

Addition of Patient Navigator and Social Worker to Interdisciplinary Hepatitis C Team Increases Treatment Uptake

Results of the Prospective, Randomized, Controlled CARE-C Trial

Jens Rosenau, MD
Associate Professor of Medicine
Acting Director of Hepatology
University of Kentucky

Disclosures

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➤ **Participating Patients**

- Patients presenting for Hepatitis C care in the University of Kentucky Hepatology Outpatient Clinic agreed to spend time on study procedures

➤ **CARE C Study Team**

- Tammi Gausepohl (HCV Program Specialist)
- Courtney Hammill (Study and ECHO Coordinator)
- Nazanin Hooman (Research Scholar)
- Michael Kindred (Addiction Specialist)
- Elaine Milem (Patient Navigator)
- Alyssa Miller (Social Worker)
- Reese Starks-Baker (Patient Navigator)
- Jeffrey Weiss (PREP-C Developer)

➤ **Specialty/Clinical Pharmacists**

- Megan Cooper
- Maribeth Wright

➤ **Hepatology Clinic Staff**

- Tonia Carr
- Katherine Gregory

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- UK Healthcare



CARE-C Study Design

HCV referrals to UK Hepatology Clinic
Screening: all Anti-HCV positive patients

Randomization of HCV RNA positive patients

Excluded:

- HCV RNA negative
- Life Exp. < 1year
- No Consent

Current Care Model

n = 214

UK Interdisciplinary Team

- Tx uptake
- Retention in Care
- Tx completion, SVR12

Enhanced Care Model

n = 215

UK Interdisciplinary Team

plus

PREP-C, Social Worker,
Patient Navigator

- Tx uptake
- Retention in Care
- Tx completion, SVR12

Analysis of Tx Barriers

CARE-C Treatment Model: How does it work?

University of KY Interdisciplinary Care Team

Provider (APP, MD)

- ✓ Determine Tx Candidacy
- ✓ Prescribe Tx Regimen

Specialty Pharmacist

- ✓ Review Therapy
- ✓ Prior Authorization
- ✓ Appeals
- ✓ Monitor Tx Adherence



Database

Addiction Specialist

- ✓ Addiction Management
- ✓ Manage Psychiatric Comorbidities



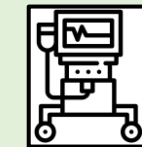
Lab

Hepatologist

- ✓ Provider in Clinic
- ✓ Supervising APPs

Nurse Case Manager

- ✓ HCV Education
- ✓ Manage Pat. Assistance
- ✓ Lab Tracking



Fibroscan

Standard of Care Model (Arm 1)

Expanded UK Team

Social Worker

- ✓ PREP-C Assessment
- ✓ PREP-C Interventions
- ✓ Social Support

Patient Navigator

- ✓ Appointment monitoring and support

SW/PN-PREP-C Model (Arm 2)

Baseline Characteristics

		Total n=429	Standard of Care n=214	SW-PN- PREP-C- Intervention n=215	P
Age Group	<30	75 (17.5)	31 (14.5)	44 (20.5)	0.5
	30 to <40	159 (37.1)	84 (39.3)	75 (34.9)	
	40 to <50	89 (20.7)	47 (22.0)	42 (19.5)	
	50 to <60	65 (15.2)	33 (15.4)	32 (14.9)	
	>=60	41 (9.6)	19 (8.9)	22 (10.2)	
Gender	Male	248 (57.8)	125 (58.4)	123 (57.2)	0.8
	Female	181 (42.2)	89 (41.6)	92 (42.8)	
Race	White	399 (93.0)	197 (92.1)	202 (94.0)	0.6
	Black	27 (6.3)	15 (7.0)	12 (5.6)	
	Hispanic	2 (0.5)	1 (0.5)	1 (0.5)	
	Others	1 (0.2)	1 (0.5)	0 (0.0)	
BMI Group	<25	133 (31.0)	64 (29.9)	69 (32.1)	0.3
	25-29.9	166 (38.7)	85 (39.7)	81 (37.7)	
	30-34.99	113 (26.3)	53 (24.8)	60 (27.9)	
	35-60	17 (4.0)	12 (5.6)	5 (2.3)	
Rural/Urban	Urban	308	158	150	
	Rural	118	55	63	
Appalachian	No	256 (59.7)	128 (59.8)	128 (59.5)	1.0
	Yes	173 (40.3)	86 (40.2)	87 (40.5)	
Insurance	Medicaid	326 (76.2)	162 (75.7)	164 (76.6)	0.9
	Medicare	40 (9.3)	20 (9.4)	20 (9.4)	
	Commercial	52 (12.2)	28 (13.1)	24 (11.2)	
	Others	10 (2.3)	4 (1.9)	6 (2.8)	

		Total n=429	Standard of Care n=214	SW-PN- PREP-C- Intervention n=215	P
Referring Provider	Community	340 (81.1)	168 (80.4)	172 (81.9)	0.9
	UK ED	24 (5.7)	29 (13.9)	26 (12.4)	
	UK Other	55 (13.1)	12 (5.7)	12 (5.7)	
Wait for Chronicity	No	269 (62.7)	134 (62.6)	135 (62.8)	1.0
	Yes	160 (37.3)	80 (37.4)	80 (37.2)	
Cirrhosis	No	355 (83.9)	173 (82.4)	182 (85.5)	0.4
	Yes	68 (16.1)	37 (17.6)	31 (14.6)	
Treatment Experienced	No	417 (97.2)	207 (96.7)	210 (97.7)	0.6
	Yes	12 (2.8)	7 (3.3)	5 (2.3)	
Drug History	<1 mo	31 (7.2)	12 (5.6)	19 (8.8)	0.09
	1-6 mo	69 (16.1)	27 (12.6)	42 (19.5)	
	>6 mo	258 (60.1)	139 (65.0)	119 (55.4)	
	Never	38 (8.9)	22 (10.3)	16 (7.4)	
	Unreported	33 (7.7)	14 (6.5)	19 (8.8)	

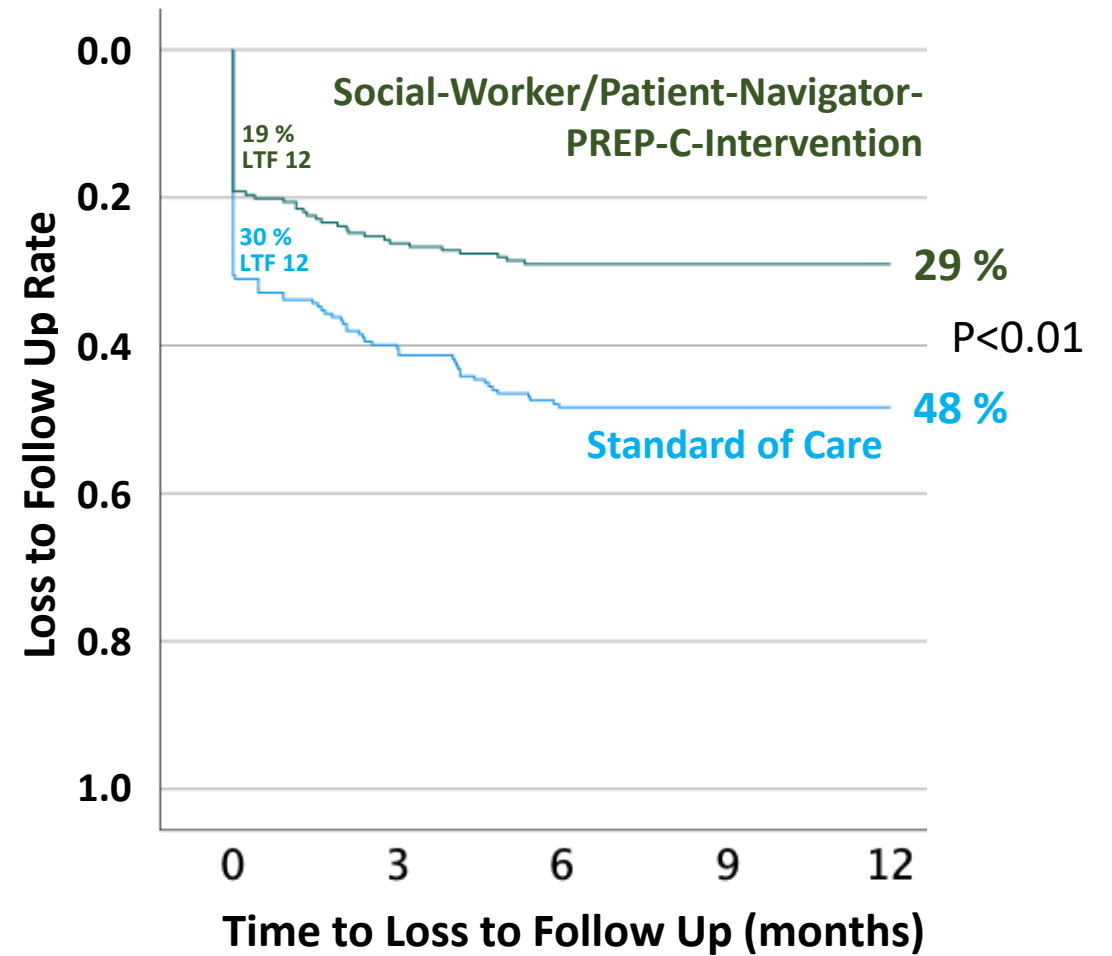
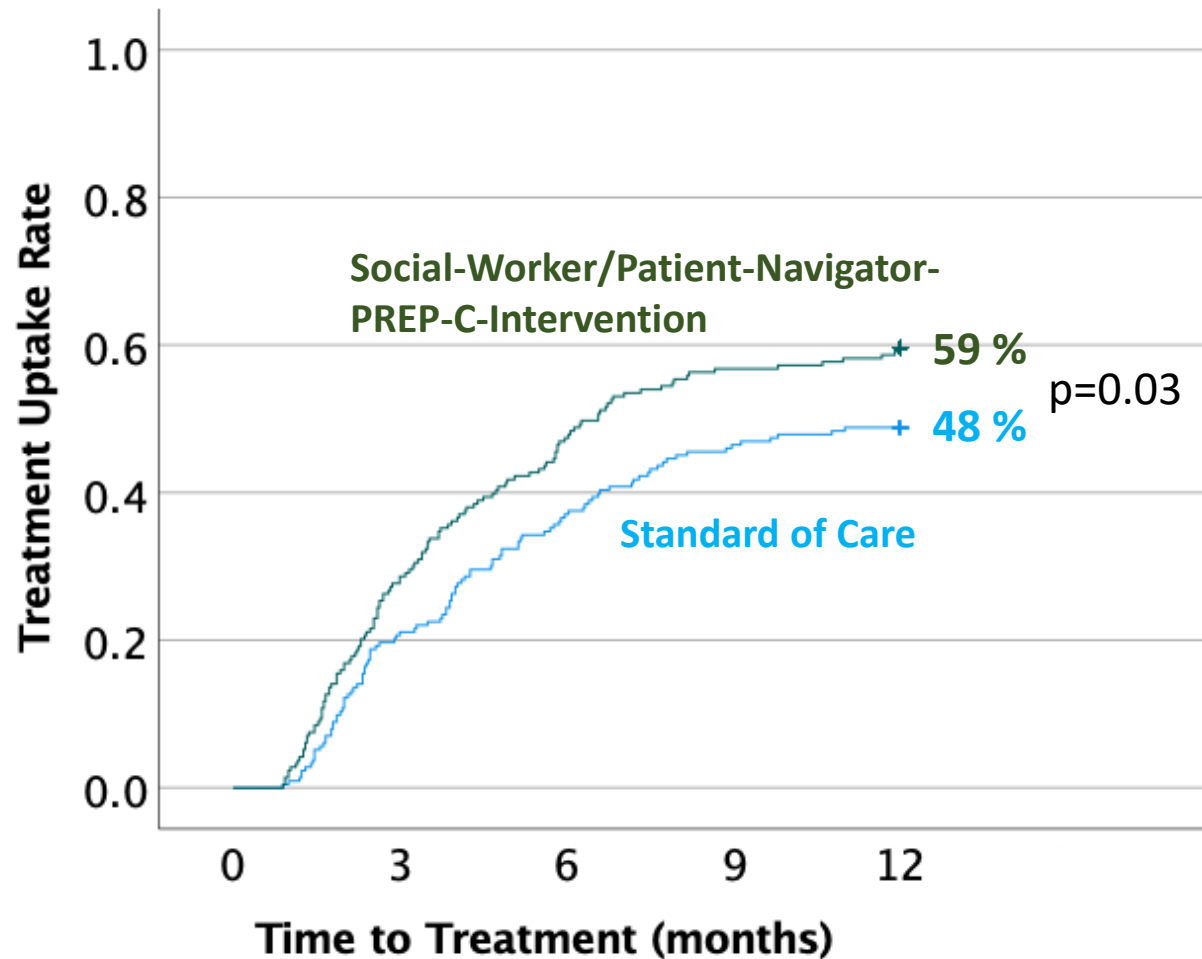
Predictors of Tx Uptake:

Uni- and Multivariable Analysis

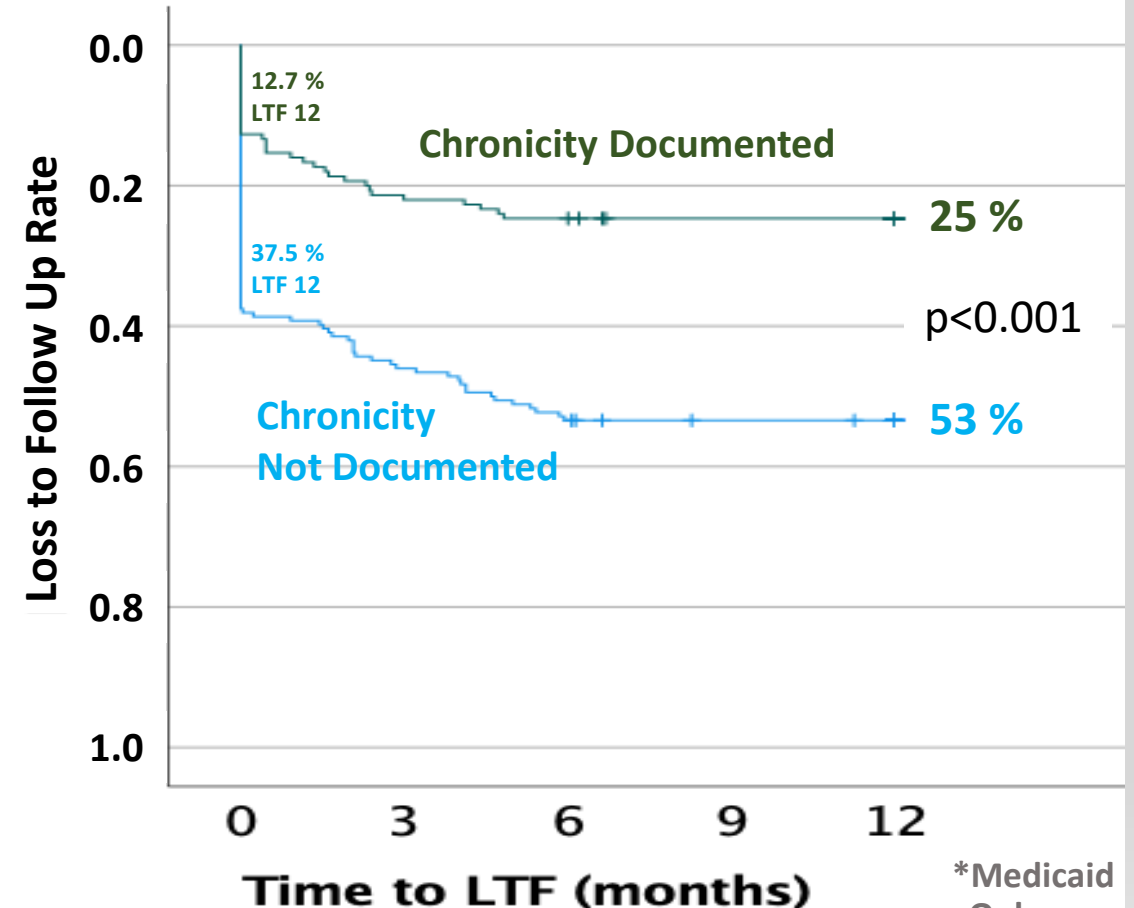
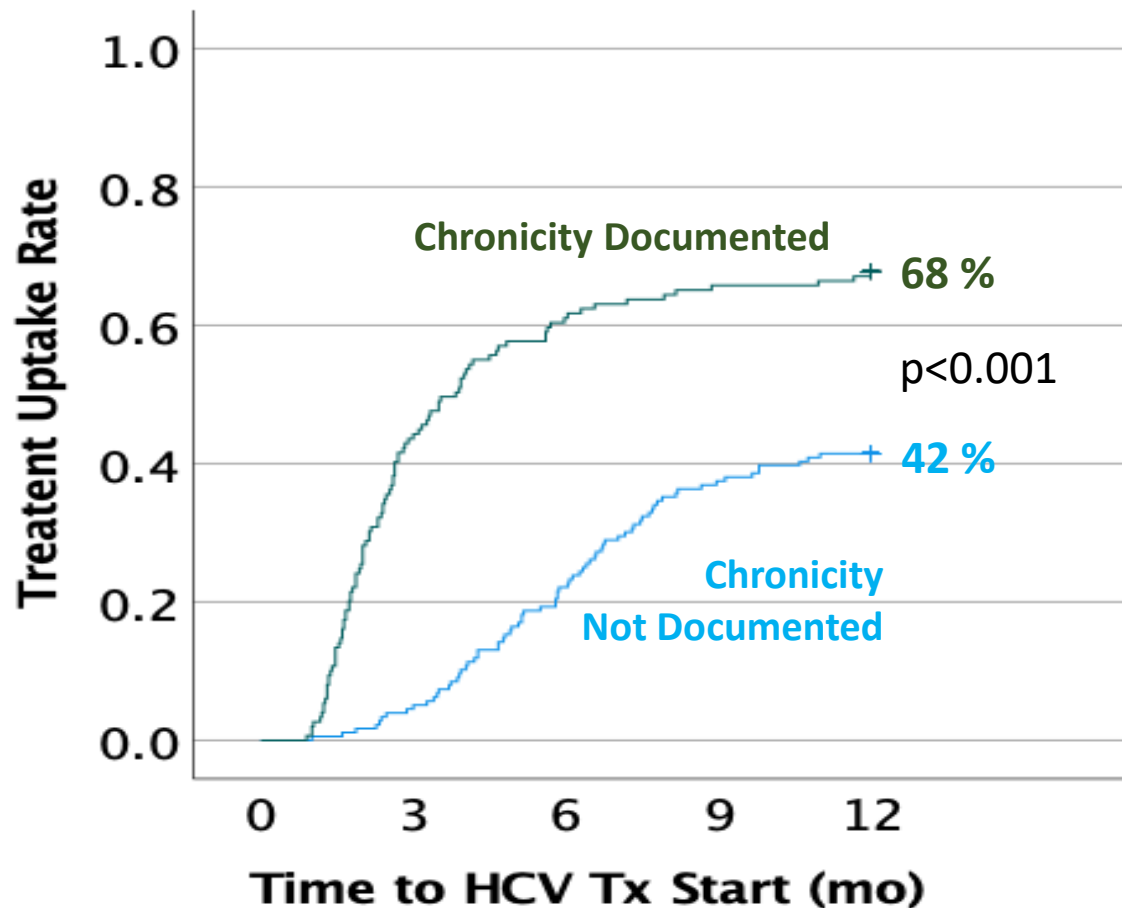
		Total Tx Starts	Univariate		Multivariate	
			OR (95% CI)	P-value	OR (95% CI)	P-value
Age	Per year		1.01 (1.00-1.03)			
Gender	Male	129 (52.2)	1			
	Female	102 (56.4)	1.18 (0.80-1.74)	0.40		
Race	White	213 (53.5)	1			
	Black	18 (66.7)	1.74 (0.76-3.96)	0.19		
	Hispanic	0				
	Others	0				
BMI	Per unit		1.00 (0.97-1.03)			
Rural/Urban	Urban	162 (52.6)	1			
	Rural	68 (57.6)	1.22 (0.80-1.88)	0.35		
Appalachian	No	133 (52.2)	1			
	Yes	98 (56.7)	1.20 (0.81-1.77)	0.36		
Insurance	Medicaid	174 (53.5)	1			
	Medicare	19 (47.5)	0.79 (0.41-1.52)	0.47		
	Commercial	35 (67.3)	1.79 (0.96-3.32)	0.07	2.02 (1.04-3.90)	0.04
	Others	3 (30.0)	0.37 (0.09-1.46)	0.16		

		Total Tx Starts	Univariate		Multivariate	
			OR (95% CI)	P-value	OR (95% CI)	P-value
Referring Provider	UK ED	7 (30.4)	1			
	UK Other	27 (49.1)	2.20 (0.78-6.20)	0.13		
	Community	194 (57.1)	3.04 (1.22-7.57)	0.02	1.65 (1.00-2.73)	0.051
Wait for Chronicity	Yes	68 (42.5)	1			
	No	163 (60.8)	2.10 (1.41-3.13)	0.0003	2.08 (1.37-3.15)	0.0005
Cirrhosis	No	193 (54.4)	1			
	Yes	38 (55.9)	1.06 (0.63-1.79)	0.82		
Treatment Experience	Naive	225 (54.1)	1			
	Experienced	6 (50.0)	0.85 (0.23-2.68)	0.78		
Drug History	<1mo	10 (32.3)	1			
	1-6 mo	32 (46.4)	1.82 (0.75-4.42)	0.19		
	>6mo	156 (60.7)	3.24 (1.47-7.17)	0.004	1.98 (1.31-3.01)	0.001
	Never	18 (47.4)	1.89 (0.70-5.07)	0.21		
	Unreported	15 (45.5)	1.75 (0.63-4.84)	0.28		
Care Model	1 SOC					
	2 SW/PN-Interv.				1.63 (1.08-2.46)	0.02

Treatment Uptake and Loss to Follow Up Rate by Care Model



Treatment Uptake and Loss to Follow Up by Chronicity Documentation at 1st Clinic Visit*



*Medicaid Only

Conclusions

- The addition of a social worker/patient navigator team performing a structured psychosocial assessment and interventions increases HCV Tx-uptake and reduces loss to follow up.
- The Medicaid policy of requiring documentation of Hepatitis C chronicity for HCV medication approval reduces treatment uptake, delays treatment initiation, and increases loss to follow up. The SW/PN-PREP-C intervention effectively mitigated loss to follow up.

Contact:

Jens Rosenau

University of Kentucky

Division of Digestive Diseases and Nutrition

jens.rosenau@uky.edu