# A randomized controlled trial comparing inSPOT and patient-delivered partner therapy to standard partner notification among MSM: The good, the bad, and the ugly

Roxanne P. Kerani[1,2], Mark Fleming[1], Bill DeYoung[1], Matthew R. Golden [1,2]

[1]Public Health – Seattle and King County, [2]University of Washington

## Background

- Among heterosexuals, patient-delivered partner therapy (PDPT) increases partner treatment and decreases rates of index case reinfection
- No published randomized trials have specifically sought to evaluate different partner notification strategies in MSM
- The effectiveness of PDPT among MSM is unknown
- The effectiveness of inSPOT, a web-based partner notification tool, is also unknown

## Research Questions

- Among MSM, do PDPT or inSPOT increase partner notification or treatment, compared to standard partner management?
- Do PDPT or inSPOT result in fewer partners being tested for HIV and/or syphilis, compared to SPM?

## Methods

- Study design: randomized, controlled trial
- Study population: MSM reported with gonorrhea or chlamydial infection.
- Participants enrolled at time of contact for partner management services (in STD Clinic or by telephone)
- Four arms:
  1. Patient delivered partner therapy (PDPT) - 1 g azithromycin; 400 mg cefixime (if patient had GC), allergy warning, STD information, condoms, invitation to STD Clinic
  2. inSPOT – participants in-clinic offered use of a computer in the clinic and given a card with website URL. Participants enrolled via telephone given web URL.
  3. Combined PDPT/inSPOT
  4. Standard partner management (SPM)– offer of assistance notifying partners
- Outcomes based on participant report at interview 2 weeks following enrollment or based on DIS recorded outcomes for partners contacted directly by DIS

## Results

**Figure 1: Study Enrollment**

Goal enrollment=420 MSM

MSM with contact attempts, N=548

- Ineligible, N=118 (22%)
- Not contacted, N=37 (7%)

Eligible MSM, N=393 (71%)

- Declined, (N=318) (81%)

Enrolled, N=75 (19%)

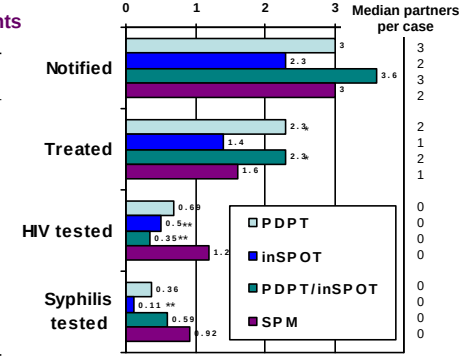
- [Low enrollment, study halted]]

Enrollees with complete data (baseline & follow-up: **N=53**

**Table 1: Study participants**

| Participant characteristic | N | % |
|---|---|---|
| Enrollment | | |
| By telephone | 2 | 3.8 |
| In STD Clinic | 51 | 96.2 |
| STD | | |
| GC | 27 | 50.9 |
| CT | 25 | 47.2 |
| Coinfected | 1 | 1.9 |
| Race | | |
| White | 40 | 75.5 |
| Black | 2 | 3.8 |
| Other | 10 | 20.1 |
| Age (mean, std) | 31.1 | 9.0 |

**Figure 2: Partners notified, treated and tested for HIV or syphilis per case**




*p<0.05 comparing PDPT arms combined to SPM

** p<0.05 compared to SPM

**Table 2: DIS management of partners and use of PDPT and inSPOT**

| | Participants | Partners | Partners managed by study staff | Patients who gave PDPT to ≥1 partner | Partners treated via PDPT | Patients who used inSPOT | Partners notified via inSPOT |
|---|---|---|---|---|---|---|---|
| PDPT | 13 | 44 | 3 (6.8%) * | 11 (84.6%) | 33 (75%) | 0 | 0 |
| inSPOT | 10 | 30 | 3 (10.3%) | 1 (10%) | 3 (10%) | 0 | 0 |
| PDPT/inSPOT | 17 | 70 | 10 (14.3%) | 13 (76.5%) | 42 (60%) | 1 (5.9%) | 1 (1.4%) |
| SPM | 13 | 42 | 14 (33.3%) | 1 (7.7%) | 1 (2.4%) | 1 (7.7%) | 2 (4.8%) |
| Total | 53 | 186 | 30 | 26 | 79 | 2 | 3 |

* p<0.05 when compared to standard arm

## Results Summary

- Of eligible patients, 81% declined enrollment
- 80% of MSM in the two PDPT arms gave PDPT to ≥1 partner
- More partners were treated per case in the PDPT arms combined compared to SPM
- inSPOT was used very infrequently
- Highest rates of HIV and syphilis testing occurred in persons receiving standard partner services

## Limitations

- We did not reach target enrollment
- Limited power to detect differences
- Limited generalizability

## Conclusions

- Population-based randomized trials of different approaches to partner management in MSM may not be feasible using standard, IRB approved protocols
- PDPT is acceptable to MSM, and may increase partner treatment among MSM
- PDPT may decrease HIV and syphilis testing in MSM
- Few MSM appear to be interested is using inSPOT