Improving Resident Knowledge And Comfort With Screening And Counseling Of Adolescent Vaping

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INTRODUCTION:

- While cigarette use has declined among adolescents, vaping or e-cigarette use has increased rapidly in adolescents over the past several years[1]
- In 2022, 25% of 12th graders reported vaping in the past 30 days[1]
- Vaping or e-cigarette use is viewed as safer than standard cigarette use by many adolescents[2]
- Prior studies have demonstrated that providers are less likely to screen and counsel for vaping or e-cigarette than cigarette smoking[3]
- Providers report less knowledge related to vaping or e-cigarettes limiting their ability to counsel patients[3,4]

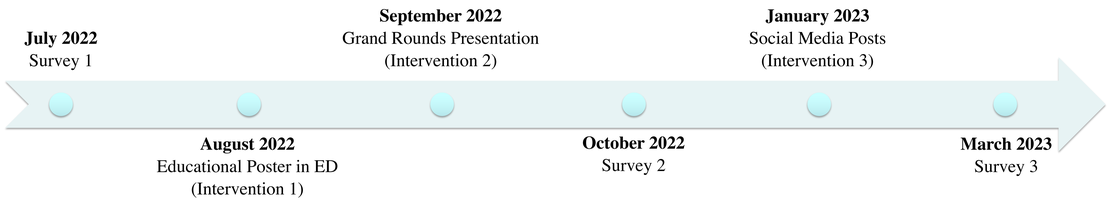
AIM:

- To assess and increase resident knowledge and comfort in screening and counseling of adolescents who vape.

METHOD:

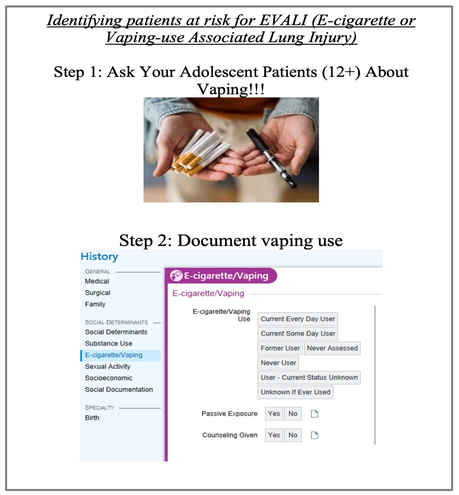
- Quality Improvement Project conducted in a Plan-Do-Study-Act (PDSA) format and subject comfort in vaping counseling and knowledge were assessed using an electronic survey.
- Developed a 17 question online Qualtrics survey
- Recruited pediatric residents from a tertiary inner city academic hospital to take the survey by direct email
- Questions focused on provider awareness of e-cigarette or vaping related products and personal comfort in screening and counseling adolescents about e-cigarette use.
- Comfort levels were reported as extremely comfortable, very comfortable, slightly comfortable or not comfortable.
- First 2 interventions included a posted visual reminder followed by a formal lecture.
- Third intervention included social media posts to increase awareness of vaping and counseling resources.
- Results were compared using Chi-Squared test

PROJECT TIMELINE

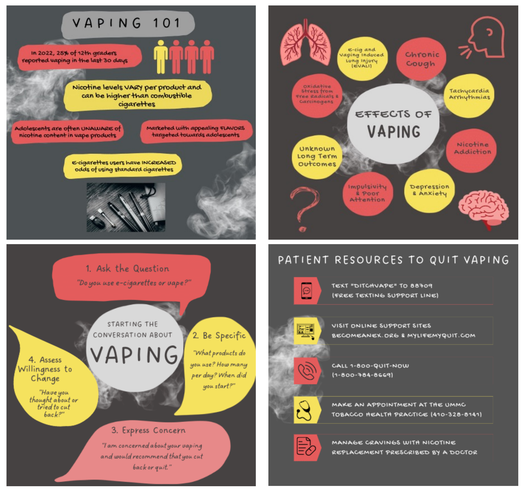


INTERVENTIONS

EDUCATIONAL POSTER



SOCIAL MEDIA POSTS



RESULTS

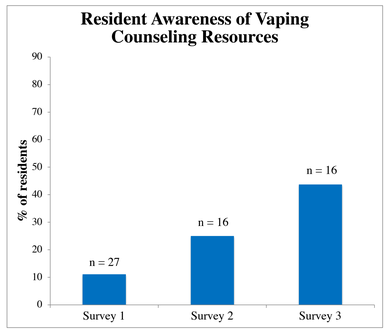


Figure 1: Graph showing 32 percentage point increase in resident knowledge of vaping cessation resources between 1st and 3rd surveys (p = 0.05)

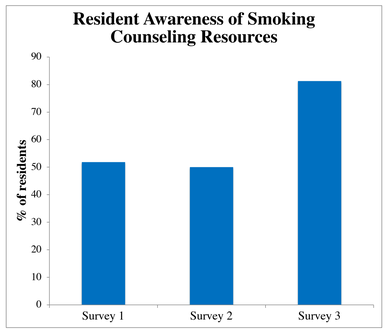


Figure 2: Graph showing 29 percentage point increase in resident knowledge of traditional cigarette smoking counseling resources. (p = 0.11)

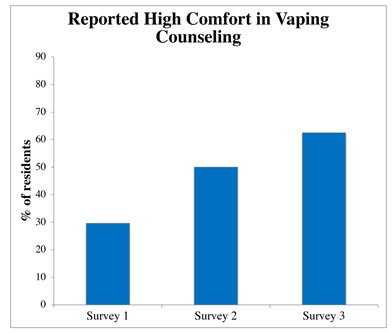


Figure 3: Graph showing 32 percentage point increase in resident comfort in providing vaping counseling following interventions. (p = 0.09)

CONCLUSIONS:

- At baseline, pediatric residents report low comfort in screening for e-cigarette use.
- Due to the growing magnitude of the problem, pediatricians need to be aware of vaping cessation and counseling resources available to teens
- The addition of educational interventions is beneficial in increasing knowledge in this area and to help with identification of this at-risk population.
- Social media can be a powerful and effective tool to expand medical knowledge and reinforce education
- Continued reinforcement is essential to bring about change in practice
- In addition to increased awareness of vaping counseling resources, we also noted an increase in resident knowledge of cigarette smoking counseling resources.

FUTURE DIRECTIONS:

- Evaluate utilization of existing Electronic Medical Record (EMR) tools used to document vaping in adolescent patients
- Increase identification of adolescent patients who vape and increase referrals to tobacco treatment programs
- Expand study to the inpatient setting
- Expand education to incorporate medical students, nursing, pharmacists and other members of the multidisciplinary team

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FINANCIAL DISCLOSURES:

- There are no relevant financial disclosures for this study