

ROME



**EUROPEAN
TELEMEDICINE
CONFERENCE**

7-8 OCTOBER 2014 | ROME, ITALY

TELEPSYCHIATRY AT UPMC

PAST, PRESENT AND FUTURE

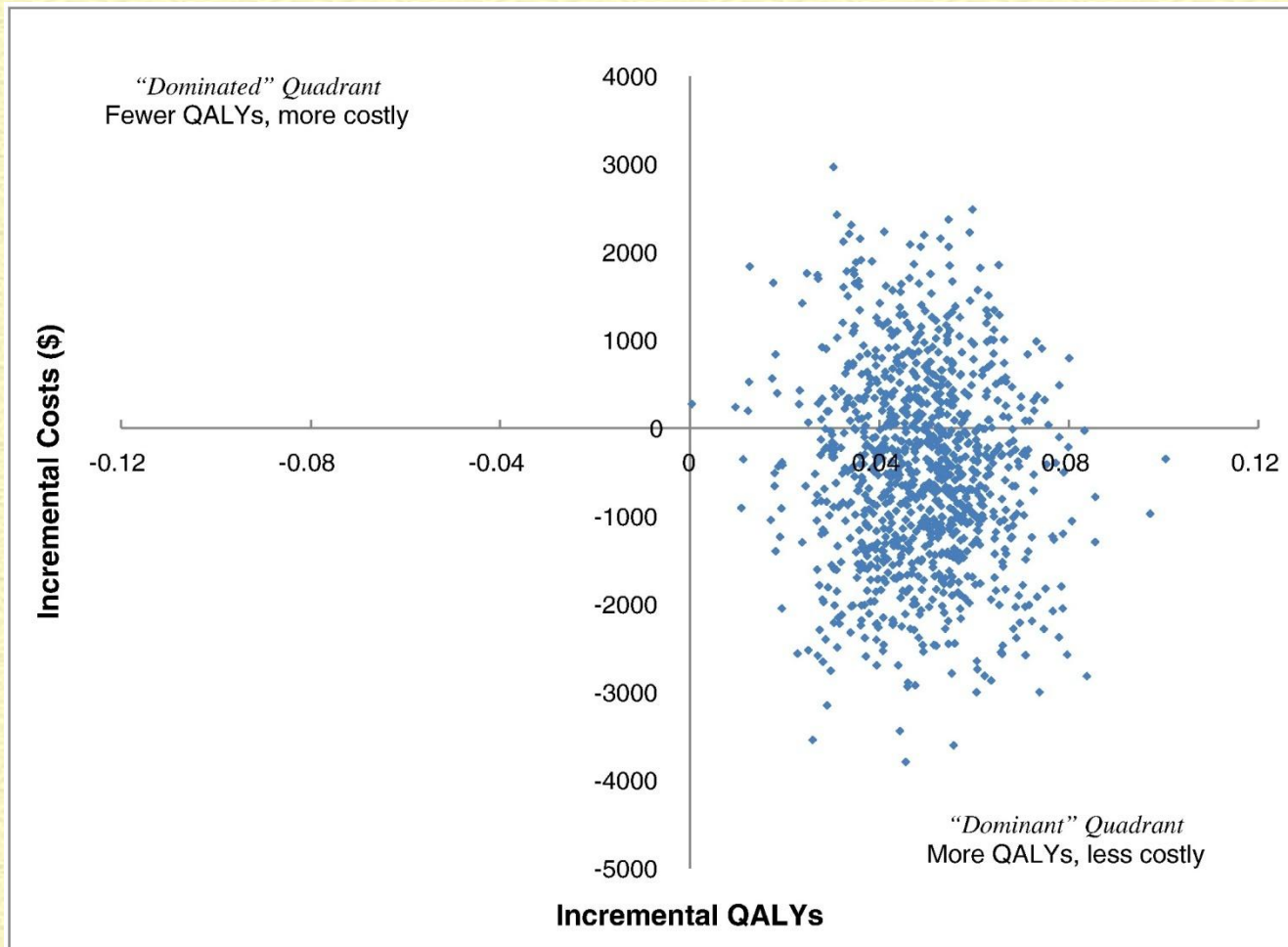




**BYPASSING THE BLUES: TELEPHONE-
DELIVERED COLLABORATIVE CARE
FOR TREATING DEPRESSION
FOLLOWING CABG SURGERY**

**COST
EFFECTIVENESS**

Estimated Cost-effectiveness of Bypassing the Blues: QALYs vs. Cost



Note: 68% of replications are in the "dominant" (cost-effective) quadrant



ONLINE CBT FOR MOOD AND ANXIETY DISORDERS: EXAMINING THE BENEFITS OF ADDING AN ONLINE SUPPORT GROUP

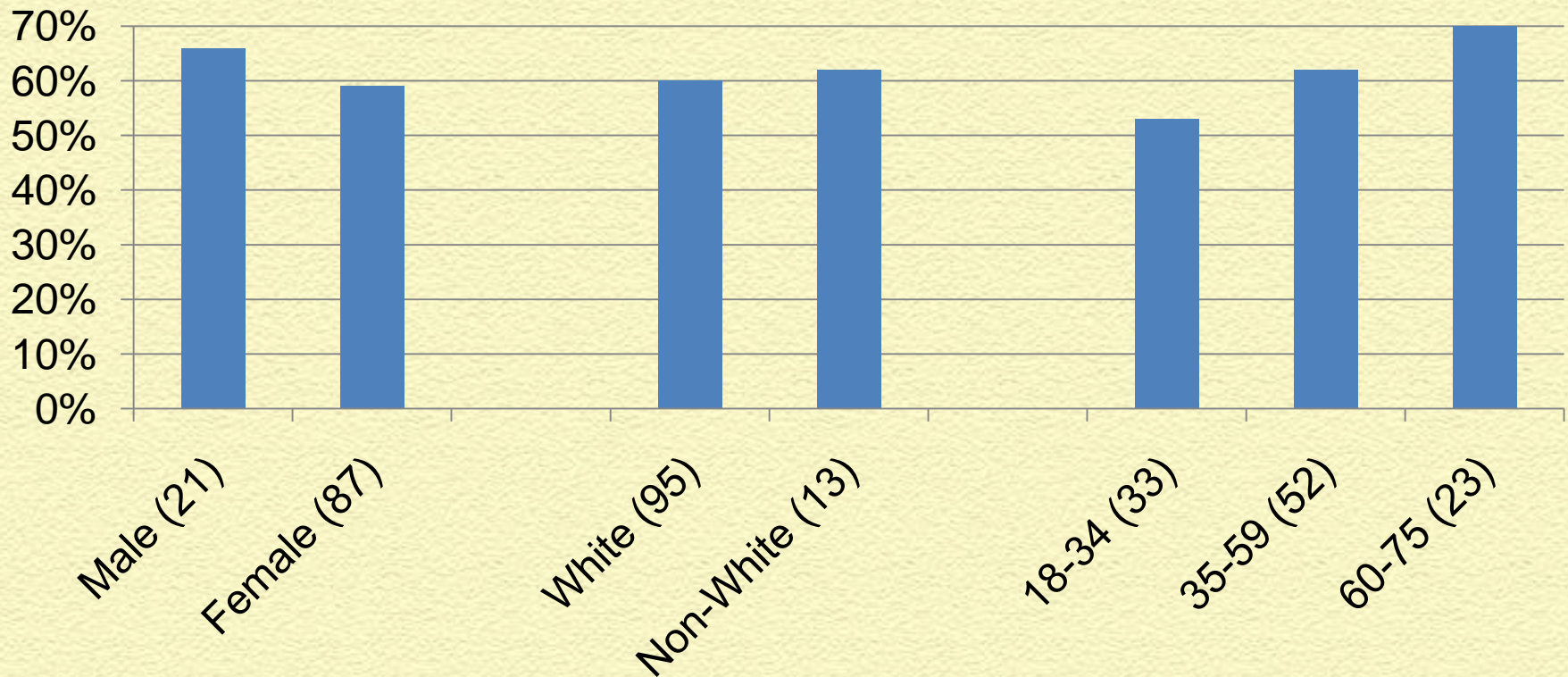


Online Treatment for Mood and Anxiety Disorders

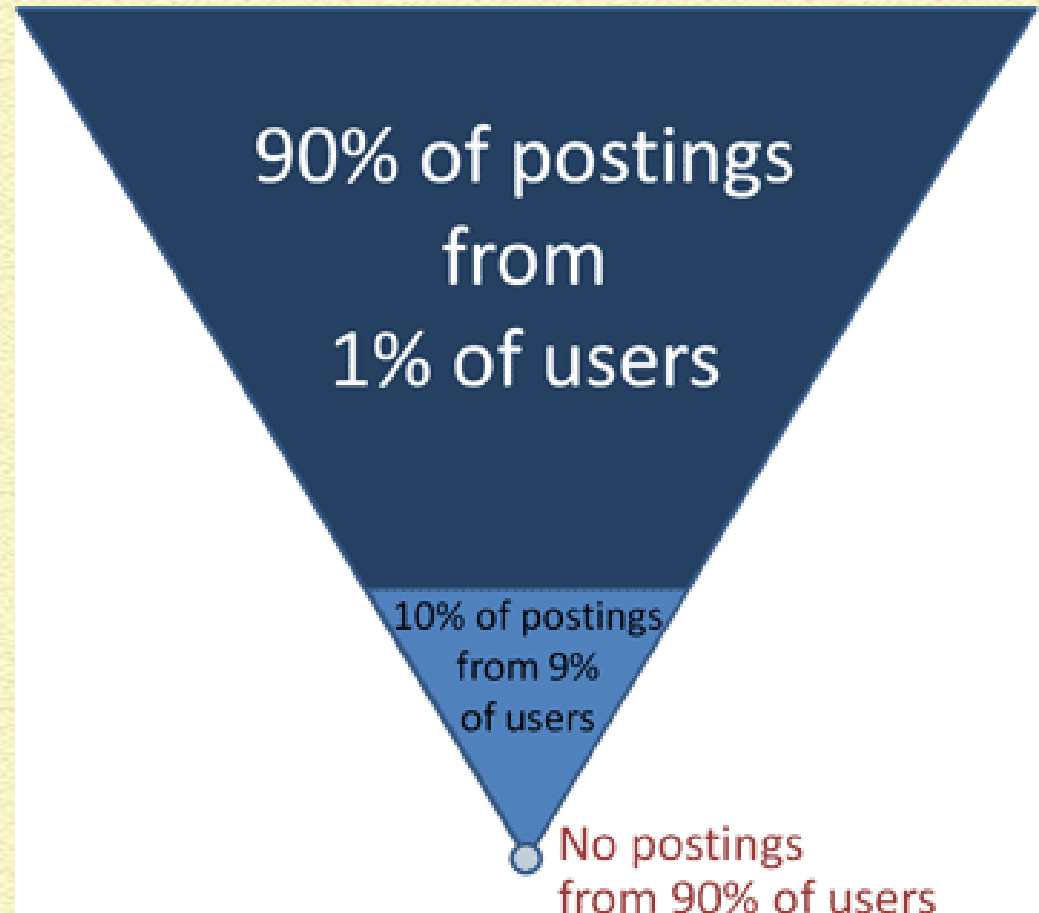
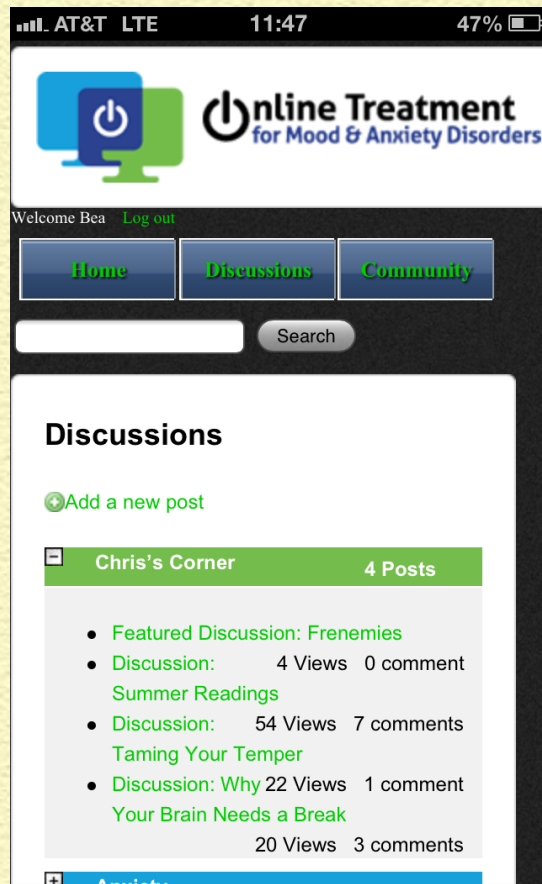
- 1) Computerized CBT program
(*Beating the Blues*)
- 2) \pm Internet Support Group
- 3) Asynchronous communications (HealthTrak,
secure e-mail)
- 4) Powered within age strata (18-34, 35-59, 60-75)



Among Beating the Blues Completers to Date: $\geq 50\%$ Decline in PHQ-9 Scores



Challenge: Engaging Patients in the Internet Support Groups





E-HEALTH MULTI- FAMILY PSYCHOEDUCATIONAL TREATMENT FOR SCHIZOPHRENIA

Multi-Family Psychoeducational Treatment for Schizophrenia: Intervention Components - I

- Home PC or mobile device and phone delivery
- Daily Support Website components
 - Therapist-facilitated bulletin board/ group psychoeducational forum
 - Persons with schizophrenia-only
 - Family members/supporters only
 - Persons with schizophrenia and family members/supporters
 - Educational materials: designed for cognitive impairment
 - Ask our Experts
 - Library of previously asked and answered questions

Multi-Family Psychoeducational Treatment for Schizophrenia: Intervention Components - II

- Early warning signs monitoring
 - Via encrypted SMS/Text messaging
 - Phone-based interactive voice response
- Reminders (e.g., appointments, medications)
 - Via encrypted SMS/Text messaging
 - Phone-based interactive voice response

**This model is currently being studied at
10 sites across the US.**



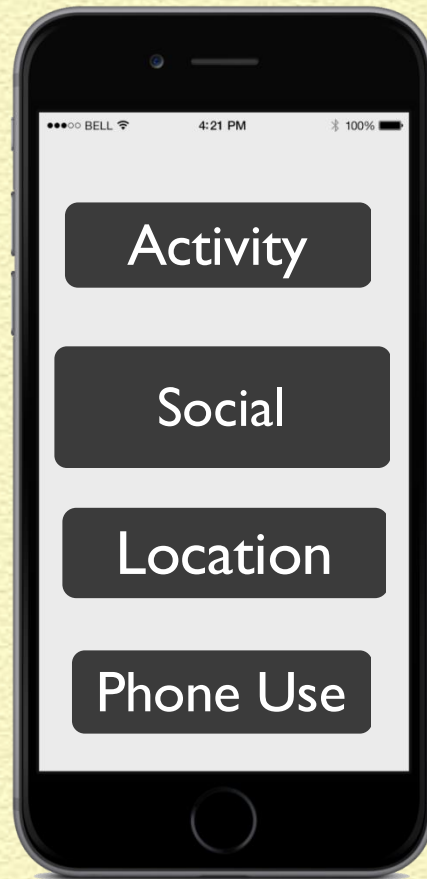
SMARTPHONE TECHNOLOGY AND MANAGING BIPOLAR DISORDER: A “MARRIAGE MADE IN HEAVEN”

What's key for patients and clinicians to know to manage bipolar disorder?

- Sleep/wake patterns
- Activity levels and patterns
- Social interaction levels
- Rate and amount of speech
- Other?

What can the smartphone tell us?

- Sleep/wake patterns
- Activity levels and patterns
- Social interaction levels & location
- Rate and amount of speech
- ...and that's all passively.





And what can we learn if we involve patients actively with their phone?

- Specific activities and their timing
- Perceived mood
- Perceived energy

MoodRhythm: an app to support individuals with bipolar disorder to establish stable daily routines

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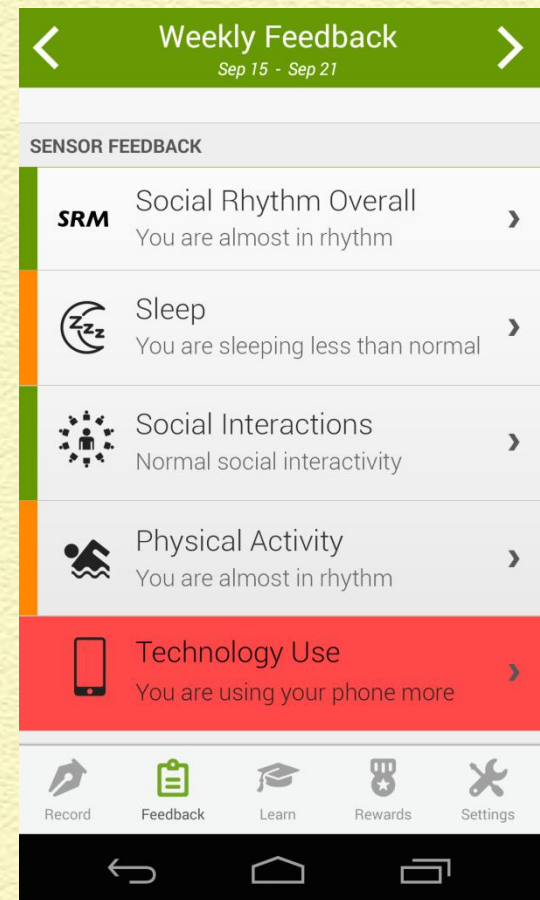
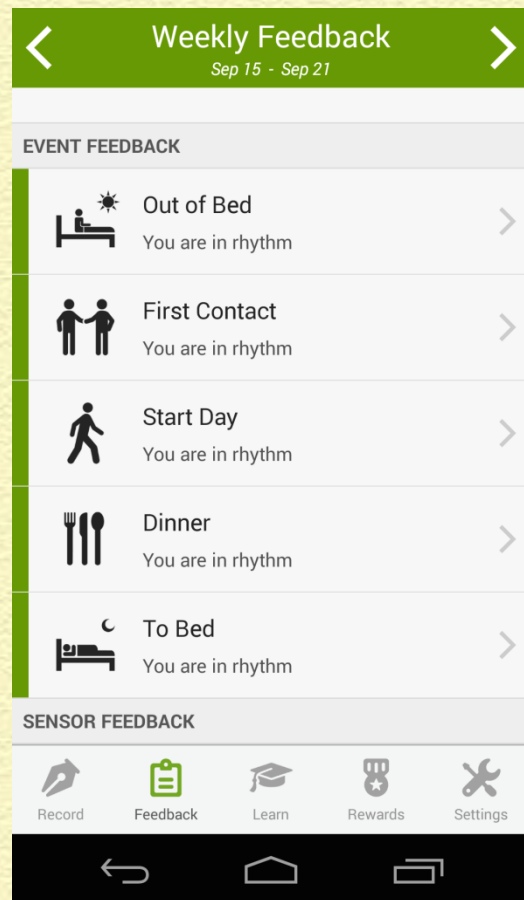
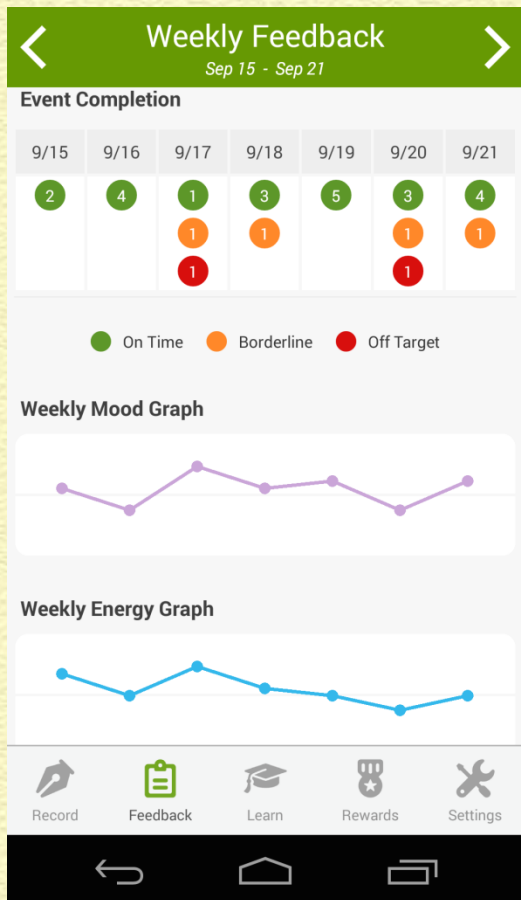


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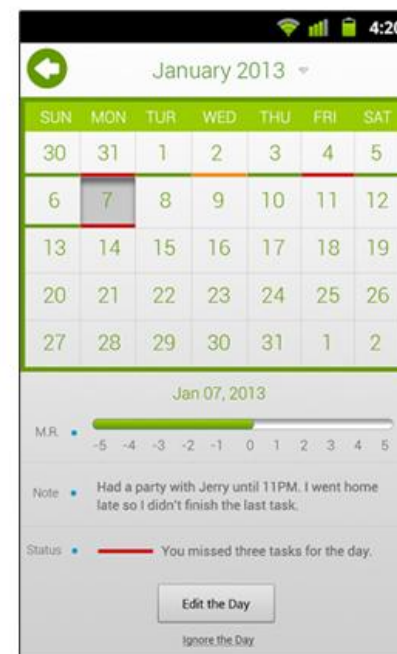
Providing the patient with feedback at a glance



Enriching the Doctor-Patient Interaction

ACCELERATE LEARNING

Enrich the Doctor-Patient Interaction



Challenges:

- How best to get this kind of app into the hands of patients: who pays for this?
- How best to provide useful feedback to patients
- How best to incorporate the app into patients' ongoing care
- How to make it easy and efficient for clinicians to use the information the app can provide