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#### Successful Cessation: Exploring Quit Attempts at Lehigh Valley Hopital's Tabacco Treatment Program.

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## SUCCESSFUL CESSATION Exploring Quit Attempts at Lehigh Valley Hospital's Tobacco Treatment Program

Suzanne Smith, RRT, MBA; Sharon Kimmel, PhD; Rebecca Johnston, TAS; Dianna Mulhern, MS, LPC; Judith Sabino, MPH

## **Tobacco Treatment Program**

A comprehensive approach to nicotine dependence that combines behavioral modification, psychosocial support, relapse prevention and pharmacologic therapy

# **Nicotine Dependence**

**Environmental or Social** (stress relief)

> Behavior modification

Tobacco Use **Physiological** (need for Nicotine)

Pharmacologic support

Emotion (emotional need) Psychosocial support

## **Tobacco Treatment Program**

The twelve-month counseling program provides assessment of nicotine dependence, education, cessation and relapse prevention strategies through face-to-face counseling and phone follow-up

# **Tobacco Treatment Program**

Proactive contact and interventions occur at

- Assessment interview
- Quit date
- One week
- One month
- Three months
- Six months
- Twelve months

Care plans are developed through an interactive process between the patient, the counselor and the referring physician.

## Tobacco Treatment Program Cumulative Client Enrollment: January 1, 2003, to June 30, 2007



# **Demographics (N=300)**

Includes patients joining the program January, 2003, and December, 2005 Enrolled in program at least 30 days or longer - Median survival = 212 days Received one or more counseling sessions ■ 51.5% female ■ 48.5% male Mean age - 50.16±1.90 years

# **Demographics**

History of 1 or more psychiatric diagnoses - 45.5% (N=113) Mean Fagerstrom Score  $-5.80\pm1.90$ nicotine dependence scale of 0-10 with 10 being highly addicted Mean length of time smoking -29.43±14.48 years Program attrition rate - 61% (N=184)

# **Tobacco Use**

	Stayed in Tobacco Treatment Program	Discontinued Tobacco Treatment Program	þ
Age first used tobacco	16.63 ± 4.94	15.84 ± 5.23	0.247
Age used tobacco regularly	16.83 ± 4.84	14.93 ± 6.35	0.015
How long tobacco used (years)	32.39 ± 13.16	27.68 ± 14.98	0.014
How many cigarettes smoked per day?	15.65 ± 12.98	19.46 ± 14.40	0.021

Differences between enrollees that Discontinued Therapy (DT) or Continued Therapy (CT) Not statistically significant

- Age

- DT and CT mean age of 50 years, p=0.982
- Gender
  - 86.5% of males and 84% of females were DT, p=0.624
- Psychiatric Treatment History
  - Trend toward DT (50.32%) more likely to have history than CT (37.78%), p=0.057 [power=0.567]

# Discontinued Therapy (DT) & Continued Therapy (CT)

## Not statistically significant

- Reported emotional smoking (stress, relax, cheer-up)
  - High probability both DT (93.17%) and CT (96.67%), p=0.390 [power=0.602]
- Report habit smoking (after meal, telephone, and driving)
  - High probability both DT (73.9%) and CT (72.2%), p=0.768 [power=0.482]

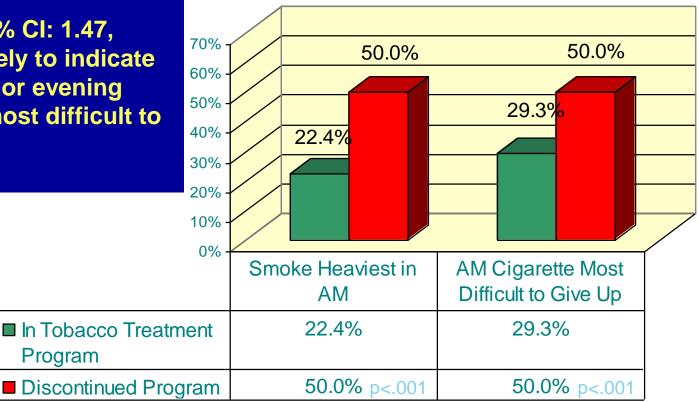
Participants who stayed in the program were:

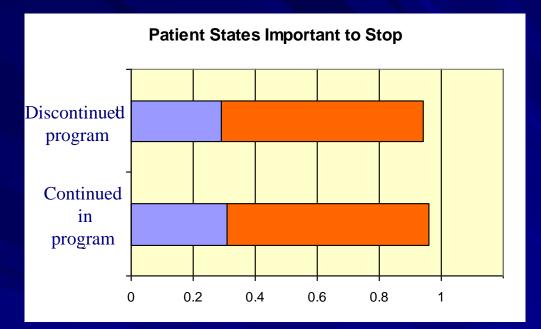
• 3.5 times (95% CI: 2.05, 5.84) more likely to smoke heaviest in the afternoon or evening and

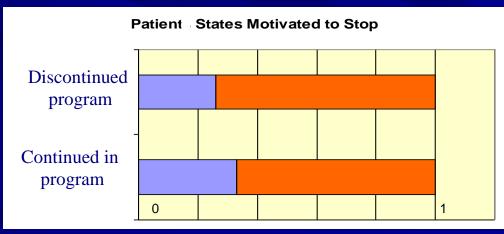
•2.4 times (95% CI: 1.47, 3.95) more likely to indicate the afternoon or evening cigarette as most difficult to give up.

Program

#### **Smoking Patterns**

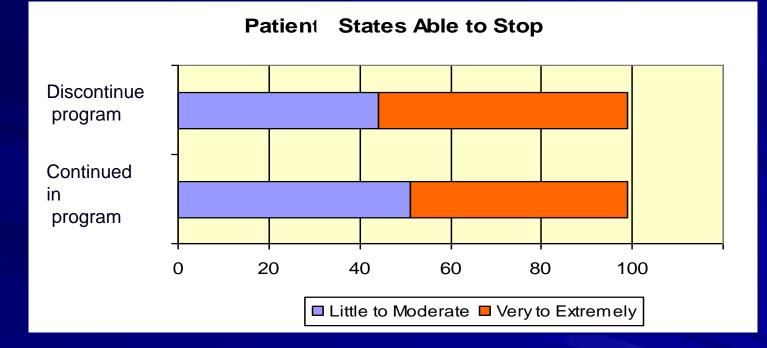






little to moderate importance/motivation

very to extremely important/motivated



Patients discontinuing the program were...

- More likely to start using tobacco regularly at an earlier age
- More likely to smoke more cigarettes per day

### But not necessarily more than 1 pack per day

- 2.5 times more likely to report feeling support by one or more non-family members (OR 2.45, CI 1.26, 4.73, p=0.007)
- 3.5 times more likely to report smoking the heaviest in the (AM OR 3.46, CI2.05, 5.84, p<.001)</p>

 Patients staying in the program were...
3 times more likely to report feeling support by one or more family members (spouse, children, parent and/or sibling) (OR 2.9: CI 1.5, 5.58, p=0.001)

2.4 times more likely to indicate the afternoon or evening cigarette as the most difficult to give up (OR 2.45: CI 1.47, 3.95, p=.001)



A patient's sense of motivation, importance and confidence in stopping tobacco use reported upon entering a tobacco treatment program may not be predictable indicators of whether the patient will maintain or drop-out of the program.

The Fagerstrom scoring system, especially cigarette smoking patterns, may be considered a predictor of continuation in a tobacco treatment program.

Predicting continuation using the Fagerstrom score is strengthened when family support and age of first regular tobacco use is also considered.

Patients enrolled in a tobacco treatment program should be strongly advised to seek support from family members. In some cases it may be plausible to include family members in counseling sessions.

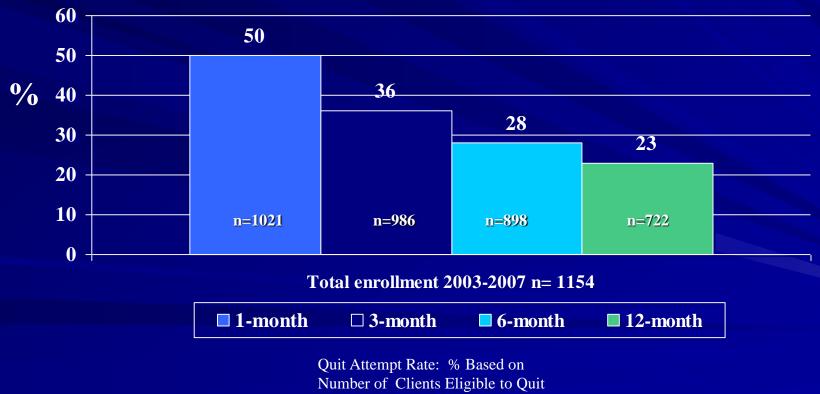
## Limitations

Did not account for dynamics of patientcounselor relationship (further investigation will occur through patient survey).

Predicting continuation in program correlating with children living at home needs further investigation.

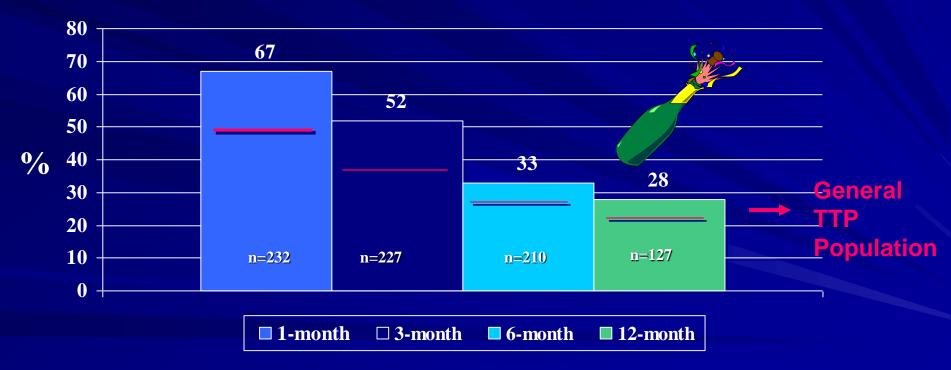
## Tobacco Treatment Program Successful Quit Attempts Cumulative Rates

### January 1, 2003, through June 30, 2007



During a Specific Time Period

Tobacco Treatment Program Successful Quit Attempts Choice Plus Covered Enrollees January 1, 2006, through June 30, 2007



Quit Attempt Rate: % Based on Number of Clients Eligible to Quit During a Specific Time Period

## **Questions** ???