Combating Stigma and Turning Orthopedic Surgery Providers into a Touchpoint for Intervention in the Opioid Crisis: SBIRT (Screening, Brief Intervention and Referral to Treatment) Training

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Introduction

SBIRT (Screening, Brief Intervention, and Referral to Treatment) is an evidence-based practice used to identify, reduce, and prevent problematic use of alcohol and other drugs[1]. SBIRT has been shown to be effective in reducing substance misuse in at-risk persons/early stage substance use disorder, forestalling more serious addiction[2]. Previously, SBIRT has been utilized in nursing, primary care and emergency medicine. Orthopedic surgeons are the third highest prescribers of opioid pain medication[3]. This project examines the utility of an SBIRT training curriculum developed for the orthopedic clinic specifically targeting the risk of opioid misuse: identifying at-risk orthopedic patients and modifying care in alignment with risk level. SBIRT's role in decreasing bias against patients with OUD is explored, as well as its impact on the use of brief interventions and referrals for treatment.

Methods

- Nineteen orthopedic providers (9 surgeons, 10 physician assistants) were recruited to participate in the study.
- Participants were instructed in an SBIRT curriculum developed for application in a busy orthopedic clinic: a 1.25 hour online component followed by a 2.5 hour interactive small group session with experienced instructors, including universal screening with the Opioid Risk Tool[4] and motivational interviewing.
- Participants completed
  - a six-week log, tracking the number of patients screened and whether they received a brief intervention or referral to treatment,
  - the Medical Condition Regard Scale (MCRS)[5], a measure of stigma, prior to training and after six weeks, and
  - a post-training survey which assessed their overall satisfaction with the SBIRT training.

Results

- Nineteen participants returned the MCRS. Scores increased from 44.6 to 52.5 ($p<0.01$), showing decreased stigma towards patients with opioid use and pain. Items 1,5,7,8 and 11 were individually significant (see table).
- Fourteen of 19 participants reported screening patients with the Opioid Risk Tool. 1471 patients were screened over 6 weeks following the training sessions. The risk stratification is shown in Figure 1.
- 15% of screened patients received brief interventions (n=219), and 0.3% were referred for treatment of SUD (n=4).
- "Medium risk" patients were 5.8 times more likely to receive intervention (brief intervention or referral) than "low risk" patients and those who were not screened (groups for which the rates were similar). This number increased to 8.4 times more likely to receive intervention for patients scoring "high risk" ($p<0.01$).
- Seventeen of 19 participants would recommend the training to their colleagues. Provider opinion of the utility of the training is shown in Figure 2.

Medical Condition Regard Scale Questions	Before Training	Six Weeks After Training	Difference	p-value
1. Working with patients like this is satisfying	2.8 ± 1.4	4.4 ± 1.5	1.5 ± 1.7	<0.01
2. Insurance plans should cover patients like this to the same degree that they cover patients with other conditions	5.3 ± 1.4	5.4 ± 1.7	0.1 ± 1.9	0.81
*3. There is little I can do to help patients like this	5.5 ± 1.4	5.8 ± 1.2	0.3 ± 2.0	0.50
4. I feel especially compassionate towards patients like this	4.1 ± 1.4	4.5 ± 1.3	0.5 ± 1.6	0.21
*5. Patients like this irritate me	4.3 ± 1.5	5.4 ± 1.4	1.1 ± 1.6	0.01
6. I wouldn't mind getting up on call nights to care for patients like this	2.7 ± 1.5	2.7 ± 1.6	0.0 ± 1.2	0.88
*7. Treating patients like this is a waste of medical dollars	5.9 ± 1.0	6.6 ± 0.6	0.7 ± 1.1	0.01
*8. Patients like this are particularly difficult for me to work with	3.4 ± 1.6	5.1 ± 1.4	1.7 ± 1.8	<0.01
9. I can usually find something that helps patients like this feel better	3.9 ± 1.7	4.4 ± 1.3	0.5 ± 1.5	0.15
10. I enjoy giving extra time to patients like this	2.8 ± 1.0	3.3 ± 1.7	0.5 ± 1.6	0.23
*11. I prefer not to work with patients like this	3.9 ± 1.5	5.2 ± 2.0	1.3 ± 2.0	0.01
Total	44.6 ± 9.9	52.7 ± 9.5	8.1 ± 10.7	<0.01
Mean	4.1 ± 1.7	4.8 ± 1.8	0.7 ± 1.7	<0.01

Table: Mean Medical Condition Regard Scale Scores - asterisks indicate reversed scored items.

FIGURE 1: RISK STRATIFICATION OF SCREENED PATIENTS

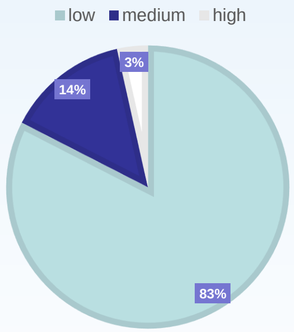


Figure 2: Provider Opinion of Training

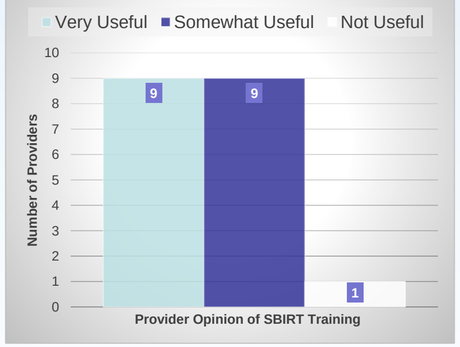
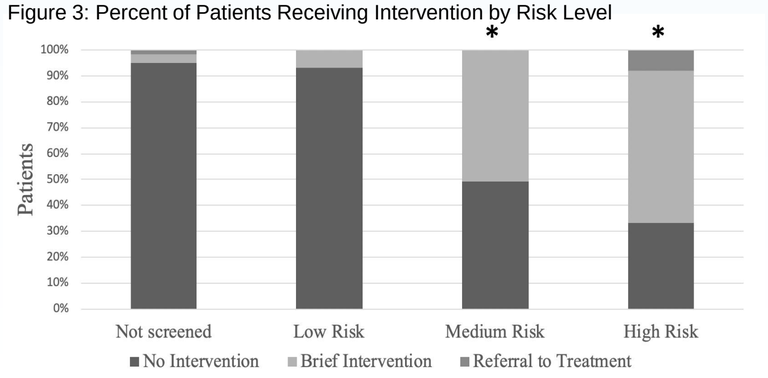


Figure 3: Percent of Patients Receiving Intervention by Risk Level



Discussion

- **Feasibility:** Most orthopedic providers incorporated SBIRT into their clinic workflow, reported the training to be useful, and would recommend it to their colleagues.
- **Utility:** A significant number (17%) of orthopedic patients screened to an elevated level of risk for opioid misuse. Screening was associated with a higher rate of intervention.
- **Stigma:** Significant improvements in the regard of orthopedic surgeons towards patients with SUD were documented, including an increase in satisfaction and decreased perceived difficulty working with patients with SUD and pain.
- **Future directions:** This pilot project benefited from institutional grant funding. However, other factors affecting successful implementation including leadership buy-in, allocation of additional institutional resources, and training of support staff can be explored, as may the application of SBIRT practices in other medical or surgical specialties.

Comment by a participant: "Before SBIRT training, I was not treating addiction as a disease; this aspect of my patient's medical care was being overlooked."

Conclusions

SBIRT is a tool novel to mainstream orthopedics which may have a profound impact on the morbidity associated with opioid use, allowing targeted interventions based on a universal screening protocol and decreasing provider bias. This study supports SBIRT training for orthopedic providers as both feasible and impactful in the orthopedic clinic environment.

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