Two-year Maintenance of Increased Alcohol and Drug Screening and Brief Intervention Rates

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ABSTRACT

BACKGROUND: Screening and brief intervention (SBI) is effective in reducing patient alcohol use, particularly in primary care settings. Most patients, however, report that their primary care provider has not asked them about their alcohol use. This project used systems changes and resident training in multiple residency clinics across three states in an effort to increase SBI behaviors. Previous results from chart reviews conducted within those clinics showed positive increases in both screening and brief intervention (BI) behaviors 12 months after implementation. The current study analyzes 24 month chart review data to see if observed changes have been maintained.

METHODS: Implementation within the 4 residency clinics included alcohol SBI residency training and clinic SBI implementation processes. Chart reviews assessed the impact on SBI rates. Data were derived from a random sample of patient charts collected before (n=661), at 12 months (n = 659) and at 24 months (n = 669) after resident training and clinic implementation. Patient charts were examined for evidence that patients were screened by a validated alcohol screening instrument, whether the screening result was positive or negative, and whether a BI was performed. Chi-square analyses were used to identify differences in proportions prior to SBI implementation compared to 12 and 24 months after implementation.

RESULTS: Though most patients were asked about their alcohol use prior to implementation (88.8%, 586/651) only a small proportion were screened using a validated alcohol screening instrument (23.7%, 156/651). Following implementation, screening with validated instruments increased significantly at 12 months (83.4%, 549/659, p<0.001). The observed increase between 12 and 24 months was also statistically significant (96.0%, 641/659, p<0.001). Positive screens for unhealthy alcohol use increased from pre-implementation (1.5%, 10/661) to 12 months (10.9%, 72/659, p<0.001). At 24 months, the proportion of positive screens continued to be higher than pre-implementation (9.1%, 61/659, p<0.001), with no significant change when compared to 12 months (p=0.27). Evidence of a BI increased between pre-implementation (2.6%, 17/661) and 12 months (4.6%, 30/659, p<0.05), and was maintained at 24 months (4.6%, 31/669, p<0.04). At 24 months, the proportion of BIs performed relative to the number of positive screens reached 50% (31/659).

CONCLUSIONS: This study demonstrates that increases in alcohol SBI achieved through a combination of both systems changes and resident training can be sustained over time. Though validated screening, the proportion of positive screens and performance of BIs all showed significant increases over pre-implementation levels at both 12 months and 24 months, patient charts showed no evidence of a BI in half of screen positive patients at 24 months. Ongoing quality improvement efforts should emphasize that clinicians both address unhealthy alcohol use and document interventions in the patient chart.

RESULTS

Comparison of Baseline, 12 months and 24 months Chart Reviews

- Most patients were being asked about alcohol use at baseline, but only a small percentage (23.7%) were screened using a validated screening instrument.
- The percentage screened with a validated instrument increased significantly at 12 months (83.4%, p<0.001) from before implementation (23.7%) with an additional significant increase from 12 to 24 months (96.0%, p<0.001).
- Patients screening positive increased significantly between baseline (1.5%) and 12 months (10.9%, p<0.001).
- Screen positive rates at 24 months were comparable to those at 12 months and significantly higher than at baseline (9.1%, p<0.001).
- Performance of a brief intervention increased significantly from baseline (2.6%) to 12 months (4.6%, p<0.05) and was sustained at 24 months (4.6%, p<0.04).

BACKGROUND

- Alcohol screening and brief intervention (SBI) is effective in reducing patient alcohol use, particularly in primary care settings.
- While most patients report that their primary care provider has not asked them about their alcohol use, significant efforts have been made to increase SBI by training medical residents and other health professions to identify and address unhealthy use.
- Previous results from this study examined patient charts 12 months after resident training, finding positive increases in both screening and brief intervention behaviors.
- The purpose of this study is to determine if the changes in SBI behaviors observed at 12 months have been maintained 24 months after the SBI training and implementation.

METHODS

Study Sample: Independent, random samples of patient charts were collected before training and implementation (n = 661), and at 12 months (n = 659) and 24 months (n = 669) post-training in 4 residency clinics in 3 states.

Chart Review:
- Charts were examined for evidence that patients were: 1) Asked about alcohol, 2) screened by a validated alcohol screening instrument 3) whether the screening result was positive or negative and 4) whether a BI was performed.

Outcome:
- Rates for each of these elements were compared across time points to identify any significant differences between baseline and subsequent data collections.

CONCLUSIONS

- Use of validated screening instruments has the potential to significantly increase the identification of unhealthy alcohol use in primary care clinics.
- While the percentage of patients screening positive and receiving brief interventions, increased over time, only half of those screening positive received BIs (31 of 61 at 24 months).
- Other positive screens either did not receive a BI, or it was not reflected in the patient chart.
- Ongoing quality improvement efforts should emphasize that clinicians both address unhealthy alcohol use and document interventions in the patient chart.

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