

PSYCHIATRIC AND SUBSTANCE USE CHARACTERISTICS: RELATIONSHIP TO PRIOR AUTHORIZATION APPROVAL PROCESS AND ACHIEVING SVR IN AN URBAN HCV POPULATION

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Purpose

We examined the relationship between substance use and psychiatric status in a mono-infected HCV population and the association with the medication approval process and achieving sustained virological response (SVR).

Background

- Psychiatric instability and active substance use can be barriers to patients initiating and completing HCV treatment.
- Some providers are less likely to treat this population due to their complexity.
- The REACH (Respectful & Equitable Access to Comprehensive Healthcare) Program is a multidisciplinary primary care program that aims to successfully treat mono-infected HCV patients with significant psychiatric and substance use challenges using a harm reduction approach.

Methods

- We conducted a retrospective chart review of 141 patients at the Mount Sinai REACH Program from whom HCV medications were ordered between November 1, 2014 to October 31, 2015.
- All subjects completed a psychosocial readiness assessment (PREP-C; prep.org) that assesses nine domains of psychosocial functioning including Psychiatric and Substance Use.
- Each domain is scored as **Could Be Improved (CBI)** or **Satisfactory (S)** based on pre-set criteria. We examined the prior authorization (PA) process for HCV medication approval in teams of: (1) successful approval; (2) number of steps taken in the approval process and (3) time to medication approval in days. For those who began HCV treatment we also examined achievement of sustained virological response (SVR).

Results

Table 1. Subject Demographics and Clinical Characteristics [N =141]

Variables	Total
Age , years, mean SD	56.5 (11.0)
Sex , male (%)	93 (66.)
Race	
Black (%)	46 (32.6)
Caucasian (%)	32 (22.7)
Other (%)	63 (44.7)
Ethnicity	
Hispanic (%)	57 (40.4)
Non-Hispanic (%)	84 (60.0)
Insurance	
Medicaid (%)	93 (66.0)
Medicare (%)	21 (14.9)
Dual (%)	16 (11.3)
Private (%)	7 (5.0)
Uninsured (%)	4 (2.8)
Treatment Naïve (%)	111(78.7)
Medication Ordered	
Harvoni (%)	117 (83.0)
Other (%)	24 (17.0)
Genotype 1a/1b (%)	120 (85.1)
Fibrosis-4 score (Fib4)	
<1.45 (%)	29 (20.6)
1.45-3.25 (%)	82 (58.3)
>3.25 (%)	30 (21.3)

- Medication Approval** was successfully obtained for 130/141 (92%) patients.
- The 11 patients for whom medication was not approved were more likely to score CBI on Substance Use (8/11; 73%) than those for whom medication was approved (42/130; 32%) [p=0.53].

Results

- We classified the number of steps taken since the first submission of PA as follows: **1 Step**, initial approval upon submission; **2 Steps**, approval after internal appeal; and **3 Steps**, approval after external appeal.

Number of Steps taken in Prior Authorization Process:

- 1 step: 54/141 (38.3%)
- 2 steps: 66/141 (46.8%)
- 3 steps: 21/141 (14.9%)

Table 2: Relationship between Substance Use (SU) and Psychiatric Stability (PS) and number of steps taken in PA process [N=141]

Characteristics	Classification Based on PREP-C	Number of Steps taken for Medication Approval			P Value
		1 Step	2 Steps	3 Steps	
Substance Use	Could Be Improved (CBI)	19	23	8	0.96
	Satisfactory (S)	35	43	13	
Psychiatric Stability	Could Be Improved (CBI)	24	24	9	0.65
	Satisfactory (S)	30	42	12	

Table 3. Length of days for those approved in relationship with SU and PS for all patients approved. Mean length [n=130] = 55.5 days (SD=51.0)

Characteristics	Classification Based on PREP-C	Length of days for successful medication approval	P value
Substance Use	Could Be Improved (CBI), mean ± SD (n=42)	62.9 ± 56.4	0.26
	Satisfactory (S) mean ± SD (n=88)	52.1 ± 48.2	
Psychiatric Stability	Could Be Improved (CBI) mean ± SD (n=54)	60.9 ± 52.8	0.31
	Satisfactory (S) mean ± SD (n=76)	51.7 ± 49.7	

- HCV treatment was started by 128 of the 130 approved patients (98%) and 110/128 patients (85.9%) achieved SVR 12.
- 16 patients had an end treatment response and returned for early SVR visits but did not return for SVR 12; 2 patients had a virologic relapse.

Table 4. Medication Approval and Achieving SVR 12 in Relationship with SU and PS [N=128]

Characteristics	Classification Base PREP-C	Not Achieved SVR 12 (n=18)	Achieving SVR 12 (n=110)	P value
Substance Use	Could Be Improved (CBI)	7	33	0.5
	Satisfactory (S)	11	77	
Psychiatric Stability	Could Be Improved (CBI)	11	43	0.1
	Satisfactory (S)	7	67	

Conclusions

- Substance use stability was associated with medication approval but psychiatric stability was not. Neither domain was associated with number of steps to approval or number of days to approval in subjects for whom medications were approved.
- Once patients begin treatment in our HCV program, baseline psychiatric and substance use characteristics are not related to achieving SVR.
- Our multidisciplinary model of care provides the necessary support and interventions needed by patients with HCV and comorbid substance use and/or psychiatric disorders to achieve SVR.

Our program receives funding from the Robin Hood Foundation and New York State Department of Health AIDS Institute

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