Retention in Telehealth Treatment for Opioid Use Disorder among Rural Populations

INTRODUCTION

- The US opioid epidemic disproportionately affects rural communities and patients living in rural areas face myriad barriers to treatment for opioid use disorder (OUD) such as lack of providers and long travel times.
- Researchers have called for evaluations of innovative models of care that address these disparities.
- Supported by federal policy during the COVID-19 public health emergency, telehealth models of OUD for patients living in rural areas have shown promise, but there are limited studies to date on treatment outcomes.

METHODS

Study Design

Descriptive, retrospective cohort study of patients living in rural areas enrolled in a harm-reduction-based telehealth OUD treatment program

Inclusion Criteria

- 1. Age 18 years or older
- 2. Resided in a rural zip code (RUCA code ≥4)
- 3. Attended an initial medical appointment via telehealth between April 1, 2020, and January 31, 2022
- 4. Received a clinical diagnosis of OUD

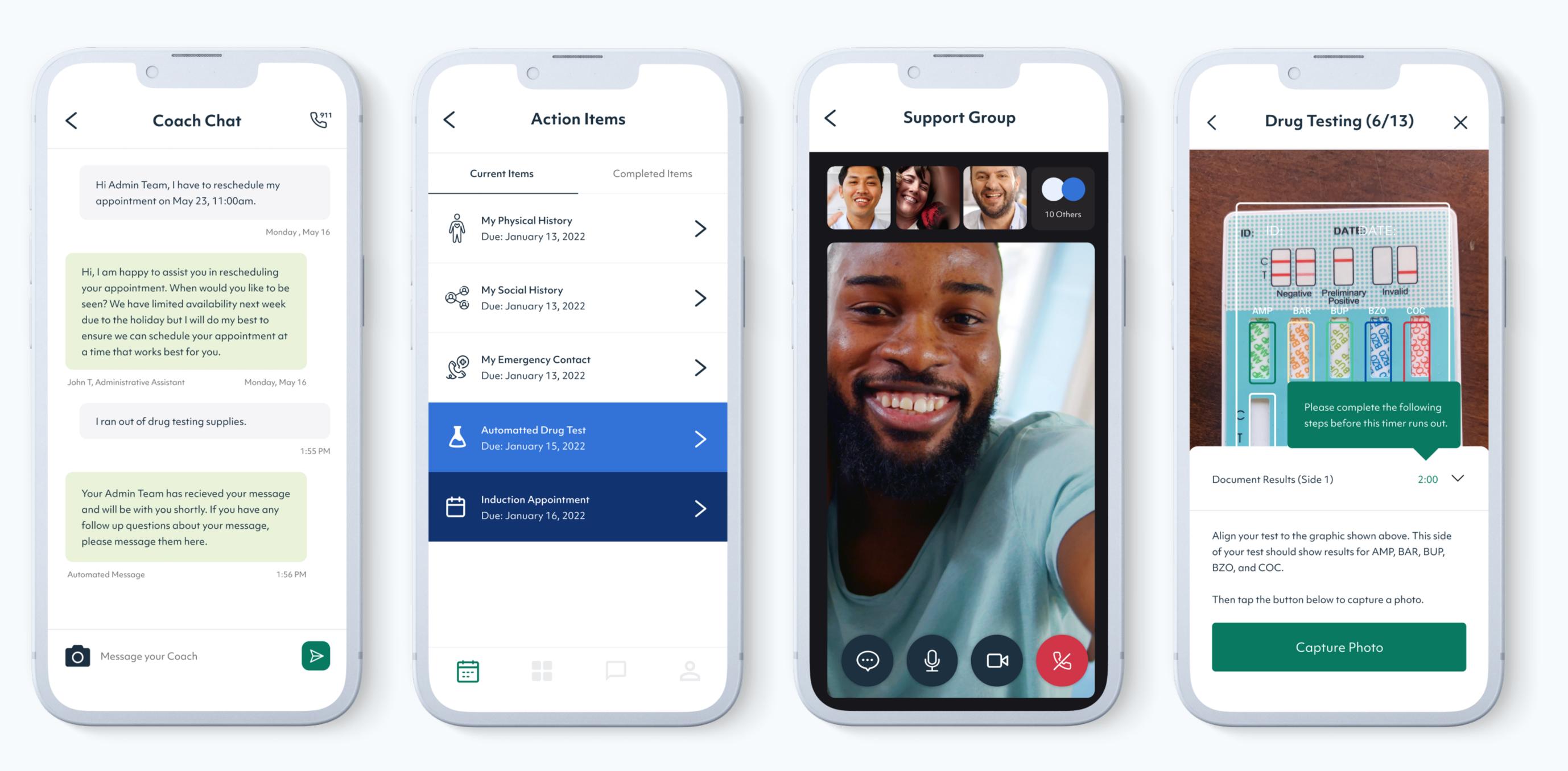
Outcome Measures

- 1. Percent retained in care (i.e., attending a visit) within follow-up window
- 2. Percent who completed a urine drug screen (UDS) within follow-up window
- 3. Percent of UDS results positive for buprenorphine at each interval
- 4. Percent of UDS results negative for unexpected substances at each interval

Follow-up Windows

- 1. 1 month: 15-45 days after initial medical visit
- 2. 3 months: 76-106 days after initial medical visit
- 3. 6 months: 167-197 days after initial medical visit

VIRTUAL-FIRST CARE

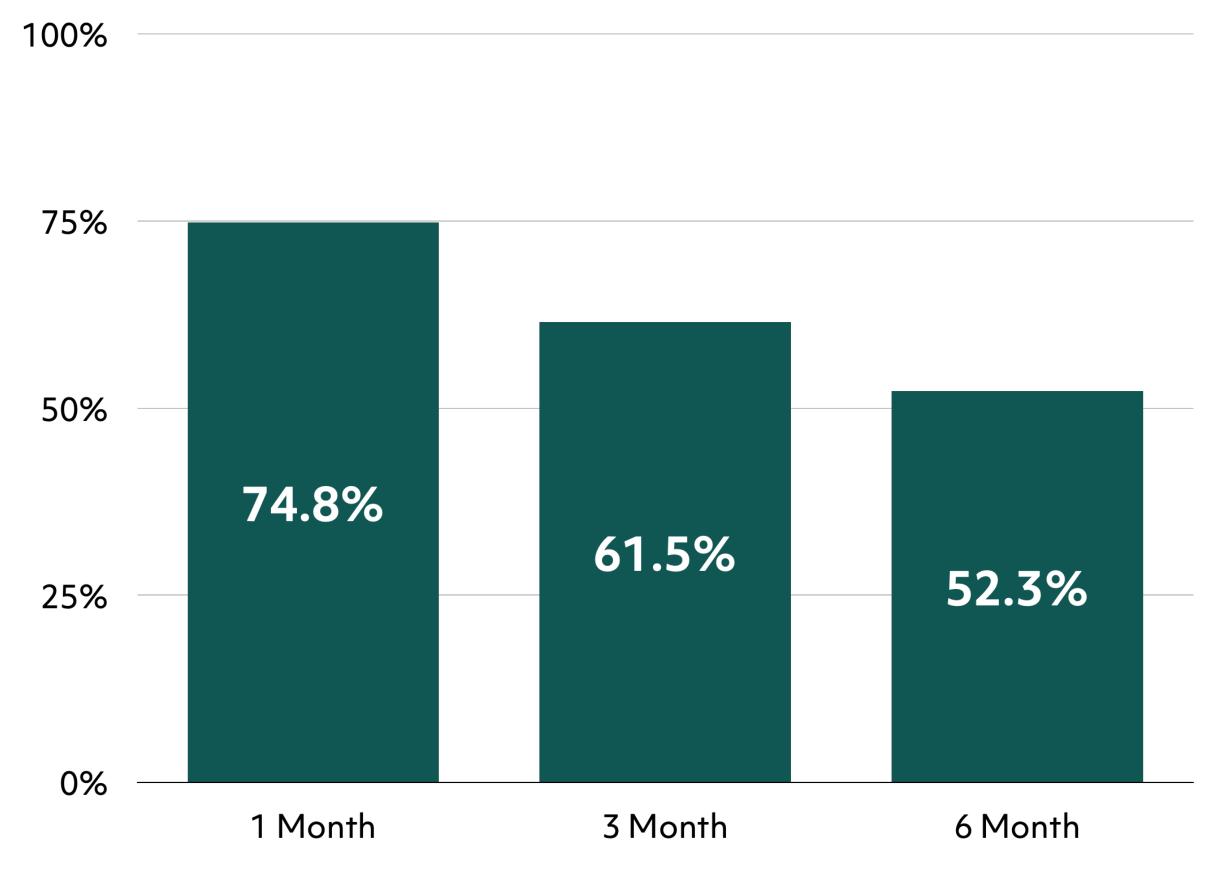


RESULTS

Table 1. Characteristics of patients living in rural areas engaged in telemedicine treatment for OUD (n=1,816)

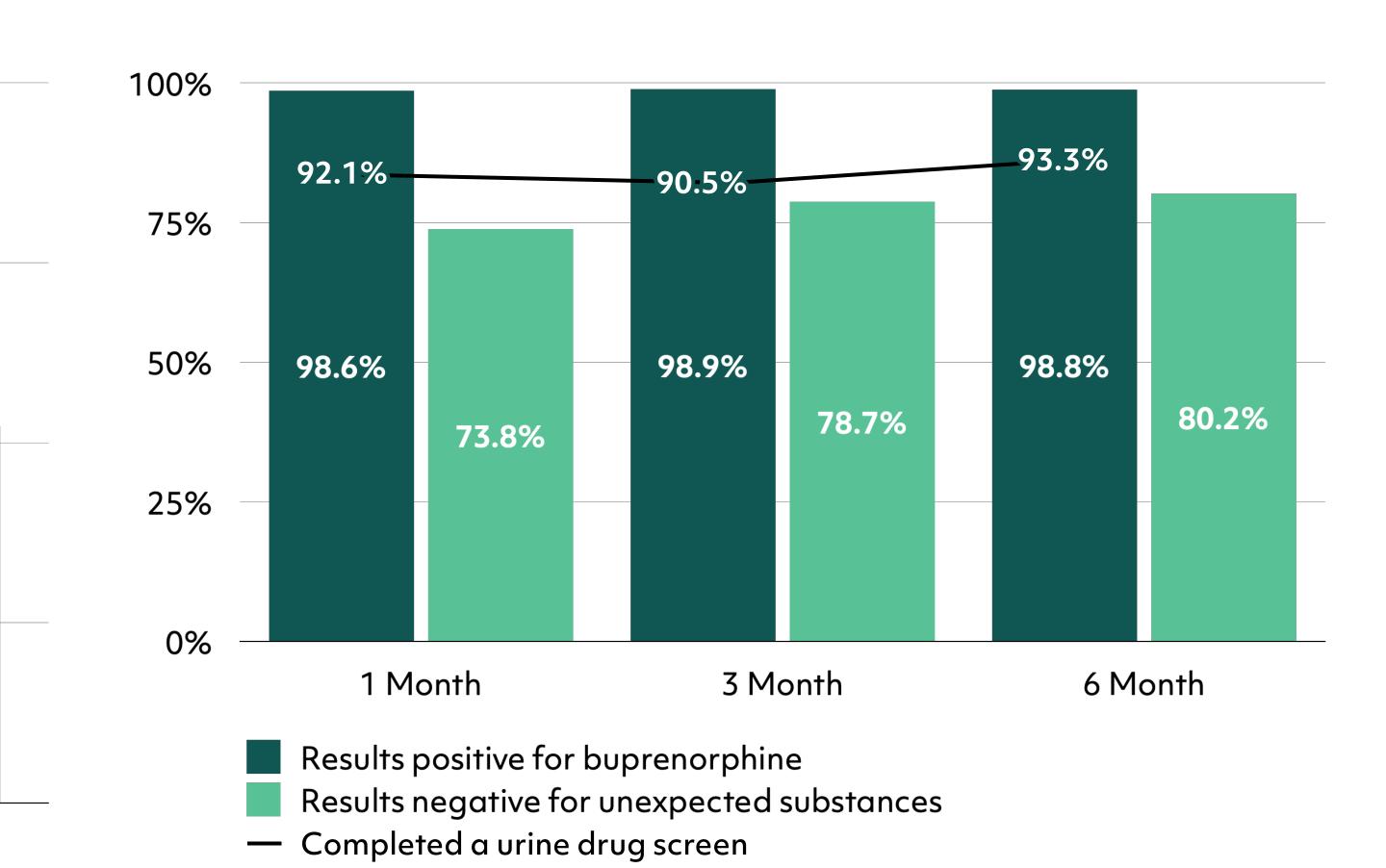
| | n (%) |
|------------------------|--------------|
| Sex | |
| Female | 931 (52.4%) |
| Male | 844 (47.5%) |
| Other/Decline to State | 1 (0.1%) |
| Mean Age (SD) | 37.7 (8.6) |
| Rurality | |
| Large Rural | 1087 (59.9%) |
| Small Rural | 422 (23.2%) |
| Isolated | 307 (16.9%) |
| Insurance | |
| Commercial | 251 (13.8%) |
| Grant | 2 (0.1%) |
| Medicaid | 1212 (66.7%) |
| Medicare | 85 (4.7%) |
| Multi-coverage | 23 (1.3%) |
| Self-pay | 243 (13.4%) |

Figure 1. Percent of patients living in rural areas retained telemedicine OUD care over time (n=1,816)



- 1,816 patients living in rural areas engaged in telemedicine treatment for opioid use disorder from April 1, 2020 January 31, 2022
- 75% of patients were retained in care at 1 month, 62% at 3 months, and 52% at 6 months
- >90% of patients completed UDS at each interval
- 99% of UDS results were positive for buprenorphine at each time point
- 74% of UDS results were negative at 1 month, 79% were negative at 3 months, and 80% were negative at 6 months

Figure 2. Percent of telemedicine-engaged patients in rural areas completing urine drug screens and results over time



CONCLUSION

- First study since the start of the COVID-19 pandemic to assess telemedicine-delivered OUD treatment outcomes among rural Americans specifically, and, to our knowledge, represents telemedicine OUD outcomes from the largest sample of American patients living in rural areas to date.
- 3-month retention in this cohort was 62%. Extant studies on telemedicine-delivered OUD treatment among patients living in both rural and rural/non-rural areas have found 3-month retention rates to be approximately 50%.
- This cohort had high rates of urine drug screen completion (>90%) at each time point.
- Nearly all urine drug test results were positive for buprenorphine, despite ~20% of patients having urine drug screen results positive for unexpected substances.
- Telemedicine-delivered treatment for OUD is **feasible and effective** among patients living in rural areas.

References

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Authors & Disclosures

Marlene C. Lira, MPH^{1,A}, Cynthia Jimes, PhD^{1,A}, M. Justin Coffey, MD^{1,2,A,B}

1 Workit Labs, Workit Health, Ann Arbor, MI 48104

2 Dept. of Psychiatry, Geisinger Commonwealth School of Medicine, Scranton, PA 18510 A Employee, Workit Health

B Equity Owner, Workit Health; Author Royalties: UpToDate, Medlink Neurology

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