Addressing Tobacco Use in Hospitalized Patients

Provider Behavior Change After Implementation of an Inpatient to Outpatient Tobacco Use Treatment Program

Ripley-Moffitt CE, Trout S, Goldstein AO
Department of Family Medicine, Nicotine Dependence Program, University of North Carolina, Chapel Hill, NC

Introduction
- Hospitalization provides unique opportunity to offer patients who smoke or use other tobacco help with becoming tobacco free.
- Provider advice & brief interventions increase quit rates.
- Provider support & buy in critical for program success.
- Most patients seen in academic medical centers receive initial treatment from a resident physician who takes history and physical.
- Goal of our program to give providers tools for helping patients consider hospitalization as opportunity to change tobacco use behavior, including ability to order bedside consult from a Tobacco Treatment Specialist.
- Use of survey to introduce new I2O (inpatient to outpatient) program, provide education, receive feedback for program improvement, and evaluate program impact on provider behavior.

Survey Development
- Focus groups held with attending physicians, resident physicians, and nurses to inform survey questions.
- Cohort pre-post design
- Domains of interest: Attitudes, Awareness, Practice, Motivators of behavioral change
- Pilot study with 3 family medicine residents
- Received approval from UNC IRB.
- Email addresses for year one and two resident physicians provided by Residency Coordinators in departments of Family Medicine, Medicine, Surgery, Obstetrics & Gynecology, and Psychiatry.
- Incentive for participation = $15

Survey implementation
- Baseline survey e-mailed February 2011 to 143 resident physicians; two reminder e-mails.
- Follow-up survey e-mailed February 2012 to 143 resident physicians; two reminder e-mails.

Results
- Baseline survey: 106 (74%) completed surveys.
- Follow-up survey: 120 (83.9%) completed surveys.
  - Thirteen physicians no longer at UNC or moved to non-inpatient services, leaving 120 eligible participants for cohort.
  - Cohort: 92 resident physicians completing pre & post surveys (71% response rate).

Demographics
- 54.3% Female
- 54.3% First year residents

Attitudes and awareness

Pre-survey:
- Knowledge of how tobacco use affects hospital outcomes:
  - 71.7% knew nicotine dependence was hospital-related.
  - 51.6% believed nicotine dependence worsened hospital course.
- Awareness of treatment resources for smoking patients:
  - 58.3% knew NRT was available.
  - 49.6% knew Medicare covered counseling.
- Expectancy for behavior change:
  - 77.3% believed their advice would help patients quit.

Post Survey:
- Knowledge of how tobacco use affects hospital outcomes:
  - 72.2% knew nicotine dependence was hospital-related.
  - 58.3% believed nicotine dependence worsened hospital course.
- Awareness of treatment resources for smoking patients:
  - 61.2% knew NRT was available.
  - 52.2% knew Medicare covered counseling.
- Expectancy for behavior change:
  - 86.5% believed their advice would the smoking patients quit.

Influences on resident physician behavior

Factors having positive effect on resident physician tobacco use treatment during post year:

- Using a variety of educational formats (e.g., pre-post survey, informal and formal teaching) can increase awareness and behavior of resident physicians in treating tobacco use.

Conclusion
- Having an inpatient tobacco treatment specialist can dramatically influence resident physician tobacco use treatment (TUT) practices.
- Availability and awareness of TUT resources are vital to increase likelihood that resident physicians will discuss tobacco use with their hospitalized patients.
- Using a variety of educational formats (e.g., pre-post survey, informal and formal teaching) can increase awareness and behavior of resident physicians in treating tobacco use.

Future Directions
- Work to increase attending physicians support and advocacy for tobacco use treatment for inpatients.
- Provide continued education on TUT resources and make referral process more integral.
- Develop strategies with medical staff to make TUT in hospital as routine as possible.

Acknowledgements
The UNC I2O program is funded through a Pfizer Medical Education Grant. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views and policies of Pfizer. Thanks to Kim Miller for assistance in data analysis.