

HIV Testing at a Free Mobile Dental Clinic

Klein P^{1*}, Cunningham C¹, Tsai P¹, Macfie R¹, Griffith T¹, Chu C¹, Blaylock B², Leone P³
¹University of North Carolina, ²North Carolina Dental Society, ³North Carolina Division of Public Health

Abstract

Many individuals are unaware of their HIV status. Integrating HIV testing into a dental care model can provide HIV testing services to a population that would be missed by other HIV testing efforts. Free, rapid, opt-out HIV testing was introduced at the NC MOM clinics in Greensboro (2011) and New London (2011, 2012). Most patients (70-88%) were approached for opt-out HIV testing. Acceptance of testing was high (72-91%). There were zero preliminary positive tests. Only 50% reported a previous HIV testing encounter. Providing HIV testing in this unique dental setting improves access to HIV testing for underserved populations that may not be reached through other HIV prevention efforts.

Background and Objective

Approximately 20% of persons infected with HIV are unaware of their HIV status. Integrating HIV testing into a dental care model may reach an at-risk population that would be missed by other HIV testing campaigns.

Many individuals who do not regularly visit medical providers do maintain contact with a dental provider. Over 70% of individuals with self-reported HIV risk factors and no recent history of HIV testing visit dental providers. Urban dental clinics show high patient and provider acceptance for HIV testing in the dental setting.

Objective: Assess the feasibility and acceptability of implementing a rapid, routine HIV testing program in a mobile dental clinic in North Carolina

HIV Testing Protocol

HIV Testing

- Patients offered HIV testing after collection of vital signs, before dental triage
- Routine, opt-out HIV testing (OraQuick Advance on oral fluid)
- Pamphlets with HIV prevention information and local free HIV testing resources distributed
- Tests batched and run in private hallway under constant supervision

Provision of Results

- Results given either while waiting or at the completion of dental services
- Opt-in counseling for personal risk assessment and risk-reduction

Preliminary Positive Protocol

- Blood drawn for Western Blot confirmation and syphilis testing
- Patient informed of preliminary nature of result and potential contact by state DIS
- Contact information for local HIV provider and UNC provided

Results

Figure 1: North Carolina HIV Rates, 2003-2005

NC MOM provides free dental services to underserved persons in North Carolina by offering monthly, 2-day clinics across the state.

Patient volume per clinic varies from 400-1000 patients.

Free rapid HIV testing was offered at the Greensboro clinic in 2011 and the New London clinic in 2011 and 2012.

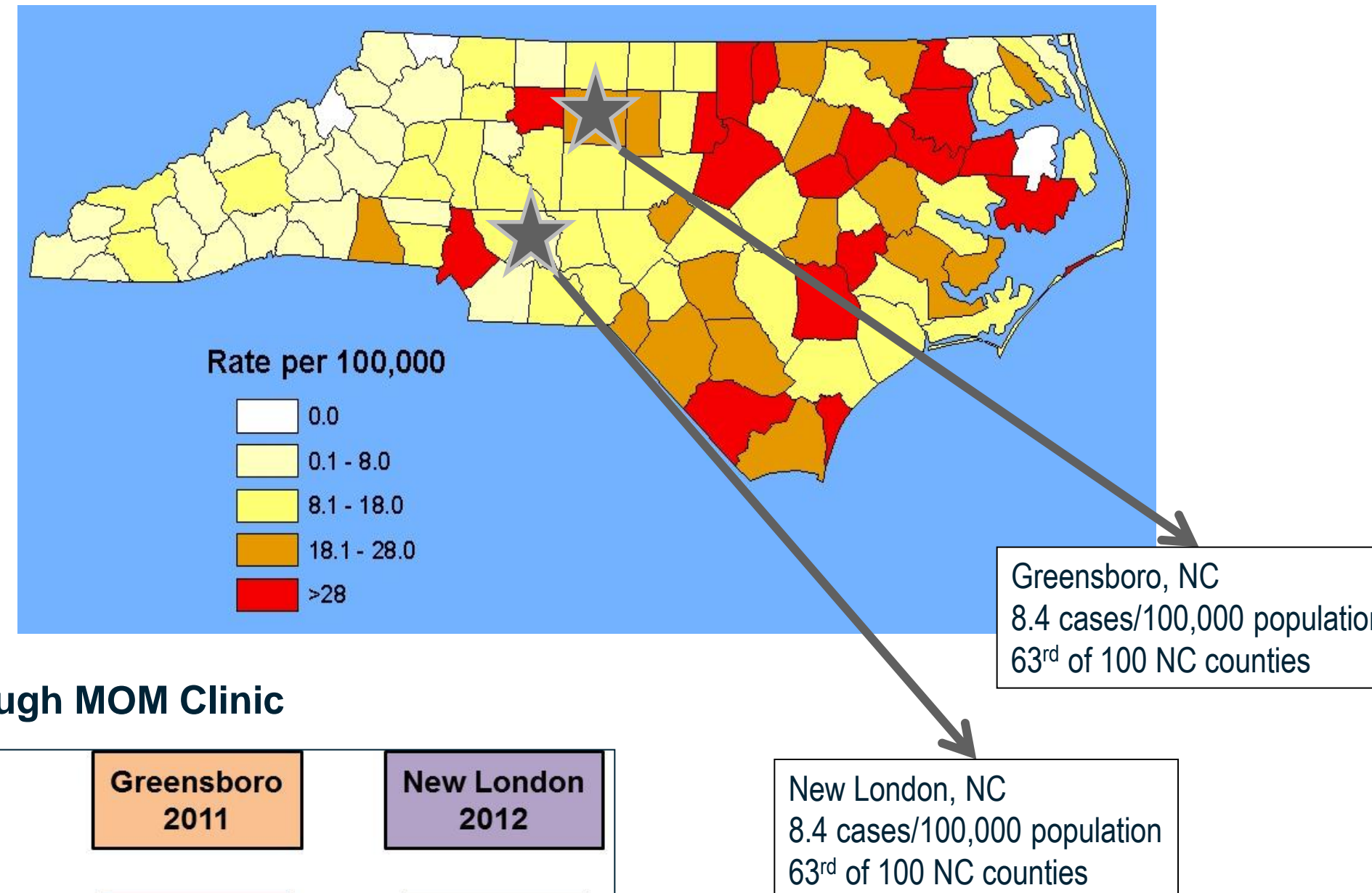
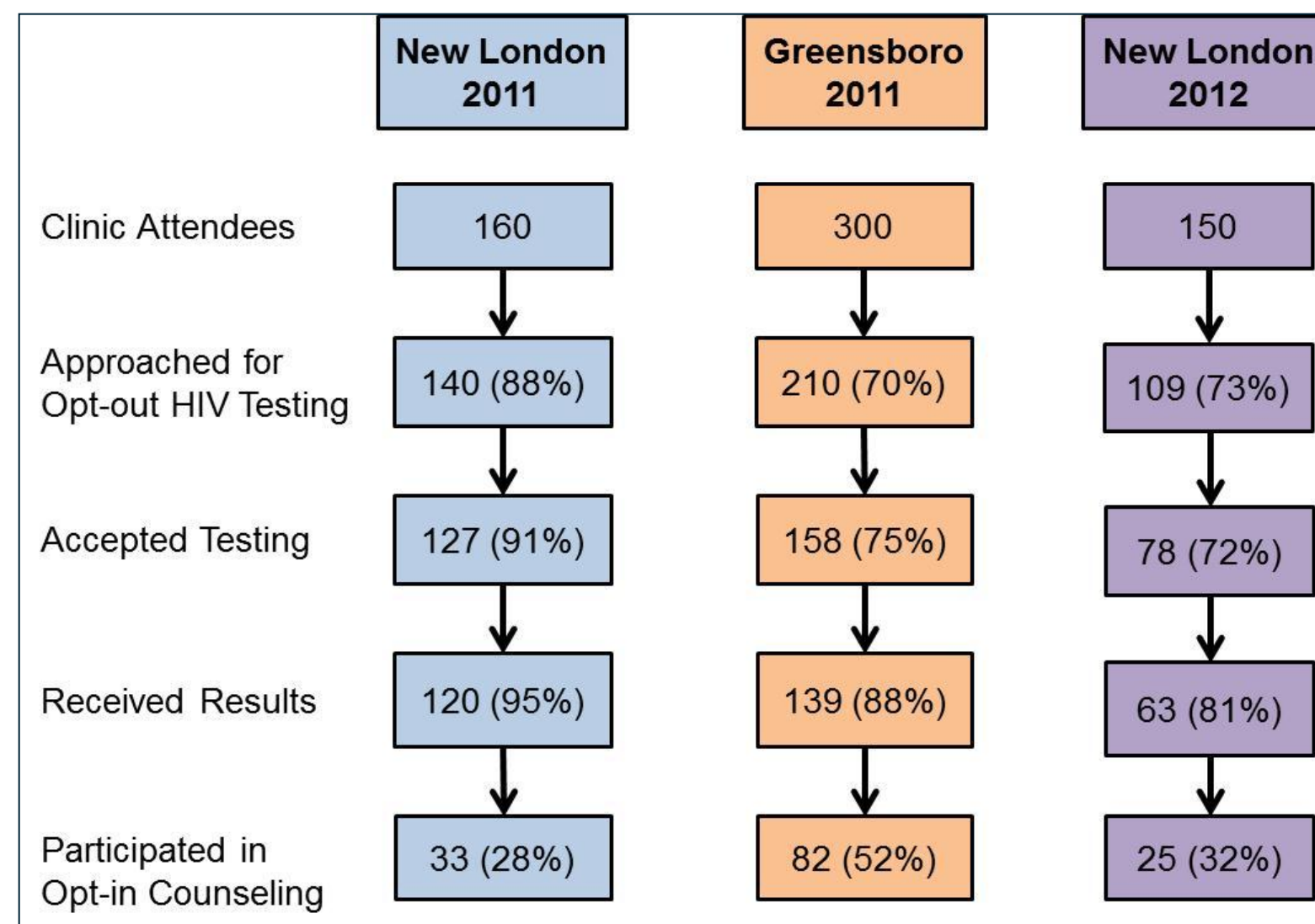


Figure 2: Patient Flow through MOM Clinic



- No patients tested preliminarily positive for HIV (positivity = 0%)
- A large proportion (70-88%) of dental clinic patients were approached for opt-out HIV testing
- High acceptance (72-91%) of rapid HIV testing
- Nearly all patients (81-95%) received their HIV test results on-site
- No major demographic differences between patients who accepted and refused HIV testing
- Only 50% of patients reported a previous HIV test

Figure 3: Patient Acceptance of HIV Testing by Demographic Characteristics

| | Accepted [n=362] n (%) | Refused [n=96] n (%) |
|--------------------|------------------------------|----------------------------|
| Gender | | |
| Male | 159 (43.9) | 37 (38.5) |
| Female | 198 (54.7) | 58 (60.4) |
| Missing | 5 (1.4) | 1 (1.0) |
| Race/Ethnicity | | |
| Non-Hispanic White | 126 (34.8) | 35 (36.5) |
| Non-Hispanic Black | 147 (40.6) | 37 (38.5) |
| Hispanic | 66 (18.2) | 19 (19.8) |
| Asian | 6 (1.7) | 1 (1.0) |
| Other | 3 (0.8) | 2 (2.1) |
| Missing | 14 (3.9) | 2 (2.1) |
| Age (median, IQR) | 37 (28, 50) | 37 (29, 47) |
| Previously Tested | | |
| Yes | 191 (52.8) | 50 (52.1) |
| No | 135 (37.3) | 20 (20.8) |
| Missing | 36 (9.9) | 26 (27.1) |

Successes and Challenges

Successes

- Reached a large proportion of MOM clinic attendees
- Relatively high test acceptance
- Population with little prior access to HIV testing
- Testing of patients and dental providers in 2 needle stick incidents (New London 2012)

Challenges

- Lack of on-site buy-in from MOM clinic staff
- Confusion about testing protocol from both HIV testing volunteers and MOM clinic staff – especially defining opt-out test and opt-in counseling
- Missing/inconsistent data collection
- Decrease in program targets over time

Conclusions

Integration of HIV testing in the dental care model is feasible and acceptable

- 70-88% of patients attending the clinic were approached for HIV testing
- High acceptance of HIV testing

Patients attending the MOM clinics were in need of HIV testing

- Only half reported a previous HIV test

Potential Barriers

- Not interfering with dental patient flow
- Providing results to patients after major dental procedures
- Lack of communication and support from some MOM clinic volunteers
- Volunteer turnover leads to inconsistent protocol dissemination and data collection

Next Steps

- Collaborating with local community based organizations and healthcare providers to offer HIV testing at MOM clinics in a sustainable manner

Acknowledgements

Funding provided by a cooperative agreement with the state of North Carolina under the PS 12-1201 federal grant (Expanded and Integrated HIV Testing for Populations Disproportionately Affected by HIV, Primarily African Americans), UNC SHAC grant, and the Paul Ambrose Scholars Program.

Gracious thanks to the organizers and volunteers with NC MOM for their gracious support of our project.