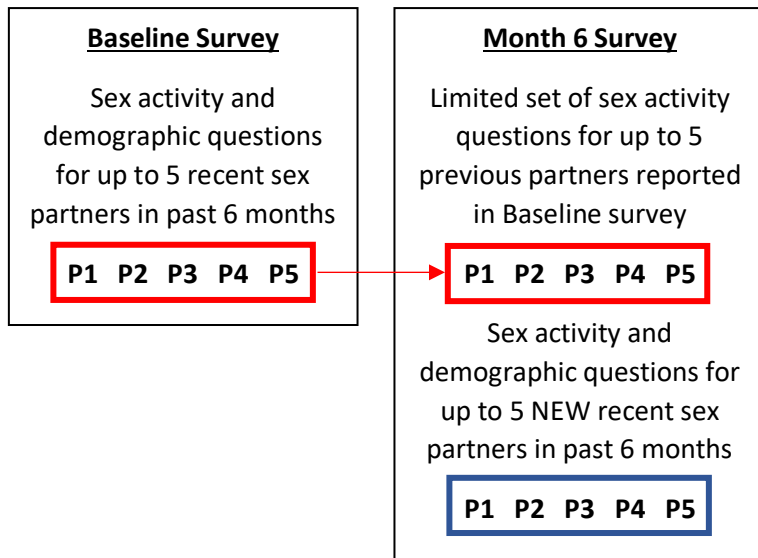# Assessment of Bias in Estimates of Sexual Network Degree using Prospective Cohort Data

Supplemental Appendix

eFigure 1. Partner-Level Survey Questions in a Study of Black and White Men Who Have Sex with Men, Atlanta, 2010–2014.

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┌─────────────────────────┐  ┌─────────────────────────┐
│    Baseline Survey      │  │     Month 6 Survey      │
│                         │  │                         │
│    Sex activity and     │  │  Limited set of sex     │
│  demographic questions  │  │  activity questions     │
│   for up to 5 recent    │  │  for up to 5 previous   │
│  sex partners in past   │  │  partners reported in   │
│       6 months          │  │     Baseline survey     │
│  ┌───────────────────┐  │  │  ┌───────────────────┐  │
│  │ P1 P2 P3 P4 P5 │──┼──┼─▶│ P1 P2 P3 P4 P5 │  │
│  └───────────────────┘  │  │  └───────────────────┘  │
└─────────────────────────┘  │                         │
                             │   Sex activity and      │
                             │  demographic questions  │
                             │   for up to 5 NEW       │
                             │  recent sex partners    │
                             │     in past 6 months    │
                             │  ┌───────────────────┐  │
                             │  │ P1 P2 P3 P4 P5 │  │
                             │  └───────────────────┘  │
                             └─────────────────────────┘
```

Select Sex Activity Questions for Baseline Partners

Did you have sex with [name] once, or more than once during the last 6 months?
  Once
  More than once

When did you first have sex with [name]?
  Calendar date or month and year

When did you last have sex with [name]?
  Calendar date or month and year

Do you think you will have sex with [name] again?
  Yes
  No
  Not sure

Is/was [NAME] someone that you feel or felt committed to above all others (someone you might call your boyfriend, significant other, life partner, or husband)?
  Yes
  No
  Don't know

Select Sex Activity Questions for Previous Baseline Partners at Month 6

Since your last visit with us, have you had anal or oral sex with [name] again?
  Yes
  No
  I'm not sure who [name] is

Have you had unprotected vaginal or anal sex with [name] since your last visit with us?
  Yes
  No
  Don't know

Please enter the date of when you last had sex with [name].

The last time you had sex with [name], did you know his HIV status?
  Yes
  No
  Don't know

What was [name]'s HIV status at that time?
  HIV negative
  HIV positive

Since your last visit with us, during the time period when you were sexually involved with [name], with how many other people did you have sex?

Enter #

Since your last visit with us, during the time period when you were sexually involved with [name], did [name] have sex with anyone else?

Yes

No

Don't know

In the last six months, how many times have you had anal sex with [name]?

Dropdown menu options: 1,2,3,4,5,6,7,8,9,10, More than 10

About how often did you have anal sex with [name] in the last six months?

About once a month

2 or 3 times a month

About once a week

2 or 3 times a week

More than 3 times a week

eTable 1. Distribution of Study Participants by Baseline and Confirmed Degree, by Partnership History, in a Study of Black and White Men Who Have Sex with Men, Atlanta, 2010–2014.

	Main or Casual (n = 405)[1]		Any Main (n = 220)[2]		Any Casual (n = 299)[3]	
	n	%	n	%	n	%
Baseline Degree						
Unknown = No[4]						
0	159	39.3	97	44.1	145	48.5
1	176	43.5	119	54.1	110	36.8
2	49	12.1	4	1.8	30	10.0
3	15	3.7	0	0.0	10	3.3
4	5	1.2	0	0.0	3	1.0
5	1	0.2	0	0.0	1	0.3
Unknown = Missing[5]						
0	64	27.6	56	32.2	51	31.9
1	117	50.4	114	65.6	71	44.4
2	34	14.7	4	2.3	26	16.2
3	11	4.7	0	0.0	8	5.0
4	5	2.2	0	0.0	3	1.9
5	1	0.4	0	0.0	1	0.6
Confirmed Degree						
0	219	54.1	121	55.0	191	63.9
1	147	36.3	96	43.6	89	29.8
2	32	7.9	3	1.4	16	5.4
3	7	1.7	0	0.0	3	1.0
4	0	0.0	0	0.0	0	0.0
5	0	0.0	0	0.0	0	0.0

[1] Study participants who had any main or any casual partnerships in the 6 months prior to the baseline survey; degree is the sum of main and casual partnerships that were ongoing

[2] Study participants who had any main partnerships in the 6 months prior to the baseline survey; degree is the sum of main partnerships that were ongoing

[3] Study participants who had any casual partnerships in the 6 months prior to the baseline survey; degree is the sum of casual partnerships that were ongoing

[4] Responses for unknown baseline degree were coded as not ongoing.

[5] Responses for unknown baseline degree were coded as missing and observations dropped from the model.

eFigure 2. Confirmed degree as a function of baseline degree, and race and age of the study participant. Dashed line with a slope of 1 displays the value where baseline degree perfectly predicts confirmed degree. Predictions below the dashed line indicate baseline degree overestimated confirmed degree. Lines/dots display the point estimates and grey polygons display the 95% confidence intervals around the estimates.