had access to two sources of data relating to linkage rates post the baseline presentation. The Service Usage Questionnaire (SUQ) was collected for both the intervention and control groups, each participant was required to identify the types of community-based services they attended in the previous six weeks at baseline and at six weeks post baseline presentation. The other source was the post baseline linkage data that was collected for each of the intervention group participants by the ALS clinician.
3.4.3 GP attendance

The significant majority of those in the intervention group attended their GP in the four-week period after their ED presentation; only 5 of those in the intervention group did not attend. Of those 3 were young people who preferred to rely on informal supports and the other 2 clients capacity to attend was compromised by alcohol dependency.

3.4.4 Linkage to other community based services

According to the SPED Service Usage Questionnaire (SUQ) data there was not a significant difference in comparative service usage for control and intervention groups at the six weeks post the baseline presentation. Of the intervention group 60% had attended a follow-up community-based service compared to 55% of the control group at the six-week post baseline time point. However, when considering pre-baseline service usage data a more accurate measure of post baseline linkage rates was obtained. As stated previously, there was a marked difference in the pre baseline service usage rates between the two cohorts. Of the intervention group, 33% had pre-existing links to a community-based service compared to 48% of the control group. If these figures were used as a baseline measure the change in the percentage of control group participants using a community-based service was + 6% while the change in the intervention group was an increase of 22%. Given this more nuanced perspective there is evidence to suggest that the assertive linkage intervention made a positive impact on post ED linkage rates.

The ALS clinician tracked the overall attendance or linkage rate for the ALS intervention group. According to this data there was a 70% attendance rate at community based services post the baseline ED attendance with an average linkage time of 3.5 weeks. The ALS clinician also continued to monitor and work with many of the intervention clients beyond the six-week time point. According to ALS records at least three other participants who were not captured at the SUQ six-week measure were linked into a service during the intervention period. Many participants had also attended a follow-up service by the time the baseline SUQ measures were taken but were not subsequently captured at the six-week time point. There were 32 participants in the intervention group who indicated that they had recently used a
community-based service at the SUQ baseline measure. Of these, 8 were not available at the six week SUQ measure, 4 of whom did not have pre-existing links to community-based services.

While the intervention group service usage rate was higher it is worth examining why 30% of this cohort was still not linked with a formal support at the 6-week mark.

Figure 3.20 Attendance at formal support post baseline ED presentation; ALS intervention group

<table>
<thead>
<tr>
<th>Referred to</th>
<th>Psychologist</th>
<th>Psychiatrist</th>
<th>Headspace</th>
<th>CHS</th>
<th>D&amp;A</th>
<th>Relp. Aust</th>
<th>Family Support</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>36</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Attended</td>
<td>30</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Time (weeks)</td>
<td>3.5</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Linked b4 ED</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Did Not Attend</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

*‘Other referrals’ included 3 people to Financial Counselling, 2 people to a Legal Service, 2 people to Grief Counselling and 1 person to an Aboriginal welfare service.

Of those in the intervention group 23 clients had indicated that they did not attend a service at the six weeks post baseline presentation. The ALS clinician was not able to complete the linkage intervention with 4 people who were un-contactable. 4 people who identified situational factors as the main precipitant to their presentation subsequently stated that their problem had been resolved and did not perceive the need for ongoing formal support. Another group of 4 had drawn on supports from informal networks including one person who had found new accommodation with a friend and had removed himself from the main source of stress. One person was unable to attend a follow up service due to recovering from a broken ankle and was not able to ambulate. One young person decided not to attend the follow up agency after her appointment had been cancelled on two occasions. Another waited six weeks for an appointment with a private psychiatrist for a medication review before having to re-present at the ED after her mental state deteriorated. The ALS was subsequently able to negotiate limited access to the CATT consultant psychiatrist for other clients in similar situations to expedite medication reviews. A notable number of 6 clients indicated that they were still help seeking at the six-week time point.
3.5 SHED REPRESENTATION RATES

3.5.1 Comparison of intervention and non-intervention groups

There was a noticeable difference between the intervention and non-intervention (control and decline) groups for mental health related ED representation rates, this being particularly apparent in the ALS intervention period. In the four-week post baseline period, 15% of the non-intervention group represented compared with 2.7% of the intervention group. The intervention group continued to have less than half the representation rates at each of the 6 week, 3 month, 6 month and 12 month time points suggesting that the intervention was instrumental in reducing ED presentation rates.

The importance of regular monitoring within a 4-6 week intervention period is highlighted when one considers the profile of those who represent. Of the intervention cohort 8 were already engaged with a follow up service at time of their re-presentation and 5 were awaiting first appointment. While there were 4 who were not linked at the time of their re-presentation 3 had pending appointments.

Figure 3.21 SHED representation rates comparison between Control and Intervention

<table>
<thead>
<tr>
<th>Post Baseline</th>
<th>1 week</th>
<th>4 week</th>
<th>6 week</th>
<th>3 month</th>
<th>6 mth</th>
<th>1 year</th>
<th>2 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Baseline</td>
<td>1 week</td>
<td>4 week</td>
<td>6 week</td>
<td>3 month</td>
<td>6 mth</td>
<td>1 year</td>
<td>2 year</td>
</tr>
<tr>
<td>n=</td>
<td>2</td>
<td>9</td>
<td>11</td>
<td>14</td>
<td>19</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>%</td>
<td>3.3</td>
<td>15.0</td>
<td>18.6</td>
<td>23.7</td>
<td>32</td>
<td>34</td>
<td>37.6</td>
</tr>
<tr>
<td>n=</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0</td>
<td>2.6</td>
<td>9.2</td>
<td>10.5</td>
<td>13.1</td>
<td>19.7</td>
<td>23.6</td>
</tr>
</tbody>
</table>

3.5.2 Non-intervention group representation rates:

The non-intervention group included all the patients in the study sample apart from those in the intervention group. Interestingly this group had a lower representation rate compared to that of the SPED control group. One may speculate that those who consented to participate in the study had more complex needs, were more inclined to seek help and were more likely to use the SHED as a support option.
Figure 3.22 Re-presentation rates for non-intervention cohort.

<table>
<thead>
<tr>
<th>Post baseline</th>
<th>1 week</th>
<th>4 week</th>
<th>6 week</th>
<th>3 mth</th>
<th>6 mth</th>
<th>1 year</th>
<th>2 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=</td>
<td>14</td>
<td>31</td>
<td>36</td>
<td>45</td>
<td>65</td>
<td>86</td>
<td>95</td>
</tr>
<tr>
<td>%</td>
<td>4.0</td>
<td>9.0</td>
<td>10.4</td>
<td>13.0</td>
<td>19.0</td>
<td>25.0*</td>
<td>28.0*</td>
</tr>
</tbody>
</table>

* "Non-Intervention" denotes all those in the Control group and those who declined to participate in study.

3.5.3 Profile of re-presenters

Of the overall eligible sample population 115 people represented.

There was an average of 3.3 identified precipitants for this group compared to 2.5 for overall sample at the baseline presentation suggesting a higher complexity of need. Of all those who represent 39% already had links with a community based support, this was compared to 35% for the overall sample. A more common profile was substance dependent men who had a mental health diagnosis and had experienced relationship conflict or breakdown.

Figure 3.23 Profile of those who re-present

<table>
<thead>
<tr>
<th>Variable</th>
<th>Re-presenters %</th>
<th>Overall %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance Dependence</td>
<td>50</td>
<td>32</td>
</tr>
<tr>
<td>Relationship conflict</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>Mental health diagnosis</td>
<td>75</td>
<td>50</td>
</tr>
<tr>
<td>Male</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Suicidal ideation</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Using psychotropic Medication</td>
<td>55</td>
<td>49</td>
</tr>
<tr>
<td>BIB Police/Involuntary</td>
<td>37</td>
<td>30</td>
</tr>
<tr>
<td>Employed</td>
<td>37</td>
<td>43</td>
</tr>
</tbody>
</table>

3.5.4 Reason for representation:

Representation data for the overall cohort revealed a concerning rate of repetition of self-harm and suicidal ideation. Of those who represent to SHED 72% do so because of self-harm or suicidal ideation, 25% were admitted to a mental health unit after re-presentation, another 5% were referred to a CAT Team and 5% admitted to a medical ward after serious overdose. The ALS was instrumental in redirecting many higher risk patients to the North West Mental Health centralised triage at initial contact and was evidently performing an important role in risk monitoring and management.
Figure 3.24 Reason for re-presentation: comparison between intervention and control group

<table>
<thead>
<tr>
<th>Reason for re-presentation</th>
<th>Intervention</th>
<th>Control</th>
<th>Control/Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdose</td>
<td>6</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Self-Laceration</td>
<td>-</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Poisoning</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>4</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Intoxication</td>
<td>2</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Anxiety</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>BPAD</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>25</td>
<td>85</td>
</tr>
</tbody>
</table>

26% of people presented with suicidal ideation and 41% presenting due to actual self-harm.

3.5.5 Disposition of those who re-present to the SHED

49% of representations in the non-intervention group (12% of whole sample) were within 3 months of baseline presentation. Of these the majority (54%) were either admitted to a psychiatric unit, referred to a CAT Team for follow up or admitted to a medical ward.

Figure 3.25: Disposition of the cohort who re-presented to SHED

<table>
<thead>
<tr>
<th>Disposition</th>
<th>N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>18</td>
</tr>
<tr>
<td>Psychiatric Unit</td>
<td>17</td>
</tr>
<tr>
<td>CATT</td>
<td>3</td>
</tr>
<tr>
<td>Medical Ward</td>
<td>1</td>
</tr>
</tbody>
</table>

3.5.6 Those who have multiple SHED representations

Of the 76 people who received the ALS intervention 18 re-presented to the Sunshine Hospital emergency department. This equated to an 18.5 % representation rate over 24-month period. Of those 18, 3 had 2 presentations. If multiple presentations were included there were a total of 21 representations for the cohort of 76 people, which equates to a .27 representation rate per head of sample population.

Of the 329 people in the non-intervention cohort, 93 or 26% re-presented to the ED within the 24-month post baseline period. If multiple re-presentations are included there were a total of 281 re-presentations, which equates to a .80 representation rate per head of sample population. Of those who re-presented there were 49 who represented more than once and 41 presented within the 2-month period of baseline.
This is equal to one out of every eight people representing to the SHED within 2 months. Of the 41 who presented within the 2 months of the baseline 22 required either an admission to a mental health ward or referral to a CAT team. One person in this cohort completed suicide. Out of the overall group of 93 who re-presented 26.8% re-presented within two weeks of their baseline presentation.

Of post baseline frequent presenters 17/45 or 38% had minimal ED contact pre-baseline suggesting that many in the ALS cohort may be experiencing emerging symptoms of mental illness or psycho-social stress. There are consequent opportunities for early intervention that could prevent further deterioration and repeat ED presentations.

### Figure 3.26 Number of re-presentations: comparison of intervention and non-intervention groups.

<table>
<thead>
<tr>
<th></th>
<th>&gt;1 re-presn</th>
<th>0-1re-presn</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>3</td>
<td>78</td>
<td>81</td>
</tr>
<tr>
<td>Non-Intervention</td>
<td>49</td>
<td>280</td>
<td>329</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>358</td>
<td>410</td>
</tr>
</tbody>
</table>

### Figure 3.27 Post baseline multiple SHED re-presenters: previous mental health ED presentation.

<table>
<thead>
<tr>
<th>N=Post Baseline presentations</th>
<th>N=number of people</th>
<th>0 presentations pre baseline</th>
<th>1 presentation pre baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>19</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>31</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>122</strong></td>
<td><strong>45</strong></td>
<td><strong>9</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

### 3.6 ASSESSMENT OF QUALITY OF LIFE MEASURES

Of the 61 who completed the AQoL measure in the ALS intervention group 54 (90%) reported an overall improvement in functioning with scores decreasing by an average of 2.67. This compares with the SPED control group where 29/50 (60%) participants reported overall improvement at an average of 1.37. The intervention group made
greatest improvements in the social and mental health domains.

Figure 3.28 Quality of Life Measure change in Social Domain score comparison between Intervention and Control group

<table>
<thead>
<tr>
<th>Change in AQoL Social Domain score</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=</td>
<td>%</td>
<td>Average change*</td>
</tr>
<tr>
<td>Improve</td>
<td>37</td>
<td>61</td>
</tr>
<tr>
<td>Worse</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Same</td>
<td>21</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100</td>
</tr>
</tbody>
</table>

Almost twice as many intervention participants made improvements in the social domain compared to that of the SPED control group. The average change in AQoL social domain score for those who did improve was slightly higher in the SPED control compared to that of the intervention group. However, only 5% of people in the intervention group reported deterioration in this domain compared to 24% of those in the control group.

Figure 3.29 Quality of Life Measure change in Mental Health domain score comparison between intervention and control group

<table>
<thead>
<tr>
<th>Change in AQoL Mental health domain score</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=</td>
<td>%</td>
<td>Average Change</td>
</tr>
<tr>
<td>Improve</td>
<td>45</td>
<td>74</td>
</tr>
<tr>
<td>Worse</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Same</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100</td>
</tr>
</tbody>
</table>

Similarly for the mental health domain there were a greater percentage of people who reported an improvement in the intervention group compared to that of the SPED control group although the difference was not as pronounced. Only 8% more of the intervention group reported an improvement in mental health while the difference in average change was 0.17 between both groups. Of those in the intervention group only 3% of people reported deterioration compared to 14% of those in the SPED control group.
3.7 ALS Social Work practice

3.7.1 Thematic analysis of notes and eco-maps

For those still in crisis navigating a pathway to the relevant community based service was often problematic. While it was important for the ALS clinician to promote the patients self-efficacy and encourage them to take as much initiative as possible, their capacity to plan and organise was frequently compromised.

The ALS intervention was essentially a continuation of the crisis intervention, which began, in the emergency department with the ECAT clinician. “Providing assistance in locating and accessing additional resources will potentially enhance the likelihood of crisis resolution”. (Roberts, AR 1990 pp213) The ALS clinician aimed to further engage the client in the initial single session with the aim of:

- examining the dimensions of the problem (eco-map)
- encouraging exploration of feelings and emotions
- exploring and assess past coping strategies
- identifying person strengths and available resources (eco-map)
- generating and exploring alternative and specific solutions
- implementing an action plan

While the aim of the intervention was to facilitate linkage and engagement with a community-based service, for some, the availability of informal supports and assistance with problem solving was perceived as sufficient in itself. It was important for the ALS clinician to be person centred and attentive to the perceived needs of the client. The following analysis of the ALS clinicians practice focused on three distinct cohorts.

- Women, who were more likely to engage and follow through with attending a follow up service after their index ED presentation
- Young people who were less likely to engage and follow through with attending a community-based service after their index ED presentation.
- Men with AOD dependency who were less likely to be able to follow through with the ECAT recommendations.

Two groups from each of these cohorts were examined and compared; those who were subsequently engaged and linked to a follow up service other than a GP and
those who were not. Emerging themes from this analysis included, client perception of need, whether the client was help seeking in a formal or informal way and the nature and stage of crisis at the time of ALS engagement. A case vignette for each group will also assist in shedding light on the nature of the ALS clinicians practice during the study.

3.7.2 Engaging young people

A 2009 study found that young people become more reluctant to seek help as their levels of depression and suicidal ideation increased, “the likelihood of help seeking appears to be inversely related to the level of depressive symptoms” (Wilson & Deane 2009 p.292). There were 18 young people who presented in the control group 16 of whom rated positive on the mini depression scale (SPED measure). Of this group 12 indicated that they did not need to seek formal help at either the baseline or 6-week mark. Of the 17 young people who were allocated to the intervention group 13 rated positive on the MINI depression scale. Of this group of 13, 4 indicated that they did not perceive the need for formal support at baseline measure while 9 indicated that they did. Similarly at the six-week time point 10 young people in the intervention cohort indicated that they were help seeking. 3 young people in the intervention cohort who indicated an intention to seek help at baseline were not available to complete measures at 6 weeks while 3 young people who response was negative at baseline were help seeking at the six-week time point.

Most young people in the intervention group were receptive both to the initial and ongoing contact of the ALS clinician. Out of the 19 young people 2 believed that their crises had resolved and were ambivalent about the need for formal support. While the overwhelming majority rated an improvement in their situation since their ED presentation they also acknowledged a need to address unresolved issues. There were 2 who were still in a state of crisis at the time of initial contact, one of whom was directed to re-attend the ED for an assessment and subsequent inpatient admission. Relationship loss and family conflict figured prominently for 14/19 while cultural factors also played a significant role for 7 of this group. Examples of cultural issues included young people transgressing cultural norms within the family, (4) and three woman students of Indian descent with limited supports who experienced
relationship loss. The latter group were particularly difficult to engage in the ongoing linkage process partly due to their work and study commitments.

Ultimately 10 young people were not linked to formal supports by the end of ALS intervention. Of these, 6 stated that informal support networks were instrumental in helping to resolve their crisis. All except one had reported a significant degree of crisis resolution. This profile might reflect the young person’s tendency have an extreme but short-term reaction to situational factors “…a heightened sense of vulnerability, interpreting stressful events as having monumental importance” (Jacobsen & Gould 2008 pp.138). It may also reflect the nature of non-suicidal self-injurious behaviour as a coping mechanism that provides a sense of temporary relief for many in this cohort. There is also the possibility that the young person did not perceive the self-injurious behaviour as problematic and therefore did not recognise the need for formal help.

The 7 young people in the intervention group who accessed formal support during the study tended to have a more complex needs profile. While relationship issues figured prominently there were other multilayered factors such as pre-existing mental illness and AOD issues. The majority of this group tended to be help seeking from the outset and while their stressors were of a more persistent nature most reported a general sense of improvement when ALS involvement terminated.

The potential opportunities for prevention were highlighted by the fact that of those young people who did not access or perceive the need for formal support 5 represented to the ED, 3 within 6 weeks of their baseline presentation. The ALS was the only contact this group had with a follow up service so at the very least the ALS clinician had an important part to play in monitoring risk, providing psycho-education and to assist in problem solving. Providing practical assistance such as a supporting letter for a Centrelink benefit application, was often enough to make a difference in the young person’s outlook.

**3.7.3 Women over 25 years of age**

Woman over 25 years of age made up over 50% of the intervention cohort. Relationship conflict with spouse or conflict with other family members was a significant contributing factor for 61% of this group with 83% having an underlying diagnosed mental illness and 60% using psychotropic medication. The overwhelming
majority of women were receptive to ALS involvement and 75% were receptive to seeking out ongoing formal supports.

There were 14 who were not initially help seeking and for the most part did not access ongoing formal help. The factors for non-engagement were diverse; two women had experienced temporary separation from a significant other. The judgement of one the women was compromised by ongoing alcohol dependence and her situation resolved within a week when her son returned from his stay in a detox facility. The other was preoccupied with concerns for her partners’ welfare while he was serving a custodial sentence and didn’t see the value in accessing supportive counselling or in exploring alternate strategies to cope with his absence. She was however linked to a prisoner advocacy service that was able to make enquiries on her behalf and allay some of her anxieties. The ALS continued to provide ongoing monitoring and supportive counselling for the 4-week intervention period to both women. Four other women who were not help seeking felt that support from informal networks was sufficient, one whose mother travelled from Fiji to be with her.

Six women believed that their crisis had sufficiently resolved and were mindful of other commitments like work and study; they tended to perceive their ED presentation as an aberration to normal coping. There were 2 women who were alcohol dependent and led chaotic lifestyles, they were difficult to contact and their functioning and judgement was often compromised. They were essentially pre-contemplative in regards to changing their substance use. The ALS maintained ongoing contact to continue to provide information on a variety of support options and monitor risk of further self-harm.

Apart from the previously mentioned fourteen women there were two others who experienced ongoing acute anxiety and agoraphobia. One was referred to a local private psychologist but was ultimately unable to attend due to her agoraphobic symptoms. The ALS developed an alliance with the client’s family by providing psycho-education. They expressed a willingness to provide assistance to the client in attending future appointments. Two other women also had a pre-existing Borderline Personality Disorder diagnosis. They tended to externalise the ‘locus of control’ and were consequently more difficult to engage in active problem solving.

Of the 22 women who were initially receptive to the prospect of formal support 19
attended a follow up service during the ALS intervention period. Most of this group also reported unresolved stressors associated with the crisis that led to their ED presentation and were generally receptive to the initial single session and the ongoing ALS intervention. While 8 of these women had pre-existing links to formal supports some were not well engaged. If the client were amenable, the ALS clinician would assist in re-establishing the link or facilitate a referral to an alternate service provider. There were also occasions when the client was ambivalent about the value of their existing support. If they had only attended for one or two sessions the ALS clinician initiated a discussion about the nature of the therapeutic process and encouraged the client to commit to a few more sessions to allow maximum opportunity for engagement. The ALS clinician would re-frame the experience of those who were more adamant about disengaging as ‘part of the process’ of finding the right therapist and if the client was agreeable offered assistance to facilitate linkage to an alternate service.

The case vignette included in Appendix 8 was an example of a woman who did not have any pre-existing formal supports. It serves as a valuable illustration of the eclectic nature of an assertive linkage intervention that involved ongoing risk assessment, use of ecologically based frameworks and an integration of cognitive and behavioural methods.

3.7.4 Men with AOD dependency
Of the 22 men in the intervention group 10 (45%) were identified as having an AOD dependence, this compares with 60/143 (42%) for the overall sample population of men. Most of the AOD dependent men in the intervention group had a diagnosed alcohol dependence (7) while 1 had amphetamine dependence and 2 had a combination of alcohol and cannabis dependence. Contrary to expectations the majority of these men were receptive to receiving the ALS service and 8 indicated that they were help seeking.

Of the 10 men in this group four could be considered to be in an acute phase of crisis at the time of initial ALS contact. While they were not actively suicidal these men harboured a concerning level of hopelessness and a strong perception that their
situation had only improved marginally since before their ED presentation. One of these men was discharged from an inpatient admission the week before the index ED presentation and had represented after running his car off the road in an intoxicated state. He had multiple psychosocial stressors including substantial financial issues, unresolved legal matters and impending loss of his licence and his job. He also identified significant relationship stress with his wife. He and his family had also recently moved to an outer suburb to minimise rental costs.

A home visit was arranged for the day after the initial ALS call to meet with *Leo and his wife. The primary objective for the ALS clinician was to undertake an initial risk assessment, to ensure that sufficient protective factors were at play and that he was able to engage in developing a safety plan. While he expressed a sense of being overwhelmed (“I've got all these overdue bills, there’s debt collectors on the phone every day and don’t know whether I will have a job next week”)... he was also amenable to engaging in problem solving and was goal directed. His wife and children continued to be protective factors.

The use of the eco-map helped to identify the most pressing matters and prioritise steps in the action plan. It was vital to take immediate concrete steps that would promote a sense of hope and change. It was also important to promote self-efficacy and to “nourish the clients innate capacity to make good choices to deal with bad feelings” (Zerler 2008 pp.177) While a referral was made to the local community service financial counsellor and legal service the ALS clinician assisted in writing a letter to the utility companies advocating for consideration of ‘hardship provision’ and a realistic payment plan. Leo had attended his GP who had commenced him on medication that would reduce his cravings. The ALS liaised with the GP during the home visit to inform him of treatment recommendations and request the provision of a mental-health care plan (MHCP) and a referral to a psychologist who specialised in addiction. Subsequent contact with Leo was over the phone to monitor risk and progress. Leo ultimately attended the financial counsellor, sought treatment for alcohol dependence with his GP and had attended two sessions with the psychologist when ALS involvement was terminated.
There were 3 other men in this group who had pre-existing links to formal supports however two were referred to additional programs like the Men’s Shed and the Personal Helpers and Mentors Program to maximise opportunities to enhance their informal networks. Of the 10 men who were alcohol dependent 1 did not attend a community-based service. One perceived his condition as purely situational and he “just wanted time to get over it.” He had a supportive family who was able to offer increased support preferring to attend to re-establishing his building business and seek out legal advice in regard to a property matter after a relationship break down. Only 2 of the clients in this group accessed and attended a specialised AOD agency. Both were contemplative of reducing their substance use so motivational interviewing techniques were used to encourage the clients’ participation in treatment planning, in considering further care and in developing a safety plan.

### 3.7.5 Findings from ALS practice

The case examples in appendix 8 reflect the application of an advanced type of social work practice. The Assertive Linkage Service is essentially an intermediary service with the clinician acting as a kind of ‘go-between’. As a social worker it places the clinician in a unique position. While there are opportunities to initiate valuable interventions there is also a requirement to maintain clear boundaries and expectations around the limitations of the linkage role. If the scope of the role is made clear from the outset there is still the potential to initiate early intervention strategies that may have a longer-term preventative impact. The clinician also needed to provide continuity in care and ensure ongoing liaison with the clients G.P and private practitioner.

In the case of Lena the clinical staging model (Hetrick et al 2008) provided a useful framework in identifying the most relevant approaches to use at the different points of the depression/anxiety illness continuum. The social work clinician utilized a host of different brief interventions accordingly.

Suys’ case study highlights the importance of the ALS clinicians’ role in working with a young persons’ ambivalence. Suys’ mental state continued to be fragile and he exhibited a level of indifference to the future. While there were no immediate concerns for his safety his outlook had not changed significantly compared to when he presented to the emergency department. While Suys’ ambivalence about ongoing
formal support was not unusual for someone of his age the ALS clinician believed that it was important that he was afforded the opportunity of engaging with a therapist to mitigate risk and optimise his mid to long term prospects. The clinician also had to consider his parents’ concerns and their ambivalence about the nature of treatment options. They were uneasy about the prospect of medication. It was important to engage them in a discussion about their apprehension, provide reassurance, information and psycho-education.

Cultural factors were also at play. Suys GP was part of the local Sri Lankan community and his parents were concerned about confidentiality. They wanted him to attend another GP who was recommended by a trusted friend. The ALS clinician facilitated this process by liaising with the GP by phone and fax to convey relevant information. The GP provided Suy with a mental health care plan and recommended follow up at WMheadspace. Given the nature of his condition the ALS also liaised with WMheadspace and advocated a priority referral. He was subsequently linked to their mental health outreach nurse who was able to make a home visit within 48 hours and facilitate further engagement.

Robs case highlighted the value of maintaining frequent contact with clients who presented with alcohol dependence and suicidal ideation; principally to mitigate risk and to remain engaged with someone who was committed to change. A detox bed was not available for Rob at the time of his ED discharge so the ALS clinician needed to monitor him closely and to advocate on his behalf when his risk of self-harm increased. ALS advised him to represent at the ED a week after his initial presentation and was in a position to negotiate an alternate pathway to a medical detox bed via the SHED. The ALS clinician assisted in triaging Rob at the emergency department and advocated for a detox bed while he was an ED patient. The ‘assertive’ component of the ALS is particularly apparent in this case (Refer appendix 8). If Rob was discharged without ALS support he would not have had ready access to the support and monitoring that was required in his changing circumstances.

The value of ongoing client engagement and risk assessment coupled with the use of brief interventions such as motivational interviewing were certainly illustrated in the
case examples. ALS practice also included the judicious use of advocacy and working in partnership with key service providers.

3.7.6 Value of the eco map

The client experience of completing the eco-map (Appendix 7) with the ALS clinician was generally positive. Most people valued the opportunity of reflecting on the quality of their relationships. They were also responsive to the process of identifying the precipitants associated with their presentation and exploring the resources options available to them. Most were able to understand the concept of rating each positive or negative relationship/factor on a scale of one to four (with one being weak and four severe). For most participants the process prompted much thought and careful consideration;

The ALS clinician introduction-

*I would like to request your help in completing this “eco-map” diagram. An eco map is a diagram that captures all of the positive and negative factors that are at play in your life. I am interested to hear more about these so I will ask you identify the positive and negative factors and to rate each one of these with a score out of four - with one out of four being a weak negative or positive and four out of four being a strong negative or positive*

*How does that sound?...

“So these factors could include ones that led you to presenting at the emergency department but also about anything positive like supportive relationships with family, friends or services. This process will help us learn more about you and your circumstances and the most appropriate services that could assist you.

*We will write your name in the centre circle- the other circles represent the other people or factors. So to begin, what is the most positive relationship that you have in your life at the moment?”*

The challenge for the ALS clinician was to maintain structure and focus during many of the sessions. Many appreciated the time and opportunity to talk and wanted to provide a detailed account of their situation. It was important to set the parameters
early in the session with an explanation of the eco-map and what sort of structure the single session would have. Many clients commented on the value of having a “complete picture with all the positives and negatives” Some people commented on the value of having a more balanced picture of their situation “…helped me think differently about things” Clients were given the option of keeping a copy, some accepted the offer and one client asked for a copy of the eco-map to place on her fridge.

Clients who were more difficult to engage in the process were usually more distracted or preoccupied with a problem or pressing matter. It was important to spend time actively listening or problem solving before moving on to completing the eco-map. This practice also provided an opportunity to start filling in the eco-map albeit in a less structured fashion. The ALS clinician would make the client aware of the purpose of the eco-map and that he would be making brief notes as the session progressed.

3.8 Client Satisfaction

60 intervention group participants responded to the satisfaction questionnaire. Client satisfaction with the ALS clinician was generally very high across the five measurement domains.

Participants were also invited to provide their own comments or opinions on the quality of the ALS service. (Appendix 9) Of the intervention participants 61 completed the questionnaire and 37 of these also provided accompanying comments. The nature of these comments was generally favourable. The most common themes revolved around an appreciation of receiving a call after the ED presentation, feeling supported or experiencing a sense comfort. This was followed closely by expressing gratitude about the linkage aspect of the intervention and in “providing direction” Other themes included, “not being judged”, being understood and the general sense of being helped. There were three participants who provided more qualified comments, one related to the value of talking therapy “helpful but what is the point of just talking, need to see change not just talk about it” The other two expressed the belief that their presentation to the ED was a misunderstanding and one stated “not sure if I needed it, I’m OK, nice to get a call though”
<table>
<thead>
<tr>
<th>Measure of Satisfaction</th>
<th>Average Rating out of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Support</td>
<td>4.68</td>
</tr>
<tr>
<td>With Assistance</td>
<td>4.55</td>
</tr>
<tr>
<td>With Counselling</td>
<td>4.48</td>
</tr>
<tr>
<td>With Linkage</td>
<td>4.45</td>
</tr>
<tr>
<td>Feels better as a result</td>
<td>4.45</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>4.7</td>
</tr>
</tbody>
</table>
Chapter 4.0 Discussion

This thesis has examined the characteristics of a sample population of those who present to the Sunshine Hospital Emergency Department (SHED) following self-harm, suicide attempt or suicidal ideation and who were subsequently considered to be low to medium risk for suicide. It also evaluated the impact of an assertive linkage intervention by comparing the outcomes of the Assertive Linkage Service (ALS) intervention group to a ‘service as usual’ group. These findings were combined with analysis of case studies to help provide insights into the needs profile of the sample population and into the aspects of ALS social work practice that made a meaningful difference. The questions that need to be asked are what ramifications the findings have and what are the future practice implications for the ALS clinician? Descriptive analysis of Emergency Department (ED) presentation and re-presentation data, quality of life and service usage data provide a critical context that will help define the future parameters of the ALS clinician’s role and the design of the intervention model.

4.1 Limitations of the study

- The ALS intervention follow up was six weeks duration so there was limited opportunity to measure the level of subsequent engagement with community-based services. The level of engagement with a formal support is an important variable that could potentially have a significant impact on client outcomes in the medium to longer term.

- Patients who required interpreters were not eligible for study inclusion. This excluded an important cohort who would be more likely to experience barriers to community-based service access.

- The researcher was only able to monitor representations at the SHED site and through self-reporting of research participants. Some of the study sample population may have had unreported presentations at other Melbourne ED sites so emergency department representation rates may be higher than reported in this study.
• Repeat self-harm or suicide attempt may be greater than reported in the study findings given that some who engaged in these behaviours may not have subsequently sought out assistance at the SHED.

4.2 ALS study outcomes

The outcomes will be discussed in the context of each of the ALS study stakeholders, these being Mid-West Area Mental Health Service (MWAMHS), the Sunshine Hospital Emergency Department and the ED patients who presented after self-harm or suicidal behaviours.

4.2.1 Mid West Area Mental Health Service Outcomes

The MWAMHS ECATT aims to ensure the safe disposition of all those who present to the ED with mental health issues. Prior to the establishment of the ALS, ECAT clinicians had the choice of either referring those who were a higher suicide risk to the CATT team or to admit them to an inpatient facility. There were limited options, however, for those who were considered to be in the low to medium risk group. ECAT clinicians are acutely aware of the unpredictable nature of ongoing risk and need to confirm that the patient’s outlook has improved and adequate protective factors are at play to enable safe discharge home. Usual practice is to provide patients with information about resources and encourage follow up attendance at relevant community based services. The assumption in this approach is that the client will maintain an adequate level of self-efficacy after their discharge from ED. In contrast, the assumption underlying the ALS model is that the clients’ capacity to act on recommendations will fluctuate and that they would likely benefit from ongoing monitoring and support with linkage. The validity of this hypothesis was reinforced in the findings of this study and in the findings of other studies that pointed to the low help seeking rates (Gunnell et al. 2002, Jauregi et al. 1999, Michlemore & Hindley 2012) and high repeat suicidal behaviours (Hawton et al. 2003, Kapur et al. 2005) for this cohort. During the course of the ALS study many of the study participants remained vulnerable to ongoing stressors, stressors that ultimately impaired their ability to seek out supports. Some of them required referral to the CATT at the time of the initial post ED phone contact (2%). As a consequence the ALS clinician became particularly aware of the importance of the monitoring role and attentive to the factors that could have an ongoing impact on the clients’ mental health.
The ALS study has therefore provided the ECAT with an important clinical context as well as an invaluable needs and risk profile. Of the overall sample of 410 people, 12% (N=49) had more than three previous mental health related presentations, of these 25% were within the week previous to the baseline presentation, 34% were within the last 6 weeks and 69% were within the last 6 months. These findings are consistent with findings of existing suicide prevention literature (Gairin House & Owens 2003, Kapur et al. 2005, Hawton & Zahl 2003, Coghlan et al. 2001). Of those who made a suicide attempt in the study period 70% had a history of self-harm, suicidal ideation or suicide attempt and 49% had a previous mental health related presentation to ED. Of those who attempted suicide, 10% (n=8 or 1.5% of study sample) used hanging as a method. Runeson et al. (2010) found that a high proportion of those who attempt to hang themselves go on to complete suicide and out of all of the methods it is the strongest indicator for future completed suicide. The same study also found that a significant 12.5 % of people who attempt suicide by self-poisoning subsequently complete suicide at a later date. Applying this ratio to the ALS study would translate to 40 people or 10% of the study sample population. So while the entire ALS cohort is deemed to be low to medium risk at the time of ED discharge there is evidence to suggest that in the medium to long-term almost 12% of the cohort remains at considerable risk. This risk profile has clear practice ramifications and highlights importance of client engagement with continuing and meaningful support after the ED presentation. In the short term the ALS clinician will need to monitor the impact of any ongoing stressors and aim to mitigate risk by providing ensuing support in a timely and relevant way. The magnitudes of ongoing risk for repeat self-harm or suicide attempts were also reinforced in the ED representation data.

There were 65/344 people in the non-intervention* group who re-presented within six months of their baseline presentation. Of these, 55% represented within the first six weeks, mostly after repeat self-harm or suicidal ideation (70%). This also reflected the findings of much of the relevant literature; that the weeks following discharge from an ED are recognized as a particularly high-risk period for further self-harm (Coghlan et al 2001, Kapur & Cooper 2005, Hawton, Zahl & Weatherall 2003, Gairin & House 2003). The risk profile is higher than what was anticipated. One out of every five patients in this cohort re-present to the ED within 3 months of their index

* All of the sample population apart from the intervention group.
presentation with self-harm, suicide attempt or suicidal ideation. During the course of the study two patients who were referred to ALS completed suicide before the ALS clinician could attempt to make initial phone contact and within 48 hours of being discharged from the SHED. Both patients were substance dependent became further estranged from family after their ED presentation. These critical incidents together with the prevalence and nature of SHED re-presentations bring the ALS risk monitoring role front and centre. Significant opportunities exist for MWAMHS in prevention and in providing early interventions for many in this cohort.

4.2.2 Emergency Department Outcomes

The ALS intervention aimed to facilitate linkage to formal follow up with the assumption that it would enhance the chances of recovery and reduce repeat presentations to the SHED. While the findings on diagnostic and clinical characteristics for the study cohort lend a more qualified context there was also evidence to support this assertion. The ED will probably continue to be an important crisis option for many who have enduring symptomatology or more complex needs regardless of the level of ongoing support. RCT studies, which evaluated more intensive interventions with similar cohorts, found that there was not a significant difference in the incidence of repeat self-harm between the intervention and control groups. (Morthorst & Krogh 2012) The Western Area Suicide Prevention (WASP) study (Petrakis 2005) had similar findings. Despite the WASP treatment group having made significant gains on depression scores there was no corresponding reduction in representation rates compared to those who declined or dropped out of treatment (Petrakis 2005 p.132). Nevertheless, the ALS intervention made a positive difference in emergency department representation rates, particularly within the four-week period following the index ED presentation. Intervention group representation rates at the four-week mark were 1/5 of the SPED control group representation rates. This tapered off to about ½ of the SPED control group rates at the 3 and 6-month time point. The subsequent attenuation raises questions about whether the initial gains from ALS support were sustained and about the quality and duration of client engagement with follow up services. It also raises questions about whether additional follow up contact six months after the client’s ED presentation is a worthwhile ALS practice initiative. However, based on current numbers, if the reduction of 2 representations per week alone was translated into financial outcomes the ALS intervention would save an average of $3200.00
per month in emergency department bed occupancy costs (NSW Health Department 2011 pp.15).

4.2.3 Consumer outcomes

Client feedback reflected a high degree of satisfaction with the Assertive Linkage Service.
Participants generally valued the follow-up contact from the ALS clinician, being listened to in a non-judgemental way and receiving linkage assistance; as reflected in this comment:

“It was nice to be able to be given help and assistance by the Assertive Linkage Service counselling and it was really effective in helping me cope with my situation”

Overall satisfaction rating of the ALS was 4.7/5 with a consistent level of approval across all the domains including support, assistance, counselling and linkage. Even those who did not perceive a need for ALS assistance generally appreciated the symbolic nature of a follow up phone call and the fact that the mental health service was actively interested in their welfare.

The AQoL results also suggest that the ALS intervention led to an improvement in mental health and social outcomes. A significantly greater proportion of the intervention group rated improvement in the social domain in the six-week period following the index ED presentation compared to the SPED control group. The difference however was not as pronounced for the mental health domain. This was to be expected given the diagnostic profile of the study sample. A significant number have a diagnosed high prevalence disorder such as depression and anxiety and any meaningful improvements in symptomatology would probably be made in the medium to long term.

The ALS intervention also appeared to enhance help seeking rates. Of all intervention participants 80% attended a GP in the four-week post baseline period. This is a significantly higher proportion compared to studies of other similar cohorts (Gunnell & Bennewith 2002) where only 53% attended their GP within 4 weeks. A greater percentage of those in the intervention group with no pre-existing community-based service links attended a follow up service (apart from a GP) within an average time of 3 weeks following the index ED presentation. However, the quality and nature of engagement with the follow up service was not measured. For the 18 people in the intervention group who represented to the ED, ten were not yet engaged with a formal community-based support. This in itself is a likely indication of the value of timely linkage and the client having access to a service that could
provide an alternate crisis support option. Of this group 6 did ultimately attend at least one appointment with a follow up agency after their re-presentation.

4.3 ALS SOCIAL WORK PRACTICE

4.3.1 Characteristics of sample population

Before exploring the more pertinent aspects of practice that emerged during the study it will be worth identifying the characteristics of the ALS cohort and the overarching principles that guided the ALS clinicians’ social work practice.

Compared to the local government area population, women and young people were over represented in the study sample. The higher numbers of women who represent with self-harm and suicidal ideation are consistent with findings of studies of other similar cohorts (Petrakis 2009, Mortørst & Krogh 2012). One third of the study participants were born overseas. Given the demographic profile of the western suburbs of Melbourne, this figure was anticipated. Nevertheless given the study exclusion criteria for those who required an interpreter it is likely to represent a slightly lower proportion of the prospective ALS client group. Ongoing Assertive Linkage Service delivery will provide access to interpreting services thus ensuring an inclusive service model for CALD communities.

The majority of ALS clients (71%) resided with a partner or family, while 15% lived alone. Family or relationship conflict was a common precipitant for ED representations (50%). This had ramifications for ED discharge planning and ultimately for the ALS clinician’s practice. Some people were unable to return to the family home and often stayed with other extended family or in crisis accommodation. Others returned to their family where conflict continued to play out. For the more vulnerable group who lived alone (Judd 2006, Bille-Brahe & Jensen 2004, De Leo 1998), 22 % were dependent on alcohol; effectively 5% of the overall sample. Frequency of ALS contact was adjusted according to the client’s specific circumstances and the aim was to provide a level of monitoring and support suited to the level of associated risk. The initial eco-map assessment proved effective in identifying any ongoing stressors associated with the client’s living environment and helped ascertain the availability of informal supports.

One quarter of the study sample was unemployed while another 10% of the sample population were on disability allowance. Given the diagnostic profile of the sample the
number of people on disability allowance is lower than anticipated; nevertheless, a substantial 35% of the study sample is vulnerable to economic insecurity, which is another recognised risk factor for suicide (Department of Health and Ageing 2007).

4.3.2 Social inclusion and ALS social work practice

Yoshimasu and Kiyohara (2008) conducted a meta-analysis of 24 studies to evaluate common contributing factors for suicide as potential indicators of risk. Social factors such as marital status, unemployment and social isolation were identified as strong predictive factors. They prescribed an ‘interactive’ intervention model rather than a disease model which firmly places the person in their social context and aims to maximize their social inclusion. Social inclusion requires “that all individuals be able to ‘secure a job; access services; connect with family, friends, work, personal interests and local community; deal with personal crisis; and have their voices heard” (Australian Government; Social Inclusion Board, 2012 p.12).

Overall, data obtained from ECAT assessments and the eco-maps suggested that there are significant cohorts who have experienced a disruption to usual informal supports or have diminished social networks. Relationship loss or conflict are a main precipitant for over 50% of presentations in the ALS study sample population, while a notable number are unemployed or live alone. Many have limited informal supports to draw on. The ALS clinician had a short term role but retained the capacity to intervene accordingly, “the notion of social inclusion is central to the recovery discourse” (Webber 2011p. 29) and it is important to be mindful of the mental health social worker’s brief; to “… adopt the role of bridge builder for the people that they work with, promoting their social inclusion and enhancing their access to social capital” (Webber2011 p. 29). Social workers can seek out appropriate resources within mainstream provision, develop relationships with service providers and act as a broker to enhance opportunities for social engagement and inclusion in the wider community” (Webber M 2011 pp28).

While ALS involvement was short term the ALS clinician was mindful of the opportunities to be a “bridge builder”, to consider and explore all the possibilities with the client. The eco-map process provided an invaluable foundation in identifying the potential resources in the client’s social networks as well as their goals, strengths and personal interests. Referrals to services such as PHaMP, employment agencies and
linkage to local clubs, volunteer agencies, support groups or culturally specific groups’ maximised opportunities for social connection. The ALS clinician also continued to build relationships and improve referral pathways with these key service providers.

4.3.4 Provide timely interventions and monitor risk.

During the study period the ALS clinician was able to meet prospective participants in the ED on only 7.5% of occasions. While the overwhelming majority were phoned within 72 hours after their presentation there were many inherent challenges with this process. This included frequent inaccuracy of phone contact details and, in some cases, the necessity to “cold call”. During the study, the initial call involved inviting patients to participate in the ALS/SPED study, then if they agreed they were allocated to either intervention or control group. The next step involved making a separate call to the intervention participants to provide them with more information about the ALS service.

Typically, during the initial ALS phone call the clinician would invite the client to rate their mood as better or worse compared to when they presented at ED. This would often lead the client to a conversation about the circumstances that led to their presentation and about how they were coping. This would also provide an opening for the clinician to inform the client of the type of support the ALS could provide and to extend an invitation to attend a single session to further discuss their needs. The clinician would also offer flexible times or home visits to minimise any barriers to attendance such as being time poor or having lack of access to transport.

The single session served to build rapport and further engage the client in reflecting on the quality of their relationships. The overwhelming majority of ALS clients were receptive to the eco-map assessment process. The eco map proved to be an effective tool in gaining a more holistic view of the clients’ circumstances; it encouraged them to consider the value of formal and informal supports, including the availability of potential resources. The session also afforded an opportunity to identify and address any real or perceived barriers to service access that existed for the client. Psycho-education about the potential benefits of psychological counselling and available treatment modalities was provided. Offering information about Medicare funded private counselling or headspace often acted to reassure
clients about the financial accessibility of psychological counselling. Motivational interviewing techniques also proved to be a worthwhile intervention to help attend to any ambivalence and encourage the client to consider and weigh up options.

The four weeks following a self-harm or suicide attempt are the highest risk period for repeat self-harm (Coghlan 2001, Kapur & Cooper 2005). The aim of the ALS practice model therefore was to make subsequent phone contact with the client at weekly intervals for up to six weeks, depending on the level of need, linkage time and complexity. The level of this contact varied greatly and the main aim was to maintain regular monitoring of the client’s wellbeing, risk factors and referral progress. The ALS clinician would confirm that the client had access to crisis line numbers, MWAMHS centralised triage contact and the ALS mobile phone contact number. Clients would be told that the ALS number was not a crisis line but could be accessed during 9am – 5pm weekdays for non-urgent calls and were reassured that while the ALS clinician would not always be readily available to answer the call he would normally respond to voicemail messages within 48 hours. One out of four clients contacted the ALS clinician on this number and the overwhelming majority of these clients used this call back facility appropriately. While the clinician was mindful of promoting client self-efficacy and encouraging those, who felt able, to actively follow through with the referral process, he took a more active role with those whose usual abilities were impaired by the impact of symptomatology and social or financial stress. For example, with the consent of the client, he would advocate for a direct referral to psychological counselling via the ATAPS suicide prevention pathway or provide brokerage to find suitable private providers who bulk billed or, on rare occasions, provide transport to enable attendance at an appointment.

4.3.5 Facilitate help-seeking and linkage

As stated previously, the assumption underlying the ALS intervention model recognises the fluctuating nature of client need, client risk and their shifting motivation or ability to seek help. Those who declined to participate in the ALS study usually declined on the basis that they already had supports in place or expressed the belief that their ED presentation was the result of an aberration to their usual coping style and that they did not effectively meet the criteria for the study or for follow up. However decline rates for those who presented intoxicated (and who were more likely to engage in uncharacteristic behaviour) was not higher than the overall sample. This was also unexpectedly the case for the cohort who presented
involuntarily with police and who were presumably less likely to agree to follow-up. Client perception of need in the ALS intervention group was diverse. Generally, woman who were in a more acute stage of crisis were more likely to be receptive to ALS involvement and linkage to more formal support while young people and men were less likely to follow through on their initial intentions to seek help.

- Young person

Suy’s case study (appendix 8) highlighted the importance of working with a young person’s ambivalence. Suy’s reticence was not unusual for someone of his age – he found it difficult to verbalise feelings and while he acknowledged that his mood was lowered he described the overdose as an impulsive act. He felt that he would “get over it” without the need for formal help. Nevertheless Suy’s mental state continued to be fragile and he exhibited a level of indifference to the future. While there were no immediate concerns for his safety, his outlook had not changed significantly compared to when he presented to the emergency department after taking a serious overdose. The ALS clinician believed that the opportunity of psychological counselling would benefit Suy and mitigate any ongoing risk of repeat self-harm. In this context he was mindful of providing information and presenting the support options in a way that “minimised coercion and promoted autonomy and self-efficacy” (Zerler pp1209). He empathised with and normalised Suys’ feelings of reluctance but also communicated his concerns about his wellbeing, particularly in regards to how a lowered mood was impacting on his general outlook and quality of life.

Information about WMheadspace was provided to Suy in both verbal and written form and he was invited to access the headspace website. He was left with the time to consider his options and an agreement was made for follow up call in two days. Suy ultimately decided to meet with a headspace clinician for an initial intake assessment.

The ALS also attended to the parents’ concerns and their ambivalence about the nature of treatment options. They were uneasy about the prospect of medication. It was important to engage them in discussion about their apprehension, provide reassurance, information and psycho-education. Cultural factors were also at play. Suys’ GP was part of the local Sri Lankan community so his parents were anxious about confidentiality and wanted him to attend another GP. The ALS clinician subsequently phoned the alternate GP to provide information
on Suys’ ED presentation and facilitate the headspace referral. A copy of the ECAT assessment, including its accompanying recommendations, was sent (with Suys consent) and the GP provided him with a mental health care plan at the subsequent consultation.

The ALS clinician advocated for prioritisation of Suys’ referral and he was allocated to the headspace mental health outreach nurse who was able to make a home visit within 48 hours and engage more assertively. The ALS clinician’s aim was to minimise any real or perceived barriers to service that might exist for Suy and his family. It involved engagement, ongoing risk assessment, monitoring, advocating and actively facilitating the referral process. This was an integral part of the ALS clinician’s social work practice that was evident in Rob’s case.

- **Substance dependent male**

Substance dependent men who are suicidal are frequently perceived to have “diagnosis and challenges that are beyond the purview of the ED” (Spence and Bergmans et al 2008 pp.345). Nevertheless Rob’s case highlighted the potential value of providing assertive follow up to those suicidal patients who presented with alcohol dependence and who were committed to changing their alcohol use. A detox bed was not available for Rob at the time of his discharge from the ED, compounding his feelings of hopelessness about the availability of support options. The ALS clinician monitored Rob’s safety and then advocated on his behalf when his risk of alcohol withdrawal and self-harm increased. Rob re-presented to ED one week later at the advice of the ALS clinician who was consequently in a better position to advocate for a medical detox bed. The ALS clinician also consulted with the receiving detox facility and the Consultation Liaison nurse who would assist in managing his risk. The ‘assertive’ component of the ALS is particularly apparent in this case. Rob capacity to plan or organise was compromised and if he was discharged without ALS follow-up it was unlikely that he would be able to access the support that was required in his changing circumstances.

The value of a more assertive follow-up on help seeking for similar cohorts has been reinforced, in other similar studies. Cebria and Parra et al (2012) provided systematic phone based follow-up at 1 week then 1,3,6,9 and 12 months post ED to encourage attendance at community-based supports. The intervention increased attendance at follow up agencies and reduced suicide reattempts in the baseline year by over 50%. Likewise Fleischmann et al. (2008) measured the effectiveness of a brief direct intervention and ongoing phone contact
for up to 18 months. The study found an increase in service usage and a significant difference in subsequent suicide rates; 0.2% in the intervention group compared to 2.2% for service as usual group. The ALS practice model incorporated similar elements to these interventions albeit for a shorter duration. A direct single session followed by regular phone contact and motivational support was ultimately effective in activating help seeking and facilitating linkage for many in the intervention group.

4.3.6 Working with ambivalence
As expected, there was a significant group in the intervention cohort who remained ambivalent about the prospect of linkage and at least 30% did not avail the services of community-based agencies. Compared to other studies of similar cohorts this was a relatively low non-attendance rate (Jauregi 1999, Van Heeringan 1995, Michelmore 2012). The people in this group were more likely to contextualise their ED presentation as uncharacteristic and precipitants usually involved situational stress and alcohol intoxication. They were likely to report a greater sense of crisis resolution during the initial follow up call. Nevertheless, many of the people in this cohort re-presented to the ED at a later date and their maladaptive coping style in the index presentation was often an indicator for future coping. Of the 18 in the intervention group, who re-presented ten were not linked into formal supports and 7 of that group re-presented within six weeks of the index ED presentation. While psycho-education and information about formal supports was provided the clinician also needed to “roll with the client’s resistance” (Britton & Patrick 2011) being mindful of maintaining a client-centred approach and adjusting the intervention to suit their perceived needs. The ALS clinician also attempted to provide post ED continuity by making themselves aware of the types of initial interventions used by the ECAT clinician as; “the initial emergency department encounter between the mental health clinician and the patient is considered to serve as a location for brief therapeutic intervention” (Kondrat and Teater 2010). As the case vignettes illustrated the subsequent ALS intervention focused on continued engagement, assisting in enhancing coping and being mindful of opportunities to facilitate linkage if client perception of need changed. At the very least a risk-monitoring role was maintained with clients being directed to more intensive mental health services if it was warranted.
In summary, the ALS was ultimately a ‘go-between’ service with the social work clinician acting as an intermediary between the ED and the community. The clinician needed to wear ‘many hats’ and the case vignettes reflect the application of an advanced type of social work practice. There were opportunities to initiate valuable interventions but given the short term nature of the model there was also a requirement to maintain clear boundaries and expectations around the limitations of the ALS clinician role. The clinician needed to be attuned to the perceived needs of the client. Those who were help-seeking were often compromised in their capacity to plan and organise. These clients benefited from practical support and advocacy with the aim of expediting referrals to relevant agencies. There was also the potential to engage those who were more ambivalent during the course of the ALS intervention with the aim of enhancing the client’s coping and problem solving skills. This included identifying any ongoing stressors, employing motivational interviewing and attending to any of the perceived or real barriers to formal supports encountered by the client. (Figure 4.1)

While ALS social work practice was primarily focused on individual interventions another key aspect of practice emerged during the course of the study. Given the emphasis on expediting linkage the ALS clinician also engaged in building the capacity for timely referrals and improving access to key community based services.
**Figure 4.1**

**ALS INTERVENTION**

**Practice Elements**

- Assess risk, and stage of crisis. Begin Engagement process. Provide information re the ALS. Invite to single session. Provide option for Home visit/Clinic appt. to facilitate contact.

- First eco-map: Identifying main precipitants, ongoing stressors, strengths, informal and formal supports/resources.

- Ongoing acute stage of crisis: Attend to more immediate needs eg. emergency relief/accommodation. Problem solving. Implement safety plan.

- Exploring personal resources. Reducing service access barriers. Information regarding Medicare funded counselling. Liaise with clients GP to initiate referral process, encourage self referral to psychologist, social worker or psychiatrist.

- Recap, terminate ALS intervention. Final Eco map

**ECATT Assessment-Low to medium risk -refer to ALS**

- ALS Phone call within 48-72 hrs

- Client Low Risk of self harm or suicide

- Client High risk of self harm or suicide

**Single session**

- Ongoing acute crisis: Client receptive to linkage - Lower capacity for self efficacy

- Likely greater sense of resolution: Less receptive to linkage

- Less acute: Client receptive higher capacity for self efficacy

- Prefers to rely on informal networks

- Awaiting Linkage/Attended follow up: Low risk

- Ongoing resolution: Low risk

**Practice Elements**

- Risk Assessment

- Refer to CAT or Centralised Triage

- First Eco-map: Identifying main precipitants, ongoing stressors, strengths, informal and formal supports and resources.

- Engagement and monitoring. Explore coping style, factors that led to ED presentation. Motivational interviewing. Information re services like Medicare funded counselling. Minimising access barriers.

- Continue to provide regular phone contact. Enhancing capacity for problem solving. Coping strategies. Psychoeducation.

- Recap, terminate ALS intervention. Final Eco map
4.3.7 Building pathways to primary care

An important part of the ALS clinician’s social work practice was to advocate for the needs of the ALS cohort with the aim of streamlining referral pathways. Integral to this role was to develop and build relationships with key support agencies. These agencies included the North West Medicare local, Western Melbourne headspace, private providers and community health services.

- **North West Medicare Local**

The ALS clinician negotiated referral rights to the North West Medicare Local ATAPS Suicide Prevention program. This afforded a ‘priority pathway’ to psychological counselling for those “higher risk” ALS clients. Once the referral was received the Suicide Prevention program co-ordinator facilitated an urgent appointment with a private provider and the client was always seen within 72 hours.

- **Private Practitioners**

The ALS clinician developed a working knowledge of the private practitioners who did not charge a “gap fee” or who were willing to offer priority appointments for those who had more urgent needs. The Medicare Local provided the ALS with a list of local ATAPS practitioners that included relevant information such as clinician specialty area and bi-lingual capabilities. This assisted the ALS clinician to tailor the referral according to client need.

- **WMHeadspace**

Before making an appointment with WM headspace the young person needed to obtain a GP referral and a Mental Health Care Plan. This process often acted as a barrier for many who cited time constraints or lack of GP access. Despite ALS involvement, some lost the interest or motivation to follow through with the referral soon after being discharged from the ED. During the course of the study the ALS clinician liaised with the WM headspace clinical manager to advocate for increased access to the WMheadspace GP and a more streamlined referral pathway that aimed to prioritize referrals from the Sunshine Hospital ED.
• Psychiatrists
Referrals to private psychiatrists posed a significant challenge in the initial stage of the study. A few people in the intervention group required diagnostic or medication review. The referral pathway to a psychiatrist for a one-off assessment is via a Medicare “item 291” GP referral. While an item 291 referral removed the cost barrier, the average waiting time for a private psychiatrist in the Western suburbs is 4-6 weeks. For one intervention group participant this waiting time resulted in further deterioration and the need for a psychiatric admission. The ALS clinician subsequently negotiated limited referral rights to the MWAMHS CAT consultant psychiatrist to expedite more urgent reviews.

• Community Health Services
Community health services such as ISIS primary care and Western Region CHS were also used as a referral option for 15% of intervention participants. CHS provide a wide range of supports including financial/gambling counseling, family support services, and drug and alcohol counseling. CHS were generally responsive and able to provide an initial assessment within a week. The ALS clinician was also able to advocate for some clients to be prioritized on the grounds of homelessness or other special need.

The social worker advocated for ALS clients by liaising with and building relationships with key agencies to improve access to services. This was part of the “bridge building” role. When barriers to service access were identified, the ALS social worker actively worked with the relevant agency, negotiating improved service access and in cases such as WMheadspace, formalised referral agreements with a memorandum of understanding.

4.4 ASSERTIVE LINKAGE SERVICE RECOMMENDATIONS

4.4.1 “Opt out” service model
Given the higher than expected risk profile of those in the ALS cohort it would be prudent to provide an “opt out” service model. The provision of the ALS provided a
post ED ‘safety net’ for low to medium risk patients and from anecdotal feedback the ECAT clinicians felt supported by the prospect of follow up for their clients.

After the study phase and without the necessity for recruitment or randomisation, client engagement will be more streamlined, so in an effort to engage the client and provide a more seamless service model it will be essential that the referring ECAT clinician provide all eligible clients with information about the ALS and inform them that;

“As part of routine practice our Assertive Linkage Service clinician will phone you in the next 72 hours to check in on your progress and, if you need it, offer you further support with the referral to ….. (follow up service)“.

Some patients may opt out, but this approach will ultimately ensure that the overwhelming majority of eligible patients will receive at least one follow up phone call. The “opt out” approach will extend the clinical responsibility of the MWAMHS beyond the ED admission with ramifications for clinical governance. ALS and ECAT clinicians will therefore need to have regular opportunity to attend clinical review sessions with the ECAT consultant psychiatrist to help ensure ALS referrals are risk appropriate and within its remit.

The effectiveness of an ‘opt out’ approach will also depend on the accuracy of client contact details. During the study contact information in the client file was incorrect or out of date in 15% of cases creating a significant barrier to post ED follow-up. The ALS also had to make repeated attempts to contact clients who were not available to answer calls. Confirmation of both patient and next of kin contact details and scheduling a time for a follow up call should be an integral part of ECAT clinician practice.

4.4.2 Implementing a safety plan

Another important part of managing ongoing risk will be adopting a routine approach to safety planning. This would ideally involve ECAT working collaboratively with the patient to formulate a safety plan before their discharge and the ALS reviewing the plan during subsequent phone contact. A CBT model developed for suicide prevention with adolescents incorporates a safety plan matrix (Stanley and Brown G et al 2010) that could be considered for use with the ALS cohort.
“Safety planning is a technique to help patients remain safe and not to engage in further suicidal behavior, at least until the next therapy session. Safety planning, as developed in CBT-SP, provides patients with a prioritized and specific set of coping strategies and sources of support that can be used during a suicidal crisis. It also includes a section on means restriction. The intent of safety planning is to help individuals lower their imminent risk for suicidal behavior by consulting this pre-determined set of potential coping strategies and list of individuals or agencies that they may contact” (Stanley and Brown G et al 2010 pp1110).

The safety plan model could fit neatly into a suite of ALS interventions as it provides a structured, evidence-based approach that as well as mitigating risk will assist the client in developing coping strategies for both the short and long term. The ALS clinician will assist the client to identify:

- Warning signs
- Internal coping strategies
- Social supports and social settings
- Family and friends for crisis help
- Professional and agency supports
- Ways to assist the client in making their environment safe.

The safety plan model could be seamlessly incorporated into the ALS clinician’s role and aligns with the ALS brief- “given that the highest risk period for a re-attempt is shortly after the index attempt, as well as during the time immediately following discharge from inpatient treatment, it is essential to develop a safety plan early in treatment” (Stanley and Brown G et al 2010 pp1110).

4.4.3 ‘Warm Linking’

To provide a more seamless transition from ED and to reinforce aspects of the safety plan the prospective ALS client should be offered the option of ‘warm linking’ to Suicide Line. Suicide Line is a 24-hour phone counselling service staffed by qualified Social Workers and Psychologists. Speaking with a Suicide Line clinician could help familiarise the patient with the service while they are in the ED and hopefully encourage further help seeking if the need arose.
4.4.4 Continued use of Single session

While the ALS is predominantly a phone-based service the value of providing a single session cannot be overestimated. Clients were receptive to the opportunity of the single session and collaborating with the clinician to complete the eco-map assessment. This structure will continue to provide an opportunity to engage ALS clients, promote therapeutic alliance and compliment the ongoing review and use of the safety plan.

4.4.5 Target population

A widening of the ALS target population would depend on resourcing and the future capacity of the ALS to respond to an increased client base. There are a two other cohorts that could benefit from ALS follow up. This includes those who present to ED with suicidal behaviours, who are assessed by the ED physicians but who are not referred to the ECAT. The other group are those who present via the ED but who are subsequently transferred and discharged from a medical ward. This cohort is usually managed by Consultation Liaison Psychiatry service while in hospital but receive no post discharge follow up.

4.4.6 HARP

Since the commencement of the Assertive Linkage Service another complimentary service has been established. The Hospital Admission Reduction Program (HARP) was established to provide a service for people in the low to medium risk category who have had multiple mental health-related presentations to the emergency department. It works with those clients who have more complex needs and likely co-morbidity of mental health and medical issues. HARP provides a more assertive outreach intervention and will be an important option for some ALS clients who make repeat presentations to the emergency department.

4.4.7 Building ALS capacity

One of the main challenges of the ALS clinician was to make timely contact with the patient after they had left the ED, a challenge reported in other similar studies (Gibbons& Stirman et al.). Making contact with and engaging the client within 72 hours of their ED presentation is a crucial part of an effective intervention. The ALS is
currently provided by one .6EFT clinician and is unable to respond within this time frame on all occasions. There is also no ALS function while the clinician is on annual leave. Consideration could be given to increasing the EFT to .8 and to share the role between two clinicians, this would allow ALS coverage during the ALS clinicians’ annual leave and ensure a more responsive coverage at all other times.

4.4.8 Improving pathways to AOD services
A significant proportion (30%) of the ALS cohort was identified as having AOD dependence. Of this cohort 20% were contemplating change and some requested assistance with accessing a detox service. However the drawn out referral process often compromised this prospect. The challenge for the ALS clinician was to maintain contact with many whose lifestyle was often chaotic. The clinician also needed to encourage, support, motivate and ensure that risk factors remained low. As demonstrated in Rob’s case vignette, the ALS clinician’s role extended to identifying and facilitating alternative pathways to detox care. The ALS clinician should continue to build relationships with AOD services and advocate for the needs of substance dependent ALS clients who are actively considering change. An AOD worker has recently been appointed to the Sunshine Hospital emergency department under the auspices of Western Health. This presents the ALS with an opportunity to develop a working alliance that could promote the interests of a common client group.

4.4.9 E-health
The ALS clinician is working to “hold” the client while they await referral and linkage. The burgeoning world of e-health is a therefore a potentially valuable resource for many in the ALS cohort. The immediate access to many e-health options could prove an important intermediary support and is likely to appeal to the younger cohort who is more ambivalent about face-to-face counselling.

On-Line therapeutic interventions have a proven efficacy when content is targeted to suicidal thoughts and behaviours. (Van Spijker, Van Straten & Kerkhof 2014) Mindfulness is also effective for those with depression or anxiety (Manicavasgar, Parker & Perich 2011, Thompson, Walker, Obolensky, Winning, Barmon, Dilorio, & Compton, 2010) and many smartphone apps are available to facilitate this practice. E-
headspace provides online support and counselling in real time while e-depression sites (www.mindspot.org.au) provide step by step exercises and ongoing monitoring. These may also be a valuable option for those who are more reluctant to meet with a counsellor or who are time poor. Safety planning apps are also available via Beyond Blue - (www.beyondblue.org.au/safetyplanning).

The ALS clinician could potentially act as a facilitator – checking in to encourage, monitor progress and prompting use of safety planning and mindspot.org exercises. E-health information could be a valuable part of a post ED resource pack that is provided to patients by the ECAT clinician to assist them in the interim as they ‘step-up’ to direct care or face-to-face counselling.

4.5 CONCLUSION

Researchers estimate that “30% to 90% of people who die by suicide have some form of mental illness”, (McPhedran 2013) however, “life history and personal circumstance such as relationship breakdowns, business failure, or unemployment – can also play a strong role in the development of suicidal behaviour, irrespective of whether or not that behaviour is accompanied by mental illness.” (McPhedran 2013)

There has been a paucity of social work research both into suicide prevention and more specifically into interventions for use in emergency settings (Neidermeier 2008). This study has demonstrated that regardless of psychiatric diagnosis there is a strong situational component for many of those who present to the SHED with suicidal behaviours, highlighting the importance of a dedicated social work intervention for this cohort. For those who are experiencing life crisis or ongoing mental ill health, timely linkage to relevant supports is essential to assist in alleviating distress. Based on this study’s findings, the involvement of the ALS after an emergency department presentation provided additional support that maximised opportunities for linkage and assisted in enhancing outcomes for those who presented with suicidal behaviours to the Sunshine Hospital Emergency Department.

The initial results on post ED service usage measures were deceptive. On initial examination there was little evidence of the ALS intervention making a difference. There was however a significantly greater increase in service use for those in the
intervention group when baseline levels of pre-existing linkage were taken into account. There was also a greater improvement on the quality of life measure for the intervention group when compared to the SPED control.

The ALS intervention also appeared to have a positive impact on intention for help seeking levels, particularly with those younger than 25 years of age, although there was not a coinciding increase in service usage at the six-week mark. Young people may therefore benefit from longer-term ALS involvement to further facilitate the engagement and referral process. Particular attention should also be given to those at higher risk of repeat self-harm, suicide attempt or representation. Many of those who were ambivalent about follow up care subsequently represented to the ED with repeat suicidal behaviours highlighting the potential opportunities for prevention. Unemployed males over 25 years of age who are substance dependent and are experiencing relationship conflicts are an especially high-risk target group. ALS should give particular attention to making initial contact with this cohort within a 48-hour time frame.

The ALS intervention group had a significantly lower repeat ED presentation rate particularly in the first six weeks after the index presentation. The high rate of representations and repeat self-harm for the non-intervention cohort means that the likely social and economic value of the ALS service just in regards to risk monitoring cannot be underestimated.

From a qualitative viewpoint, the overwhelming response of clients to initial ALS contact was favourable. Most commented on the symbolic value of receiving a follow up phone call; that their needs were being acknowledged and the mental health service was taking an active interest in their progress. People in the intervention group were overwhelmingly appreciative of the ongoing support and as one client commented, the intervention” helped join the dots”.

Ultimately the ALS clinicians’ social work practice needed to be client-centred and it could not be assumed that all who presented would be receptive to or need formal community-based support. The needs profile of the cohort was generally diverse and sometimes complex. It demanded a flexible and eclectic approach. The ALS clinician
also needed to strike a balance; to ensure that the ALS responded according to the perceived needs of the client and within the bounds of acceptable ongoing risk. The initial eco-systemic assessment provided a valuable foundation and guided ongoing interventions that could include brokerage, problem solving, CBT and motivational interviewing. Embedding a safety plan as a standard part of the ALS intervention could further mitigate ongoing risk. Continued efforts to consolidate and build relationships with key community based services will also serve to improve post ED service access for ALS clients.

On balance the ALS appeared to have made a positive difference to the clients’ experience after their emergency department presentation. Generally, clients were more supported regardless of whether they were seeking out community-based supports or relying on informal support. For those with more entrenched symptomatology any meaningful gains towards recovery will possibly be made in the medium to long term, nevertheless the ALS intervention provided a valuable role in providing a safety net for a vulnerable cohort, facilitating the help seeking process and reducing reliance on the emergency department.
REFERENCES


Australian Bureau of Statistics


Australian Bureau of Statistics


Chanen A, Jackson, J., McCutcheon L, Jovev M, Dudgeon P, Yuen H, Germano D, Nistico


Coghlan, R., Lawrence, D.; Holman, C.J.D., and Jablensky, A. (2001) Duty to care: Physical illness in people with mental illness. Western Australia: The University of Western Australia


Currier W., Fisher, S.G., Caine, E.D., (2010), Mobile Crisis Team Intervention to Enhance Linkage of Discharged Suicidal Emergency Department patients to Outpatient Psychiatric Services: A randomized Controlled trial. Academic Emergency Medicine Jan Vol.17, No.1


Emergency Care Institute, NSW (2014): NEAT The Basics


Goodluck, C.T. (1991) Utilization of Genograms and Eco-Maps to assess American Indian Families who have a Member With a Disability (Making Visible the Invisible) *Final report American Indian rehabilitation research and Training Center*


Grupp-Phelan, McGuire L A Randomized Controlled Trial to Engage in Care of Adolescent Emergency Department Patients With Mental Health Problems That Increase Suicide Risk, (2012) *Paediatric Emergency Care: December - Volume 28 - Issue 12 - p 1263–1268*


Hoek W Marko M, (2011) Randomized controlled trial of primary care physician motivational interviewing versus brief advice to engage adolescents with an Internet-based depression prevention intervention: 6-month outcomes and
predictors of improvement. *Translational Research* December pp. 315-325


Kapur, Navneet; Cooper, Jayne; Rodway, Cathryn; Kelly, Joanne; Guthrie, Else; Mackway-Jones, Kevin. (2005) Predicting the risk of repetition after self-harm: Cohort study. *BMJ: British Medical Journal*. Vol. 330 (7488) Feb, 394-395


behavioural treatment of chronically parasuicidal borderline patients; *Archive of General Psychiatry* 48: (12) 1060-1064

Lizardi, D; Stanley, B; (2010) Treatment engagement: a neglected aspect in the
psychiatric care of suicidal patients. *Psychiatric Services*, Dec; 61 (12): 1183-91

emergency room clients with dual disorder. *Social work Research* Vol. 26 No. 3 Sept.

Luxton DD; June JD; Comtois KA, (2013) Can postdischarge follow-up contacts prevent
suicide and suicidal behavior? A review of the evidence *Crisis, Jan* ; Vol. 34 (1), pp. 32-41

interviewing in reducing drug consumption and perceptions of drug-related
risk and harm among young people: results from a multi-site cluster randomized trial *Addiction, Jan*; 99 (1): 39-52

McLeavey B, Daly RJ (1994) Interpersonal problem-solving skills training in the
treatment of self poisoning patients *Suicide and Life threatening behaviour* Winter:24 (4) 382-94

McNeil D.E and Binder D.L (1997), The impact of hospitalisation on clinical
assessments of suicide risks. *Psychiatric services*, 48, 207-208

McPhedran,S. (2013) “Suicide prevention takes more than just treating depression”,
*theconversation.com/suicide-prevention-takes-more-than-treating-depression-13781* June 26

Manicavasgar, V; Parker, G; Perich, T. (2011) Mindfulness-based cognitive therapy vs
cognitive behaviour therapy as a treatment for non-melancholic depression. *Journal of Affective Disorders*. April 130(1-2):138-144


Michelmore, L; Hindley, P; (2012) Help-seeking for suicidal thoughts and self-harm in
young people: a systematic review, *Suicide and Life-Threatening Behavior*. Oct , Vol. 42 Issue 5, p507,

Mishara B. Weisstub D. (2005) Ethical and legal issues in suicide research,
*International Journal of Law and Psychiatry* 28 23–41
Miller M., Hempstead K. (2013) Method Choice in Nonfatal Self-Harm as a Predictor of Subsequent Episodes of Self-Harm and Suicide: Implications for Clinical Practice, Published online ahead of print April 18, ppe1-e8 | American Journal of Public Health


NSW Health Department, (2011) Cost of Care Standards 2009/2010, Case-Mix Policy Unit, Inter Government and funding branch N.S.W May


Petrakis, M. (2009) Suicide prevention : recovery outcomes from an innovative model of client-centred assertive counselling, community linkage and monitoring, developed within one Victorian hospital Emergency Department /Thesis (Ph.D.)--University of Melbourne, School of Nursing and Social Work

Pleban, A (2009) Unpublished- ECATT presentation audit report to Mid-West Area Mental Health Service Assertive Linkage Service Steering Group Committee


Repper, J.,(1997) A review of the literature on the prevention of suicide through interventions in Accident and Emergency Departments *Journal of clinical Nursing* 1999; 8: 3-12


Rosenberg, R. (1994); The Therapeutic Alliance and the Psychiatric Emergency Room Crisis as Opportunity *Psychiatric Annals*; Nov. 24, 11; Pro Quest Central pg. 610


Stevens, J. Klima,J., Chisolm, D.,Kelleher, K.J (2009) A trial of Telephone Services to increase Adolescent Utilisation of Health Care for Psychosocial problems; *Journal of Adolescent Health* 45 564-570

Stevenson R, Petrakis M, Joubert L, Cementon E, Jesperson S, Barton D, (Unpublished, 2009), Suicide Prevention at the Emergency Department: Outcomes from an Innovative Model of Brief Psychotherapy and Community Linkage *Unpublished*


Thompson, NJ.; Walker, ER; Obolensky, N; Winning, A; Barmon, C; Dilorio, C; Compton, MT.. (2010) Distance delivery of mindfulness-based cognitive therapy for depression: Project UPLIFT. *Epilepsy and Behavior* 19(3): 247-254


Webber, M. (2011) Evidence based Policy and Practice in Mental Health Social Work p.28 Learning Matters


World Health Organisation (2016); [http://www.int/mental_health/prevention/suicide/suicideprevention/en Table 5.1]

Wu et al. (2013) The association between social relationships and self-harm: a case–control study in Taiwan Bio Medical Central Psychiatry, 13:101 [http://www.biomedcentral.com/1471-244X/13/101]


Appendices

Appendix 1: Literature search process

Literature was sought through:

- Online search tools (University of Melbourne’s Super Search, Google Scholar, Medline, PsycInfo, CINAHL Plus)
- Directly perusing online journals (e.g. Social work in Health Care, Australian Social work, British Journal of Social Work)
- Perusing the Melbourne Health and University of Melbourne libraries for relevant hardcopies of seminal and other texts.
- Consultation with supervising researcher
- Utilizing the support of the Melbourne health library staff to undertake literature searches.

Search terms included:

- Suicide prevention, emergency department, assertive linkage
- Suicide prevention, accident and emergency, assertive linkage
- Self-harm, emergency department, assertive linkage
- Social work, suicide prevention
- Suicide, help seeking, emergency department
- Suicide, self-harm, help seeking, young people
Appendix 2: The Melbourne Health Mental Health Human Research & Ethics Committee: Ethics approval

Mental Health Research and Ethics Committee Approval Certificate

This is to certify that
MHREC Project No: 2007.52
Approval date: 04/06/2008
Expiry date: 30/06/2010

Project Title: Suicide Prevention in the Emergency Department (SPED): Management of deliberate self-harm through an assertive engagement, brief psychotherapy and community linkage model

Principal Investigator:
Dr Lynette Joubert
Senior Lecturer
School of Nursing and Social Work
The University of Melbourne

Sponsored by: N/A
Protocol No: N/A

Participant Information and Consent Form: Version 2 dated April 2008

Investigator Brochure: N/A

Conducted at: Western Hospital has been approved.

This proposal meets the requirements of the NHMRC National Statement on Ethical Conduct in Human Research 2007.

It is now your responsibility to ensure that all people conducting this research project are made aware of which documents have been approved.

This approval is subject to ongoing, current and valid insurance coverage throughout the duration of the conduct of the study.

You are required to notify the Manager of the Mental Health Research and Ethics Committee of:
• Any change in the protocol and the reason for that change together with an indication of ethical implications (if any) by submitting an amendment to the study;
• Serious adverse effects on subjects and the action taken to manage them, including an amended Patient Information and Consent Form where appropriate;
• Any unforeseen events;
• Your inability to continue as Principal Investigator, or any other change in research personnel involved in the study;
• A delay of more than 12 months in the commencement of the project; and
• The actual date of commencement of the study.

You are required to submit the following reports to the Mental Health Research and Ethics Committee:
• An Annual Report every twelve months for the duration of the project; and
• A detailed Final Report at the conclusion of the project.

The Mental Health Research and Ethics Committee may conduct an audit at any time.

An extension of the project beyond the stated conclusion date should be sought from the Mental Health Research and Ethics Committee.

Signed:

Michelle Clemens
Manager
Mental Health Research and Ethics Committee
Dear Nicole,

RE: Amendment 4 to MHREC 2007.652 SPED

Thank you for the submission of the documents requested in the email below.

Accordingly, Amendment 4 dated 20/07/2009 to MHREC 2007.652 SPED has been approved enclosing:

1) Inclusion of Sunshine Hospital as an additional site;
2) Additional student researcher: Alex Pleban;
3) Additional research personal: Donal Twomey;
4) Updated Module One; and
5) PICF (Sunshine Hospital) Version 1 dated 20 July 2009.

Your amendment may proceed upon receipt of this email. You will receive a formal approval letter for your file.

Cheers

Michelle Clemson
Research and Ethics Manager, Mental Health
Office For Research, Melbourne Health
ph: 9342 7215 fax: 9342 8548
(Mon and Weds only)
Appendix 3: AQoL Questionnaire

Assessment of Quality of Life Scale (AQoL)  
(Measure of Quality of Life)

Please circle the alternative that best describes you during the last week.

Illness
1. Concerning my use of prescribed medicines:
   a. I do not or rarely use any medicines at all.
   b. I use one or two medicinal drugs regularly.
   c. I need to use three or four medicinal drugs regularly.
   d. I use five or more medicinal drugs regularly.

2. To what extent do I rely on medicines or a medical aid? (NOT glasses or a hearing aid). (For example: walking frame, wheelchair, prosthesis etc.)
   a. I do not use any medicines and/or medical aids.
   b. I occasionally use medicines and/or medical aids.
   c. I regularly use medicines and/or medical aids.
   d. I have to constantly take medicines or use a medical aid.

3. Do I need regular medical treatment from a doctor or other health professional?
   b. Although I do have some regular medical treatment, I am no dependent on this.
   c. I am dependent on having regular medical treatment.
   d. My life is dependent on having regular medical treatment.

Independent living
4. Do I need any help looking after myself?
   a. I need no help at all.
   b. Occasionally I need some help with personal care tasks.
   c. I need help with the more difficult personal care tasks.
   d. I need daily help with most or all personal care tasks.

5. When doing household tasks: (For example, preparing food, gardening, using the video recorder, radio, telephone or washing the car)
   a. I need no help at all.
   b. Occasionally I need some help with household tasks.
   c. I need help with the more difficult household tasks.
   d. I need daily help with most or all household tasks.

6. Thinking about how easily I can get around my home and community:
   a. I get around my home and community by myself without any difficulty.
   b. I find it difficult to get around my home and community by myself.
   c. I cannot get around the community by myself, but I can get around my home with some difficulty.
   d. I cannot get around either the community or my home by myself.

Social relationships
7. Because of my health, my relationships (for example: with my friends, partner or parents) generally:
   a. Are very close and warm.
   b. Are sometimes close and warm.
   c. Are seldom close and warm.
   d. I have no close and warm relationships.

(P.T.O.)
8. Thinking about my relationship with other people:
   a. I have plenty of friends, and am never lonely.
   b. Although I have friends, I am occasionally lonely.
   c. I have some friends, but am often lonely for company.
   d. I am socially isolated and feel lonely.

9. Thinking about my health and my relationship with my family:
   a. My role in the family is unaffected by my health.
   b. There are some parts of my family role I cannot carry out.
   c. There are many parts of my family role I cannot carry out.
   d. I cannot carry out any part of my family role.

Physical senses
10. Thinking about my vision, including when using my glasses or contact lenses if needed:
    a. I see normally.
    b. I have some difficulty focusing on things, or I do not see them sharply. For example: small print, a
       newspaper, or seeing objects in the distance.
    c. I have a lot of difficulty seeing things. My vision is blurred. For example: I can see just enough to
       get by with.
    d. I only see general shapes, or am blind. For example: I need a guide to move around.

11. Thinking about my hearing, including using my hearing aid if needed:
    a. I hear normally.
    b. I have some difficulty hearing or I do not hear clearly. For example: I ask people to speak up, or
       turn up the TV or radio volume.
    c. I have difficulty hearing things clearly. For example: often I do not understand what said. I usually
       do not take part in conversations because I cannot hear what is said.
    d. I hear very little indeed. For example: I cannot fully understand loud voices speaking directly to
       me.

12. When I communicate with others: (For example: by talking, listening, writing or signing)
    a. I have no trouble speaking to them or understanding what they are saying.
    b. I have some difficulty being understood by people who do not know me. I have no trouble
       understanding what others are saying to me.
    c. I am only understood by people who know me well. I have great trouble understanding what others
       are saying to me.
    d. I cannot adequately communicate with others.

Psychological well being
13. If I think about how I sleep:
    a. I am able to sleep without difficulty most of the time.
    b. My sleep is interrupted some of the time, but I am usually able to go back to sleep without
       difficulty.
    c. My sleep is interrupted most nights, but I am usually able to go back to sleep without difficulty.
    d. I sleep in short bursts only. I am awake most of the night.

14. Thinking about how I generally feel:
    a. I do not feel anxious, worried or depressed.
    b. I am slightly anxious, worried or depressed.
    c. I feel moderately anxious, worried or depressed.
    d. I am extremely anxious, worried or depressed.

15. How much pain or discomfort do I experience?
    a. None at all.
    b. I have moderate pain.
    c. I suffer from severe pain.
    d. I suffer unbearable pain.
### Appendix 4: Health Service Use Questionnaire

In the past month how many times have you used each of these health services? (Please circle the number of times you used each health service. If you used a service more than 10 times, please fill in the number of times in the space provided next to "More?____").

<table>
<thead>
<tr>
<th>Number of times saw the health professional or used the service in the past month</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal Supports</strong></td>
</tr>
<tr>
<td>1. General practitioner (usually your local doctor)</td>
</tr>
<tr>
<td>2. Community mental health service</td>
</tr>
<tr>
<td>3. Community health centre</td>
</tr>
<tr>
<td>4. District nurses or other community nurses</td>
</tr>
<tr>
<td>5. Social worker</td>
</tr>
<tr>
<td>6. Psychologist</td>
</tr>
<tr>
<td>7. Psychiatrist</td>
</tr>
<tr>
<td>8. Other specialist doctor (not in a hospital)</td>
</tr>
<tr>
<td>9. Other counsellor (e.g. marriage/financial counsellor)</td>
</tr>
<tr>
<td>10. Hospital clinic (outpatient/specialist clinic/allied health clinic)</td>
</tr>
<tr>
<td>11. Hospital inpatient (number of nights spent in hospital)</td>
</tr>
<tr>
<td>12. Chiropractor</td>
</tr>
<tr>
<td>13. Physiotherapist</td>
</tr>
<tr>
<td>14. Acupuncturist</td>
</tr>
<tr>
<td>15. Other alternative therapist (e.g. Chinese herbalist, homeopath, naturopath, osteopath)</td>
</tr>
<tr>
<td>16. Dentist</td>
</tr>
<tr>
<td>17. Telephone support (e.g. Lifeline; Men’s Line; Direct Line; Domestic Violence support)</td>
</tr>
<tr>
<td>18. Alcohol and other drug service</td>
</tr>
<tr>
<td>19. Other health professional</td>
</tr>
<tr>
<td>Please specify:</td>
</tr>
<tr>
<td>20. I would not seek help from anyone.</td>
</tr>
</tbody>
</table>

Below is a list of people who you might seek help or advice from if you were experiencing a personal or emotional problem. **Tick any of these who you have gone to for advice or help in the PAST month for a personal or emotional problem.**

<table>
<thead>
<tr>
<th>Informal Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Partner (e.g., significant boyfriend or girlfriend)</td>
</tr>
<tr>
<td>22. Friend (not related to you)</td>
</tr>
<tr>
<td>23. Parent</td>
</tr>
<tr>
<td>24. Other relative/family member</td>
</tr>
<tr>
<td>25. Someone else not listed above</td>
</tr>
<tr>
<td>Please specify:</td>
</tr>
<tr>
<td>26. I would not seek help from anyone.</td>
</tr>
</tbody>
</table>
Appendix 5: Client Satisfaction Survey

**Western Health**

**Assertive Linkage Service - Client Satisfaction Exit Survey**

How satisfied are you with the support you have received from the Assertive Linkage Service over the past month?

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Mixed</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

How satisfied are you that the assistance provided by the Assertive Linkage Service prepared you to better cope with your situation?

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Mixed</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

How satisfied are you that the counselling provided by the Assertive Linkage Service clinician helped you to better understand your situation?

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Mixed</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

How satisfied are you that the community services you were linked to by the Assertive Linkage Service were suitable?

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Mixed</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

How satisfied are you that the support provided by the Assertive Linkage Service over the past month has made you feel better?

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Mixed</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Overall how satisfied are you with the care you have received from the Assertive Linkage Service?

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Mixed</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

We welcome any additional comments you may have about the Assertive Linkage Service:

__________________________________________________________________________________________

__________________________________________________________________________________________

Thank you.

Modified from WASPS Client Satisfaction Survey, Nicole Hill, 2009.
Appendix 6: Consent Form

Participant Information and Consent Form

Version 1  Dated 20.7.09
Site  Sunshine Hospital

Full Project Title: Suicide Prevention in the Emergency Department (SPED): Management of deliberate self-harm through an assertive engagement, brief psychotherapy and community linkage model.

Full Project Title: Assertive Linkage Service.

Principal Researchers: A/Prof Dr Lynette Joubert, A/Prof Dr Carol Harvey, Dr Sean Jespersen, Dr Enrico Cementon, A/Prof Graeme Hawthorne, Prof Anne-Marie Kelly, Dr Anita Govindan, Donal Twomey, Nicole Hill, Alex Pleban.

This Participant Information and Consent Form is 6 pages long. Please make sure you have all the pages.

1. Your Consent
You are invited to take part in this research project.

This Participant Information contains detailed information about the research project. Its purpose is to explain to you as openly and clearly as possible all the procedures involved in this project before you decide whether or not to take part.

Please read this Participant Information carefully. Feel free to ask questions about any information in the document. You may also wish to discuss the project with a relative or friend or your local health worker. Feel free to do this.

Once you understand what the project is about and if you agree to take part in it, you will be asked to sign the Consent Form. By signing the Consent Form, you indicate that you understand the information and that you give your consent to participate in the research project.

You will be given a copy of the Participant Information and Consent Form to keep.

2. Purpose and Background
The purpose of this project is to research whether providing additional care and support to patients who attend the Sunshine Hospital Emergency Department after having harmed one's self is effective in relieving suicidality and depression.

A total of 270 people will participate in this project.

Previous experience has shown that linking patients with appropriate follow-up and providing social and psychological support after one has harmed one's self may be helpful. However, such help has not always been available in the past. Suicide Prevention in the Emergency Department (SPED) is an innovative research program that aims to address this. SPED has developed from a successful pilot program at the Western Hospital, Footscray Melbourne (Western Area Suicide Prevention Strategy,
WASPS) which was funded by the National Suicide Prevention Strategy under the auspices of the Commonwealth Department of Health and Aging.

Sunshine Hospital has implemented a service entitled the Assertive Linkage Service. Clinicians from this service will provide additional support to you after you return home. You are invited to participate in this because the results of the pilot suggested that the additional care and support could be effective. We would like to explore this in a larger program that compares the additional treatment with the usual care that you would receive in an emergency department. The way this will happen is that, if you agree, then you will be given either usual care or the additional treatment, according to a randomised decision.

3. **Procedures**

A mental health clinician from the Enhanced Crisis Assessment Team Service (ECATS) will assess you during your time in the Emergency Department (ED). Together, you will discuss the issues that have contributed to your presentation, and determine if any additional support services would benefit you upon your return home. You will be provided with information regarding any support options you discuss together.

If you are placed in the new service arm of the program, you will receive contact with an ECATS clinician for one-month after your initial ED presentation. This contact will be made by telephone.

The purpose of both of these approaches is designed to ensure that you feel supported upon your return home from Hospital, by having the opportunity to problem solve and discuss issues that arose from your ED presentation, and to link you with any necessary community services to help you in the future.

Should you agree to participate in this project, you will be asked to:

- Give permission for the researchers to access a copy of information relating to your Emergency Department presentation from the mental health clinician that saw you.
- Give permission for a researcher to contact you to complete questionnaires to assess if you have harmed yourself, or thought of harming yourself again; and issues relating to quality of life, psychological well-being, feelings of anxiety and/or depression, and your links in the community with support services and/or other health professionals. This contact will be made either face-to-face or by telephone, and should take approximately one-hour.
- You will be contacted four times by this researcher to complete the questionnaires: within one-week, six-weeks, three-months and six-months of having presented to Emergency. Follow-up data collections should take approximately 30-minutes.
- These interviews will occur at a location that is convenient for you. This may include over the phone, or face-to-face at the Hospital, your GP's clinic, local Community Health Centre, or in some instances, at your home.

4. **Possible Benefits**

The information that you share regarding your experiences will be used to improve the quality of care for patients who attend the Emergency Department with self-harming behaviours or thoughts.

Whilst we cannot guarantee or promise that you will receive any benefits from this project, it is anticipated that this project will enhance current understanding regarding
the specific psychosocial needs of patients who attend Emergency Departments with deliberate self-harm behaviours and thoughts. It is expected that this will directly contribute to the development of more effective service provision and subsequent sharing of a service model that will benefit patients in other Hospital Emergency Departments.

5. Possible Risks:
There is a possibility that you may become distressed when discussing personal issues and describing any difficult life experiences whilst taking part in this research. If you feel distressed, you can let the researcher know and can ask to pause or stop the interview. If appropriate, the researcher can arrange for you to speak with an ECAT clinician, who is experienced in working with people in distress. Alternatively, the researcher can put you in touch with an external service, such as a Community Health Centre, where a social worker or counsellor can provide you with support.

If you need to talk with someone after your presentation to the Emergency Department, you may also contact Lifeline. Lifeline offers a 24-hour confidential telephone counselling service by trained professionals (phone 13 11 14).

You are welcome to contact the Project Research Officer and/or Research Assistant weekdays 9am-5pm should you have any concerns: Nicole Hill, contactable on ph. 0421 894 656.

There may be additional unforeseen or unknown risks. You are welcome to suspend or withdraw your participation in this project at any time, if distress occurs. This will not adversely affect your care in any way.

6. Privacy, Confidentiality and Disclosure of Information:
Any information obtained in this project that can identify you will remain confidential, and only disclosed with your permission, except as required by law. For example, if you disclose you are in serious and imminent danger of hurting yourself or others, the Researcher is obliged to disclose this information to relevant people. Relevant people may include police, Crisis Assessment Teams (CAT), your general practitioner, next of kin to name a few. If you agree to participate in this project (by signing the Consent Form), any information you provide will be presented in a way that prevents you from being identified in any way. No identifiable information will be made available to medical staff including those on this project team.

The findings of the study will be written up as a PhD thesis and reported to the Australian Research Council. Specific findings relating to service linkage, quality of life and satisfaction will also be used in a Masters Thesis and disseminated. Findings will be shared with SPED health care providers in order to improve service to patients. This non-Identifiable information will also be shared with similar services in Victoria and be re-analysed. In all reports and publications, information will be provided in such a way you cannot be identified.

During the duration of the project, all information collected will be kept in a locked filing cabinet, in a locked project office. On completion of the project, information will be kept in a locked filing cabinet in a secure office in the School of Nursing and Social Work at the University of Melbourne for a total of seven years. According to Australian Privacy Laws, you have rights to access information collected and stored about you.

7. New Information Arising During the Project:
Any new information concerning possible risks and benefits of the project that arise during the research will be made available to you. This new information may mean that you can no longer participate in this research. If this occurs, the person(s)
8. Results of Project:
At the end of the project, a summary of our findings will be made available to participants. If you would like a copy, please tick the box on the consent form.

9. Further Information or Any Problems:
If you require further information or if you have any problems concerning this project, you can contact the principal researcher: Dr Lynette Joubert, University of Melbourne (ph) 8344 9417 (Monday-Friday 8:30-5pm).

10. Other Issues:
If you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:
Name: Ms Michelle Clemson
Position: Manager, Mental Health Research and Ethics Committee.
Telephone: (03) 9342 7215

You will need to tell Ms Michelle Clemson the name of the researcher given in section 9 above.

11. Participation is Voluntary
Participation in any research project is voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage.

Your decision whether to take part or not to take part, or to take part and then withdraw, will not affect your routine treatment, your relationship with those treating you or your relationship with any of the services offered by Sunshine Hospital.

Before you make your decision, a member of the research team will be available to answer any questions you have about the research project. You can ask for any information you want. Sign the Consent Form only after you have had a chance to ask your questions and have received satisfactory answers.

If you decide to withdraw from this project, please notify a member of the research team before you withdraw. This will ensure that research clinicians do not contact you again.

12. Ethical Guidelines
This project will be carried out according to the National Statement on Ethical Conduct in Research Involving Humans (2007) produced by the National Health and Medical Research Council of Australia. This statement has been developed to protect the interests of people who agree to participate in human research studies.

The ethical aspects of this research project have been approved by the Human Research Ethics Committee of North Western Mental Health.
Western Health
Consent Form
Version 1  Dated 20/07/09
Site  Sunshine Hospital Footscray

Full Project Title:  Suicide Prevention in the Emergency Department (SPED):
Management of deliberate self-harm through an assertive engagement, brief psychotherapy and community linkage model.

Assertive Linkage Service

I have read, or have had read to me in my first language, and I understand the Participant Information Version One dated 20/07/09.

I freely agree to participate in this project according to the conditions in the Participant Information.

☐ YES

☐ YES

☐ YES

☐ YES

OR  I do not wish to participate in this project.

☐ Tick

If I agree to participate in this project:

I will be given a copy of the Participant Information and Consent Form to keep

The researcher has agreed not to reveal my identity and personal details if information about this project is published or presented in any public form.

I would like to receive a copy of the results at the end of the project.  ☐ YES  ☐ NO

Participant’s Name (printed) .................................................................

Signature  Date

Name of Witness to Participant’s Signature (printed)  .................................................................

Signature  Date

Declaration by researcher: I have given a verbal explanation of the research project, its procedures and risks and I believe that the participant has understood that explanation.

Researcher’s Name (printed) .................................................................

Signature  Date

Please contact Ms Michelle Clemson, Manager, Mental Health Research and Ethics Committee [tel. 9342 7215] for any ethical concerns relating to this research.
REVOCATION OF CONSENT FORM
(TO BE USED FOR PARTICIPANTS WHO WISH TO WITHDRAW FROM THE PROJECT.)
(ATTACH TO PARTICIPANT INFORMATION)

Western Health

Revocation of Consent Form

Full Project Title: Suicide Prevention in the Emergency Department (SPED) Assertive Linkage Service

I hereby wish to WITHDRAW my consent to participate in the research proposal described above and understand that such withdrawal WILL NOT jeopardise any treatment or my relationship with any service connected with the Suicide Prevention in the Emergency Department Project (SPED), or any service offered by the Sunshine Hospital, Footscray.

Participant’s Name (printed) ..........................................................

Signature.......................................................... Date

Appendix 7: Eco-Map

**Eco-Map:**

*Patient's Name:*

*Date Completed:*

*Baseline* (1-week) (1-month)

**Legend**

<table>
<thead>
<tr>
<th>Relationship with each system:</th>
<th>Positive</th>
<th>Nature</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak/intermittent</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Moderate</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Strong</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
</tr>
<tr>
<td>Very strong</td>
<td>- - -</td>
<td>- - -</td>
<td>- - -</td>
</tr>
</tbody>
</table>

**Direction of flow within each relationship:**

- Indicated with an arrow(s)

**Link Coded:**

- Indicates that a moderately positive relationship has ended, and this is good.
- A weak negative relationship has ended. This is bad.
- A moderately negative relationship has ended, and this is good.

**Services referred to; Information provided; Outcome of Intervention:**

- ❖
- ❖
- ❖

*Created by Nikki E.A.A. PhEco maps Template - EcoMap FINAL.doc*
Appendix 8: Case Vignettes

Case Vignette 1- Suy

Suy was a 16-year-old young male of Sri Lankan background who presented to the emergency department after taking an impulsive overdose of 25 paracetamol tablets. He had an argument with a female friend at school who had misinterpreted his attempt to console her as an insult. Suy believed that the friendship was over. He was currently part of an accelerated learning program and described having difficulty keeping up with schoolwork – Suy was also bothered about his parents arguing over “foolish little things”.

His parents reported that he is a “friendly normal child”. He has enrolled in 3 subjects in the accelerated stream and they feel that this has been too much for him. His brother is also enrolled in the accelerated stream and is doing well so Suy feels that he is not keeping up.

Suy was brought in by an ambulance after telling a friend he had taken an overdose. He was medically cleared and subsequently referred to the ECATT service. Suy stated during the assessment that while he had been ‘thinking a lot about life’ and ‘what is the point’ he had taken the overdose impulsively. The ECATT clinician had assessed him to be a low risk, as he did not have any ongoing suicidal intent. While he was still ambivalent about his future prospects he was confident that he would not attempt to overdose or self-harm again. He was discharged home with information about headspace youth mental health services and agreed to contact from the ALS clinician.

The ALS clinician contacted Suy within 48 hours after his presentation. His mother answered the phone and informed the clinician that Suy was at school. The ALS had prior knowledge that Suys parents were aware of his presentation to the ED so was able to answer her questions. She expressed her concern about him, ” he is not eating much; one meal a day.... he keeps everything to himself, I am still very worried about him.” The ALS clinician reassured the mother that he would speak with Suy to gain a better understanding of how he was coping. Contact was made with Suy later in the day- The ALS initially undertook a brief review of mental state and risk.
There was no change compared to when Suy was discharged. The ALS also confirmed that he was provided with the relevant information about community-based services when he left the ED. Suy stated that he was told about the headspace service but had not contacted them yet. The ALS subsequently provided an explanation of the SPED/ALS study and he was invited to participate. Suy agreed and was allocated to the intervention group using the randomisation method. Suy was given further information about the ALS role and function and an appointment was made to meet the next day to discuss his situation and complete an eco-map. Suy was also agreeable that ALS inform parents.

ALS attended the next day and initially met with S. He was introduced to the concept of the eco-map and how it would be used during the session. Suy was a little reticent and most likely, due to underlying anxiety, not readily engaged - however he was more at ease when he was asked to identify the most positive factors in his life- he was able to speak about his interest in music and playing the guitar. He also identified his relationship with his siblings as a positive. The main negative factor was falling out with a group of friends at school – he spoke about his reluctance to return and about the prospect of changing schools. Suy also believed that his parents were unnecessarily worried and overprotective and that this was placing extra pressure on him. He also described ongoing difficulties with sleep, getting 3-4 hours a night, and lowered appetite, “I’m never hungry” He also was concerned that his concentration was poor and while he usually did well at school he had started to fall behind in his studies.

It was important for the ALS to empathise and reflect on the impact of these stressors on his mood and outlook. It appeared that these changes had been occurring since before the most recent precipitant and presentation to the ED. While the conflict with the friend was a trigger for his crisis Suys high expectations of his own academic performance was also an ongoing stressor and the impact of the biological symptoms were becoming problematic. The ALS clinician reframed his crisis as an understandable reaction to the stress he was experiencing but also expressed concern about his safety and the way he had tried to cope. The clinician also spoke in more detail about learning of other safer ways of coping with stress. He had also reassured
Suy about the efficacy of psychological interventions and provided more information about the types of services available including the headspace service. Suy expressed some reluctance about the prospect of talking to a counsellor—

“I’m not sure about the idea of talking to someone…. what do I talk about?” The clinician framed this reluctance as a normal apprehension and asked Suy to consider an alternative to the status quo -that it may be worth meeting with the headspace intake worker to find out more about what they have to offer. Suy would need to obtain a mental health care plan from his GP as part of the headspace referral process. He was apprehensive about this as his GP was part of the local Sri Lankan community and he was concerned about compromising confidentiality.

The ALS clinician also sought permission to speak with Suys parents about available supports and to make them aware of the referral process. He was agreeable and a meeting subsequently took place during the home visit. The parents were still distressed about the overdosing incident and continued to express concern about his mental health. Reassurance and information was provided about the types of services that could provide ongoing support. The parents voiced some concern over the potential of Suy being referred to a mental health service and being medicated as part of any intervention. Further psycho-education was provided about Suys current condition (without diagnostic labelling) and the proven benefits of psychological counselling. The parents were reassured that counselling was always the first line option and that if medication was considered it would not be used without their consent. They were keen to seek out the opinion of a Sri Lankan doctor who practised in another area. The clinician encouraged this but also sought permission to send the nominated GP some background clinical information as is usual practise. Suy and his parents agreed.

The ALS clinician spoke with the GP about Suys presentation, the ECATT assessment and their recommendations. The ALS clinician also offered to fax a transition of care summary and reinforced the need for the provision of a Mental Health Care Plan that would ensure Suy eligibility for Medicare funded psychological counselling. Suy subsequently attended the GP who followed up on ECAT/ALS recommendations.
The ALS clinician had alerted the headspace intake worker about Suy and sent them relevant clinical information. A previously negotiated ‘priority referral’ pathway was utilised to expedite Suys referral.

The ALS maintained contact with Suy in the ensuing weeks to monitor his mental state and referral progress. After visiting the GP he agreed to contact from the headspace intake worker who could offer more information. Suy was concerned about being able to travel to Headspace as his parents worked and he didn’t have convenient access to other transport. Headspace offered to allocate the mental health nurse who was able to offer home visits. Suy agreed to this initial contact and attend headspace on multiple occasions. His parents were subsequently able to offer assistance with transport on occasions.

**Case Vignette 2 - Lena**

Lena was a 38 year-old woman who presented to the Emergency department after experiencing severe panic symptoms and a consequent minor overdose of medication. The attending E.D registrar referred her to The Enhanced Crisis and Assessment Team clinician who carried out a Mental Health Status assessment. While Lena had initially told the attending paramedics that she had “felt like dying” she subsequently told ECAT that the overdose was a way of escaping from her panic state and current difficulties. She identified these as being financial concerns, her eldest daughters’ behaviour and her relationship with her husband. Lena was experiencing biological symptoms of depression with lowered appetite, disturbed sleep patterns (averaging 2-3 hours per night) and diminished energy and motivation.

She had been attending her G.P for the last 12 months to seek treatment but had been reluctant to use prescribed anti-depressants until six weeks prior to her E.D presentation. Despite this, she reported no improvement in her mood. The ECAT clinician recommended that Lena be referred back to her G.P for onward referral to psychological counselling and consideration of relationship counselling with her husband. Lena was also referred to assertive linkage follow-up.
The assertive linkage clinician contacted her soon after her discharge from the ED and further explained the ALS role. He enquired about her wellbeing and the recommendations made by the ECAT were reviewed. Lena reported continued anxiety and depressed mood. She had made an appointment with her G.P. but was unsure about the process of obtaining an onward referral to a psychologist. ALS provided more information about obtaining a Mental Health Care Plan and offered assistance to link into the relevant supports. Lena subsequently accepted an invitation to meet at the mental health clinic to further assess her needs.

Lena was generally receptive to the eco map and the assessment process. It ultimately assisted in validating her strengths and identifying resources such as friends in the local Lebanese community. It was also helped identify the precipitants to her current condition such as significant financial loss after the sale of the family business and the death of her brother due to heart attack nine months prior. Lena also spoke about the difficulties with her relationship with her husband who had been unemployed for an extended period and had been gambling. While he had made a promise to stop Lena found it difficult to believe him. They also often disagreed about ways of parenting their eldest daughter who was becoming more oppositional. He had also been discouraging Lena from using the anti-depressant medication and expressed scepticism about her depression diagnosis. While Lena had friends in the local community she also spoke of a sense of isolation from her family. She had one brother living in Sydney but the remaining six siblings and her aging mother lived in Lebanon. She harboured feelings of guilt about being away from her mother and was affected by accusations from other family members about not making sufficient financial contributions to her family in Lebanon.

Lena had reported no improvement in her mood since she had presented at the ED a few days prior. It had also become clear that Lena was emotionally fragile; she was tearful on occasions and anxious. It was therefore important to re-assess her mental state and level of risk. Her biological symptom of depression were still present, she was distressed by the sleep disturbance and described ongoing panic attacks which had triggered both a fear of dying and fleeting suicidal thoughts. She denied having actually planned to self-harm or suicide and was clearly mindful of her children’s
interests. While there were strong protective factors at play it was apparent that the anxiety and depressive symptoms were becoming more debilitating despite having been on her current medication for almost six weeks. There were also some emerging obsessive-compulsive cleaning behaviours. The ALS clinician was also careful to assess her general coping in regards to caring for her children. While Lena was concerned that her increased irritability and lower tolerance of some of their behaviours it was clear that there was no neglect or other risk factors. This was later confirmed with collateral information from her husband and close friend.

On the clinical staging model continuum Lena was experiencing “First episode of major depressive disorder; full-threshold disorder with moderate to severe symptoms, neurocognitive deficits and functional decline” (Hetrick and Parker et al. 2008)

The next phase of the consultation with Lena could be defined as a type of problem solving process; identifying needs and the steps that needed to be taken to access support. Lena had identified both the sleep disturbance and the panic symptoms as the most distressing aspect of her life at the moment and was insightful about how her condition was effecting her general functioning. The short-term priority was to arrange an assessment by a consultant psychiatrist who would be able review medication and make some recommendations about ongoing treatment. This referral could be initiated by the G.P who would be able to make a referral for a one off bulk-billed consultation under Medicare Item 291 but this process could often be drawn out. Given the severity of her symptoms the ALS advocated to fast track her appointment with the CATT team psychiatrist who was able to provide an appointment for the next week.

The other aspect was to attend to the medium to long term needs regarding psychological counselling. Lena would be eligible for up to 10 sessions of psychological counselling by a social worker or psychologist via the Better Access pathway, which would require a mental health care plan, completed by her treating G.P. The ALS clinician spent some time providing psycho-education in regards to treatment of depression and anxiety placing emphasis on the importance of a multilayered
approach, i.e a combination of medication and counselling having a proven efficacy. Given Lenas’ continuing levels of distress she was motivated to seek help. She agreed that she would attend at her G.P within the following week and that the ALS clinician could liaise with the GP about the treatment plan. A fax that outlined details of Lenas’ recent ED presentations and the subsequent ECAT recommendations were sent. ALS then phoned the G.P who agreed to provide Lena with a MHCP and arrange an appointment with a psychologist who practiced from the same medical clinic.

Given the acute nature of Lenas’ anxiety symptoms and her willingness to seek help there was an opportunity to introduce a simple controlled breathing exercise during the course of the meeting. The ALS provided further psycho-education about the physiological effects of anxiety; - that people tend to take shallow breaths’ when anxious which increase the physical symptoms and exacerbate anxiety. The clinician spent some time practicing controlled breathing technique with Lena and encouraged her to practice this twice a day in the morning and evening for ten minutes.

An agreement was made about ongoing monitoring of her anxiety including taking note of triggers and employing the breathing technique when necessary. “Mastery of emotions involves being aware of what triggers them, recognizing indications of emotional arousal and developing new ways of coping with stressful situations” (Hepworth & Rooney R. et al. 2010 p. 211). Self -monitoring sheets could have been considered to assist Lena to track her thoughts, behaviours and emotions in a structured way. This would assist in developing her skills of self- evaluation. The ALS clinician was also able to use the follow-up calls to reinforce the technique, encouraging adherence to the practice routine.

Subsequent contact lasted for 8 weeks; Lena was linked into a consultant psychiatrist within a week of her initial presentation to the ED and to a psychologist within a fortnight. The ALS liaised with both the psychologist and psychiatrist to inform them of ALS interventions. While Lena was initially ambivalent about ongoing attendance sessions with the psychologist she was encouraged to continue for at least the short term to enable a proper evaluation. Ultimately she engaged with the psychologist and
had attended on at least four occasions. The consultant psychiatrist changed her medication to an anti-depressant medication that would assist with sleep disturbance and anxiety symptoms. There was also an opportunity for the ALS clinician to speak with Lenas husband to inform him of nature the ALS involvement, provide supportive counselling and psycho-education to highlight the importance of the recommended treatment approach.

Completion of the eco-map at the four–five week time line enabled a review of Lenas situation. Most notably she rated her contact with the psychologist as moderately positive, she had started to attend to some of the issues associated with parenting and the relationship with her husband. There was also a decrease in the negative rating of the anxiety symptoms. While Lena did experience further panic attacks she was starting to utilize the controlled breathing strategies. The ALS also reframed her gains as important steps in the context of the medium to long-term recovery process. Further phone contact also enabled some initial problem solving around financial stressors and information about financial counselling services was provided.

**Case Vignette 3 - Rob**

Rob A was a 32-year-old male who presented to the Sunshine ED with the Police in an intoxicated state. His sister contacted the police after he had voiced suicidal ideation. He had tied up a noose to a tree in her back yard with a stated intention of hanging himself. While Rob had a previous dependence on alcohol he had not been drinking for at least 10 years. He had started drinking again in the previous 3 months prior to his admission in the context of breaking up with his long-term partner and losing his job. Rob had also effectively become homeless and was staying in a tent in the backyard of his sister and her family.

“I get the feeling that her husband thinks I am a bad influence on the kids, like I am burden. I can’t stay here for much longer but I got nowhere else to go ……”

When Rob was brought into the ED he was .35-blood alcohol reading (BAL), he could not be fully assessed until he was less intoxicated. He was ultimately assessed when his BAL was .15 as he presented as alert and coherent. While his mood was depressed
he subsequently denied any intentions of harming himself and expressed a wish and commitment to detox. Unfortunately no detox beds were readily available so given his low risk status he was discharged with information about self referring to D&A services and provided with a 24 hour crisis number- he was also informed about the SPED study and agreed to receive a phone call with view to participating.

The ALS clinician contacted Rob the next day and after initial risk assessment invited him to participate in the study. Rob agreed and was subsequently allocated to the intervention group. He was receptive to ongoing follow up but was not able to attend at the clinic for an appointment due to financial constraints. A home visit was suggested. Rob preferred to maintain confidentiality and meet at a local park.

The ALS met with Rob the following day- he was agreeable to completing an eco-map. He rated the break up with his girlfriend and the recently increased dependence on alcohol, as the most negative factors while homelessness and financial stress was a close second. His sisters’ support was rated most positive but he believed this was tenuous because of his brother in laws attitude and the exposure of his lifestyle to their children. He expressed the desire to return to work in the building industry and move into his own accommodation but had little hope of this happening.

After completion of the eco-map referral options were identified and prioritised. Rob was anxious to access detox. The process was explained and he agreed to make an appointment on the ALS mobile phone for an assessment with DAS West while we were meeting. He was provided with an appointment for the following week.

The ALS clinician offered to liaise with Robs sister to keep her informed and enlist her support. (To reassure her that Rob was acting to change his situation) Rob was spending most of his funds on alcohol but ceasing suddenly without medical involvement could be dangerous or fatal. Rob was advised to moderate his drinking without going cold turkey.

The ALS advised R that regular contact would be made up until next week to monitor his situation and provide support. Unfortunately Robs situation deteriorated 2 days
later when he had an altercation with his brother in law. Robs sense of hopelessness escalated and he described increasing suicidal thoughts. He was intoxicated and had impaired judgement. The ALS offered to meet with him again the next day to assess his situation and consider the options. Rob was confident that he would not harm himself before tomorrow and continued to be help seeking. He also agreed for the ALS clinician to speak with his sister to inform her of the plan.

The ALS met with Rob the next day. Robs mental state had clearly deteriorated. He stated that he was not able to cope in the present situation and expressed intent to “go cold turkey”. Given the risk factors the ALS advised that Rob attend the Sunshine ED and the ALS clinician was able to liaise with ED physicians to facilitate an admission to the medical detox bed at western general hospital Footscray.

Rob subsequently completed a 7-day detox program and was linked into a D&A psychiatrist on discharge to commence anti-depressant treatment. The ALS also linked him into local psychological counselling through the ATAPS program. He was also linked in to a local financial counsellor.

After a further four weeks of weekly contact Rob was well engaged with formal supports and was agreeable to terminating contact with the ALS clinician.
Appendix 9: Client satisfaction survey comments

- He was fantastic. So patient and seemed to understand. I didn't know what to do but he did.
- He was good, good to have his help.
- Very comforting to have someone follow-up with me
- Service was helpful but still feeling anxious about things (generally) helping myself now to address problems.
- He went above and beyond sourcing info for me, extended and regular phone conversations that left me feeling very satisfied and uplifted and was very patient, answering any questions I may have had promptly and succinctly.
- Was helpful
- I have been hard to catch up with
- Appreciated help in locating more suitable GP. Thank you.
- Not sure anything can 'make' me feel better, but his help was really good. I needed it. His support has been important at this time. He understands.
- He understands anxiety
- Thanks.
- You guys are doing a good job keep up the good work. Thank you heaps for all the help.
- It feels really good to know that there are people out there who really care. Thank you!
- Helpful, but what is the point of just talking? Need to see change, not just talk about it
- Nice to talk when I was so upset
- Not up to him to make me feel better, but helped to show me what's out there
- He's a nice guy
- Not sure if i'd ask for help - how are they going to help? More likely to go to professional than family/friend
- Not sure I needed it, I'm ok. Nice though to get a call
- Really like the phone calls and his visit. Felt supported. Didn't judge me. Some people do.
- Can't remember exactly what we talked about, but remember it helped
- Great service. It's needed, when you feel really upset and can't talk with people around you
- Nice guy
- Not sure I need to understand or cope better with my situation - I take drugs as I like the effect. Already getting help with this through 1st step. I know it's bad.
- I feel in a better place not just due to this but lots of things. This was good though
- Good to get a call when you feel like things are against you
- Didn't judge me
- Encouraging of me
- Very friendly, very caring
- It was nice to be able to be given help and assistance after the Assertive Linkage Service e.g. counselling and it was really effective in helping me cope with my situation
• He's helping me find the right people
• I need/want someone to sort me out. Counsellor or something. He's helping to find one.
• Was so good to talk with someone when I was so distressed
• Nice to get follow-up but I didn't see that I needed this service. It was all a misunderstanding that I was there.
• A voice of reason. Although sometimes when you're sad or anxious you can't hear that reason until later
• I'm very happy with my progress and with the follow-up and with the CAT team. And I'm very happy with myself
Author/s: 
Pleban, Alex

Title: 
An evaluation of an assertive community linkage intervention for patients presenting to the Sunshine Hospital Emergency Department with suicidal behaviours

Date: 
2017

Persistent Link: 
http://hdl.handle.net/11343/194800

File Description: 
An evaluation of an assertive community linkage intervention for patients presenting to the Sunshine Hospital Emergency Department with suicidal behaviours

Terms and Conditions: 
Terms and Conditions: Copyright in works deposited in Minerva Access is retained by the copyright owner. The work may not be altered without permission from the copyright owner. Readers may only download, print and save electronic copies of whole works for their own personal non-commercial use. Any use that exceeds these limits requires permission from the copyright owner. Attribution is essential when quoting or paraphrasing from these works.