# The VirtualClinic

Results of 16 Australian clinical trials, lessons learned, and future plans

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### The Team ...

- CRUfAD Director: Professor Gavin Andrews
- VirtualClinic Director: Dr Nickolai Titov
- Clinicians: Dr Emma Robinson, Dr Matthew Davies, Dr Edward Wims, Karen McIntyre, Jay Spence, Dr Alison Mahoney, Sarah Perini
- Support Team: Genevieve Schwencke, Karen Solley, Luke Johnston, Isabella Choi
- Programmers: Dan Winter, Jason Hando
- Our participants!







# Australian Context

Australia: A big country

Australia: Population = 21.5 million

# 12-month cases of common mental disorders (prevalence)\*

Anxiety Disorders (14.4%)

Panic

Social Phobia

GAD

PTSD

Mood Disorders (6.2%)

Depression

Dysthymia

416 000 (2.6%)

752 000 (4.7%)

432 000 (2.7%)

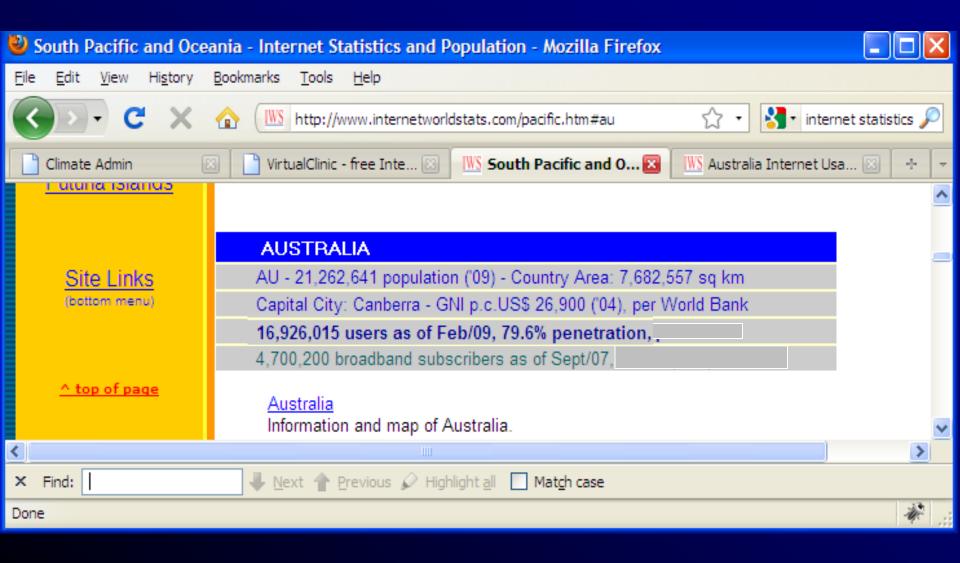
1 024 000 (6.4%)

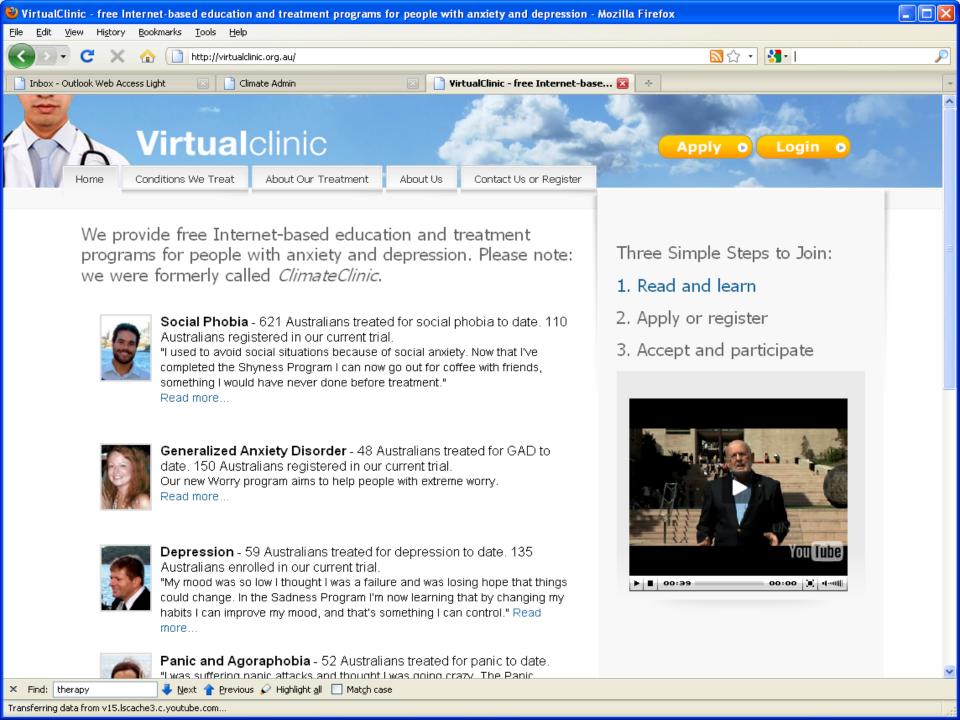
656 000 (4.1%)

208 000 (1.3%)

Only 35% of people with a mental disorder seek treatment

# Internet Usage in Australia





### Aims of the VirtualClinic

- Explore Internet-based strategies for enhancing existing Australian mental health services.
- Develop guided and self-guided Internet-based cognitive behavioural treatment (CBT) programs for common mental disorders:
  - Social Phobia
  - Panic Disorder
  - Depression
  - Generalized Anxiety Disorder
  - Others
  - Transdiagnostic programs

## **Model of Treatment**

- Empowering people
  Replace "sage on the stage" with "guide on the side"
- Aim to:
  - Reduce severity (short-term)
  - Reduce vulnerabilities (longer-term)
  - Increase resilience (longer-term)
- Do this by:
  - Providing education/knowledge
  - Teaching skills systematically
  - Providing guidance about overcoming hurdles and maintaining gains

# **Treatment Components**

#### •Include:

- Psycho-education
- Behavioural activation
- Graded exposure
- Cognitive therapy
- Problem solving
- Communication skills
- Relapse prevention

# What Does the VirtualClinic Look Like?



Lesson 1

Lesson 2





View fullscreen



Welcome to Lesson 1 of the Sadness Program.

The aim of this Program is to help you to learn to get good control over your symptoms of depression and low mood. We hope you find this program helpful.

(Read this Lesson by clicking on the arrow below me)



After completing the lesson, please download the summary.

Download Summary





Go to Forum

#### Resources

There are 22 resources for this course.

View Resources

#### Lesson 1 Stories from the Front Line

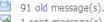
Hi I'm Bruce, I'm late starting after my ...

Read more

#### Messaging



5 new message(s).





Compose New Message

Go to Messages



1/57

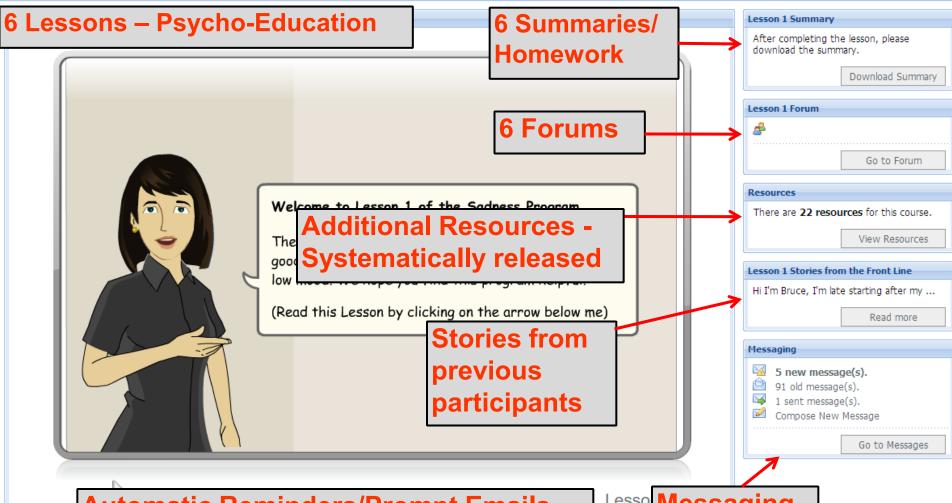
Lesson 1



Lesson 2







**Automatic Reminders/Prompt Emails** 

Lesso Messaging

Guidance: Self vs. Technician vs. Clinician

# Virtual Clinic Results

# 3 Stages of Research

#### **Stage 1:** Evaluating proof of concept:

- Question: Does it work?
- Design: Clinician vs. Waitlist Control

#### **Stage 2:** Testing parameters:

- Question: Is Technician-guided as effective as Clinician-guided?
- Design: Clinician vs. Technician-guided

#### **Stage 3:** Evaluating effectiveness:

 Questions: Is ICBT equivalent to face to face? Are non-research clinicians effective?

# Completed + Current Projects

**Stage 1** = Proof of Concept – Clinician vs. Waitlist Control

**Stage 2** = Parameters – Clinician vs. Technician support

**Stage 3** = Effectiveness – ICBT vs. Face to Face, real world clinics

	Social Phobia	Depression	Panic Disorder	GAD	Trans- diagnostic
Stage 1	2 trials (n =180)	2 trials (n = 58)	2 trials (n = 70)	1 trial (n = 48)	1 trial (n = 82)
Stage 2	4 trials (n = 450)	1 trial (n = 135)		1 trial (n = 151)	
Stage 3	2 trials (n = 67)				

16 Studies: Total n = 1200+

# Results

**Stage 1** = Proof of Concept – Clinician vs. Waitlist Control

**Stage 2** = Parameters – Clinician vs. Technician support

**Stage 3** = Effectiveness – ICBT vs. Face to Face, real world clinics

	Social Phobia	Depression	Panic Disorder	GAD	Trans- diagnostic
Stage 1 (120 min/p)	Treatment (ES = 1.0) > Control	Treatment (ES = 1.0) > Control	Treatment (ES = 1.0) > Control	Treatment (ES = 1.0) > Control	Treatment (ES = 1.0) > Control
Stage 2 (40 min/p)	Clin = Tech (ES = 1.3+) > Control	Clin = Tech (ES = 1.4+) > Control		???	
Stage 3 (40 min/p)	ICBT = F2F ES = 1.0+)				

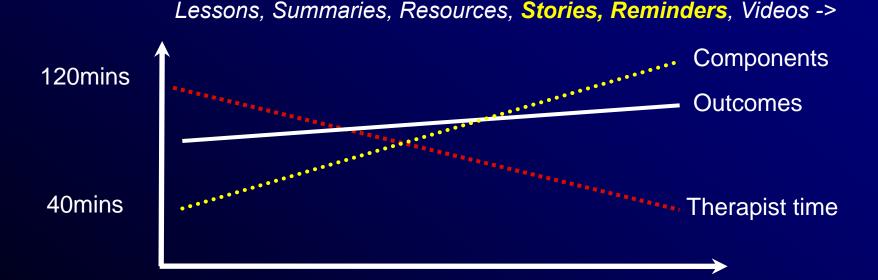
Effect Sizes: Disorder specific measures

# Lessons Learned

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Stage 1 = Proof of Concept – Clinician vs. Waitlist Control
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Stage 2 = Parameters - Clinician vs. Technician support

**Stage 3** = Effectiveness – ICBT vs. Face to Face, real world clinics



Program Development ->

# Who Are Our Patients?

# Who Uses VirtualClinic?

	National Survey 2007	Anxiety Disorders Clinic*	Virtual Clinic
Age	42	35	40
K-10	26	30	29
Gender (% male)	34%	42%	40%
Education (Tertiary)	53%	73%	58%
Married/de facto	33%	40%	52%
Employed	57%	52%	72%

<sup>\*</sup> Face to face clinic at St Vincent's Hospital, Sydney
Severity of VirtualClinic patients same as Anxiety Disorders Clinic

### What Have We Learned?

- Large demand
- The "modality" is initially a distraction
- Patients are not "unusual"
- Results are similar to face to face, acceptable, cost-effective, and sustained at 3 or 6 months
- Technicians can produce similar clinical outcomes as clinicians, at reduced cost, with similar acceptability
- VirtualClinics have the potential to be useful

#### Where To ....

- Evaluating:
  - Stage 2 and 3
  - Transdiagnostic programs
  - Self-guided programs
  - Booster programs
- Implementation:
  - CRUfADClinic for general practitioners
  - External clinicians using VirtualClinic
  - Stepped care modeling



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# Summary

- Considerable unmet need in Australian adults with anxiety or depression
- Pattern of results indicates:
  - [Clinician-guided = Technician-guided] > Waitlist
- Beginning implementation trials in wider community
- Exploring how to add value to results with additional components (pre and post-acute-treatment)
- VirtualClinic is popular and appears to have the potential to be a useful addition to existing services

www.virtualclinic.org.au

• Thank you ...