An Online Approach to Directing Consumers to the Right Level of Care:

The MindSpot Clinic

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Bio: Nick Titov, PhD

• Professor, Department of Psychology, Macquarie University
• Co-Director, eCentreClinic, Macquarie University
• Project Director, MindSpot Clinic, Macquarie University
• Clinical Psychologist
• Serve on Psychology Board of Australia (NSW)
• Advise Australian Government on digital mental health services
Agenda

1. How severity (need) is assessed for those presenting for e-therapy (based on MindSpot approach)
2. Share learnings from experience at MindSpot:
   1. Overview and service model
   2. MindSpot users
   3. Treatment outcomes
   4. Summary
3. Note: Differences between MindSpot and PHNs ....
The MindSpot Clinic
About Us

The MindSpot Clinic is a free telephone and online service for Australian adults troubled by symptoms of anxiety or depression.

We provide free Online Screening Assessments to help you learn about your symptoms, free Treatment Courses to help you to recover, or we can help you find local services that can help.

Learn more about the MindSpot Clinic

How MindSpot Works In 3 Easy Steps

1. Learn
   Read the information on this website and try taking the Depression or Anxiety Quiz.

2. Get Assessed
   Complete a telephone or Online Screening Assessment. We will provide information about your symptoms and provide recommendations.

3. Treatment
   Based on the results of your assessment we may recommend one of our free 8 week Treatment Courses, or provide referrals to other services.

Take The Brief Depression Quiz

Take The Brief Anxiety Quiz
Overview
MindSpot Clinic (www.mindspot.org.au)

- **Mission**: Provide safe and effective virtual, mental health services for adults with symptoms of anxiety or depression, aligned with a low intensity model.

- **Principles**: Delivering services that are:
  1. Evidence-based
  2. Safe and clinically effective
  3. Co-designed with stakeholders
  4. Valued by consumers
  5. Informed by best practice (e.g., IAPT)
MindSpot Clinic: Overview

1. **Launched:** Officially launched in 2013. BTPWFTP.
2. **Mission:** Provide safe and effective virtual, mental health services for adults with symptoms of anxiety or depression, aligned with a low intensity model.
3. **Funding:** Australian Government. Free to consumers.
4. **Access:** Self referral (85%) and referral via health professionals (15%).
5. **Therapist Guided:** 45 staff (35 therapists + 10 support staff).
6. **Quality Assurance:** Clinical outcomes and service satisfaction measured weekly and reported to patients and funders.
7. **Volume:** ~ 20,000 registrants/year. >55,000 registered users at 1 Feb 2017.
8. **Governance:** Robust clinical and IT policy and governance framework.
Key Services
Why Do People Use MindSpot? (N>50,000)

Main Reason for Using MindSpot

• 58%: Want to understand symptoms and treatment options/information about local services
• 32%: Considering treatment at the MindSpot Clinic
• 10%: Other reasons

*Most people want an assessment, information about their symptoms, and treatment options ...
## MindSpot Clinic: Four Key Services

1. **Public Information Website**
   - Information, symptom quizzes, Health Professional page
   - >250,000 unique visitors/year (92% Australian)
   - 35% visit on two or more occasions

2. **Register for Screening Assessment**
   - Screening of symptoms, risk, demographics, and needs
   - Assessment Report sent to person and GP
   - Assessment Process *(Standardised)*
   1. Screening symptoms
   2. Discussion of symptoms and treatment options
   3. Report to patient and health practitioner
   4. Follow-up 2 weeks after assessment, and 3 months after treatment.
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1. User ID (name; email; telephone; address)
2. Demographic details
3. Reason for using MindSpot
4. Symptoms
   1. Distress: K-10
   2. Depression: PHQ-9
   3. Anxiety: GAD-7
   4. Social Anxiety: SPIN
   5. Panic Disorder: PDSS-SR
   6. OCD: YBOCS-SR
   7. PTSD: PCL-C
5. Current stressors (relationships, finances, etc)
6. Safety/Risk
7. Preferred contact methods
8. Consent to contact GP
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   • Screening of symptoms, risk, demographics, and needs
   • Assessment Report sent to person and GP
   • >20,000 registered users/year
   • Age range 18 – 98 yrs
   • Female = 72%; 4% Indigenous
   • ≥38% live outside major cities
   • 80% not receiving mental health services
   • What do they want from MindSpot?
     • 58%: Want to understand symptoms and treatment options
     • 32%: Considering treatment at MindSpot
     • 10%: Other reasons
   • Severity?
     • Mean K-10 = 32
     • 35% have thoughts of self-harm
     • 1% need crisis support [Step 5 Care]
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Patient decision ....

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3. Referred or Self-Manage (75%)
   - Supported to access local services or prefer to self-manage symptoms. Navigation!
   - Note: Not everyone needs or wants treatment
   - >30% require social service support
   - 80% report taking recommended action
   - >95% would recommend MindSpot

4. MindSpot Online Treatment (25%)
   - 6 Treatment Courses: Developed and evaluated at eCentreClinic, Macquarie University.
   - 8 week treatment courses
   - Patients choose level of therapist support
   - Weekly outcome measures; automated alerts, reviews
   - No exclusion criteria (except suicidal/acute psychosis)
Other Information
MindSpot Clinic Team (45 staff)

- **Therapists (35)**
  - Psychologists, mental health nurses, social workers, counsellors, indigenous mental health workers.
  - Team leaders.
  - Consultant psychiatrists.

- **Management/Support (10)**
  - IT developer, hardware and desktop support.
  - Clinical admin; content developers; analyst.
  - Management/leadership team.

- **Expert advisory group**
  - National and international experts.
The MindSpot Clinic offers six treatment courses (based on CBT) developed and evaluated at Macquarie University:

1. Wellbeing Course (25-60 years)
2. Wellbeing Plus Course (60+ years)
3. Mood Mechanic Course (18-24 years)
4. Indigenous Wellbeing Course
5. OCD Course
6. PTSD Course

- All consumers receive therapist support, follow-up at 3-months post-treatment and can access materials for 6 months post-treatment.
Clinical Trial History

- 2007 – 2016
- Each rectangle represents a clinical trial
- > 60 clinical trials (N>7000)

Research Questions

1. Is internet treatment effective in a research setting?
2. Does it work with different populations?
3. Is it effective in routine clinical care?
Treatment Courses: Model Overview

Key components:
1. Online lessons (core content: CBT principles)
2. Homework assignments (Do It Yourself Guides)
3. Case stories (about experiences of past participants)
4. Additional resources (other topics)

Facilitated by:
1. Automated emails (reminders, prompts, encouragement)
2. Automated questionnaires (monitor symptoms and satisfaction)
3. Automated monitoring (to alert therapists about risk)
4. Manual (therapist) monitoring and scripted contact (telephone and private messaging)

- Core psychological skills
- Taught in an engaging way using stories
- Use technology and systems to promote engagement and support process of treatment
Activity During Treatment

What do patients do during treatment?
- Login 18-25 times over eight weeks
- Stay for 22-30 minutes per login (6 – 12 hrs total)
- 75% read minimum number of lessons
- Download 15-25 additional resources

What do therapists do during treatment?
- Check each patient several times/week + receive automated alerts
- Contact patient regularly (based on preference/need)
- Receives weekly individual and group supervision
- Time: 0.5 – 1.5 hours (average) per patient/treatment, approx. 6 hours (average) for patients with highly complex needs
Clinical Software Platform: Manager Dashboard - Assessment

- Aims to streamline workflows and facilitate clinical oversight
- Significant investment
- Bespoke software solution (version 4)
Who Uses MindSpot (registrants)?

- As at 1 Feb 2017: > 55,000 registered users
- Severity:
  - Moderate – severe symptoms
  - 35% suicidal thoughts; 1% imminent
  - 36% never spoken to health professional
- Ethnicity/Geography:
  - Aboriginal/Torres Strait Islander: 4%
  - Born in Australia: 75%
  - Utilised by people across Australia
## Where Do People Live?

<table>
<thead>
<tr>
<th>State</th>
<th>Australian Bureau of Statistics 2011</th>
<th>MindSpot Clinic</th>
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<tbody>
<tr>
<td>New South Wales</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>Victoria</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Queensland</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Western Australia</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>South Australia</td>
<td>7%</td>
<td>7%</td>
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<tr>
<td>Tasmania</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>ACT</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>1%</td>
<td>1%</td>
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### Where Do People Live?

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<tr>
<td>Capital City or Surrounds</td>
<td>62%</td>
</tr>
<tr>
<td>Other Urban Region</td>
<td>18%</td>
</tr>
<tr>
<td>Rural</td>
<td>20%</td>
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GP/Health Professional Referrals

- 15% of all MindSpot patients are referred by GPs (or told about Clinic by a GP).
- Linkages with GPs at Assessment:
  1. GP refers patient via MindSpot website. GP receives report.
  2. GP tells patient about MindSpot. GP receives report.
- Linkage with GPs at Treatment:
  - MindSpot reports to GP (start of treatment, post-treatment, 3-month follow-up; withdrawal; deterioration).
Outcomes:
MindSpot Clinic Results
## Treatment Results (n>10,000; ITT)

<table>
<thead>
<tr>
<th></th>
<th>% Change in symptoms from assessment</th>
<th>Effect Size (Cohen’s d) from assessment *</th>
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<tbody>
<tr>
<td></td>
<td>Post-treatment</td>
<td>3-month follow-up</td>
</tr>
<tr>
<td>PHQ-9 (depression)</td>
<td>49%</td>
<td>53%</td>
</tr>
<tr>
<td>GAD-7 (anxiety)</td>
<td>50%</td>
<td>55%</td>
</tr>
</tbody>
</table>

* An effect size of 0.8 is considered large.

- **Satisfaction with Treatment:** >95% would refer a friend
- **Deterioration Rate:** Very low (below 5%), and usually due to external factors. Patients subsequently supported to receive more intense care.
- **Predictors:** No predictors of outcome.
Change in Depression Severity (n=2,049)

Mean PHQ-9 scores (±CI)

- Severe (n = 433)
- Moderate-Severe (n = 583)
- Moderate (n = 516)
- Mild (n = 392)
- Normal (n = 125)
Summary

Severity/needs (stepped care) are assessed:

1. Within a framework of clinical governance
   1. Using clearly defined roles, responsibilities, and processes
2. To help manage risk
   1. Safety and risk are regularly monitored (at assessment and during treatment)
   2. Systems of triage and escalation (automated + therapist evaluations)
3. In a standardised and pragmatic way
   1. Recognising change in symptoms occurs (requires flexibility in system)
   2. Recognising systems will evolve
   3. Recognising virtual approaches are not a panacea
4. Recognising role of patient choice
Summary

Digital mental health services like MindSpot are not a panacea (they are not suitable for everyone). But, they have considerable potential to:

1. Provide screening and triage services.
2. Complement existing services by providing a step-up or step-down for consumers.
3. Be clinically and cost effective.
4. Highly acceptable and convenient.
5. Improve access for people who would not otherwise access care.
Recent Papers

The first 30 months of the MindSpot Clinic: Evaluation of a national e-mental health service against project objectives

Nickolai Titov1,2, Blake F Dear1,2, Lauren G Staples1,2, James Bennett-Levy3, Britt Klein3, Ronald M Rapee3, Gerhard Andersson3, Carol Purcell5, Greg Bezuidenhout3 and Olav B Nielsen3

MindSpot Clinic: An Accessible, Efficient, and Effective Online Treatment Service for Anxiety and Depression

Nickolai Titov, Ph.D., Blake F. Dear, Ph.D., Lauren G. Staples, Ph.D., James Bennett-Levy, Ph.D., Britt Klein, B.A., D.Psych. (Clinical), Ronald M. Rapee, Ph.D., Clare Shann, David Richards, Ph.D., Gerhard Andersson, Ph.D., Lee Ritterband, Ph.D., Carol Purcell, Greg Bezuidenhout, Luke Johnson, Ph.D., Olav B. Nielsen, M.B.B.S., Ph.D.

Internet-delivered treatment for older adults with anxiety and depression: implementation of the Wellbeing Plus Course in routine clinical care and comparison with research trial outcomes

Lauren G. Staples, Vincent J. Fogliatti, Blake F. Dear, Olav Nielsen and Nickolai Titov

Transdiagnostic Internet-delivered cognitive behaviour therapy in Canada: An open trial comparing results of a specialized online clinic and nonspecialized community clinics

H.D. Hadjistavropoulos1,*, M.M. Nugent1, N.M. Alberts2, L. Staples2, B.F. Dear2, N. Titov1

*Department of Psychology, University of Regina, 2322 Wascana Parkway, Regina, SK S4S 0A2, Canada
1Department of Psychology, University of Regina, 2322 Wascana Parkway, Regina, SK S4S 0A2, Canada
2Department of Rehabilitation Medicine, University of Washington, Seattle, WA, United States
3MindSpot Clinic, Australian Institute for Media and Innovation, University of Technology, Sydney, NSW 2007, Australia
4Department of Psychology, Macquarie University, Sydney, NSW 2109, Australia
5MindSpot Clinic, Aust Institute of Media and Innovation, Department of Psychology, Macquarie University, Sydney, NSW 2109, Australia
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