Poster 0578

Care Facilitation for HIV/HCV Co-infected Increases Movement on the HCV Care Cascade

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National Drug Abuse Treatment Clinical Trials Network

Background

Project Hope (CTN0049) is a previously published[a,b] 3-arm RCT to test 6 months of Patient Navigation (PN) and PN + Financial Incentives (PN+FI) versus treatment as usual (TAU) in increasing viral suppression rates in HIV-positive substance using hospitalized patients. A new protocol, CTN0064, included a long-run follow-up of the participants in CTN0049 and was reported elsewhere[c]. Participants enrolled into CTN0064 who tested antibody positive for Hepatitis C (HCV) were invited to participate in a second RCT to evaluate the effectiveness of a 6-month Care Facilitation (CF) intervention against standard of care (Control) in moving HIV/HCV co-infected substance users forward along the HCV Care continuum.

Methods

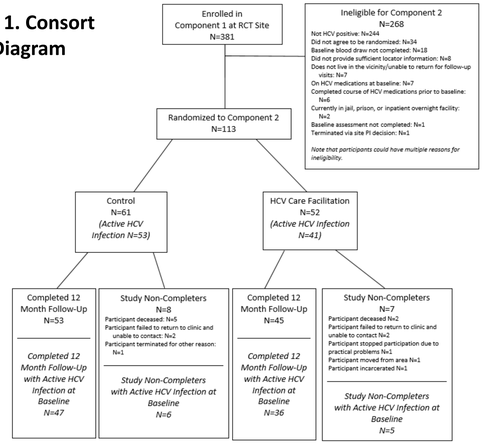
In Project Hope, 801 patients from 11 hospitals in the U.S. were recruited from 7/1/2012 until 1/31/2014 and followed for a year. Hospitals were in the following cities: Atlanta, GA, Baltimore, MD, Boston, MA, Birmingham, AL, Chicago, IL, Dallas, TX, Los Angeles, CA, Miami, FL, New York, NY and Philadelphia and Pittsburgh, PA.

Of the 711 patients alive at 12 months, 686 had consented to contact for long-run follow-up, which was completed between 2/18/2016 and 1/30/2017. Of these, 381 enrolled in the CTN0049 long-run follow-up component of CTN0064; 129 of them tested HCV antibody positive.

A total of 8 sites participated in the RCT component of CTN0064 (Atlanta, GA, Baltimore, MD, Boston, MA, Chicago, IL, Dallas, TX, Miami, FL, New York, NY). A total of 113 participants were randomized: 61 to Control and 52 to CF. Participants in CF received a care facilitator who used motivational interviewing to build an effective, working relationship with the participant, conducted needs assessments and used a strengths-based approach to move them along the HCV care continuum (represented by 8 steps as shown in Figures 3 and 5) during the 6-month intervention period; participants were assessed at baseline, 6 months and 12 months.

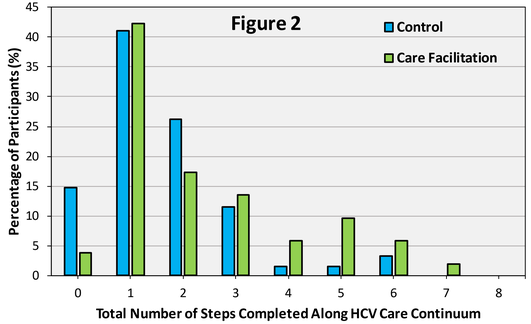
Results

Figure 1. Consort Flow Diagram

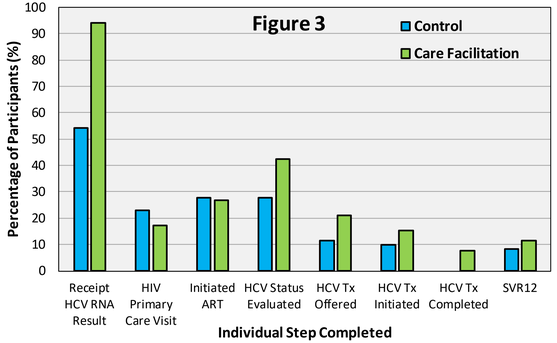


Results

Primary Outcome -- Total Number of Steps Completed Along HCV Care Continuum: Participants in CF completed significantly more (of the up to 8) steps along the HCV Care Continuum than those in Control, (GLM, p=0.0067, Figure 1). CF participants completed 2.44 steps on average (95%CI[1.99,2.99]) while Control participants completed 1.6 steps on average (95%[1.36,2.08]).



Completion of Individual Steps Along HCV Care Continuum: CF participants had higher rates of receiving their HCV RNA results, liver status evaluation, treatment offer, treatment initiation, treatment completion and sustained viral response at 12 weeks (SVR12), (Figure 2).

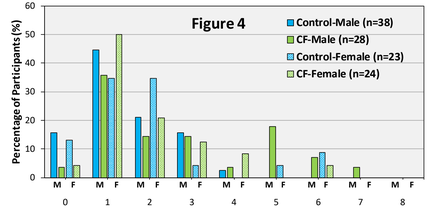


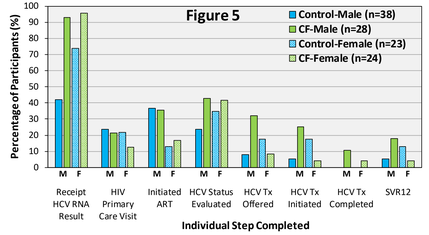
Demographics: Participants were mostly male (58%), had a mean age 50 (SD=8); 14% were Hispanic, 71% Black, 20% White, and 76% had insurance (Table 1).

Table 1. Demographic Characteristics (N=113)

Characteristic	TAU (n=61)	CF (N=52)	Total (N=113)
Sex/Gender			
Male	38 (62.3%)	28 (53.8%)	66 (58.4%)
Female	23 (37.7%)	24 (46.2%)	47 (41.6%)
Age			
Mean (SD)	50 (7.8)	51 (8.2)	50 (8.0)
Ethnicity			
Not Hispanic/Latino	54 (88.5%)	43 (82.7%)	97 (85.8%)
Hispanic/Latino	7 (11.5%)	9 (17.3%)	16 (14.2%)
Race			
American Indian/Alaska Native	0 (0%)	0 (0%)	0 (0%)
Asian	0 (0%)	0 (0%)	0 (0%)
Black/African American	44 (72.1%)	36 (69.2%)	80 (70.8%)
Native Hawaiian/Pacific Islander	0 (0%)	0 (0%)	0 (0%)
White	11 (18.0%)	12 (23.1%)	23 (20.4%)
Other	3 (4.9%)	0 (0%)	3 (2.7%)
Multiracial	3 (4.9%)	4 (7.7%)	7 (6.2%)
Health Insurance			
No	18 (29.5%)	8 (15.4%)	26 (23.0%)
Yes	42 (68.9%)	44 (84.6%)	86 (76.1%)
Don't Know	1 (1.6%)	0 (0%)	1 (0.9%)

Subgroup Effects: There was a significant subgroup effect of gender (GLM, p=0.004, Figure 4, Figure 5). Male CF participants completed more steps than male Control participants (CF: mean=3.08, 95% CI [2.41,3.93]; Control: mean=1.48, 95% CI [1.12,1.96]). Female CF participants completed a similar number of steps to females in Control (CF: mean=1.74, 95% CI [1.26,2.41]; Control: mean=1.96, 95% CI [1.43,2.69]). However, there were no other significant subgroup effects for site, race, ethnicity, baseline HIV treatment status, CTN0049 treatment arm or stimulant use.





Conclusion

A strengths-based Care Facilitation intervention significantly increased progress along the HCV care continuum compared to a standard of care Control.

Subgroup analysis revealed that males had greater benefit of the Care Facilitation intervention in progression along the HCV care continuum than females.

This study recruited from an existing study population (CTN-0049) which limits the ability to generalize study conclusions. However, the benefits of a relatively short CF intervention demonstrated in this study suggest its promise of moving other vulnerable populations along the HCV care continuum.

References

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[b] Metsch, LR, Feaster, DJ, Gooden, L, Matheson, T, Stitzer, M, Das, M, Jain, MK, Rodriguez, AE, Armstrong, WS, Lucas, GM, Nijhawan, AE, Drainoni, ML, Herrera, P, Vergara-Rodriguez, P, Jacobson, JM, Mugavero, MJ, Sullivan, M, Daar, ES, McMahon, DK, Ferris, DC, Lindblad, R, VanVeldhuisen, P, Oden, N, Castellon, PC, Tross, S, Haynes, LF, Douaihy, A, Sorensen, JL, Metzger, DS, Mandler, RN, Colfax, GN, del Rio, C. Effect of patient navigation with or without financial incentives on viral suppression among hospitalized patients with HIV infection and substance use. Journal of the American Medical Association, 316 (2), 156-170. 2016.

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Acknowledgment/Contacts

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