

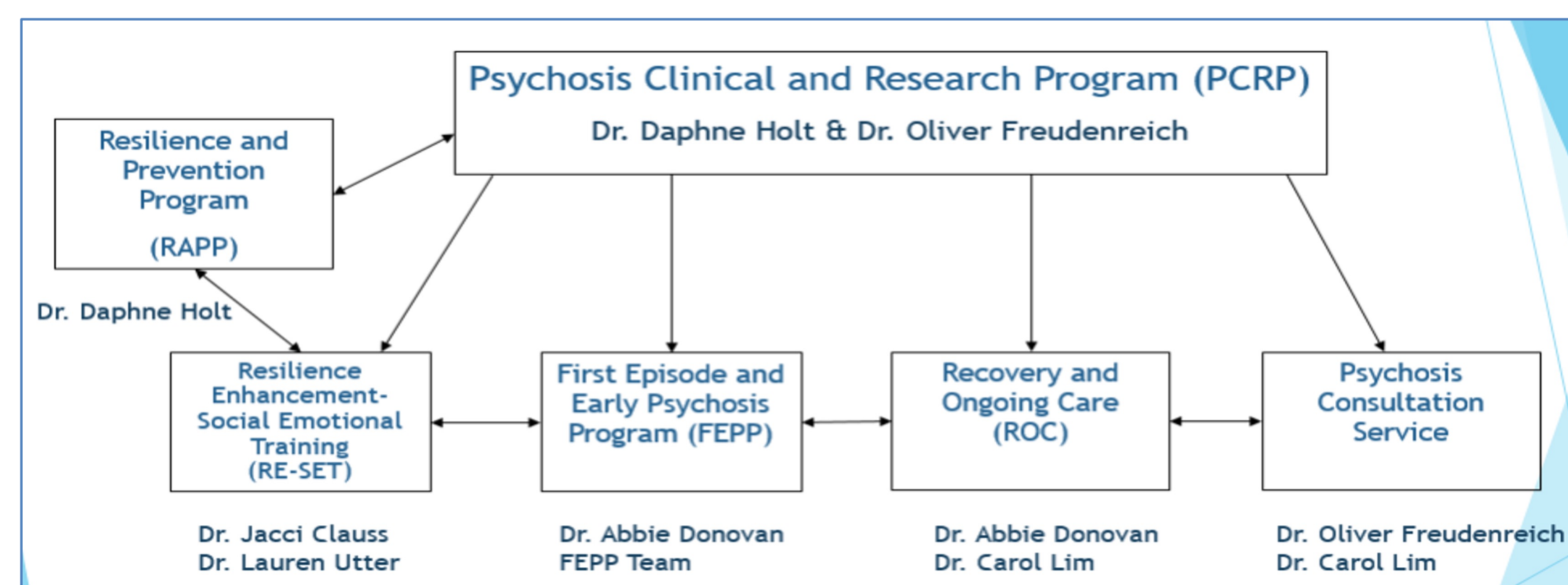
A real-world approach to screening for attenuated and early psychotic symptoms: application to the MGH Psychosis and Clinical Research Program referral database

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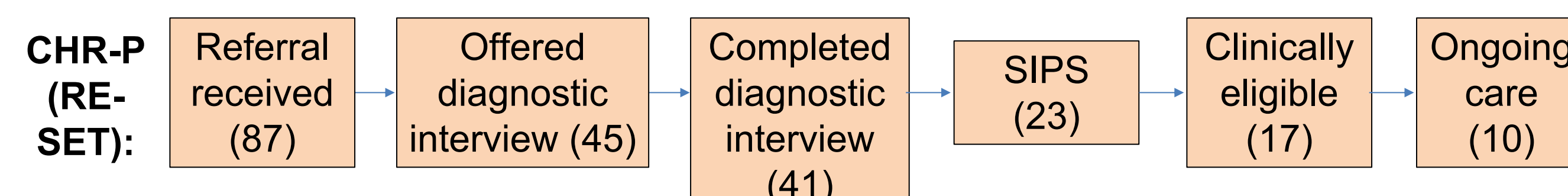
INTRODUCTION

- Having a psychotic-like experience, including hearing voices or sounds, seeing shadows or other visual experiences, or having disorganized thoughts is relatively common (20% in early adolescence, 7% in late adolescence); however, these experiences are associated with increased risk for poor functioning and significant psychiatric symptoms.¹
- When psychotic-like experiences are persistent or distressing, the individual may meet criteria for clinical high-risk for psychosis (CHR-P) and may benefit from specialized treatment within a CHR-P specialty program.²
- Unlike suicidality or substance use, screening for psychotic symptoms is not routine, even within general psychiatry practices, contributing to more undetected psychosis and longer duration of untreated psychosis.³
- Brief, low-burden screening measures are needed to improve identification of individuals experiencing attenuated or early psychotic symptoms.
- This study evaluated the performance of the Adolescent Psychotic-Like Symptom Screener (APSS) against gold standard assessments of clinical diagnosis for psychotic risk syndromes in a help-seeking clinical population.**



METHODS

- The MGH Resilience Evaluation-Social Emotional Training program (RE-SET) offers evaluation and treatment for individuals with psychosis-risk syndromes.
- 87 clients, caregivers, or current treaters completed an online screening form that included the 7-item Adolescent Psychotic-Like Symptom Screener (APSS)⁴ between May 2021 and December 2022.
- 41 eligible individuals received clinical diagnostic interviews.
- Based on eligibility from diagnostic interview, 23 participants further completed the Structured Interview for Psychosis-risk Syndromes (SIPS).⁵
- We constructed receiver operating characteristic (ROC) curves for various APSS item combinations, with meeting CHR-P or psychotic disorder criteria as outcome measures.



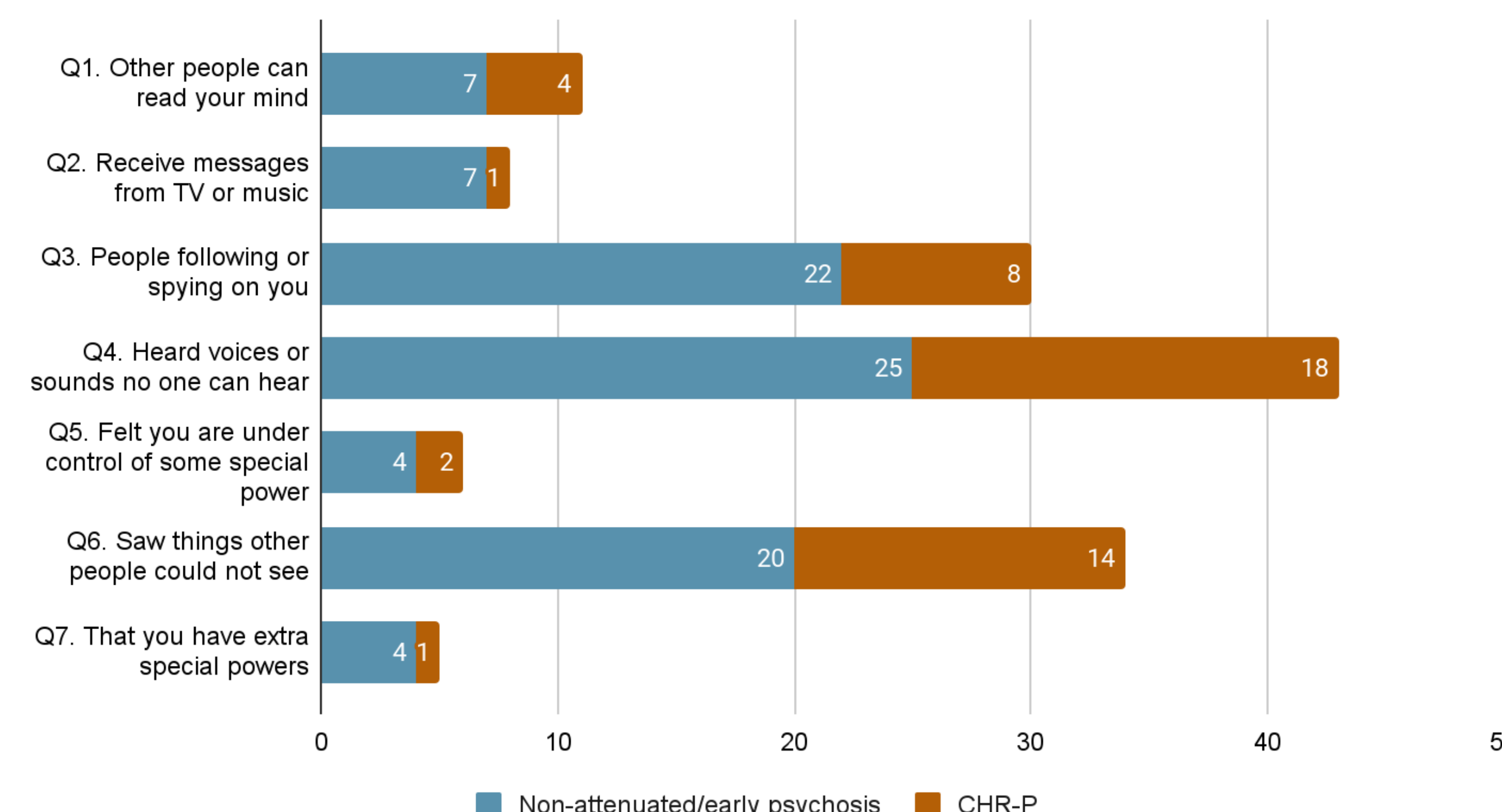
RESULTS

Referral Characteristics

	N=87
Age (years)	18.2 ± 4.16
Sex assigned at birth	
Male	42 (48.3%)
Gender Identity	
Male	40 (46.0%)
Female	35 (40.2%)
Nonbinary	4 (4.6%)
Transmale	3 (3.4%)
Transfemale	1 (1.1%)
Race/Ethnicity	
Asian/Pacific Islander	7 (8.0%)
Black/African-American	7 (8.0%)
Hispanic or Latinx	9 (10.3%)
Middle Eastern or Northern African	2 (2.2%)
White	49 (56.3%)
Multiracial or Biracial	7 (8.0%)
Lifetime Behaviors	
Substance Use	25 (28.7%)
Self-Harm	36 (41.4%)
Suicide Attempt	21 (24.1%)
Violence/Aggression	9 (10.3%)
Criminal Justice Involvement	5 (5.7%)
Lifetime Psychiatric Hospitalization	43 (49.4%)
Lifetime Mental Illness Diagnosis	63 (72.4%)
Mood or Anxiety Disorders	54 (62.1%)
Non-affective Psychotic Disorders	14 (16.1%)
Lifetime Use of Psychotropic Medication	56 (64.4%)
Antipsychotic Medication	25 (28.7%)
Referral Source	
Self	18 (20.7%)
Family member	33 (37.9%)
Outpatient provider	17 (19.5%)
Acute psychiatric setting (inpatient/ emergency department)	12 (13.8%)

Adolescent Psychotic-Like Symptom Screener (APSS)

Pattern and Number of Endorsed APSS Items for Referred Patients (N=87)



Note. Non-attenuated psychosis/early psychosis represents portion of referred clients who did not meet criteria for CHR-P or threshold psychotic disorder

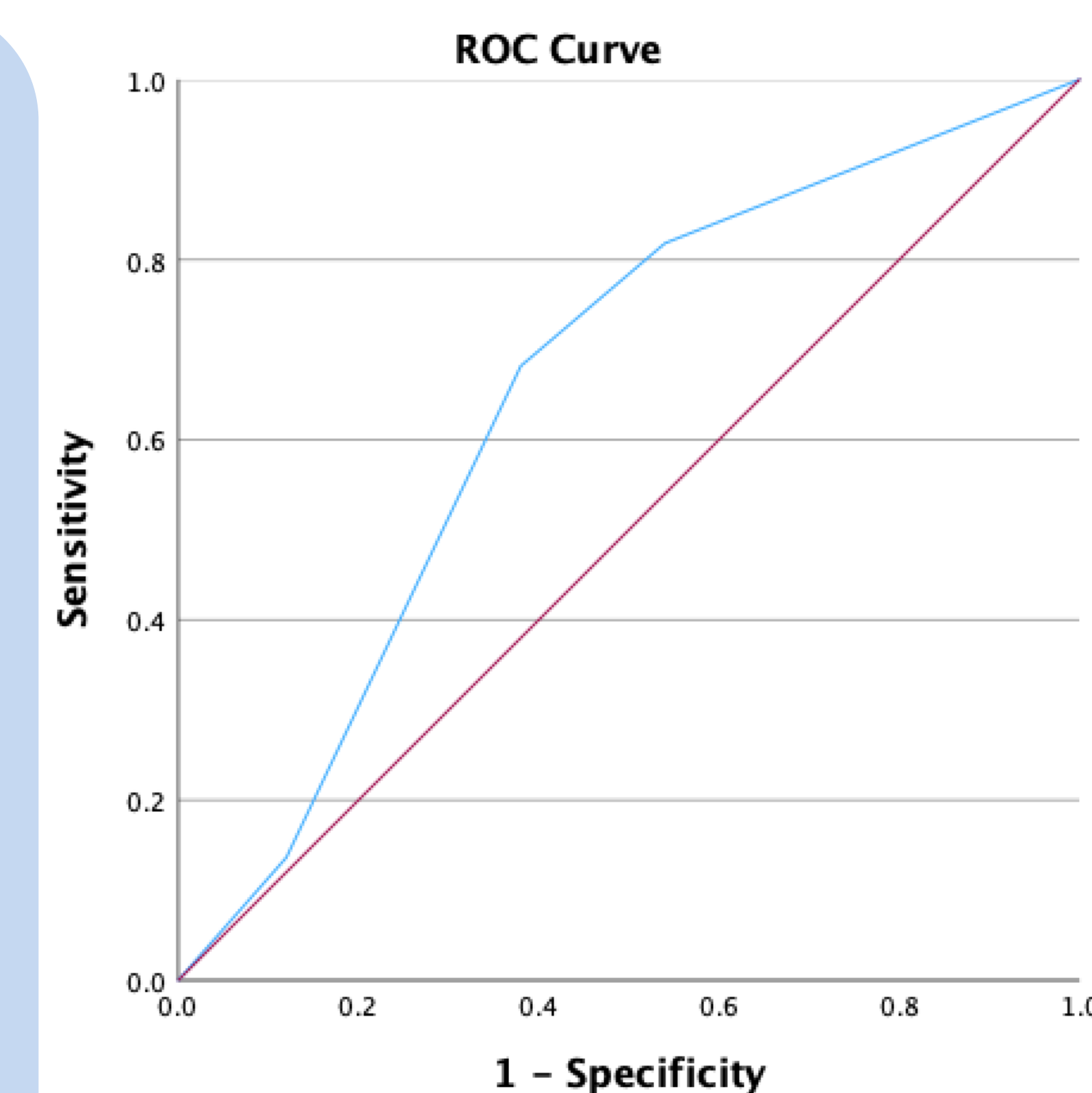
RESULTS

3-Item Screener

- After clinical assessments, 9 (10.3%) met criteria for a psychotic disorder and 17 (19.5%) met criteria for CHR-P.

- A three-item screener performed the best in identifying individuals with CHR-P or primary psychotic disorder:

- Have you felt that other people can read your mind?
- Have you heard voices or sounds that no one else can hear?
- Have you seen things that other people could not see?



AUC = .65 [.52, .79], p=.04

Cutoff (positive symptoms endorsed)	N (%)	Sensitivity	Specificity	Positive Predictive Value*	Negative Predictive Value*
1	45 (52%)	82%	46%	28%	91%
2	34 (39%)	68%	62%	31%	89%
3	9 (10.3%)	14%	88%	23%	80%

*Assuming rate of CHR-P detected in mental health settings is 20%.⁶

CONCLUSIONS

- Endorsing one item of three selected items on the APSS was highly sensitive for identifying outpatients determined to be CHR-P.**
- Approximately 20% of referrals to a specialty CHR-P program met CHR-P criteria.
- Only 1-2% of young people in Massachusetts are in a specialty CHR-P program, representing an area of great unmet need.⁷
- Using a brief and simple psychosis screener can facilitate early identification in primary care and general psychiatry outpatient settings.**

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