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|  <p style="text-align: center;">CREDIT VALLEY THE CREDIT VALLEY HOSPITAL</p> | <p>CLINICAL PRACTICE GUIDELINE</p> | <p>PROFESSIONAL PRACTICE</p> |
| <p>TITLE: Smoking Cessation Management In-Patient</p> | | |
| <p>DATE OF ISSUE: 2005, 05</p> | <p>PAGE 1 OF 12</p> | <p>NUMBER: CPG 9</p> |
| <p>SUPERCEDES: New</p> | <p>ISSUED BY: _____ TITLE: Chief of Medical Staff</p> | |
| | <p>ISSUED BY: _____ TITLE: President</p> | |

Purpose:

To provide guidelines for healthcare providers on the integration of smoking cessation recommendations into clinical practice for admitted patients.

To assist healthcare providers with the implementation of the “Smoke Free A 19.4” administration policy.

Selection Criteria:

Inclusion:

All admitted patients who have been identified as a smoker and require temporary smoking cessation intervention and/or request a smoking cessation program.

Exclusion:

Non smokers

Patients who refuse to comply with the “Smoke Free A 19.4” administration policy.

Clinical Considerations:

Guiding Principles/assumption about smoking cessation:

The guiding principles and assumptions that underlie this CPG related to smoking cessation are as follows:

1. Regular tobacco use is an addiction that requires support and repeated interventions.
2. The offer of assistance to quit smoking will benefit every smoker.
3. The client has the right to accept or refuse smoking cessation intervention.
4. Individual smokers deserve to be treated with respect, dignity and sensitivity, while receiving smoking cessation intervention.

5. The public values and trusts specific advice provided by their healthcare professionals.
6. Healthcare providers are involved with clients at multiple entry points to care. This provides many opportunities to identify smokers and implement smoking cessation interventions or direct them to smoking cessation sources.
7. Actively implementing smoking cessation interventions in every care setting will increase successful quitting.

Understanding Smoking Addiction:

Tobacco contains nicotine, which is a powerful and highly addictive substance. Tobacco use delivers nicotine to the brain very rapidly and effectively, bringing on the rapid onset and maintenance of addiction. The resulting physiological need for tobacco, as well as the accompanying psychological need, explains the continuing use of tobacco products in spite of all the known health risks.

Nicotine dependence consists of both physical and behavioural components. Tobacco use triggers the release of dopamine - a chemical in the brain that is associated with feelings of pleasure (relief of withdrawal symptoms). Smokers need greater and greater amounts of nicotine to achieve the same levels of satisfaction. Further smoking alleviates the withdrawal symptoms that set in as soon as the effects of nicotine wear off.

Smoking cessation is not a single event but a process that involves a change in lifestyle, values, social circles, thinking and feeling patterns and coping skills.

About half of those who give up smoking do so as a result of a health problem or crisis.

Most researchers agree that individual smokers differ to the degree to which they are dependent.

Studies have shown that tobacco is as addictive as heroin or cocaine.

(Nursing Best Practice Guideline www.rnao.org/bestpractices)

Nicotine withdrawal symptoms:

- Cravings and thinking about smoking all the time
- Trouble concentrating, feeling tense and irritable
- Feeling dizzy, shaky, headaches
- Coughing
- Constipation or an upset stomach
- Food cravings, especially for sweets

Treatment and Monitoring:

Identification of readiness to quit smoking and interventions required during hospitalization will be directed according to the algorithm. (**Appendix A**)

Refer to (**Appendix B**) for Pharmacological management

Consultations:

| Multidisciplinary Team | Criteria for Referral |
|------------------------|---|
| Psychology | Patient committed to undergoing: <ul style="list-style-type: none"> • psychological interventions for smoking cessation • behavioral therapy • cognitive restructuring • hypnosis |
| Occupational Therapy | For inpatient psychiatry only |
| Pharmacy | If patient requests additional information on pharmacotherapy |

Considerations going forward:

Some guidelines recommend dedicated staff to coordinate smoking cessation treatments –

To consider Smoking Cessation education programs run by trained personnel

Assessment Forms to be included in the Non smoking information package:

The WHY test (**Appendix C**)

Fagerstrom Test for Nicotine Dependency (**Appendix D**)

Communication to staff -

e-learning course available to help educate health professionals on smoking cessation (RNAO website)

Education Rounds

Resources:

| Resources Smoking Cessation | |
|---|--|
| The Canadian Cancer Society Smokers' Helpline | 1-877-513-5333 |
| Canadian Cancer Society | www.cancer.ca |
| Canadian Council of Tobacco Control | www.cctc.ca |
| Canadian Health Network (CHN) | www.canadian-health-network.ca |
| Health Canada Tobacco Control Programme | www.gosmokefree.ca |
| Heart and Stroke Foundation of Canada | www.heartandstroke.ca |
| Physicians for a Smoke-free Canada (PSC) | www.smoke-free.ca |
| Pregnets | www.pregnets.org |
| Program Training and Consultation Centre | 1-800-363-7822 www.ptcc-cfc.on.ca |
| The Lung Association National Office | 613-747-6776 www.lung.ca |
| Ontario Lung Association | 416 864-9911 www.on.lung.ca |
| Smoking Cessation Programs: Health Line Peel | 905-799-7700 www.peelregion.ca/health/quitsmoking/index.htm |
| World Health Organization | www.who.org |

Online Support Help to Quit Smoking

| | |
|---|--|
| Centers for Disease Control and Prevention (CDC) Quit Tips: Don't let another year go up in smoke | www.cdc.gov/tobacco/quit/quittip.htm |
| Registered Nurses Association of Ontario (RNAO) Offers an e-learning course to help educate health care professionals on smoking cessation interventions | www.rnao.org/smokingcessation |
| Smokefree.gov | www.smokefree.gov |
| The Foundation for a Smoke Free America | www.tobaccofree.org |

Evaluation:

Indicators – (Examples)

Nicotine replacement therapy use in inpatients

% of In patient smokers identified on admission

% of healthcare personnel attendance at smoking cessation education sessions/e-learning

Staff Survey – Effectiveness of education and guideline

% of code whites

% of patients attending smoking cessation sessions - Psychology

Number of security calls/time spent/outcome – related to smoking issues

Number of complaints reported to the Nurse Manager related to smoking issues

Approval:

Medical Departments:

Nursing Practice: April 2005

Pharmacy and Therapeutics: May 2005

Professional Practice: April 2005

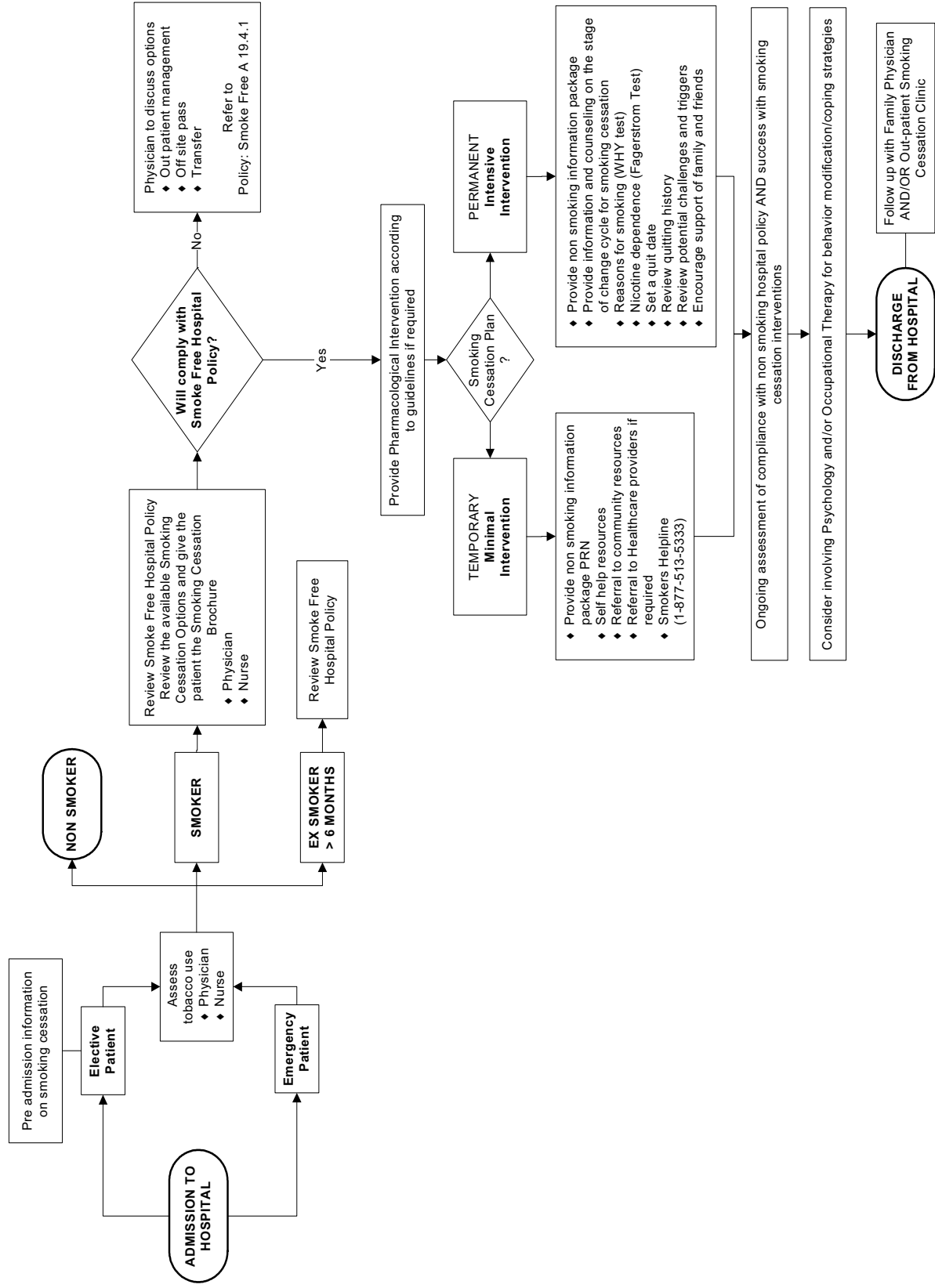
CQCC: April 2005

MAC: May 2005

References:

1. Refer to reference web sites included in the Clinical Practice Guideline
2. Compendium of Pharmaceuticals and Specialties (CPS) 2004. The Canadian Drug Reference for Health Professionals. www.pharmacists.ca
3. Micromedix® Healthcare Series – Nicotine March 2004, Bupropion December 2004, Nortriptyline December 2004, Clonidine September 2004.

Appendix A: Identification of readiness to quit smoking and interventions required during hospitalization



Appendix B: Clinical Guidelines for Prescribing Pharmacotherapy for Smoking Cessation:

| Contraindication | Precautions | Dosing and Dose Adjustment of Concomitant Medications | Side Effects |
|--|--|--|---|
| NICOTINE (Gum and Patches) | | | |
| <p>In pts with hypersensitivity or allergy to nicotine or the components of the preparations.</p> <p>In non-smokers or occasional smokers.</p> <p>In children under 18 years of age</p> <p>In pts during the immediate post myocardial infarction period, in pts with life-threatening arrhythmias, in pts with severe or worsening angina-pectoris and in pts who have had a recent Cerebral Vascular Accident.</p> <p>In pregnant women, in nursing mothers</p> <p>Nicotine patches are contraindicated with pts with generalized skin disorder.</p> | <p>The pt should be urged to stop smoking completely when initiating nicotine therapy.</p> <p>The pt should be informed that if they continue to smoke while using nicotine preparations, they may experience adverse effects due to peak nicotine levels higher than those experienced from smoking alone.</p> <p>If there is a clinically significant increase in cardiovascular effects or other effects attributable to nicotine, the nicotine dose should be reduced or treatment should be discontinued.</p> <p>* Nicotine gum should be used with caution in pts with oral or pharyngeal inflammation and in pts with history of esophagitis or peptic ulcer.</p> <p>Has been reported in chewing gums</p> <p>Dependency Has been reported in chewing gums.</p> <p>Nicotine patch is likely to have low abuse potential based on: much slower absorption, much smaller fluctuations in blood level, lower blood level of nicotine and less frequent use (i.e once daily)</p> | <p>Nicotine gums For light smokers (less than 20 cigarettes/day): 2 mg q1-2 hours For heavy smokers (more than 20 cigarettes/day): 4 mg q1-2 hours.</p> <p>Pts should chew one piece of gum whenever they have the urge to smoke.</p> <p>Each piece should be chewed slowly and intermittently for about 30 min.</p> <p>Chewing quickly can release the nicotine too rapidly, leading to effects similar to over smoking, e.g. nausea, hiccup or irritation of the throat.</p> <p>Pts should be advised not to consume liquids while chewing nicotine gum, as the pH of the oral cavity may be reduced and interfere with absorption of nicotine.</p> <p>Nicotine patches People smoking 10 or more cigarettes per day, start with step 1 (21 mg) x 6 weeks, then step 2 (14 mg) x 2 weeks, then step 3 (7 mg) x 2 weeks.</p> <p>For people who smoke less than 10 cigarettes per day or weigh less than 45 kg or have heart disease, do not use step 1, start with step 2 (14mg) x 6 weeks, then switch to step 3 (7 mg) for the final 2-4 weeks.</p> <p>Nicotine patch should be applied only once daily to a non-hairy, clean, dry skin site on upper body or outer upper arms. After 24 hrs, the used patch should be removed and a new patch applied to an alternative skin site. Skin site should not be reused for at least a week. The patch should not be used for more than 24 hrs.</p> <p>Dose adjustment of concomitant medications: May require a decrease in dose at smoking cessation: Acetaminophen, Caffeine, Clozapine, Imipramine, Oxazepam, Pentazocine, Propranolol, Theophylline, (due to deinduction of hepatic enzymes on smoking cessation). Insulin (increase in subcutaneous Insulin absorption with smoking cessation). Adrenergic antagonists (e.g. Prazocin, Labetalol). May require an increase in dose at smoking cessation: Adrenergic agonists (e.g. Isoproterenol, Phenylephrine).</p> | <p>The most common side effect of the patches is skin irritation, characterized by erythema, pruritus, and edema. GI side effects are minimal compared to nicotine gum.</p> <p>Gastrointestinal: diarrhea, dyspepsia, dry mouth, hiccup and nausea.</p> <p>Respiratory: bronchitis, coughing, throat irritation and rhinitis.</p> <p>Cardiac: chest pain, hypertension and tachycardia.</p> <p>Neurologic: headache, paresthesia, nervousness, dizziness, lightheadedness, sleep disturbance, depression.</p> |

| Contraindications | Precautions | Dosing | Side Effects |
|--|--|--|---|
| <p>BUPROPION</p> <p>In pts who are hypersensitive or allergic to Bupropion</p> <p>In pt with current seizure disorder</p> <p>In pt with current or prior diagnosis of bulimia or anorexia nervosa.</p> <p>In pt undergoing abrupt withdrawal from alcohol or benzodiazepine or other drugs.</p> <p>In pts currently taking MAOI</p> | <p>Should be used with caution in pts with renal impairment.</p> <p>Reduced dose and frequency is recommended.</p> <p>In pts with mild to moderate hepatic impairment, the dose of bupropion should be started at 100mg/day.</p> <p>Bupropion is not recommended in pts with severe hepatic impairment.</p> <p>Bupropion should be used in pregnancy only if clearly needed. (There are no adequate and well-controlled studies in pregnant women)</p> <p>Bupropion and its metabolites are excreted in human milk. Bupropion is not recommended for breast-feeding mothers.</p> | <p>Start with 150 mg daily x 3 days, then increase to 150 mg twice daily.</p> <p>Because the need to build up a therapeutic level, bupropion should be started 1-2 weeks prior to smoking cessation.</p> | <p>Nausea, vomiting, constipation, dry mouth</p> <p>Agitation, insomnia, headache/migraine and tremor.</p> <p>Seizure</p> |

Second Line Treatment:

| Contraindications | | Precautions | | Dosing | Side Effects |
|---|--|---|---|---|--|
| NORTRIPTYLINE The use of nortriptyline for smoking cessation is not approved by FDA, but it has been used successfully in some studies. It is especially beneficial in patients with depression. | | | | | |
| Concomitant use of MAOI | In patients with glaucoma | In patients with history of urinary retention | Start with 25 mg qhs, then increase every 3 days to 75-100 mg qhs | No dose adjustment is needed in renal and hepatic dysfunction. | Most common side effects are sedation and anticholinergic effects, such as dry mouth, blurred vision and urinary retention. Nortriptyline may also cause severe cardiovascular adverse effects and must be used with caution in cardiac patient. |
| Acute recovery period after myocardial infarction | In patients with cardiovascular disease | | | | |
| Hypersensitivity to nortriptyline | | | | | |
| CLONIDINE The use of Clonidine in smoking cessation is not approved by FDA, but it has been used with success in some studies. High incident of side effects may limit usefulness. Females have higher response rate than males. | | | | | |
| In patients with hypersensitivity to clonidine. | Abrupt discontinuation may cause severe rebound hypertension. | | Oral: 0.15 - 0.75 mg daily x 3-10 weeks | Rebound hypertension, atrioventricular block, bradycardia, hypotension, depression, psychotic reaction, drowsiness, fatigue, irritability, vomiting, dry mouth, constipation, sexual dysfunction, hepatotoxicity, and cutaneous reactions | |
| In patients with severe bradyarrhythmia resulting from either sick sinus syndrome or AV block of 2nd or 3rd degree | Because it lowers blood pressure, should be used with caution in patients with severe coronary insufficiency, recent myocardial infarction, cerebro-vascular disease or chronic renal failure. | | | | |
| In sinus node function impairment. | Should be used in pregnancy only if clearly needed (no adequate and well-controlled study in pregnant women has been done.) | Not recommended for breast-feeding mothers (due to lack of supporting information) | | | |

Other medications:

For patients with significant agitation and/or anxiety, consider the use of pm medications.

Appendix C

The WHY Test

Next to the following statements, mark the number that best describes your own experience.

1 = Never 2 = Rarely 3 = Once in a while 4 = Most of the time 5 = Always

- A. I smoke to keep myself from slowing down.
- B. Handling a cigarette is part of the enjoyment of smoking it.
- C. Smoking is pleasant and relaxing.
- D. I light up a cigarette when I feel angry about something.
- E. When I'm out of cigarettes, it's near-torture until I can get them.
- F. I smoke automatically, without even being aware of it.
- G. I smoke when other people around me are smoking.
- H. I smoke to perk myself up.
- I. Part of enjoying smoking is preparing to light up.
- J. I get pleasure from smoking.
- K. When I feel uncomfortable or upset, I light up a cigarette.
- L. I'm very much aware of it when I'm not smoking a cigarette.
- M. I often light up a cigarette while one is still burning in the ashtray.
- N. I smoke cigarettes with friends when I'm having a good time.
- O. When I smoke, part of my enjoyment is watching the smoke as I exhale it.
- P. I want a cigarette most often when I am comfortable and relaxed.
- Q. I smoke when I'm "blue" and want to take my mind off what's bothering me.
- R. I get a real craving for a cigarette when I haven't had one in a while.
- S. I've found a cigarette in my mouth and haven't remembered that it was there.
- T. I always smoke when I'm out with friends at a party, bar, etc.
- U. I smoke cigarettes to get a lift.

The WHY Test

SCORECARD

Write the number you put beside each letter in The WHY Test beside the same letter on the scorecard. For example, if you marked a "3" beside question "C" on the test, put a "3" beside the letter "C" on the scorecard. Then add up the numbers to get the totals for each category.

| | |
|--|---|
| <p>A ___ H ___ U ___ Stimulation Total ___</p> | <p>"IT STIMULATES ME" With a high score here, you feel that smoking gives you energy, keeps you going. So, think about alternatives that give you energy, such as washing your face, brisk walking and jogging.</p> |
| <p>B ___ I ___ O ___ Handling Total ___</p> | <p>"I WANT SOMETHING IN MY HAND" There are a lot of things you can do with your hands without lighting up. Try doodling with a pencil, knitting or get a "dummy" cigarette you can play with.</p> |
| <p>C ___ J ___ P ___ Pleasure/Relaxation Total ___</p> | <p>"IT FEELS GOOD" A high score means that you get a lot of physical pleasure out of smoking. Various forms of exercise can be effective alternatives. People in this category may be helped by the use of nicotine chewing pieces or a nicotine transdermal patch if medically indicated.</p> |
| <p>D ___ K ___ Q ___ Crutch/Tension Total ___</p> | <p>"IT'S A CRUTCH" Finding cigarettes to be comforting in moments of stress can make stopping tough, but there are many better ways to deal with stress. Learn to use relaxation breathing or another technique for deep relaxation instead. People in this category may be helped by the use of nicotine chewing pieces or a nicotine transdermal patch if medically indicated.</p> |
| <p>E ___ L ___ R ___ Craving Addiction Total ___</p> | <p>"I'M HOOKED" In addition to having a psychological dependency to smoking, you may also be physically addicted to nicotine. It's a hard addiction to break, but it can be done. People in this category are the ones most likely to benefit from the use of nicotine chewing pieces or a nicotine transdermal patch if medically indicated.</p> |
| <p>F ___ N ___ S ___ Habit Total ___</p> | <p>"IT'S PART OF MY ROUTINE" If cigarettes are merely part of your routine, one key to success is being aware of every cigarette you smoke. Keeping a diary or writing down every cigarette on the inside of your cigarette pack is a good way to do it.</p> |
| <p>G ___ N ___ T ___ Social Smoker Total ___</p> | <p>"I'M A SOCIAL SMOKER" You smoke in social situations, when people around you are smoking and when you are offered cigarettes. It is important for you to remind others that you are a non-smoker. You may want to change your social habits to avoid the "triggers" which may lead to smoking again.</p> |

Appendix D

Fagerstrom Test for Nicotine Dependence

The following test is designed to help you determine the strength of your nicotine addition. Circle the appropriate score for each question. Total the number of points to arrive at your score. The highest possible score is 11.

| | | |
|---|---------------|----------|
| How soon after you wake up do you smoke your first cigarette? | Within 5 min. | 3 points |
| | 5 – 30 min. | 2 points |
| | 31 – 50 min. | 1 point |
| | After 60 min. | 0 points |

| | | |
|---|-----|----------|
| Do you find it hard not to smoke in places that you shouldn't smoke such as church, in school, in a movie, on the bus, in court or in a hospital? | Yes | 1 point |
| | No | 0 points |

| | | |
|---|------------------------------|----------|
| Which cigarette would you hate most to have to give up? | The first one in the morning | 1 point |
| | Any other one | 0 points |

| | | |
|--|------------|----------|
| How many cigarettes do you smoke each day? | 10 – fewer | 0 points |
| | 11 – 20 | 1 point |
| | 21 – 30 | 2 points |
| | 31 or more | 3 points |

| | | |
|---|-----|----------|
| Do you smoke more in the first few hours after waking than you do during the rest of the day? | Yes | 1 point |
| | No | 0 points |

| | | |
|--|-----|----------|
| Do you still smoke, even if you are so sick that you are in bed most of the day, or if you have the flu or a severe cough? | Yes | 1 point |
| | No | 0 points |

| | |
|-------|--------|
| TOTAL | points |
|-------|--------|

Interpretation of Scoring:

- 7 – 10 You are highly dependent on nicotine and may benefit from a smoking cessation program based on treatment for nicotine addiction. Start with 21 mg. patch or 4 mg. gum.
- 4 to 6 You have a low to moderate dependence on nicotine, however this does not rule out a smoking cessation program based on treatment for nicotine addiction. Start with 14 mg. patch or 2 mg. gum.
- < 4 You have a low to moderate addition, but are not likely to need Nicotine Replacement Therapy.