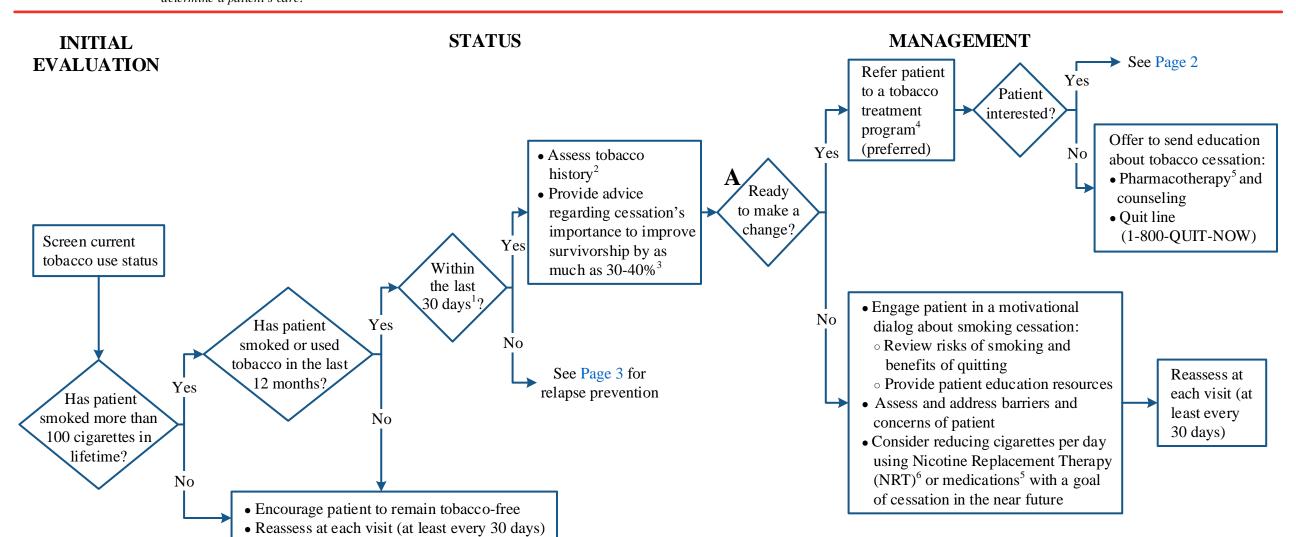
Making Cancer History®

Tobacco Cessation - Adult

Page 1 of 7

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular toMD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.



¹ If patient has not smoked in the past 7 days, treatment may not be required

² Refer to Appendix A for Tobacco History Assessment

³ Refer to the 2014 U.S. Surgeon General Report, see Page 6

⁴ The tobacco treatment program provides both outpatient and inpatient services

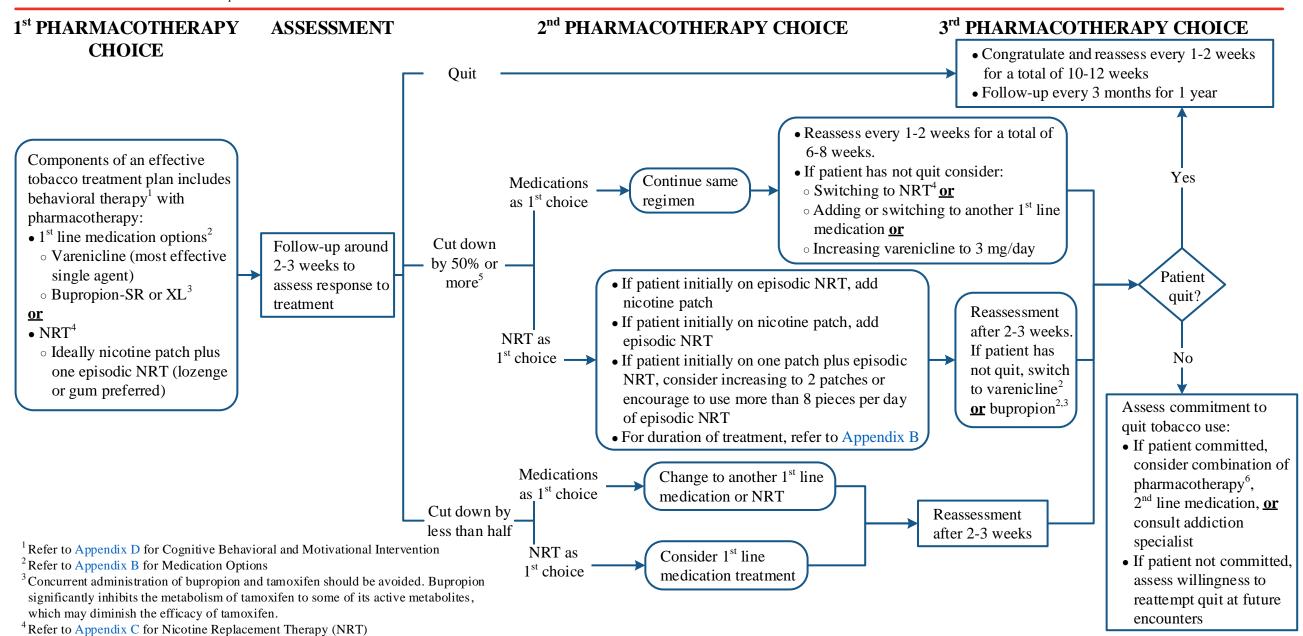
⁵ Refer to Appendix B for Medication Options

⁶ Refer to Appendix C for Nicotine Replacement Therapy (NRT)

Page 2 of 7

Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular toMD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.



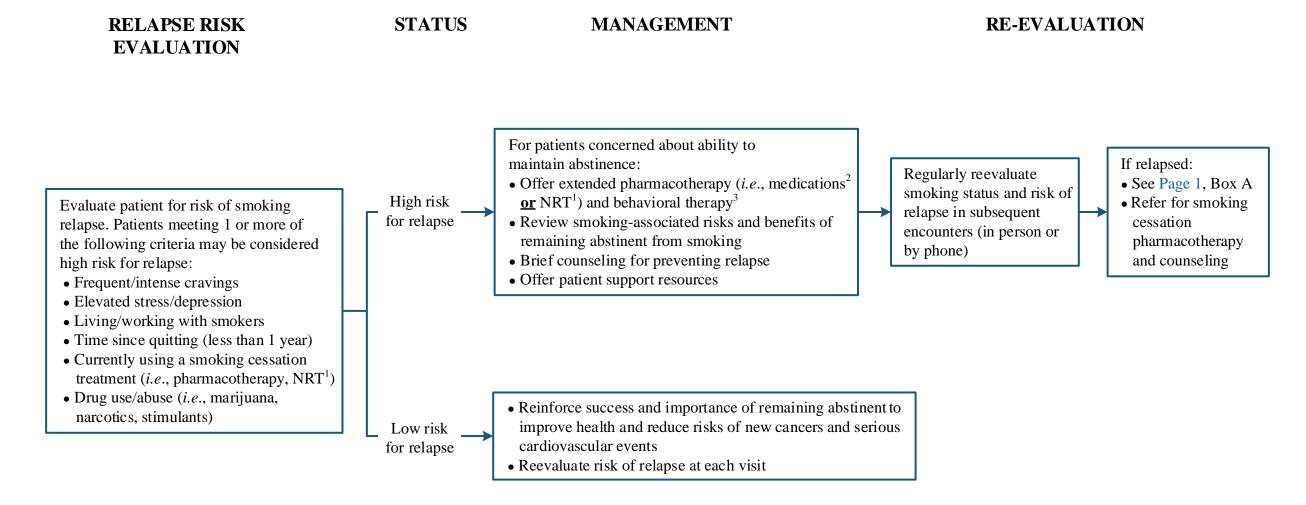
⁶Two 1st line medications or one medication plus NRT

⁵Cutting back by half on the number of cigarettes smoked or the amount smoked of each cigarette

Page 3 of 7

Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular toMD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.



¹ Refer to Appendix C for Nicotine Replacement Therapy (NRT)

² Refer to Appendix B for Medication Options

³ Refer to Appendix D for Cognitive Behavioral and Motivational Intervention

Page 4 of 7

Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular toMD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.

APPENDIX A: Tobacco History Assessment

- How much do you smoke per day?

 If greater than 20 cigarettes, see footnote¹
- How soon do you smoke after you wake up in the morning? If within 30 minutes, see footnote¹
- Do you use any other type(s) of tobacco/nicotine products and if so, how much? (e.g., pipes, cigars, snuff, and/or e-cigarettes)
- **Do you use tobacco everyday or some days?** If daily, see footnote¹
- Fagerstrom Test of Cigarette Dependence (FTCD) (optional): If they score 3 or higher indicates dependence on nicotine

Document history of quit attempts in patient health record:

- What is the longest period you have gone without smoking?
- When was your last quit attempt?
- Did you use anything to help you quit in the past? If so, what?
- o Unaided
- Medications
- o Support group
- Behavior therapy
- o Quitlines, websites, smart phone applications, or other media
- E-cigarettes
- o Other
- Why were previous quit attempts unsuccessful? (e.g., side effects, cost, continued cravings, did not work)
- Engage patients in a motivational dialog about smoking cessation:
- o Review risks of smoking and benefits of quitting
- Provide patient education resources

APPENDIX B: Medication Options

- Varenicline (Chantix®) for 12 weeks; if patient quits, then renew another 12 weeks
- o 0.5 mg for three days, then
- o 0.5 mg twice a day for 4 days, then
- o 1 mg twice a day
- Bupropion-SR² (Zyban[®]) for 12 weeks; if patient quits, then renew another 12 weeks
 - \circ 150 mg daily for 3-7 days, then
 - 150 mg twice a day or bupropion-XL² 150 mg every morning for 3-7 days, then 300 mg every morning

²Bupropion inhibits the metabolism of tamoxifen diminishing the availability of active tamoxifen metabolites and therefore tamoxifen becomes ineffective in preventing recurrence of certain breast cancers (HR+ types)

APPENDIX C: Nicotine Replacement Therapy³ (NRT)

Nicotine patch:

- If greater than 5 cigarettes per day or smokes within 30 minutes of awaking:
- o 21 mg daily for 6 weeks or more
- o 14 mg daily for 2 weeks or more
- o 7 mg daily for 2 weeks or more
- o If patient quits, either stop or taper to next lower level. Minimum of 12 weeks, recommended up to 24 weeks.
- If less than 5 cigarettes per day or smokes after at least 30 minutes of awaking
- o 14 mg daily for 6 weeks or more
- o 7 mg daily for 2 weeks or more
- o If patient quits, either stop or taper to 7 mg. Use for a minimum of 12 weeks; recommended for up to 24 weeks.

Episodic NRT: (Dosing minimum of 8 doses/day; maximum 20 doses/day. One dose every 1-2 hour(s) on a schedule for 12 weeks or more.)

- Gum or lozenges: 2 mg or 4 mg/piece (4 mg lozenge is preferred due to favorable cost, effectiveness and ease of use)
- Nasal spray: 2 squirts (1 mg) equals 1 dose (not preferred due to higher cost and difficulty of use)
- Oral inhaler: 10 mg/cartridge (20 puffs equal 1 dose) (not preferred due to higher cost and difficulty of use)

³Continuous use of NRT: There is no standard timeframe beyond 12 weeks; it is based on individual preference

¹ Patient has a higher likelihood of being nicotine dependent and more difficult to quit

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular toMD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.

APPENDIX D: Cognitive Behavioral and Motivational Intervention

| Type of Counseling | Interventions |
|---|---|
| In-person, videoconference, and/or by phone | Negotiate quit date, a trial quit attempt or a scheduled reduction Support cessation and build abstinence skills Review educational handouts Explore social support Problem solving Discuss medication options¹ Assessment of motivation and readiness to quit Relapse prevention |
| Related Interventions | Explore psychiatric symptoms Cancer related distress: Internal resources: Place of Wellness, Palliative Care, Integrative Medicine External resources: Cancer Counseling Incorporated, help locate community resources Consultation: |

¹ Refer to Appendix B for Medication Options

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular toMD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.

SUGGESTED READINGS

- Anthenelli, R., Benowitz, N., West, R., St Aubin, L., Mcrae, T., Lawrence, D., . . . Evins, A. (2016). Neuropsychiatric safety and efficacy of varenicline, bupropion, and nicotine patch in smokers with and without psychiatric disorders (EAGLES): A double-blind, randomised, placebo-controlled clinical trial. *The Lancet*, 387(10037), 2507–2520. https://doi.org/10.1016/S0140-6736(16)30272-0
- Cahill, K., Stevens, S., Perera, R., & Lancaster, T. (2013). Pharmacological interventions for smoking cessation: An overview and network meta-analysis. *Cochrane Database of Systematic Reviews*, 5(5), CD009329. https://doi:10.1002/14651858.CD009329.pub2
- Fiore, M., Jaen, C., Baker, T., Bailey, W., Benowitz, N., Curry, S., . . . 2008 PHS Guideline Update Panel, Liaisons, and Staff. (2008). Treating tobacco use and dependence: 2008 update U.S. public health service clinical practice guideline executive summary. *Respiratory Care*, 53(9), 1217-1222. Retrieved from http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&sid=8248ba44-7634-4859-aa5e-039c01c2807a%40sessionmgr4008
- Heatherton, T. F., Kozlowski, L. T., Frecker, R. C., Fagerstrom, K. (1991). The fagerström test for nicotine dependence: A revision of the fagerstrom tolerance questionnaire. *British Journal of Addiction*, 86(9), 1119-1127. https://doi.org/10.1111/j.1360-0443.1991.tb01879.x
- Karam-Hage, M., Cinciripini, P., & Gritz, E. (2014). Tobacco use and cessation for cancer survivors: An overview for clinicians. *CA: A Cancer Journal for Clinicians*, 64(4), 272-290. https://doi.org/10.3322/caac.21231
- Karam-Hage, M., Oughli, H., Rabius, V., Beneventi, D., Wippold, R., Blalock, J., & Cinciripini, P. (2016). Tobacco cessation treatment pathways for patients with cancer: 10 years in the making. *Journal of the National Comprehensive Cancer Network*, 14(11), 1469-1477. https://doi.org/10.6004/jnccn.2016.0153
- Mills, E. J., Wu, P., Lockhart, I., Thorlund, K., Puhan, M., & Ebbert, J. O. (2012). Comparisons of high-dose and combination nicotine replacement therapy, varenicline, and bupropion for smoking cessation: A systematic review and multiple treatment meta-analysis. *Annals of Medicine*, 44(6), 588-597. https://doi:10.3109/07853890.2012.705016
- National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health. (2014). The health consequences of smoking—50 years of progress: A report of the Surgeon General. Centers for Disease Control and Prevention (US). Retrieved from: https://www.ncbi.nlm.nih.gov/books/NBK179276/
- National Comprehensive Cancer Network. (2021). *Smoking Cessation* (NCCN Guideline Version 1.2021). Retrieved from https://www.nccn.org/professionals/physician_gls/pdf/smoking.pdf.
- Rose, J. E., & Behm, F. M. (2013). Adapting smoking cessation treatment according to initial response to precessation nicotine patch. *American Journal of Psychiatry*, 170(8), 860-867. https://doi.org/10.1176/appi.ajp.2013.12070919
- Wippold, R., Karam-Hage, M., Blalock, J., & Cinciripini, P. (2015). Selection of optimal tobacco cessation medication treatment in patients with cancer. *Clinical Journal of Oncology Nursing*, 19(2), 170-175. https://doi.org/10.1188/15.CJON.170-175

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular toMD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.

DEVELOPMENT CREDITS

This screening algorithm is based on majority expert opinion of the Tobacco Cessation work group at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

Diane M. Beneventi, PhD (Behavioral Science – Clinical)

Therese B. Bevers, MD (Cancer Prevention)[†]

Jan Blalock, PhD (Behavioral Science)

Paul M. Cinciripini, PhD, MS (Behavioral Science)

Mark Evans, MSW, LCSW (Behavioral Science)

Wendy Garcia, BS*

Ernest Hawk, MD, MPH (Cancer Prevention)

Nancy N. Huang, MA, LPC (Behavioral Science)

Maher Karam-Hage, MD (Behavioral Science – Clinical)[†]

Sheila A. Kitaka, PAC (Behavioral Science – Clinical)

Melissa A. Macomber, MA, LPC (Behavioral Science)

James Staley, MA, LPC (Behavioral Science)

Danielle Underferth, MS (Strategic Communications)

Leann M. Witmer, MA, LPC-S (Behavioral Science)

[†]Core Development Team

^{*}Clinical Effectiveness Development Team