CHANGING PRACTICE: PREVENTIVE CARE FOR CHRONIC DISEASE HEALTH RISK BEHAVIOURS IN COMMUNITY MENTAL HEALTH SERVICES

Kate Maree Bartlem
BPsyc (Hons)

Submitted for the Degree of Doctor of Philosophy
School of Psychology
Faculty of Science & IT
University of Newcastle
August, 2015
Statement of Originality

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library**, being made available or loan and photocopying subject to the provisions of the Copyright Act 1968.

** Unless an Embargo has been approved for a determined period.

Statement of Authorship

I hereby certify that the work embodied in this thesis is the result of original research, and this thesis is submitted in the form of a series of published papers of which I am a joint author. This thesis adheres to the guidelines for thesis submission by publication (Refer to Rule 39 of the Rules Governing Research Higher Degrees). I have included as part of the thesis a written statement from each co-author; and endorsed by the Faculty Assistant Dean (Research Training), attesting to my contribution to the joint publications (Refer to Rule 38.5 of the Rules Governing Research Higher Degrees).

SIGNED: ____________________________

Kate Bartlem

University of Newcastle

August 2015
ACKNOWLEDGMENTS

There are so many people that I would like to thank for their support, guidance and patience throughout the completion of this thesis.

Firstly, to my supervisors, Jenny Bowman, Paula Wye, Megan Freund, and John Wiggers. Thank you for providing such a genuinely caring and supportive learning environment. Each of you have provided me with the skills and confidence to continue along the research path, and without your expertise and guidance none of this would have been possible. In particular, a very special thank you to Jenny, who has invested so much time and energy into developing my abilities and confidence, and providing support throughout this process. I could not have asked for a better primary supervisor, and I will miss our weekly coffee/supervision meets!

To all of the members of the larger Preventive Care team who have come and gone over these few years, this thesis would not have been possible without your hard work and dedication. To Jay Jones, Mary Gabbey, and Paula Wye in particular, thank you for your commitment to improving the care provided to clients of community mental health services. Mary – thank you for making work so fun! To the CATI interviewers, who have completed thousands of telephone interview surveys and made many thousands of additional attempts throughout the project, thank you for your persistence and dedication. To the ‘CHIME team’, especially Michael Talbot, thank you for the support you have given the Preventive Care team throughout the project. To all of the community mental health service clinicians, managers and other staff, and all of the clients of these services, thank you for your contribution to this research.
Thank you to Sam McCrabb, Jacqui Bailey, Jade Goodman, and Caitlin Fehily who have assisted with various aspects of the research encompassed in this thesis over the years, through volunteering, research assistant work, or research scholarship opportunities. A very special thank you to a number of people who have very selflessly given up huge amounts of their time in these last few weeks: Debs Mainey, thank you for your attention to detail during the many hours you have spent beautifully formatting this document; Caitlin Fehily, thank you for undertaking the very tedious task of editing my wildly inconsistent referencing style; and Rebecca Hodder, Emily Stockings, Tameka Small, and Danika Tremain, thank you for taking the time to proof this document.

Christophe Lecathelinais, thank you for making statistics fun, coming to my aid every time I “broke SAS”, and providing me with an endless supply of gossip and procrastination tools (primarily cat videos). To Serene Yoong and Luke Wolfenden – thank you for the support and guidance you have provided along the way, and to my PhD buddies - Kathleen McElwaine, Danika Tremain, Julia Dray, Jacqui Bailey, Sam McCrabb, Bec Hodder, Tameka Small and others – thanks for all of the support, debriefing, and fun we have had along the way! A special thanks and congratulations to Kathleen for all of your support while sharing this PhD journey with me, and submitting a few weeks ahead of me – we did it!

To my wonderful friends, both in and outside of work – especially Katrin Cox, Emily Stockings, Christophe Lecathelinais, Sam McCrabb, Mary Gabbey and Bec Lavis - thank you for keeping me sane and being patient with me when I cancelled playdates or disappeared into thesis land. Thank you to Steve Monro for our fortnightly ‘parties’, and keeping my love of music alive. A very special thank you to Katrin and Em in particular. Katrin, thank you for the many crazy dinners, tea parties and nights out, and
your unwavering friendship and support over the many years that we’ve been friends. ‘Em-face’ – thank you for being my mentor, the sister I never had, and for always being there, despite now living and working in a different city. ‘The ranch’ is not the same without you.

To my family, both immediate and extended – including my ‘fur-babies’ – thank you for the constant support over the years, particularly Mum, Dad and brother Scott. Mum and Dad – thank you for supporting me, feeding me (sometimes for weeks on end), and providing me with a home where I can be independent, enjoy the amazing things a farm life has to offer, enjoy my menagerie of animals, and come next door for a cuppa break when I need it.

Lastly, Grant. Even though you weren’t in my life for the first three quarters of this, I couldn’t have gotten through this last leg without you. Thank you for your patience and understanding, for pushing me, and picking up my slack when I haven’t been able to contribute. You have given me so much to look forward to, and I can’t wait to see where life with you takes me.
LIST OF PUBLICATIONS INCLUDED AS PART OF THESIS


CO-AUTHOR STATEMENT

I attest that Research Higher Degree candidate Kate Bartlem has contributed to the following publications for which I am a co-author. Kate has:

- Contributed to the development of research questions
- Contributed to research design and methodology
- Contributed to the development and modification of data collection tools
- Participated in data collection
- Contributed to intervention design
- Contributed to, and overseen intervention implementation
- Cleaned the data
- Led the data analysis for chapters 2, 3, 4 and 5
- Led the writing of each manuscript

<table>
<thead>
<tr>
<th>Full name of co-author</th>
<th>Chapters co-authored</th>
<th>Signature of co-author</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jenny Bowman</td>
<td>2,3,4,5,6,7</td>
<td></td>
<td>13.07.2015</td>
</tr>
<tr>
<td>Megan Freund</td>
<td>2,3,4,5,6,7</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>Paula Wye</td>
<td>2,3,4,5,6,7</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>John Wiggers</td>
<td>2,3,4,5,6,7</td>
<td></td>
<td>15.07.2015</td>
</tr>
<tr>
<td>Kathleen McElwaine</td>
<td>2,3,4,5,6,7</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>Karen Gillham</td>
<td>2,3,4,5,6,7</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>Luke Wolfenden</td>
<td>3,4,5,7</td>
<td></td>
<td>09.08.2015</td>
</tr>
<tr>
<td>Elizabeth Campbell</td>
<td>2,3,7</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>Full name of co-author</td>
<td>Chapters co-authored</td>
<td>Signature of co-author</td>
<td>Date</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------</td>
<td>------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Christophe Lecathelinais</td>
<td>2,5</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>Patrick McElduff</td>
<td>6,7</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>Jacqueline Bailey</td>
<td>2</td>
<td></td>
<td>31.07.2015</td>
</tr>
<tr>
<td>Kate Ross</td>
<td>4</td>
<td></td>
<td>31.07.2015</td>
</tr>
<tr>
<td>Emma Doherty</td>
<td>4</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>Jenny Knight</td>
<td>6</td>
<td></td>
<td>06.08.2015</td>
</tr>
<tr>
<td>Daniel Barker</td>
<td>7</td>
<td></td>
<td>06.08.2015</td>
</tr>
</tbody>
</table>

**Signature of PhD Candidate**

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kate Bartlem</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Signature of Assistant Dean (Research and Training) (ADRT)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frances Martin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LIST OF ADDITIONAL PUBLICATIONS

PAPERS


CONFERENCE PAPERS

*Presenting author


15. Hampton R*, Bowman J, Freund M, Bartlem K. Health risk behaviours and preventive health care delivery: a comparison of general health and specialist mental health services. Poster presentation: *48th Australian Psychological Society Annual Conference, Cairns, Australia, October 2013*


TABLE OF CONTENTS

STATEMENT OF ORIGINALITY __________________________________________ ii

STATEMENT OF AUTHORSHIP __________________________________________ ii

ACKNOWLEDGEMENTS ____________________________________________ iii

LIST OF PUBLICATIONS INCLUDED IN THESIS __________________________ vi

STATEMENT OF CONTRIBUTION ______________________________________ vii

LIST OF ADDITIONAL PUBLICATIONS ___________________________________ ix

TABLE OF CONTENTS _______________________________________________ xiii

LIST OF TABLES AND FIGURES _________________________________________ xxi

LIST OF APPENDICES ______________________________________________ xxiv

SYNOPSIS _______________________________________________________ xxvii

CHAPTER 1: INTRODUCTION: CHRONIC DISEASE, HEALTH RISK BEHAVIOURS AND PREVENTIVE CARE FOR PEOPLE WITH A MENTAL ILLNESS

CHAPTER PURPOSE AND STRUCTURE ______________________________________ 2

MENTAL ILLNESS ___________________________________________________ 2

Prevalence and burden of mental illness _________________________________ 3

Internationally ____________________________________________________ 3

In Australia _________________________________________________________ 4

Mortality and life expectancy of people with a mental illness _______________ 6

Internationally ____________________________________________________ 6

In Australia _________________________________________________________ 8

Contribution of chronic physical disease to the mortality experienced by people with a mental illness _________________________________ 8

Internationally ____________________________________________________ 9

In Australia _________________________________________________________ 10
# TABLE OF CONTENTS

MODIFIABLE HEALTH RISK BEHAVIOURS AND THEIR PREVALENCE AMONG PEOPLE WITH A MENTAL ILLNESS ___________________________________________________________ 10

- Smoking ______________________________________________________________ 12
  - Internationally ____________________________________________________ 12
  - In Australia ____________________________________________________ 12
- Harmful alcohol consumption ______________________________________________ 18
  - Internationally ____________________________________________________ 18
  - In Australia ____________________________________________________ 18
- Inadequate nutrition _____________________________________________________ 23
  - Internationally ____________________________________________________ 23
  - In Australia ____________________________________________________ 23
- Inadequate physical activity _______________________________________________ 30
  - Internationally ____________________________________________________ 30
  - In Australia ____________________________________________________ 30
- Limitations of evidence regarding the prevalence of health risk behaviours among community dwelling people with a mental illness _______________________________ 36

HEALTH CARE SERVICES AS SETTINGS FOR REDUCING CHRONIC DISEASE HEALTH RISK BEHAVIOURS: ‘PREVENTIVE CARE’ ______________________________________________ 37

- Effectiveness and models of preventive care __________________________________ 38
- Guidelines recommending preventive care provision in general and mental health care settings ___________________________________________________________ 40

COMMUNITY MENTAL HEALTH SERVICES: AN OPPORTUNITY FOR THE PROVISION OF PREVENTIVE CARE ___________________________________________________________ 42

- Prevalence of preventive care in community mental health services ___________ 43
  - Assessment ______________________________________________________ 44
    - Internationally ____________________________________________________ 44
    - In Australia ____________________________________________________ 44
  - Advice __________________________________________________________ 44
    - Internationally ____________________________________________________ 44
    - In Australia ____________________________________________________ 45
  - Referral _________________________________________________________ 47
    - Internationally ____________________________________________________ 47
    - In Australia ____________________________________________________ 47
- Limitations of evidence regarding the prevalence of preventive care in community mental health services _______________________________ 47

FACTORS INFLUENCING PREVENTIVE CARE PROVISION IN COMMUNITY MENTAL HEALTH SERVICES ___________________________________________________________ 48

- Studies quantitatively investigating the association between clinician and system level factors and the provision of preventive care 49
<table>
<thead>
<tr>
<th>Chapter 2: Chronic Disease Health Risk Behaviours Amongst People with a Mental Illness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BACKGROUND</strong></td>
</tr>
<tr>
<td><strong>METHODS</strong></td>
</tr>
<tr>
<td>Design and setting</td>
</tr>
<tr>
<td>Participants and recruitment</td>
</tr>
<tr>
<td>Community health services</td>
</tr>
<tr>
<td>Clients</td>
</tr>
<tr>
<td>Measures</td>
</tr>
<tr>
<td>Demographics and clinical descriptors</td>
</tr>
<tr>
<td>Risk status</td>
</tr>
<tr>
<td>Interest in modifying health risk behaviours</td>
</tr>
<tr>
<td>Statistical analysis</td>
</tr>
<tr>
<td><strong>RESULTS</strong></td>
</tr>
<tr>
<td>Participants</td>
</tr>
<tr>
<td>Prevalence of behavioural health risks</td>
</tr>
<tr>
<td>Interest in modifying health risk behaviour</td>
</tr>
<tr>
<td>Association between participant diagnosis, health risk behaviours, and interest in modifying health risk behaviours</td>
</tr>
<tr>
<td><strong>DISCUSSION</strong></td>
</tr>
<tr>
<td><strong>REFERENCE LIST</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 3: Care Provision to Prevent Chronic Disease by Community Based Mental Health Clinicians</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BACKGROUND</strong></td>
</tr>
</tbody>
</table>
# Table of Contents

## Methods
- Design and setting
- Participants and recruitment
- Data collection
- Measures
  - Clinician and service characteristics
  - Delivery of preventive care
  - Availability of practice support strategies
- Statistical analysis

## Results
- Clinician characteristics
- Preventive care delivery
- Availability of practice support strategies
- Association between availability of practice support strategies and optimal provision of preventive care

## Discussion
- Limitations

## Conclusions

## Reference List

## Chapter 4: Mental Health Clinician Attitudes to the Provision of Preventive Care for Chronic Disease Risk Behaviours and Association with Care Provision

### Background

### Methods
- Design and setting
- Sample
- Recruitment and data collection
- Measures
  - Clinician characteristics
  - Provision of preventive care
  - Clinician attitudes regarding delivery of preventive care
- Statistical analysis
  - Attitudinal differences by professional discipline
  - Association between clinician attitudes and provision of preventive care

### Results
- Clinician characteristics
- Provision of preventive care
- Attitudes toward provision of preventive care
  - Perceived role in providing preventive care
TABLE OF CONTENTS

Perception of client interest in changing health risk behaviours 138
Self-efficacy 139
Association between clinician attitudes and provision of preventive care 140

DISCUSSION 143

REFERENCE LIST 147

CHAPTER 5: ACCEPTABILITY AND RECEIPT OF PREVENTIVE CARE FOR CHRONIC DISEASE HEALTH RISK BEHAVIOURS REPORTED BY CLIENTS OF COMMUNITY MENTAL HEALTH SERVICES

BACKGROUND 152

METHODS 154
Design 154
Participants and recruitment 155
Community mental health services 155
Community mental health clients 155
Measures 156
Client descriptors 156
Client health risk behaviours 156
Acceptability of preventive care 156
Receipt of preventive care 157
Analyses 157

RESULTS 160
Participants 160
Acceptability of preventive care 161
Receipt of preventive care 161
Assessment 161
Advice 161
Referral/Follow-up 161
Complete care 162
Associations with receipt of preventive care 162

DISCUSSION 166

REFERENCE LIST 169
# TABLE OF CONTENTS

## CHAPTER 6: EVALUATING THE EFFECTIVENESS OF A CLINICAL PRACTICE CHANGE INTERVENTION IN INCREASING CLINICIAN PROVISION OF PREVENTIVE CARE IN A NETWORK OF COMMUNITY-BASED MENTAL HEALTH SERVICES: A STUDY PROTOCOL OF A NON-RANDOMISED, MULTIPLE BASELINE TRIAL

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACKGROUND</td>
<td>176</td>
</tr>
<tr>
<td>METHODS / DESIGN</td>
<td>178</td>
</tr>
<tr>
<td>Study design and setting</td>
<td>178</td>
</tr>
<tr>
<td>Participants</td>
<td>179</td>
</tr>
<tr>
<td>Community mental health facilities</td>
<td>179</td>
</tr>
<tr>
<td>Clients</td>
<td>180</td>
</tr>
<tr>
<td>Clinicians</td>
<td>180</td>
</tr>
<tr>
<td>Recruitment</td>
<td>181</td>
</tr>
<tr>
<td>Clients</td>
<td>181</td>
</tr>
<tr>
<td>Clinicians</td>
<td>181</td>
</tr>
<tr>
<td>Intervention model</td>
<td>181</td>
</tr>
<tr>
<td>Model of preventive care</td>
<td>181</td>
</tr>
<tr>
<td>Clinical practice change intervention</td>
<td>183</td>
</tr>
<tr>
<td>Data collection procedures</td>
<td>186</td>
</tr>
<tr>
<td>Client CATI</td>
<td>186</td>
</tr>
<tr>
<td>Clinician CATI</td>
<td>186</td>
</tr>
<tr>
<td>Measures</td>
<td>186</td>
</tr>
<tr>
<td>Client CATI</td>
<td>186</td>
</tr>
<tr>
<td>Clinician CATI</td>
<td>189</td>
</tr>
<tr>
<td>Sample size and power</td>
<td>191</td>
</tr>
<tr>
<td>Statistical analysis</td>
<td>192</td>
</tr>
<tr>
<td>Client CATI</td>
<td>192</td>
</tr>
<tr>
<td>Ethics approval</td>
<td>193</td>
</tr>
<tr>
<td>Trial status</td>
<td>193</td>
</tr>
<tr>
<td>DISCUSSION</td>
<td>193</td>
</tr>
<tr>
<td>REFERENCE LIST</td>
<td>195</td>
</tr>
</tbody>
</table>

## CHAPTER 7: EFFECTIVENESS OF AN INTERVENTION IN INCREASING PROVISION OF PREVENTIVE CARE BY COMMUNITY MENTAL HEALTH SERVICES: A MULTIPLE BASELINE IMPLEMENTATION TRIAL

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACKGROUND</td>
<td>201</td>
</tr>
<tr>
<td>METHODS</td>
<td>203</td>
</tr>
<tr>
<td>Study design and setting</td>
<td>203</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

Participants

Community mental health facilities
Clinicians
Clients

Intervention

Preventive care
Practice change intervention

Data collection procedures

Recruitment

Measures

Client characteristics
Client health behaviour risk status
Client reported receipt of preventive care
Intervention delivery

Statistical analysis

Intervention delivery

RESULTS

Sample characteristics
Intervention effectiveness
Intervention implementation

DISCUSSION

REFERENCE LIST

CHAPTER 8: SUMMARY OF KEY FINDINGS AND IMPLICATIONS

INTRODUCTION

SUMMARY OF KEY FINDINGS
TABLE OF CONTENTS

IMPLICATIONS FOR THE DESIGN OF FUTURE PREVENTIVE CARE INTERVENTIONS IN COMMUNITY MENTAL HEALTH SERVICES 239

- Design of the intervention to align with the characteristics and circumstances of community mental health services 239
- Facilitating the process of referral 239
- Clinician misperception of client interest in improving their health risk behaviours 242
- Promoting the mental health clinician’s role in preventive care 244
- Use of a systematic, theory-driven approach to identify barriers and inform future intervention design: the Theoretical Domains Framework as an example 246
- Considering an alternative approach to increasing the provision of preventive care within community mental health services 248

CONCLUSIONS 253

REFERENCE LIST 255
LIST OF TABLES

CHAPTER 1: INTRODUCTION: CHRONIC DISEASE, HEALTH RISK BEHAVIOURS AND PREVENTIVE CARE FOR PEOPLE WITH A MENTAL ILLNESS

TABLE 1.1: Mental health related service use in Australia, 2010-2011 ___________________ 6
TABLE 1.2: Prevalence of smoking among people with a mental illness internationally and in Australia in community dwelling samples and comparison to general population figures where available _____________________________________________ 14
TABLE 1.3: Prevalence of harmful alcohol use among people with a mental illness internationally and in Australia in community dwelling samples and comparison to general population figures where available ____________________________ 20
TABLE 1.4: Prevalence of inadequate nutrition use among people with a mental illness internationally and in Australia in community dwelling samples and comparison to general population figures where available ____________________________ 25
TABLE 1.5: Prevalence of inadequate physical activity use among people with a mental illness internationally and in Australia in community dwelling samples and comparison to general population figures where available ____________________________ 32

CHAPTER 2: CHRONIC DISEASE HEALTH RISK BEHAVIOURS AMONGST PEOPLE WITH A MENTAL ILLNESS

TABLE 2.1: Demographic description of sample ____________________________________ 87
TABLE 2.2: Participants at risk for health risk behaviours and multiple risks by diagnosis ____ 89
TABLE 2.3: At-risk participants interested in modifying their health risk behaviours by diagnosis ________________________________________________________ 91
TABLE 2.4: Diagnostic associations with risk status _____________________________________________ 92
TABLE 2.5: Diagnostic associations with interest in improving health risks, for those at risk for each behaviour _______________________________________ 93
CHAPTER 3: CARE PROVISION TO PREVENT CHRONIC DISEASE BY COMMUNITY BASED MENTAL HEALTH CLINICIANS

TABLE 3.1: Description of sample _______________________________________________ 112
TABLE 3.2: Clinician estimates of preventive care provision ___________________________ 113
TABLE 3.3: Clinician reported availability of preventive care practice support strategies ____ 117

CHAPTER 4: MENTAL HEALTH CLINICIAN ATTITUDES TO THE PROVISION OF PREVENTIVE CARE FOR CHRONIC DISEASE RISK BEHAVIOURS AND ASSOCIATION WITH CARE PROVISION

TABLE 4.1: Clinician reported role congruence and client interest in preventive care for all four behavioural health risks combined __________________________________________ 139
TABLE 4.2: Clinician reported self-efficacy regarding the provision of preventive care for four behavioural health risks combined __________________________________________ 141
TABLE 4.3: Association between clinician attitudes and the provision of preventive care to 80-100% of clients _______________________________________________ 142

CHAPTER 5: ACCEPTABILITY AND RECEIPT OF PREVENTIVE CARE FOR CHRONIC DISEASE HEALTH RISK BEHAVIOURS REPORTED BY CLIENTS OF COMMUNITY MENTAL HEALTH SERVICES

TABLE 5.1: Description of sample _______________________________________________ 159
TABLE 5.2: Client reported acceptability of receiving preventive care, by health behaviour and element of preventive care _______________________________________________ 163
TABLE 5.3: Proportions of clients who reported receipt of assessment for health risk behaviours, and reported receiving further care (brief advice, referral/follow-up for behaviours for which they were at risk and assessed __________________________________________ 164
TABLE 5.4: Association between practice support strategies and optimal care provision for all behaviours combined _______________________________________________ 165
CHAPTER 7: EFFECTIVENESS OF AN INTERVENTION IN INCREASING PROVISION OF PREVENTIVE CARE BY COMMUNITY MENTAL HEALTH SERVICES: A MULTIPLE BASELINE IMPLEMENTATION TRIAL

TABLE 7.1: Sample characteristics by group and time 212
TABLE 7.2: Levels of preventive care at baseline and follow-up, and estimates of the intervention effect 215
TABLE 7.3: Summary of intervention strategy implementation 217

LIST OF FIGURES

CHAPTER 6: EVALUATING THE EFFECTIVENESS OF A CLINICAL PRACTICE CHANGE INTERVENTION IN INCREASING CLINICIAN PROVISION OF PREVENTIVE CARE IN A NETWORK OF COMMUNITY-BASED MENTAL HEALTH SERVICES: A STUDY PROTOCOL OF A NON-RANDOMISED, MULTIPLE BASELINE TRIAL

FIGURE 6.1: Overview of study design 179

CHAPTER 7: EFFECTIVENESS OF AN INTERVENTION IN INCREASING PROVISION OF PREVENTIVE CARE BY COMMUNITY MENTAL HEALTH SERVICES: A MULTIPLE BASELINE IMPLEMENTATION TRIAL

FIGURE 7.1: Overview of study design 203
LIST OF APPENDICES

APPENDIX ONE
UNIVERSITY OF NEWCASTLE THESIS BY PUBLICATION GUIDELINES A2

APPENDIX TWO
ETHICS APPROVAL FOR CHAPTERS 2 TO 7 A6
APPENDIX 2.1: University of Newcastle Human Research Ethics Committee A6
APPENDIX 2.2: Hunter New England Human Research Ethics Committee A9

APPENDIX THREE
EVIDENCE TO SUPPORT MANUSCRIPT SUBMISSION A12
APPENDIX 3.1: Evidence to support manuscript submission for Chapter 4 A12
APPENDIX 3.2: Evidence to support manuscript submission for Chapter 6 A13

APPENDIX FOUR
ADDITIONAL MATERIAL FOR CHAPTERS 2, 5 AND 7 A14
APPENDIX 4.1: Client survey information letter A14
APPENDIX 4.2: Client survey: Computer assisted telephone interview script A17

APPENDIX FIVE
ADDITIONAL MATERIAL FOR CHAPTERS 3 AND 4 A88
APPENDIX 5.1: Clinician survey information letter A88
APPENDIX 5.2: Clinician survey: Computer assisted telephone interview script A91

APPENDIX SIX
ADDITIONAL MATERIAL FOR CHAPTERS 3 AND 4 A127
APPENDIX 6.1: Supplementary table: Chi-squared associations A127
APPENDIX SEVEN
ADDITIONAL MATERIAL FOR THE INTERVENTION [CHAPTERS 6 AND 7]  A128

APPENDIX 7.1: Policy Guidelines  A128
APPENDIX 7.2: Snapshot examples of tool incorporated into electronic medical record system  A139
APPENDIX 7.3: Example of client information sheet  A141
APPENDIX 7.4: Example of letter to primary care provider  A144
APPENDIX 7.5: Online educational training module examples  A145
APPENDIX 7.6: Manager training  A158
APPENDIX 7.7: Example of a monthly performance report  A167
APPENDIX 7.8: Example of a monthly newsletter  A171
APPENDIX 7.9: Example of a monthly tip sheet  A172
APPENDIX 7.10: Example of a resource pack items  A175
APPENDIX 7.11: Protocol for support officer (practice change support project personnel) tasks  A198
APPENDIX 7.12: Project personnel checklist for recording intervention delivery  A209
APPENDIX 7.13: Summary of intervention implementation  A210

APPENDIX EIGHT
ADDITIONAL MATERIAL FOR CHAPTER 8  A213

APPENDIX 8.1: Theoretical domains framework – theoretical domains and constructs  A213
CHANGING PRACTICE: PREVENTIVE CARE FOR CHRONIC DISEASE HEALTH RISK BEHAVIOURS IN COMMUNITY MENTAL HEALTH SERVICES
People who have a mental illness have significantly greater mortality rates and a reduced life expectancy when compared to the general population, with a large proportion of excess mortality attributable to a higher prevalence of preventable chronic diseases. One contributor to the greater chronic disease burden is an increased prevalence of modifiable health risk behaviours, when compared to the general population, in particular, tobacco smoking, harmful alcohol consumption, inadequate nutrition, and inadequate physical activity. The provision of preventive care in mental health services is one approach to addressing such health risk behaviours among people with a mental illness, with community mental health services identified as a particularly appropriate setting for such care delivery. Despite this, there are evident gaps in the literature regarding the prevalence of health risk behaviours among people with a mental illness, the prevalence of preventive care provision in community mental health services, and the approaches required to increase the provision of such care in community mental health services. To address these evidence gaps, the broad aims of this thesis were to:

1. Identify the prevalence of, and client characteristics associated with, four chronic disease health risk behaviours (tobacco smoking, harmful alcohol consumption, inadequate fruit and/or vegetable consumption, and inadequate physical activity) among clients of community mental health services;

2. Determine the prevalence of preventive care provision (assessment, brief advice, and referral) in community mental health services for these four health risk behaviours;
3 Explore factors that may be associated with the provision of preventive care for these four health risk behaviours;

4 Determine the effectiveness of a clinical practice change intervention in increasing community mental health clinicians’ provision of preventive care for these four health risk behaviours across a network of community mental health services.

These four aims have been addressed through a series of studies, undertaken within a network of 19 community mental health services in a single local health district in New South Wales, Australia. These studies include: a cross-sectional survey of 558 clients of community mental health services; a cross-sectional survey of 151 community mental health service clinicians; and a multiple baseline intervention trial involving 19 community mental health services, evaluated through weekly surveys of clients of community mental health services over a three year period.

The work encompassed in this thesis has contributed to advancing research in this field in a number of ways. Firstly, the findings include evidence among people with a broad range of mental disorders, of a high prevalence of risk for all four health risk behaviours (tobacco smoking, harmful alcohol consumption, inadequate fruit and/or vegetable consumption, and inadequate physical activity), high interest in improving these behaviours, and high acceptability towards receiving preventive care to address them. Despite the high prevalence of health risk behaviours and high client interest, it was found that the provision of preventive care for these behaviours within community mental health services was sub-optimal, and a number of factors that may be
associated with the provision of such care were identified. Finally, the clinical practice change intervention that was undertaken to increase the routine provision of preventive care in community mental health services was found to have limited effectiveness.

Overall, this thesis has identified a need to increase the provision of preventive care to address the high prevalence of health risk behaviours among people with a mental illness, and has trialled a novel approach to increasing the provision of such care in community mental health services. Despite the limited effectiveness of the clinical practice change intervention, the findings of this thesis have provided important insight for future interventions. It is suggested that future research consider barriers identified throughout this thesis to better tailor an intervention to the specific context of community mental health services; consider utilising advances in the science of clinical practice change design; and explore alternative models of preventive care provision.