Developing a service model for primary mental health support for moderate need

An evidence review developed by Network 4 in partnership with Platform Trust.

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Contents

ACKNOWLEDGEMENTS ............................................................................................................. 1
CONTENTS ................................................................................................................................. 2
EXECUTIVE SUMMARY ............................................................................................................. 4
Introduction ................................................................................................................................. 4
Problem definition ....................................................................................................................... 4
Findings ........................................................................................................................................ 4
Conclusions .................................................................................................................................. 5
INTRODUCTION ......................................................................................................................... 6
Purpose .......................................................................................................................................... 6
BACKGROUND ............................................................................................................................. 7
Policy context ............................................................................................................................... 7
The economic cost of mental health and addiction problems ....................................................... 7
Primary mental health models of care .......................................................................................... 9
Mental health and addiction Non-Government Organisations ..................................................... 10
What is meant by ‘moderate need’? ............................................................................................ 10
Socioeconomic determinants of mental health and addiction ..................................................... 11
EVIDENCE SUMMARY ............................................................................................................... 14
Research Question ....................................................................................................................... 14
Methods ......................................................................................................................................... 14
Information gaps and limitations .................................................................................................. 14
Collaborative and integrated care models .................................................................................... 15
Features of successful shared care ............................................................................................... 16
Economic studies of models and interventions .......................................................................... 18
Effectiveness of mental health & addiction interventions in primary care settings (excluding medication) ........................................................................................................................................ 24
Closing the Loop recommendations ............................................................................................ 28
REFERENCES ............................................................................................................................... 31
APPENDIX ONE: POLICY CONTEXT AND BACKGROUND TO PRIMARY MENTAL HEALTH SERVICE DEVELOPMENT IN NEW ZEALAND ........................................................................................................ 37
Policy context and background .................................................................................................. 37
Background on primary mental health services in New Zealand .................................................. 38
Stepped care .................................................................................................................................. 41
APPENDIX TWO: PRIMARY MENTAL HEALTH CARE IN PRACTICE IN THE NETWORK 4 LOCALITIES .................................................................................................................................................. 43
Executive Summary

**Introduction**

This report was written on behalf of Network 4 (Network 4 Change) in partnership with Platform Trust\(^1\). It builds on the Network 4 report, *Closing the Loop: A person-centred approach to primary mental health and addiction support* (2016). It is intended to complement *On Track* (Te Pou o te Whakaaro Nui, 2015) and support the Ministry’s *Fit for the Future* work programme, in building an evidence base about integrated models that improve outcomes for adults with ‘moderate’ mental health and addiction problems. It is also intended to align with and inform the Government’s Social Investment agenda for the health sector.

The purpose of the report is to provide advice based on both research findings, emerging models of practice, and the experience and expertise of leaders in this area, on how primary care, and particularly general practice, can contribute to addressing the needs of people with moderate to severe mental health and addiction problems.

**Problem definition**

Mental health and addiction problems place a very high burden of cost on individuals, families, and social services, including health, social welfare, justice, employment, and housing.

There is good evidence that by intervening early when problems are identified, demand can be reduced on more specialized and costly health and social services.

A group of people experiencing moderate to severe symptoms of mental health and addiction problems are currently unable to access the most effective and cost-effective treatment. They are not easily supported and treated in primary care, yet they are unable to access specialist care. Typically, this group has complex needs related to both health and wellbeing and social circumstances, and an unknown proportion will have already experienced serious mental illness\(^2\) and/or addiction, and have used specialist services. People whose moderate to severe need is not addressed in a timely manner, are likely to incur greater personal and financial cost.

**Findings**

The evidence summarized in this report points to the complexities of relying too heavily on good quality, published research, in the development of services in New Zealand. While there is very good evidence for a range of models of care and interventions delivered in primary care, no single ‘best practice’ solution was found for delivering mental health and addiction services in primary care, and neither had the ‘moderate need’ group been the focus of recent systematic reviews.

It is clear that primary care can and does play a key role in addressing moderate to severe need. Internationally and within New Zealand, some well-tested principles, service models and components of care have been found to be successful across a range of mental health and addiction problems of varying severity – within the social, political and health service delivery contexts of their origin. As is often the case, many of the more promising models have very limited published research demonstrating longer-term outcomes. They have however, been developed using sound evidence, are showing early success, and can inform further development and resourcing of existing primary mental health services in New Zealand.

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\(^1\) Network 4 is a group of primary health organisations (Pegasus Health, Compass Health PHO, Pinnacle Midlands Health Network, and ProCare Health). Platform Trust is the national network of non-government organisations that deliver mental health and addiction support services.

\(^2\) The term ‘serious mental illness’ is widely used in the literature to refer to psychosis, bipolar disorder, major depression and/or anxiety - conditions that are generally treated by psychiatrists in secondary care services.
Conclusions

The development of primary mental health services in New Zealand over the last decade has resulted in a range of models of care, which can be further improved based on good research evidence and experience, and better resourced to meet emerging needs. The findings of this report support the development of new collaborative models of primary and community care, building on successful New Zealand and overseas experience, and in different socio-demographic settings, alongside national policy development. These new collaborative models will be person-centred, encouraging people to take ownership of their care and to help shape their own plans.

This evidence review has concluded that to most effectively support those in primary care with moderate to severe mental health and addiction problems, a community based, multi-disciplinary planned care approach needs to be developed to enable access to the full range of stepped care interventions for people seeking help. This approach includes the following three core elements:

1. Shared care between primary and secondary care services, including monitoring and relapse prevention, supported by clear mechanisms and protocols and appropriate technology, at regional and/or local levels

2. Collaboration between PHO and NGO sector representatives (including mental health service user representation) in co-designing and co-delivering practical and effective mechanisms to support person-centred care at a local level, with a focus on peer support for service users, supported employment services, and strong linkages and/or co-location with government agencies, including social welfare, employment, housing and justice services

3. The development of the role of accredited, integrated mental health practitioners (eg Behavioural Health Consultants) within the primary care team, with a generalist scope of practice, providing consultation to general practitioners and their clients, and maximising access to effective, focused, evidence-based psychological strategies to meet the needs of referred clients across the full spectrum of needs and adapted to reflect best information available about practices likely to build effective therapeutic relationships when working with Māori.

The review has concluded that the following enablers would need to be adopted to develop this approach for people with moderate to severe need in primary care:

- Better integration of existing online and telemedicine low- to medium-intensity interventions into general practice (e.g. via shared care tools within patient portal environment and patient management systems) as a conduit to face-to-face services

- Additional resources (funding, workforce planning and capacity development) to improve access to evidence-based, appropriate psychological therapies for people with moderate to severe depression and anxiety (and other conditions where psychological therapy is part of an optimal treatment plan)

- Significant investment in workforce development, including new approaches to learning and skills training; professional development and training for general practice teams, mental health practitioners working in community and general practice settings, and the mental health and addiction NGO workforce

- Clear outcome measures that are aligned with the Ministry’s Mental Health and Addiction Commissioning Framework (2016), and enable the collection of useful data from the outset for evaluation and quality improvement purposes, alongside specifications about the frequency of data collection and clear reporting requirements.

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3 In some cases, a GP and/or practice nurse or nurse practitioner may take on some or all of the role of behavioural health consultant.
Introduction

This report on the development of mental health and addiction services in primary and community care settings, has been written on behalf of Network 4, in partnership with Platform Trust. Network 4 is a group of primary health organisations (PHOs) collectively responsible for providing services to over two million New Zealanders. They are Pegasus Health, Compass Health PHO, Pinnacle Midlands Health Network, and ProCare Health. Platform Trust is the national network of non-government organisations (NGOs) that provide services across New Zealand, specifically to those with mental health and addiction needs, more than 60,000 individuals in 2015.

The needs of people with ‘moderate to severe’ mental health problems have not been well met historically, as this population tends not to meet the threshold for specialist mental health services. Primary mental health services first piloted within primary care in 2006 attempted to address the needs of people with ‘mild to moderate’ mental health needs, and some progress has been made since then in consolidating and further developing the resulting models. There is good evidence that by intervening at this stage, with evidence-based interventions, there is potential for both improving mental health outcomes, and reducing pressure across the continuum of care.

The Ministry’s Fit for the Future - a systems approach, described as “a new approach to addressing moderate mental health issues (longer term)" will initially build on the evidence base for primary mental health by further developing existing models of care and trialing them. It is intended that the findings will inform the Mental Health and Addiction Commissioning Framework (Ministry of Health, 2016).

This report follows Closing the Loop, and On Track as a further contribution to the development of primary mental health and addiction services that are well integrated with the wider comprehensive, community-based mental health and addiction services and that support Fit for the Future. It is intended to inform the Ministry’s approach to building an evidence base about integrated models which improve outcomes for people with moderate mental health and addiction problems. It is also intended to align with and inform the Government’s Social Investment agenda for the health sector.

This report focuses on improving the mental health of adults within primary and community care settings, while acknowledging that there is a significant and growing body of evidence that supports the importance of early intervention in the life cycle. This argues for greater investment in maternal, child and youth mental health and addiction services. The identification and modification of risk factors early in life can reduce economic and social costs across the public sector.

Purpose

1. To provide a summary of national and international evidence (including economic evaluations) for models of primary and community care aiming to meet the needs of people with moderate mental health and addiction problems

2. On the basis of a comprehensive understanding of the evidence base, articulate the most effective (and cost-effective) interventions or set of interventions that will return the best value for money, together with the greatest likelihood of health gain, for people with moderate mental health and addiction problems

3. To identify models with the greatest opportunity for scalability for this population

4. To identify the role of NGO and secondary care mental health and addiction services in working with this group (within a stepped care approach)

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*Excerpt from a Ministry of Health consultation slide of August 2016*
Background

Policy context

The two main national policy documents currently guiding mental health and addiction service development in New Zealand are *Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012-2017* (Ministry of Health, 2012), and the *Mental Health and Addiction Commissioning Framework* (Ministry of Health, 2016).

*Rising to the Challenge* identifies the importance of building infrastructure for integration between primary and specialist services, and states that the Ministry will be developing and implementing a primary mental health and addiction service delivery framework, based on a stepped-care model that enables people to rapidly receive the level of care that is appropriate to their need. This work is not yet completed.

In the absence of a current national service delivery framework for primary mental health, the Ministry’s *Mental Health and Addiction Commissioning Framework* (2016) refers to the UK *Guidance for Commissioners of Primary Mental Health Care Services* developed by the Joint Commissioning Panel for Mental Health (JCPMH, 2013) for guidance on service development in New Zealand.

The UK guidance is generally consistent with New Zealand primary mental health care principles and practice. However, in meeting the needs of people with moderate mental health and addiction problems, primary mental health services in the UK have the benefit of far more substantial investment in evidence-based psychological therapies for depression and anxiety than is the case in New Zealand. As well, addiction services are funded and managed quite separately from mental health services in the UK.

The Ministry of Health is consulting with the mental health and addiction sector on *Fit for the Future - a systems approach*, described as “a new approach to addressing moderate mental health issues (longer term)”\(^6\). This initiative will initially build on the evidence base for primary mental health by funding the further development of existing models of care and trialing them. It is intended that the findings will inform the *Mental Health and Addiction Commissioning Framework* (Ministry of Health, 2016).

The Social Investment Unit (NZ Treasury) is currently driving and coordinating the Government’s shift towards social investment across the public sector. This includes supporting a new mental health and addiction test case in partnership with the Ministry of Health, based on the following hypothesis:

- Unmet need for mental health and addictions services creates fiscal, individual and social costs outside of the health system
- Existing mental health and addictions service design and delivery is not optimised relative to the population’s continuum of needs
- Early intervention in a person’s life course reduces overall costs.\(^7\)

The economic cost of mental health and addiction problems

It is widely recognized that New Zealand society, the economy, individuals and their families pay a high price for mental health and addiction problems, and the physical illnesses associated with them. It has been estimated that the cost of the burden of disease from serious mental illness\(^8\) and

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\(^2\) Excerpt from a Ministry of Health consultation slide of August 2016

\(^3\) From Social Investment Unit consultation slideshow dated 21 September 2016.

\(^4\) Serious mental illnesses used for this analysis were psychosis, severe depression, and severe anxiety.
opioid addiction in New Zealand in 2014 was $17.0 billion, amounting to 7.2% of GDP (Sweeny & Shiu, 2016).

Mental illness and addiction problems are associated with relatively poor physical health, including significantly higher prevalence of cardiovascular disease, diabetes, cancer, respiratory illness, and poor oral health (Te Pou o te Whakaaro Nui, 2014). The combination of mental and physical health problems is very costly – to individuals, their families, and society, whether the mental health problems are experienced as ‘mild to moderate’ or ‘severe’.

An economic analysis of the comorbidities of chronic physical illness and serious mental illness and addiction was recently commissioned by the Royal Australian and New Zealand College of Psychiatrists (Sweeny & Shiu, 2016). An estimate of the prevalence and overall burden of disease in New Zealand from schizophrenia, severe anxiety, severe depression and opioid dependency was based on the Global Burden of Disease Study for 2010 (IHME, 2010), and identified 105,350 individuals. It was estimated that the cost of the burden of disease from these conditions in New Zealand in 2014 was $17.0 billion (7.2% of GDP). The cost of comorbidities associated with premature death amongst this group was estimated at $6.2 billion (2.6% of GDP).

The costs to the economy from less severe depression, anxiety and alcohol-related harm are also very high, in terms of the impact on productivity through reduced employment, and increased sick-leave amongst those employed. Oakley-Brown and colleagues, in Te Rau Hinengaro: The New Zealand Mental Health Survey (2006) identified that people with moderate severity mental health problems spent an average of 10.3 days per year ‘out of role’ due to their disorder, and those with mild problems an average of 1.4 days out of role, compared with 60.1 days on average amongst those with severe mental health problems.

Ministry of Social Development statistical data for June 2016 showed that 24,912 New Zealanders received a short-term job seeker allowance for psychological or psychiatric conditions. A further 28,307 individuals received a long-term supported living payment for psychological or psychiatric reasons (increasing each year from 24,765 individuals in 2010)\(^9\).

There are many reasons for providing the most clinically effective and cost-effective treatments, as early as possible in the development of mental health and addiction problems. As well as improving health outcomes, the cost of secondary health care and other publicly funded social services may be reduced by intervening early, in primary care settings.

Funding for primary mental health services is available for people with mild to moderate mental health and addiction problems. However, primary mental health resources are targeted at Māori, Pacific and high-deprivation populations, and need to be ‘rationed’ at a GP practice level. (ProCare estimates approximately 0.47 per cent of their total enrolled population are able to access psychological therapy through this funding\(^9\). This compares with access to evidence-based psychological therapies in the UK, which has recently moved from providing access to at least 15 per cent of the adult population seeking help for depression and anxiety, to a target of 25 per cent, through the Increasing Access to Psychological Therapies (IAPT) programme\(^11,12\).

Evidence from the UK argues strongly for significantly increased access to evidence-based, good quality psychological therapy for people with depression and anxiety, within structured programme settings. In the three years since Increasing Access to Psychological Therapy (IAPT) was


\(^10\) Personal communication, Johnny O’Connell, 16 September 2016.


\(^12\) NOTE: IAPT services in the UK sit alongside traditional primary mental health services, they do not replace them. IAPT only responds to depression and anxiety disorders – using mainly CBT practitioners, within a tightly-defined stepped care model. The more traditional primary care services deal with mental health problems requiring family therapy, some low-grade personality problems, stress, and general counselling. (Personal communication with David Fitzpatrick-Cockram, 30 September, 2016.)
implemented, there have been economic gains in terms of employment attainment and retention documented by the NHS, with more than 45,000 people claimed to be moved off sick pay and benefits, as a result of receiving better treatment. IAPT was expected to generate net savings in excess of £300 million by March 2015 through healthcare savings; 75,000 people moving off welfare benefits; and economic gains through reduced workplace sick leave.13

**Primary mental health models of care**

Primary mental health services were initially funded through primary health organisations (PHOs) in 2005, when they were trialed and evaluated by the Ministry of Health. The evaluation found that 80 per cent of service users benefited from the variety of interventions offered, and this significant and beneficial treatment effect was generally sustained at six months. Dowell and colleagues (2009) concluded that “mental health needs arising from mild to moderate common mental health conditions, including those involving social complexity, can be addressed by primary care” (Dowell et al., 2009, p. ix). An optimal model of care was developed based on these findings (see Appendix One).

The Ministry now funds primary mental health care (PMHC) across all DHBs. The total 2015/16 funding was $29.3 million14 (increased from $23.765m in 2011).

Components of care may include:

- extended consultations with a general practitioner (or practice nurse)
- assessments, brief interventions, and/or counselling sessions provided by primary mental health clinicians or counsellors/psychologists
- packages of care for patients, which cover a variety of services such as cognitive behavioural therapy, medication reviews, counselling and other psychosocial interventions.15

Primary mental health services are targeted to high needs populations such as Māori, Pacific and high deprivation patients with mild to moderate mental health and/or substance abuse problems. An unknown number of New Zealanders with moderate to severe mental health and addiction problems are therefore not eligible for this service, unable to access specialist mental health and addiction services, and unable to afford psychological therapy. For those people who are eligible to access psychological therapy, the number of sessions funded may not provide optimal treatment for their needs, consistent with New Zealand and international clinical guidelines.

Typically, this group has complex needs, and may be identified through Government agencies including Work and Income, Housing NZ, the criminal justice system, and community organisations. An unknown proportion will have already experienced serious mental illness and/or addiction, and have used mental health and addiction services.

Because of the cost of psychological therapy, treatment options for people with moderate to severe mental health problems in primary care may be limited to medication, lifestyle advice and online self-management. For some people, these are not viable or helpful options. Medication may not be advisable, due to lack of acceptability to the patient, problems with side effects, adherence issues, and/or polypharmacy concerns.

Individuals need better access to both effective treatment options and social support. Further development of primary mental health and community responses are needed, to provide for more

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14 *Closing the Loop*, 2016, p. 9.

15 From archived Primary Mental Health website (no longer maintained by the Ministry of Health)
effective, personalized treatment options for patients, with better communication between primary and secondary care, and collaboration with social and NGO services.

Examples of such models are being developed and/or practised in New Zealand. These occur on an ad hoc basis, with very limited national guidance. Innovative and effective approaches may be in place; however, they are rarely independently evaluated which makes it difficult to gather learnings or to implement on a wider scale. This creates a risk of duplication of effort and waste of resources, and means that access to the most effective treatment for individuals is inequitable, and largely dependent on where they live.

This report brings together international economic evidence that argues for greater investment in the provision of primary mental health services to those with moderate need, who may currently be missing out on the best quality and clinically effective treatment options. The social and economic benefits of investing in this group are likely to be significant.

Mental health and addiction Non-Government Organisations

Non-Government Organisations (NGOs) in New Zealand are contracted by District Health Boards, the Ministry of Social Development, Corrections and ACC to provide a broad range of community-based support services for mental health and addiction service users and their families. The NGO sector plays a key role in the delivery of community-based mental health and addiction services. Recent government policy describes changes and new directions for health services, which indicates that the type of community-based services delivered by NGOs will become increasingly important. There have been some local DHB attempts at innovative purchasing of early intervention and ongoing support such as self-referral, peer support, youth wellness programmes, alternatives to acute admission, respite support and wrap-around support. However, these have not been evaluated. In many areas, the focus of service contracts with NGOs is to meet the demands of acute mental health services rather than community needs.

NGOs also provide supported employment services (funded by the Ministry of Social Development), social housing and addiction support (Corrections and DHBs). Many NGOs provide highly-specialised programmes to different population groups: Māori, Pasifika, Asian, refugees, young people and people with disabilities. There is huge variability of service coverage across the country and a lot of scope to make better use of this resource.

NGOs received approximately 28 per cent of the total funding for mental health\textsuperscript{16} in 2013/14 (Platform Trust and Te Pou, 2015, p. 10).

What is meant by ‘moderate need’?

People with moderate mental health and addiction problems are defined as those “who are not easily managed in primary care, but whose needs do not yet meet the threshold for specialist care” (Ministry of Health consultation materials on Fit for the Future, September 2016). In practice, this group may include:

(a) people who present in primary care and are assessed as not meeting the threshold for admission to mental health and/or addiction specialist services, but for whom medication and/or ‘low intensity’\textsuperscript{17} interventions are not improving their mental health

(b) people who may have co-existing (both mental health and substance use) problems

\textsuperscript{16} This total does not include funding specifically for primary mental health services.

\textsuperscript{17} ‘Low intensity’ interventions include self-management, guided or unguided e-therapy or other online mental health programmes, and brief intervention or brief psychological therapy.
(c) people with long-term physical health conditions associated with depression, emotional distress, and anxiety-related disorders

(d) people who have been transferred from secondary to primary care, having been assessed as being in recovery from severe mental illness, often with associated physical health problems.

While there may be overlap between these groups, their treatment needs are likely to be quite different. Those in the first three groups are more likely to be experiencing mood and/or anxiety disorders, or problems with common substance use such as alcohol. New Zealand guidelines for the treatment of common mental disorders in primary care (NZ Guidelines Group, 2008) suggest a provisional diagnosis of moderate depression as having a PHQ-9 score of 15-19.

This group can potentially be supported to manage their mental health problems through one or more interventions, including medication, brief intervention, online self-help resources, e-therapy, medication, and psychological therapy, consistent with current clinical guidance and within a stepped care framework. However, this group may not respond to the lower-intensity interventions, and may not have access to sufficient sessions of psychological therapy to improve their symptoms. Many do not meet the criteria for primary mental health packages of care, and cannot afford the cost of paying for therapy.

The latter group is likely to have more complex needs related to socio-economic disadvantage and physical health problems. They require different treatment and types of interventions, and comprehensive care plans. These ought to take into account the additional need for screening and monitoring of physical health problems (e.g., for CVD, cancer, and diabetes) associated with moderate to severe mental health and addiction problems and the use of psychotropic medication.

Referrals from secondary care will require better systems for co-ordination between services, including primary care, social services and NGO mental health and addiction providers.

Socioeconomic determinants of mental health and addiction

In arguing the case for social investment, it is important to understand the relationship of mental health and addiction to socioeconomic factors. There is a large body of international and New Zealand epidemiological evidence demonstrating that risk factors for many mental health and addiction problems are strongly associated with socio-economic inequalities, and it is well-established that the greater the inequality, the higher the risk (WHO, 2014).

There is also strong evidence of a social gradient in the prevalence of mental disorders. Comparative population studies have shown that greater income inequality is associated with higher prevalence of mental and substance disorders in wealthy societies (Pickett & Wilkinson, 2010), and the degree of socio-economic disadvantage that individuals experience is associated with a proportionately increased risk of mental illness (McManus et al., 2009).

Te Rau Hinengaro, the New Zealand population mental health survey showed that the prevalence of mental illness\(^\text{18}\) is strongly associated with socio-demographic variables, including: NZDep2001 deciles (for those living in the least deprived areas, prevalence was 3.2 per cent, compared with 6.9 per cent for those living in the most deprived areas); equivalised household income (2.8 per cent for those on the highest income, compared with 8.1 per cent for those on the lowest); and educational qualifications (3.4 per cent for those with both school and post-school qualifications, and 6.1 per cent for those with no qualifications). These findings argue for a co-ordinated cross-agency approach.

\(^{18}\) Note that Te Rau Hinengaro: The NZ Mental Health Survey (2006) did not include the collection of data on psychotic disorders.
Strong evidence of further inequities in mental health status amongst Māori, over and above the impact of low SES was also found (Oakley-Browne et al., 2006). The prevalence of serious mental disorder amongst Māori was found to be significantly higher than other ethnicities at 6.0 per cent (adjusted for age, sex, educational qualifications and equivalised household income).

Poor mental health tends to both reflect socioeconomic deprivation, and contribute to it. Mental illness can further compound the disadvantage associated with low socio-economic status, for example through increases in a range of health-risk behaviours such as poor nutrition, lack of physical activity and tobacco smoking (Campion et al., 2013).

Given the social investment focus of this review, it is worth noting that socio-economic inequalities impact on the cost of most social services, both directly and through their impact on mental health and addiction problems.

The WHO recommends use of the principle of proportionate universalism in policies intended to reduce the mental health impacts of social disadvantage. Focusing resources only on those most disadvantaged is not effective in reducing health inequities across the whole population. Access to mental health services needs to be universal, but “calibrated proportionally to the level of disadvantage” (WHO, 2014, p. 39).

Funding for primary mental health services in New Zealand is currently very targeted to those most disadvantaged. This leaves few options for those people presenting in primary care with ‘moderate’ mental health and addiction problems who may not be able to afford effective treatment, consistent with clinical guidelines.

**The impact of mental health problems on other social sectors**

Employment status is strongly associated with mental health outcomes, and specifically, unemployment is a risk factor for mental illness (Kawachi & Wamala, 2006).

In general, the employment rates for people experiencing mental health issues are much lower than the general population (Statistics NZ, 2012).

In New Zealand, 42.3 per cent of sickness beneficiaries and 31 per cent of invalid beneficiaries are out of employment due to mental health issues (Ministry of Social Development, 2013).

Associations have been identified between housing quality and affordability and mental health. Mason et al. (2013) used data from the longitudinal Household, Income and Labour Dynamics in Australia (HILDA) survey to investigate whether this association was different for home purchasers and private renters among low-income households. They concluded that unaffordable housing differentially affects the mental health of renters and owners.

Homelessness is clearly both a risk factor for and consequence of mental illness, and has been relatively well-researched. A systematic review undertaken by Fazel et al. (2008) found 29 eligible surveys providing mental illness and addiction prevalence estimates obtained from 5,684 homeless individuals in Western Europe and North America. They found that alcohol disorders affected between 8.1 per cent and 58.5 percent of those studied, and drug dependence ranged from 4.5 per cent to 54.2 per cent. The prevalence of psychotic illness ranged from 2.8 per cent to 42.3 per cent, with similar findings for major depression.
Interventions that can reduce the impact of socio-economic status on mental health

Blas & Kurup (2010) in their book commissioned as part of the work undertaken by the WHO Knowledge Network of the Commission on Social Determinants of Health, identified evidence of effectiveness in support of interventions for mental disorders targeting socioeconomic context, including:

- Mental health policy, legislation and service infrastructure to co-ordinate service provision
- Provision of adequate housing
- Relocation of people with mental disorders to less adverse neighbourhoods
- Employment creation and skills development for people with mental health problems
- Depression prevention programmes
- Provision of adequate nutrition
- Access to financial advice
Evidence summary

Research Question

How strong is the evidence for effectiveness and cost-benefit of different interventions and models of care in primary and community settings seeking to address the needs of people with moderate mental health problems being seen in primary care?

Methods

This rapid review focused on international review studies published in since 2006, that investigated the effectiveness of different models of care, and interventions designed to improve outcomes for people with mental health and addiction problems within primary care settings. Well-designed single studies of particular relevance to the research question were also incorporated and a separate search was carried out to identify material on the cost-effectiveness of identified interventions.

The London School of Economics website was searched for material on Increasing Access to Psychological Therapies. The search was conducted using Google Scholar, and drew on information available from websites, communications with, and information provided by international leaders in this area, and materials provided by Network 4 representatives.

Information on the following has also been summarized in this report:

- Primary mental health service models developed around New Zealand since 2006
- International research and experience\(^\text{19}\) in addressing the needs of people with moderate mental health and addiction problems within primary and community care, with a focus on Increasing Access to Psychological Therapies (IAPT) in the UK
- Research investigating the cost-effectiveness and cost-benefit of different types of early intervention and self-management support for addressing mild to moderate mental health and addiction problems in primary and community care
- The effectiveness and cost-benefit of online and tele-mental health, addiction and e-mental health programmes, in addressing the needs of people with mild to moderate mental health and addiction problems in primary and community care. (This review may lead to enabling closer alignment of the proposed Primary Mental Health initiative with the Mental Health and Addiction service arm of the National Telehealth Service at the Homecare Medical Limited.)
- Material from the four PHOs on primary mental health initiatives in practice in their localities
- Relevant material from the Ministry of Health on \textit{Fit for the Future} and the Social Investment Unit (the NZ Treasury).

Information gaps and limitations

In relation to the international evidence, no review studies were found that focused on the treatment of people with moderate or moderately severe symptoms of mental distress and addiction issues in primary care.

\(^{19}\) This includes research papers and personal communications provided by Dr David Fitzpatrick-Cockram and Professor Nick Kates.
While there are many examples of good practice and innovation in primary mental health services in New Zealand, some of which are summarized in Appendix Two, there has been limited research undertaken since the original primary mental health pilots were evaluated (Dowell et al., 2009). Documentation on the current status of these services is not easily accessed – including:

- extent of integration and collaboration between primary and secondary mental health and addiction services across New Zealand
- extent of variation in models of practice including working relationships between general practice, NGOs and other community-based support
- how effective the various approaches have been over the last decade in improving the mental health of the groups targeted
- what kind of uptake there has been from targeted groups
- practical challenges to implementation (including availability of psychologists and counsellors)
- the involvement of primary care nurses and/or primary mental health workers in either case management or delivery of low-intensity or brief interventions.

The main focus of this search for evidence was on review studies, due to limited time (see the evidence summary and Appendix Four). The global move towards more integrated and collaborative systems of care within health sectors has been taking place over many years, and no particular model has demonstrated superiority (Butler et al., 2008). However, there is good international evidence about what elements are likely to be most effective for mental health and addiction services in primary care.

**Collaborative and integrated care models**

Collaborative care originated in the United States and incorporates a multi-professional approach to patient care; a structured management plan; scheduled patient follow-ups; and enhanced interprofessional communication (Green et al., 2014). The term is used in the literature to describe various models of care that may include a combination of GP usual care plus a case manager (e.g. practice nurse) who maintains ongoing contact with the person over a period of time, linking to specialist and community level support.

Integrated care generally involves a multidisciplinary team comprising both generalist and specialist practitioners who work on a shared care plan. A good description is provided by Dale (2015) in her investigation of behavioural health service models in the US (for application in Scotland).

- “Integrated primary care involves a co-located multi-disciplinary integrated care team where each team works with an allocated patient list (usually 1200-1400 patients).
- The team manages the patient jointly, making team formulation, care plans and decisions together to promote and maintain physical, mental, emotional and spiritual health and wellbeing.
- Organisations in the USA define a 6-level model of integrated care, specifying what needs to happen at each step to reach the particular level of integration (SAMHSA-HRSA, 2013).
- The highest level of integrated care (level 6) has been pioneered by the South Central Foundation (SCF) based in Alaska, which achieved remarkable improvements, such as a 42% reduction in accident and emergency (A&E) visits and a 62% reduction in strokes over 10 years (Graves, 2013).
- The integrated care team typically consists of: a GP who focuses on medical needs and manages conditions; a **Case Manager** (a nurse) who coordinates the patients overall care
and works proactively to ensure their preventative and acute health needs are met; a **Health Care Assistant** who undertakes basic medical procedures; an **Administrator** who books in patients and processes medical admin; a **Behavioural Health Consultant** who supports the team in working more collaboratively and works directly with patients.

- Relationship-based continuity of care is central to the ethos of integration. Through the whole organisation modelling collaborative practice, staff feel valued and this filters into their work with patients.
- There is also a recognition that the system and staff need to change, in order to support patients to change.
- Community engagement is key to informing the delivery of population-based interventions and shaping service developments. ...
- Behavioural Health Consultants (BHCs) deliver psychological/behavioural direct clinical services to patients and spend significant amounts of time training and co-working with primary care colleagues” (Dale, 2015, p. 2).

Review studies on integration or collaboration between primary and secondary care (see Appendix Four) suggest a wide variety of models that have been implemented and tested.

The global move towards more integrated and collaborative systems of care within health sectors has been taking place over many years, and no particular model has demonstrated superiority (Butler et al., 2008). However, there is good international evidence about what elements are likely to be most effective for mental health and addiction services in primary care.

Early review findings indicated that collaborative care interventions delivered by multidisciplinary teams may improve clinical outcomes in those with persistent or recurrent difficulties, and that models incorporating a case management approach and/or using the services of a care manager or primary mental health care worker showed some benefit (Doughty 2006) and especially for major depression in primary care (Gensichen et al., 2006).

Pharmacists were found to contribute to optimising the use of medications for mental illness in a community setting. However, limited evidence was found on the impact of pharmacists as members of community mental health teams (Bell et al., 2005).

Team-based approaches across primary and secondary care are effective for depression and anxiety compared with standard primary care (Archer et al., 2012). Integrated care trials also showed positive effects in the treatment of depression, but the degree of integration was not significantly related to depression outcomes (Butler et al., 2011).

**Features of successful shared care**

Common features of successful integration models include: prioritized underserved vulnerable populations; increasing community collaboration; ensuring strong leadership early in the process; implementing a team-based approach including the patient as an active participant; diversifying funding sources; implementing data-driven best practices (Grazier et al., 2016).

Other features of successful person and family centred care include

- physical proximity of services
- attention to relapse prevention
- population monitoring – i.e tracking everyone in the practice currently being treated for depression to monitor their progress
• clear goals – which can be framed within the triple aim\textsuperscript{20}, but which always include one or both of increasing capacity within primary care and improving access, as well as enhancing the experience for the patient and their family
• support for self-management\textsuperscript{21}.

Nine factors were identified as important for successful implementation of collaborative care for depression, in a US study (Whitebird et al., 2014). These were ranked in importance as follows:

1. Operating costs not seen as a barrier
2. Engaged psychiatrist
3. Primary care provider
4. Strong care manager
5. Warm hand-off (face-to-face referrals)
6. Strong top leadership support
7. Strong primary care provider champion
8. Care manager role well-defined and implemented
9. Care manager on-site and accessible.

Factors correlated with higher patient activation rates were:
• strong leadership support
• well-defined and implemented care manager roles
• a strong primary care physician champion, and an on-site and accessible care manager.

However, the authors found that remission rates at six months were correlated with: an engaged psychiatrist, not seeing operating costs as a barrier to participation, and face-to-face communication between the care manager and primary care physician for new patients (Whitebird et al., 2014).

Consultation-liaison psychiatry appeared to be no more effective than usual care in one review (Cape et al., 2010). However, another review found that psychiatric consultation in primary care settings was found to be effective for people with depression, primarily through increasing adherence to antidepressants (van der Feltz-Cornelis et al., 2010).

There is promising evidence in support of a number of evidence-informed models of shared care and collaborative care that provide co-ordination of social and health services with a patient-centred focus (Thiel et al., 2013).

There is strong evidence for evidence-based supported employment as one of the most robust interventions available for persons with severe mental illness (Bond et al, 2008). Employment advisors are an essential component of IAPT services in the UK, and are recommended as members of “the optimum primary mental health care team” by the Joint Commissioning Panel for Mental Health in the UK\textsuperscript{22}.

There is evidence to support the use of mental health peers or professional staff to implement self-management components to address physical health care for individuals experiencing severe mental health problems (Kelly et al., 2014).

\textsuperscript{20} See Appendix Three, p. 58 for description of Triple Aim.
\textsuperscript{21} Nick Kate, personal communication, October 2016.
\textsuperscript{22} Retrieved from \texttt{www.jcpmh.info} on 27 September 2016
Peer support interventions for depression result in greater improvement in depression symptoms than usual care and may have similar efficacy to group CBT (Pfeiffer et al., 2011). Peer workers are included as members of “the optimum primary mental health care team” by the Joint Commissioning Panel for Mental Health in the UK. Predictors of better outcomes for depression were identified, and include

- having a case manager with mental health expertise
- focusing on medication compliance
- ensuring good supervision mechanisms are in place, and
- incorporating service user preferences in care plans (Christensen et al., 2008).

Components later found to significantly predict improvement in depression outcomes include the revision of professional roles, the provision of a case manager who delivered a psychological therapy, and the incorporation of patient preferences into care. Nurse, psychologist and psychiatrist delivered care were effective, but pharmacist delivery was not. GP training was less successful when it was the most important intervention. Community interventions were effective (Christensen et al., 2010).

**Economic studies of models and interventions**

Because of growing evidence on the economic impact of mental health problems, many countries are investigating how to improve the effectiveness and efficiency of both systems of care, and treatment interventions. A recent global return on investment analysis investigated the scaling-up of treatment for depression and anxiety (Chisholm, Sweeney, Sheehan et al., 2016). Treatment costs and health outcomes were calculated in 36 countries between 2016 and 2030. An economic value of $310 billion was estimated based on additional healthy life-years and potential economic productivity gains. The authors’ analysis “can contribute strongly to a balanced investment case for enhanced action to address the large and growing burden of common mental disorders worldwide” (Chisholm et al., 2016, p. 415).

There is limited evidence on the cost effectiveness of models of care or successful interventions which focus specifically on people with moderate to severe mental health problems treated in primary care settings.

Economic studies tend to focus on particular models and interventions for identified mental health problems – primarily depression and anxiety – rather than on levels of severity. Even these are of mixed quality and usefulness in assessing cost-benefit. Chisholm et al (2016) found 440 randomised trials of the effects of depression and anxiety disorders on economic outcomes (return to work, absenteeism and presenteeism), but “found few useful data and these could not be synthetized meta-analytically. The same conclusion was made in a similar review of the scientific literature” (Chisholm et al., 2016, p. 416).

**Collaborative care**

An economic evaluation of a randomized controlled trial in the UK estimated the cost-effectiveness of collaborative care for depression in primary care (Green, Richards, Hill et al., 2014). Collaborative care was described as usual care from the GP, together with case managers providing 6-12 contacts with participants over a period of 14 weeks. Contacts included education about depression, medication management, behavioural activation and relapse prevention.
The main outcome measure was depression severity using the PHQ9, and secondary outcome measures were quality of life, anxiety, patient satisfaction, health care service use and health state values. Over half (55.6%) of participants (n=581) met criteria for a moderately severe depressive episode, with 29.9 per cent meeting criteria for severe depression.

Collaborative care was found to be more effective and cost-effective than usual care, and the results supported funding of this model in UK primary care settings. Of note, collaborative care was found to improve depression immediately after treatment compared to usual care, had effects that persisted to 12-month follow-up, and was preferred by patients over usual care (Green et al., 2014).

Early findings were mixed on the cost-effectiveness of collaborative care. One review study found that interventions based upon collaborative care/case management resulted in improved outcomes but were also associated with greater costs (Gilbody et al., 2006). Doughty et al., (2006), found insufficient evidence to compare the cost-effectiveness of individual models in primary care.

More recent studies have been more positive. Collaborative chronic care (CCM) models were investigated in a large US review study (Woltmann, Grogan-Kaylor, Perrons et al., 2012) and were found to improve mental and physical outcomes for people with mental health problems across a wide variety of care settings, including primary care, compared with other models. Total health care costs did not differ between CCMs and comparison models.

Woltman and colleagues (2012) argue that the major focus of health care cost reduction efforts must be in reducing avoidable complications of chronic illnesses, which account for up to 22 per cent of all health care expenditures in the US. The analyses indicated that these benefits can extend to patients with a wide variety of mental health conditions, including those with chronic or highly comorbid disorders.

Jacob and colleagues (2012) reported on three studies that found lower collaborative care cost because of reduced healthcare utilization or enhanced productivity. The authors also found strong evidence that collaborative care for management of depressive disorder provides good economic value.

Good evidence was found for effectiveness and cost-effectiveness of collaborative care models in UK primary care settings involving GP practice as usual combined with case managers (eg via trained practice nurses) delivering structured psycho-social and health literacy sessions (Green, Richards, Hill et al., 2014).

An innovative UK service designed to meet the needs of specific groups of patients in primary care with complex mental, physical and social needs was recently evaluated (Parsonage, Hard, & Rock, 2014) including an economic analysis of the service (see Appendix Three for description). The City and Hackney Primary Care Psychotherapy Consultation Service (PCPCS) evaluation collected data from a sample of 282 patients, covering three time periods: 12 months before the start of treatment; the period during treatment, which on average lasted 10 months; and 12 months after the end of treatment. It was estimated that treatment by the PCPCS reduced the costs of NHS service use by £463 per patient in the 22 months following the start of treatment. Savings in primary care accounted for 34 per cent of this total (mainly fewer GP consultations) and savings in secondary care for 66 per cent (fewer A&E and outpatient attendances and inpatient stays).

Compared with the year before referral, the average number of GP attendances per patient seen by the PCPCS fell by 25 per cent in the year after treatment. A typical course of treatment by the PCPCS lasted for 12 or 13 sessions, at an estimated average cost of £1,348 per patient.

Based on the cost-effectiveness framework used by NICE, it was estimated that treatment by the PCPCS had a cost per QALY (quality-adjusted life-year) of around £10,900, indicating that the service is good value for money.
Integrated care

A large study of the economic impact of integrated healthcare in the US commissioned by the American Psychiatric Association (Melek, Norris, & Paulus, 2014) investigated the role of psychiatry in addressing escalating healthcare costs, including through the integration of medical and behavioral (mental) healthcare (IMBH). Some of the advances in IMBH have been driven by primary care providers, while others have been driven by mental health practitioners. The authors argue that psychiatry has a direct role in the value proposition of integrated/collaborative care and stands to benefit from the savings generated by effective integration programs. Based on the experience of recent successful IMBH programmes, the study estimated the portion of the elevated healthcare costs that can be controlled through IBMH as well as the possibility of shared savings.

The study found that medical costs for treating people with chronic medical and comorbid mental health/substance use disorder (MH/SUD) conditions can be 2-3 times as high as for those without comorbid MH/SUD conditions. Most of the increased cost for those with comorbid MH/SUD conditions is attributed to medical services (rather than behavioral), creating a large opportunity for savings on the medical side through integration of behavioral and medical services. Based on their review of the results of effective IMBH programmes, the authors calculated that 9-16 per cent of the total additional spending may be saved through effective integration of care (Melek et al., 2014).

Intervention studies

Guided Internet interventions for depression, anxiety, smoking cessation and alcohol consumption were likely to be more cost-effective when compared to wait-list, TAU, group cognitive behaviour therapy (CBGT), attention control, telephone counselling or unguided Internet CBT (Donker et al., 2015).

Cost-benefit studies undertaken by the London School of Economics (LSE) provide strong evidence supporting investment in universal access to evidence-based psychological therapies, (including allowing for self-referral, as GP referral was seen as a barrier to access) and demonstrate cost benefits in terms of reduced unemployment and extra taxes resulting from return to work (Griffiths, et al., 2013).

Continually escalating costs are a feature of healthcare systems world-wide. An economic review of mental health promotion and prevention interventions undertaken by the London School of Economics (Knapp, McDaid and Parsonage, 2011) included several interventions in primary care settings, as follows.

(a) The costs and benefits of GPs undertaking screening and brief intervention in primary care for alcohol misuse were analysed, based on research findings that this approach achieved an average 12.3 per cent reduction in alcohol consumption per individual (Kaner, Dickinson, Beyer et al., 2007). Estimated savings in the NHS were found to exceed costs by more than 2 to 1. In addition, there were significant economic benefits in terms of potential reduction of crime and increased productivity.

(b) The economic case for mental illness prevention in primary care collaborative care was studied. Collaborative care was defined as including “GP advice and care, the use of antidepressants and cognitive behavior therapy (CBT) for some patients” but with a practice nurse acting as case manager (Knapp et al., 2011, p. 31). According to the model, the intervention results in increased costs in year one, but with net savings for health and social services in year two, due to lower costs associated with depression. The intervention was described as highly cost-effective in an English context, with the potential benefits very conservatively estimated.

(c) A CBT intervention for working age adults, tackling medically unexplained symptoms, was studied in relation to costs to the health system and productivity as a result of sick leave,
and found to be cost-effective. When including the costs of face-to-face learning for GPs, and based on 15 sessions of therapy per patient, the intervention would start to be cost-saving in year 3, and if e-learning was used instead of face-to-face, the intervention would start to be cost-saving in year 2.

In a single study investigating the long-term impact of employment on mental health service use and costs for persons with severe mental illness, service costs were identified over ten years among participants in a co-occurring disorders study (Bush, Drake, Xie et al., 2015). Annual costs of outpatient services and institutional stays for 187 participants were calculated and group differences examined in ten-year utilization and cost.

A steady-work group (N=51) included individuals whose work hours increased rapidly and then stabilized to average 5,060 hours per person over ten years. A late-work group (N=79) and a no-work group (N=79) were combined into a minimum work group (N=136). Use of outpatient services for the steady work group declined at a significantly greater rate than it did for the minimum-work group, while institutional (hospital, prison) stays declined for both groups without a significant difference. The average cost per participant for outpatient services and institutional stays for the minimum-work group exceeded that of the steady-work group by $166,350 over ten years. The authors found significant reductions in service use associated with steady employment, and concluded that supported employment programmes are cost-effective because they produce better outcomes than other vocational service programmes for similar costs (Bush et al., 2015).

**Increasing Access to Psychological Therapies (IAPT)**

An economic case was made for investing in psychological therapies in the UK, based on a 2004 NICE systematic review of the evidence for effective interventions for depression and anxiety disorders. The review supported cognitive behavioural therapy (CBT) as an effective first-line treatment for a number of common mental health problems, but at that time it was not readily available. CBT was found to produce impressive recovery rates, and in many cases better prevent relapse, compared with medication alone. These findings resulted in NICE guidelines recommending the use of psychological therapies in the treatment of depression and anxiety (IAPT, 2012).

In an economic analysis published in 2007, it was estimated that the total benefits to society of one course of CBT (priced at 750 pounds) amounted to 4,700 pounds, a benefit-to-cost ratio of 6.26 (Layard, Clark et al., 2007). The UK Department of Health later undertook a cost-benefit analysis of IAPT and found an overall benefit-to-cost ratio of 5.8 (Department of Health 2011).

The initial estimates were later challenged on the basis that the actual cost of therapy was higher than assumed (Griffiths and Steen, 2013), but the overall benefit is still very high. An analysis of cost of session, treatment and recovery in primary care trusts in the East of England (Radhakrishnan, Hammond, & Jones, 2013) also found that the cost per session exceeded previous estimates, but the cost of treatment was only marginally higher. They also found that the actual recovery rate was more than 50 per cent in all types of therapy (the recovery rate without treatment is about 30 per cent for depression and less for anxiety disorders)\(^\text{24}\).

Radhakrishnan et al. (2013) found that their cost estimates, based on routine outcome data and actual spend, were supportive of the original IAPT model, on cost-benefit grounds.

Economists and researchers initially argued that an increase in access to psychological therapies would largely pay for itself by reducing the costs of welfare benefits and medical costs, and

\(^\text{24}\) Note that this is the recovery rate for those who complete at least two sessions. In 2015 that was only 38 per cent of all people referred. The drop-out rate before first appointment and after only one appointment is high - only 537,000 accessed two or more sessions in 2015/16 (personal communication, Dr Sue Hallwright, 6 November 2016).
increasing tax revenue through increased productivity. In 2005, political commitment and funding were secured to increase access to evidence-based psychological treatments for adults with depression and anxiety, and the IAPT programme was set up. Two regional demonstration sites were set up in 2006, to develop the care pathways and skills needed to deliver NICE-approved, evidence-based therapies. The first wave of services began in October 2008 and a full national programme was rolled out. A four-year plan was funded in 2011, with a further allocation of over £400 million up until 2014/15.

There is a large body of evidence on the associations between mental health and long-term conditions. The associations between long-term conditions such as diabetes and chronic pain with depression were of particular relevance to IAPT. The effective treatment of depression associated with these conditions, together with the provision of support for finding employment, reduced benefit dependency and strengthened the economic argument for investing in evidence-based psychological therapies.

It should be noted that supported employment services for people with mental health problems are an integral component of IAPT services. In New Zealand, these are provided in some areas by NGOs.

The IAPT three-year report (Department of Health, 2012, p. 21) documented health and economic gains directly attributable to the programme in the first three years, as follows:

- More than 1.134 million people treated in IAPT services
- More than 683,000 people completing a course of treatment which is defined as attending two or more treatment sessions
- Recovery rates in excess of 45% and approaching those expected from the randomised controlled trials that generated the initial NICE recommendations
- Nearly 250,000 ‘cases’ (41%) recovering, and around two-thirds of those treated showing reliable improvement, i.e. achieving significant improvements in symptoms but not achieving the technical definition of recovery
- A session-by-session outcomes monitoring system, collecting data on 90% of contacts with service users
- Training of a new, competent workforce, to deliver NICE-recommended treatments (different levels of training for different roles, to deliver different intensity of interventions)
- Economic gains in terms of employment attainment and retention, with more than 45,000 people moving off sick pay and benefits.

The programme was expected to generate net savings in excess of £300 million by March 2015 through: healthcare savings; 75,000 people moving off welfare benefits; and economic gains through reduced workplace sick leave. By the end of 2016/17, a net financial benefit of £4,640 million is expected25.

IAPT is an essential component of No health without mental health: A cross-government mental health outcomes strategy for people of all ages (Department of Health, 2011).

Uptake of psychological interventions

A review of 100,000 outpatient contacts in a Department of Psychiatry (Talmon, 1990 cited by Young and Rycroft, 1997) found that the modal length of therapy for every therapist, regardless of their

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model, was one session and that 30 per cent of all clients chose to attend only once. Findings are remarkably similar to this for the IAPT programme.

The NHS publishes data regarding access to its IAPT programme on the NHS digital website. The following figures have been sourced from the spreadsheet Psychological Therapies: Annual Report on the use of IAPT services – England, 2015/16. In 2015/16, out of 1,299,525 referrals ended, 405,974 (31.2%) did not attend any appointments, 356,420 (27.4%) attended just one appointment and 537,131 (41.3%) attended two or more treatment appointments. It is not known how many actually attended for the full duration of treatment set out in the NICE guidelines.

The economic value of psychological therapies in New Zealand

A New Zealand study investigating the economic value of psychological therapy (Vaithianathan, 2012), demonstrated that compared with medicines, psychological therapy provided good value for the health benefits it yields. The cost-benefit analysis estimated societal economic benefits gained from employment and reduced sick leave equated to $15.19 for every dollar spent treating mild to moderate mental health problems, and for more severe mental health problems, $4.47 for every dollar spent (based on 18 CBT sessions).

“Moreover, this analysis calculates that the fiscal implications are only positive, in that the costs of the therapy can be recovered by Treasury through the increased expected tax paid by recovered service users and through reductions in disability benefit. These results strengthen the message that mental health policy is part of economic policy and ought to be taken seriously in the current focus on increasing the productivity of New Zealand’s workforce” (Vaithianathan, 2012, p. 6).

A similar approach to that taken by IAPT, of trialing and evaluating demonstration sites was recommended for New Zealand, with a focus on outcome measurement and careful data collection to inform future development of services.

<table>
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<th>Costs</th>
<th>Costs and benefits\textsuperscript{27}</th>
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<td></td>
<td>\textit{UK£ for 400,000 service users}</td>
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<tr>
<td>Cost of talking therapies based on training, roll-out and therapy sessions under NICE guidelines</td>
<td>£966,000,000</td>
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<tr>
<td>Benefits</td>
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<tr>
<td>Health care savings</td>
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<td>Welfare savings</td>
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<td>Health and quality of life benefits to service users</td>
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<td>Reduction in sickness absences by service users</td>
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<tr>
<td>Overall benefit-cost ratio (\textit{£}5,606 million divided by \textit{£}966 million)</td>
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\textsuperscript{26} Retrieved from http://content.digital.nhs.uk/catalogue/PUB22110 on 24 November 2016

\textsuperscript{27} British pounds converted into New Zealand dollars using foreign exchange rate as at 4/10/11. Then converted into figures per service user by dividing by 400,000.
Table 1: UK Department of Health’s valuation of cognitive behavioural therapy (2011) and New Zealand dollar conversion (from Vaithianathan, 2012, p. 17)

Effectiveness of mental health & addiction interventions in primary care settings (excluding medication)

Economic studies attempting to identify the cost-benefit of various psycho-social and medical interventions rely on what is known about their effectiveness to make assumptions about potential savings to the health sector. This section summarises the evidence in support of types of mental health and substance use interventions that may be provided in primary care, which are likely to be effective for people with moderately serious problems.

Most systematic reviews in primary care point to the effectiveness of mental health practitioners with sufficient training delivering brief, simplified, psychological therapies based on cognitive behaviour therapy to address ‘mild to moderate’ common mental health and addiction issues.

Brief intervention

There is good evidence for the effectiveness of alcohol brief intervention in preventing alcohol-related harm in primary care, summarized in a Cochrane Review (Kaner, Dickinson, Beyer et al., 2009). Positive screening and use of a brief intervention resulted in reduction in alcohol intake at 12-month follow up, for men but not for women. There was little evidence of a greater reduction in alcohol consumption with longer treatment exposure. Earlier review studies also demonstrated good evidence for screening and brief intervention in primary care, (Bertholet et al., 2005; Kaner et al., 2009).

There is good evidence for ‘low intensity’, relatively low-cost interventions targeting people with mild to moderate common mental health problems who present in primary care (Linde et al., 2015; Whiteman et al., 2016). These are delivered within a stepped care model (matching level of need with intensity of intervention).

Brief cognitive behaviour therapy (CBT), counselling, and problem-solving therapy (PST) are all effective treatments in primary care, but effect sizes are low compared to longer length treatments, with the exception of brief CBT for anxiety which delivers comparable effects to longer therapy (Cape et al., 2010b).

Psychological therapies

The evidence base in support of evidence-based psychological therapies, primarily in the treatment of depression and anxiety, is very strong. This has resulted in most international clinical guidelines incorporating their use in treatment for these conditions.

Good evidence indicates that cognitive behavior therapy (CBT) can be as effective as medication in treating depression and anxiety, and is more effective at preventing relapse than medication (Cuijpers, Berking, Andersson et al., 2013). This has resulted in international clinical guidelines recommending the use of identified psychological therapies alongside or as an alternative to medication for people with depression and anxiety presenting in primary care.

The evidence about the effectiveness of psychological therapies in psychosis is complex. In one recent meta-analysis, CBT was found to be ineffective in treating the symptoms of schizophrenia (Jauhar, S., McKenna, P. J., Radua et al. 2014), and nor had it demonstrated any effectiveness against relapse. However this finding has been challenged on methodological grounds (Wykes, 2014), and NICE guidelines (2014) recommend psychological therapy in the prevention of psychosis, in first episode psychosis, and as an option for the treatment of psychosis.
A network meta-analysis undertaken by Linde, Rucker and colleagues (2015) compared the effectiveness of psychological treatments in primary care, and found little difference between types of psychological treatments. Remote therapist-led, guided self-help, and minimal contact approaches were found to yield effects similar to personalized face-to-face therapies. Although the evidence was described as ‘limited’, the authors tentatively concluded that psychological therapies might be less effective for patients having minor depression and dysthymia than for patients with major depression. For CBT approaches, substantial evidence suggested that interventions that are less resource intensive might have effects similar to more intense treatments.

A guide to talking therapies for Māori developed by Te Pou o te Whakaaro Nui (2010) describes the paucity of evidence-based research into the effectiveness of talking therapies for Māori. It identifies processes and approaches to assist Māori and non-Māori practitioners to develop and maintain effective therapeutic relationships with Māori and their whānau and enhance the talking therapy process, based on the limited research and the views and experiences of practitioners and of Māori who have accessed services, their kaumatua and whānau.

**Integrated behavioural health consultancy**

“Integrated behavioural health consultancy” is a term used in the United States to refer to brief, focussed talking therapy services embedded in the general practice team. This type of integrated or collaborative care involves the delivery of psychological therapies such as motivational interviewing, problem-solving techniques, acceptance and commitment therapy (ACT) and Cognitive Behaviour Therapy (CBT) using a primary care consultancy approach. A major part of the consultant’s role is to provide advice to the general practice team members to support their own service provision. The integrated behavioural health consultancy approach can be delivered by general practitioners, practice nurses and/or mental health professionals who have specific training in these therapies and work as part of the general practice team.

Studies have demonstrated the effectiveness of integrated behavioural health consultants within primary care in minimising symptoms and/or increasing functioning (Angantyr et al, 2015, Bryan et al, 2012) even in those with the most severe levels of distress at baseline and that clinical gains are maintained approximately 2 years after the final appointment (Ray-Sannerud et al, 2012). Improvements in PHQ-9 scores for people with mood disorders accessing behavioural health consultative scores were not significantly different from those of people receiving psychotropic medication (McFeature et al, 2011). Patients demonstrate clinically meaningful improvement in wellbeing, symptoms and functioning in as few as two to three behavioural health consultant appointments (Bryan et al, 2009).

Introduction of behavioural health consultants into an urban Federally Qualified Health Center in the United States resulted in decreased initiation rates of antidepressants and decreased referrals to mental health specialty care (Serrano et al, 2011). Clinicians reported near universal acceptance of the behavioural health consultation programme and willingness to increase their role in managing patient mental health issues.

**Telehealth services and interventions**

Monitoring and treatment are needed to address medical comorbidity among individuals with serious mental health problems, and telehealth services are demonstrating they can be an effective, accessible and acceptable option for service users. A small trial of adults with serious mental illness and chronic medical conditions (n=70) examined the feasibility and potential effectiveness of an automated telehealth intervention, supported by nurse health-care management (Pratt, Bartels, Mueser et al., 2013). Participation was associated with improvements in self-efficacy for managing depression and diastolic blood pressure. Individuals with diabetes achieved decreases in fasting
blood glucose, and among those with diabetes and major depression or bipolar disorder there were reductions in urgent care and primary care visits.

Telephone-based interventions have also been found to be effective for people with alcohol problems. “The most dramatic effects appear to be seen with interventions using push technology that combines monitoring with tailored information, social support, and automated reminder systems that alert both the patient/family and the clinical team when a predetermined indicator passes a threshold” (Gustafson, Boyle, Shaw et al., 2011, p. 334). However, the authors cautioned that high-quality RCTs on smartphone applications were still rare, and it is too early to generalise about their usefulness.

The effectiveness of smartphone-based behavior change interventions was investigated more recently in a systematic review (Free, Phillips, Galli et al., 2013) which found 75 trials fitting the search criteria, of which 26 investigated health behaviour change. While this indicated significant interest in the potential of these technologies, it was disappointing that the quality of studies was generally low. However there was good evidence found for this approach in smoking cessation and reducing alcohol-related harm.

A large UK observational study (39,227 adults referred to IAPT) compared the clinical and cost-effectiveness of face-to-face (FTF) with over-the-telephone (OTT) delivery of low-intensity CBT for depression and anxiety (Hammond, Croudace, Radhakrishnan et al., 2012). The authors found that OTT delivery was as effective as FTF except for those with more severe illness, for whom FTF was superior. They concluded that telephone services were more cost-effective than face-to-face interventions, and improved access for people with less severe depression and anxiety. The study provided evidence for better targeting of therapy, and concluded that “the potential is enormous for spreading access to effective psychological therapies to the millions of people affected by depression and anxiety” (Hammond et al., 2012, p. 15). Randomised evaluations were recommended for tele-mental health services.

e-Therapy

There is a growing evidence base on the effectiveness of e-therapy for mental health problems; however, the quality of evidence is variable (Kaltenthaler, Parry et al., 2008). Of 14 RCTs in one systematic review, only five studies showed high methodological quality (Postel, de Haan and De Jong, 2007).

More recent reviews have found computer-based CBT to be significantly more effective than both waitlist and active control conditions (Grist, Cavanagh et al., 2013). The findings indicate that CCBT can be an effective low-intensity intervention and support the implementation of CCBT within the stepped-care context.

In a meta-analysis of adherence to Internet-based and face-to-face CBT for Depression, van Ballegooijen, Cuijpers and colleagues (2015) found that participants in face-to-face CBT completed on average 83.9% of their treatment, which did not differ significantly from participants in guided iCBT (80.8%). The percentage of completers (total intervention) was significantly higher in face-to-face CBT (84.7%) than in guided iCBT (65.1%). Non-completers of face-to-face CBT completed on average 24.5% of their treatment, while non-completers of guided iCBT completed on average 42.1% of their treatment. Adherence to guided iCBT appears to be adequate and could be equal to adherence to face-to-face CBT.

Integrated primary and secondary care self-management interventions

A recent systematic review (Whiteman, Naslund, DiNapoli et al., 2016) added to growing evidence that integrated general medical and psychiatric self-management interventions can improve the lives of adults with serious mental illness. Of the nine interventions studied, the feasibility, acceptability, and preliminary clinical effectiveness of the intervention in regard to enhancing
participants’ knowledge of self-management skills, promoting behavioral and attitudinal changes toward managing illnesses, reducing psychiatric symptoms, stimulating changes in biological indicators of general medical illnesses, and reducing use of acute services.

**Peer support programmes in primary care**

There is evidence that peer staff providing conventional mental health services can be effective in engaging people into care, reducing the use of emergency rooms and hospitals, and reducing substance use among persons with co-occurring substance use disorders (Davidson, Bellamy, Guy et al., 2012). Most of the literature on peer support investigates this approach in mental health services, but there is emerging evidence about the effectiveness of peer support workers in primary care settings.

**Supported employment**

The OECD has recently developed policy on mental health and employment, in recognition that mental ill-health is responsible for between one-third and one-half of all long-term sickness and disability among the working-age population in OECD countries (OECD, 2015). Mental ill-health “causes and exacerbates chronic physical illness, pushing up health care costs. And it lowers education outcomes – partly because those who are ill leave school early ... Relatively to the mentally healthy, the employment rate of people who suffer from poor mental health is 15-30 percentage points lower and their unemployment rate is twice as high. ... The prevalence of mental ill-health also accounts for it being a heavy economic burden. At any given moment, some 20% of the working-age population suffers from a mental illness, and one person in two will suffer a period of poor mental health during their lifetime. Most people with mental ill-health are affected by mild- to-moderate illness – predominantly mood and anxiety disorders,”

Supported employment programmes generally employ case workers who work with both employers and mental health service users to facilitate meaningful employment opportunities, and provide ongoing on-the-job support. The number, consistency, and effect sizes of studies of evidence-based supported employment establish it as one of the most robust interventions available for persons with severe mental illness (Bond, Drake and Becker, 2008). In New Zealand, these services are provided for mental health service users by NGOs.

There is good evidence that providing individualised support, based on the best available evidence, is the best means of assisting those on benefits with mental health conditions to move into employment (Waddell, Burton, & Kendall, 2008). A Cochrane Review of supported employment for adults with severe mental illness (Kinoshita et al., 2013) found evidence for significant increases in levels of employment after one-year follow-up. There were two main findings: 1) Supported employment increases the length and time of people’s employment; and 2) People on supported employment find jobs quicker than other approaches for finding employment.

A review of randomised controlled trials studying evidence-based supported employment focused on the Individual Placement and Support (IPS) model for clients with severe mental illness (Bond et al., 2008). Outcomes investigated were: employment rates, days to first job, annualized weeks worked, and job tenure in longest job held during the follow-up period. Across the 11 studies, the competitive employment rate was 61 per cent for IPS compared to 23 per cent for controls. About two-thirds of those who obtained competitive employment worked 20 hours or more per week. Among those who obtained a competitive job, IPS participants obtained their first job nearly 10 weeks earlier than did controls. Among IPS participants who obtained competitive work, duration of

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employment after the start of the first job averaged 24.2 weeks per year. This review supports earlier findings.

**Closing the Loop recommendations**

1. A number of the recommendations from *Closing the Loop* (identified in bold type below) are well-supported by the evidence summarized in this review, as follows.

**PHOs, NGOs and other relevant primary care and community-based support services are resourced to offer stepped care through virtual and face-to-face assessment, co-ordination and navigation, working within a place-based framework**

**Standardised pathways that offer flexibility and choice from first contact to a meaningful outcome are co-designed**

- Common features of successful integration models include: prioritized underserved vulnerable populations; increasing community collaboration; ensuring strong leadership early in the process; implementing a team-based approach including the patient as an active participant; diversifying funding sources; implementing data-driven best practices (Grazier et al., 2016).

- Team-based approaches across primary and secondary care are effective for depression and anxiety compared with standard primary care (Archer et al., 2012).

- Collaborative care interventions delivered by multidisciplinary teams may improve clinical outcomes in those with persistent or recurrent difficulties. Collaborative care models incorporating a case management approach and/or using the services of a care manager or primary mental health care worker show some benefit (Doughty 2006) and especially for major depression in primary care (Gensichen et al., 2006).

- Components found to significantly predict improvement in depression outcomes include the revision of professional roles, the provision of a case manager who delivered a psychological therapy, and the incorporation of patient preferences into care. Nurse, psychologist and psychiatrist delivered care were effective, but pharmacist delivery was not. GP training was less successful when it was the most important intervention. Community interventions were effective (Christensen et al., 2010).

- Nine factors were identified as important for successful implementation of collaborative care in one US study (Whitebird, Solberg, and Jaeckels, 2014). Factors correlated with higher patient activation rates were: strong leadership support, well-defined and implemented care manager roles, a strong primary care physician champion, and an on-site and accessible care manager. However, remission rates at six months were correlated with: an engaged psychiatrist, not seeing operating costs as a barrier to participation, and face-to-face communication between the care manager and primary care physician for new patients.

- Collaborative chronic care (CCM) models were found to improve mental and physical outcomes for people with mental health problems across a wide variety of care settings, including primary care, compared with other models. Total health care costs did not differ between CCMs and comparison models (Woltmann, Grogan-Kaylor, Perrons et al., 2012).

- Woltman and colleagues (2012) argue that the major focus of health care cost reduction efforts must be in reducing avoidable complications of chronic illnesses, which account for up to 22 per cent of all health care expenditures in the US. The analyses indicated that these benefits can extend to patients with a wide variety of mental health conditions, including those with chronic or highly comorbid disorders.
• Jacob and colleagues (2012) found strong evidence that collaborative care for management of depressive disorder provides good economic value.

• Good evidence was found for effectiveness and cost-effectiveness of collaborative care models in UK primary care settings involving GP practice as usual combined with case managers (eg via trained practice nurses) delivering structured psycho-social and health literacy sessions (Green, Richards, Hill et al., 2014).

Greater access to talking therapies, NGO services and specialist mental health services is provided directly from primary care, underpinned by comprehensive shared care planning

Greater access to mental health and addiction resources, including those within DHBs and NGOs, should be made available directly from primary care

• Strong evidence was found for the effectiveness of evidence-based psychological therapies, with and without medication, in the treatment of depression and anxiety (Cuijpers, Berking, Andersson, et al., 2013). This has resulted in most international clinical guidelines incorporating their use in treatment for these conditions.

• There is strong evidence for evidence-based supported employment as one of the most robust interventions available for persons with severe mental illness (Bond et al, 2008). Employment advisors are an essential component of IAPT services in the UK, and are recommended as members of “the optimum primary mental health care team” by the Joint Commissioning Panel for Mental Health in the UK.29

• There is evidence to support the use of mental health peers or professional staff to implement self-management components to address physical health care for individuals experiencing severe mental health problems (Kelly et al., 2014).

• Peer support interventions for depression result in greater improvement in depression symptoms than usual care and may have similar efficacy to group CBT (Pfeiffer et al., 2011). Peer workers are included as members of “the optimum primary mental health care team” by the Joint Commissioning Panel for Mental Health in the UK.

• Brief cognitive behaviour therapy (CBT), counselling, and problem-solving therapy (PST) are all effective treatments in primary care, but effect sizes are low compared to longer length treatments, with the exception of brief CBT for anxiety which delivers comparable effects to longer therapy (Cape et al., 2010b).

• NICE guidelines (2014) recommend CBT in the prevention of psychosis, where “a person is considered to be at increased risk of developing psychosis”, and for people with first episode of psychosis alongside family interventions, and as an option for the treatment of psychosis. In primary care, treatment decisions for psychosis should be made in consultation with a psychiatrist (NICE, 2014, pp 15-23).

• There is good evidence for ‘low intensity’, relatively low-cost interventions targeting people with mild to moderate common mental health problems who present in primary care (Linde et al., 2015; Whiteman et al., 2016). These are delivered within a stepped care model (matching level of need with intensity of intervention) and mostly based on cognitive behavior therapy. They include online self-management, telehealth counselling, brief intervention, and face-to-face counselling.

• Guided Internet interventions for depression, anxiety, smoking cessation and alcohol consumption were likely to be more cost-effective when compared to wait-list, TAU, group

cognitive behaviour therapy (CBGT), attention control, telephone counselling or unguided Internet CBT (Donker et al., 2015).

- Cost-benefit studies undertaken by the London School of Economics (LSE) provide strong evidence supporting investment in universal access to psychological therapies, (including allowing for self-referral, as GP referral was seen as a barrier to access) and demonstrate cost benefits in terms of reduced unemployment and extra taxes resulting from return to work (Griffiths, et al., 2013).

- A New Zealand study investigating the economic value of psychological therapy (Vaithianathan, 2012), demonstrated that compared with medicines, psychological therapy provided good value for the health benefits it yields. The cost-benefit analysis estimated societal economic benefits gained from employment and reduced sick leave equated to $15.19 for every dollar spent treating mild to moderate mental health problems, and for more severe mental health problems, $4.47 for every dollar spent (based on 18 CBT sessions).

A single point of co-ordination at a local level is created to provide support for mental health and addiction problems, accessible both physically and through a community hub, and virtually through digital channels (eg websites, social media and telephone services)

- There is promising evidence in support of a number of evidence-informed models of shared care and collaborative care that provide co-ordination of social and health services with a patient-centred focus (Thiel et al., 2013).
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Appendix One: Policy context and background to primary mental health service development in New Zealand

Policy context and background

The two main national policy documents currently guiding mental health and addiction service development in New Zealand are *Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017* (Ministry of Health, 2012), and the recently completed *Mental Health and Addiction Commissioning Framework* (Ministry of Health, 2016).

*Rising to the Challenge* identifies the importance of building infrastructure for integration between primary and specialist services, and states that the Ministry will be developing and implementing a primary mental health and addiction service delivery framework, based on a stepped-care model that enables people to rapidly receive the level of care that is appropriate to their need.

“The framework will:

- outline a service matrix and stepped-care model including requirements for clinical governance and oversight
- describe the multidisciplinary primary care workforce in terms of skills and mix, including the role of service users within the primary care workforce
- specify workforce supervision and support requirements along with credentialing expectations for roles specific to mental health
- outline the infrastructure and tools necessary to support effective service delivery (eg, extended consultations, decision support tools and screening tools for primary care staff, and self-management tools for people using primary care services)
- describe mechanisms to link with, and access input from, specialist mental health and addiction services (eg, phone advice, one-off assessments, consultation liaison, access to supports and shared care)
- identify the service components that would be funded through usual primary care funding streams and those that may require specific primary mental health funding.

The framework will ... provide a high-level overview of the core components of an effective, integrated response to mental health and addiction issues, while still allowing for a ‘bottom-up’ approach to service development based on local needs and preferences. The framework will be used to inform contract expectations that will be negotiated through existing processes with primary care and DHBs” (*Rising to the Challenge*, p. 49).

*Rising to the Challenge* identifies that NGO and DHB mental health and addictions services are expected to provide support and advice to primary care and other general health services, including:

- consultation and liaison services (including one-off assessments)
- prompt telephone advice
- access to advice via telemedicine or outreach services for primary care teams in rural areas
- urgent assessments for people in crisis
- shared care arrangements that allow people to move quickly and efficiently between primary care and specialist services as their needs dictate
• delivery of specialist services from primary care sites, in combination with processes to ensure collegial working
• consultation liaison from specialist perinatal and infant mental health services to primary care, lead maternity carers and well child services with clear referral pathways to specialist perinatal and infant mental health services, ensuring ease of access for those people with the most serious problems.” (Rising to the Challenge, pp 50-51)

The Ministry’s Mental Health and Addiction Commissioning Framework (2016) refers to the UK Guidance for Commissioners of Primary Mental Health Care Services30 developed by the Joint Commissioning Panel for Mental Health (JCPMH, 2013) for guidance on service development in New Zealand. This guidance

“covers the scope of primary mental health care and why it is particularly important to commissioners and the current state, and it then describes what a good primary mental health care service should look like.

“In describing why primary mental health care is important, the guidance document refers to several policy imperatives such as the provision of care closer to home, taking patient views into account and patient preference for being treated in primary care. The cost of mental health problems and population prevalence are presented, along with a discussion on the importance of early intervention to improve outcomes and reduce costs.

“The importance of addressing physical health care needs as well as mental health care needs through primary care is also discussed, with a key focus on aligning physical health care with mental health services. The expectation is that better management of long-term conditions and comorbidity will reduce the demand on acute inpatient services. Key principles and patient-centred approaches are outlined to describe what a good primary mental health care service would look like” (Ministry of Health, 2016, p. 65).

It is worth noting that the UK guidance is generally consistent with New Zealand primary mental health care principles and practice. However primary mental health services in the UK have the benefit of substantial investment in psychological therapies through Increasing Access to Psychological Therapies (IAPT).

Background on primary mental health services in New Zealand

Primary mental health initiative trials and evaluation results

Primary mental health services were initially funded through PHOs in 2005, when a number of different models were trialed and evaluated by the Ministry of Health (Dowell et al. 2009).

The evaluation found that up to 80 per cent of service users benefited from the variety of interventions offered. This represented a “significant and beneficial treatment effect, which was generally sustained at six months in those for whom data were available”.

The researchers concluded that “mental health needs arising from mild to moderate common mental health conditions, including those involving social complexity, can be addressed by primary care” (Dowell et al., 2009, p. ix).

A variety of different models of care evolved during the trial period, as follows:

• Some initiatives employed mental health staff while others contracted services out.
• Models in large organisations were different from those in smaller ones.

- Māori and Pacific services tailored their services and workforce to their local populations and context.
- Increased access to community and social support networks and therapists was enabled by the use of mental health co-ordinators in some of the models. It was important that the service models were able to address the (frequently present) complex social needs of service users.
- Appropriate liaison and integration with secondary care services was also an important part of effective intervention.
- The key factors enabling successful liaison were communication and an understanding of the respective roles of the primary and secondary services.
- Successful service delivery was linked to having adequate initial preparation time, establishing good relationships with referring practitioners, and developing a definition of mental illness and mental health problems that included life complexity.

![Diagram of optimal primary mental health model](image)

**Figure 1: Optimal primary mental health model (Dowell et al., 2009)**

Features of an optimal model were found to include:

- Support from the DHB
- An effective IT platform
- Incorporating training, health promotion and liaison with both secondary care and other sectors into the model.

Over time, primary care practitioners and therapists need to develop a new skill mix tailored to the needs of initiatives. These skills include:
• assessment
• use of outcome tools
• brief interventions and talking therapies
• motivational interviewing
• self-management
• medication use.

An effective patient care pathway would depend on identifying appropriate roles for existing and new providers, the adoption of stepped care, and appropriate regard for service-user choice within the available resources.

**Funding for primary mental health services**

The results of this evaluation were sufficiently positive to argue for additional funding, and the Ministry now funds primary mental health care (PMHC) across all DHBs. The total 2015/16 funding was $29.3 million\(^{31}\) (increased from $23.765m in 2011). Primary mental health services funds are targeted to high needs populations such as Māori, Pacific and high deprivation patients with mild to moderate mental health and/or substance abuse problems.

Components of care may include:

• extended consultations with a general practitioner (or practice nurse)
• assessments, brief interventions, and/or counselling sessions provided by primary mental health clinicians or counsellors/psychologists
• packages of care for patients, which cover a variety of services such as cognitive behavioural therapy, medication reviews, counselling and other psychosocial interventions.\(^{32}\)

The *Toolkit for Primary Mental Health Care Development* (Collings et al., 2010) identified a number of strategic and operational issues confronting primary care in delivering mental health services (pp 22-40). The authors identified the lack of a strategic policy framework for primary mental health as fundamentally problematic.

“What is clear from our research is that the pathway of (PMHC) service development has not been accompanied by the development of a powerful strategic context. In most areas centrally driven funding has stimulated service and capacity development in isolation from the broader streams of care system development. Without this context there is little which integrates the guiding ideas, trends in care systems, and policy and priority outcomes in a way that can mobilise the resources and leadership for its ongoing success.” (Collings et al., 2010, p. 25.)

The report also noted that there was

• substantial variation in focus, approach and equity of access across PHOs, and lack of connection with the wider primary care and DHB services.
• Primary mental health care (PMHC) has had relatively modest funding. While this has supported the development of a basic level of service in most PHOs or districts, it has not been sufficient to develop a broader infrastructure of relationships, leadership, service development and integration that is capable of addressing sustainability issues.

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\(^{31}\) *Closing the Loop*, 2016, p. 9.

\(^{32}\) From archived Primary Mental Health website (no longer maintained by the Ministry of Health)
- Limited and centrally driven funding has meant that there have been pragmatic choices made in each PHO over targeting their services. Comprehensive population planning and outcomes targeting has been limited. There are unresolved challenges in managing both access criteria and model of care trade-offs between breadth and intensity of services.
- The programmatic, ‘packages of care’ nature of the initiatives means they are not well integrated horizontally with ‘business as usual’ primary care (including self-care and care for long-term conditions), not vertically with DHB-supported community and specialist mental health services.

As part of the Government’s Better, Sooner More Convenient policy, five demonstration sites were established in 2010 for the Primary/Secondary Mental Health Integration Project. The final report on these projects (Ministry of Health 2012) identifies key learnings of relevance to this project.

The aim of the demonstrations was to showcase initiatives on:
- Electronic notes sharing
- Specialist mental health telephone advice to general practitioners
- More comprehensive integration of primary and secondary mental health and AOD treatment services.

The key learning from this project was that there needs to be strong local support from both primary and secondary services from the initial planning stages through to implementation. For the demonstrations that were most successful, there was a strong project champion who drove the project and addressed problems and issues as they arose.

Other themes identified in the final report were:
- Technical difficulties in sharing information between primary and secondary care services
- Clinician reluctance in sharing patient information – concerns about patient confidentiality
- Clinician concerns about extra work generated
- Service user reluctance to participate
- GP engagement was problematic as they could be reluctant to communicate by phone or attend meetings, and in some areas there was high turnover of locum GPs
- NZ has a shortage of specialist psychiatrists in some areas
- GPs operating their own business could be reluctant to free the time to participate.

**Stepped care**

The concept of stepped care has been central to primary mental health development from the outset, and appears to be well-established in primary care. It involves:

- Using the least intrusive treatment required to meet presenting need
- The provision of interventions with different levels of intensity
- Matching people’s needs to the level of intensity of the intervention
- Entry and exit at any point
- Routinely collecting outcome data to support people’s journey
- Having clear referral pathways between different levels of intervention and service providers
- Supporting self-care as an important aspect of managing demand across primary, community and specialist care settings (Closing the Loop, 2016)
New Zealanders have access to a range of low-intensity and relatively inexpensive interventions. Most people can access these without having to see a health professional. They include telehealth services, e-mental health interventions and self-management resources available through websites, such as The Journal (supported with mobile technology and personalized support), SPARX and Beating the Blues. Demand for these services indicates they are well-utilised, and there is evidence for effectiveness and acceptability (Edwards, 2016). But low-intensity interventions are not acceptable to, or effective for everyone, and are likely to be more appropriate for people with less severe mental health problems – those with ‘mild to moderate’ rather than ‘moderate to severe’ symptoms. The Royal Australian and New Zealand College of Psychiatrists cautions that technology-based interventions ought not to be regarded as “the ‘silver bullet’ that may solve many of the sector’s current challenges”, and stresses that “the therapeutic relationship in psychiatry is of paramount importance”.  

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33 Letter re Closing the Loop from RANZCP to ProCare dated 1 June 2016, retrieved on 13 September, 2016 from https://www.ranzcp.org
Appendix Two: Primary mental health care in practice in the Network 4 localities

Introduction

Primary care is defined by the Ministry of Health as “the professional health care provided in the community, usually from a general practitioner (GP), practice nurse, pharmacist or other health professional working within a general practice. Primary health care covers a broad range of health services, including diagnosis and treatment, health education, counselling, disease prevention and screening” 34

Community based health services such as mental health and addiction NGOs can also be included in the definition of primary care. This section includes mental health services provided in general practice within the Network 4 localities, and a brief description and some examples of programmes delivered by NGO providers.

Primary mental health care “refers to the assessment, treatment, and, when needed, ongoing management of people with mental health problems and/or addiction in the primary care setting. It encompasses promotion, prevention, early intervention and ongoing treatment for mental health” (Dowell et al., 2009, p. 1).

All four PHOs are committed to ongoing development of primary mental health care in their localities. Examples of innovative good practice are provided in Closing the Loop 35 and summarized below. Closing the Loop describes a “person-centred, integrated system where people can easily access the full range of mental health and addiction care and support, from the first point of contact through to an outcome that is right for them. It proposes a model where coordination and collaboration between services is the norm, where services are consistent and seamless for all populations, but tailored to individual needs. It outlines a holistic approach to health and social care that enables people to self-manage, stay well, lead more effective lives, and reduce the likelihood of needing specialist care.”

The model proposes “care close to home, with better integration of primary, community, Non-Government Organizations (NGO) and specialist services, facilitating early intervention and support in a familiar and trusted setting. This model would be underpinned by an appropriately trained multi-disciplinary workforce, targeted evaluation and research, effective use of technology, better leadership at all levels and funding models that ensure services are designed around people rather than organisations.”

As previously noted, there are many primary mental health services around the country that include aspects of, or possibly all of the above components. However, little has been written in recent times to summarise what is actually in place around New Zealand.

The Health Care Home

Network 4 members are developing a model called the Health Care Home described as “having a single place that connects individuals with the broader health and social system, providing or facilitating access to a range of services, and focusing on the whole person, including physical health, mental health and social needs such as housing, employment and community connectivity. It is a team-based model, featuring early assessment, coordinated care, navigation to an outcome, 34 Retrieved from http://www.health.govt.nz/our-work/primary-health-care on 29 September, 2016. 35 Retrieved from PROC+0015+Closing+the+Loop+-+Booklet_FINAL_PDF+for+WEBSITE.pdf On 29 September 2016.
monitoring and review. Its partnership-based philosophy encourages people to take ownership of their care and help to shape their own individualised support plan.”

The Health Care Home is centred around general practice, and “features triage by health professionals, including telephone consultations where appropriate, to ensure that demand is managed appropriately and effectively. It offers easy access to a range of services and support through a single point of patient contact, integrating with national tele-health services, electronic portals, e-prescribing, Accident and Medical Centres, hospital services, NGOs and residential and social care providers. The model is now being adopted in general practices across New Zealand, with rollout planned over the next three years and a national collaborative providing oversight and standard setting. This model (see Figure 3 below) is one of a community hub offering holistic care and support based around individual needs, with continuity and accountability underpinned by a shared care record” (Closing the Loop, 2016, pp 17-20).

Figure 3: The Health Care Home. From: Closing the Loop, 2016, p. 19.
The following are examples of approaches and models that have been developed within each of the four PHO localities.

**Pegasus Health**

Pegasus Health’s mental health team comprises qualified and experienced mental health clinicians and provides services and support to general practices and patients through:

**Brief Intervention Coordination (BIC) service** – up to five consultations for patients with mild-moderate illness, e.g., depression and anxiety, usually done at the practice.

**General Practice Liaison (GPL)** – provides support to patients with moderate to severe illness with consultations, and if necessary, linking people with other psychiatric services. Facilitates the building and strengthening of the capability of primary health services to assess and respond to mental health and/or addiction needs of people through the provision of specialist support, supervision, advice and training to the primary care services.

**Earthquake Crisis Consultations** – these extended GP consultations support patients with particular mental health concerns relating to the Canterbury earthquakes.

The team’s vision is to:

- Create a responsive, integrated and recovery-focused primary mental health service that facilitates effective outcomes for patients
- Ensure patients can access the mental health services they need
- Offer assistance with delivering a consistent approach to screening, assessing and treating people with mental health and/or addiction issues
- Working collaboratively and in partnership with the primary health care team, the patient, family, whānau and the wider community

**CASE STUDY: Te Pikenga**

Canterbury Te Pikinga (TP), meaning Steps to Change, is a Settlers Health Centre (SHC) project that commenced in June 2010 for people who have had limited input from the health system and who are at risk due to lifestyle, addiction or imprisonment. Referrals are received from three social service providers. Most clients are male and of Māori or Pacific background, have been released from prison or are court-ordered to undergo alcohol and drug intervention programmes. Each TP patient is encouraged to participate in their own care. Te Pikinga has developed an assessment tool that includes measurements, blood tests, hearing/vision assessments, personal/family medical history, and social/emotional/wairua (spiritual) history. The doctor, client, and an accompanying support worker discuss the clinical decisions made and care strategy at the end of each consultation. Input from the support worker ensures the client has another person who understands what care decisions have been made and who can provide support to follow through with actions.

**Compass Health PHO**

The **Mental Health Liaison Programme** provides free health care both mental and physical for people who have experienced mental illness.

It is a 20-year-old programme originally set up by the local DHB, mental health consumers group and the predecessor of Compass Health PHO to create easier access to primary health for those with

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enduring mental health illness. The programme continues to provide both physical and mental health support for those discharged from specialist mental health services to primary practice, in the form of funded visits both to primary practice and after hours services.

**Primary Solutions** (Greater Wellington) and **To Be Heard** (Wairarapa) provides a brief interventions approach to patients who meet the criteria of mild to moderate mental health issues and are 12-25 years of age; Maori and Pacifica either aged over 10, have a current Community Services card or fit Dep 5 criteria.

Interventions include initial mental health assessment and counselling – four to six sessions. This is provided by a Compass Health Mental Health Practitioner or a contracted counsellor or psychologist funded by Compass Health. In addition, Compass Health is able to fund up to four GP visits or Practice nurse brief interventions as part of a stepped care approach.

The service is provided either from compass offices in Wellington, Porirua Kapiti and Masterton or directly from GP practices who have sufficient volume of referrals and office space suitable for counselling. Typically, this involves clinics one day per week. The practice-based model has been in place for 2.5 years and facilitates ease of referral and information exchange, collaborative interventions and improved access for patients. It provides an integrated approach that enhances quality and efficiency.

**ADHD Youth service in primary care** - for youth aged 6-13yrs with uncomplicated ADHD that can be assessed and treated by those GPs who have completed further training in assessment and treatment. There is also access to Psychology and Psychiatrist input for this population, in terms of diagnosis and treatment options.

**CASE STUDY: Practice-based primary mental health co-ordinators Wellington**

Following a significant increase in referrals for therapy, Compass Health PHO has changed the way it provides services for people with mild to moderate mental health disorders. Previously all referrals were triaged and then referred to contracted clinical providers for up to 12 sessions of therapy. However, referrals increased to more than 3,300 in 2013/14, without a comparable increase in funding. The PHO now employs mental health practitioners with therapy qualifications who provide assessments and brief interventions within practices, with no referral needed. GPs access the practitioner’s calendar in the patient management system to directly book their patients in, accompanied by clinical notes. People are seen promptly in the practice setting, always within two weeks and on the same day if the co-ordinator is available.

**CASE STUDY: Equally Well – improving monitoring and treatment of physical and mental health**

The Equally Well initiative developed by Te Pou in 2014 was endorsed by Compass Health and used as a basis for a programme to address the poor physical health outcomes experienced by people with a serious mental illness. PHO data was used to develop a list of all those within the patient population on antipsychotics and mood stabilisers, and these patients were funded to receive an annual physical health examination. This will result in a consistent approach to monitoring, treating and improving health outcomes for this cohort within general practices covered by Compass Health.

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37 Material provided by Lynley Byrne, October 2016.
Figure 4: Mental health patients at centre of primary care. Compass Health, 2016.

Pinnacle Midland Health Network

Pinnacle’s Primary Mental Health Service helps:

- Improve coordination of care, experience and journey for those seeking or receiving care for primary mental health and addiction problems
- Provide services to patients in the least restrictive environment for greatest gain
- Improve early detection, diagnosis and treatment of mental illness and addiction with greater flexibility and tailoring intervention to meet individual patient need.
- Build capacity in primary care to better meet mental health needs in community settings
- Ensure there is a continuum of care between primary and secondary services.

Other features of the service include:

- Claiming for extended GP consults via advanced forms
- eReferral
- Clear eligibility criteria for referral to the service
- The transfer of patient information is sent via Healthlink as the primary mental health coordinators use a secure patient management system.

Each coordinator is allocated a cluster of practices, but a coordinator from outside the area may be allocated if a referral requires specific expertise. Coordinators may also work from outside the practices at venues in the community.38

CASE STUDY: Hauora Tairawhiti – removing barriers and increasing integration

Pinnacle Midlands Health Network is working with Hauora Tairawhiti to offer new integrated mental health care services to deliver a higher level of care and eliminate gaps in service. The first step is the establishment of a single point of access for referrals to mental health services to reduce complexity for referrers and ensure people are seen by the right service with as few barriers as possible.

Pinnacle worked with Tairawhiti DHB to provide funded access to general practice for people with mental health and addiction problems to ensure their physical health needs are cared for in the most appropriate setting – primary care. A service was also developed for clients transferring back to general practice for long-term mental health care. This service funds the development of a comprehensive care plan developed by staff within secondary care and general practice, to ensure a successful transition to primary care and ultimately discharge from secondary services.

**CASE STUDY: Taranaki DHB Maternal Mental Health Pathways**

Many new mothers experiencing mental distress can benefit from talking therapy provided by GPs and NGOs. Better integration can help ensure that women’s maternal status is automatically considered alongside their mental health status so the appropriate assessment and services can support their pregnancy and post-pregnancy journey. Taranaki District Health Board put in place a pathway to allow midwives, Plunket nurses and GPs to all understand the process of standardised assessment and support for women’s perinatal mental health needs. As a result, there has been a 50 per cent increase in referrals, reflecting previously unmet maternal mental health needs. This increased demand on the DHB’s mental health services has been challenging and reinforced the identified next step which is to improve integration with primary health.

**ProCare Health**

ProCare general practitioners are able to refer their patients to a dedicated psychological service made up of counsellors and psychologists. This team of mental health professionals can provide the following:

- Family support, eg positive parenting programme
- Counselling for addiction, sexual abuse victims
- Mindfulness and Cognitive Behaviour Therapy
- Group Therapy sessions / peer support

**CASE STUDY: Awhi Ora – Tamaki Mental Health and Wellbeing initiative**

The Tamaki initiative was developed in 2013 by Auckland DHB, its PHO partners and the local community, to re-design how mental health and wellbeing was supported in the Tamaki local board area. The initiative draws on person-centred design and is the first to use a ‘social lab’ approach, which encourages members from different sectors, including government, local people and diverse local providers to work together to develop supports from the ‘ground up’. Workstreams are based around whole-person/whole-of-life care, ensuring general practice can access dedicated NGO resources, facilitating integration between primary and secondary care, linking health and social support and cultivating community wellbeing.

**CASE STUDY: Counties Manukau - At Risk Individuals programme**

The At Risk Individuals (ARI) programme uses a risk stratification algorithm to identify those at risk of hospitalisation as part of a planned proactive approach to care. The aim is to intervene early with patients through proactive identification, engage in partnership with the individual through shared care planning and activate the person to take charge of their condition through focused self-

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management programmes. Each patient has an individualised care plan and a named care coordinator to help them identify and achieve their goals. The programme allows resources to be allocated to support the individual care plan, ranging from items such as shoes to help encourage physical activity, to services such as transport to attend appointments.

**CASE STUDY: Pukekohe Family Health Care – shared care pilot**

Pukekohe Family Health Care ran a successful psychology shared care pilot on-site in their large rural general practice, funded through the Ministry of Health in partnership with ProCare and in association with Counties Manukau Health’s At Risk Individuals project for patients with long-term conditions. GPs and nurses recognised that the cost of psychology sessions was a barrier to those who did not fit the criteria. Stigma around mental health, and rurality were barriers to off-site attendance. A ProCare Psychological Services (PPS) health psychologist was based in the general practice one day a week to receive nurse or GP referrals for up to three brief intervention sessions - psychoeducation, cognitive behaviour therapy, anxiety management and support. The practice has now integrated on-site psychological support as part of their practice’s ongoing flexible funded approach to patient services.

**CASE STUDY: Enhanced school-based health services in Auckland**

Under the governance of the Youth Service Alliance Leadership Team, ProCare Health provides nurses, GPs and psychologists in ten decile 1-3 and special character schools in the ADHB area. Having a psychologist on-site in schools has reduced the barriers to access as there is no need for a GP referral. Teachers and school counsellors can refer a student, and having extended services on-site within schools provides confidential access within school hours. Referrals to specialist mental health services or alcohol and drug youth services are made when needed. Uptake of the services is aligned with local demographics, with the 50 percent of student population who are Pacific Islanders having a matching 50 per cent uptake in services while 14 per cent service use has been Māori students where Māori students make up 17 per cent of the population. Funding has recently been extended for a further three years.

**CASE STUDY: Health New Lynn – psychiatrist based in general practice**

Health New Lynn, in collaboration with Waitemata DHB and ProCare Health, has implemented a consultation liaison model of care. A secondary care psychiatrist and specialist mental health nurse are on-site within the GP practice to provide timely specialist advice and expertise to GPs to help them better support their patient’s mental health and addiction needs. The aim was to build GP capacity and confidence in treating people’s mental health and addiction needs, and to demonstrate a way for secondary care to provide sustainable and scalable support to primary care. While 80 per cent of the psychiatrist’s work has involved face-to-face consultations with patients, the focus is on understanding the health needs of patients and designing their treatment journey, rather than providing hands-on psychiatric treatment. The remaining time has been working directly with GPs. This has resulted in GPs becoming more effective in intervening early with support appropriate to the person’s needs.

**Counties Manukau - whole of system integration in South Auckland**

A commitment has been made to transform the mental health and addictions system in Counties Manukau, with effective integration across primary care, specialist mental health and addictions and NGO provision. Through a process of co-design, the plan is to develop a mental health system that builds effective relationships focused on primary care clusters. Named individuals from specialist mental health and addiction services are assigned to clusters/hubs, working in a way that moves past the traditional approach to referrals.

Outreach will take services into the community and engage with partners such as schools, marae and churches. NGO partners will be a core component of local provision, ensuring that each locality
has access to a range of services that are responsive to their needs. Specialist services, such as eating disorders or maternal mental health will continue to be part of the mix of options, and there will be a strong focus on building community resilience and providing education and coaching for self-management.

Non-Government Organisations (NGOs)

Mental health and addiction non-government organisations (NGOs) in New Zealand provide a range of support to people with experience of mental health problems and their families. NGOs received 28 per cent of the total funding for mental health in 2013/14 (Platform Trust and Te Pou, 2015, p. 10). The main focus of these NGOs has been on providing support to mental health and addiction service users, and helping to improve social outcomes for people in their local communities. Mental health and addiction workforce development is also provided by NGOs.

Services provided by NGOs include residential services, wellbeing programmes, counselling, peer support, education and advocacy, supported employment, housing and accommodation, and services for Māori, Pasifika, Asian and refugee communities. Many NGOs support mental health service users to navigate their way around the health and social sectors, including helping to access primary care.

Figure 5 from On Track, (Platform Trust and Te Pou o te Whakaaro Nui, 2016, p. 6.)

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40 It is not clear whether this total includes funding for primary mental health services.
CASE STUDY: Odyssey Addictions – growing the connection

Odyssey Addictions delivered and evaluated a successful primary care demonstration programme in 2014/16 to provide training for 43 professionals in telephone and face-to-face engagement, screening and brief intervention to support management of substance use within the primary care setting. They worked on-site at a large medical centre in West Auckland, and with associated professionals including social workers and nurses. On-site support enabled addiction training to fit within a busy general practice environment; built a collegial relationship with the Alcohol and Other Drugs (AOD) specialist and greater understanding around addictions and the referral agencies available; and improved the system and responsiveness when specialist support was needed. Patients reported increased motivation to make changes and health professionals reported enhanced clinical outcomes.

CASE STUDY: Rural services – bringing services closer to home

Rural Health Alliance Aotearoa New Zealand is establishing a framework to help improve mental health and addictions outcomes for rural New Zealanders. It aims to provide strategic guidance to the many involved in mental health services in rural communities and will build on current health, psychological, social support and wellbeing programmes to promote best practice, peer support and mentoring, and innovative approaches to increasing service reach, continuity and quality. Partners who can support the mental health needs across rural communities can be different from traditional urban players - for example the Ministry for Primary Industries’ stock agents and vets have an important role in recognising and channelling mental health and addiction services for farmers.
Appendix Three: International models

UNITED KINGDOM

City and Hackney Primary Care Psychotherapy Consultation Service

This outreach service for people was designed to meet the needs of specific groups of patients who fall through gaps in existing service provision and may be difficult to manage in primary care because of the complexity of their complex mental health and other needs. They include patients with

- medically unexplained symptoms
- personality disorders
- chronic mental health problems which are not currently being managed by secondary mental health services.

Many have two or more of these problems at the same time, often accompanied by poor physical health and social difficulties. Over 60 per cent of patients seen by the service are from black and minority ethnic groups.

The service is provided by the Tavistock and Portman NHS Foundation Trust, which supports GPs throughout the London boroughs of City and Hackney. The service was recently evaluated and found to improve health outcomes and lead to a reduction in health service use in both primary and secondary care settings (Parsonage et al., 2014). The financial savings from reduced service use were estimated to be equivalent to about a third of the consultation treatment costs. The service also achieves very high satisfaction ratings among local GPs.

The PCPCS supports GPs in the management of patients with complex needs partly through case discussions and training and partly by providing a direct clinical service to referred patients through assessments and a range of brief psychological interventions. A survey of local GPs using the PCPCS found very high levels of satisfaction with the service, covering such aspects as the referral process and the accessibility and responsiveness of the service.

Outcomes data was collected using three different measures, relating to severity and the ability of individuals to carry out day-to-day tasks. About 75 per cent of all patients showed improvements in their mental health, wellbeing and functioning, as a result of treatment. In addition, about 55 per cent were shown as having “recovered”, defined as an improvement in mental health which moves a patient from above a clinical threshold before treatment to below the threshold after treatment. These improvements compare favourably with those achieved by IAPT services, even though the latter typically treat less severe and complex cases.

Co-ordinated care in the Sandwell Integrated Primary Care Mental Health and Wellbeing Service

Primary care mental health services in England

Historically, primary mental health services have not been well co-ordinated with physical health services, especially in primary care. In addition, underinvestment and lack of capacity resulted in long waiting lists for access to therapies and fragmented care. In 2007, the Improved Access to Psychological Therapies (IAPT) initiative was launched to increase mental health service provision and capacity in the primary care sector to provide better access to therapies for people with mild to moderate mental health problems. It provides an additional £700 million until 2014/15 to train 3,600 therapists specialising in cognitive behavioural therapy (Department of Health 2012).
In addition to IAPT, GPs are incentivised to keep a register of patients with serious mental illnesses (the SMI register) to monitor their status and to invite them for annual check-ups. The current government has also launched the ‘No health without mental health’ initiative which seeks to:

- improve the mental health of the population through prevention work
- promote recovery from mental health problems and improve quality of life
- improve the physical health of people with mental health problems
- improve patient experience of care
- improve patient safety
- reduce stigma and discrimination. (Department of Health 2011)

**The Sandwell Esteem Team – Summary Background**

The Sandwell Esteem Team is part of the Sandwell Integrated Primary Care Mental Health and Wellbeing Service (the Sandwell Wellbeing Hub). This hub is a holistic primary and community care-based approach to improve social, mental and physical health and wellbeing in the borough of Sandwell. The community is characterised by high levels of poverty and ill health, both physical and mental. The population of the borough is 309,000.

The key aim of the Esteem Team is to help people with mild to moderate mental health problems and complex social needs at an early stage to prevent deterioration and admission to secondary care services. It aims to empower patients to take control over their own lives by offering guided therapies and tools for self-help.

The team targets people on the SMI register and receives referrals from secondary, primary and community care organisations as well as social care and probation services. Patients can also self-refer. The service is open to anyone over the age of 16 who is registered with a Sandwell GP.

The team employs six link workers who provide care co-ordination for complex patients. They act as patients’ navigators through the health and social care system. They typically have a social worker background and/or personal experience with mental health problems. The Esteem Team can refer patients to a wide variety of statutory and voluntary sector services such as social services, debt advice agencies, substance abuse counselling, therapeutic services and peer support groups. Link workers form close relationships with their patients, building their confidence and self-esteem. They will visit patients at home and accompany them to appointments if required. Link workers will also show patients simple wellbeing interventions such as relaxation techniques, but the main focus of their work is care co-ordination. The Esteem Team’s work is not time-limited: patients will be discharged from the service only if the link worker and the clinical co-ordinator agree on discharge using guidelines developed by the service.

A statistical analysis showed significant levels of improvement on a clinical and a wellbeing scoring tool (the Core 10 and Warwick-Edinburgh Mental Wellbeing Scale). However, given the pilot nature of the Esteem Team, there is little quantitative evidence of its impact.
Scotland – expanding access to psychological therapies

NHS Education for Scotland (NES) is a Special Health Board, responsible for the development and delivery of education and training for all those who work in NHS Scotland, serving the population of 5.3m. Expanded access to psychological therapies has been integrated with the structure of existing services and with the wider Mental Health Strategy. This process is supported through a HEAT target for psychological therapies. HEAT targets are NHS Scotland targets for Board performance in the areas of:

- **Health Improvement** - improving life expectancy and healthy life expectancy
- **Efficiency** - focusing on improving the efficiency and effectiveness of the NHS
- **Access** - ensuring quicker and easier access to NHS Services
- **Treatment** - ensuring patients receive high quality services that are appropriate to their needs

Measurement against the target is by assessment to treatment waiting time rates, clinical outcomes and psychological therapy workforce data.

The Scottish Government Mental Health Division funded the establishment of the Psychological Interventions Team, hosted within NHS Education for Scotland, to act as a point of co-ordination for the strategic planning and development of psychological therapies and interventions across Scotland. Key functions for the Psychological Interventions Team are to:

- Look at the criteria by which people are referred to various psychological interventions and the service user pathways that people follow when using the service. This should highlight the necessary functions required within the service at each stage of the service user journey
and clarify both the required volume of different psychological therapies to meet service user need and the skills that staff will require at each point of the service user journey.

- Identify and develop training opportunities required to improve general access to psychological interventions and therapies in Scotland. This involves training staff to deliver therapies effectively, creating the supervision necessary to support staff in this and developing the psychological literacy of key groups working in health and care settings in Scotland.

Psychological Therapy Training Co-ordinators (PTTC) have been established in all 14 Scottish NHS Boards. They are responsible for the dissemination of information and the co-ordination of psychological training within the Board’s services.

**A new settlement for health and social care: final report from the Commission on the Future of Health and Social Care in England**

The commission, chaired by Kate Barker, proposes a new approach that redesigns care around individual needs regardless of diagnosis, with a graduated increase in support as needs rise, particularly towards the end of life. The commission has concluded that this vision for a health and care system fit for the 21st century is affordable and sustainable if a phased approach is taken and hard choices are taken about taxation.

**Key findings**

- The commission recommends moving to a single, ring-fenced budget for the NHS and social care, with a single commissioner for local services.
- A new care and support allowance, suggested by the commission, would offer choice and control to people with low to moderate needs while at the highest levels of need the battlelines between who pays for care – the NHS or the local authority – will be removed.
- Individuals and their carers would benefit from a much simpler path through the whole system of health and social care that is designed to reflect changing levels of need.
- The commission also recommends a focus on more equal support for equal need, which in the long term means making much more social care free at the point of use.
- The commission largely rejects new NHS charges and private insurance options in favour of public funding.

**Policy implications**

- Proposals for a single, ring-fenced budget and single local commissioner will have major implications for central and local government and the NHS.
- Public spending on health and social care is likely to reach between 11 per cent and 12 per cent of GDP by 2025, the next government needs to consider how to respond to these spending pressures.
- The commission proposes funding changes, including changes to National Insurance contributions, to meet the additional £5 billion that would be required to improve social care entitlements.
• A comprehensive review of various forms of wealth taxation needs to be undertaken with a view to generating additional resources that will be needed for health and social care in future years.41

CANADA

Shared Care: The Hamilton Family Health Team

Since 1994, the Hamilton Family Health Team Mental Health Program has successfully integrated mental health counselors, addiction specialists, child mental health professionals, and psychiatrists into 81 offices of 150 family physicians in Hamilton, Ontario (Kates, McPherson-Doe, & George, 2011).

Maximising the potential of a ‘shared care’ model requires changes within the primary care setting, to support the addition of mental health and addiction professionals, active involvement of primary care staff in managing mental health problems of patients, and collaborative practice. This co-ordinated effort is intended to minimise the need to refer most patients to mental health services.

A small central management team composed of a manager, a medical director, and three support staff co-ordinates activities, along with part-time leads for the child & youth, addiction, depression and peer support programmes. They also provide ongoing support for psychiatrists, counselors, addiction specialists, and child mental health professionals and assist with recruitment of mental health personnel. It is their responsibility to set programme standards, deploy resources, communicate with funding sources, troubleshoot when problems arise, and liaise with the funder.

Family physicians and nurses are the health professionals most likely to assist patients make lifestyle changes, such as reducing alcohol consumption, stopping smoking, managing stress, improving diet, or increasing physical activity levels. The goal, however, is for this to be a team effort.

The presence of the mental health team increases the confidence and skills of family physicians in assessing and also managing mental health problems. Mental health and addiction education for family physicians in HFHT-MHP clinics is primarily case-based and often informal.

Family health team practice nurses assist patients with acute and chronic medical diseases. They also help individuals with mental health problems, including delivery of supportive counseling or linking patients to mental health resources and other community programs. They can assist with coexisting mental health problems or the social and emotional consequences of their illnesses. These roles are facilitated if they have received training in techniques such as motivational interviewing.

Practice nurses and physicians use a child and youth mental health assessment questionnaire and the patient health questionnaire 9 (PHQ-9) and a 2-question alcohol screen in teens and adults. Pharmacists can assist with reconciling prescriptions taken by patients. They especially target patients using multiple medications, which often include at least one psychotropic medication. Their role also includes providing patients with health “passports” that list all current medications. This document, carried by the patient, is helpful when patients see multiple clinic and hospital physicians.

Dieticians screen individuals with diabetes for depression, using the PHQ-2, a “triage” subset of the PHQ-9. Many also identify mental health problems in obese children and adults. When appropriate, a referral to the counselor or back to their family physician is made. In addition, they are also involved in assisting patients with eating disorders in conjunction with mental health counselors.

Medical office assistants in HFHT-MHPs often have ongoing relationships with patients seen by clinicians in the practice. It is these office professionals who may distribute and collect screening tools and satisfaction surveys. They also provide information about community resources under direction of clinical staff and give out education materials.

UNITED STATES

The IHI Triple Aim

The IHI Triple Aim\(^{42}\) is a framework developed by the Institute for Healthcare Improvement in the US that describes an approach to optimizing health system performance. It is IHI’s belief that new designs must be developed to simultaneously pursue three dimensions, called the “Triple Aim”:

1. Improving the patient experience of care (including quality and satisfaction);
2. Improving the health of populations; and
3. Reducing the per capita cost of health care.

Approach

In most health care settings today, no one is accountable for all three dimensions of the IHI Triple Aim. For the health of our communities, for the health of our school systems, and for the health of all our patients, we need to address all three of the Triple Aim dimensions at the same time.

Because the IHI Triple Aim entails ambitious improvement at all levels of the system, we advocate a systematic approach to change. Based on six phases of pilot testing with over 100 organizations around the world, IHI recommends a change process that includes: identification of target populations; definition of system aims and measures; development of a portfolio of project work that is sufficiently strong to move system-level results, and rapid testing and scale up that is adapted to local needs and conditions.

IHI believes that to do this work effectively, it’s important to harness a range of community determinants of health, empower individuals and families, substantially broaden the role and impact of primary care and other community based services, and assure a seamless journey through the whole system of care throughout a person’s life.

Figure 7: Design of a Triple Aim Exercise (IHI, 2016)
### Appendix Four: Review studies of primary mental health models and interventions (2005-2016)

<table>
<thead>
<tr>
<th>Author, title</th>
<th>Review Type</th>
<th>Model/ intervention</th>
<th>Population</th>
<th>Mental Health / Addiction</th>
<th>No. studies included</th>
<th>Key conclusions/findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archer et al., (2012) Collaborative care for depression and anxiety</td>
<td>Cochrane review</td>
<td>Collaborative care</td>
<td>Depression and anxiety</td>
<td></td>
<td></td>
<td>Team-based primary and mental health care services significantly improved symptoms of depression and anxiety compared with standard primary care.</td>
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<tr>
<td>Bell et al (2005) Community pharmacy services to optimise the use of medications for mental illness: a systematic review.</td>
<td>Systematic review</td>
<td>Pharmacy services as a component of mental health care</td>
<td>Not specified</td>
<td>Mental health</td>
<td>22</td>
<td>There is some evidence to suggest that pharmacists can contribute to optimising the use of medications for mental illness in a community setting. However, there is limited evidence on the impact of pharmacists as members of community mental health teams.</td>
</tr>
<tr>
<td>Bertholet et al. (2005) Reduction of alcohol consumption by brief alcohol intervention in primary care</td>
<td>Systematic review and meta-analysis</td>
<td>Screening and brief intervention</td>
<td>All ages</td>
<td>Alcohol</td>
<td>19</td>
<td>Brief alcohol intervention is effective in reducing alcohol consumption at 6 and 12 months.</td>
</tr>
<tr>
<td>Bond, et al. (2008). An update on randomized controlled trials of evidence-based supported employment.</td>
<td>Review of randomized controlled trials of high-fidelity IPS programs</td>
<td>Supported employment services</td>
<td>Adult mental health service users</td>
<td>Severe mental illness</td>
<td>11</td>
<td>The Individual Placement and Support (IPS) model of supported employment for clients. Across the 11 RCTs, IPS participants obtained their first job nearly 10 weeks earlier than did controls. Among IPS participants who obtained competitive work, duration of employment after the start of the first job averaged 24.2 weeks per year, or 47% of the 52-week year. This supports the findings of earlier reviews. The number, consistency, and effect sizes of studies of evidence-based supported employment establish it as one of the most successful models in reducing unemployment for clients with severe mental illness.</td>
</tr>
<tr>
<td>Author, title</td>
<td>Review Type</td>
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<td>Population</td>
<td>Mental Health / Addiction</td>
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<tr>
<td>Bower et al. (2011) Counselling for mental health and psychosocial problems in primary care.</td>
<td>Systematic review</td>
<td>Service features for integrated models</td>
<td>All ages</td>
<td>Mental health</td>
<td>9</td>
<td>Counselling is associated with significantly greater clinical effectiveness in short-term mental health outcomes compared to usual care, but provides no additional advantages in the long-term.</td>
</tr>
<tr>
<td>Butler et al (2008) Integration of mental health/substance abuse and primary care.</td>
<td>Systematic review</td>
<td>Integrated care</td>
<td>All ages</td>
<td>Mental health and addiction</td>
<td>33 studies</td>
<td>Integrated care programmes have been tested for depression, anxiety, at-risk alcohol and ADHD in primary care settings, and for alcohol disorders and persons with severe mental illness in specialty care settings. Although most interventions in either setting were effective, there was no clearly superior model for integration.</td>
</tr>
<tr>
<td>Butler et al (2011) Does integrated care improve treatment for depression?</td>
<td>Systematic review</td>
<td>Integrated care</td>
<td>Not specified</td>
<td>Depression</td>
<td>26 trials</td>
<td>Most trials showed positive effects, the degree of integration was not significantly related to depression outcomes</td>
</tr>
<tr>
<td>Cape et al. (2010a) What is the role of consultation-liaison psychiatry in the management of depression in primary care?</td>
<td>Systematic review and meta-analysis</td>
<td>Service features for collaborative care</td>
<td>All ages</td>
<td>Depression</td>
<td>5</td>
<td>Existing studies do not suggest consultation-liaison psychiatry is more effective than usual care.</td>
</tr>
<tr>
<td>Cape, et al. (2010b) Brief psychological therapies for anxiety and depression in</td>
<td>Meta-analysis</td>
<td>Service features for integrated models</td>
<td>All ages</td>
<td>Anxiety and depression</td>
<td>34</td>
<td>Brief CBT, counselling and PST are all effective treatments in primary care, but effect sizes are low compared to longer length treatments (with the exception of brief CBT for anxiety which delivers comparable effects to longer therapy).</td>
</tr>
<tr>
<td>Author, title</td>
<td>Review Type</td>
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<td>primary care: meta-analysis and meta-regression.</td>
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<td>Christensen et al. (2008) Models in the delivery of depression care: a systematic review of randomised and controlled intervention trials.</td>
<td>Systematic review</td>
<td>Service features for collaborative care</td>
<td>Adult</td>
<td>Depression</td>
<td>55</td>
<td>Components found to significantly predict improvement were the revision of professional roles, the provision of a case manager who provided direct feedback and delivered a psychological therapy, and an intervention that incorporated patient preferences into care. Nurse, psychologist and psychiatrist delivered care were effective, but pharmacist delivery was not. GP training was significantly less successful than interventions that did not have training as the most important intervention. Community interventions were effective.</td>
</tr>
<tr>
<td>Cuijpers et al. (2009) Preventing the onset of depressive disorders: a meta-analytic review of psychological interventions.</td>
<td>Meta-analysis</td>
<td>Service features for integrated models</td>
<td>Adult</td>
<td>Depression</td>
<td>15</td>
<td>The mean incidence rate ratio was 0.78, indicating a reduction of the incidence of depressive disorders by 22% in experimental compared with control groups. Moderator analyses revealed no systematic differences between target populations or types of prevention (universal, selective, or indicated). The data indicated that prevention based on interpersonal psychotherapy may be more effective than prevention based on cognitive-behavioral therapy.</td>
</tr>
<tr>
<td>Donker et al., 2015 Economic evaluations of Internet interventions for mental health</td>
<td>Systematic review</td>
<td></td>
<td>Adult</td>
<td>Mental health and addiction</td>
<td>16</td>
<td>Guided Internet interventions for depression, anxiety, smoking cessation and alcohol consumption were likely to be more cost-effective when compared to wait-list, TAU, group cognitive behaviour therapy (CBGT), attention control, telephone counselling or unguided Internet CBT. Unguided Internet interventions for suicide prevention, depression and</td>
</tr>
<tr>
<td>Author, title</td>
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<tr>
<td>Doughty (2006) Effective models of mental health service provision and workforce configuration in the primary care setting.</td>
<td>Systematic review</td>
<td>NZ Evidence</td>
<td>Adult</td>
<td>Mental health &amp; addiction</td>
<td>44</td>
<td>smoking cessation demonstrated cost-effectiveness compared to TAU or attention control. Collaborative care interventions delivered by multidisciplinary teams may improve clinical outcomes in those with persistent or recurrent difficulties. Telephone care management interventions appear to be of some benefit to patients with mild to moderate mental health problems but telehealth care may be more effective if combined with interventions with proven effectiveness such as CBT. There was insufficient evidence to provide a definitive answer as to the clinical effectiveness and cost-effectiveness of individual models or to provide a rigorous comparison between models, but there is a trend towards collaborative care models, including those incorporating a case management approach and/or using the services of a care manager or primary mental health care worker showing some modest benefit.</td>
</tr>
<tr>
<td>Firth, et al (2015) The clinical effectiveness of stepped care systems for depression in working age adults</td>
<td>Systematic review</td>
<td>Integrated care</td>
<td>Not specified</td>
<td>Depression</td>
<td>14</td>
<td>Evidence suggests that stepped care interventions for depression are at least as effective as usual care. The clinical and organisational superiority of stepped care is yet to be scientifically verified. Differential benefits of stepped care may ultimately depend on service quality.</td>
</tr>
<tr>
<td>Free et al. (2013). The effectiveness of mobile-health technology-based health behaviour change or disease management</td>
<td>Systematic review</td>
<td>e-mental health</td>
<td>75, with 14 on health behaviour change</td>
<td>Mental Health / Addiction</td>
<td>14</td>
<td>Most trials were of low quality, and nearly all undertaken in high-income countries. In two high-quality UK trials, a smoking intervention based on text messaging more than doubled biochemically verified smoking cessation. One trial reported a reduction in self-reported heavy drinking days in young people.</td>
</tr>
<tr>
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<td>Population</td>
<td>Mental Health / Addiction</td>
<td>No. studies included</td>
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<tr>
<td>interventions for health care consumers.</td>
<td>Systematic review</td>
<td>Service features for collaborative care</td>
<td>All ages</td>
<td>Major depression</td>
<td>13</td>
<td>Case management improves management of major depression in primary health-care settings.</td>
</tr>
<tr>
<td>Gensichen et al. (2006) Case management to improve major depression in primary health care</td>
<td>Systematic review of randomised economic evaluations</td>
<td>Cost effectiveness for collaborative care</td>
<td>All ages</td>
<td>Depression</td>
<td>11</td>
<td>11 full economic evaluations found (4757 patients). A near uniform finding was that the interventions based upon collaborative care/case management resulted in improved outcomes but were also associated with greater costs. Educational interventions alone were associated with increased cost and no clinical benefit.</td>
</tr>
<tr>
<td>Gilbody, Bower &amp; Whitty. (2006) Costs and consequences of enhanced primary care for depression</td>
<td>Systematic review, site visits, key informant interviews</td>
<td>Integrated care</td>
<td>Not identified</td>
<td>Mental health &amp; addiction</td>
<td>42</td>
<td>Common features of successful integration models include: prioritized underserved vulnerable populations, increasing community collaboration, ensuring strong leadership early in the process, implementing a team-based approach including the patient as an active participant, diversifying funding sources, implementing data-driven best practices.</td>
</tr>
<tr>
<td>Grazier et al., 2016 Overcoming barriers to integrating behavioral health and primary care services</td>
<td>Systematic review</td>
<td>Cost effectiveness for integrated models</td>
<td>All ages</td>
<td>Mental health &amp; addiction</td>
<td>42</td>
<td>While having mental health workers onsite can improve outcomes for people accessing primary care with mental health and addiction problems, at least in the short term, cost offsets through this service utilisation have not been consistently demonstrated.</td>
</tr>
<tr>
<td>Harkness &amp; Bower. (2009) On-site mental health workers delivering psychological therapy and psychosocial interventions to patients in primary care: effects on the professional</td>
<td>Systematic review</td>
<td>Cost effectiveness for integrated models</td>
<td>All ages</td>
<td>Mental health &amp; addiction</td>
<td>42</td>
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63
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<tr>
<th>Author, title</th>
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<th>Key conclusions/findings</th>
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<td>practice of primary care providers</td>
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<td>No significant differences were found between the strengths-based approach and other service delivery models in level of functioning and quality of life. More evidence is required to ascertain the impact of the strengths based approach in mental health care.</td>
</tr>
<tr>
<td>Ibrahim et al (2014) The strengths based approach as a service delivery model for severe mental illness</td>
<td>Systematic review &amp; meta-analysis of clinical trials</td>
<td>Strengths-based approach case management</td>
<td>Adults</td>
<td>Mental health</td>
<td>5</td>
<td>Of seven studies that measured only economic benefits of collaborative care in terms of averted healthcare or productivity loss, four found positive economic benefits due to intervention and three found minimal or no incremental benefit. Of five studies that measured both benefits and costs, three found lower collaborative care cost because of reduced healthcare utilization or enhanced productivity, and one found the same for a subpopulation of the intervention group. Among six cost–utility studies, five found collaborative care was cost effective. The evidence indicates that collaborative care for management of depressive disorder provides good economic value.</td>
</tr>
<tr>
<td>Jacob et al (2012) Economics of collaborative care for management of depressive disorders</td>
<td>Community guide systematic review</td>
<td>Collaborative care</td>
<td>All ages</td>
<td>Depression</td>
<td>30</td>
<td>Positive screening and use of a brief intervention resulted in reduction in alcohol intake at 12-month follow up, for men but not for women. There was little evidence of a greater reduction in alcohol consumption with longer treatment exposure.</td>
</tr>
<tr>
<td>Kaner et al. (2009) Effectiveness of brief alcohol interventions in primary care populations</td>
<td>Cochrane review</td>
<td>Screening and brief intervention for excessive drinking</td>
<td>All ages</td>
<td>Alcohol</td>
<td>29</td>
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<tr>
<td>Kelly et al (2014) A systematic review of self-management health care models for individuals with serious mental illnesses.</td>
<td>Systematic review</td>
<td>Self-care management</td>
<td>Adults</td>
<td>Mental health</td>
<td>14</td>
<td>The review examined collaborative and integrated models of care that incorporated self-management components to address physical health care for individuals experiencing severe mental health problems. There was evidence to support the use of mental health peers or professional staff to implement health care interventions.</td>
</tr>
<tr>
<td>Linde, et al. (2015a). Efficacy and acceptability of pharmacological treatments for depressive disorders in primary care.</td>
<td>Systematic review and network meta-analysis</td>
<td>Adult primary care patients</td>
<td>Depression</td>
<td>66</td>
<td>Compared with other drugs, TCAs and SSRIs have the most solid evidence base for being effective in the primary care setting, but the effect size compared with placebo is relatively small. There is evidence that these drugs are more effective for people with moderate to severe depression. Fewer patients receiving SSRIs report adverse effects, but no significant differences regarding study discontinuation resulting from adverse effects or for any reasons were found among the investigated substance classes. There are very few data from primary care trials regarding long-term effectiveness and acceptability. Future research should prioritize the best management of mild-to-moderate depression and comparison of pharmacological and psychological treatments under conditions of routine care and stepped-care strategies.</td>
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<tr>
<td>Linde, et al. (2015b). Comparative effectiveness of psychological treatments for depressive disorders in primary care</td>
<td>Systematic review and meta-analysis</td>
<td>Adult primary care patients</td>
<td>Depression</td>
<td>30</td>
<td>There is evidence that psychological treatments are superior to usual care alone, the size of the effects being small to moderate. The differences between types of psychological treatments are minor, and remote therapist-led, guided self-help, and minimal contact approaches can yield effects similar to personalized face-to-face therapies. Psychological therapies might be less effective for patients having minor depression</td>
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<td>Pfeiffer et al (2011) Efficacy of peer support interventions for depression</td>
<td>Systematic review and meta-analysis</td>
<td>Peer support</td>
<td>Adults</td>
<td>Depression</td>
<td>7 RCTs</td>
<td>Based on the pooled results, peer support interventions for depression result in greater improvement in depression symptoms than usual care and may have similar efficacy to group CBT. There was wide variability in the patient populations and peer interventions studied. Peer support for depression should be studied as a potentially low-cost intervention in primary care or other settings where more established but costly depression services are unavailable.</td>
</tr>
<tr>
<td>Puntis et al (2015) Associations Between Continuity of Care and Patient Outcomes in Mental Health Care</td>
<td>Systematic review</td>
<td>Continuity of care</td>
<td>Adults</td>
<td>Mental health</td>
<td>18 studies</td>
<td>Little consistency was found in the way continuity of care is measured - as a result no clear evidence about association between continuity of care and patient outcomes. There is some evidence to suggest that social functioning of patients improves.</td>
</tr>
<tr>
<td>Siantz et al (2013) Chronic disease self-management interventions for adults with serious mental illness</td>
<td>Systematic review</td>
<td>Self-care management</td>
<td>Adults</td>
<td>Mental health</td>
<td>10 studies</td>
<td>Favourable treatment effects were observed for individuals experiencing severe mental health problems and chronic physical health conditions across primary, community and residential settings.</td>
</tr>
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<td>van der Feltz-Cornelis et al. (2010) Effect of psychiatric consultation models in primary care.</td>
<td>Systematic review and meta-analysis</td>
<td>Service features for collaborative care</td>
<td>All ages</td>
<td>Depression</td>
<td>10</td>
<td>Psychiatric consultation in primary care settings was effective for people with depression, primarily through increasing adherence to antidepressants.</td>
</tr>
<tr>
<td>Whiteman et al. (2016). Systematic review of integrated general medical and psychiatric self-management interventions for adults with serious mental illness.</td>
<td>Systematic review</td>
<td>Integrated GP and psychiatric self-management interventions</td>
<td>Adults with SMI</td>
<td>15 (9 RCTs, 6 pre-post designs).</td>
<td>The 9 interventions reported on were automated telehealth, Health and Recovery Peer program, Helping Older People Experience Success, Integrated Illness Management and Recovery, Life Goals Collaborative Care, Living Well, Norlunga Chronic Disease Self-Management program, Paxton House, and Targeted Training in Illness Management. Most studies demonstrated feasibility, acceptability, and preliminary effectiveness; however, clinical effectiveness could not be established in most studies because of methodological limitations. Factors identified that may deter implementation included operating costs, impractical length, and workforce requirements. Integrated general medical and psychiatric illness self-management interventions appear feasible and acceptable, with high potential for clinical effectiveness. However, implementation factors were rarely considered in intervention development, which may contribute to limited uptake and reach in real-world settings.</td>
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<tr>
<td>Woltmann et al., 2012. Comparative effectiveness of collaborative chronic care (CCM) models for mental health conditions across primary, specialty, and</td>
<td>Systematic review and meta-analysis</td>
<td>Adults</td>
<td>Mental health and addiction</td>
<td>78 articles yielded 61 analyses from 57 trials</td>
<td>CCMs can improve mental and physical outcomes for individuals with mental disorders across a wide variety of care settings, and they provide a robust clinical and policy framework for care integration. CCM effects were robust across populations, settings, and outcome domains, achieving effects at little or no net treatment costs. Total health care costs did not differ between CCMs and comparison models.</td>
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<td>behavioral health care settings</td>
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<td>Thus, CCMs provide a framework of broad applicability for management of a variety of mental health conditions across a wide range of treatment settings, as they do for chronic medical illnesses. It is argued that the major focus of health care cost reduction efforts must be in reducing avoidable complications of chronic illnesses, which account for up to 22% of all health care expenditures. Reducing these complications could realistically result in a $40-billion per-year savings. Our analyses indicate that these benefits can extend to patients with a wide variety of mental health conditions, including those with chronic or highly comorbid disorders.</td>
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