Increasing Retesting for Chlamydia & Gonorrhea

Holly Howard, Aileen Barandas, Anna Steiner, Heidi Bauer
California Department of Public Health, Sexually Transmitted Diseases Control Branch
California Family Health Council
Disclosures

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I have no other financial disclosures.
Background

- CT/GC reinfections are dangerous for women:
  - Very common: 2-3x baseline infection rate
  - Associated with much higher risk of PID and ectopic pregnancy than initial infection
  - Asymptomatic

- Retesting a few months after treatment can detect reinfections earlier, reducing risk of complications

- CDC recommends retesting ~ 3 months post treatment; “priority” for providers
The Problem: Retesting Rates Remain Low

CA Female family planning patients, 1-6 months post-treatment for CT infection
Why are Retesting Rates so Low?

Proportion of CT+ Patients who Returned to Clinic
- 40% Returned
- 60% Did not Return

Proportion of Returned Patients who were Retested
- 70% Retested
- 30% Not Retested

CA Female family planning patients, 1-6 months post-treatment for CT infection
## Why are Retesting Rates so Low?

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Primary Research Objective:

To determine and compare the effectiveness of two levels of interventions in improving CT/GC retesting rates among female FP clients:

1. **Clinic-level interventions**: introduce enhancements to clinic retesting protocols and systems

2. **Patient-level interventions**: provide clients with automated reminder message and home-testing options

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- PI: Heidi Bauer, MD, MS, MPH, CDPH STD Control Branch
- Study Coordinator, Holly Howard, MPH, CDPH STD Control Branch
- Clinic Liaison, Aileen Barandas, MSN, NP, California Family Health Council (CA Title X)
- Assistant Study Coordinator, Anna Steiner, MPH, CDPH STD Control Branch
Settings and Participants

**Settings:**
6 CA Title X family planning clinics.
Bay Area, Sacramento, Los Angeles.

**Study Participants:**
Female, age >16, CT+, GC+
*Excluded:* pregnant, PID, no English/Spanish.
Analysis Methods: Cohort Study

All positive CT, GC tests from eligible study patients were assigned to cohorts by study clinic:

- **Historical Cohort** (Control Phase)
- **Phase 1: Clinic-Level Interventions**
- **Phase 2: Patient-Level Interventions**
### Study Interventions

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Encouraged Agency to prioritize CT/GC retesting services

**Objective:**
Institute retesting as high-priority clinical service

**Intervention:**
Medical Director presentation using clinic data to demonstrate:
- high reinfection rates
- patient return rates
- missed opportunities for retesting
### Study Interventions

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Clinic-Level Interventions: Reducing Missed Opportunities

Introduced protocols to accommodate retesting at ALL visit types

- Protocols to allow *all clinic staff* to accept CT/GC specimens
  - Urine-based or self-collected vaginal swab specimens
  - Standing orders
Clinic-Level Interventions: Reducing Missed Opportunities
Offered STD-Test-Only walk-in visits
Clinic-Level Interventions: Reducing Missed Opportunities
Staff Performed risk assessment at all visit types

<table>
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<tr>
<th>CT/GC Risk Assessment: ASK All Women, All Ages, All Visits</th>
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<tr>
<td><strong>STD HISTORY, Ask:</strong></td>
</tr>
<tr>
<td>“Have you had an STD, like chlamydia or gonorrhea, in the past year?”</td>
</tr>
<tr>
<td>If Yes → <strong>Determine if retesting is due</strong></td>
</tr>
<tr>
<td><strong>LAST TEST DATE, Ask:</strong></td>
</tr>
<tr>
<td>“Do you know when you were last tested for chlamydia and gonorrhea?”</td>
</tr>
<tr>
<td>If test was &gt; 12 months ago AND she is &lt; age 25 → <strong>Screen</strong></td>
</tr>
<tr>
<td>If &gt; age 25 OR test was &lt; 12 months ago → <strong>Assess risk (next questions)</strong></td>
</tr>
<tr>
<td><strong>MULTIPLE PARTNERS, Ask:</strong></td>
</tr>
<tr>
<td>“How many people have you had sex with within the past year?”</td>
</tr>
<tr>
<td>(or “since that last test”, whichever is more recent)</td>
</tr>
<tr>
<td>If none → <strong>No screen needed. Stop here.</strong></td>
</tr>
<tr>
<td>If = 1 → <strong>Screen if NEW partner (within past 3 months)</strong></td>
</tr>
<tr>
<td>→ If not a new partner – Assess risk (next question)</td>
</tr>
<tr>
<td>If &gt; 1 → <strong>Screen</strong></td>
</tr>
<tr>
<td><strong>PARTNERS OTHER PARTNER(S), Ask:</strong></td>
</tr>
<tr>
<td>“Do you think it is possible that a person you had sex with in the last year had sex with someone else during that same time?”</td>
</tr>
<tr>
<td>If they suspect it’s possible → <strong>Screen</strong></td>
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Clinic-Level Interventions: Reducing Missed Opportunities
Programmed “pop-up” reminders for front office staff

ALERT: CT/GC Retest due after 3/25/12
Results: Historical v. Study Cohorts

Retesting Rates Among Returning Patients*

* Preliminary data
Results: Historical v. Study Cohorts

Retesting Rates Among Returning Patients*

Historical Cohort (n=1373)

<table>
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<tr>
<th>Clinic A</th>
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<th>Clinic C</th>
<th>Clinic D</th>
<th>Total Agency 1</th>
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<tr>
<td>86</td>
<td>94</td>
<td>93</td>
<td>91</td>
<td>85</td>
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Study Cohort § (n=1352)

<table>
<thead>
<tr>
<th>Clinic P</th>
<th>Clinic S</th>
<th>Total Agency 2</th>
<th>Total Agencies 1, 2</th>
</tr>
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<tbody>
<tr>
<td>74</td>
<td>81</td>
<td>77</td>
<td>81</td>
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Significant difference: p-value <0.05
Significant difference: p-value <0.001

* Preliminary data
Results: Historical Cohort

Retesting Rate Among Patients who Returned

Proportion of Returned Patients who were Retested (N=1,373)

- Retested: 81%
- Not Retested: 19%
Results: Study Cohorts

Retesting Rate Among Patients who Returned

Proportion of Returned Patients who were Retested (N=1,352)

93% Retested
7% Not Retested

63% reduction in missed opportunities for retesting
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Counseled patients at their treatment visit about **why** they need to prioritize retesting.

Encouraged patients to find a way to **remember** their retest.
Patient-Level Intervention: Helping them Understand
Updated and simplified patient education materials

1. Reinforced new messaging around:
   - the danger of reinfections
   - various partner treatment options, and
   - the importance of retesting
2. Improved the readability level and lowered the literacy level
3. Organized the material in a more user-friendly format
4. Pilot tested with CT/GC positive patients
Approximately 40-60% of women do not have symptoms. The women who do may notice increased vaginal discharge; painful urination; bleeding, spotting, or pain with intercourse; or, abdominal pain. During the pelvic exam, we may notice a discharge from the cervix and/or bleeding, when the cervix is touched. This irritation of the cervix is called cervicitis.

10-30% of men do not have symptoms. The ones who do may notice a discharge from their penis; or, hesitation, pain, or a tense feeling when they urinate.

What is the treatment? Chlamydia is treated with antibiotics. Be sure to tell your clinician if you are allergic to any medications. Take the medicine prescribed for you exactly as instructed, and finish all of it.

Your partner(s) and any other of his/her partner(s) should be treated to prevent getting the infection again and again. Since no one knows how long you have possibly had the infection, we recommend treatment for your current or most recent sex partner and everyone you have had sexual contact with from 2 months before your symptoms began (if you have symptoms) until now, or if you have no symptoms, for everyone you have had sexual contact with in the past two months. Do not have sexual intercourse until 7 days after both you and your partner(s) have taken the one dose treatment, or until you have both completed the 7 day treatment. If that is not possible, use condoms. If you have sex during this time, you could pass on the infection, or be infected again by your sex partner.
Chlamydia is an infection you can get in your vagina, penis, anus or throat. Most people with Chlamydia do not have any signs or symptoms. When people do have symptoms, they can be mild at first. You may have some of these symptoms:
- Pain or burning when you urinate (pee)
- Fluid from the vagina, penis, or anus that smells or looks strange
- Bleeding from the vagina during or after sex
- Pain or tingling in the penis
- Pain in the lower belly or back, especially when having sex (women)
- A fever

**Is Chlamydia serious?**

Chlamydia can be cured if you follow these 3 important steps:
1. Take all of the medicine your doctor or nurse gives you.
2. Make sure ALL of your sex partners from the past 2 months get medicine for Chlamydia as soon as possible.
3. Don’t have sex until 7 DAYS AFTER both you and your sex partner(s) finish the medicine. → If you do have sex before 7 days, use a condom.

If you don’t follow all of these steps, you can get Chlamydia AGAIN and it can be worse!

**What should I do now?**

Many people who get Chlamydia GET IT AGAIN: Get tested again in 3 months!
Patient-Level Intervention: Helping them Understand
Developed new patient materials.

Front of cards:

Back of card with space to add target retest month:

Messaging inside cards:

Why should I get retested?

- It is very common for women with chlamydia or gonorrhea to get infected again soon after their first infection.
- Getting another infection may cause more damage inside you than the first.
- This damage can make it so that you can’t have babies later and make it painful to have sex.
- For most women, there are no symptoms and so you may not know that anything is wrong.

Drop-in or call to schedule your retest appointment by: ___________ (date)
Patient-Level Intervention: Helping them Remember
Offered retest reminder options via Postcards, Text, Email
Reminder Sign Up

Please enter the patient reminder information.

Agency/Clinic: -- Select Clinic --
Study ID:
First Name:
Reminder Type: CT/GC 3-month retest
Language: ☐ English ☐ Spanish
Date of treatment: 09-10-2012 (mm-dd-yyyy format)
Notify by: ☐ Text Message ☐ Email ☐ Both
Cell Phone: [ ] [ ] [ ]
Cell Phone Carrier: -- Select Carrier --
Email Address:
Re-enter Email Address:
Patient-Level Intervention: Help them Remember
Offer home-testing option
**Results:**

90% of Patients opted to receive a retest reminder 

*(N = 774)*

![Pie chart showing reminder preferences]

- **Text and/or Email only:** 73%
- **Postcard plus Text/Email:** 9%
- **Postcard only:** 8%
- **No Reminder:** 10%

- **81% preferred via text and/or email**
Results:
5% of Patients chose home-test kit option
(N = 774)

Retest Method Option Chosen:
- Home-test kit
- Return to Clinic

Range by clinic: 2-10%

% Home-Test Choice by Age:
- 16-17: 2%
- 18: 4%
- 19: 6%
- 20-21: 8%
- 22-24: 10%
- >25: 16-17%

(N = 774)
Results:
Higher home testing uptake among patients who reported barriers to clinic visits

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Getting to/from clinic is hard</td>
</tr>
<tr>
<td>Getting help with childcare so I can come to clinic is hard</td>
</tr>
<tr>
<td>The days/hours the clinic is open aren't good</td>
</tr>
<tr>
<td>Clinic wait times are too long</td>
</tr>
<tr>
<td>Coming to the clinic makes me nervous or scared</td>
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</tbody>
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- **Yes, often true**
- **Yes, sometimes true**
- **No, not true**
Results Historical vs. Study Cohorts:
Patient Return Rates, by Study Clinic, Agency

- **Clinic A**: 61%
- **Clinic B**: 59%
- **Clinic C**: 57%
- **Clinic D**: 59%
- **Total Agency 1**: 55%
- **Clinic P**: 50%
- **Clinic S**: 47%
- **Total Agency 2**: 49%
- **Total Agencies 1, 2**: 53%

Historical Cohort (n=3204)
**Results Historical vs. Study Cohorts:**
Patient Return Rates, by Study Clinic, Agency

![Bar chart showing patient return rates for historical and study cohorts across different clinics and agencies.](chart)

- **Historical Cohort (n=3204)**
- **Study Cohort 1: Pt Education (n=1640)**

<table>
<thead>
<tr>
<th>Clinic</th>
<th>Historical</th>
<th>Study Cohort 1</th>
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<tbody>
<tr>
<td>A</td>
<td>61</td>
<td>59</td>
</tr>
<tr>
<td>B</td>
<td>59</td>
<td>62</td>
</tr>
<tr>
<td>C</td>
<td>57</td>
<td>67</td>
</tr>
<tr>
<td>D</td>
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Significant difference: p-value <0.05
Significant difference: p-value <0.001

* Preliminary data for Study Cohort 2 – data from only 3 of 6 clinics validated to date
Results **Historical vs. Study Cohorts:**
Patient Return Rates, by Study Clinic, Agency

- **Historical Cohort** (n=3204)
- **Study Cohort 1: Pt Education** (n=1640)
- **Study Cohort 2: Reminders and Home Testing**
  *Preliminary data for Study Cohort 2 – data from only 3 of 6 clinics validated to date*

Significant difference: p-value <0.05
Significant difference: p-value <0.001
**Results: Historical v. Study Cohorts**

**Overall Retesting Rates**

- **Clinic A**: 50
- **Clinic B**: 50
- **Clinic C**: 47
- **Clinic D**: 38
- **Total Agency 1**: 47
- **Clinic P**: 32
- **Clinic S**: 30
- **Total Agency 2**: 38
Results: Historical v. Study Cohorts
Overall Retesting Rates

* Retesting rates as of end of Phase 1 - Phase 2 data not yet available
** Retesting rates at end of Phase 2 for Clinics B, C, and D only
Additional Qualitative Data

• Survey of study clinic staff (n = 78)
  – To measure satisfaction and feasibility of interventions and obtain recommendations for improvements

• Telephone interviews of sample enrolled patients (n = 33)
  – To determine patients’ satisfaction with study interventions and any additional barriers to retesting
Sample Patient Interviews
All interviewed patients (n = 33)

Q: How important was it to you that you got to pick the options that were best for your situation?

- 85% It was very important
- 15% It wasn't that important

“(Getting chlamydia) was a scary situation for me and being given these different options made me feel like I was more in control (of the situation).”
In Summary

What worked?
- Pop-ups for front office at check in
- Enhancing patient education
- Giving patients option for reminder

What didn’t?
- Giving patients option to test at home

What else?
- Being given these options was important to patients = better quality care
Limitations

• Possible missing encounter data may have underestimated overall return, retesting rates
• Return visits and retesting outside of these agencies would not have been captured -- underestimation of return, retesting rates
• Results may not be generalizable to all clinic types
• These are still preliminary data
Many Thanks to our Study Partners

- Research Partner:
  - California Family Health Council (CFHC)
- Clinical Agencies/Laboratories:
  - Planned Parenthood Mar Monte
  - Planned Parenthood Los Angeles
- Grants Management:
  - Public Health Foundation Enterprises
- Funder:
  - HHS, Office of Population Affairs

For more information and samples of tools, fact sheets and job aides, please contact Holly Howard

Holly.Howard@cdph.ca.gov