



Optimizing the Hepatitis C Cascade of Care in the Direct-Acting Antiviral Era

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BACKGROUND

- Despite improved treatments for Hepatitis C Virus (HCV) infection, barriers remain in the HCV cascade of care (CoC), limiting the overall impact of direct acting antivirals.
- The Vanderbilt Infectious Diseases (ID) clinic provides multidisciplinary care involving a physician, clinical pharmacist, and nurse for patients with HCV infection.
- The objective of this study was to identify factors associated with movement through the HCV CoC after referral to a multidisciplinary ID clinic to sustained virologic response (SVR), including both general and historically difficult to treat populations.

Clinical Pharmacist Responsibilities

| Access | Education | Monitoring |
|---|---|---|
| <ul style="list-style-type: none"> - Obtaining medication access through insurers - Procuring medication for uninsured - Ensuring cost-effectiveness for patients - Mitigating access barriers while on treatment | <p>Prescribers:</p> <ul style="list-style-type: none"> - Treatment options to guide therapy decisions <p>Patients:</p> <ul style="list-style-type: none"> - Thorough medication overview and monitoring plan - Creating adherence action plan - Developing a follow-up plan | <ul style="list-style-type: none"> - Appropriate and timely pretreatment work-up - Adherence, safety and efficacy monitoring by phone and in clinic - Lab monitoring and dose adjustment when applicable - Ensuring appointment adherence |

METHODS

- Single-center, retrospective cohort study of patients receiving care at the VUMC ID Clinic between July 2015 and September 2016.
- Inclusion criteria: diagnosis of chronic HCV with an appointment in the VUMC ID clinic.
- Exclusion criteria: active carcinoma, cognitively impaired, life expectancy of ≤ 6 months.
- The following baseline characteristics were evaluated using a univariate analysis: HIV coinfection, patients with cirrhosis, people who use illicit substances (PWUIS), diagnosed psychiatric disorder, "Baby Boomer" (born between 1945-1965)

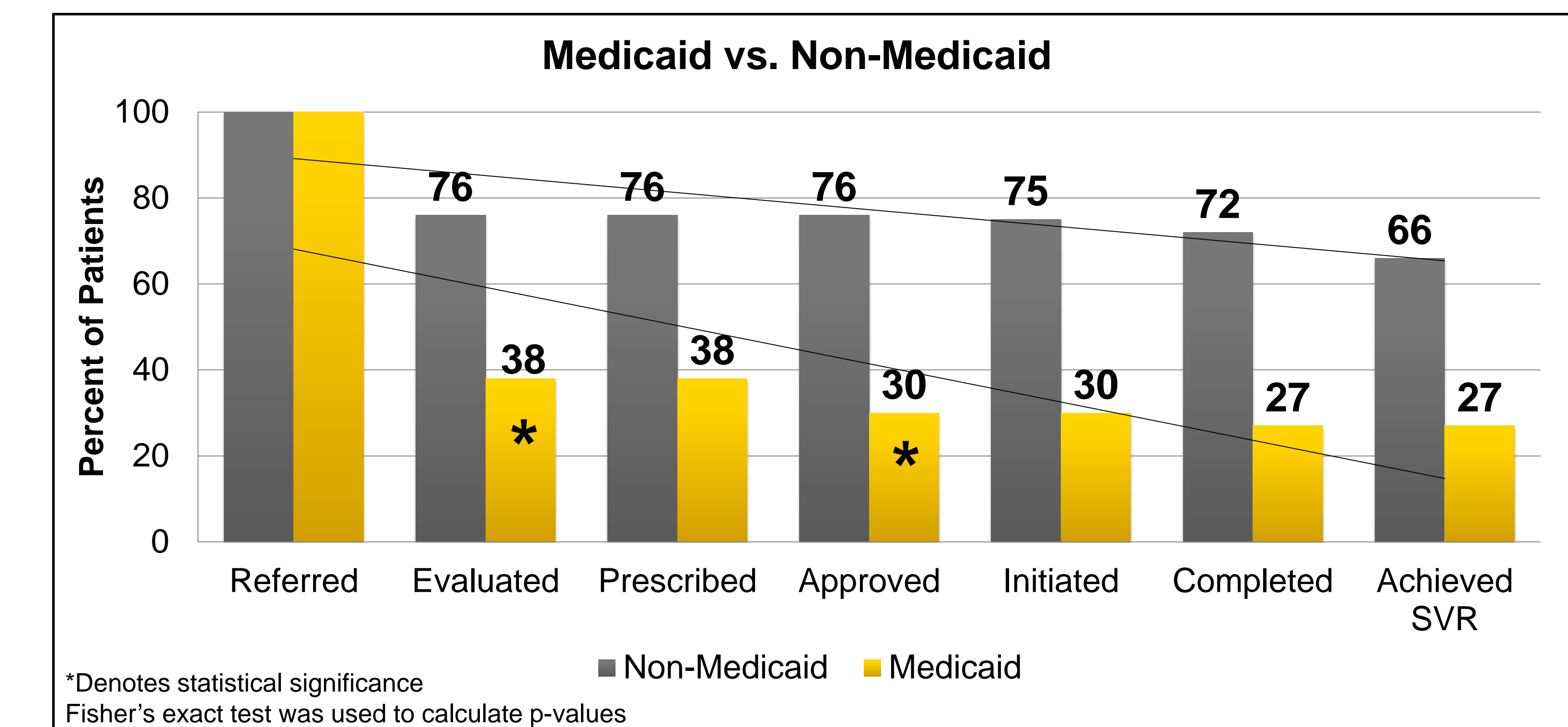
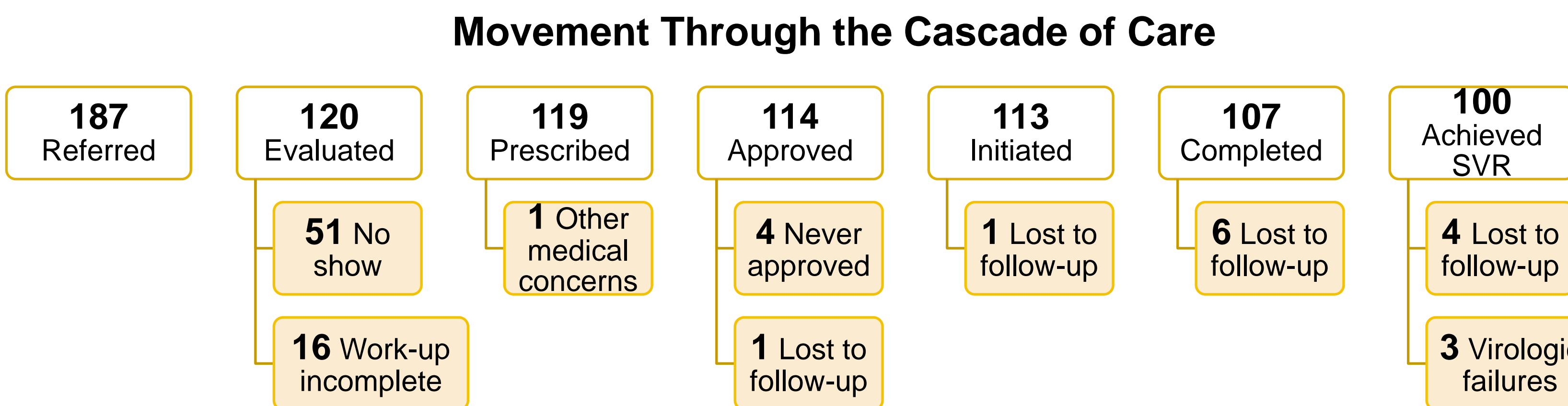
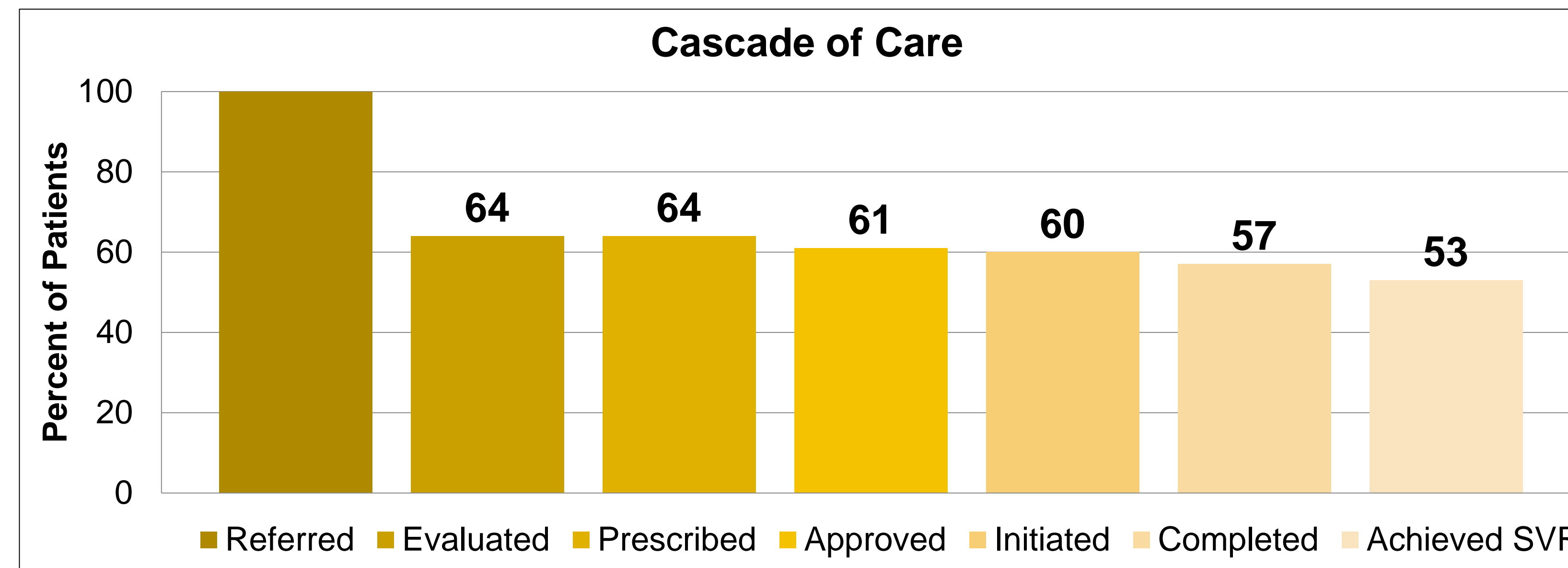
RESULTS

| Baseline Characteristics | Referred (N = 187) | Evaluated (N=120) |
|---|--------------------|-------------------|
| Age (mean \pmSD) | 48 \pm 13 | 47 \pm 14 |
| Baby Boomer | 79 (42%) | 69 (58%) |
| Gender: p=0.0001[†] | | |
| Male | 115 (62%) | 86 (72%) |
| Female | 72 (39%) | 34 (28%) |
| Ethnicity: p=0.011[†] | | |
| White | 132 (71%) | 82 (68%) |
| African American | 48 (26%) | 34 (28%) |
| Other | 3 (2%) | 4 (3%) |
| Insurance Type: p=<0.0001[†] | | |
| Medicare | 21 (11%) | 18 (15%) |
| Medicare/Medicaid | 19 (10%) | 15 (13%) |
| Medicaid | 60 (32%) | 23 (19%) |
| Private | 72 (39%) | 55 (46%) |
| Other | 15 (8%) | 9 (8%) |

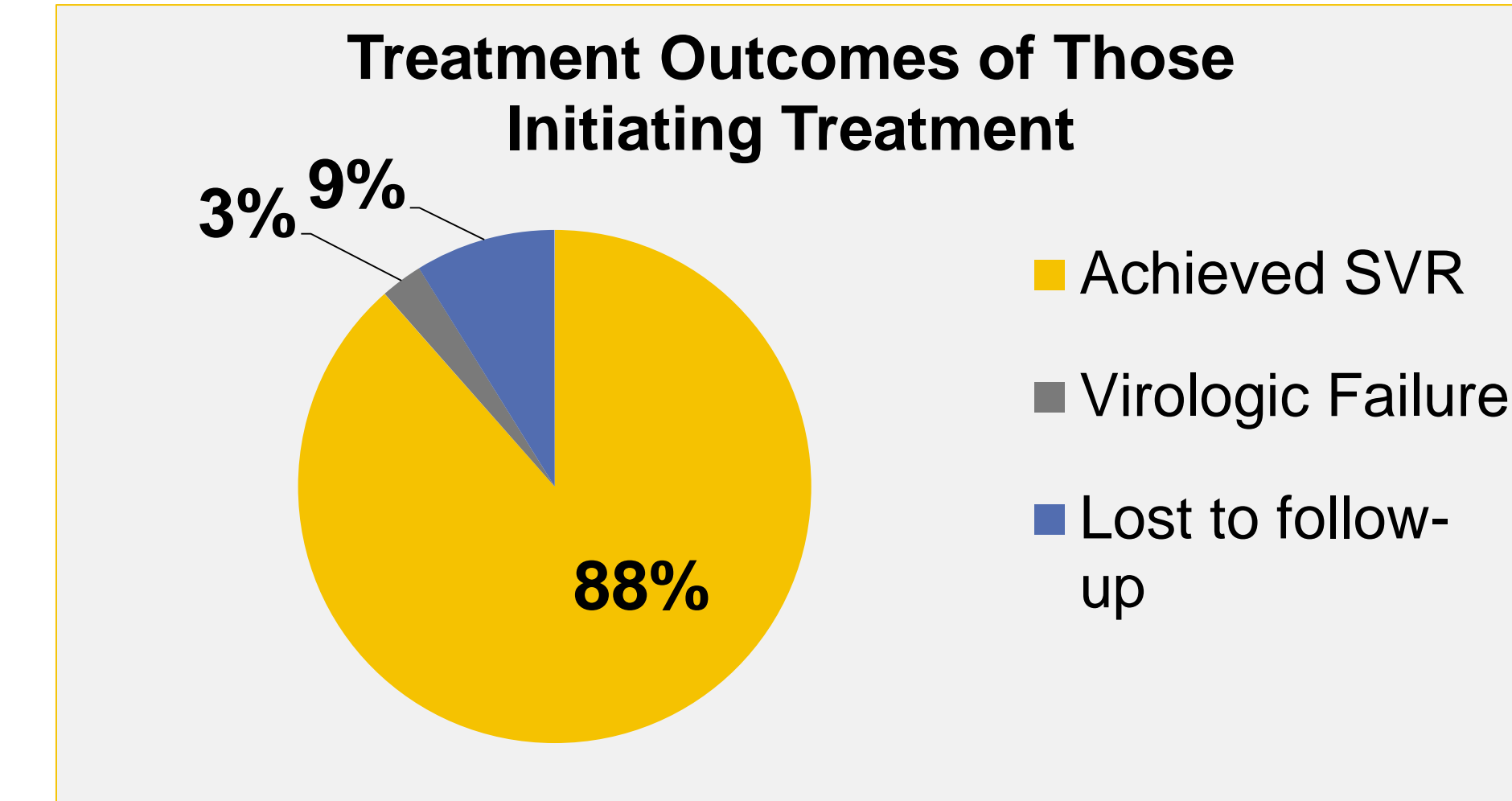
Differences between groups was assessed using Chi-Square[†] or Fisher's Exact[‡]

| Baseline Characteristics of Patients Evaluated (N = 120) | |
|--|-----------|
| Genotype 1a | 79 (66%) |
| Treatment naïve | 108 (91%) |
| Cirrhosis | 28 (24%) |
| HIV coinfection | 51 (43%) |
| History of IVDU | 62 (52%) |
| Ongoing IVDU* | 2 (2%) |
| Ongoing alcohol use [†] | 10 (9%) |
| Ongoing illicit substance use* | 15 (13%) |
| Psychiatric disorder | 47 (40%) |

*Denotes use within 3 months of evaluation
†Denotes >5 drinks on most days of the week
IVDU= Intravenous drug use



RESULTS



- SVR rate of 93.4% in patients who initiated and completed treatment, with only 3 virologic failures
- Of baseline characteristics compared, only having Medicaid insurance was associated with a lower rate of treatment approval.

DISCUSSION AND CONCLUSIONS

Recent real world reports of over 15,000 patients with HCV found that 37% of patients prescribed HCV treatment in 2016 did not actually initiate treatment.²

Conversely, within the ID clinic, 97% of patients prescribed treatment were initiated on treatment.

- Compared to previous reports of the HCV CoC, the ID clinic showed high rates of retention in care, treatment initiation, and SVR.
- Presence of baseline characteristics that have historically been identified as harder to treat were not significant predictors of lack of movement through the CoC.
- While not specifically evaluated by this study, we hypothesize that the high retention and completion rates observed was due to the integrated model of care delivery.

REFERENCES:

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