# Acceptability of a Mobile Phone Based Hepatitis C Intervention at an Urban Community Social Services Center

JACOB A. LEVINE, PAUL HARKIN, JOSEPH R. GUYDISH, JAMES L. SORENSEN & CARMEN L. MASSON.

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#### Hepatitis C Virus in the US

•Up to 3.9 million people are living with chronic HCV infection in the US

In 2010, estimated 17,000 new HCV infections

IDU most common risk factor for HCV transmission

•IDUs experience multiple barriers to receiving HCV prevention and treatment services including homelessness, poverty, psychiatric comorbidities and difficulties in self-care

#### **Overcoming Barriers to HCV Prevention and Treatment Services**

 Digital health offerings, such as health information websites, online social support networks, and mobile health communication devices can be used to address impediments to care

Not all population groups have opportunities to access and use these applications, in particular populations with lower incomes and levels of education, including IDUs

#### Mobile Phone Interventions for Infectious Disease Prevention and Management

Emerging as a tool to address individual and structural-level barriers in the prevention and management of disease, including for HIV and other sexually transmitted diseases

- Mobile phones have been shown to be effective for:
  - Increasing adherence to antiretroviral medication for people living with HIV/AIDS
  - Increasing appointment attendance in STD clinics, provision of STD test results, communication
    of sexual health information, and assistance with contact-tracing following STD diagnosis

There is tremendous need for effective strategies to increase knowledge, testing, and linkage to HCV evaluation and treatment for HCV-infected persons

 However, there is little data about how disadvantaged and underserved populations, including IDUs use digital health offerings

## **Objectives and Methods**

To assess mobile phone ownership and use, and acceptability of text messaging to promote linkage to HCV evaluation and treatment among clients seeking health and social services at a community center in San Francisco

Participants (N = 100) were recruited from the waiting room

Survey included 25 items:

- Mobile phone ownership and use
- Acceptability of text messaging to:
  - encourage HCV testing
  - encourage engagement in HCV risk behavior screening
  - notify patients of HCV evaluation and treatment appointments
- Concerns about privacy

#### Demographics

Average age = 49 years

66% Male

53% African American

21% White

11% Hispanic

#### **Mobile Phone Ownership**

85% mobile phone ownership

- 52% Smartphone ownership
- 36% Smartphone with unlimited data plan

36% changed phone number in last year

•59% interrupted service in last year

## **HCV Text Messaging**

•96% would feel comfortable receiving at least one type of HCV related text message

- 79% encouraging HCV testing
- 81% encouraging HCV risk assessment
- 94% HCV testing or evaluation appointment reminders
- 94% HCV treatment appointment reminders

•39% would worry about privacy receiving HCV related messages

## Conclusions

 Clients receiving social services at an urban community center are receptive to receiving text messages focusing on HCV disease

Low ownership rates of smartphones with unlimited data plans suggests that smartphone applications may not be a suitable means of communicating health information to poor and underserved populations

A more realistic option may be to use the text messaging feature of mobile phones for intervention delivery.

 Interventionists should be sensitive to potential barriers related to the use of mobile phones for intervention delivery including device ownership and service plans, interruptions in service, and frequency of changing mobile phone numbers.