A MODEL OF eHEALTH DELIVERY
FOR THE MENTAL HEALTH NEEDS OF AUSTRALIANS

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Context

Existing mental health service provision is poorly distributed and inefficient. In some areas, services are duplicated while in others, there are no services at all. Not all services are evidence-based or effective.

Existing services are expensive and costs have been increasing. In 2011-2012, over $7.2 billion, or $322 per person, was spent on mental health-related services in Australia, an increase from $282 per person in 2007–08.

However, the prevalence of mental disorders remains unchanged and furthermore 55% of people with mental health conditions do not access services. Symptoms and disability can deteriorate over time, requiring more expensive services than if care had been received earlier, or the illness had been prevented altogether. Of those who receive services, not everyone recovers and many require ongoing care.

The key points of service in current health care provision are GPs (and services offered through Medicare Locals), hospitals (including emergency departments) and, for youth, Headspace centres. Within the community services sector, NGOs provide recovery and crisis support services.

The central tenet of current health reform is early intervention and prevention, to reduce numbers developing mental health conditions in the first place. For those with existing mental health problems, care should be evidence-based, available when needed, and integrated.

A Practical Solution

eMental health (eMH), e therapies and integration are the keys to solving the cost and efficiency problems in the mental health sector.

Australian data shows that eMH is clinically effective, and that huge cost savings can be gained by integrating it into a fully functional mental health system of stepped care. However, currently the eMH sector is disaggregated. It needs intra-domain, inter-sectorial rationalisation, mechanisms for integration with other mental health...
services and expansion. The problem is not too big – Australia has a relatively small population. However, the context is complex, because of State and Commonwealth responsibilities, lack of integration, historical developments and other factors.

Nevertheless, an eMH solution is possible, and the return on an initial investment will be substantial.

Key Components of the eMH Solution: Overview

1. eMH is integrated into the Australian mental health service model, as a mandated first step of service delivery (as appropriate), in a stepped care model.

2. eMH is offered nationally, across 5 domains:
   i) Promotion
   ii) Prevention and Early Intervention
   iii) Crisis Intervention and Suicide Prevention
   iv) Treatment
   v) Recovery and Support

3. eMH services are integrated, share data and communicate with each other.

4. A standardised adaptive screening tool is used across all eMH domains.

5. National eMH services are linked with local face-to-face mental health services, including primary care, emergency departments, NGOs and Headspace centres, to provide continuity of care.

Existing eMental Health Services

First generation eMH services were funded under the Teleweb measure. These were often standalone eMH solutions which provided web services directly to the community. Examples include Kids Helpline, MoodGYM, This Way Up and MyCompass. More recent examples include MindSpot Clinic. It is important to recognise that these ‘standalone’ services are the building blocks of an integrated eMH solution because they are evidence-based. Developing new components that replicate them is both wasteful and may not be clinically effective i.e. these programs/services have ‘proven themselves’ and have been developed on platforms worth millions of dollars.

The second generation of eMH services is already in progress. These integrate eMH services in sophisticated ways with primary care and face-to-face services. Some are already established on IT platforms and provide specialist programs for adults and for youth; others leverage already existing connections within organisations.

An example of a second-generation eMH service that currently exists is the Black Dog Institute model, which integrates specialist clinics with eMH services and
general practice referrals. The model is also currently developing a range of community accessed services which will link into the current face-to-face activities. All are linked via a common platform.

Another second-generation eMH service is currently in development with YAWCRC funding. It includes:

- An integrated virtual clinic for university students (led by Australian National University)
- Professional clinics – virtual psychiatric clinics for young people (led by Brain and Mind Research Institute).

This new generation service provides links across the domains of eMH services, in order to make services more comprehensive for particular groups (i.e. youth and young people). The service also offers the opportunity to link directly on a new software platform (called synergy, currently funded for youth services by Government). The new generation service also links to face-to-face services. Once established, the service will continue to offer services to target populations such as youth and university students on campus. However, it does not offer a national service or accommodate all regions or age ranges.

Third generation services are required now, and can be shaped by policy.

Four actions are needed to achieve third generation services:

(a) Promote consolidation within the five service domains
Organisations that provide the same type of evidence-based services are assisted to
consolidate either as one service, or as a conglomerate. The five eMH domains to be rationalised are:

- **Health promotion** (currently undertaken by Beyondblue, Headspace, Black Dog Institute, Inspire Foundation).

- **Prevention and early intervention** (primarily Australian National University (ANU), Black Dog Institute and Queensland University of Technology (QUT), but also includes others).

- **Crisis support services** (Lifeline, On The Line, Kids Help Line etc.). Integration amongst players into one structure or a set of relationships that determines who sees which patients, with interoperability and a shared protocol system.

- **Treatment** – This is a crowded space, but one where there is potential for cooperation and interoperability. Those providing treatment include CRUFA D, Black Dog Institute, Macquarie University (Mindspot), QUT, Swinburne, Beyondblue New Access (if this includes an e component) and e headspace (triage). Some of these services are guided, others are not; some link back to referrers, most do not.

- **Recovery** is currently under-represented. ANU (BlueBoard) and Kids Help Line provide peer support, but there is a lack of scale and integration into larger services.

(b) **Promote inter-domain consolidation**

- eMH service providers need to ‘cross-connect’ across domains. For example, the web-based **health promotion** domain should connect to the **early intervention and treatment, crisis and recovery** domains. This domain contacts directly with the community. What is required is a screening or assessment process that provides community members with assistance on how to find suitable services (the mindhealthconnect portal was originally designed to do this, but ended up being too inclusive). There should also be the opportunity for registration at this stage. There is clear evidence that portal-based eMH interventions are effective and that people using an evidence-based standalone website will benefit.

- **Crisis intervention** should link to **treatment** and to **recovery**. Research data from Australia suggests Lifeline services could be augmented if they included evidence-based web interventions as part of the service. The slide below shows that an automated e health website (blue line) is more effective than Lifeline call-back (green line) or Treatment as Usual (red line) with callers to Lifeline. Lifeline is an important service used by medical and psychological workers and the community. However, it needs to link to recovery services, because it is also approached by ‘frequent flyers’ and these repeat callers are not offered continuity of service.
• **Treatment services** should integrate with recovery programs. We believe that a software platform which provides tracking from screening through the treatment process, with assertive, programmed e-contact following registration, is key to improving adherence and making sure that people stay well.

• **Services/programs currently not available or undercatered should be added using existing providers.**
  These include (as noted above):
  - ‘Kiddie clinics’ (ages 10-14).
  - Recovery services, such as Big White Wall.
  - Web based self-help programs for suicide prevention, some of which are in development.

(c) **Introduce screening and continuity of care solutions**
As noted above, the ‘glue’ for such continuous service provision requires registration, screening, reassessment (tracking) and referral.

(d) **Integration with face-to-face services**
To provide the best quality care, eMH services need to integrate with face-to-face services. Points of intersection with the eMH platform should include:
  - Referral by GP to the eMH treatment domain requires feedback to GP on progress. The eMH treatment provider should also contact the consumer periodically to check progress.
  - Screening available in GP practices with direct transfer to eMH service provider for treatment or recovery services. (80% of Australians visit GPs in one year, but few raise mental health problems).
  - Crisis and emergency support to those who have severe mental health problems or urgent needs.
  - For individuals who have not responded to ‘stepped care’ at various points, a connection is made via the system back to GP nominated by the consumer.
  - For individuals with a physical or mental health problem, the system provides integrated face-to-assessment and treatment.

(e) **Promotion of integrated treatment services**
  - Via advertisements in mass media and social media
• Via screening in general practice
• Via screening in workplaces
• Via web entry

**Challenges for the Proposed eMH Solution**

We see five challenges to achieving the above vision:

• It requires intergroup integration for those services serving similar functions.
• It requires integration between eMH services – there should be cross communication between eMH service providers operating in each of the five domains.
• It requires the integration of eMH services with face-to-face services. As face-to-face services are organised largely at a local level, (in the local community, in the local hospital, in the local GP office), the model must incorporate some local involvement. Although we would argue that most eMH components across the five domains can be provided in a centralised national model with its own workforce of health professionals, there must be robust connection between local services and this central body.
• It requires expansion, both in terms of gap areas and scale. Specific areas that are currently poorly accommodated and need additional e resources include: a) screening functions to continue to provide a responsive tailored service; b) integration functions to provide continuity of care as well as new areas of development (servicing schools and regional areas, ‘kiddie clinics’, suicide prevention with ongoing links back to recovery and treatment services).
• Crisis intervention remains a one-off episode of care (e.g., Lifeline), whereas there is a natural fit, we believe, between crisis intervention, recovery, and support, to provide assistance and support over time.

**Key policy points for the proposed eMH Solution**

• Set up a strong and tight implementation authority – run by industry, public service, service provider, or university.
• Provide new money (specifically) for integration (which can be funded out of savings arising from these proposed changes).
• Recognise that the lack of integration is not an IT problem, but a clinical integration problem that may have a software solution, or set of solutions, and built with a consumer pathway in mind.
• Recognise that solutions may involve national services, in conjunction with local face-to-face health services.
• Develop new components that are required for the service sector to grow: a national ‘screening’ function; and a national ‘tracking and continuity of care’ function. These provide the “glue” to make sure that the patient/consumer has the best type of collaborative and continuous care.
Practical plan for achieving the eMH Solution

The following is a practical plan, using a stepped care approach, to create an integrated, fully functional mental health system that incorporates eMH services.

- Re-tender all eMH functions with a focus on each of the five domains (Promotion, Prevention and Early Intervention, Crisis, Treatment, and Recovery) either to encourage intrasectorial co-operation within each domain, or to establish a key service for each domain. Leadership of each domain is provided by a current eMH provider which has proven expertise in that domain.

- Develop and implement a standardised adaptive screening tool, for triage use across all domains.

- Require that each domain set up a working relationship and shared data with the relevant NGOs or health providers to provide integrated care, with the aim that any person entering the eMH domain has the opportunity to receive integrated care via relevant face-to-face health or NGO providers, or to other eMH providers as appropriate. This sets up a network of connections between agencies. It is also monitored by a tracking function, which connects regularly with registered consumers.

- Data collection will occur directly through participant interfaces for online service delivery, or via a clinician where services and programs are delivered face-to-face or by telephone. Data will be securely collected, stored and monitored.

- Establish protocols for eMH services to interact locally with face-to-face services and with general practice. Both youth and adult models are included which requires integration into GP/Medicare Locals and or Headspace centres. All service connections are required to have shared data capability and to collect minimal and agreed data sets for reporting. Funding is made contingent on expansion of stepped care approaches, cost efficiencies and access.

- Consider funding gap areas including “kiddie clinics” (ages 10-14).

- Invest in recovery services and peer support, but require that they be integrated into face-to-face services and into other e domains.

- Consider the mechanisms that will increase and lead to integrated care. This will include requirements around shared health records, responsiveness (online case management to guide people through the system and keep them online across systems, not just part of an internal program), and commitment to research.

- Fund a community-wide marketing strategy, with the following aims:
(1) to raise awareness about the availability of eMH services and their ease of access;
(2) to attract more people with mental health conditions to access services;
(3) to encourage schools, workplaces, NGOs etc to recommend eMH services;
(4) to continue to encourage health professionals to refer patients with mild-moderate conditions to eMH

- Require health professionals to refer suitable patients to eMH for promotion, prevention/early intervention, crisis, treatment and recovery as a first step in eMH care, using legislation or incentives.

Conclusion

Solving the eMH system is like solving the health system! However, a rationalised and integrated eMH system which sits at the centre of an integrated, fully functional mental health system is possible.

Key components of the model are (1) a combined national and local focus (national eMH services combined with locally based face-to-face services), and (2) a greater focus on prevention and early intervention (our work has established that there are over 600,000 Australians with mild-moderate depression and anxiety, a large proportion of whom do not access services).

Substantial clinical benefits and cost efficiencies can result from a mental health model that integrates eMental Health.