Perceived vs. Accuracy: A Comparison of Patient Perceived STI testing vs. Actual Tests Performed in a Community Health Center

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Introduction

• Among the top 3 largest clinics of CentroMed in revenue, population served, and building size

• Shadowed 4 Providers

• High amount of STI screening/testing

• On-site LabCorp

• STIs in Texas\(^1\)
  • Chlamydia
  • Gonorrhea
  • HIV
Background

• 1 in 4 individuals affected$^2$
  • Incidence (20 million new infections/yr) + Prevalence (110 million infections) → 16 BILLION dollars

• 5 major strategies for prevention and control:$^3$
  • Advise and educate
  • Identify asymptomatic and symptomatic infected people
  • Effective diagnosis, treatment, and counseling
  • Evaluate, treat, and counsel sex partners of persons who are infected with an STI
  • Pre-exposure vaccination of high-risk people

• CDC encourages providers to inform patients receiving STI testing of all STD’s they are being tested for and the common ones they are not$^3$

• Patients have a general misunderstanding of STI screening procedures
  • Previous research found 40% of young women thought routine STI testing included all eight STIs$^4$
Methodology

• Study Overview
  • Purpose: Accurate identification of STDs

• Subjects/Recruitment Procedures
  • Patients attending onsite LabCorp at CentroMed-Walzem St receiving STI testing that included at least one blood test
  • July 21, 2014-August 12, 2014
  • STI testing indicated by LabCorp staff and number written on sign-in chart and survey
  • Recruited at end of each visit and provided with consent form and survey
Methodology

• Measures
  • Eight-item questionnaire provided in English/Spanish
    • Demographic Questions
    • Reasons for visit
    • Which STIs
    • Referring Provider
    • Concerns Addressed
  • Anonymity ensured by placing survey in drop-box

• Clinic staff blinded to purpose of study, survey content, and response of participants

• Analysis Plan
  • Surveys linked to patient charts via number provided during check-in and listed on complete surveys
  • 2011 Microsoft Excel used for:
    • Descriptive statistics
    • Frequencies
    • Other data
Results-Demographics

- 101 patients asked to be surveyed
  - 1 declined
  - 100 participants
- 70% of surveys completed in English; 30% completed in Spanish

**Gender**
- Female: 87%
- Male: 13%

**Age**
- 18-24: 31%
- 25-34: 38%
- 35-44: 13%
- 45+: 17%
- 17 and under: 1%
Results - Demographics

Race

- Hispanic: 55%
- AA: 26%
- White: 11%
- Multi: 8%

Education Level

- HS diploma: 30%
- Some College: 25%
- Tech/Assoc Degree: 10%
- Less than HS diploma: 29%
- B.S. or higher: 6%
Results - Reason for visit and Frequency

Participant Reported Reason(s) for Visit

- My provider wanted me...
- Exposed to an STD
- I wanted to be...
- Experiencing...
- Partner wanted me...
- Other

Frequency of Tests Performed

- Gonorrhea: 62
- Chlamydia: 65
- Syphilis: 28
- HSV: 94
- HIV/AIDS: 1
- HPV: 16
- Hepatitis B: 6
- Trichomoniasis: 0
Results - Identification of Testing Status and Patient Satisfaction

Were you tested for an STI/STD today?

Yes: 34
No: 36
Don't Know: 30

Were your concerns addressed during your visit?

Yes: 90
No: 7
No Answer: 3
## Results - Participant Identification of Tests Performed

<table>
<thead>
<tr>
<th>STD</th>
<th>Number of participants tested</th>
<th>Percentage of participants who correctly identified whether they were tested</th>
<th>Percentage of participants who were tested but did NOT know that they were</th>
<th>Number of participants NOT tested but who thought that they were</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhea</td>
<td>62</td>
<td>12.9</td>
<td>87.1</td>
<td>0</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>65</td>
<td>12.3</td>
<td>87.7</td>
<td>1</td>
</tr>
<tr>
<td>Syphilis</td>
<td>28</td>
<td>14.3</td>
<td>85.7</td>
<td>2</td>
</tr>
<tr>
<td>Herpes</td>
<td>1</td>
<td>0</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>94</td>
<td>23.4</td>
<td>76.6</td>
<td>0</td>
</tr>
<tr>
<td>HPV</td>
<td>16</td>
<td>6.2</td>
<td>93.8</td>
<td>6</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>6</td>
<td>33</td>
<td>77</td>
<td>4</td>
</tr>
<tr>
<td>Trichomoniasis</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>
## Results - Referring Provider

<table>
<thead>
<tr>
<th>Practice of Referring Provider</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/Internal Medicine</td>
<td>31</td>
</tr>
<tr>
<td>OBGYN</td>
<td>68</td>
</tr>
<tr>
<td>No Answer</td>
<td>1</td>
</tr>
</tbody>
</table>
Discussion

- Gender and Education Level → Inconsistent with population demographics for SA
- Race → Consistent with demographics of uninsured and underserved
- Language → Consistent with demographics for SA
- Age → 25-34 age group overrepresented compared to SA → Childbearing??
- Reason for visit
  - Differ from a previous studies (due to a STI-related symptom)
- Frequency of Tests Performed
  - HIV, Gonorrhea, Chlamydia- most commonly tested at CentroMed Walzem Rd.
    - CDC states include HIV screening in all patients 13-64 in all healthcare settings → CentroMed doing great!
  - Most prevalent STDs in the US → HPV, Herpes, Trichomoniasis
    - No patient tested specifically for Trichomoniasis
    - CDC vs USPSTF for Herpes
Discussion

• Identification of Testing Status
  • Misunderstandings of STD testing present a risk because patients are often only told the specifics of their testing if a positive test result is received
  • Majority of participants did not know they were tested for STI

• Blinded Study
  • Surveys separated by week
  • No trend in increasing amount patient knowledge of STI testing identified

• Referring Provider
  • OBGYN with most referrals → Pregnancy and Pap smears???

• Patient Satisfaction
  • Majority felt concerns were addressed-only 10 able to accurately identify all test performed
  • Falsely elevated sense of patient satisfaction
  • Maybe if they had known which tests were and were not performed, they would say the opposite
Conclusions/Recommendations

• Patients are generally unaware of which STIs they are being tested for
• Prevention of STIs and correct identification of patients infected is critical in order to decrease the prevalence and potentially negative outcomes of these illnesses
• Clear communication between HCPs and their patients is essential to meeting this goal
• HCPs should conform to CDC recommendations regarding STI testing
• Educational efforts for HCPs to inform them of CDC recommendations and importance of patient education regarding STD testing
• Perform studies after training of healthcare providers to see if the efforts targeted at providers result in increased patient education and knowledge of testing status
References


