

## **UNIVERSITY** of MARYLAND SCHOOL OF SOCIAL WORK

# Self-Report Medication Adherence Trends After Implementing a Telemedicine Intervention to Individuals with SPMI

### 2018

#### Background

- Individuals suffering from SPMI are at risk for adverse psychiatric, somatic health, and social outcomes with higher rates of heart disease, high blood pressure, obesity, and diabetes
- Essential to controlling chronic psychiatric disorders is improved adherence to prescriptions that address the symptoms and causes of these conditions.
- Adherence rates for SPMI individuals are 50-70%, well under the 80% considered adherent.
- Lack of real-time information on patient adherence leads to medication and dosing changes complicating patient adherence, interfering with the provider-patient relationship and making care coordination more difficult.
- Terrapin Pharmacy and Medherent developed a "smart" vending machine loaded with a 30 days' supply of the consumer's medications.
- Pilot data demonstrated that users were 93% adherent using machine

#### **Study Purpose**

- (1) Assess the correspondence between Medherent activation and medication adherence,
- (2) Assess the clinical effects of the Medherent device, and
- (3) Further refine the device and platform's interface.

The Medherent dispensing device is part of a remote medication management system.

The system includes: activity and automatically populates an eMAR. to monitor dispensing activity of patients in real time and receive alerts for missed doses

 software that monitors medication dispensing an app that can be accessed from other devices

Device is stocked by Terrapin techs with packets that contain patients' oral medications for up to 30 days

Alarm sounds to indicate dose time

"Away mode" option for planned leave of absence

Table 1. D Variables Race White Black All Othe Education Gender **Marital St Never** M Married Separate Widowe **Income So** SSI/SSD TANF Employm Age

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## Methods & Sample

emographic Characteristics for Study Sample (N = 184)						
	N(%)/M(SD)	Category/Range				
	67 (36.6)					
	89 (48.6)					
Races	27 (14.8)					
	127 (69)	HS Diploma or less				
	120 (65.6)	Male				
atus						
arried	138 (75.4)					
	5 (2.7)					
d/Divorced	34 (18.6)					
	5 (2.7)					
urce						
	158 (86.3)					
	13 (7.1)					
ent	5 (2.7)					
	49 (13.2)	20 - 75				

**PHASE 2:** 

- relationships

Study Month	Enrollmt 1 & 2	3	4	5	6	7
Cohort 1	ERL	BL	ТΧ			
Cohort 2	ERL		BL	ТΧ		
Cohort 3	ERL			BL	ТХ	
Cohort 4	ERL				BL	ТХ
Cohort 5	ERL					
Cohort 6						