

# Applying the BMC Youth Model: three case studies (follow-ups)

## Presented by

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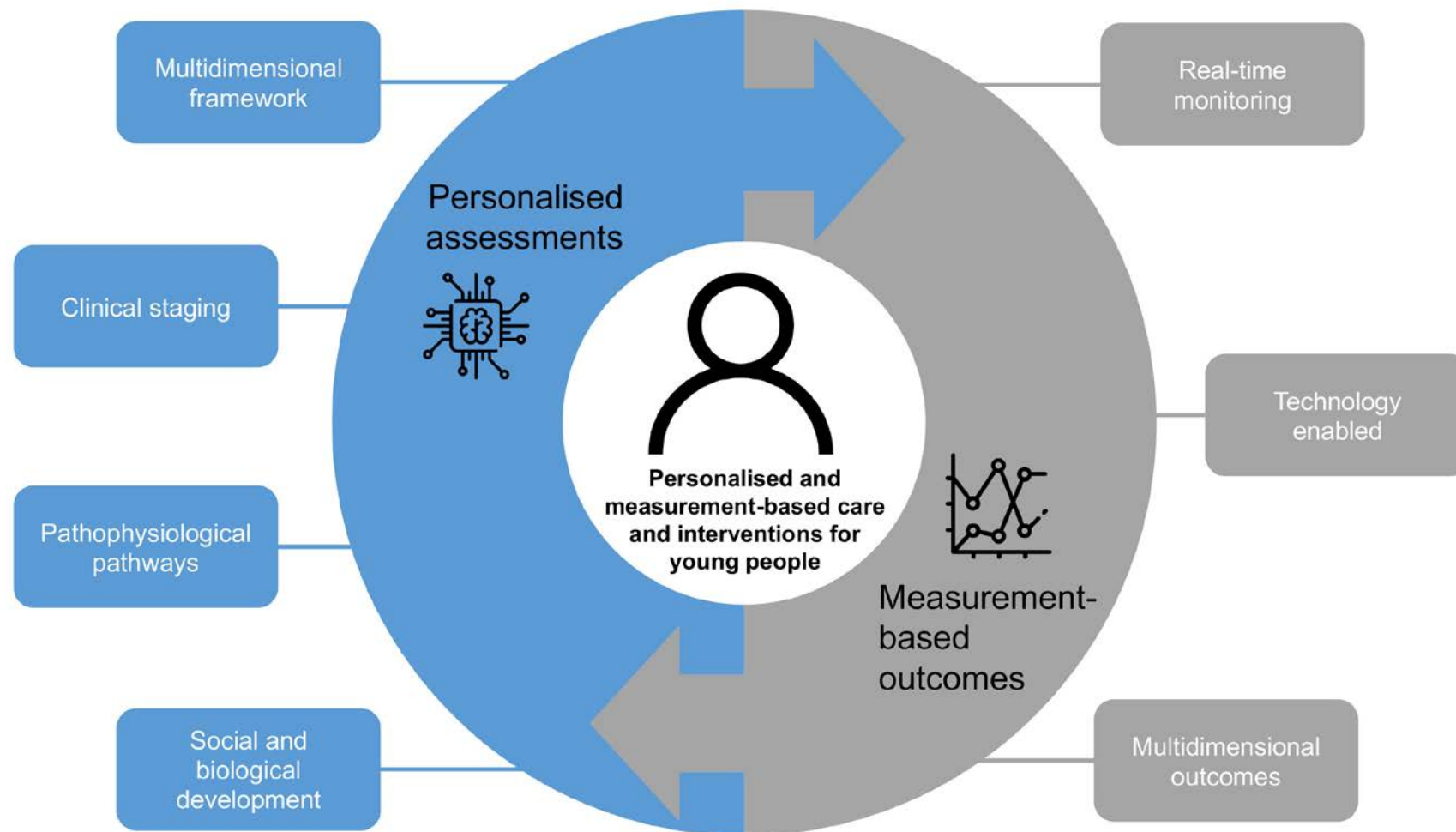


# Acknowledgements

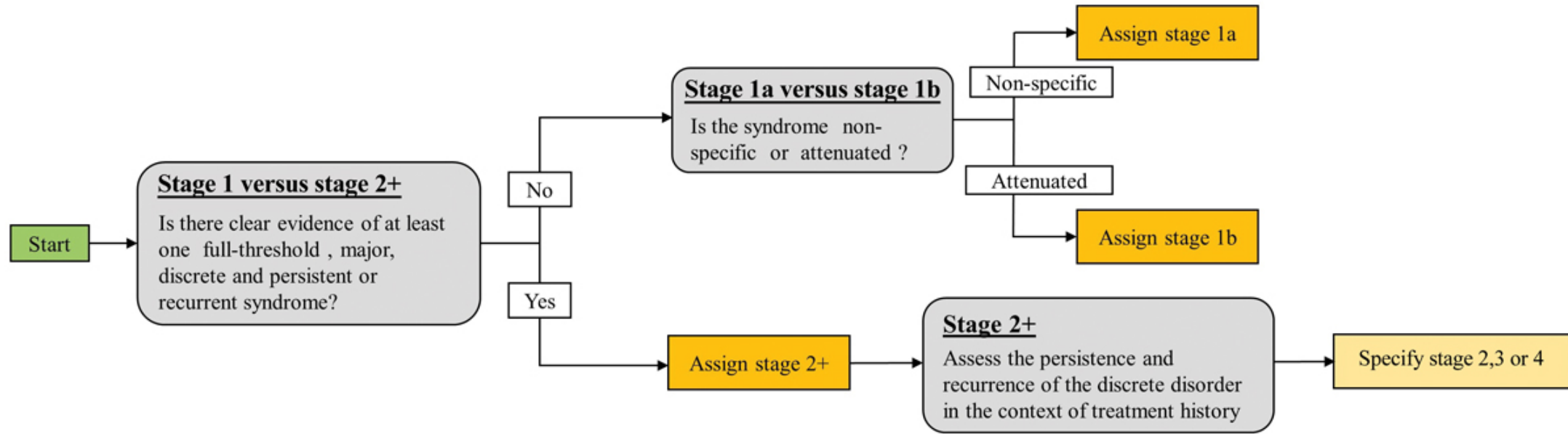
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- Of lived experience



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# Reminder – staging decision tree



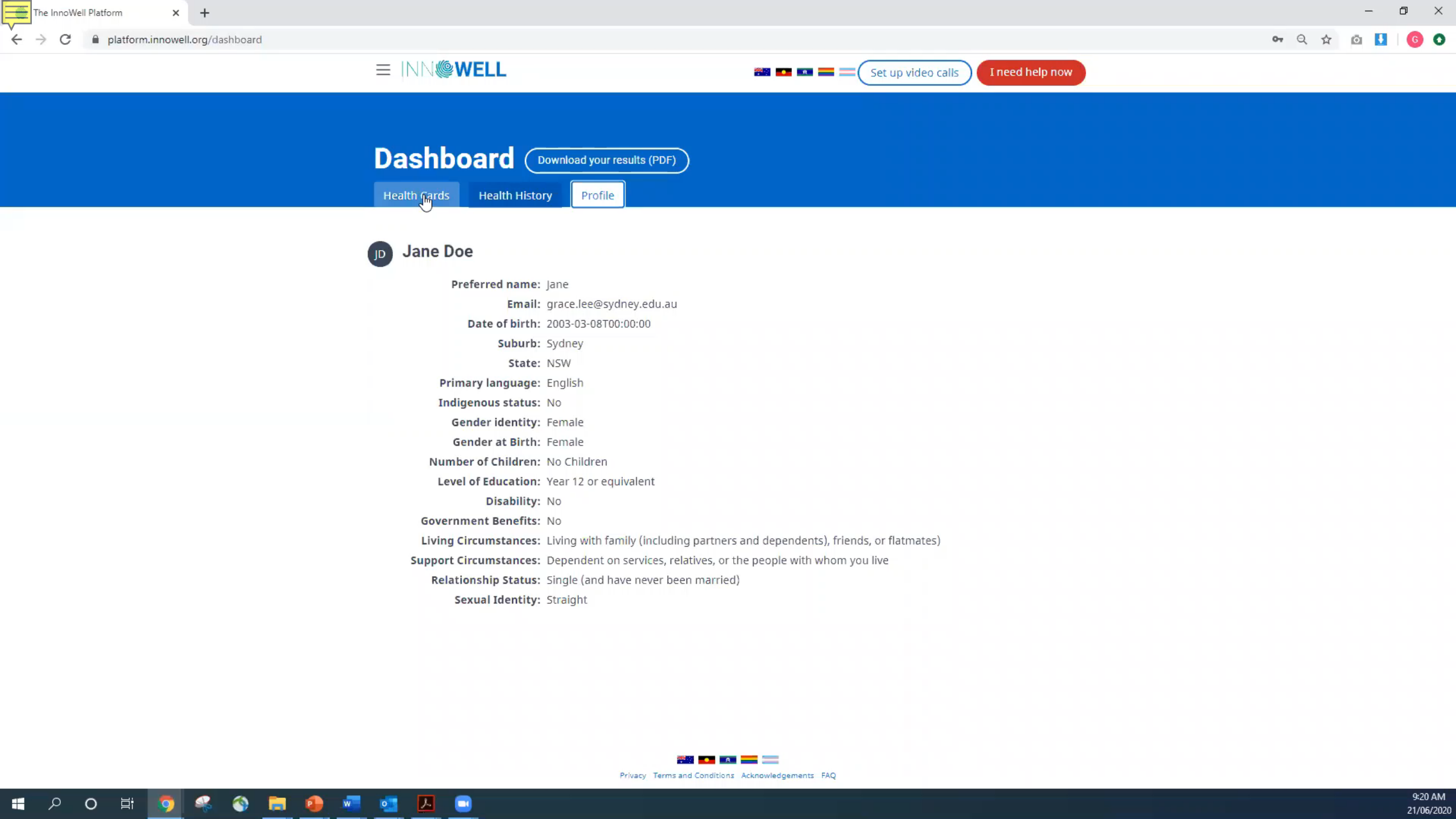
**Clinical decision-making principle:** *Assign highest achieved in lifetime, and when in doubt, rate down and re-assess in 4–6 weeks.*

# Outline for Case Studies webinar

Applicability of the BMC Youth Model for three case studies at various follow-up points:

- **Case study 1: JANE (17 years old)**
  - Stage 1a transition to Stage 1b
- **Case study 2: ANNE (22 years old)**
  - Stage 1b (persisting)
- **Case study 3: SIMON (19 years old)**
  - Stage 2 (confirmed)

*Conflict of interest declaration: The University of Sydney and PwC each have a 45% shareholding in InnoWell. The remaining 10% shareholding is evenly shared between Professor Jane Burns and Professor Ian Hickie*



# Dashboard

Download your results (PDF)

Health Cards

Health History

Profile

JD

Jane Doe

Preferred name: Jane

Email: grace.lee@sydney.edu.au

Date of birth: 2003-03-08T00:00:00

Suburb: Sydney

State: NSW

Primary language: English

Indigenous status: No

Gender identity: Female

Gender at Birth: Female

Number of Children: No Children

Level of Education: Year 12 or equivalent

Disability: No

Government Benefits: No

Living Circumstances: Living with family (including partners and dependents), friends, or flatmates)

Support Circumstances: Dependent on services, relatives, or the people with whom you live

Relationship Status: Single (and have never been married)

Sexual Identity: Straight



## **headspace - team case review:** Digital navigator includes Jane (17 years old) for review as they noticed marked deterioration during the latest check-in via video-visit

### **Case presentation:**

*Following her initial in-clinic visit, Jane was assigned Stage 1a and developed a shared care plan including online apps and e-tools (including CBT) in association with a headspace digital navigator who would monitor her data over time with the InnoWell Platform, including monthly check-ins using video-visits for up to 3 months.*

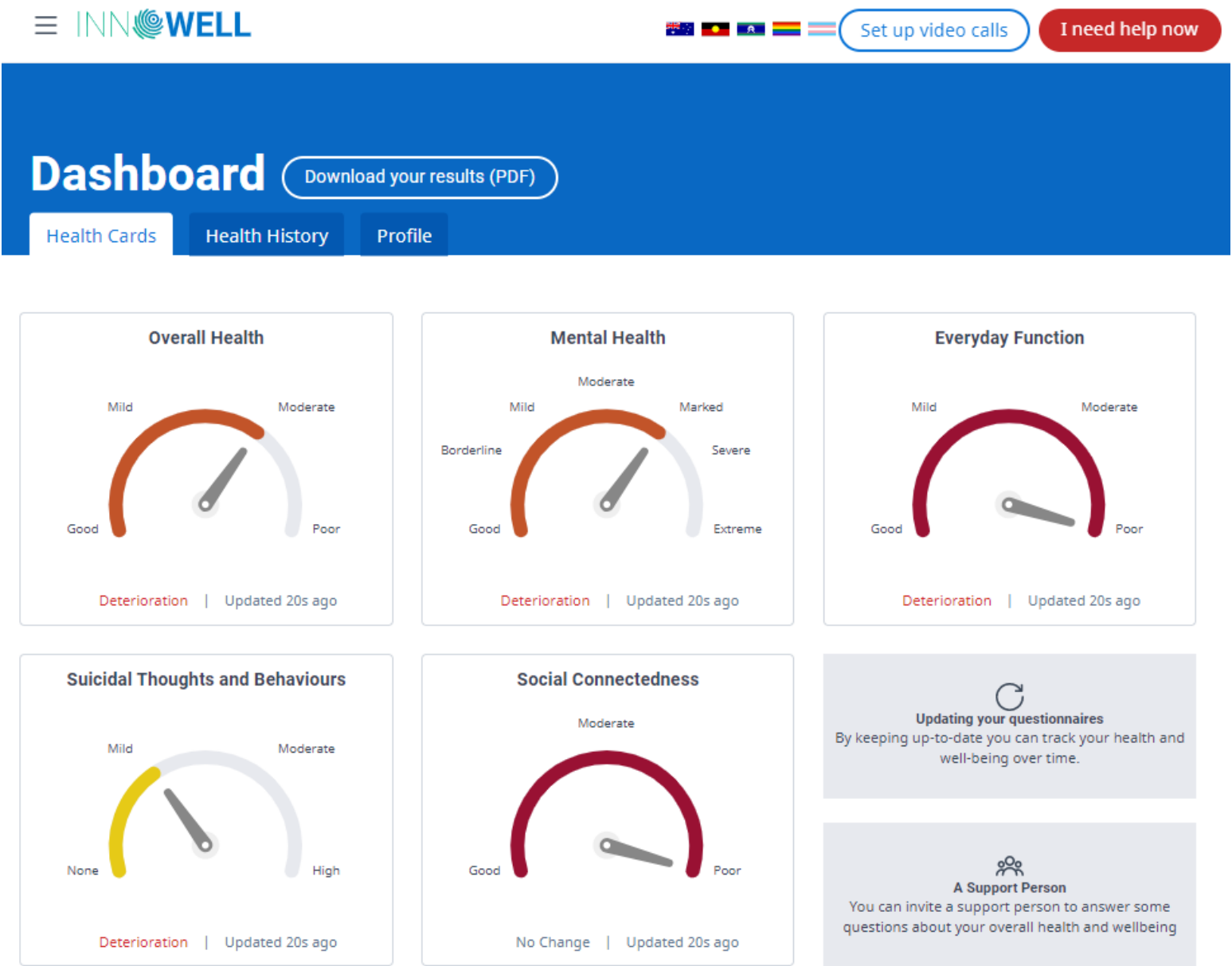
**Video-visit at 1 month:** Jane stated she had dropped out of high school and is not going to sit her final exams. She seemed relieved, less anxious and noted she would be looking for a job in retail to make ends meet (and her parents happy).

**Video-visit at 2 months:** Jane is yet to find a job and her parents are now very distressed about her decision to leave school resulting in lots of tension and fights at home. She has become depressed, has lost contact with all her school friends and has stopped playing sports on the weekend. Along with low mood, Jane also describes day-time fatigue, oversleeping and a persistent lack of interest in everyday activities. In addition, her previous disturbed eating behaviours have worsened with periods of bingeing and purging more frequent. She also describes “punching her legs” when taking a shower.

### **Mental State Examination:**

- Jane has appeared to gain weight, her hair is unkempt, and she is poorly dressed
- She is also preoccupied and sad about her body shape, as well as her perceived "rejection" by friends and family

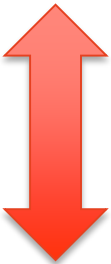
# Jane's most recent multidimensional assessment results:



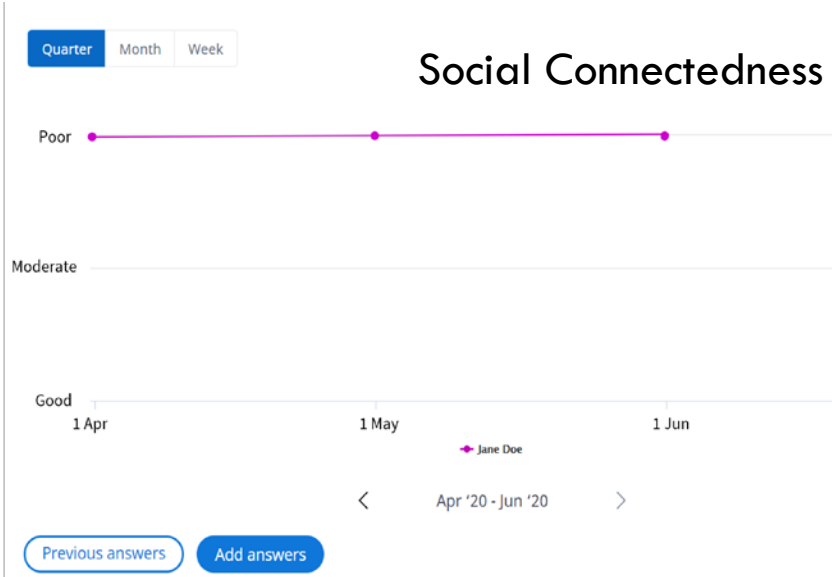
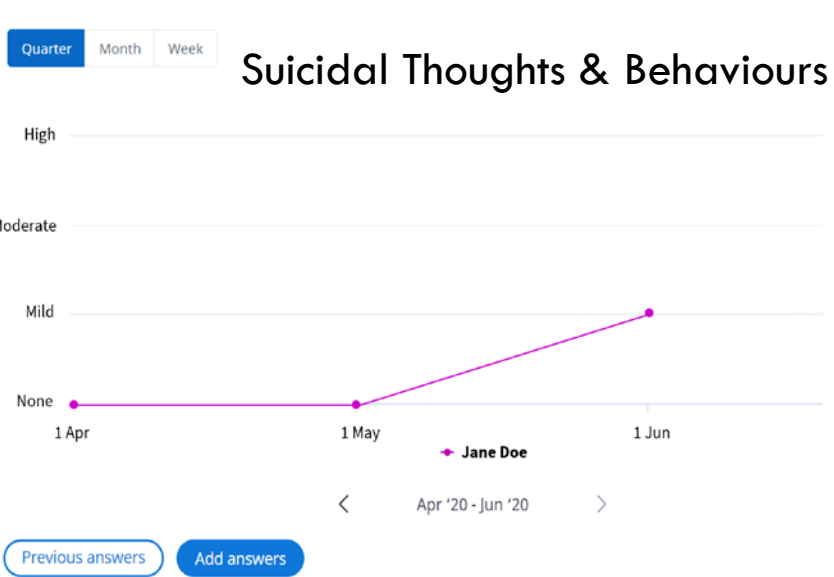
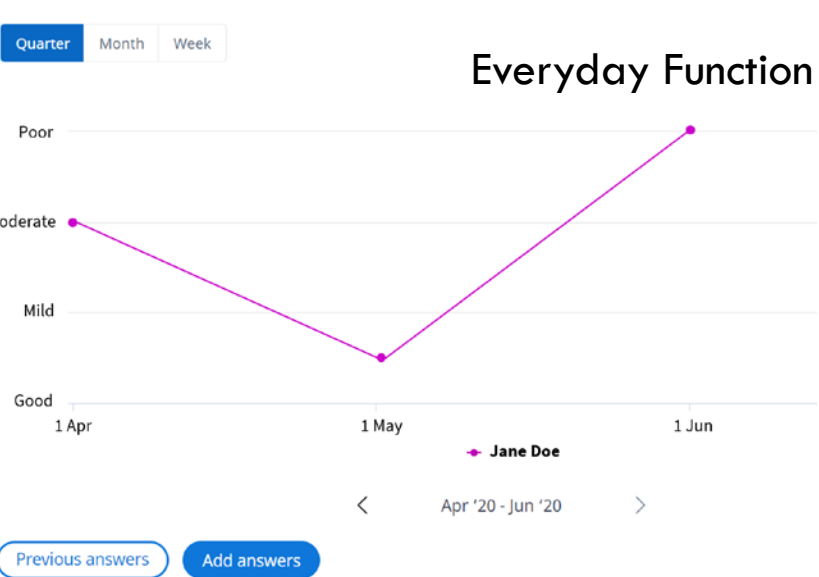
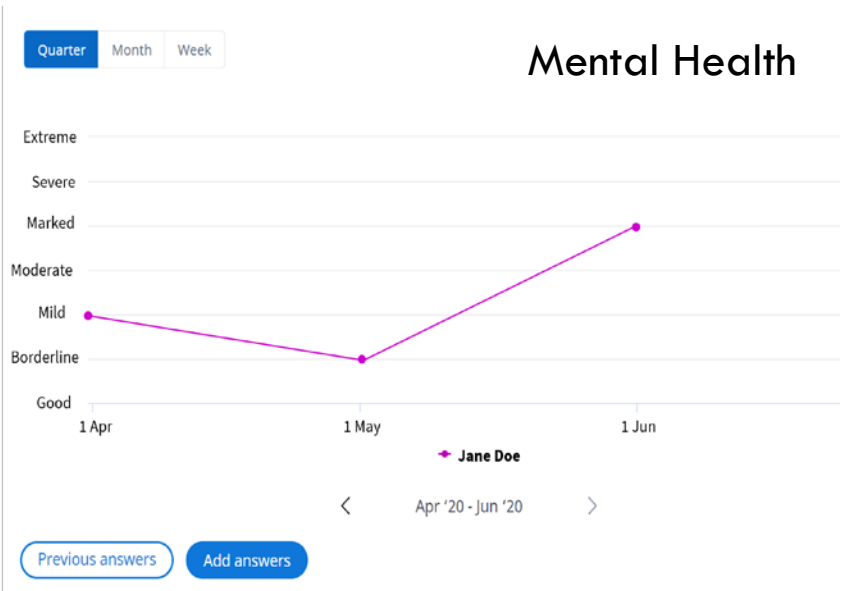
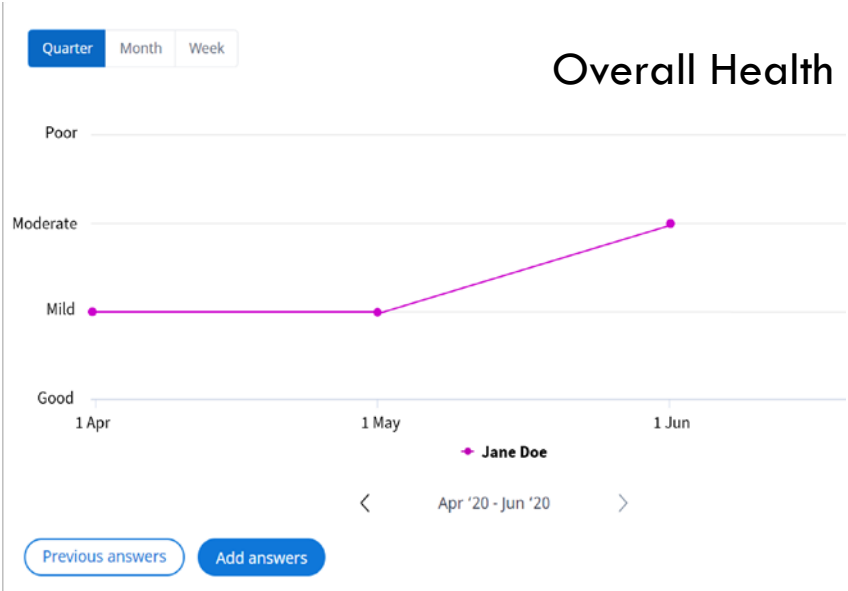


# Monitoring Jane's outcomes over the past 3 months:

Deterioration



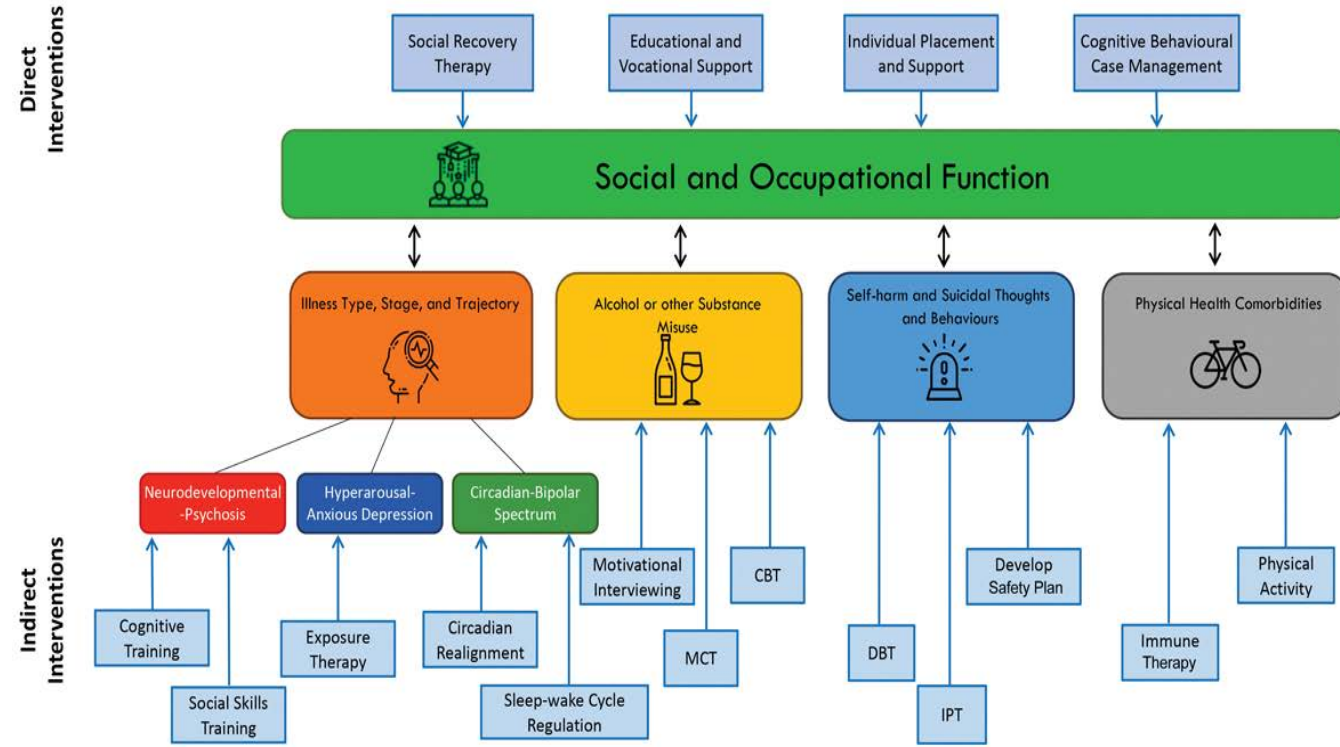
Improvement



# Jane's clinical stage transition and sequencing of care options?

**Stage 1a transition to Stage 1b:**  
Ongoing video-visits but now supplemented with in-clinic visits (as required) with the care team

1. CURRENT CLINICAL STAGE		Stage 1a Minimum 3 monthly review and length of care	Stage 1b Minimum monthly review and 12 months of care	Stage 2 3-monthly review and 2-5 years of care	Stages 3 and 4 6-monthly review and ongoing care
2. CURRENT CLINICAL NEED (symptoms, functional impairment, risk severity)	Very mild	Self- and carer-directed monitoring and management			
	Mild	Low intensity services			
	Moderate		Moderate intensity services		
	Severe			High intensity services	
	Very severe			Acute and specialist community services	



## Further assessment & care options discussed:

- **Individual CBT** to improve mood and recover functioning
- **Interpersonal therapy** to improve eating and self-harm behaviours
- **Behaviour activation** to increase activity, improve mood and overall health
- Plans for **educational/ vocational support** to sit final school exams
- Case management to increase **social connectedness** and general participation in community
- **Inclusion of parents** in new shared care plan
- Consideration of **medication options**



# **Student counselling service – team case review:** Treating student counsellor includes Anne (22 years old) for review following a serious suicide attempt

## **Case presentation:**

*Following her initial in-clinic visit, Anne was assigned Stage 1b and developed a shared care plan including a suicide safety plan, some online apps and e-tools for mindfulness and alcohol support, as well as psychological therapies for depression, anxiety and psychosis-like experiences. It was agreed with her counsellor to predominantly use video-visits via the InnoWell Platform, and supplement with in-clinic visits when required over a 12-month period.*

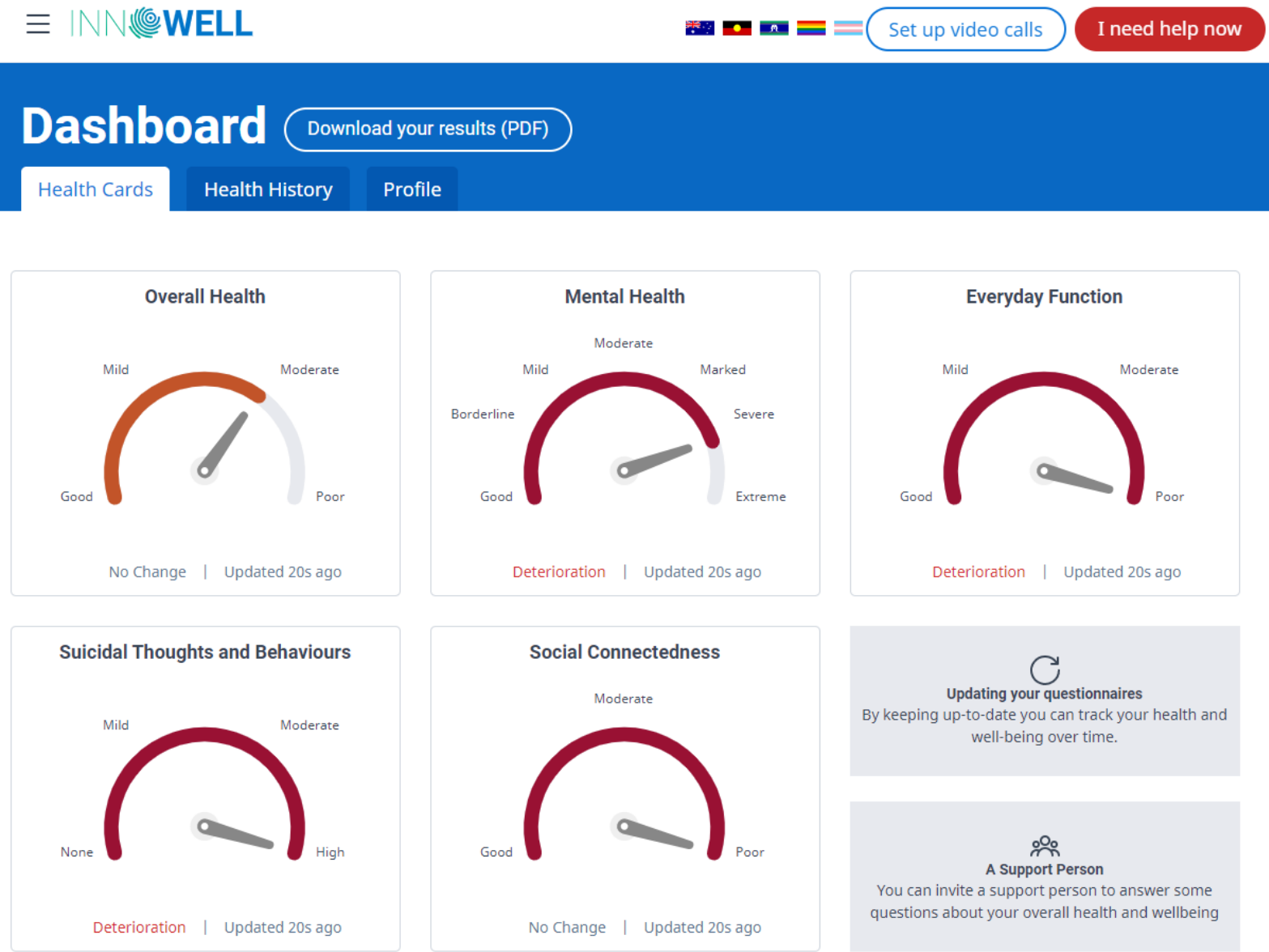
Anne participated in CBT for approximately 3 months. However, her mood still deteriorated, paranoia worsened, and she stopped attending all sessions as she refused to talk with people during daylight hours. With the intention to "...make it all go away...", Anne took an overdose of painkillers mixed with alcohol. Her house-mates called an ambulance and Anne was admitted to hospital. At discharge, a Mental Health Acute Care Team nurse contacted the treating counsellor who immediately set up a video-visit to see Anne that same day.

During this video-visit, Anne said she was convinced her house-mates were conspiring to harm her and that other people in her street could tell from her Eurasian appearance that she was "bad". Her mother also attended the video-visit and explained that Anne had withdrawn from university and was now moving back home. Her mum also noted how Anne believed she "...shouldn't trust anyone who isn't family...". Anne further described a sense of being cognitively damaged and unable to function properly, and that she was hearing people comment on her every move from the moment she woke up. This has led Anne to drink even more heavily to dull the thoughts.

## **Mental State Examination:**

- Anne would only be seen in the presence of her mother and was clearly distracted
- She was agitated, hypervigilant and really didn't want to be in the session
- Anne's answers were coherent, but short in nature and without much elaboration

# Anne's most recent multidimensional assessment results:



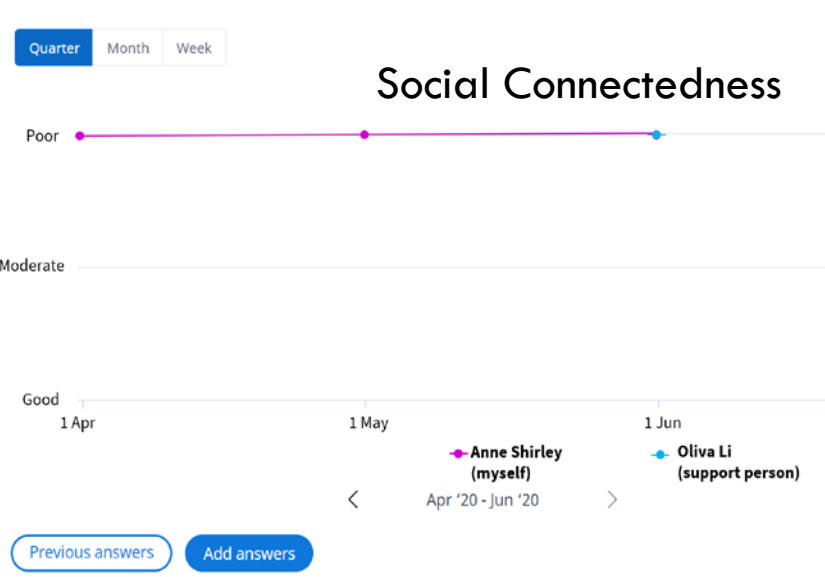
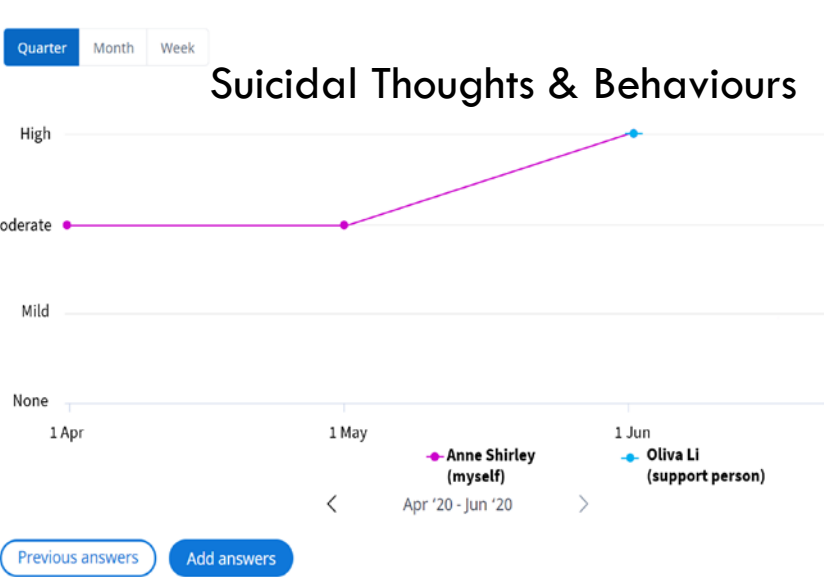
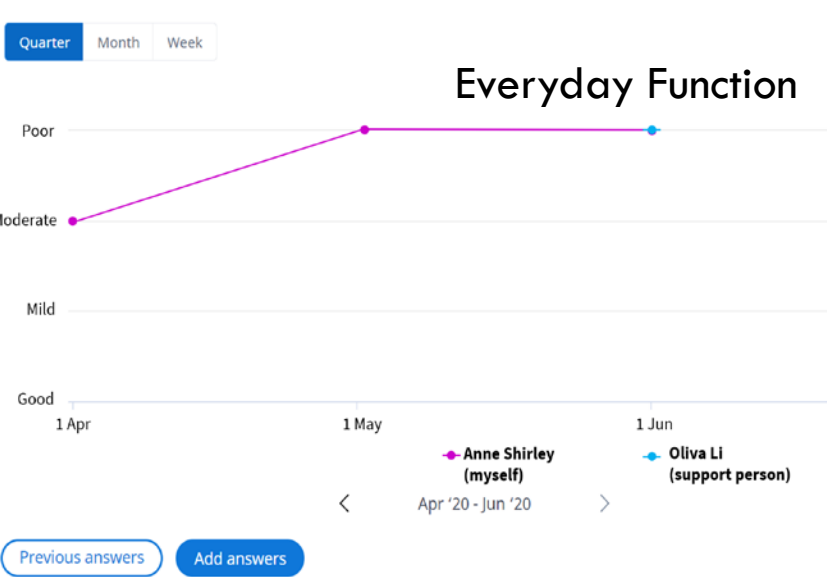
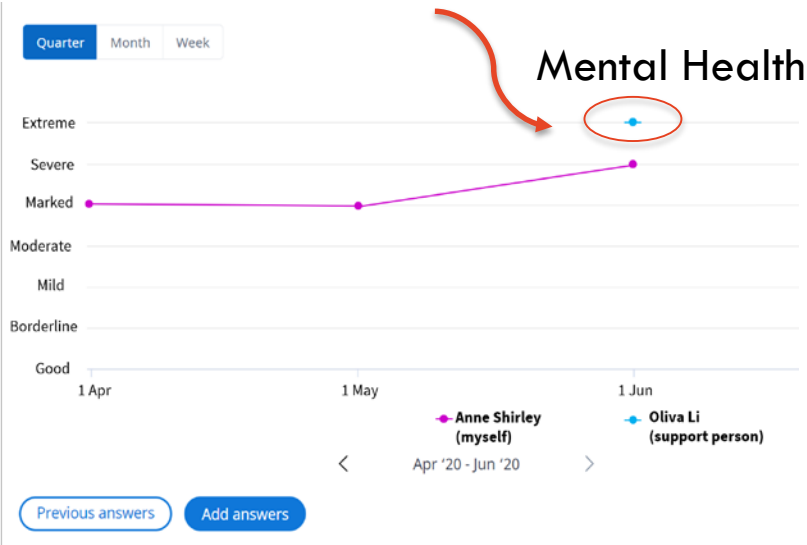
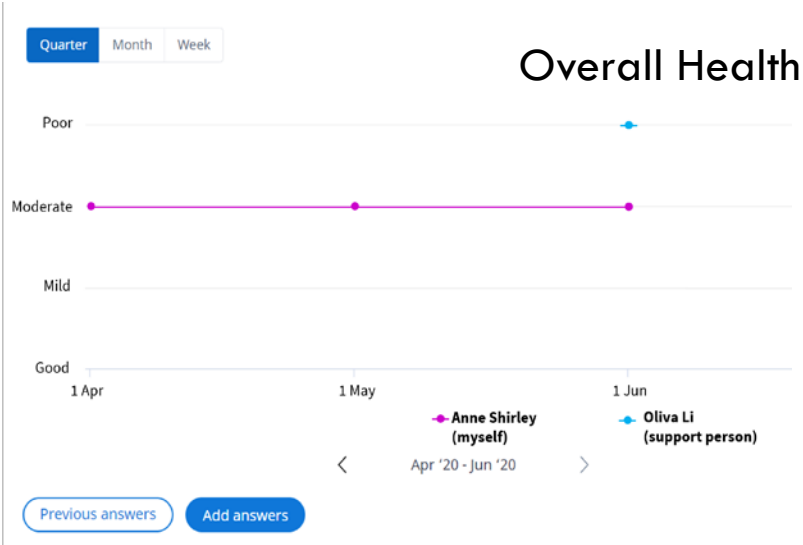
# Monitoring Anne's outcomes over the past 3 months:

\* Supportive other input (blue):  
Anne's mother now also contributing  
data to her dashboard

Deterioration



Improvement

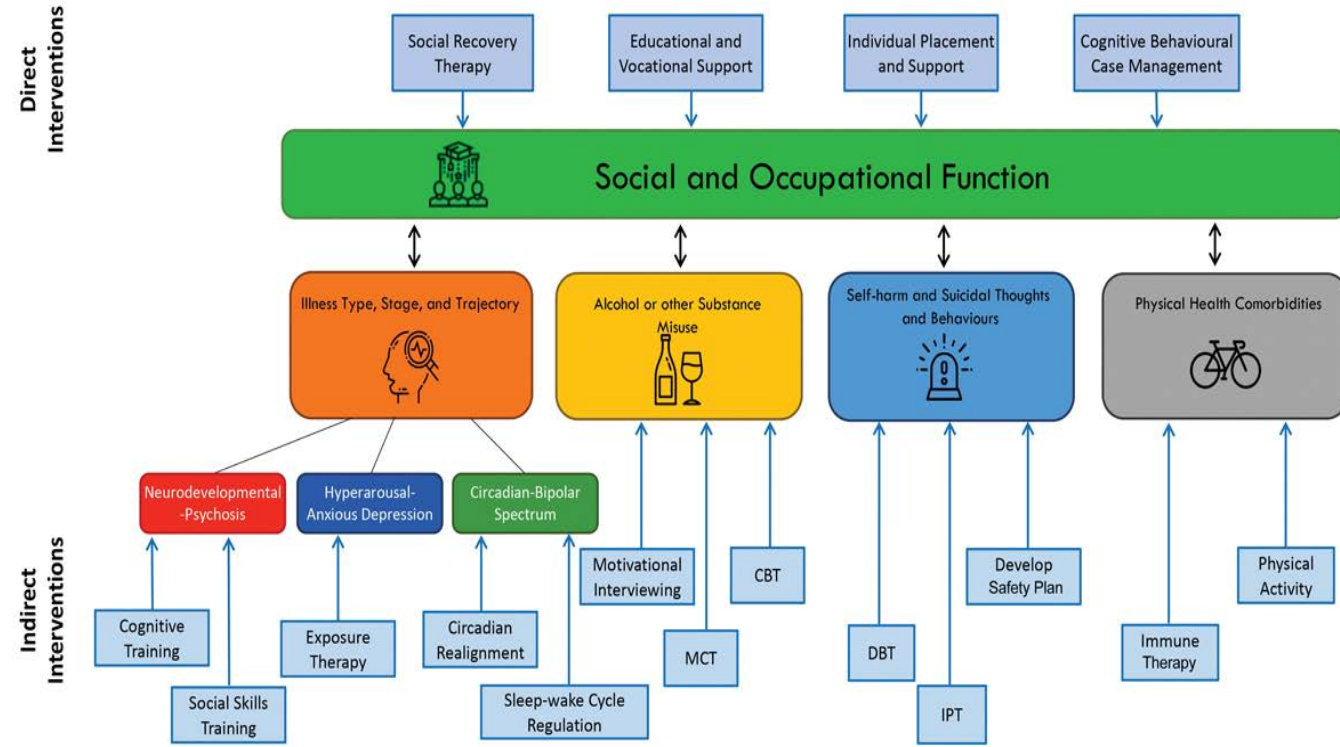




# Anne's clinical stage transition and sequencing of care options?

**Stage 1b (persisting):**  
Ongoing video-visits with Anne and family, supplemented with in-clinic visits with the care team

		1. CURRENT CLINICAL STAGE			
		Stage 1a Minimum 3 monthly review and length of care	Stage 1b Minimum monthly review and 12 months of care	Stage 2 3-monthly review and 2-5 years of care	Stages 3 and 4 6-monthly review and ongoing care
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	Moderate		Moderate intensity services		
	Severe			High intensity services	
	Very severe			Acute and specialist community services	



## Further assessment and care options discussed:

- **Assertive case management** to recover functioning and return to university
- Continue **individual CBT** to improve mood and reduce distress associated with psychosis-like experiences
- Inclusion of a **psychiatrist** within the care team
- Consideration of **medication options**
- **Neuropsychological assessment** to assess cognitive decline



# **Aboriginal Health Service – team case review:** Treating health professional includes Simon (19 years old) for review following the emergence of a hypomanic episode

## **Case presentation:**

*Following his initial in-clinic visit, Simon (or Si) was assigned Stage 2 (provisional) and developed a shared care plan including a suicide safety plan, online app to track his mood, psychological therapies for depression, functioning and substance misuse as well as individual placement and support services. It was also agreed with his health professional that care would be best delivered using in-clinic visits and supplemented with more frequent online video-visits via the InnoWell Platform to monitor progress real-time.*

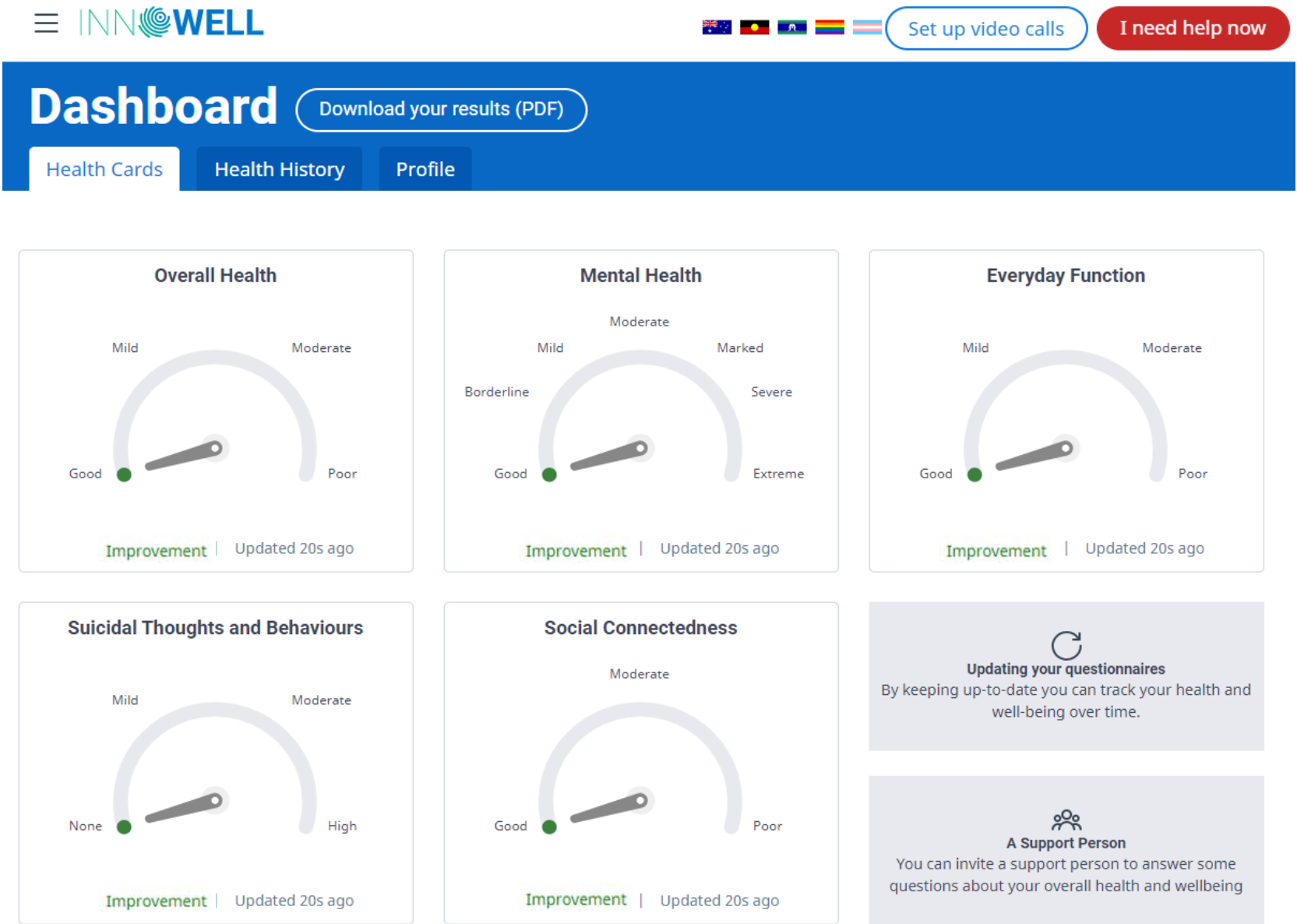
**In-clinic visit at 3 months:** Outcome monitoring showed ‘no change’ in Si’s mood. After consultation with his wider kinship, Si was prescribed an antidepressant to which he again had a reasonable symptomatic response and minimal side effects. Together with an Aboriginal Liaison Officer, Si and his family arranged casual work at an Uncle’s business with the prospect of an electrician apprenticeship. However, on shift Si was increasingly distracted, needing regular cigarette breaks and asking for afternoon naps.

**In-clinic visit at 6 months:** Si presented with his girlfriend. While Si excitedly stated “...he had never felt better...” (happy, energetic, creative), his girlfriend described that he had become ridiculously active in the past couple of weeks – Si had started engaging in protest organisations, frantically writing and preparing screen plays, and leaving the house very early in the morning and returning home in the middle of the night without spending any meaningful time with his family. He was also not turning up for work at his Uncle’s business, and he boasted about his achievements for the ‘Black Lives Matter’ movement and how the global protests depend on him.

## **Mental State Examination:**

- Si’s speech was rapid, jumbled and difficult to understand
- He also frequently interrupted his girlfriend and the health professional with loosely related ideas
- Si appeared agitated, was unable to sit still, and stood up several times to express his frustration with the slow assessment

# Si's most recent multidimensional assessment results:



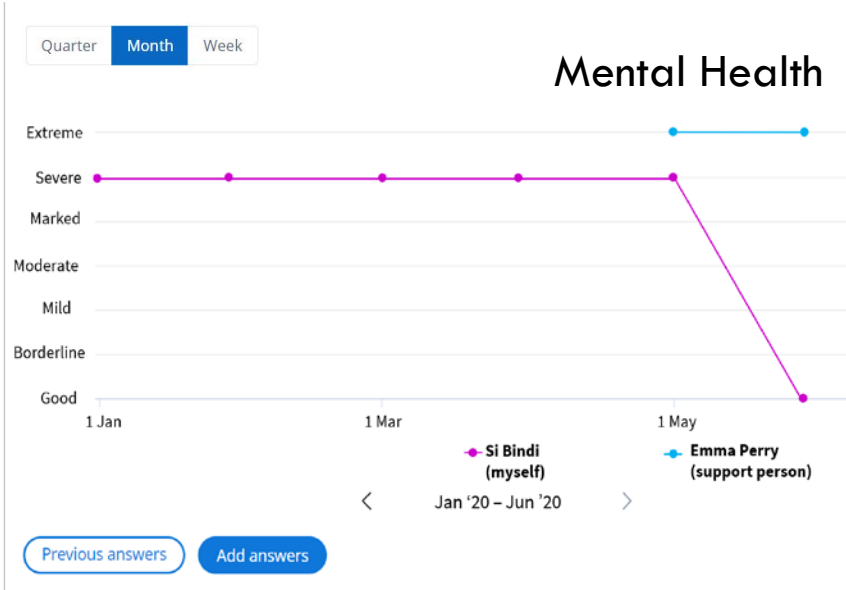
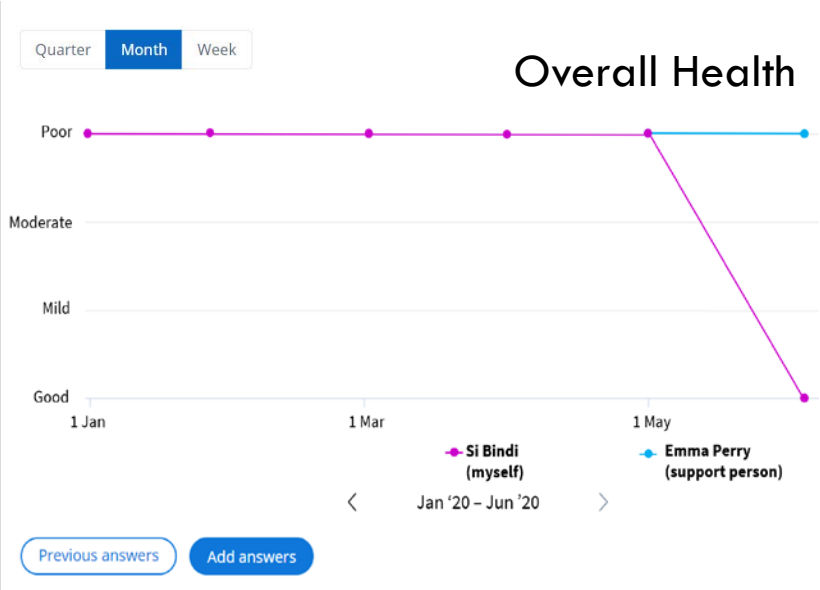
<b>Good</b> Social And Occupational Function Improvement 28m ▼	<b>Minimal</b> Depressed Mood Improvement 26m ▼	<b>Probable concern</b> Mania-Like Experiences Deterioration 25m ▼	<b>Moderate</b> Self-Harm No Change 18m ▼	<b>High</b> Tobacco Use Deterioration 17m ▼
<b>Moderate</b> Alcohol Use Improvement 17m SB ▼	<b>Good</b> Social Connectedness Improvement 13m ▼	<b>Moderate</b> Physical Health Improvement 14m ▼	<b>Poor</b> Sleep-Wake Cycle No Change 12m SB ▼	<b>None</b> Post-Traumatic Stress No Change 12m ▼
<b>High</b> Cannabis Use No Change 11m SB ▼	<b>Low</b> Psychological Distress Improvement 9m ▼	<b>Low</b> Psychological Distress Improvement 9m ▼	<b>None</b> Suicidal Thoughts And Behaviours No Change 8m ▼	<b>No concern</b> Psychosis-Like Experiences No Change 7m ▼
<b>Minimal</b> Anxiety Improvement 6m ▼	<b>Possible concern</b> Eating Behaviours And Body Image Deterioration 5m ▼			

# Monitoring Si's outcomes over the past 6 months:

Deterioration

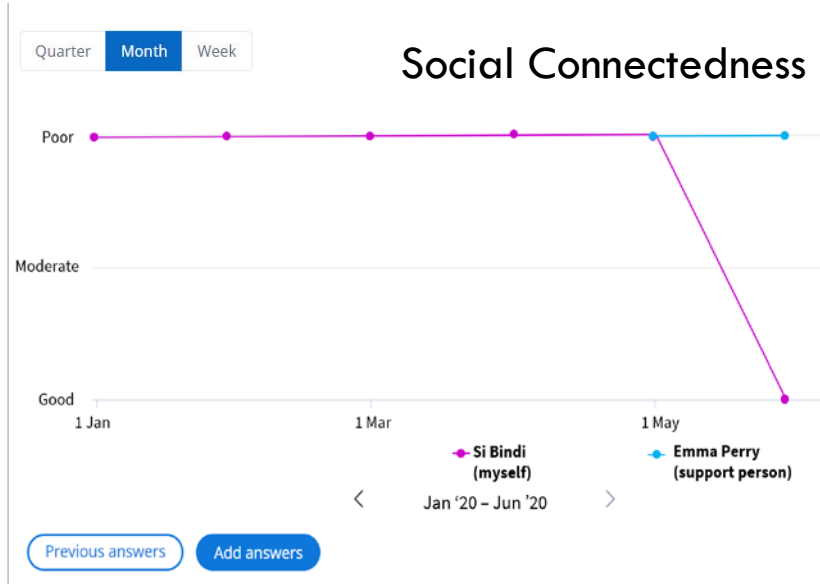
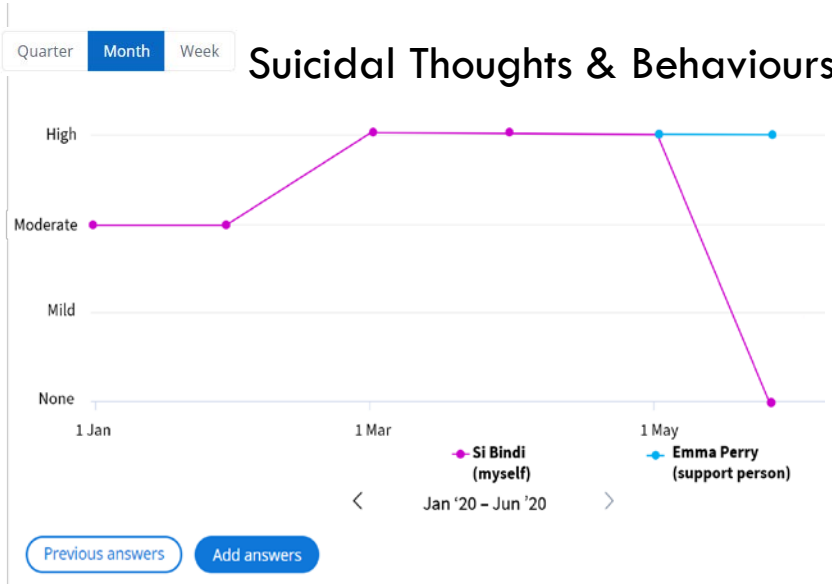
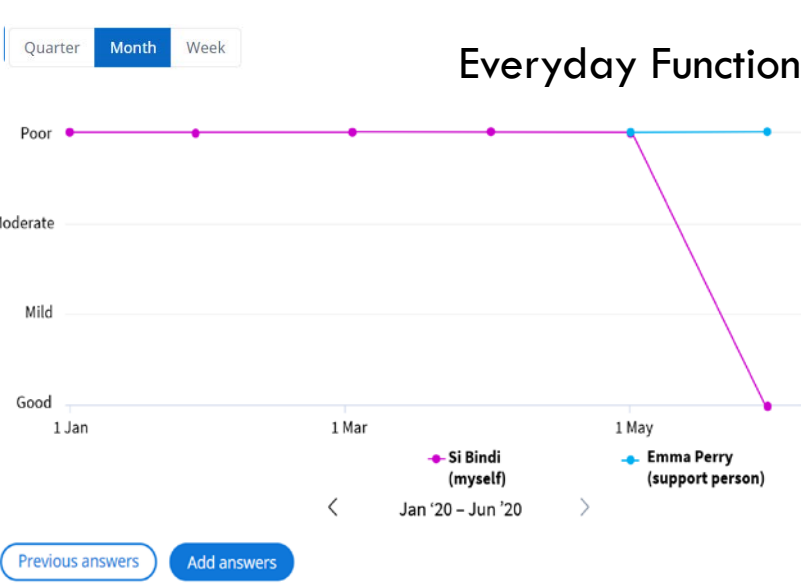


Improvement



\* Supportive other input (blue): Si's girlfriend also contributes data to his dashboard

The discrepancy is important !





# Si's clinical stage transition and sequencing of care options?

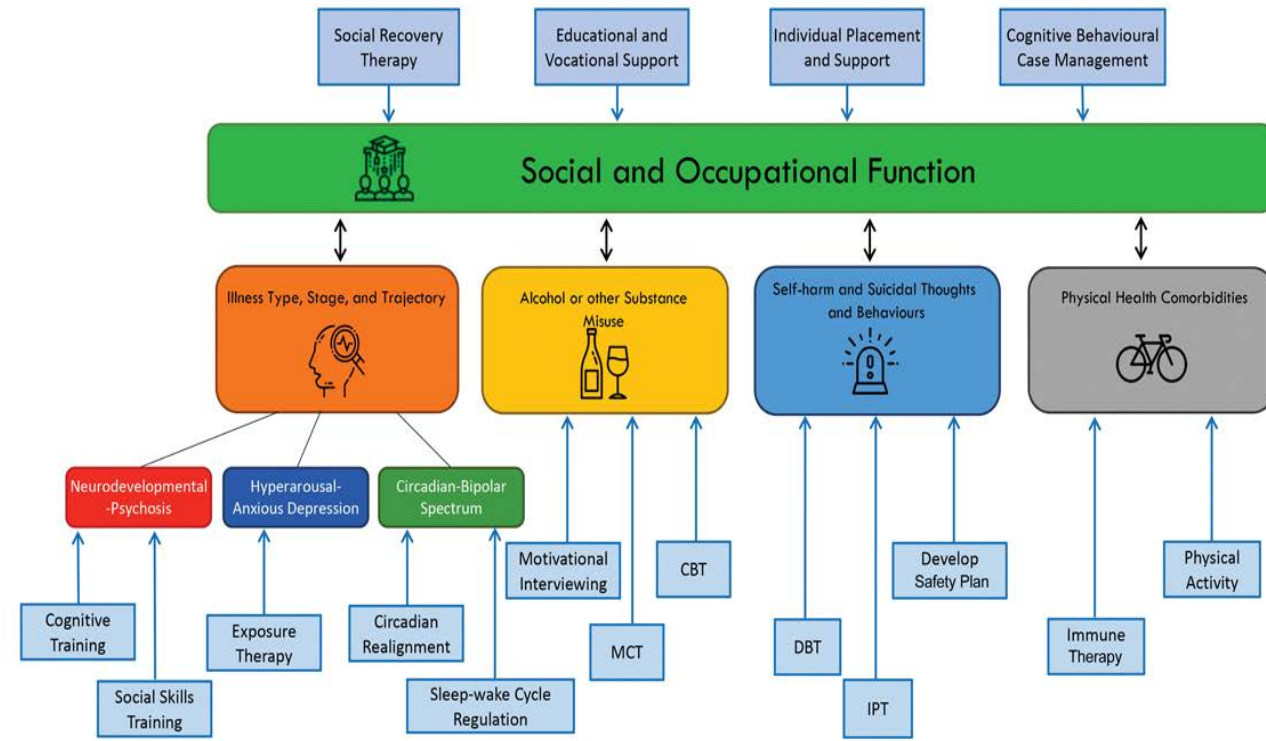
## Stage 2 (confirmed):

Ongoing in-clinic visits with family and kin, supplemented by video-visits for real-time case management and monitoring of medication response

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	Severe	High intensity services			
	Very severe	Acute and specialist community services			

Direct Interventions

Indirect Interventions



## Further assessment and care options discussed:

- **Outpatient trial** for new medication
- **Hospitalisation** for risk mitigation
- **Psychoeducation** with family and kin
- Continued **psychological intervention** using Interpersonal and Social Rhythm Therapy with a clinical psychologist
- Long-term **individual placement and support** to help Si return to work and study

# Summary...

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- Use of health information technologies enable a digiHealth solution to practically adopt the BMC Youth Model of Care into clinical practice, including:
  - Multidisciplinary team review
  - Routine outcome monitoring
  - Revision of staged care decisions
  - Further assessment and sequencing of treatment options
- Training in use of the BMC Youth Model can also be delivered specific to a service by one of the BMC's clinician-researchers (such as A/Professor Elizabeth Scott). If you are interested, please contact [grace.lee@sydney.edu.au](mailto:grace.lee@sydney.edu.au)





# Thank you!

All resources & recordings can be found on  
*[bmc-research.engagementhub.com.au](https://bmc-research.engagementhub.com.au)*

*The Brain and Mind Centre would like to thank our research partners, such as*

# END