

CLINICAL PROBLEM

- Stigmatization, need for confidentiality, and avoidance of attention among other personal reasons hinder STI screening
- Lack of time by primary care providers to address high-risk sexual behaviors create a barrier to STI screening
- Initially, STIs were diagnosed in public health settings but now non-STI clinics offer screening and diagnoses
- High incidence of STI acquisitions occur in persons with new sexual partners/multiple sexual partners, partners who have current STIs, inconsistent or no condom use, and direct contact with sex workers
- The significance in nursing is to optimize STI screening in the primary care since primary care is the main gateway into healthcare to alleviate the low screening rate in the US
- The significance of the project problem to the host site is to Implement STIGI to increase early diagnosis and timely treatment to prevent complications, transmissions, and reinfections

OBJECTIVES

- To administer an education seminar for the multi-disciplinary team to train on the STIGI protocol
- To implement STIGI
- To improve provider compliance with EBP national standards of screening and treatment of STIs in primary care
- To increase STI screening rate by 10% for patients who come into the clinic with abnormal symptoms

INTRODUCTION

- STI prevalence risen significantly in the US
- STI cause substantial morbidity and health issues if left untreated
- Linked to heavy monetary burden, cost US \$16 billion in 2018
- Prevailing STIs chlamydia, gonorrhea, hepatitis B virus (HBV), herpes simplex virus type 2 (HSV-2), human papillomavirus (HPV), human immunodeficiency virus (HIV), syphilis, and trichomoniasis
- Screening is critical for patients reporting STI symptoms
- STI screening facilitates detection, early treatment, and prevents transmission and reinfections
- This QI project is an evidence-based STI screening protocol with a goal of promoting diagnosis and standardizing treatment within the primary care clinic

SIGNIFICANCE TO THE FIELD OF NURSING

- This QI project was developed to improve STI screening and early treatment by implementing STIGI protocol, educating staff of the importance of its application in the primary care setting.
- Nonadherence to STIGI and the unchanged medical providers' behavior can lead to poor patient outcomes and have the potential to impact not only the individual's health, but that of their partners'. (1)
- Primary care is the gateway and initial point of care for many STI patients (2).
- QI project applies to the particular clinical site due to its location in Miami's suburbs, and its clientele is primarily underprivileged minorities, including the Latino, black, gay, and transgender communities. Therefore, this facility displays an urgent need for the implementation of STIGI in order to assure appropriate screening, timely diagnosis, and early treatment of STIs.
- The education and EBP had a positive impact, but the QI project had limitations. The hope is that the QI process will continue moving forward and early diagnosis and treatment of STIs will be standardized in this primary care practice.
- Providers will continue to improve screening and STI treatment across this very diverse clinical setting and improvement of delivery of care will persist.

LITERATURE REVIEW

- Standard treatment guidelines international (STIGI) is the recommended CDC screening protocol
- Early screening and treatment effectively reduce STIs transmission risk, particularly in high-risk populations
- Education and outreach programs can optimize STI screening by eliminating common misconceptions (3)
- Physician-patient education is essential in implementing STIGI as it raises patient awareness of STIs risk (4)
- Provider or clinic level-based advocacy and protocol development are essential in implementing screening more efficiently
- Successful implementation of screening protocol requires collaborative partnership between primary care and STI programs
- Lack of time by providers creates a barrier in STI screening (5)
- Provider and patient education had limited benefit toward improving STI screening (6)
- Clinics can effectively adopt strategies to improve screening and minimize STI prevalence

THEORETICAL MODEL

Changes at the host site achieved through 3 stages of Lewin's model:

- Unfreezing
- Change
- Refreezing (7)



PROJECT DESIGN

- Quantitative data collected via EHR report
- Participants: 6 providers- two medical doctors and four advanced practice providers
- A total of 75 charts from all participants audited 4 weeks pre-implementation of STIGI
- Data collected manually added to a chart auditing tool
- Four weeks post-implementation, an EHR report will again be run, and collectively 92 charts with the same ICD10 code Z20.2 will be obtained
- The data collection align with the project aim to optimize STI screening in primary care utilizing Lewin's change theory to improve early detection and treatment

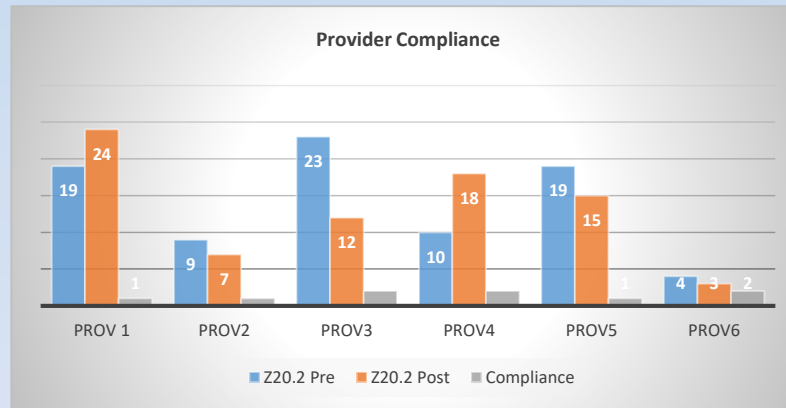
TOOLS

CDC STIGI protocol • Chart auditing tool • EHR summary reports • Educational materials

RESULTS

Chart Auditing tool – Pre- and Post- Implementation and compliance column with 1 for Yes and 2 for No.

Providers	Z20.2-Pre	Z20.2Post	Compliance
Prov1	19	24	1
Prov2	9	7	1
Prov3	23	12	2
Prov4	10	18	2
Prov5	10	15	1
Prov6	4	3	2
TOTAL	75	79	3/3



Fisher's Exact Test

P Value:

The two-tailed p- value equals 0.6831
 The p-value was calculated with McNemar's test with the continuity correction.
 Chi squared equals 0.167 with 1 degrees of freedom.

Odds ratio:

The odds ratio is 1.000, with a 95% confidence interval extending from 0.134 to 7.466

Conclusion of Analysis		STIGI +	STIGI -	Total
Compliance	+	0	3	3
	-	3	0	3
Total		3	3	6

McNemar's Test

p- value after four weeks of STIGI protocol0.8220

Confidence interval:

The mean of Z20.2 Pre minus Z20.2 Post equals -0.67
 95% confidence interval of this difference: From -7.90 to 6.56

Intermediate values used in calculations:

t = 0.2370 df = 5 standard error of difference = 2.813

Group	Z20.2 Pre (N = 6)	Z20.2 Post (N = 6)
Mean	12.50	13.17
SD	7.06	7.57
SEM	2.88	3.09

The provider's knowledge and behavior were not changed, and post-implementation protocol analysis did not increase the screening and early treatment rates. The result analyzed showed no statistically significant association on providers' adherence to STIGI protocol ($p = 0.6831$) within five weeks of implementation.

CONCLUSION

- STIs are a serious health concern and monetary burden for the United States
- It is crucial to establish and maintain an evidence-based tool (STIGI) in primary care to improve STIs' early detection and treatment
- Lewin's Change Model was appropriate to create significant change and increase awareness on using the standardized tool
- The utilization of evidence-based practice in primary care creates positive changes in patients' outcomes

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