Quality Improvement Project: Implementation of CRAFFT Questionnaire for Adolescents in the Outpatient Psychiatric Setting to Improve Screening, Brief Intervention and Referral to Treatment

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ABSTRACT

Problem under investigation– Increases in substance use among adolescents is an increasing concern in the US worsened with substance use and overdose increasing after the COVID pandemic; unfortunately, substance use disorders (SUD) often go undiagnosed and untreated.

Background – Current guidelines recommend the use of a validated screening tool to screen for SUD in adolescents. CRAFFT Questionnaire has been validated for the adolescent population on a wide range of socioeconomic and racial/ethnic backgrounds.

Methods - The IOWA Model of evidenced based practice change was used to implement the use of CRAFFT in this project with the aim of improving adolescent substance screening process in two outpatient psychiatric clinics in South Texas implementing the use of CRAAFT in initial psychiatric evaluation visits for ages 11-21.

Intervention – CRAAFT use was implemented over one month in initial psychiatric evaluation visits; 59 initial psychiatric evaluations were analyzed to examine adherence to the screening tool, the tendency to diagnose SUD, and the tendency to refer or provide brief substance intervention.

Results – Results included a statistically significant increase in use of the validated screening tool in the adolescent population at the project site in the post-intervention period. Analysis yielded a numerical but not statistically significant increase in the amount of SUD diagnosis while the use of SBIRT increased two-fold in the post intervention stage.

Conclusions- Carrying out this project was a worthwhile exercise as it allows the DNP student to analyze existing literature and research, identify a current problem within an organization, formulate a plan for intervention based on evidence-based practice, and implement the plan to improve processes and services provided at the project site while allowing the DNP student to become acquainted with dissemination of knowledge.

Keywords – Quality improvement project, substance use disorders, adolescents, CRAAFT, SBIRT

Quality Improvement Project: Implementation of CRAFFT Questionnaire for Adolescents in the Outpatient Psychiatric Setting to Improve Screening, Brief Intervention and Referral to Treatment

In recent years, the subject of substance use disorders has become increasingly prevalent. For example, it is a frequent occurrence to watch a news hour and that hour includes at least one report on substance use related issues such as overdose, substance use in school aged minors, and the opioid epidemic. National Institute on Drug Abuse (2023) paints a grim picture of a rise in overdose deaths after the COVID pandemic growing from 97,799 in 2020 drug overdose deaths to 106,699 in 2021. When looking further back at drug overdose deaths, the drastic increase is much more evident as there has been a 7.5 fold increase in synthetic opioid (mainly fentanyl) overdose deaths from 2015 to 2021 (National Institute on Drug Abuse, 2023). This quality improvement project had the purpose of implementing the use of a standardized substance evaluation tool to improve the ability to identify those in the selected population, adolescents aged 12 to 21, who would benefit from brief intervention or referral for substance use disorder treatment.

Problem Identification

SAMHSA (2021a) suggests that in persons aged twelve or older in 2020, 58.7 percent (or 162.5 million people) used tobacco, alcohol, or an illicit drug in the past month. The National Survey on Drug Use and Health (NSDUH) for this population of persons aged twelve or older in 2020 found rates of alcohol at 50.0 percent (or 138.5 million people), tobacco and nicotine vape use was seen to be at a rate of 20.7 percent (or 57.3 million people), and illicit drug rates were at 21.4 percent (or 59.3 million people). These rates are worrisome when considering that Alcohol misuse especially when excessive can lead to premature death and lead to both acute and chronic conditions (US Preventive Task Force, 2018). Moreover, the year 2020 saw an increase in unintentional injury deaths which are known to largely be attributed to drug overdose deaths (Ahmad and Anderson, 2021)

Increases in unintentional injury deaths in 2020 were largely driven by drug overdose deaths. Final mortality data will help determine the effect of the pandemic on concurrent trends in drug overdose deaths.

The practice site selected, Psychiatric Specialists of Texas, includes two clinics in South Texas. The clinics see all age groups; however, they overwhelmingly serve an adolescent population. The clinics have previously implemented the use of other screening tools for other conditions that are treated such as Vanderbilt scales for ADHD and the Abnormal Involuntary Movement Scale (AIMS). However, they did not previously use a standardized tool for screening for substance use in the adolescent population. The existing practice prior to the implantation of the project was to assess for substance use in an unstructured manner in the provider's (Psychiatric NP's and Psychiatry PA-C) psychiatric interview. The site's providers expressed concern that this could lead to insufficient identification of adolescents who could benefit from either brief substance counseling/intervention or referral to substance use disorder rehabilitation. Their concern is not unfounded, SAMSHA (n.d.) describes the 2021 National Survey on Drug Use and Health finding that there were 40.7 million people with illicit drug or alcohol use disorder who did not receive treatment in 2021.

The Substance Abuse and Mental Health Services Administration's (SAMHSA) has published Treatment Improvement Protocols (TIPs) to advance the treatment competency of the United States's alcohol and drug abuse treatment service systems by reaching a consensus on up-to-date best practices which include input from clinicians, researchers, program managers, policymakers, and other Federal and non-Federal experts (Substance Abuse and Mental Health Services Administration, 2012). The concern leading to this project is that guidelines from the Treatment Improvement Protocol (TIP) 31 by SAMHSA are not being followed which provides guidelines for evaluating, developing, and administering screenings and assessment instruments and processes to structure the screening of young people for

substance use disorders (SAMHSA, 2012). The best practice defined is to use structured interviews which can be done with the use of a screening tool (SAMHSA, 2021b).

Project Question

The PICO (P=Population/Patient/Problem, I = Intervention, C = Comparison, O = Outcome) Question mnemonic was used to guide the formation of this project. Regarding Population question, this project used the age ranges for population of adolescents as suggested by SAMHSA (2012) in TIP 31 publication as well as Bright Futures guidelines from the American Academy of Pediatrics identify adolescence as 11 to 21 years of age (American Academy of Pediatrics, 2017). The intervention in this project was the implementation of the use of the CRAFFT questionnaire to identify adolescents in need for brief intervention or referral for substance rehabilitation. The comparison was between the site's current practices and the proposed intervention. This project aimed to help the site transition from an unstructured manner in assessing for substance use to the use of validated structured tool. Lastly, the expected outcome was an improved ability for the site's psychiatric providers in identifying adolescents in need for brief intervention or referral to substance rehabilitation treatments.

Search Methods

A thorough literature search was carried out to pursue the most current relative existing research on substance use screening in adolescents as well as current guidelines. The databases used were accessed through the Touro University Nevada database access. The databases used for this search included PubMed, MEDLINE (Ovid), MEDLINE, and the Health and Medical Collection. The databases were queried using the search term "Adolescent substance screening" "substance screening protocols" and "adolescent substance screening guidelines". Inclusion criteria for the search included "peer reviewed", "journal article", "full text", and "publication within 5 years". Articles that were geared towards adult population were excluded as this project focused on adolescent population. A C.R.A.A.P.O. approach was used to evaluate the appropriateness of electronic sources (Southern New Hampshire

University, 2023). This included evaluating for the sources currency by including sources within 5 years unless no other source was available, relevancy by including sources that met only the inclusion criteria, authority by ensuring the author's credentials were relevant to the project's subject, accuracy by selecting sources that were professional and well organized, purpose by selecting sources whose purpose is to teach and with minimal bias, and objectivity by selecting sources that are supported by reputable institutions or are peer reviewed.

Review of Study Methods

Study methodologies discussed in existing literature were reviewed. Literature reviewed included observational studies, retrospective cohort studies, previous quality improvement projects, mixed method quantitative/qualitative studies, and retrospective cohort studies. Studies reviewed were relevant to the task of preparing to implement this quality improvement project. The study methodologies helped highlight the need for the use of screening tools in assessing for substance use, highlighted potential barriers faced in the implementation of the use of a validated screening tool, and validity of the use of the CRAAFT questionnaire in detecting substance use in the adolescent population.

Review Synthesis

Themes that emerged in in reviewing current literature included and highlighted increases in drug use and drug overdose, low treatment rates of adolescents with substance use disorders, the negative impacts that substance use can have to the quality of life and mental health of adolescents, low rates of substance use treatment, and the need for validated questionnaires to be used when assessing for substance use.

Increases of Substance Use

The literature describes marked increases in all age groups in drug involved overdose deaths. This included an increase of drug involved overdose deaths in 2019 of 70,630 deaths to 2020 of 91,799 deaths to 2021 of 106,699 deaths showing increases in deaths involving synthetic opioids,

psychostimulants, and cocaine (National Institute on Drug Abuse, 2023). SAMHSA (2021a, October) describes the National Survey on Drug use and Health findings which included that in those aged 12 years and older there is a rate of 13.5 percent usage of illicit drugs which amounts ot 37.3 million people in the United States in 2020.

Low Substance Use Treatment Utilization

Substance use disorder (SUD) treatment was found to have low utilization rates in 2020. Of note, SAMSHA (2021a, October) found that people aged 12 years and older had a need for substance use treatment of 14.9 percent or 41.1 million people. Nevertheless, only 1.4 percent or 4 million people received any substance use treatment in 2020 in the same age group.

Negative Impacts of Adolescent Substance Use

Kirsch and Lippard (2022) describe that early life stress can increase the likelihood of substance use in adolescents which can lead to changes in the structure of the brain; these changes in the structure of the brain can potentiate the likelihood of developing a long term substance use disorder. HPA axis dysregulation with increases to cortisol levels that is often observed in people with substance use disorders which is believed to create a drug reinforcement loop of withdrawal symptoms with cravings and relapse.

Barriers to Substance Use Detection and Use of Validated Questionnaires

Detection of substance use is the first step to begin the SBIRT model of treatment. Unfortunately, past cross-sectional surveys have found that providers routinely underestimate the use of substances compared to actual national rates (Alinsky et al., 2020). Durante et al. (2020) examined Provider feelings on how they are generally comfortable discussing substance use with adolescents but felt they were unfamiliar with SBIRT methods. The study found that there was an increase in the use of CRAFFT screening when providers participated in in-person provider education sessions and email reinforcement. SAMSHA (2012) presents guidelines in the Treatment Improvement Protocol (TIP) 31 by

the Substance Abuse and Mental Health Services Administration (SAMHSA) for evaluating, developing, and administering screenings and assessment instruments and processes to structure the screening of young people for substance use disorders. Discusses recommendations for referral to treatment.

Project Aims

The project aim was mainly to Improve adolescent substance screening process in two outpatient psychiatric clinics in South Texas to enhance the use of Screening, Brief Intervention and Referral to Treatment (SBIRT) model. To meet this aim, this project will have five objectives as described below.

Project Objectives

Objective 1 of the project to meet project aims will involve improving site clinician knowledge base on Screening, Brief Intervention and Referral to Treatment (SBIRT) model to improve screening and treatment of substance use disorders and evidenced based screening and treatment for youth ages 11-21. Objective 2 of the project entails optimizing the site workflow protocols to administer CRAFFT screening in initial psychiatric evaluations and yearly comprehensive psychiatric evaluations in ages youth ages 11-21. Objective 3 included the implementation of the use of CRAFFT (Car; Relax; Alone; Forget; Friends; Trouble) substance use screening tool to screen for substance use disorder among youth ages 11-21. Objective 4 required an Increase in the rates of substance screening for new patients to 100% in the project site for youth ages 11-21. Objective 5 proposes the project results in an increase of the rate of any level of intervention for substance use disorders in youth ages 11-21, this can include brief intervention and/or referral to treatment.

Implementation Framework

Implementation Framework of this project used the IOWA Model. The IOWA Model of EBP was developed by the University of Iowa College of Nursing faculty and the University of Iowa Hospital (Duff et al., 2020). It is the most widely used model for evidenced based practice models and has a focus in

integrating evidenced based practice at the systems level (Duff et al., 2020). The goal of the IOWA model is to provide a method to in evidence-based practice to identify issues, find solutions, and implement changes (Brown, 2014).

Application to DNP Project

Implementation framework using the IOWA Model included Identifying triggering issues and opportunities, clearly stating the question or purpose, identifying if the project is a priority, forming a team, synthesizing the evidence, piloting a change, and evaluating if adaptation into practice is appropriate (Iowa Model Collaborative, 2017).

Identify triggering issues/opportunities. The project site was not previously following guidelines for substance screening in adolescent screenings.

State the question or purpose. The purpose of this project is to improve the assessment of substance use disorders and treatment for adolescents treated at the project site.

Is the topic a priority? This project was a priority as assessment and identification of substance use disorders helps better identify those in need for brief intervention and/or referral to treatment. There are marked increases in all age groups in drug involved overdose deaths including overdose deaths in 2019 of 70,630 deaths to 2020 of 91,799 deaths to 2021 of 106,699 deaths showing increases in deaths involving synthetic opioids, psychostimulants, and cocaine (National Institute on Drug Abuse, 2023).

Form a team. The team for this project included the project instructor, project mentor, site leadership, and site staff. Site staff included psychiatric prescribers including three Psychiatric Mental Health Nurse Practitioners and one Psychiatric Physician Assistant as well as support clinical staff which are primarily medical assistants.

Synthesize the evidence. The American Academy of Pediatrics recommends alcohol and drug use assessment at all adolescent visits which can include the CRAFFT (American Academy of Pediatrics, 2017). The Substance Abuse and Mental Health Services Administration's (SAMHSA) published

Treatment Improvement Protocols (TIPs) including Treatment Improvement Protocol (TIP) 31 which provides guidelines for evaluating, developing, and administering screenings and assessment instruments and processes to structure the screening of young people for substance use disorders (SAMHSA, 2012).

Pilot a change. Objectives included implementing the use of the CRAFFT questionnaire to assess substance use of youths aged 11-21 years old. Other objectives included increasing prescriber knowledge base on SBIRT, increasing the rates of substance screening for new patients, and increasing the rate of any level of intervention for substance use disorders in youth ages 11-21, this can include brief intervention and/or referral to treatment.

Evaluate if adaptation into practice is appropriate. The plan was reviewed by the project instructor and project mentor as well as site leadership to establish feasibility.

Disseminate. Prescribers implemented the change in a trial run the project to identify any issues. The plan includes that the project can then be extended to the rest of the institution's prescriber use or barriers can be addressed with any unexpected barriers found in the trial run.

Project Setting

The geographic location for this project encompasses two outpatient psychiatric clinics in South Texas area that serves a population in Corpus Christi metropolitan area, McAllen-Hidalgo metropolitan area, Brownsville metropolitan area, and Harlingen Metropolitan area. The project took place in two sites that are the same PLLC (Professional Liability Limited Corporation) that include: Site 1 is an outpatient psychiatric clinic in Corpus Christi, Texas and Site 2 is an outpatient psychiatric clinic in Harlingen, Texas. The South Texas Region was estimated to have a population of 2.4million people in 2019 (Texas Comptroller of Public Accounts, 2020). Demographics include a Primarily Hispanic population at 83.8%, then White non-Hispanic at 13.7%, Black non-Hispanic at 1.1%, and Other at 1.4% 2019 (Texas Comptroller of Public Accounts, 2020). The South Texas region median household income

was $42,246 and average educational levels include: Less than High School 25.6%, High School or Equivalent 23.4%, some college or associate degree 24.6%, bachelor's degree or advanced degree 12.7% 2019 (Texas Comptroller of Public Accounts, 2020).

Population of Interest

The project included both a direct population of interest and an indirect population of interest. The direct population consisted of staff in the organization such as psychiatric provider prescriber staff Psychiatric Mental Health Nurse Practitioners providing direct care and Physician Assistant whose experience levels range from 1 to 30 years in practice. The project included direct population of interest members of Medical Assistant staff whose average experience level is five years in the organization. The Indirect Population of administered the CRAAFT questionnaire, was an adolescent population defined as all genders aged Eleven to twenty-one years of age. Typical Characteristics will range in educational levels that can include Elementary school age, Middle School, High School, Some college, College graduates. Primary Spoken languages include English, Spanish, Bilingual (English/Spanish). The indirect population primarily resides in the South Texas area in the Corpus Christi metropolitan area, McAllen-Hidalgo metropolitan area, Brownsville metropolitan area, and Harlingen Metropolitan area. However, a minimal number of adolescents may be included from outside this area as some patients may travel from outside areas which can include the Laredo, El paso, and San Antonio metropolitan area. Exclusion criteria consisted of clinic patients aged 10 and younger or 22 and older, patients with Moderate to severe IDD (Intellectual and Developmental Disabilities) due to potential inability to self-report substance use and participate in brief substance counseling. Other exclusionary criteria included patients not wishing to participate in substance screening or if a minor's parents refused participation. The participants included only be those who presented for in-person visit in for initial psychiatric evaluation.

Stakeholders

The stakeholders in the project included Touro University Project instructor who is a doctoral prepared nurse. A project mentor, also a doctoral prepared nurse, was also included among the stake holders. The project mentor was a Certified Psychiatric Mental Health Nurse Practitioner. Other stakeholders included site staff who are facilitating the project and include the project site Chief Executive Officer (CEO) as well as the Medical Assistant Liaison. Written permission to complete the project at site was provided by the site CEO and no affiliation agreements were necessary.

Planning Project Team

The project team will include DNP student, Site Psychiatric Provider Supervisor, Site Lead Medical Assistant, and Project Mentor.

Resources

Resources included Electronic Health Record (EHR), print materials for the CRAFFT Questionnaire, Presentation tools such as computer and projector. Site leadership agreed to allow access to EHR, to print CRAFFT Questionnaire as part of intake packet, and the use of a computer and projector in lounge area that is in use for normal clinic presentations.

Timeline

Brief timeline of the project implementation by week (format as Figure in the Appendix e)

Tools

The Tools used in this project included the creation of Adolescent Substance Screening Protocol/Policy developed by DNP student in collaboration of Site Supervisor. Educational Presentation/handouts for the education session will be an existing training PowerPoint from University of Pittsburg (2023) which discusses SBIRT approach and the use of CRAFFT in the adolescent population (Appendix A.1). This tool has a copyright but is listed to be available free of charge for educational purposes (University of Pittsburg, 2023).

Another tool that was used is that of the CRAFFT Questionnaire (Appendix A.2). CRAFFT

questions are copyright protected by Boston Children's Hospital The Center for Adolescent Behavioral Health Research (CABHRe) allows and encourages for the reproduction of the CRAFFT Questionnaire with a description of the intended context of use (Boston Children's Hospital, n.d.-b). CRAFFT Questionnaire has been validated for use in the adolescent population on a wide range of socioeconomic and racial/ethnic backgrounds and the American Academy of Pediatrics' Bright Futures Guidelines has recommended its use in screening for substance sue as well as National Institute of Alcohol Abuse and Alcoholism (NIAAA) Youth Screening Guide for screening for alcohol use (Boston Children's Hospital, n.d.-4). Boston Children's Hospital (n.d.-b) provides a list of publications with various validating studies.

A Chart Audit Tool was also be created by the DNP student for specific use in this project to measure results of the intervention (Appendix B). Permission to use the project site can be seen in Appendix C.

Data Collection Plan

Data collection took place in a pre and post intervention timeframe. This was done by use of the electronic health record in use at the practicum site. The scheduling software was used to audit to search for patient visits for age range of 11 to 21 years of age during the date of service for a period of four weeks pre intervention. This was cross-referenced with the use of the electronic health record software where a search will be entered for all new patient visits in the same four-week pre intervention time period. This allowed identifying those that met the intervention's inclusion criteria of 11 to 21 years of age who are attending services for initial psychiatric evaluation for a four-week pre intervention time period. The same search and cross-referencing process wase used with same demographics of 11 to 21 years of age who are conducting new patient visits during the date of service for a period of four weeks post intervention. The search yielded a list of patients aged 11 to 21 years that were seen for initial psychiatric evaluation services for a four-week period before and after

intervention, the inclusion criteria prevented paired data and the patients seen and were distinct individuals in the pre and post intervention time frames but with similar demographics.

This data collection method was used to search for data points for the first objective that are of interest including rates of substance use screening done through any method that was documented in the electronic health record in the pre-intervention group of new patient psychiatric evaluation services for a four-week time period. This was compared to the rates of compliance with the use of the CRAFFT questionnaire in youth ages 11-21 attending new patient psychiatric evaluation services in the post intervention group for a four-week time period.

The same data collection method was used to search additional data points for the second objective that included measuring the frequency of documentation for either brief substance education and/or referral to treatment (SBIRT) in the pre-intervention group of new patient psychiatric evaluation services for a four-week time period. This was then compared to data measurement of the four-week post intervention time period for documentation of either brief substance education and/or referral to treatment (SBIRT)

Ethics/Human Subjects Protection

The Touro University Nevada Institutional Review Board (IRB) tool to identify human subjects research and exempt research indicated this quality improvement project does not involve human participants and is not classified as research therefore IRB review is not required by federal law (Touro University Nevada, 2019). The practicum site also did not require IRB approval for this quality improvement project. There was no compensation being provided for this project to the practicum site or project participants.

To maintain confidentiality, findings were transposed to the project data set with responses using codes from the project codebook. Further, data was de-identified by using a respondent ID for the project data set. The CRAFFT screening tool will had no identifying patient data on any of the

response sections with only the respondent ID used. To maintain electronic data confidentiality, the data set and codebook master lists were kept on a password encrypted Universal Serial Bus (USB). Computers used to access the USB had firewall protection turned on and have a lock screen with a screen off time setting when inactive.

Data Analysis

Data collected was used for statistical analysis through IBM SPSS Statistics software. The of Chi Square Test of Independence was used and was chosen as it can help to examine an outcome to analyze observed versus expected values (Pallant, 2020). An example of use of the Chi Square test is comparing provider rates during implementation of a protocol after receiving training (Touro University Nevada, 2022). Assumptions for the Chi-square include for data in cells should be in frequencies or counts of cases, categories of variables should be mutually exclusive, each subject may contribute to data to only one cell, and study groups must be independent (Zagreb, 2013). The Chi Square Test of independence was applied to measure provider compliance to the use of the standardized substance screening tool, the CRAFFT. The Chi Square Test of Independence was also used to compare the rates of brief substance counseling and/or referral to treatment in the pre and post intervention time periods.

Results

The project used data from 59 patient encounters with 32 of these encounters being in the pre-intervention stage and 27 in the post-intervention stage. 61% of CRAAFT respondents were female while 39% were male (Appendix: CRAAFT Implementation Demographics (G)).

Participants

		Value	Count	Percent
Standard Attributes	Label	GROUP		
Valid Values	1	Pre-Intervention	32	54.2%
	2	Post-Intervention	27	45.8%

Gender of Participants

		Value	Count	Percent
Standard Attributes	Label	Gender		
Valid Values	1	Female	36	61.0%
	2	Male	23	39.0%
	3	Other	0	0.0%

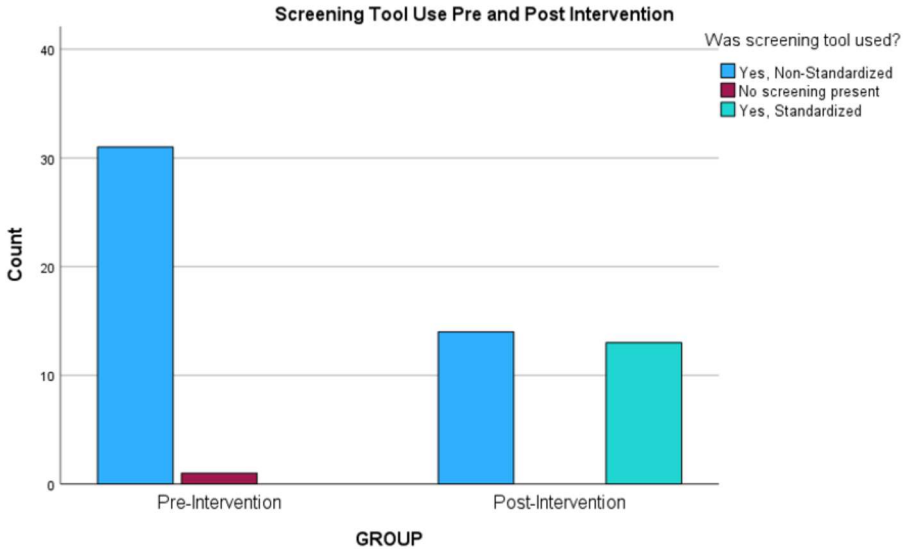
Chi-Square test for independence was ran through IBM SPSS software for statistical analysis. The assumptions for the Chi-Square test included data that cells were all frequencies or counts of cases, categories of variables should be mutually exclusive, each subject only contributed to data to only one cell, and study groups were independent.

Chi-Square Tests

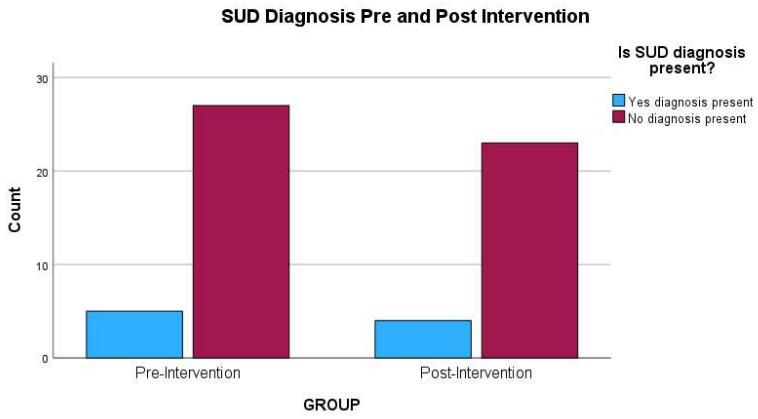
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.143[a]	2	<.001
Likelihood Ratio	25.568	2	<.001
Linear-by-Linear Association	18.141	1	<.001
N of Valid Cases	59		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .46.

The use of the screening tool was examined. In the pre-intervention stage 31 of 32 cases were seen to use a non-standardized screening tool while one case had no screening tool at all (Appendix: Screening Tool Use (H)). The post intervention stage saw all cases use some form of screening tool with 14 using a non-standardized screening tool and 13 using a standardized screening tool in addition to the non-standardized form. The Chi-Square test for independence (Appendix: Screening Tool Use (H.1)) yielded a Asymptomatic Significance (2-sided) of <0.001 with a degree of significance of 2. This leads us to assume that the intervention did show a significance between the intervention and had a statistically significant impact on the use of screening tools in the project site.



The tendency to diagnose a substance use disorder was examined (Appendix: Substance use Disorder Diagnosis (I)). The pre-intervention stage yielded the presence of 5 cases with substance use disorder diagnosis out of a total of 32 cases. The post-intervention stage yielded 4 cases with substance use disorder diagnosis out of a total of 27 cases. The Chi-Square test for independence (Appendix: Substance use Disorder Diagnosis (I.1)). showed an Asymptomatic Significance (2-sided) of .931 with a degree of significance of 1. These results show that the implementation of CRAAFT did not have a statistically significant impact on the frequency of the clinician diagnosing a substance use disorder as $p < 0.05$.



Lastly, the tendency to implement SBIRT which was measured by documentation of either a referral for treatment or brief intervention was analyzed (Appendix: SBIRT Intervention (J)). The pre-intervention stage showed 2 cases out of 32 where SBIRT was documented while the post-intervention stage showed 4 cases out of 27 where SBIRT was documented. The Chi-Square for independence (Appendix: SBIRT Intervention (J)) yielded an Asymptomatic Significance (2-sided) of .278 which shows only a weak correlation between the implementation of CRAAFT and the tendency to intervene using SBIRT in the project site.

GROUP * Intervention

SBIRT Intervention Documented

Count

		Intervention		
		Yes, intervention is documented	No, intervention not documented	Total
GROUP	Pre-Intervention	2	30	32
	Post-Intervention	4	23	27
Total		6	53	59

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.176[a]	1	.278		
Continuity Correction[b]	.425	1	.514		
Likelihood Ratio	1.183	1	.277		
Fisher's Exact Test				.398	.257
Linear-by-Linear Association	1.156	1	.282		
N of Valid Cases	59				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.75.

b. Computed only for a 2x2 table

Summary

The implementation of the project was able to increase the use of a validated substance use screening tool to the adolescent population at the site where half of cases showed the use of the CRAAFT screening tool. This is significant as prior to the intervention there was no use prior use of a validated screening tool and only a non-standardized questionnaire was used in practice. Although

there was a numerical increase in the cases with a substance use disorder diagnosis in the post-intervention stage, the increase was not statistically significant. It is unclear as to why there was not a statistically significant increase but reasons for this may include the small sample size and limited time frame of the intervention. Moreover, a longer time frame of intervention could

Interpretation

The use of CRAAFT for the adolescent has been previously validated in the screening of substance use disorders in this population such as described in Knight et al. (2002) there were strong correlation between the presence of substance use and increased CRAFFT scores. The implementation of CRAAFT in the project site did not yield a statistically significant increase in the frequency of diagnosing substance use disorders. Likewise, the correlation between the implementation of CRAAFT showed only a weak correlation between implementing the CRAAFT Screening tool and the use of SBIRT. However, this should be taken lightly as the effectiveness of the previous non-standardized version in detecting substance use disorders is not known and only half of post intervention cases used the CRAAFT. Increasing adherence to the CRAAFT, a longer time frame, and an increased sample size could change these results.

Limitations

The limitations to the project included that answers to questionnaire can be affected by parental involvement in initial psychiatric evaluation which was necessary as the visit includes psychotropic medication management in patients 18 years of age and younger. Patients under the age of 18 required parental involvement for consent of medication in their visit therefore may have been present when the adolescent filled out the CRAAFT questionnaire. This can affect the adolescent patient's willingness to answer question items truthfully and in turn affect the CRAAFT questionnaire's results. It should be noted that the population that is served by the project site is majority Hispanic and are Medicaid participants with 61% of respondents identified as female and 39% identified as male which may affect

generalization of results to other populations. Further, the psychiatric providers that carried out the CRAAFT questionnaires were psychiatric nurse practitioners and physician assistants but did not include any physicians. The data collection covered one month pre-intervention data and one month post intervention data. Longer data collection post intervention data may yield different results. The staff at the project site noted anecdotally that compliance with the use of CRAAFT increased towards the end of the data collection timeframe as the staff became more acquainted with us of the CRAAFT questionnaire.

Conclusions

The project aim was to improve the substance use screening process at two outpatient psychiatric clinics in South Texas by implementing the use of a standardized substance use screening tool that has previously been validated for use in the adolescent population. The use of the CRAAFT Questionnaire was implemented and results were analyzed of the post-intervention period of one month. Objectives met included a statistically significant increase in the use of a validated screening tool in the adolescent population at the project site in the post-intervention time period. Analysis yielded a numerical but not statistically significant increase in the amount of substance use disorder diagnosis while the use of SBIRT increased two-fold in the post intervention stage. An increase in substance use among adolescents has been an increasing concern in the United States and has only become more concerning with substance use and overdose increasing after the COVID pandemic. Substance use disorders often go undiagnosed and untreated; therefore, identification of the substance use disorders are vital. The use of a validated substance use disorder screening tool is recommended by various organizations that set standards in the adolescent population. The psychiatric providers and staff at the project site reported increasing levels of comfort with the use of the CRAAFT as the project continued and will continue to use it for the foreseeable future. A longer time frame of data collection could yield more generalizable results as the longer time could show the increase the adherence to the use of the

validated screening tool as staff anecdotally reported that adherence to the use of CRAAFT improved in the latter stages of the intervention as staff became more acquainted with is use. Carrying out this project was a worthwhile exercise as it allows the DNP student to analyze the existing literature and research, identify a current problem within an organization, formulate a plan for intervention based on evidence-based practice, and implement the plan to improve processes and services provided at the project site while allowing the DNP student to become acquainted with dissemination of knowledge. This project demonstrates how institutional policy can be changed to improve workplace processes and services provided.

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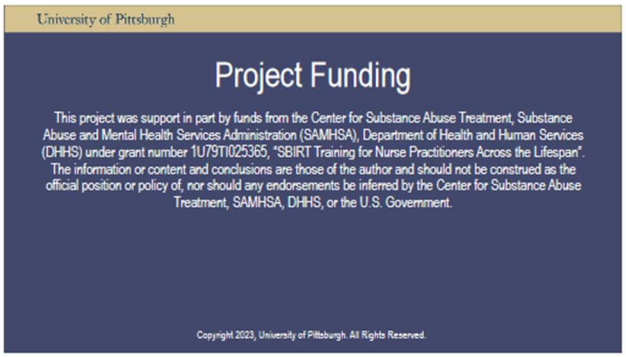
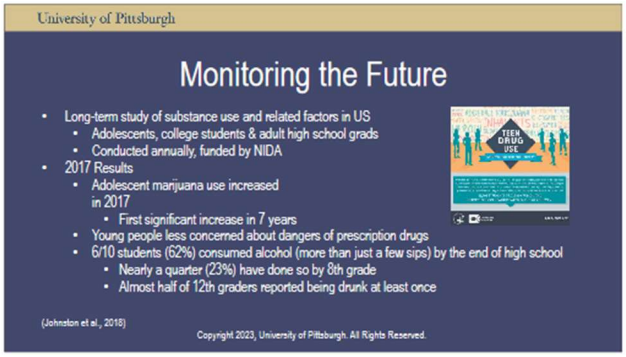
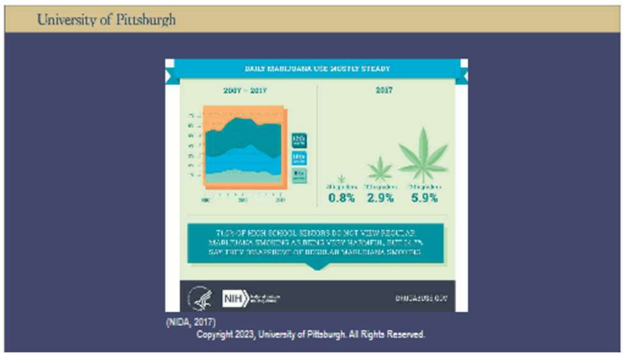
Appendices

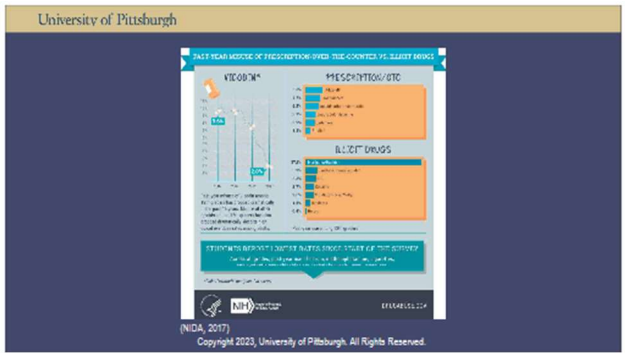
A.1. Educational Presentation/handouts

(University of Pittsburgh School of Nursing, 2023)









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The Adolescent Brain

- The greatest changes to the parts of the brain that are responsible for impulse-control, judgment, decision-making, planning, organization and involved in other functions like emotion, occur in adolescence.
- This area of the brain (prefrontal cortex) does not reach full maturity until around age 25.
- Video http://teenagebrain.blogspot.com/

(Crews & Boettiger, 2009)

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Teen Brain

- http://teenbrain.drugfree.org/science/

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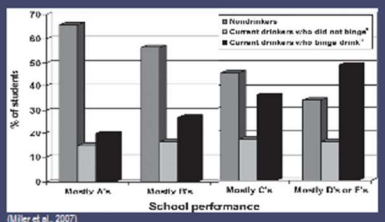
School performance during the past 12 months among US high school students during 2003.



(Miller et al., 2007)

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Negative Impact of Binge Drinking

Increased frequency of binge drinking results in increased prevalence of other health risk behaviors.

- riding with a driver who had been drinking
- being sexually active (and increased risk of alcohol-exposed pregnancy and FASD)
- smoking cigarettes or cigars
- being a victim of dating violence
- attempting suicide
- using illicit drugs

(Miller et al., 2007)

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Harmful Effects to Adolescent Brain

- Regions related to decision making, judgment, impulse control, emotion and memory are not yet fully developed; teens more prone than adults to taking risks, including experimenting with tobacco, alcohol and other drugs (Crews & Boettiger, 2009).
- Addictive substances physically alter its structure and function faster and more intensely than in adults, interfering with brain development, further impairing judgment and heightening the risk of addiction (Benowitz, 2010).
- Emerging evidence of the heightened vulnerability of the developing adolescent brain to the harmful effects of AOD use (Windle et al., 2008).

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Brain Development May Influence the Behavior of a Teenager

- Sensory and Physical Activities May be Favored Over Complex, Cognitive-demanding Activities
- Activities with High Excitement and Low Effort May be Preferred
- Poor Modulation or Control of Emotions (e.g. the Teenager Emotionally Over-reacts to a Minor Incident)
- Propensity Toward Risky, Impulsive Behaviors
- Poor Planning and Judgment

(Miller et al., 2007)

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Effectiveness of SBIRT for Adolescents

Preliminary research shows promising effects of SBIRT on adolescent AOD use:

- Project CHAT (D'Amico et al., 2008)
  - Less likely to report intentions to use marijuana
  - Lower perceived prevalence of marijuana use and fewer friends who use marijuana
  - Increased readiness to change, increased self-efficacy, decreased marijuana use
- SBIRT in 2 continuation high schools (Grenard et al., 2007)
  - Youth willing to discuss personal drug use
  - Reported satisfaction with SBIRT
  - Greater readiness to change drug use at follow-up

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Effectiveness of SBIRT for Adolescents

- Knight et al. (2005) pilot study
  - Reduction in substance use and risk of drinking after driving at three month follow-up
- Harris et al. (2012) computerized Screening and Brief Advice (SBA)
  - Lower past 90 day alcohol and drug use than control group
  - cSBA prevented or delayed initiation of alcohol use
    - 44% fewer cSBA adolescents started drinking during the twelve month study period than adolescents in the control group

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Summary of the Teen SBIRT Research:

1) Small but growing literature
2) Teen outcomes:
   - AOD use
   - AOD consequences
   - Self-efficacy
2) Abstinence not typical
3) Effects are rapid and durable
4) High satisfaction ratings by teens
5) May promote additional help-seeking

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Why Brief Interventions Make Sense For Youth

- Their problems are not as deep-rooted.
- Person-centered approach is appealing to young people.
- Commitment to lengthy and intensive interventions can be difficult at this age.
- Many youth are seen in opportunistic settings

(NIAAA, 2011)

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Delivering SBIRT to Adolescents

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Why SBIRT with adolescents?

- A large population of "subclinical" AOD users exists
- Only 1 in 20 with clinical AOD involvement get services
- Behavioral health and primary care offer "opportunistic" settings
- Expands service options
- Low threshold for service engagement
- Congruent with aspects of adolescent development

(NIAAA, 2011)

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SBIRT Core Clinical Components

- **Screening**: universal screening for quickly assessing use and severity of alcohol, illicit drugs, and prescription drug abuse
- **Brief Intervention**: a brief motivational and awareness-raising intervention given to risky or problematic substance users; 1 session
- **Brief Treatment**: "Extended Brief Intervention" (EBI) is similar to BI in emphasizing motivation to change and client empowerment given to those with at-risk use up to 5 sessions (total is 6/year)
- **Referral** to **Treatment**: referrals to specialty care for patients with substance use disorders

(NIAAA, 2011)

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Adolescent Risk Levels

At ages **12 to 15** years:
- any drinking is considered at least "moderate" risk, and
- half of those who drank alcohol in this age group drink frequently enough to be in the "highest risk" category.

At ages **16 to 18**:
- about one-third of those who drink alcohol are at "lower risk,"
- one-fifth at "moderate risk," and
- just under half are at "highest" risk (NIAAA, 2011).

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For Students who drink – Assess Risk, and Provide Feedback

(NIAAA, 2011)

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Definitions: Standard Drink

NIAAA

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SBIRT for Youth in Healthcare Settings

- The American Academy of Pediatrics recommends that pediatricians provide alcohol screening and counseling to all adolescents (Levy & Williams, 2016).
- The Massachusetts Department of Public Health states that "Every adolescent should be asked yearly about use of alcohol and drugs" (Massachusetts Department of Public Health Bureau of Substance Abuse Services, 2009).

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Relatively Few PCPs Screen According to Guidelines

- An American Academy of Pediatrics' survey found that only 45 % of fellows routinely screened young patients for alcohol use, and only 16 % reported using standardized instruments (1998).
- In another study, they found that, while 14 % of the sample scored ≥2 on the CRAFFT, providers' only identified only 4.8 % of the patients with at-risk use (Hassan et al., 2009)
- Moreover, almost 20 % of those perceived by the providers to have an AOD problem still did not receive a recommendation for an intervention (Hassan, et al., 2009)

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CRAFFT Screening Tool

- The CRAFFT is a validated screening tool for use with adolescent patients
- Because it screens for both alcohol and other drug problems simultaneously, it is especially handy for providers
- CRAFFT consists of
  - ✓ Part A: 3 prescreening questions and
  - ✓ Part B: 6 items
  - ✓ Scoring Algorithm
- A positive CRAFFT means the student should be assessed for alcohol/drug use severity (mild, moderate or severe)

(Knight, Sherrill, Shrier, Harris, Chang, 2002)

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CRAFFT - Part A Review

Ask: During the Past 12 months, did you:

1. Drink any alcohol (more than a few sips)?
2. Smoke any marijuana or hashish?
3. Use anything else to get high? ("Anything else" includes illegal drugs, over the counter and prescription drugs, and things that you sniff or "huff".)

If answers **NO** to all, Ask the **CAR** question in Part B, then STOP.

If answers **YES** to ANY, ask all of Part B

(Children's Hospital Boston, 2009)

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The CRAFFT

IF: No to All Part A and No to Car question:

Praise and Encouragement: "You made some good choices not to use drugs or alcohol."

IF: No to All Part A and Yes to Car question:

"Please don't ever ride with a driver who has had a single drink, because people can feel that it's safe to drive even when it's not."

(Children's Hospital Boston, 2009)

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The CRAFFT

Part B:

1. Have you ever ridden in a CAR driven by someone (including yourself) who was "high" or had been using alcohol or drugs?
2. Do you ever use alcohol or drugs to RELAX, feel better about yourself, or fit in?
3. Do you ever use alcohol or drugs while you are by yourself, or ALONE?

(Children's Hospital Boston, 2009)

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The CRAFFT

4. Do you ever FORGET things you did while using alcohol or drugs?
5. Do your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?
6. Have you ever gotten into TROUBLE while you were using alcohol or drugs?

(Children's Hospital Boston, 2009)

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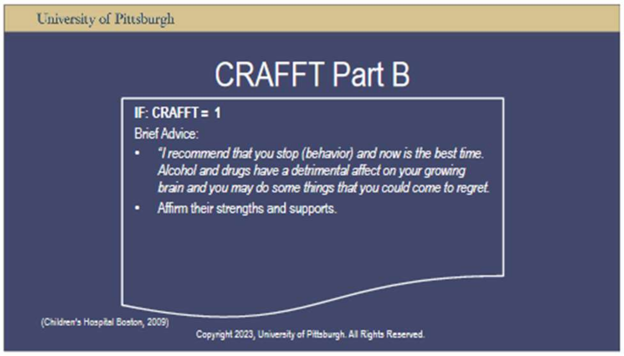
The CRAFFT

A score of 2 or greater is a "positive" screen and indicates that the adolescent is at high-risk for having a substance use disorder.

(Children's Hospital Boston, 2009)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CRAFFT Part B
IF: CRAFFT = 1
Brief Advice:
• "I recommend that you stop (behavior) and now is the best time. Alcohol and drugs have a detrimental affect on your growing brain and you may do some things that you could come to regret.
• Affirm their strengths and supports.
(Children's Hospital Boston, 2009)
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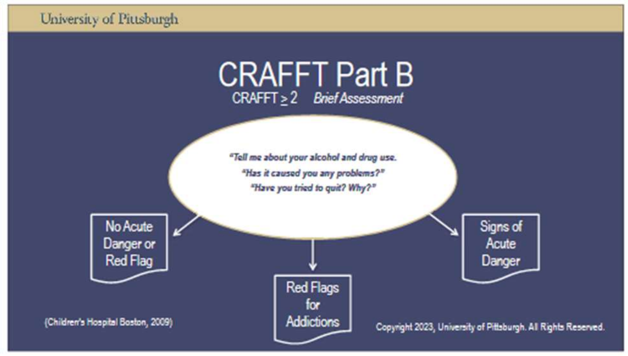
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CRAFFT Part B
CRAFFT > 2 Brief Assessment
"Tell me about your alcohol and drug use.
"Has it caused you any problems?"
"Have you tried to quit? Why?"
No Acute Danger or Red Flag
Red Flags for Addictions
Signs of Acute Danger
(Children's Hospital Boston, 2009)
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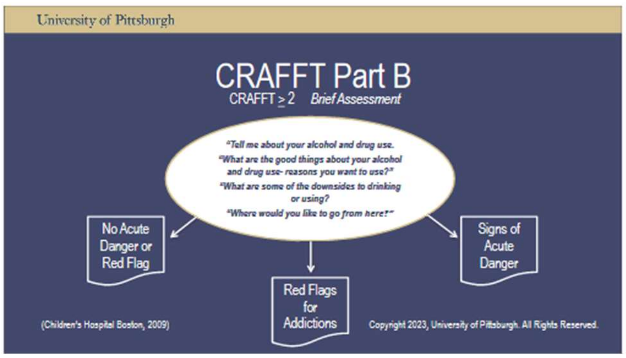
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CRAFFT Part B
CRAFFT > 2 Brief Assessment
"Tell me about your alcohol and drug use.
"What are the good things about your alcohol and drug use- reasons you want to use?"
"What are some of the downsides to drinking or using?
"Where would you like to go from here?"
No Acute Danger or Red Flag
Red Flags for Addictions
Signs of Acute Danger
(Children's Hospital Boston, 2009)
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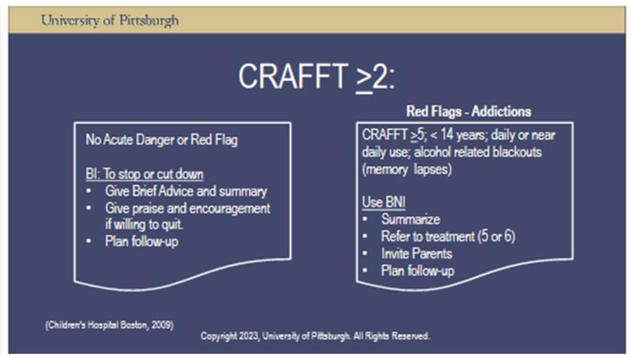
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CRAFFT >2:
No Acute Danger or Red Flag
BI: To stop or cut down
• Give Brief Advice and summary
• Give praise and encouragement if willing to quit.
• Plan follow-up
Red Flags - Addictions
CRAFFT >5; < 14 years; daily or near daily use; alcohol related blackouts (memory lapses)
Use BNI
• Summarize
• Refer to treatment (5 or 6)
• Invite Parents
• Plan follow-up
(Children's Hospital Boston, 2009)
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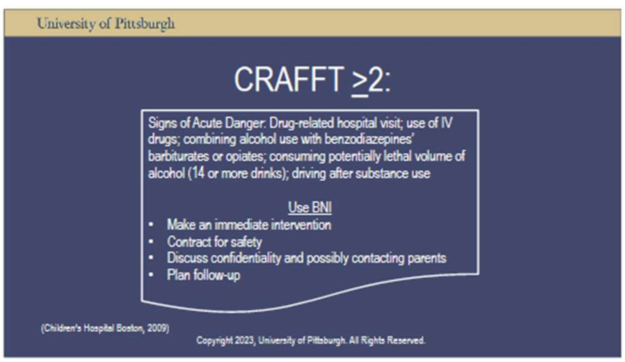
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CRAFFT >2:
Signs of Acute Danger: Drug-related hospital visit; use of IV drugs; combining alcohol use with benzodiazepines' barbiturates or opiates; consuming potentially lethal volume of alcohol (14 or more drinks); driving after substance use
Use BNI
• Make an immediate intervention
• Contract for safety
• Discuss confidentiality and possibly contacting parents
• Plan follow-up
(Children's Hospital Boston, 2009)
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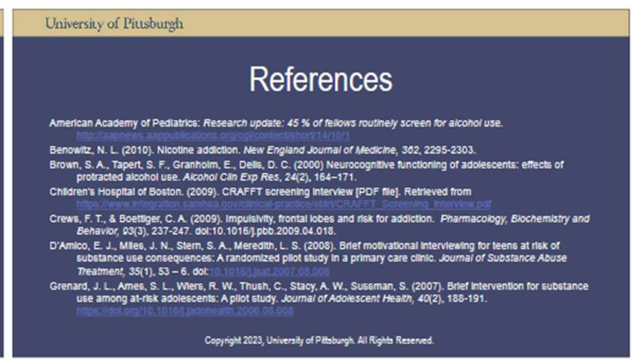
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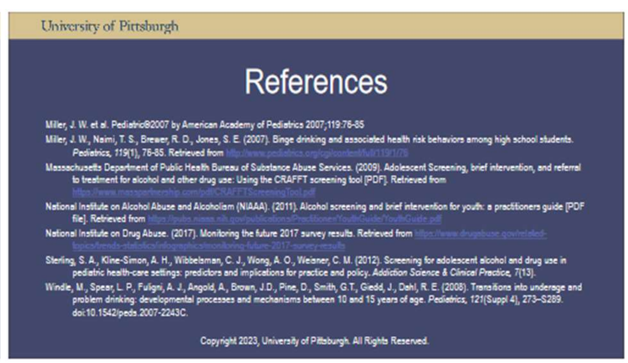
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A.2. CRAFFT Questionnaire

Knight (2020)

The CRAFFT Interview (version 2.1)

To be verbally administered by the clinician

Begin: *"I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."*

Part A

During the PAST 12 MONTHS, on how many days did you:

1.	Drink more than a few sips of beer, wine, or any drink containing **alcohol**? Say "0" if none.	☐ # of days
2.	Use any **marijuana** (cannabis, weed, oil, wax, or hash by smoking, vaping, dabbing, or in edibles) or "**synthetic marijuana**" (like "K2," "Spice")? Say "0" if none.	☐ # of days
3.	Use **anything else to get high** (like other illegal drugs, pills, prescription or over-the-counter medications, and things that you sniff, huff, vape, or inject)? Say "0" if none.	☐ # of days

Did the patient answer "0" for all questions in Part A?

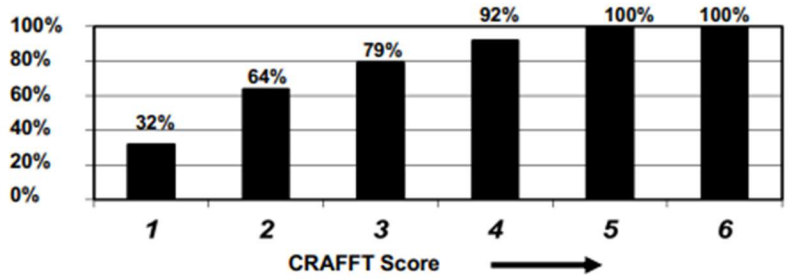
Yes ☐	No ☐
↓	↓
Ask 1st question only in Part B, then STOP	**Ask all 6 questions in Part B**

Part B		**Circle one**	
C	Have you ever ridden in a **CAR** driven by someone (including yourself) who was "high" or had been using alcohol or drugs?	**No**	**Yes**
R	Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?	**No**	**Yes**
A	Do you ever use alcohol or drugs while you are by yourself, or **ALONE**?	**No**	**Yes**
F	Do you ever **FORGET** things you did while using alcohol or drugs?	**No**	**Yes**
F	Do your **FAMILY** or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?	**No**	**Yes**
T	Have you ever gotten into **TROUBLE** while you were using alcohol or drugs?	**No**	**Yes**

***Two or more YES answers in Part B suggests a serious problem that needs further assessment. See back for further instructions →**

CRAFFT Score Interpretation

Probability of a DSM-5 Substance Use Disorder by CRAFFT score*



*Data source: Mitchell SG, Kelly SM, Gryczynski J, Myers CP, O'Grady KE, Kirk AS, & Schwartz RP. (2014). The CRAFFT cut-points and DSM-5 criteria for alcohol and other drugs: a reevaluation and reexamination. Substance Abuse, 35(4), 376–80.

Use the 5 R's talking points for brief counseling.

1. **REVIEW** screening results
   For each "yes" response: *"Can you tell me more about that?"*
2. **RECOMMEND** not to use
   "As your doctor (nurse/health care provider), my recommendation is not to use any alcohol, marijuana or other drug because they can: 1) Harm your developing brain; 2) Interfere with learning and memory, and 3) Put you in embarrassing or dangerous situations."
3. **RIDING/DRIVING** risk counseling
   "Motor vehicle crashes are the leading cause of death for young people. I give all my patients the Contract for Life. Please take it home and discuss it with your parents/guardians to create a plan for safe rides home."
4. **RESPONSE** elicit self-motivational statements
   Non-users: *"If someone asked you why you don't drink or use drugs, what would you say?"* Users: *"What would be some of the benefits of not using?"*
5. **REINFORCE** self-efficacy
   "I believe you have what it takes to keep alcohol and drugs from getting in the way of achieving your goals."

Give patient Contract for Life. Available at www.crafft.org/contract

crafft@childrens.harvard.edu www.crafft.org

For more information and versions in other languages, see www.crafft.org.

Adolescent Substance Screening Protocol/Policy (A.3.)

Outpatient psychiatric evaluation process	**Page No.**	**Number:**
POLICY & PROCEDURE MANUAL	**Required Review: tbd**	
Policy [X] Procedure [X]	**Reviewed : 09/2023**	
	Revised: 09/2023	
Title: Adolescent Substance Screening Protocol	**Responsible Position: Psychiatry Supervisor**	
	Approval Requirements: Psychiatric Provider team	

POLICY:
Adolescent Substance Screening Protocol

PURPOSE:
Substance use disorders has become increasingly prevalent. SAMHSA (2021a) suggests that in persons aged twelve or older in 2020, 58.7 percent (or 162.5 million people) used tobacco, alcohol, or an illicit drug in the past month. The National Survey on Drug Use and Health (NSDUH) for this population of persons aged twelve or older in 2020 found rates of alcohol at 50.0 percent (or 138.5 million people), tobacco and nicotine vape use was seen to be at a rate of 20.7 percent (or 57.3 million people), and illicit drug rates were at 21.4 percent (or 59.3 million people) (SAMHSA, 2021a). These rates are worrisome when considering that Alcohol misuse especially when excessive can lead to premature death and lead to both acute and chronic conditions (US Preventitive Task Force, 2018) Guidelines from the Treatment Improvement Protocol (TIP) 31 by SAMHSA are not being followed which provides guidelines for evaluating, developing, and administering screenings and assessment instruments and processes to structure the screening of young people for substance use disorders (SAMHSA, 2012). The best practice defined is to use structured interviews which can be done with the use of a screening tool (SAMHSA, 2021b). This policy's purpose of implementing the use of a standardized substance evaluation tool to improve the ability to identify those in the selected population, adolescents aged 11 to 21, who would benefit from brief intervention or referral for substance use disorder treatment.

RESPONSIBILITY:
This Policy has been approved by psychiatry services supervisor after receiving feedback from clinic's psychiatric providers..

PROCEDURE:

1. Interventions to screen for substance use and begin treatment include:
    a. All new patients undergoing psychiatric evaluation aged 11-21 years will receive either a self directed or provider administered (based on patient preference and literacy level) substance screening questionnaire.
        a. The CRAFFT (Car; Relax; Alone; Forget; Friends; Trouble) will be the tool used.
        b. Note: patients (or patient's parents for minors) can refuse to take part in evaluation.

b. The results of the evaluation will be used as part of the determination for level of treatment for substance use disorders if any at the psychiatric providers clinical judgement.
    a. Examples of treatment options can include:
        i. Brief substance intervention and education
        ii. Referral to treatment such as outpatient or inpatient substance rehabilitation.
c. The Psychiatric provider team and lead will meet once a year to discuss the policy and approve it for the year.
d. The use of CRAFFT and SBIRT (Screening, Brief Intervention and Referral to Treatment) will be included in yearly education materials.

Policy References

Substance Abuse and Mental Health Services Administration. (2012). *Screening and Assessing Adolescents for Substance Use Disorders: Treatment Improvement Protocol (TIP) Series.* SAMHSA: https://store.samhsa.gov/sites/default/files/d7/priv/sma12-4079.pdf

Substance Abuse and Mental Health Servcies Administration (SAMHSA). (2021a, October). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and HealthA.* SAMHSA: https://www.samhsa.gov/data/sites/default/files/reports/rpt35325/NSDUHFFRPDFWHTMLFiles2020/2020NSDUHFFR1PDFW102121.pdf

Substance Abuse and Mental Health Services Administration. (2021b). *SCREENING AND TREATMENT OF SUBSTANCE USE DISORDERS AMONG ADOLESCENTS* . Screening and Treatment of Substance Use Disorders among Adolescents: https://store.samhsa.gov/sites/default/files/pep20-06-04-008.pdf

US Preventive Services Task Force. (2018). Screening and Behavioral Counseling Interventions to Reduce Unhealthy Alcohol Use in Adolescents and Adults: US Preventive Services Task Force Recommendation Statement. *JAMA, 320*(18), 1899-1909. https://doi.org/10.1001/jama.2018.16789

Chart Audit Tool (B.1)

Pre intervention Chart Audit Tool

Item	Item Answer	Variable Code	Response Code	Response Answer
Group		GROUP	1=Pre intervention 2=Post intervention	
Participant Age		AGE	11=11 12=12 13=13 14=14 15=15 16=16 17=17 18=18 19=19 20=20 21=21	
Gender		GEN	1=Female 2=Male	
Is there use of a any substance use screening tool?		SCRN	1=Yes, non-standardized 2=No 3=Yes, standardized	
Is there any SUD Diagnosis		DX	1=Yes 2=No	
Is there documentation for substance intervention, if yes what type?		INTERV	1=Yes 2=No	

Chart Audit Tool (B.2)

Post intervention Chart Audit Tool

Item	Item Answer	Variable Code	Response Code	Response Answer
Group		GROUP	1=Pre intervention 2=Post intervention	
Participant Age		AGE	11=11 12=12 13=13 14=14 15=15 16=16 17=17 18=18 19=19 20=20 21=21	
Gender		GEN	1=Female 2=Male	
Is there use of a any substance use screening tool?		SCRN	1=Yes, non-standardized 2=No 3=Yes, standardized	
Is there any SUD Diagnosis		DX	1=Yes 2=No	
Is there documentation for substance intervention, if yes what type?		INTERV	1=Yes 2=No	

Permission to complete project at the site (as applicable) (C)

Affiliation Agreement Statement:

Touro University Nevada does not require affiliation agreements for DNP Practicum Experiences. However, the project/practicum site may require an affiliation agreement with Touro. Please delegate this form to an appropriate project/practice site representative for completion.
Please fill in the blanks below and check the appropriate box:

The TUN DNP student: Hermes Mendoza-Zavala, APRN, PMHNP-BC is authorized to complete practicum hours at the above listed project site.

_____ An affiliation agreement is required for completion of this practicum experience.

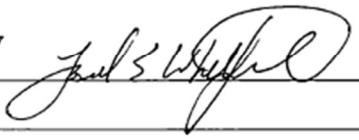
__✓__ An affiliation agreement is not required for completion of this practicum experience.

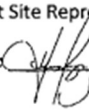
*If an affiliation agreement is required, please insert the name and contact information of the person who will coordinate the agreement:

Name of representative: Joseph Whitfield, Psych PA-C

Contact Information and preferred contact method: joeatusa@aol.com

Psychiatric Specialists of Texas
418 E Tyler Ave Suite C, Harlingen, TX 78550
5440 Old Brownsville Rd, Corpus Christi, TX 78417

Authorized Project Site Representative Signature: 

Student Signature: 

Graphic of EBP or PDSA framework used in the project (D)

Adapted from Agency for Healthcare Research and Quality (2020)

PDSA (plan-do-study-act) Worksheet

TOOL: Implementation of CRAFFT **STEP:** **CYCLE:**

PLAN

- Implementation of standardized substance evaluation tool to improve the ability to identify those in the selected population, adolescents aged 11 to 21, who would benefit from brief intervention or referral for substance use disorder treatment.
    - Create Adolescent Substance Screening Protocol
    - Educate staff on CRAFFT (Car; Relax; Alone; Forget; Friends; Trouble) which will be the tool used.
    - Results of the substance evaluation will be used as part of the determination for level of treatment for substance use disorders if any at the psychiatric providers clinical judgement.

DO

Analyze results of intervention including rate of use of the CRAFFT questionnaire and resulting brief substance intervention or referral to treatment.

STUDY

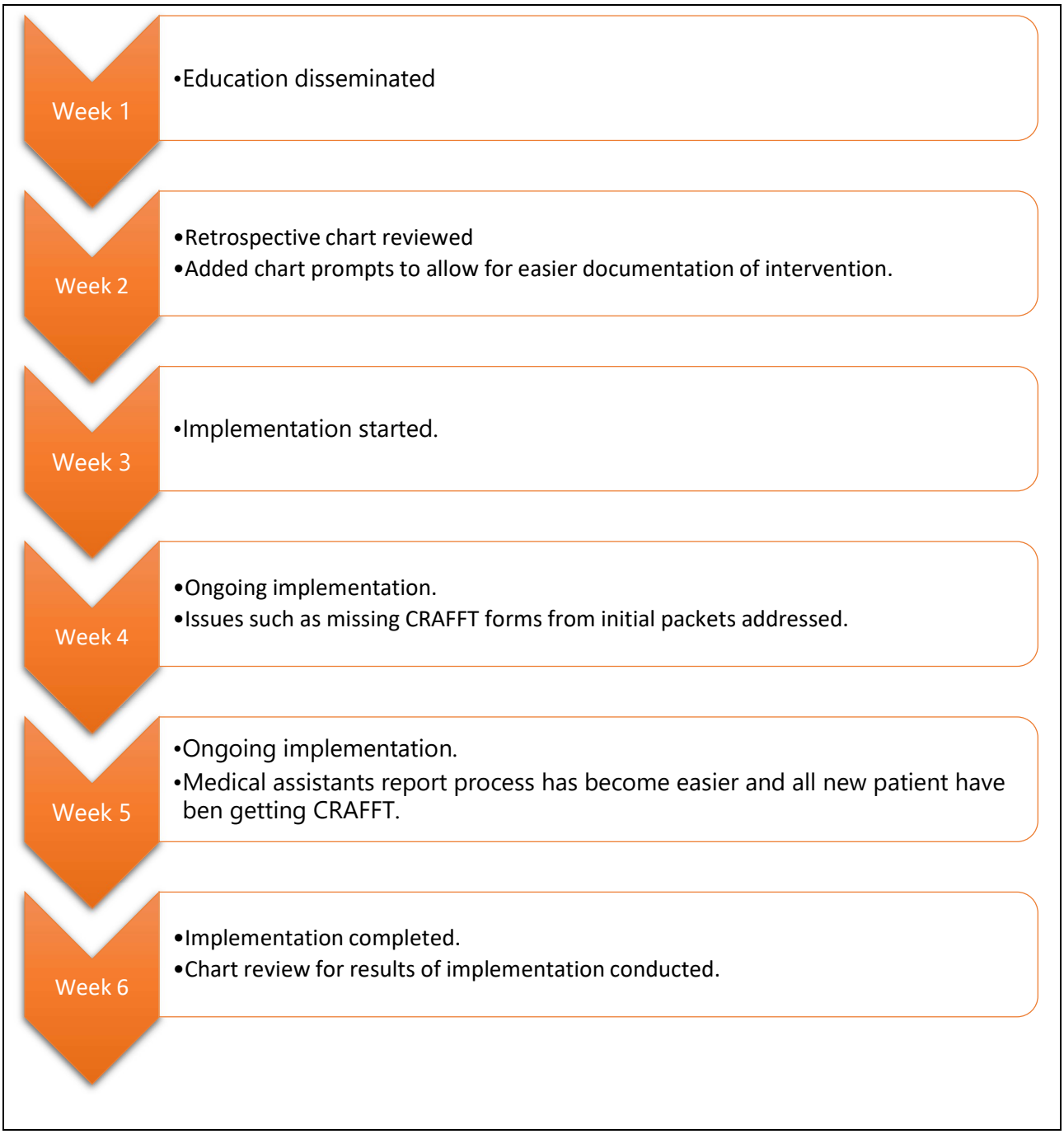
What did you learn? Did you meet your measurement goal?
Partially met objectives

ACT

What did you conclude from this cycle?
A longer timeframe may yield improve results as staff is more acquainted with use.

Graphic of Timeline (E)

Introduction	
Project Site	Psychiatric Specialists of Texas (Harlingen and Corpus Christi locations)
Project Mentor	Dr. Velma Vega-Hughes, DNP, APRN, PMHNP-BC
Project Purpose	The project aim will be mainly to Improve adolescent substance screening rates in two outpatient psychiatric clinics in South Texas to enhance the use of Screening, Brief Intervention and Referral to Treatment (SBIRT) model.
Project Question	Will the use of a validated substance screening tool improve adherence to Screening, Brief Intervention and Referral to Treatment (SBIRT) model.
Project Timeline	
Plan out the activities you will be performing each week during the implementation phase of Project III. Clearly delineate the time needed to carry out interventions, collect data, and evaluate the project. Set concrete dates for all implementation activities (e.g., trainings/education, interventions, data collection and analysis) and include them in the appropriate weeks below. **Dates for implementation are posted in the Project II course announcements. Week 1 should correlate with the first week of DNP Project III, unless permission is granted to implement early.**	


Week 1
•Education disseminated
Week 2
•Retrospective chart reviewed
•Added chart prompts to allow for easier documentation of intervention.
Week 3
•Implementation started.
Week 4
•Ongoing implementation.
•Issues such as missing CRAFFT forms from initial packets addressed.
Week 5
•Ongoing implementation.
•Medical assistants report process has become easier and all new patient have ben getting CRAFFT.
Week 6
•Implementation completed.
•Chart review for results of implementation conducted.

Project Timeline Summary (F)

Project Timeline Summary	
Project Site	Psychiatric Specialists of Texas (Harlingen and Corpus Christi locations)
Project Mentor	Dr. Velma Vega-Hughes, DNP, APRN, PMHNP-BC
Project Purpose	The project aim is to improve adolescent substance screening rates using a validated screening tool in two outpatient psychiatric clinics in South Texas to enhance the use of Screening, Brief Intervention and Referral to Treatment (SBIRT) model.
Project Question	Will the use of a validated substance screening tool improve adherence to Screening, Brief Intervention and Referral to Treatment (SBIRT) model.
Weekly Summary	
Week 1	NOTES: -Education material disseminated. Ongoing education with individual providers as requested by providers ongoing. -Retrospective 4-week chart review using the pre-intervention chart audit tool is ongoing.
Week 2	NOTES: -Continued retrospective chart review, dates of review adjusted to match 30 day pre intervention window. Finished planning implementation with individual providers, added chart buttons to be easily able to document the intervention and any clinical interventions that result from the use of CRAFFT (i.e. brief substance intervention or referral to treatment) to facilitate provider ability to chart their intervention and allow for efficient chart audit.
Week 3	NOTES: The use of the CRAFFT has been started on new patients aged 11-21 throughout the Psychiatric Specialists of Texas facilities in South Texas. Site leadership has been very helpful in providing a point person in the medical assistant staff to liaise with student when questions arise from staff and this has led to a smoother implementation. Retrospective chart review for the adjusted pre-intervention time frame is being completed now.
Week 4	NOTES: Implementation of CRAFFT continues. Small issues are being identified such as the tool not being placed in a couple patient admission packets by medical assistant staff that are in the age group. So far providers have noticed this during the evaluation and given the form to patients. Discussions in the team include that eventually the clinic may move to use the tool for other age groups after completion of the project as it will be easier to include the form in adult charts as well of having to only place in the adolescent charts.
Week 5	NOTES: Implementation of CRAFFT continues. The workflow processes have been much smoother this week with the medical assistant staff now being much more accustomed to including in patient packets and encouraging their use as well as flagging for the provider to review. Post-intervention data collection continued.

CRAAFT Implementation Demographics (G)

Participants

		Value	Count	Percent
Standard Attributes	Label	GROUP		
Valid Values	1	Pre-Intervention	32	54.2%
	2	Post-Intervention	27	45.8%

Age of Participants

		Value	Count	Percent
Standard Attributes	Label	Age		
Valid Values	11	11	10	16.9%
	12	12	6	10.2%
	13	13	6	10.2%
	14	14	10	16.9%
	15	15	3	5.1%
	16	16	10	16.9%
	17	17	7	11.9%
	18	18	4	6.8%
	19	19	1	1.7%
	20	20	0	0.0%
	21	21	2	3.4%

Gender of Participants

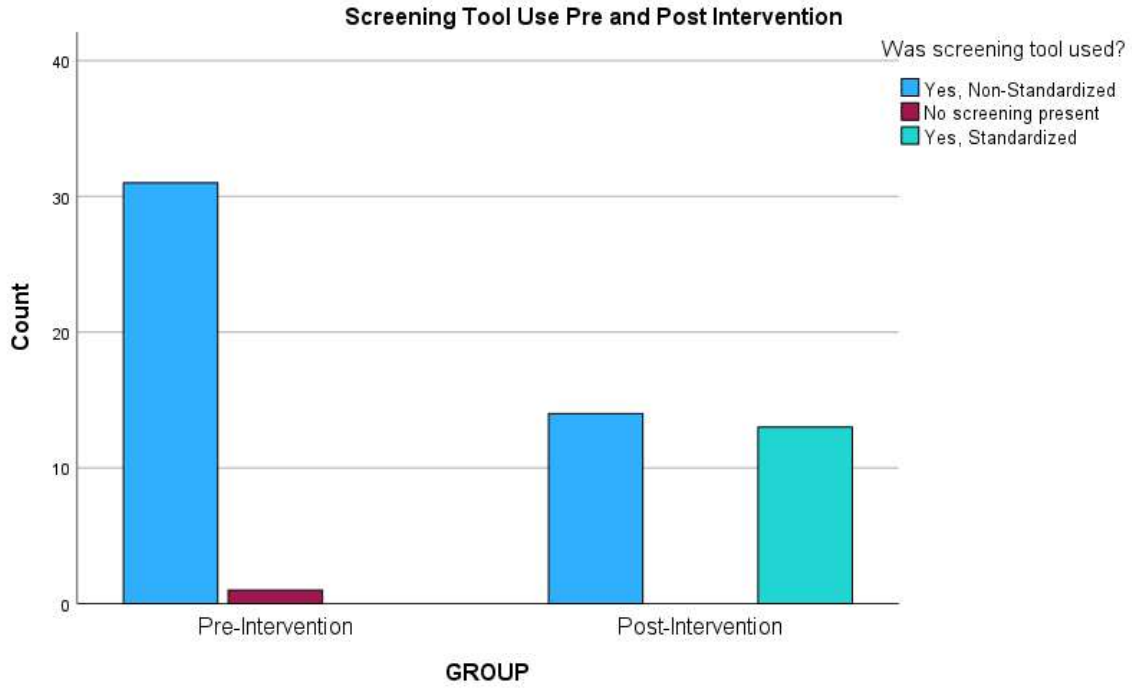
		Value	Count	Percent
Standard Attributes	Label	Gender		
Valid Values	1	Female	36	61.0%
	2	Male	23	39.0%
	3	Other	0	0.0%

Screening Tool Use (H)

Screening Tool Use Pre and Post Intervention

Count

		Screening Tool Yes, Non-Standardized	No screening present	Yes, Standardized	Total
GROUP	Pre-Intervention	31	1	0	32
	Post-Intervention	14	0	13	27
Total		45	1	13	59



Screening Tool Use (H.1)

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GROUP * Screening Tool	59	100.0%	0	0.0%	59	100.0%
GROUP * Diagnosis Present	59	100.0%	0	0.0%	59	100.0%
GROUP * Intervention	59	100.0%	0	0.0%	59	100.0%

GROUP * Screening Tool

Screening Tool use Pre and Post Intervention

Count

		Screening Tool			
		Yes, Non-Standardized	No screening present	Yes, Standardized	Total
GROUP	Pre-Intervention	31	1	0	32
	Post-Intervention	14	0	13	27
Total		45	1	13	59

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.143[a]	2	<.001
Likelihood Ratio	25.568	2	<.001
Linear-by-Linear Association	18.141	1	<.001
N of Valid Cases	59		

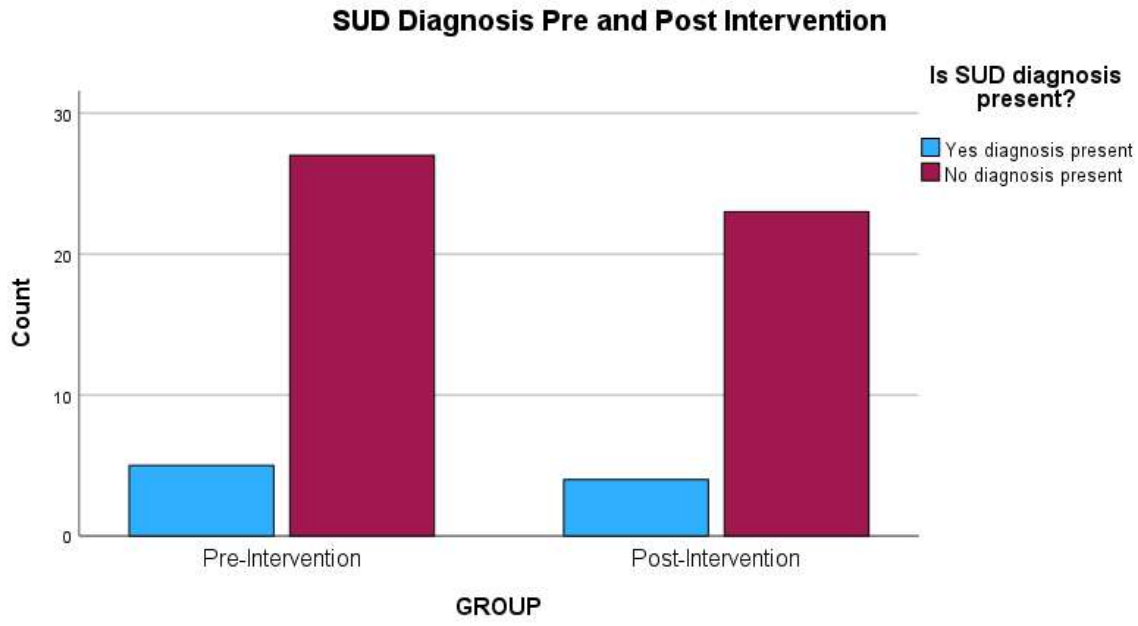
a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is .46.

Substance use Disorder Diagnosis (I)

SUD Diagnosis Pre and Post Intervention

Count

		Diagnosis Present		
		Yes diagnosis present	No diagnosis present	Total
GROUP	Pre-Intervention	5	27	32
	Post-Intervention	4	23	27
Total		9	50	59



Substance use Disorder Diagnosis (I.1)

GROUP * Diagnosis Present

Diagnosis Present Pre and Post Intervention

Count

		Diagnosis Present		
		Yes diagnosis present	No diagnosis present	Total
GROUP	Pre-Intervention	5	27	32
	Post-Intervention	4	23	27
Total		9	50	59

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.007[a]	1	.931		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.007	1	.931		
Fisher's Exact Test				1.000	.611
Linear-by-Linear Association	.007	1	.932		
N of Valid Cases	59				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 4.12.

b. Computed only for a 2x2 table

SBIRT Intervention (J)

GROUP * Intervention

SBIRT Intervention Documented

Count

		Intervention		
		Yes, intervention is documented	No, intervention not documented	Total
GROUP	Pre-Intervention	2	30	32
	Post-Intervention	4	23	27
Total		6	53	59

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.176[a]	1	.278		
Continuity Correction[b]	.425	1	.514		
Likelihood Ratio	1.183	1	.277		
Fisher's Exact Test				.398	.257
Linear-by-Linear Association	1.156	1	.282		
N of Valid Cases	59				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.75.

b. Computed only for a 2x2 table