# Initiative to Increase Referrals to Intimate Partner Violence/Teen Dating Violence Resources at a School Based Health Center: A Quality Improvement Project

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March 17, 2023

This paper is submitted in partial fulfillment of the requirements for the Doctor of Nursing Practice degree.

**Abstract**

Intimate partner violence (IPV) in adolescents is a significant public health problem affecting millions of American youth with profound lifelong impacts on both physical and mental health. In Oregon, more than 1 in 8 students experience teen dating violence before age 18 (Oregon Department of Education, n.d.). School-Based Health Centers (SBHCs) are medical clinics within schools that provide primary healthcare services to students. Early intervention strategies in adolescence are crucial for ending teen dating violence (TDV); and health care-based interventions provide an opportunity to mitigate partner violence and adverse health outcomes in these individuals. This quality improvement project was implemented at a SBHC within a high school in Portland, Oregon utilizing visual media, including posters with QR codes, as an educational intervention to inform students about IPV services available through the SBHC and improve student referrals to these services. Additionally, patients seen at the SBHC were asked to fill out a survey quantifying the number of students who noticed the posters, QR codes, and information leaflets and how likely they are to call or seek resources about intimate partner violence. While this project did not yield the intended results due to incomplete data and other limiting factors preventing adequate outcome measurement, it did highlight the importance of partner investment, focused data tracking, and continuity despite staff turnover. These are key findings of this project that will be incorporated into partner agency policies and can be used to inform future quality improvement projects.

*Keywords*: intimate partner violence, IPV, teen dating violence, TDV, school based health centers, SBHC, adolescent, high school, QR codes, referrals, quality improvement

# Initiative to Increase Referrals to Intimate Partner Violence/Teen Dating Violence Resources at a School-based Health Center: A Quality Improvement Project

## Introduction

### Problem Description

Intimate partner violence (IPV) in adolescents, or teen dating violence (TDV), is a significant, preventable, public health problem that affects millions of American youth with profound lifelong impacts on health and wellbeing; it can be in the form of physical or sexual violence, psychological aggression or stalking that takes place in person or online (Centers for Disease Control and Prevention [CDC], 2022; Exner-Cortens et al., 2013). IPV/TDV can occur in any and all types of intimate relationships, including among heterosexual and sexual minority populations; however, it disproportionately affects racial/ethnic and sexual minority populations (Niolon et al., 2017). According to the Centers for Disease Control and Prevention (2022), about 1 in 12 high school students experience physical dating violence and 1 in 12 experience sexual dating violence. More than 1 in 8 students in Oregon experience teen dating violence before age 18 (Oregon Department of Education, n.d.).

Adolescents who suffer from TDV are more likely to experience symptoms of depression, anxiety, and consider suicide, engage in unhealthy behaviors including substance use (tobacco, alcohol, drugs), lying, bullying, or stealing. Research shows that IPV experienced in adolescence is associated with adverse health outcomes, regardless of gender (Exner-Cortens et al., 2013). Those who experience TDV in high school are more likely to experience victimization in college and TDV is a risk factor for IPV in adulthood (CDC, 2022; Niolon et al., 2017). Early prevention strategies in adolescence are critical for ending IPV, including screening and health care-based interventions during regular clinical office visits, provide opportunities to mitigate partner violence and future health problems for teens in unhealthy relationships (Niolon et al., 2017).

### Available Knowledge

School-Based Health Centers (SBHCs) are medical clinics within schools or on school grounds that provide quality primary healthcare services including physical, behavioral, and preventative health services and have existed in Oregon since 1986 (OHA, 2021). SBHCs utilize a youth-centered model to support adolescent health and wellness and increase access to healthcare by reducing barriers including transportation, cost, and concerns about confidentiality (OHA, 2021). SBHCs allow students to return to class faster than if they received care in a non-SBHC setting and eliminate the need for parents to take time away from work to take their child to the doctor. They are funded through public-private partnerships among community members, local public health authorities, the Oregon Public Health Division, health care providers, parents, students, and school districts (OHA, 2021).

Despite their positive impact on health, students underutilize care at SBHCs due to a lack of awareness of available services and how to access them, as well as confidentiality concerns (Gruber et al., 2021). Current evidence, however, suggests that even with underutilization, school settings have the potential to reduce TDV rates by promoting awareness and reporting TDV to school personnel through a school-based poster campaign (Niolon et al., 2017). Health education via visual posters have been shown to be effective for reaching a large audience, including young people in schools. They can convey information that promotes healthy lifestyles and reduce negative health outcomes (Hasanica et al., 2020). Posters and brochures are an inexpensive form of communication that some patients prefer for receiving health-related information and can prompt topical conversations with providers in the primary care setting (Devlin et al., 2021; Hasanica et al., 2020). Quick Response (QR) codes became ubiquitous during the COVID-19 pandemic and allowed patients to immediately access information on their personal devices, reducing transmission of disease through contact (Sharara & Radia, 2021). A study conducted in 2020 found that QR codes are a familiar, easy-to-use tool that patients preferred for accessing information over paper leaflets (Sharara & Radia, 2021); given that 75% of students in high

school or lower have smartphones, QR codes are a reasonable option for distributing information (Pew Research Center, 2021).

**Rationale**

This project was guided by the Institute for Healthcare Improvement (IHI) Model for Improvement (MFI), an evidence-based process for identifying, testing, and implementing quality improvement (QI) interventions (Institute for Healthcare Improvement, n.d.). The MFI is recognized as a QI framework of good utility in healthcare systems (Crowl et al., 2015; IHI, n.d.). The MFI process was initiated by creating a cause-and-effect diagram (see Appendix A) to identify gaps in current processes at the student wellness center that could have led to the dearth of referrals for IPV resources. The root cause analysis and cause and effect diagram revealed that there were no posters or visual aids to inform students about available IPV resources. A review of literature identified use of posters/visual aids as appropriate intervention for increasing the identification and referral to IPV/TDV resources. Placing posters and informational cards in the areas students will occupy during their visits (exam rooms, restrooms, and waiting areas) filled this gap for the project's aim.

**Specific Aims**

The goal of this project was to increase student awareness of and referrals to IPV/TDV services available through a partner clinic. The specific aim was to have 5% of students seen at the wellness center access IPV/TVD resources available at the partner clinic between September 1, 2022 through December 31, 2022.

## Methods

**Context**

This project took place during the fall/winter semester at an urban, university-affiliated wellness center within a Portland area high school from September 1-December 31, 2022. The wellness center is an Oregon SBHC serving 848 students, the target population of this campaign. Staff consists of a

physician and medical director, family nurse practitioner, registered nurse, certified medical assistant, licensed clinical social worker, and mental health consultant. The wellness center provides primary care focused services to all students, regardless of insurance status or ability to pay. These services include sexual health and education, and behavioral health services, including treatment for mental health concerns such as depression and anxiety.

**Interventions**

Prior to implementation of this project, there were no visual materials to inform patients of the student wellness center about IPV/TDV and resources available. This deficit was addressed by hanging posters with QR codes and providing informational leaflets from Futures Without Violence (FWV) that feature resource information including phone numbers for IPV advocates and local 24/7 hotlines (see Appendix B). The posters and leaflets were made available in the waiting room area, bathroom, and exam rooms of the student wellness center. The QR codes, when scanned, linked to on-line information similar to what was provided on the posters and leaflets (see Appendix C). Students could then access these resources on their own time, regardless of whether they were screened by a healthcare provider. They could also access the information anonymously and share with peers who may benefit from available resources. Providers were informed of this project and intended goal prior to implementation.

This project was implemented using plan-do-study-act (PDSA) cycles. Interventions were tested over one-month cycles; IPV advocates and clinic staff were consulted to discuss improvements for each intervention. Additional interventions included a student intern pointing out the posters to patients at the wellness center, and a concurrent reproductive health campaign posting the IPV information on the Instagram account of the wellness center (see Appendix D).

**Study of the Interventions**

The study of the interventions included tracking the number of QR code scans, and monitoring the number of student referrals to resources at the affiliated clinic and partner agencies. Specific

utilization of IPV resources could not be determined, as calls to advocates were anonymous and individualized. Given that the IPV advocates were understood to receive no referrals from the wellness center prior to the interventions, referrals made during this initiative were likely related to accessing information via posters and leaflets. A run chart was created with data collected during fall/winter semester 2022 compared with the same period in 2021. Students visiting the wellness center were asked to complete a survey about whether they noticed the posters, QR codes, and information leaflets and whether they would seek available IPV/TDV services, providing quantitative and qualitative data. The number of "likes" garnered on Instagram were also monitored and recorded.

**Measures**

The outcome measure for this project was the percentage of patients visiting the wellness center who were referred to IPV resources, helping to quantify the effectiveness of the interventions. The process measures include the number of student visits to the wellness center, the number of QR code scans, and responses to surveys, evaluating the number of students who noticed interventions and showed interest in learning more about available resources.

Balancing measures included the awareness that increasing referrals for IPV resources could burden staff at the affiliated clinic and partner agencies, including schedulers, mental health clinicians and support staff, potentially leading to distress and burnout. The potential negative emotional impact for students seeing posters possibly making them aware of difficult or abusive relationships, and the vulnerability of seeking out support were additional balancing measures considered but not formally assessed as it was outside of scope of this project.

**Analysis**

Quantitative and qualitative data was collected by prospective monitoring from September 1 to December 31, 2022. Data was collected by the author with support from clinic staff and was documented in an Excel spreadsheet and displayed in a run chart to represent the results. The monthly

referrals per number of students seen at the clinic September-December 2021 prior to the interventions, and the same time period in 2022 during the interventions, provided a comparative percentage of referrals. The number of QR code scans per month were monitored through the QR code generator and collected in the Excel spread sheet. Qualitative and quantitative data collected from survey responses were aggregated by response and theme.

**Ethical Considerations**

All clinic staff, including the medical director, providers, and extended support staff were informed of this quality improvement project. The implementation of this project did not pose any ethical concerns for the patients who seek care at the clinic as no identifiable information was collected and no direct contact with human subjects was made. The project was deemed not research involving human subjects by the Oregon Health & Science University Institutional Review Board due to its nature as quality improvement (STUDY00024757).

**Results**

The following results are based on an incomplete dataset because one of the partner agencies did not provide the referral data requested, therefore primary outcomes could not be fully measured. Between September 1, 2021 and December 31, 2021, prior to the interventions, there were 325 students seen at the wellness center and 18 referrals to IPV resources, a rate of 5.5%. Between the same period in 2022, after the interventions were implemented, 255 students were seen and 12 were referred, a 4.7% rate (see Appendix E). In September of 2021 and 2022, the rates were 4.9% and 10.2%, respectively, with 6 QR code scans. Consultation with IPV advocates determined that the location of the contact information for IPV advocates should be moved to the top of the landing page accessed in QR code scans for more immediate access during the October 2022 PDSA cycle. Additionally, in October of 2022, a DNP student intern completing a clinical rotation at the SBHC started pointing out posters to students seen at the wellness center with the aim of increasing QR code scans and referrals to IPV

resources. In October of 2021 and 2022, the rates were 3.3% and 3.7%, respectively, with 5 QR code scans. In November of 2022, the IPV poster was posted to the wellness center's Instagram account with the goal of increasing referrals to IPV resources. In November of 2021 and 2022, the rates were 8.9% and 5.6%, respectively, with 4 QR code scans. In December of 2021 and 2022, the rates were 7% and 0%, respectively, with no QR code scans (see Appendix F). Partner agencies reported receiving 4 additional referrals from this high school during the project; however, they could not be ascribed to specific months or the SBHC, and therefore could not be correlated with applied interventions.

Of the 255 students seen at the SBHC, 17 completed the survey. Of these, 8 reported seeing the posters, none reported scanning the QR codes, and one took an informational leaflet. Two respondents (12%) stated they planned to seek out IPV/TDV resources, 8 (47%) stated they "might" access resources and 7 (41%) stated they would not. Reasons for not accessing resources included, "I'm not in a relationship," "it seems irrelevant to me," "not interested," "there is no violence in my life," and "IDK." Responses about what was most useful included "To be aware that there are resources" and "It is important to me to have a good relationship and it's nice to know there's help and that I can go to seek." One student requested "who are confidential advocates vs. mandatory reporters." Lastly, the Instagram post garnered 3 "likes."

## Discussion

### Summary

This QI project sought to increase student awareness of and referrals to available IPV/TDV resources using posters with QR codes, informational leaflets, and Instagram. The project did not yield the intended result of a 5% referral rate and was not as clarifying as expected. Referrals were made to partner agencies; however, there was no way to differentiate them because partner agencies do not keep track of referral sources. Additionally, one of the partner agencies declined to provide the referral

data requested, therefore the data collected was incomplete and primary outcomes could not be fully measured.

Although this project did not meet the 5% referral rate, it increased awareness of available IPV/TDV resources among students who visited the wellness center and visited its Instagram page. While awareness of IPV/TDV resources is difficult to measure, the survey responses provided some insight. Seventeen students participated in the surveys and are now aware that there are resources available. Some expressed appreciation for learning that there were services available, and may even share this knowledge with peers in need of support.

The project also provided valuable information to the affiliated clinic and partner agencies about the need for improved tracking of referrals and importance of continuity. Thanks to the strong partnership of the primary care physician and medical director of the SBHC, there is an encouraging environment for future quality improvement projects to build upon the knowledge gleaned from this one.

**Interpretation**

This project highlighted the importance of key stakeholder investment. Without data from partner agencies, the impact of this project cannot be fully examined. An important balancing measure, turnover of confidential advocates at partner agencies, impacted the practicality of implementing this project. All of the advocates who were present at the initiation of this project left their roles at various points during the implementation phase. Some advocates were not replaced, and those that were may not have been made aware of the project or its specific aims, or may never have agreed to participate or collect data. This may have impacted buy in and willingness to share referral data, or they may not have had the same level of investment in the project as their predecessors. This highlighted the importance of continuity; if the departure of a contact person at a partner agency is anticipated, having a warm handoff to the person taking over is key to maintaining efficacy.

A key takeaway is that the affiliated health care clinic plans to change their process for tracing referrals to services through partner agencies. Having specific data denoting the number of referrals received, when they were received, and the source of referral is paramount to understanding how to increase referrals to available resources. This project helped to renew the drive at the partner clinic to connect students with available IPV/TDV resources. It helped to uncover the need to prioritize better integration for future IPV advocates at the wellness center and promoted a more intentional connection between the partner agencies and clinics.

**Limitations**

There were several limitations during this QI project that impacted outcomes including incomplete referral data, advocate turnover, and a lack of awareness of the project among new staff. This project also took place over one semester during which students had Thanksgiving break from November 23-27 and winter break from December 17-31, limiting appointments and access to interventions during those months. Additionally, there was no way to track who scanned the QR codes; it is possible that clinic staff or other non-student individuals scanned the codes, creating inaccurate data about scans.

**Conclusions**

Despite the limitations of this QI project, it may be worth repeating at this and other SBHCs with adjustments to the limitations identified above. Additional PDSA cycles over a longer time, and developing a tracking system for referrals, would provide additional and specific data to help increase IPV referrals. Future QI projects may consider developing an initial brief IPV/TDV screening questionnaire like the PHQ-2 which can trigger a full screening if warranted by response to the initial two questions; this could lower the burden of students needing to fill out lengthy surveys during appointments, yet still screen every student for IPV/TDV. Other projects may consider implementing a sophomore focus group to elicit information on what could have worked. While an Instagram account

affiliated with the SBHC may not be the best vehicle to interact with student body, a campaign to distribute leaflets in lockers may help increase awareness of resources and increase referrals. Future programs that focus on quality improvement are needed to develop effective interventions for increasing IPV referrals. By continuing to expand awareness of available IPV/TDV resources, more students can connect with these services to limit and prevent IPV.

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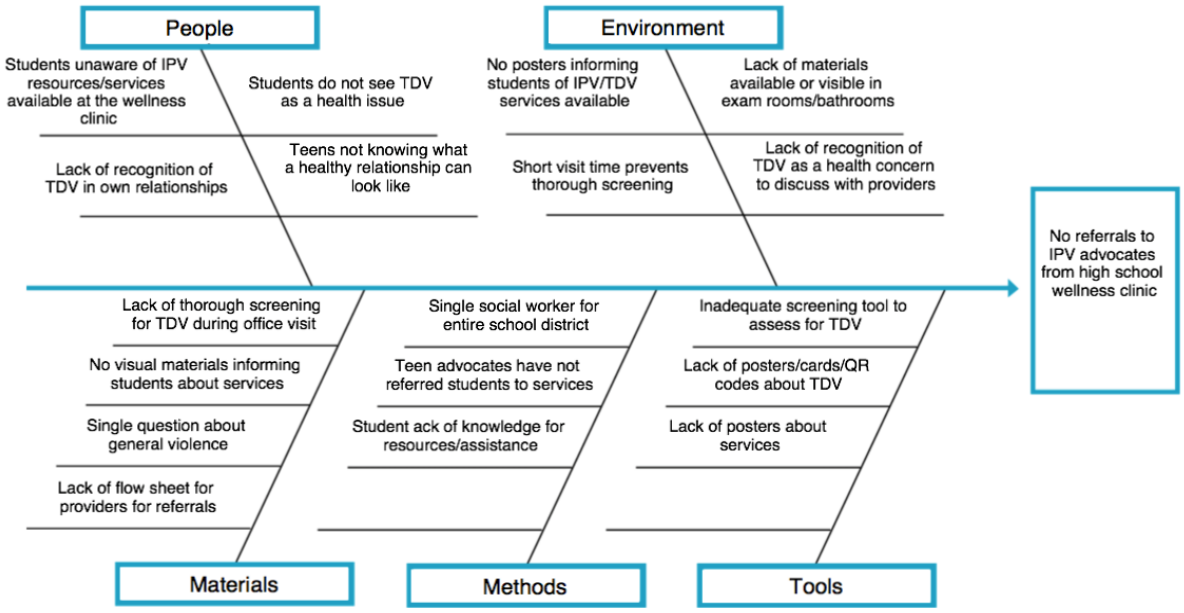
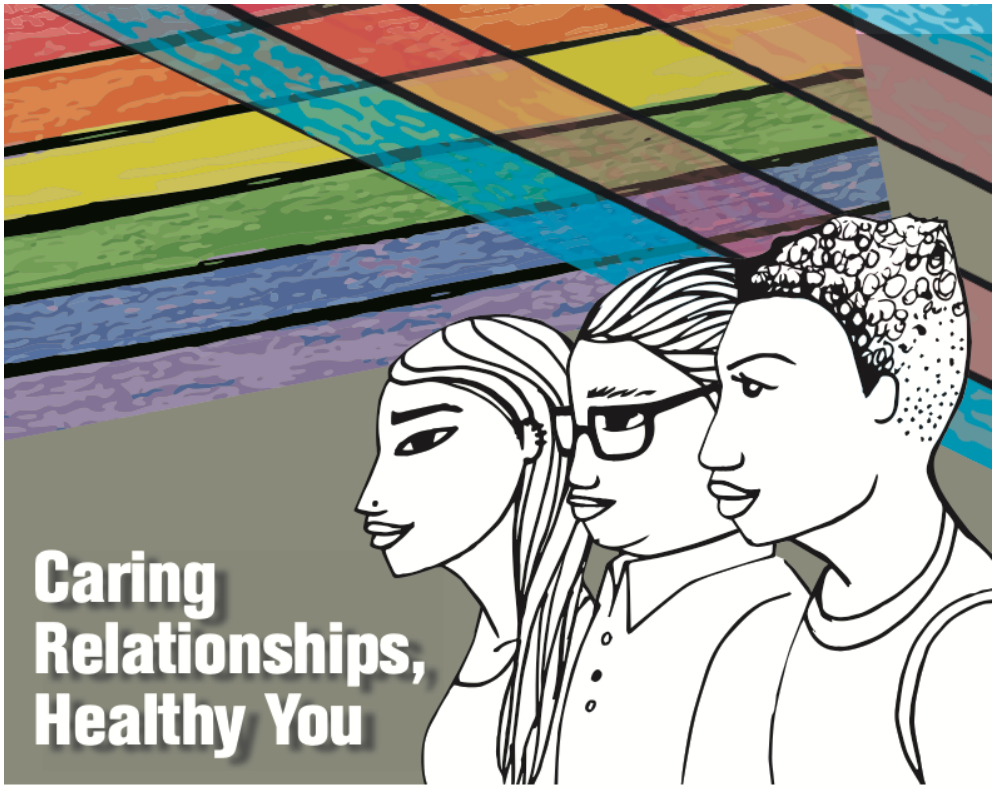
## Appendix A

## Cause and Effect Diagram



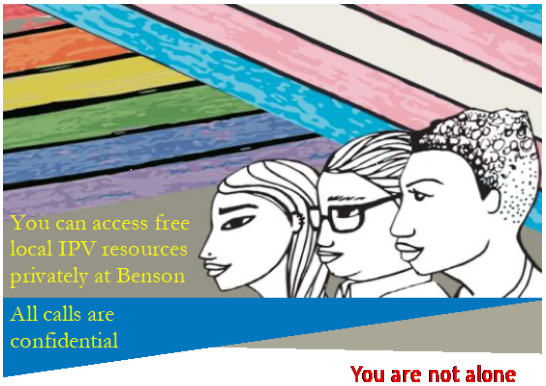
**Appendix B**

**IPV Poster**



## Appendix C

## QR Code Landing Page




**You are not alone**

Abuse and/or domestic violence occurs in all kinds of relationships.

**The fact that it happens often does not make it okay. You deserve to be in a relationship that is supportive and feels good. Help is available.**

**Local resources available at Benson:**
**Confidential (Bilingual) cellphone number of IPV advocate:**

Simone: **503-488-9085**

### A plan that works for you

If you feel that there is something not right about your relationship it could be helpful to talk with a trusted friend or advocate about what you have been experiencing.

Together, you could formulate a plan about:

- How to get support for things you may be doing to help you cope, such as: binge drinking, using drugs, eating too much or too little.
- How to connect with your health provider about what to do if your partner is restricting your access to medications or health visits, and other ways that your relationship could be affecting your health.
- How to reduce harm within your relationship and/or develop a safety plan.
- How to connect with resources listed ↑ and ↓

National, confidential hotlines can connect you to local resources and provide support 24/7 via phone, text, or online chat:

National Domestic Violence Hotline
1-800-799-7233 | 1-800-787-3224 (TTY)
thehotline.org

The Trevor Project
Crisis line for LGBTQ Youth
866-488-7386 | thetrevorproject.org

Other helpful resources:

The Northwest Network
nwnetwork.org

National Coalition of Anti-Violence Programs avp.org/ncavp

FORGE for trans people and allies
forge-forward.org

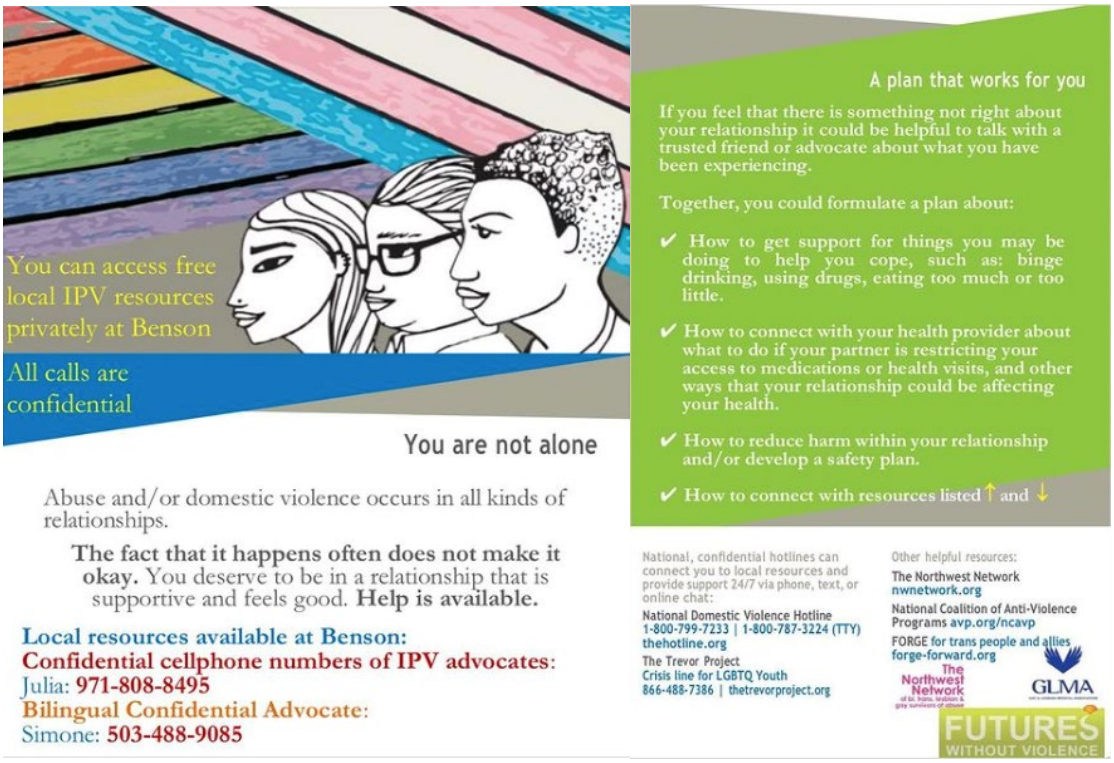
The Northwest Network of bi, trans, lesbian & gay survivors of abuse

GLMA

FUTURES WITHOUT VIOLENCE

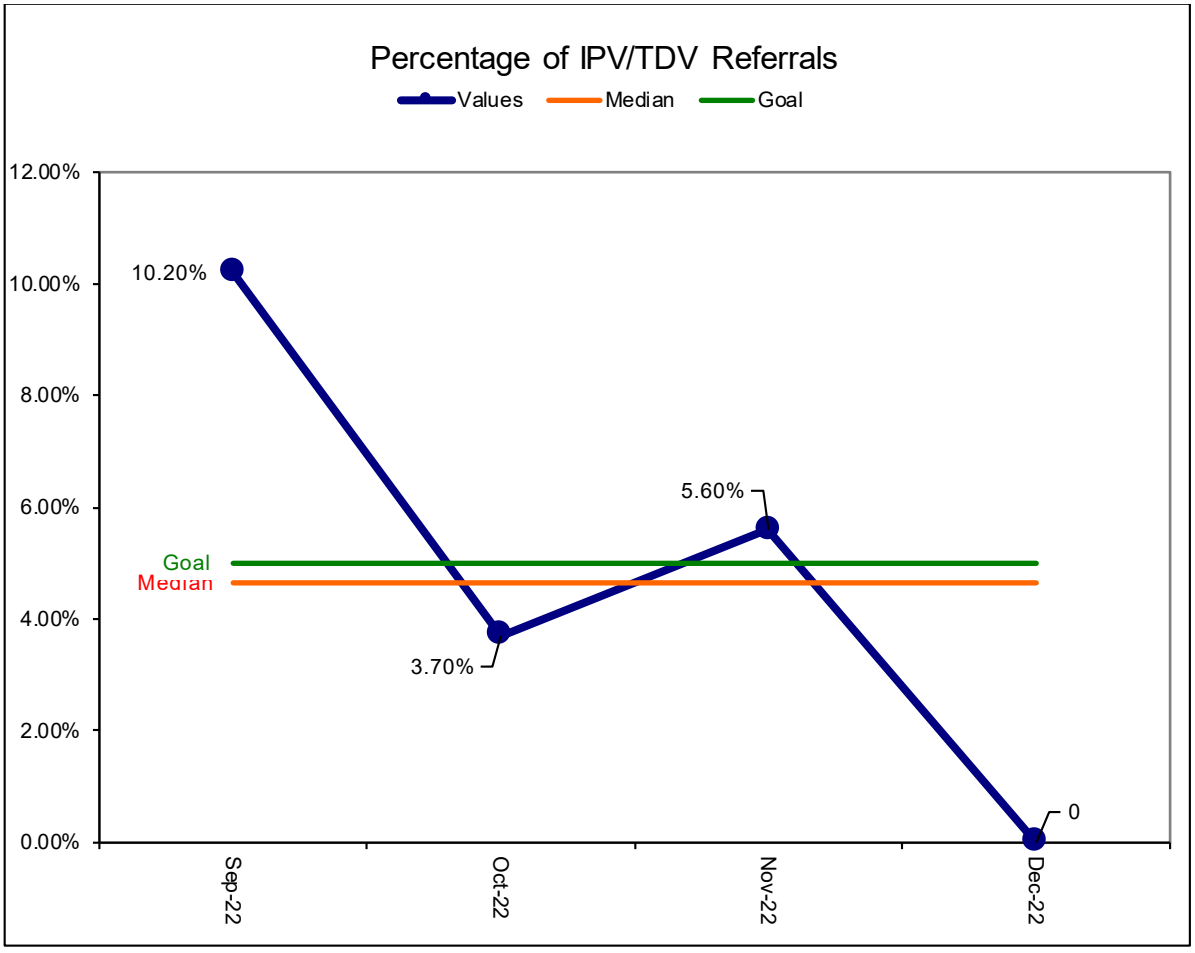
## Appendix D

## Wellness Center Instagram Post



**Appendix E**

**Percentage of IPV Referrals**



**Appendix F**

**IPV/TDV Referrals**