



Collaboratively Augmenting Longitudinal Monitoring in Bipolar: CALM Bipolar

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WHY CALM BIPOLAR?

- Young people with **early onset bipolar disorder (EOBD: 15-25 years)** attending Adolescent Bipolar Service (ABS) were encouraged to **chart their mood**, medication adherence and sleep using pen-paper “mood charts”, but **completion rates were low** (~30%)
- Young people stated an app would increase this low rate
- **Given rapid uptake of apps** in this age range[1], there was a need to develop CALM

PROJECT AIMS

- **Co-design** and **co-produce** an alpha **prototype App** using **participatory design methods** to **improve outcomes** for early onset bipolar disorder
- Evaluate the **usability and acceptability** and **user satisfaction** of the alpha prototype App

THE CO-DESIGN PHASE

May 2015 – June 2015

- **6 weekly workshops** with **12 participants**
- Young people **aged 16-25 years** and family members
- Discussion: **self management of EOBD**
- **Emerging themes:** *Socialisation, Learning, Relaxation, Excitement, Regulation and Distraction*

THE CO-PRODUCTION PHASE

June 2016 – September 2016

- **6 weekly workshops** with **12 participants**
- Young people **aged 16-25 years** and family members
- Discussion: **production of the alpha prototype App**
- The **prototype App** was developed December 2016



THE QUALITATIVE FEEDBACK

- The App was described as **helpful, discrete, simple and quick** to use
- **Favourite features** were the **colour slide scale**, the **graphs** and the **lifeline button**
- **Least liked features** were **not having reminders**, the **free text page** and **limited emotions in dictionary**

FUTURE DEVELOPMENTS

- Add a blank **slide scale**
- Add more words to the **emotion dictionary**
- **Personalise the App** i.e. colour scheme choice
- Make the App more **interactive** i.e. add games
- Professionals access the App via a **Dashboard**
- Add **reminders** to complete the App
- Have a “**what helps me**” **toolkit** page

THE EVALUATION PHASE

January 2017 – June 2017

- **13 users** with EOBD **tested the App** for **90 days**
- **6 bi-weekly contacts** (face to face or telephone call) to maintain retention rates [2]
- **10 young people** completed:
 - Satisfaction and Usability Tool**
 - Warwick Edinburgh Mental Wellbeing Scale**
 - Qualitative semi-structured interview** questions

EVALUATION AND FUTURE CONSIDERATIONS

- **Convenient** and accessible (on mobile device)
- **User friendly** design
- **Cost effective** for services
- Possible **information governance** issues
- Co-morbid difficulties may affect use

1. Hidalgo-Mazzei, D., Mateu, A., Reinares, M., Undurraga, J., Mar Bonnin, C., Sanchez-Moreno, J., Vieta, E., & Colom, F. (2015) Self-monitoring and psychoeducation in bipolar patients with a smart-phone application (SIMPLE) project: design, development and studies protocol. *BMC Psychiatry*, 15(52), DOI 10.1186/s12888-015-0437-6. 2. Wright, P., McCarthy, J. (2010). *Experience-centred design: designers, users and communities in dialogue*. Morgan & Claypool Publishers