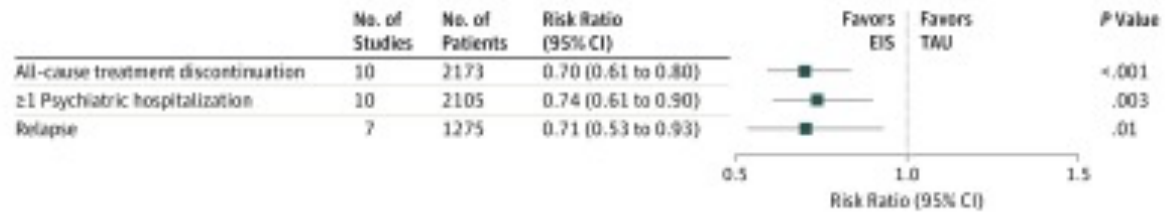


Irene Hurford, M.D.
Clinical Director, PEACE
Program, Horizon House
Director, Pennsylvania Early
Intervention Center
Assistant Professor of Clinical
Psychiatry, Department of
Psychiatry, University of
Pennsylvania

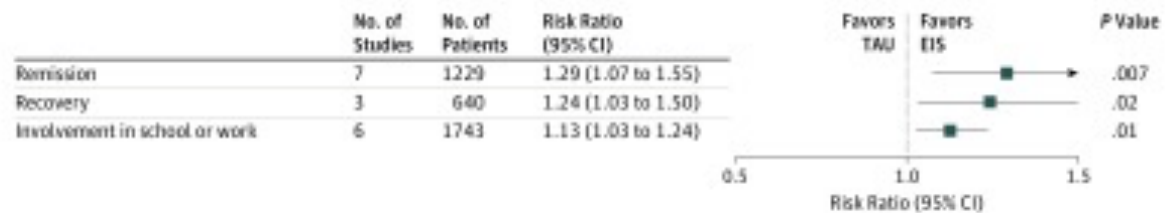
Background of CSC Step-Down Care and the PA Experiment

Benefits of EIP Services vs. TAU – a Meta-Analysis

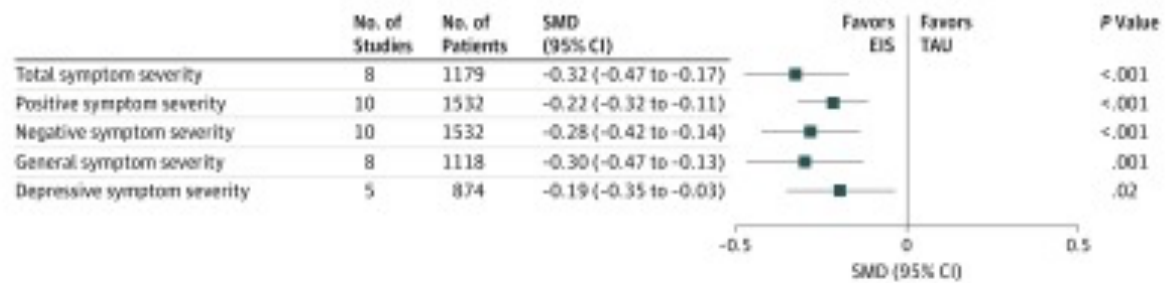
All-cause discontinuation
 ≥1 Psychiatric hospitalization
 Relapse



Remission
 Recovery
 Involvement in school/work



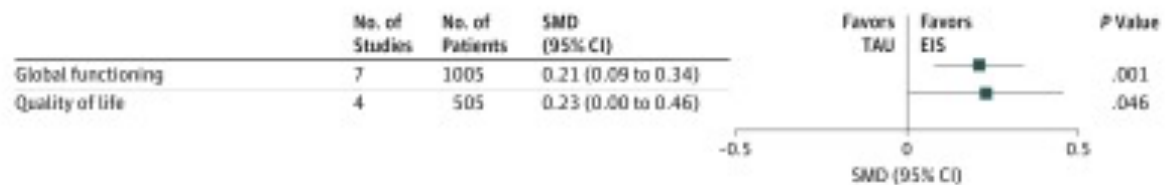
Total sx severity
 Pos sx severity
 Neg sx severity
 General sx severity
 Depressive sx severity



No. of psych hospitalizations
 Duration of psych hospitalizations

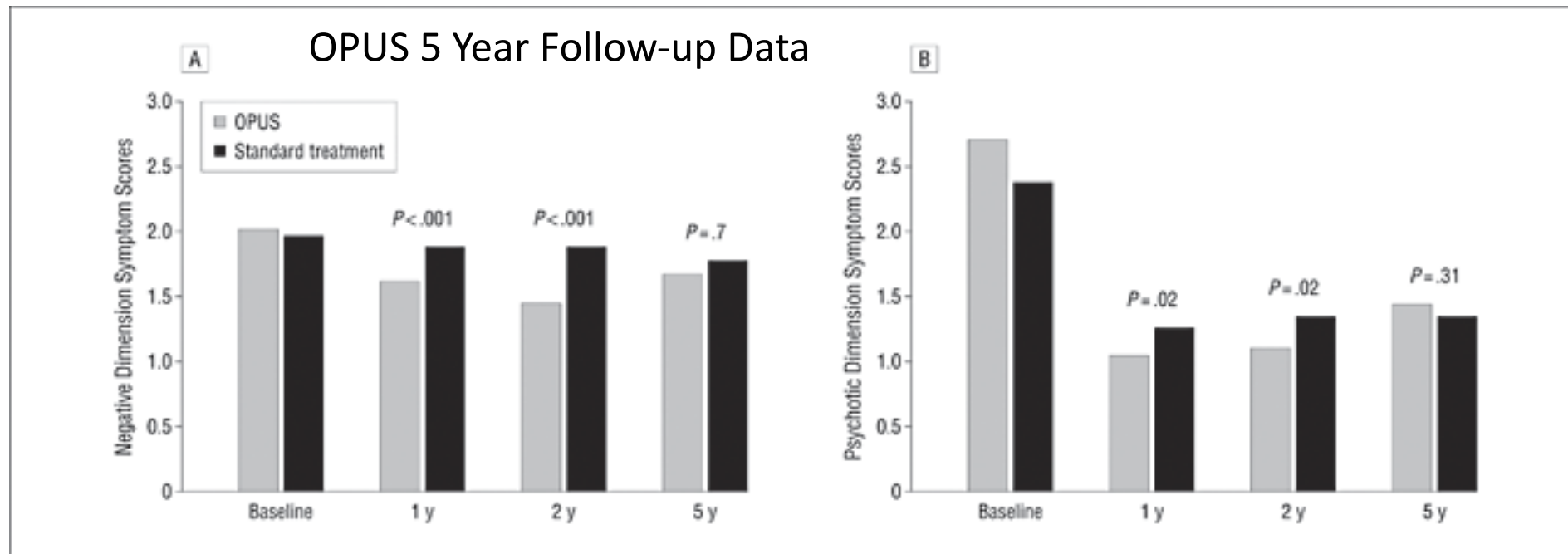


Global functioning
 QOL



Clinical Benefits During and After EIP – OPUS Trial

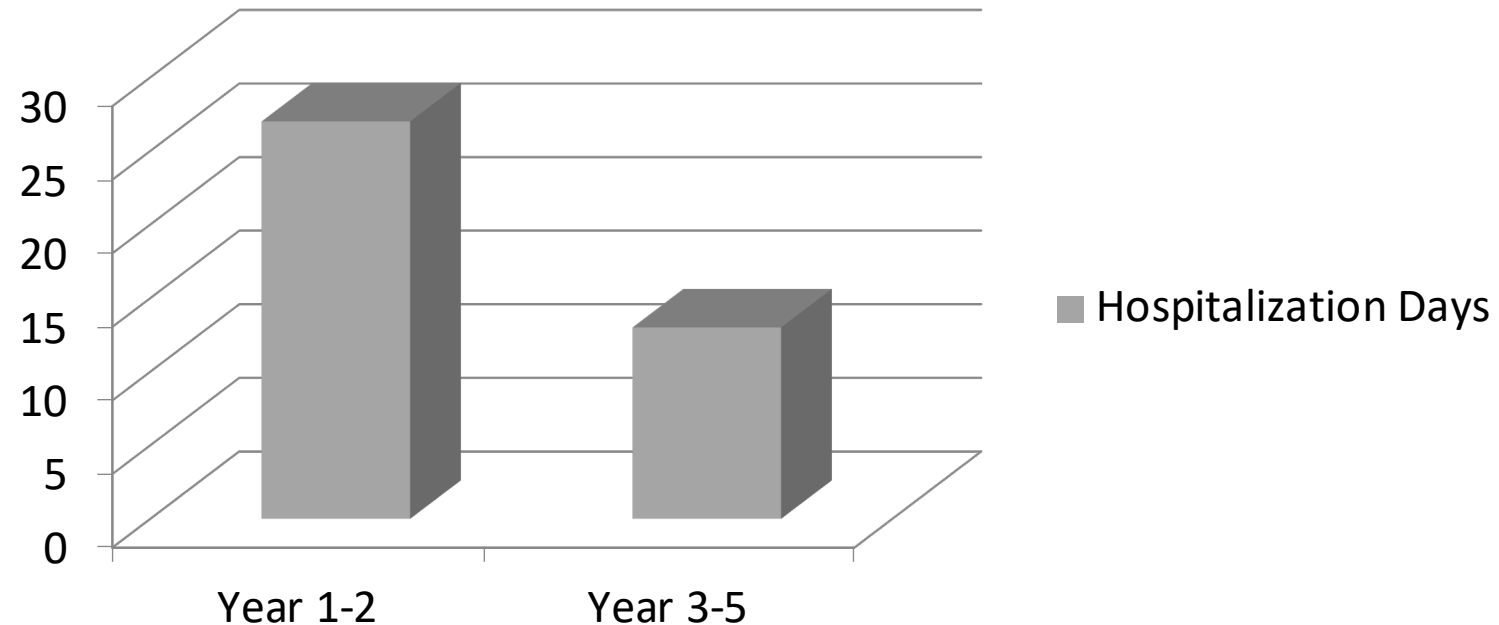
- Symptoms improve in active intensive treatment , but effects appear to dissipate after intensive treatment discontinuation



Functional Benefits

OPUS Trial

of Fewer Hospitalization Days



At 5 years:

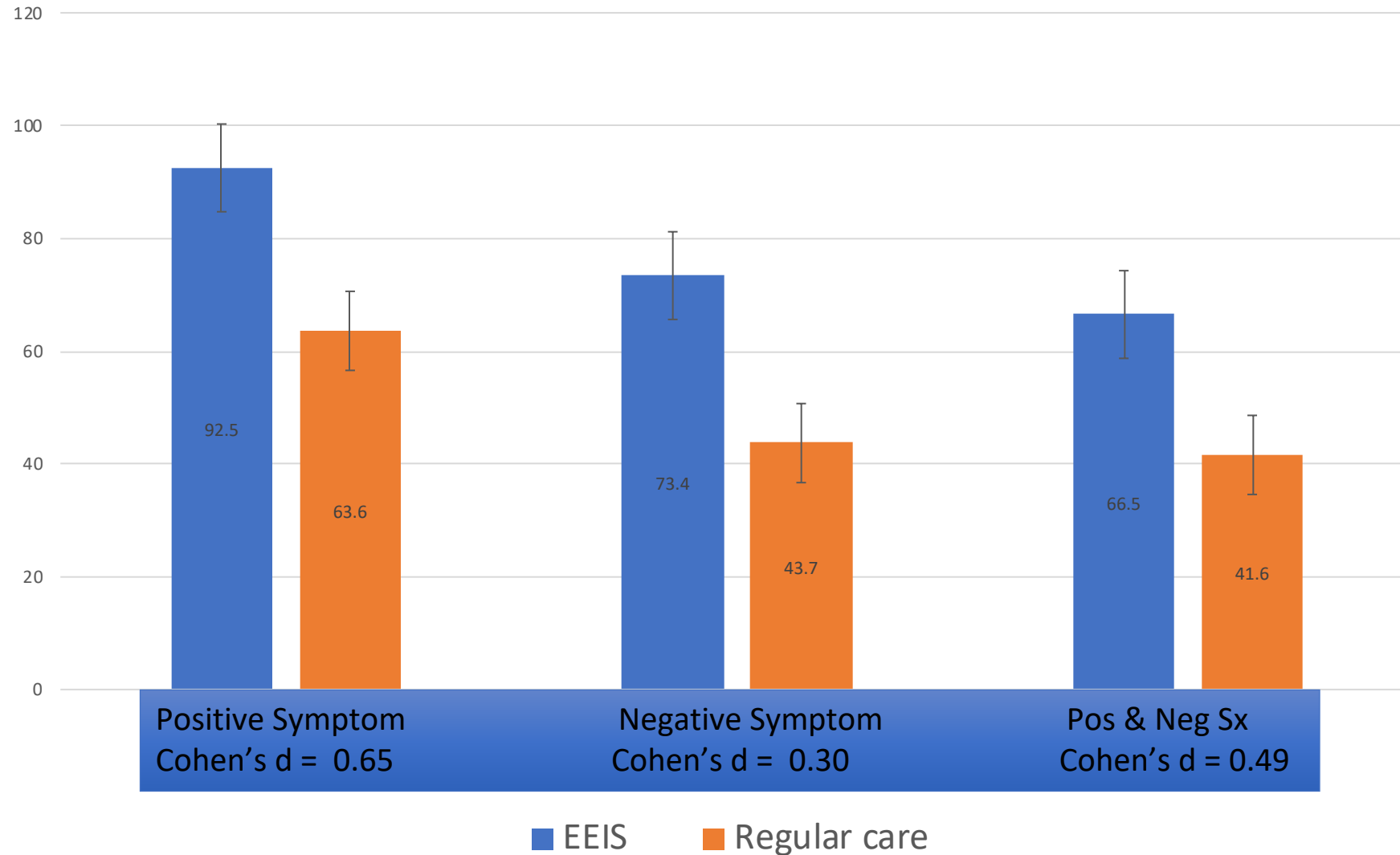
- More intervention subjects living independently
- Fewer intervention subjects using supported housing

At 10 years, all intervention gains had been lost

Discharge vs Post-Discharge Outcomes: EASY Historical Case Control Study

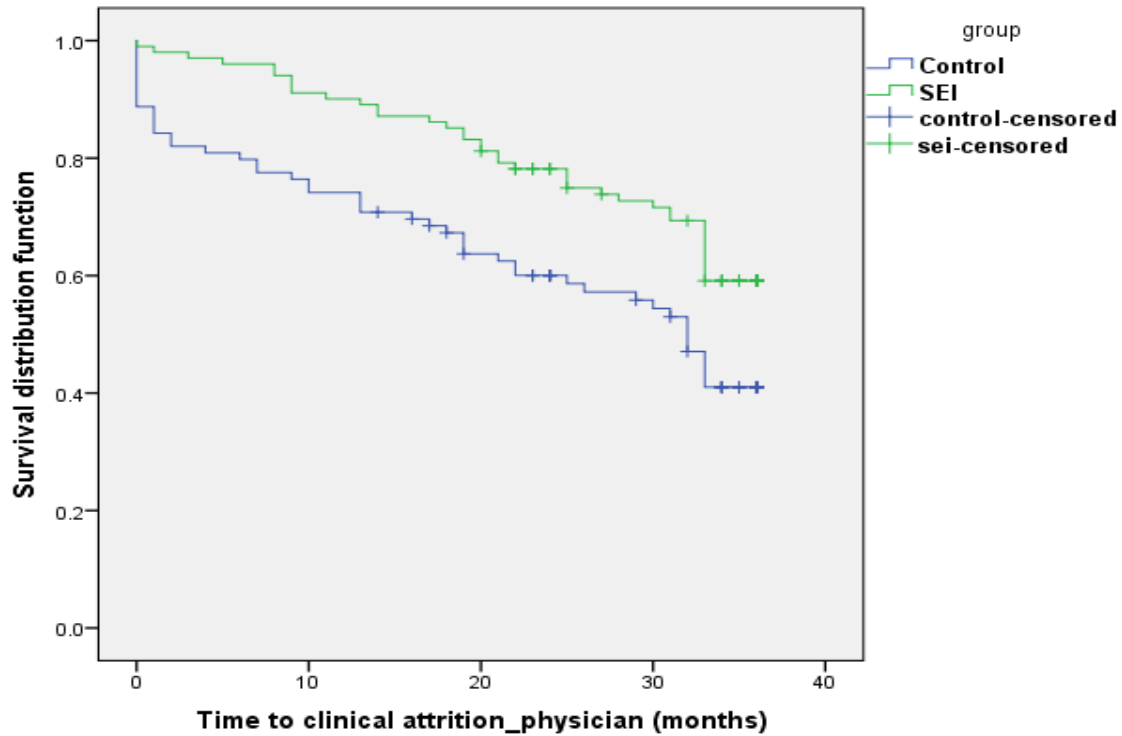
Domain	At EASY Discharge	EASY - Follow-Up
Psychotic Symptoms	-	No difference by 8 yrs post-discharge
Symptomatic Remission	+	No difference by 8 yrs post-discharge
Functional Recovery	+	No difference by 8 yrs post-discharge
Suicide Attempts	-	Fewer attempts over post-discharge period (through 8 yrs post-discharge)
Completed Suicide	-	Fewer suicides over post-discharge period (through 8 yrs post-discharge)
Length of Periods of Employment	+	+ Longer periods of full time employment over post-discharge period (through 8 yrs post-discharge), but diminishing difference
Duration of Hospitalization	-	Reduced duration of hospitalization

Differences in Length of Positive and Negative Symptom Remission in EEIS vs Regular Care (Malla et al 2017)

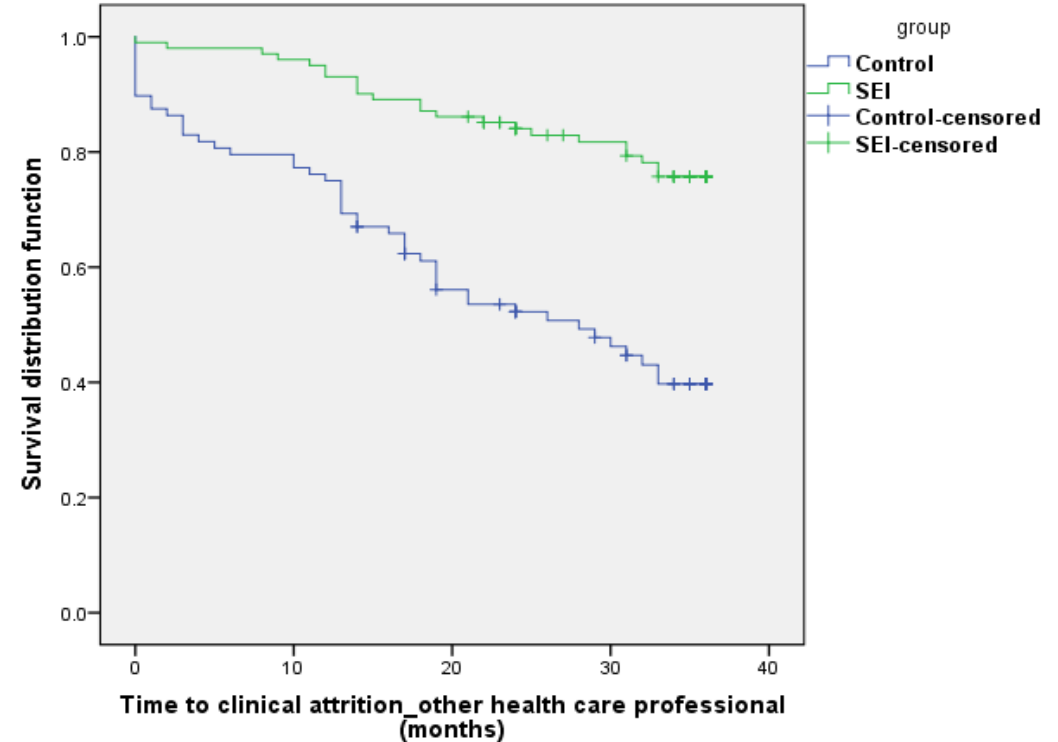


Time to Clinical Attrition

Physician Contact



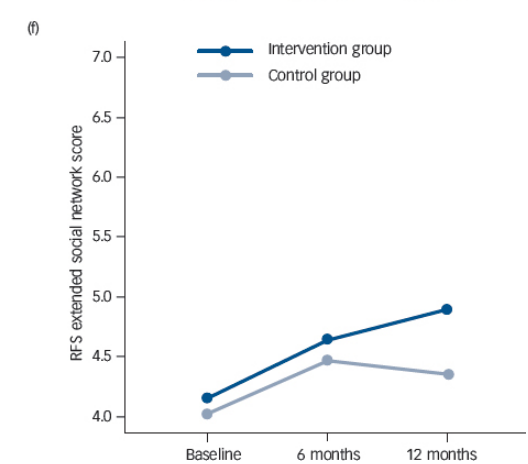
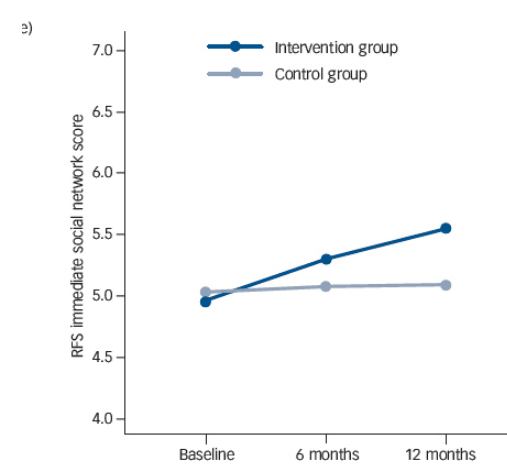
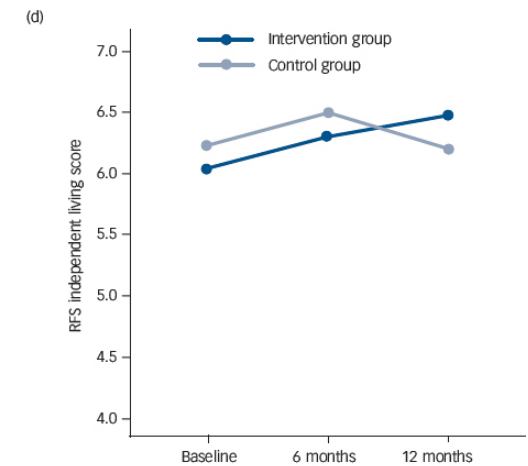
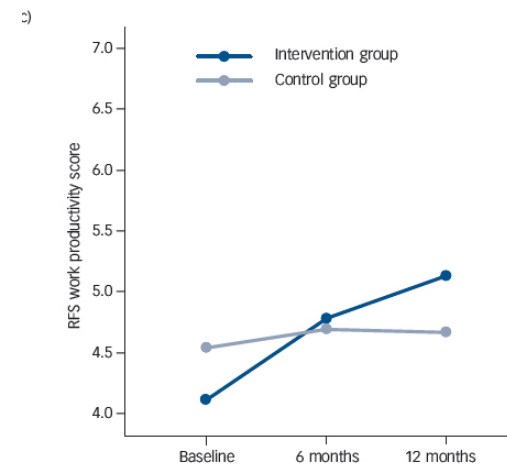
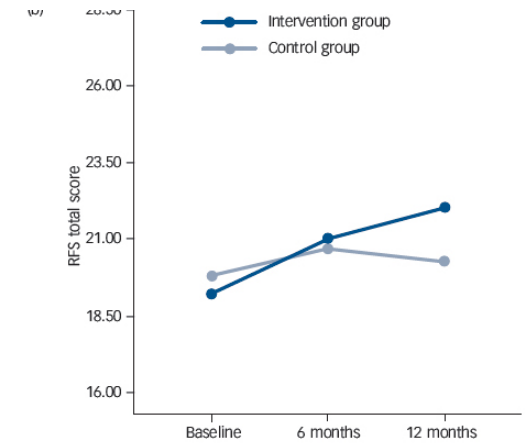
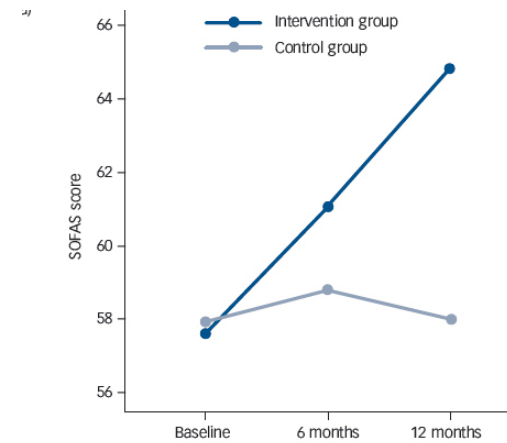
Health Care Professional Contact



Hong Kong EASY – 1 year Extension Study

Functional Outcomes at baseline (after 2 year FEP Program) and after 1 year extension vs. TAU

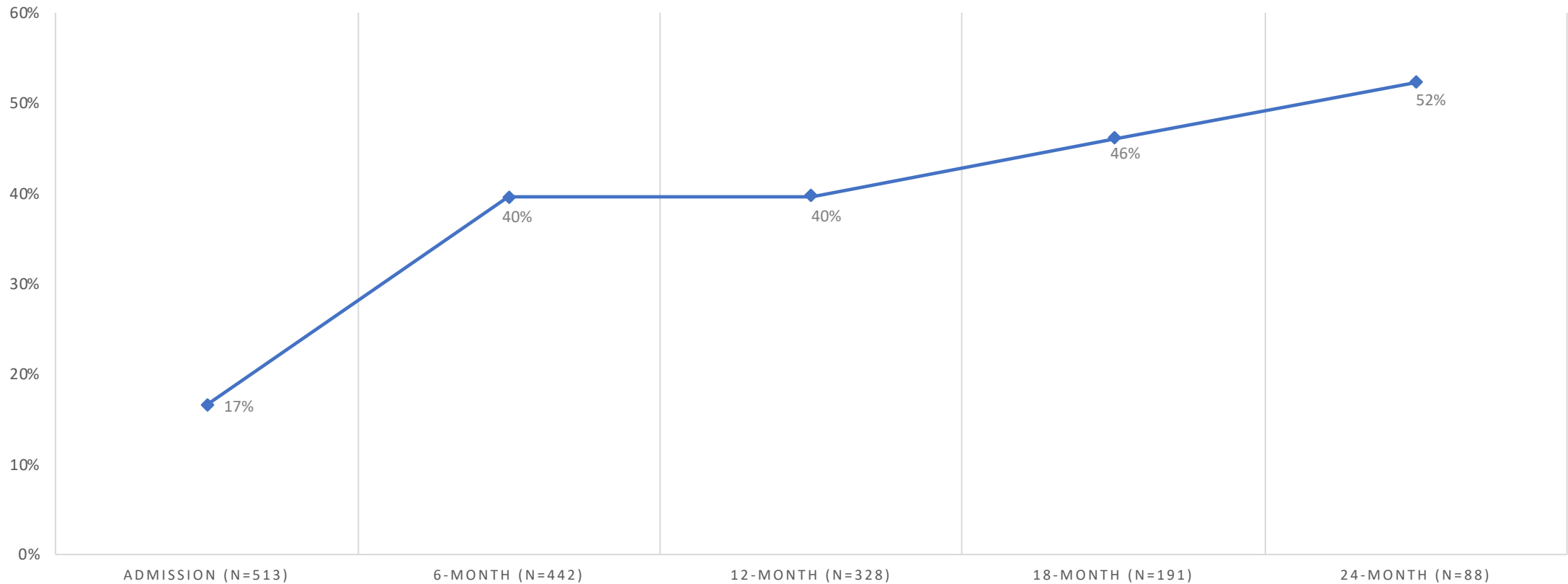
Chang et al. BJP, June 2015



Stepped Care for CSC in PA: The Need and the Model

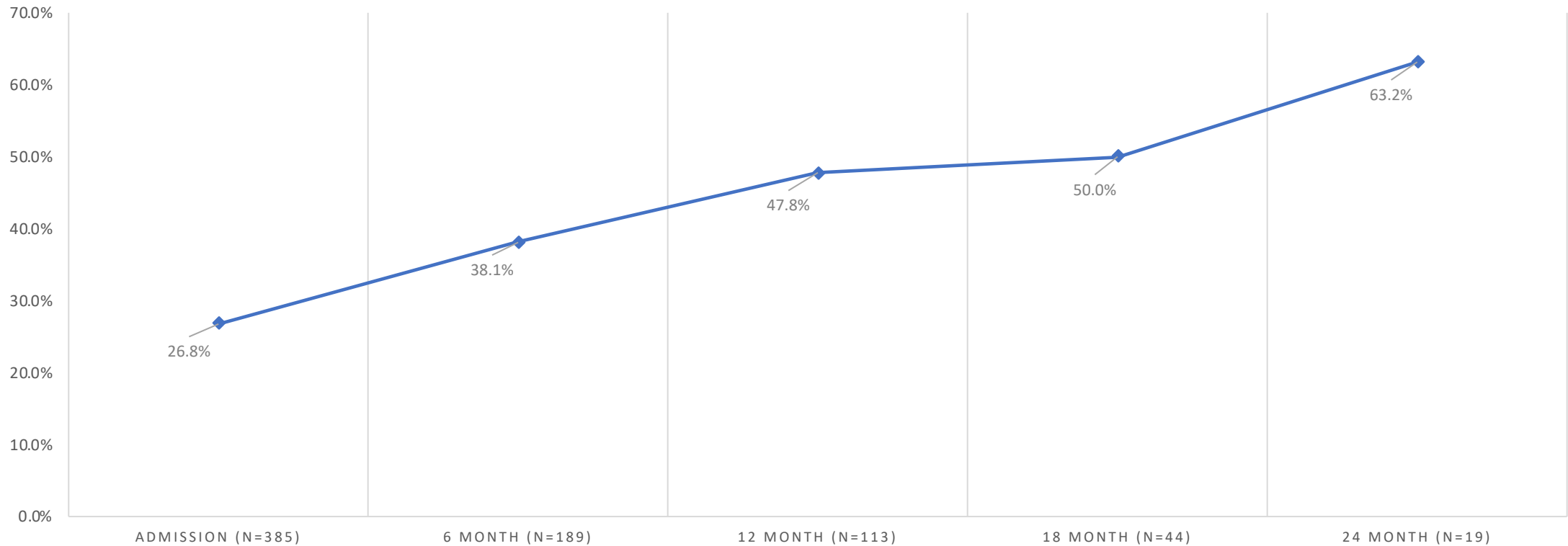
PA State-Wide Program Evaluation - PEIC

PARTICIPANT COMPETITIVE EMPLOYMENT



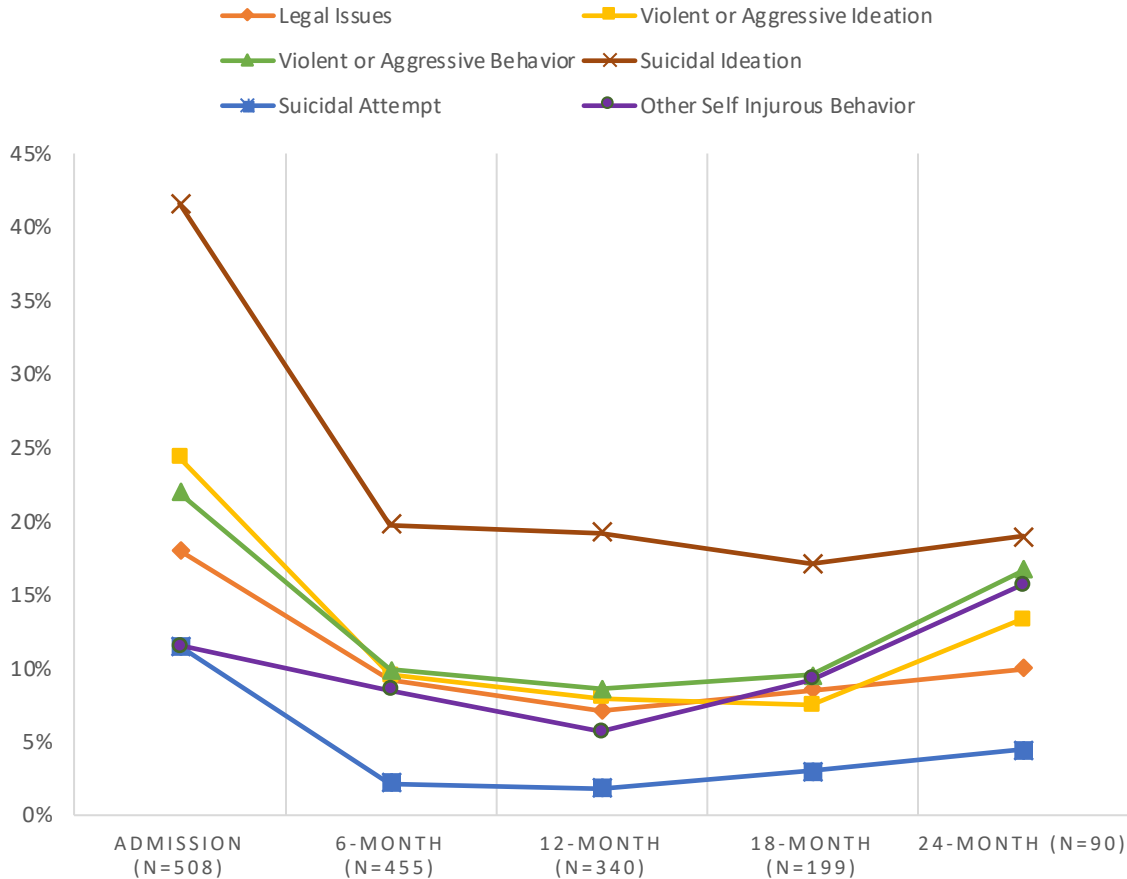
PA State-Wide Program Evaluation - PEIC

**SCHOOL ENROLLMENT FOR PARTICIPANTS
OVER 18 YEARS OLD***

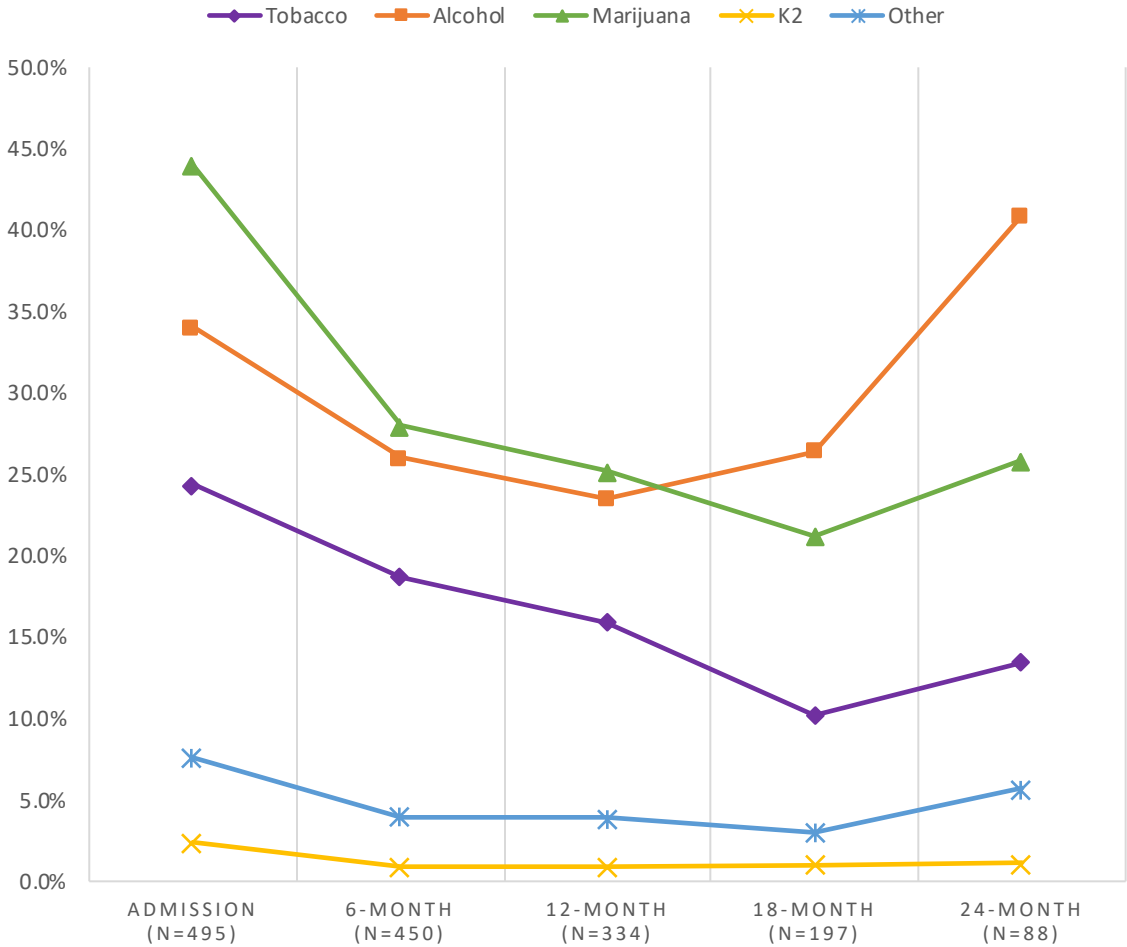


PA State-Wide Program Evaluation - PEIC

ADVERSE BEHAVIOR

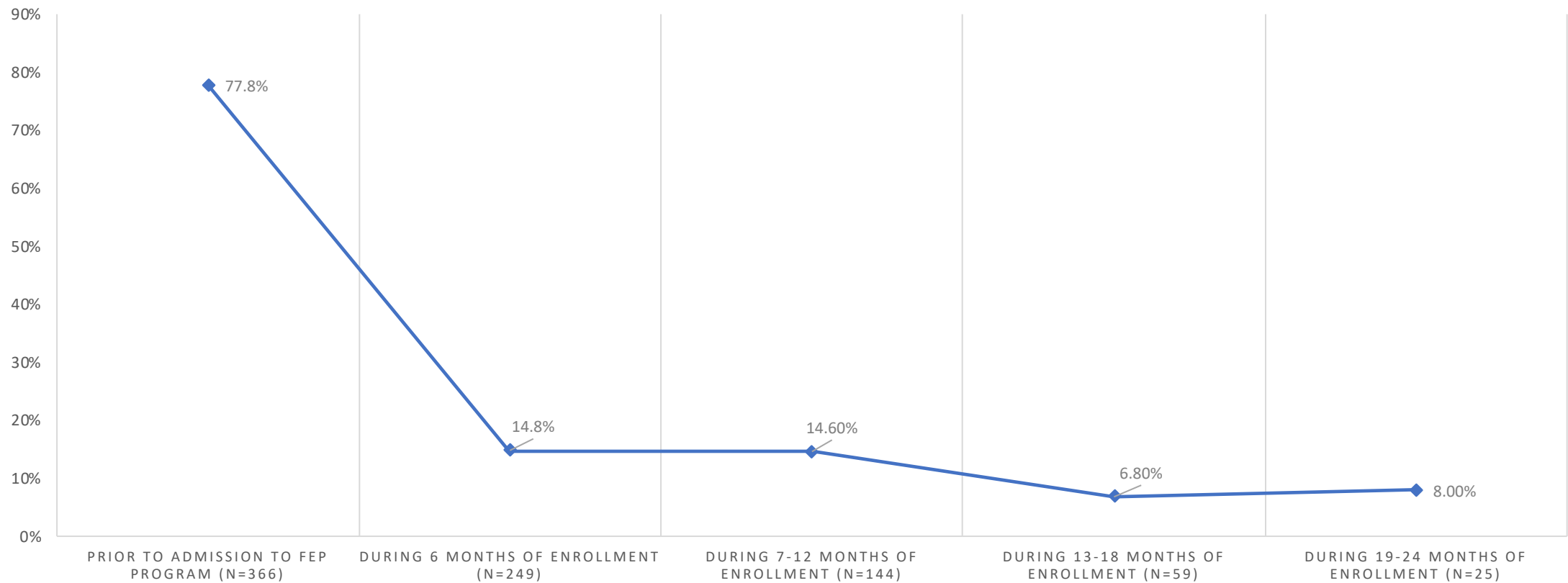


SUBSTANCE USE



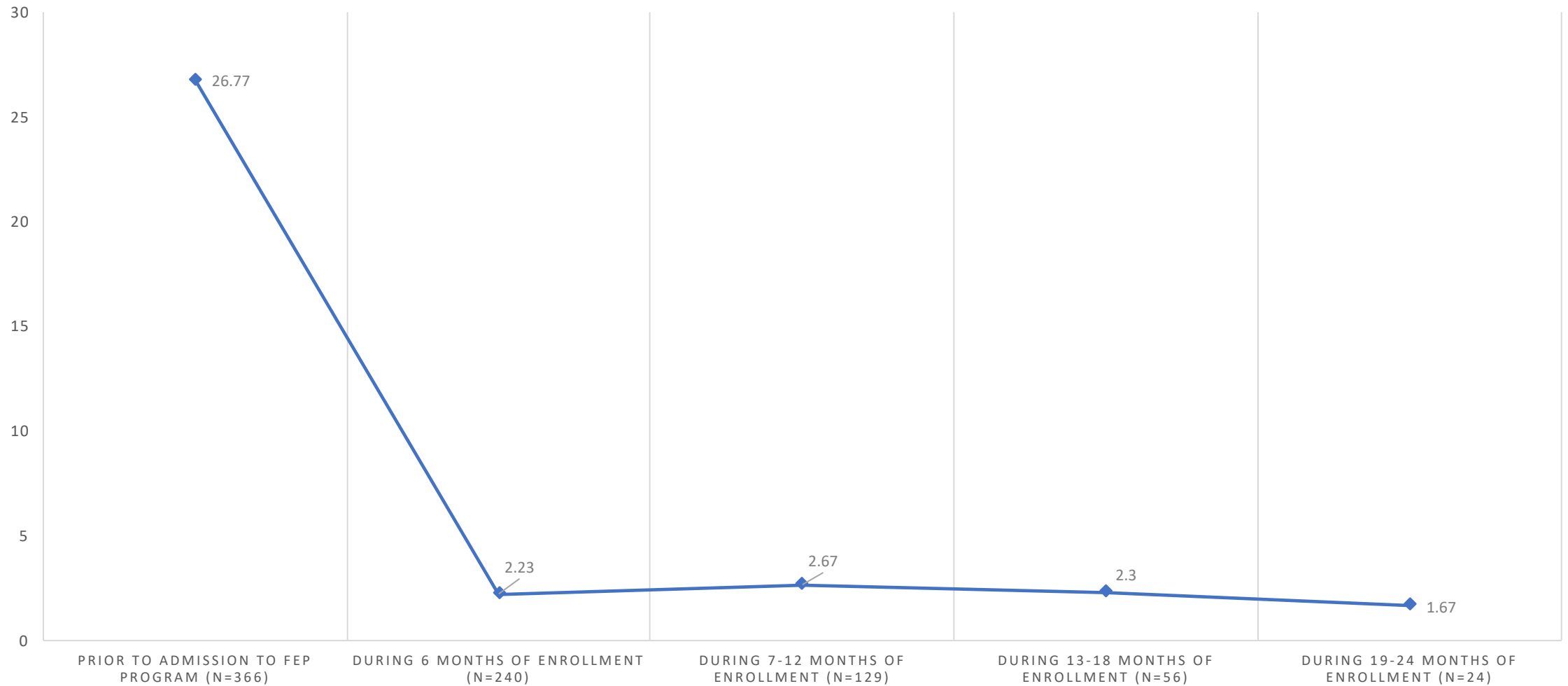
PA State-Wide Program Evaluation - PEIC

PERCENT OF PARTICIPANTS WITH INPATIENT PSYCHIATRIC HOSPITALIZATIONS



PA State-Wide Program Evaluation - PEIC

AVERAGE NUMBER OF HOSPITAL NIGHTS PER PARTICIPANT

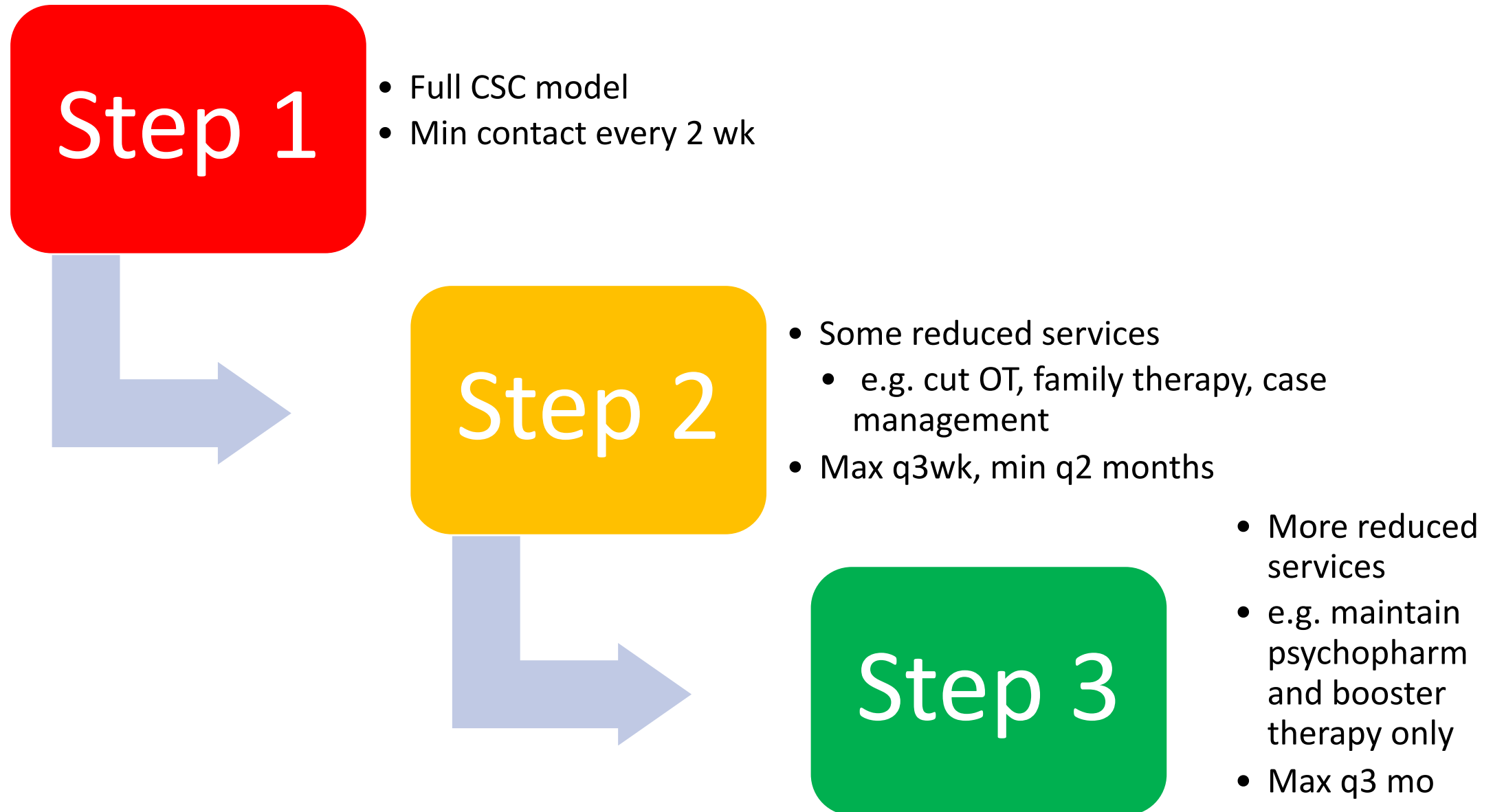


Findings from an informal follow-up call 12 months after PEACE graduation

Engagement in Aftercare Services						
	Number	Aftercare Service Engagement Challenges				Total Endorsing Aftercare Challenges
Engaged in Mental Health Services at Follow-Up	15	Excessive time to be admitted to service		1	5	
		Excessive time to get appts. (first appt. or between appts.)		2		
		Unsatisfied with service/ wants a different service		2		
NOT Engaged in Mental Health Services at Follow-Up	9	Not in service, would like to engage service	4	Was in service, withdrew b/c unsatisfactory	2	4
Total Contacted	24					9

^[1] The 2 respondents “in service, withdrew b/c unsatisfactory” are also included in the 4 “not in service, would like to engage service” in the previous column.

Stepped Care Model Pilot Program in PA



SITE	STEP 3 - High Intensity - Full FEP Program			STEP 2 - Moderate Intensity				STEP 1 - Low Intensity				NOTES				
	Service	Intensity	Billing	Criteria for Step Down	Service	Intensity	Billing	Criteria for Step Down	Service	Intensity	Billing					
Safe Harbor	Individual therapy	Weekly - more if needed	Fee for service	Completed 2 years of treatment or deemed ready for step down sooner than 2-years	Individual therapy	Bi-weekly	Fee for service	Deemed ready for step down	Individual therapy	Bi-weekly or monthly	Fee for service	Goal for 20 individuals				
	Family Therapy	Bi-weekly or weekly	Fee for service/Grant Funds		Family Therapy	Bi-weekly	Fee for service/Grant Funds		Family Therapy	Monthly	Fee for service/Grant Funds	Can step down before 2 years				
	Med Mgmt	Monthly	Fee for service		Med Mgmt	Every 6-8 weeks	Fee for service		Med Mgmt	Every 8-12 weeks	Fee for service	Non-specific guidelines for moving between steps				
	Case Mgmt	Weekly	Fee for service		Case Mgmt	Bi-weekly	Fee for service		Case Mgmt	D/C	Fee for service					
	SEE	Weekly	Grant funds		SEE	Weekly	Grant funds		SEE	Weekly	Grant funds					
	Peer	Weekly	Fee for service		Peer	Bi-weekly	Fee for service		Peer	Bi-weekly	Fee for service					
	Multi-family group	Weekly - more if needed	Grant funds		Multi-family group	Weekly - more if needed	Grant funds		Multi-family group	Weekly - more if needed	Grant funds					
STEP	Therapy	1-2 weeks	Fee for service	Reductions in symptoms, developed a safety plan and practice coping skills, they have identified recovery goals with continued progress and active participation in treatment	Therapy	Monthly	Fee for service	Goals related to functioning, have stable relationships and housing, and are focused on continued maintenance of wellness	Therapy	Every 2 months	Fee for service	Offers 5 years of treatment in FEP				
	Med Mgmt				Med Mgmt				2 years in FEP, then can step down							
	Blended Service Coordination				Blended Service Coordination				Have defined measures for moving between steps							
	Vocational Services				Vocational Services											
	Peer				Peer											
	Clinical Pharmacy				Clinical Pharmacy											
PERC	Transition planning	Weekly for months 1-3, then biweekly, in-person	Fee for service	Chronic residual symptoms or remission < 6 months	Transition planning	Biweekly during month 1-3, then monthly - can be teletherapy	Fee for service	In remission > 6 months	Transition planning	Monthly during months 1-3, teletherapy	Fee for service	Defined thresholds between steps				
	CT-R				CT-R											
	Case Mgmt				Case Mgmt											
	Med Mgmt	Transferred within month 1-3			Med Mgmt	Transferred within month 1-3			Med Mgmt	Transferred within month 1-3						
	Peer	Throughout			Peer	Continued through month 1-3, then as needed			Peer	As needed						
	Engagement in occupational, educational or volunteer services				Engagement in occupational, educational or volunteer services											
On My Way	Therapy	3x a month - minimum	Case Rate	2 years in FEP, not currently suicidal/homicidal, not required inpatient hospitalization within the 2 months prior, secured or are interested in securing employment or continuing their education, have a commitment to continuing treatment. Re-evaluated every 90 days	Therapy	2x a month - minimum	Grant Funding, Reduced Case Rate (anticipated at some point during fiscal year)	Not currently suicidal/homicidal, have maintained Moderate Level of care successfully for at least 6 months and have remained stable, requiring no inpatient hospitalization for at least one year. Re-evaluated every 120 days.	Therapy	2x a month - minimum	Fee for service	2 years in FEP, then can step down				
	Peer	2x a month - minimum			Peer	1x a month - minimum			Peer	1x a month - minimum		Peer	1x a month - minimum	Peer	1x a month - minimum	Defined measures for moving between steps
	SEE				SEE				Do not allow "step up" back into high intensity; if needed, referred out of program to another							
	Med Mgmt				Med Mgmt				Can move between moderate and low							
	Case Mgmt				Case Mgmt				Defined time periods for re-evaluation between steps							
HOPE	Psychiatrist/CRNP	Every 2-3 weeks	Outpt bill to insurance	Improved functioning in daily living, academics/employment. Social engagement. Decrease in frequency of discipline visits. Independently uses family and community supports. Able to transition services in last 6 months	Psychiatrist/CRNP	Monthly or PRN 1-2x/month	Outpt bill to insurance	Functioning well w/ minimum staff interaction. Employed/Volunteer work. Academically stable. Symptom control. Continuing to use family/ community supports independently. Continuing with medicine management (if	CPS	Monthly or as needed	Billing CCBH	Defined thresholds between steps				
	Mobile Therapist	Weekly	Billing CCBH		Mobile Therapist				As needed			Billing CCBH	BCM	Defined duration for moderate intensity step		
	CPS				BCM	2 years in FEP, then can step down										
	BCM				SEE		Grant funds									
	SEE	Weekly	Grant funds													
PEACE	Individual Therapy	Meet with at least two Weekly or Bi-weekly	CBH	Completed 2 years of CSC program or at least 1 year and clinically ready for reduction in services. Treatment plan to be re-evaluated every 6 months	Individual Therapy	Meet with at least two Monthly	CBH	PEACE does not offer 3rd Tier of reduced services in proposal				Can move back up into high-intensity care				
	Family Therapy				Family Therapy				Have re-admits to FEP Program							
	Med Mgmt				Low Dose Med Mgmt				PEACE refers to steps as Tier 1 (high intensity) and Tier 2 (decreased intensity)							
	Peer				Peer				Threshold for moving up or down not specifically defined							
	Occupational Therapy				Occupational Therapy											
	SEE				SEE											
	Social Groups				Social Groups											
ENGAGE	Individual therapy	2-3x Weekly	Fee for service, Base funds, supplemental grant funding. *Case-rate if negotiated successfully	Completion of 2 yrs in FEP program, sustaining life goals in terms of education, work and relationships	Individual therapy	1-2x Weekly	Fee for service, Base funds, supplemental grant funding. *Case-rate if negotiated successfully	Clinically ready, parameters not clearly defined	Individual therapy	Weekly or bi-weekly	Fee for service, Base funds, supplemental grant funding. *Case-rate if negotiated successfully	2 years in FEP, then can step down				
	Med Mgmt				Med Mgmt				No specific time period for re-evaluation							
	Case Mgmt				Case Mgmt				Non-specific guidelines for moving between steps							
	Peer				Peer											
	SEE				SEE											
					Cognitive Enhancement											