



SCHOOL OF
PUBLIC HEALTH

University of Medicine & Dentistry of New Jersey

UMDNJ – School of Public Health

Tobacco Dependence Clinic

Annual Report

January 1, 2002 – December 31, 2002



Tobacco Dependence Clinic at UMDNJ-School of Public Health:

Summary Report 2001-2003

Introduction

The Tobacco Dependence Clinic at UMDNJ-School of Public Health (732-235-8222) is funded by New Jersey DHSS to provide a specialist tobacco dependence treatment service to the local community and also to provide a referral and consultation service to health professionals throughout New Jersey. The Clinic is part of the Tobacco Dependence Program at UMDNJ-SPH which has a wider role in training, research and advocacy on tobacco dependence. The Clinic first started seeing patients in January 2001, and by July 31, 2003 has seen 875 new patients.

Characteristics of Patients Seen

60% of the patients seen are women and over 70% live in Middlesex County. Over a third heard about the Clinic from their health care provider, and around a quarter heard about the clinic from a friend or family member. Surprisingly, less than 5% are referred by NJ Quitnet or NJ Quitline. 91 % of our patients attend the Clinic for help to stop smoking, with 5% attending for help to stay stopped after a recent quit attempt and 3% seeking help to reduce their tobacco use. The typical Clinic patient has already tried to quit smoking on at least 3 previous occasions (average = 8 times), smokes over a pack of cigarettes per day for over 25 years, and lights up within 10 minutes of waking each morning. Almost 60% already have symptoms or an illness they believe is caused by smoking, over a half have previously received treatment for a mental health or emotional problem and a quarter have previously received treatment for an alcohol or drug problem.

Types of Treatment Provided

All patients receive a comprehensive assessment including measurement of expired carbon monoxide. Most are then treated with a combination of counseling and pharmacotherapy with input from a multidisciplinary team. Over 50% attend group treatment and over 80% use medication. The average number of appointments attended is 5.4, with an average of 2.2 additional telephone consultations with the clinic.

Treatment Outcome

523 (87%) of the patients seen in 2001-2 made an attempt to quit. 265 patients (51%) were abstinent at one month follow-up, and an additional 80 (15%) reported cutting their cigarette consumption down by at least half. 154 patients (30%) remained abstinent six months after their Quit Date, and 77 (15%) reduced by at least 50%. These rates assume that those not contacted for follow up continue smoking. There are signs that those who participate in at least four group treatment sessions and use more than one treatment medication have much higher abstinence rates, reaching over 75% at six months follow-up. Over 95% rated the service as "excellent" or "good".

Summary

The Clinic has grown substantially, treating twice as many patients in 2003 as in 2001. Most of the patients are highly addicted to tobacco and have multiple other health problems. The clinic achieves very respectable short and long term outcomes (51% and 30% abstinence at one and six month follow-ups). For comparison, the U.S. Public Health Service Guideline reports an average long term abstinence rate of 11% without treatment and 22% from "high intensity counseling". The Clinic's main aims for 2003-4 are therefore to maintain a high standard of patient care while continuing to increase the volume of patients seen.

Tobacco Dependence Clinic at UMDNJ-School of Public Health

Annual Report: 2002-2003

Introduction

This report summarizes the work carried out at the Tobacco Dependence Clinic at UMDNJ-School of Public Health between its launch in January 2001 through to December 31, 2002. The report includes descriptions of our patients, all available six-month outcomes, and an account of how patients fared depending upon participation and particular treatments for tobacco dependence. We also provide a summary of the number of patients seen for counseling through to July, 2003.

The Tobacco Dependence Program at UMDNJ-School of Public Health provides education, treatment, research, and advocacy to reduce the harm to health caused by tobacco. The Clinic is the treatment component of the Tobacco Dependence Program at UMDNJ-School of Public Health. The Clinic is funded by New Jersey DHSS (initially via Master Settlement Agreement funds, and since July 1, 2002 from the NJ State Tax on Tobacco) to provide a specialist tobacco dependence treatment service to the local community and also to provide a referral and consultation service to health professionals throughout New Jersey. The clinical staff is also involved in training and consulting to the network of tobacco dependence treatment clinics throughout New Jersey known as New Jersey Quitcenters and to other providers of tobacco treatment.

A number of professional specialists in tobacco dependence treatment have provided clinical services: Donna Richardson LCSW (Clinic Coordinator), Anitha Varughese LCSW, Michael Steinberg MD MPH (Clinic Medical Director), Michael Burke EdD MHS, Jill Williams MD, and Jonathan Foulds PhD (Director, Tobacco Dependence Program). The Clinic has also benefited from input from other staff and faculty at the Tobacco Dependence Program including Doug Ziedonis MD MPH, and from psychiatry residents receiving specialist training in addiction psychiatry. The Clinic provides a multidisciplinary approach to tobacco dependence treatment, based on the evidence-based assessment and treatment procedures outlined in the US Public Health Service Clinical Practice Guideline on Treating Tobacco Use and Dependence and the New Jersey Guidelines for Tobacco Dependence Treatment.

Patients contact the clinic through referral from their health-care provider, or via self-referral. The clinic is centrally located in New Brunswick at 317 George St. (Suite 210). Parking is available and the clinic is easily accessible via public transportation. Patients typically call to set up an appointment and this is usually scheduled within a week of first telephone contact (ph: **732-235-8222**). Efforts are also made to see patients who may walk into the clinic without a scheduled appointment.

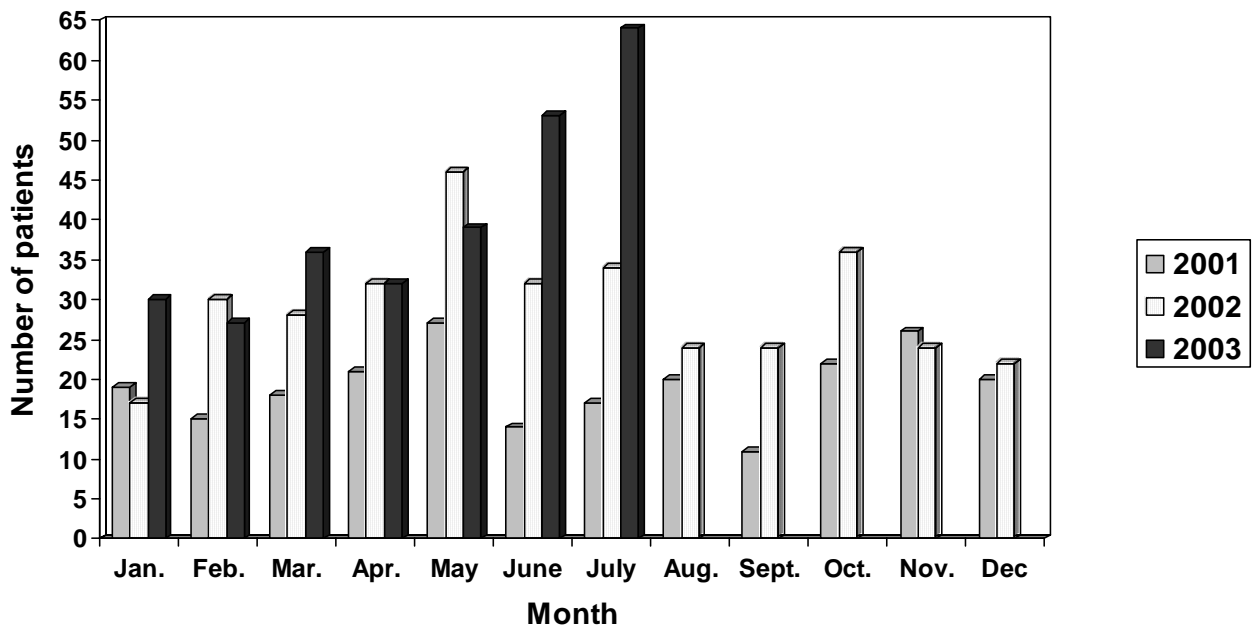
Number and characteristics of Patients Seen

Patient Intakes

586 patients were seen at the Clinic for an initial assessment appointment between January 1, 2001 and December 31, 2002. The numbers of patients seen for each month at the clinic has steadily increased through the two years in which the clinic has been open. The rate of increase has also continued through the beginning of 2003 with an additional 290 new patients seen for an initial intake through July.31, 2003 (Figure 1 below).

Figure 1. Number of new patient intake assessments seen each month from January 1, 2001 to July 31, 2003.

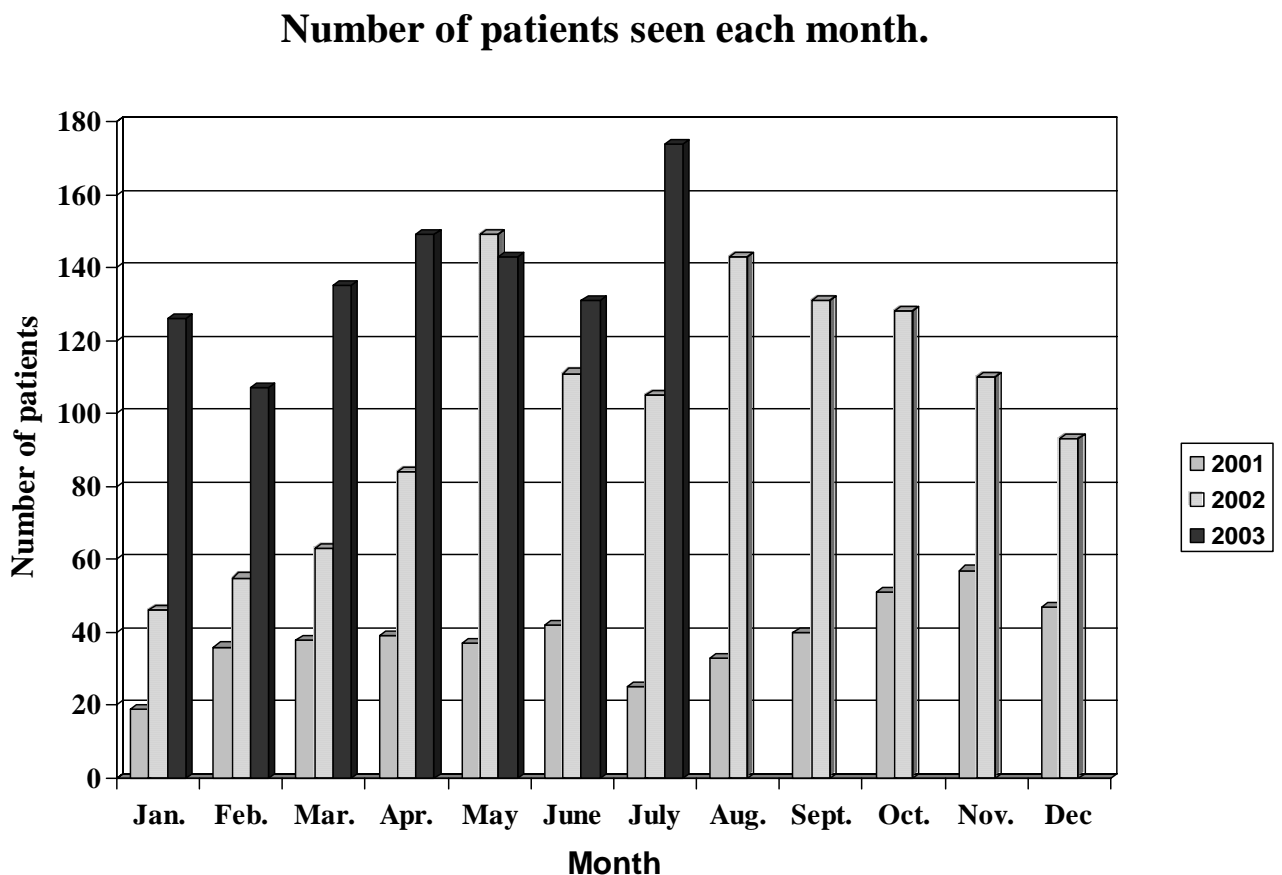
Tobacco Dependence Clinic Patient Intakes per month (total = 875)



Patients seen for tobacco treatment

The number of unique patients seen each month has increased steadily since the clinic has opened. 38 patients were seen per month during the first year of operation in 2001. During the first 7 months of 2003 and an average of 139 patients were seen each month (Figure 2.). We expect this rate of growth will continue through the coming year.

Figure 2. Number of unique patients seen each month from January 1, 2001 to July 31, 2003.



Total patient visits

There were 3,564 patient visits to the clinic between January 2001 and December 2002. Of these 586 were intake assessments, 1565 were group visits, and 1,413 were post-intake individual counseling sessions. After an individual intake session 53% of patient visits were for group session and 47% for individual counseling.

Demographic characteristics

The demographic characteristics of our patients are shown in the tables on the following pages.

Table 1 provides a demographic overview of the patients presenting for treatment. It shows that over 60% of our patients are women. The clinic has increased service to traditionally underserved groups during the past year as 20% of our patients are African Americans and we have significantly increased the number of Hispanic patients we serve. In this past year a larger proportion of our patients did not have a high school diploma, and fewer than 50% were employed full-time. 87% of our patients have health insurance, and about 22% have either Medicaid or Medicare.

Referral sources seem to indicate that grassroots advertising of the clinic is having an impact. There is a steady rate of referral from health care providers and an increase in referrals from family and friends, local schools and employers. More people are coming in after seeing our brochure or pamphlet (see Table 2). Surprisingly few patients are referred by NJ Quitline with only 1 such referral in 2002 (i.e. <0.3%). Most of our patients live locally with 73% from Middlesex County and almost 1/3 of those patients living in New Brunswick. (See Table 3).

Heavily dependent with significant co-morbidity

As shown in Table 4, the clinic patients present with significant symptoms of addiction. Over 70% smoke a pack per day or more, and clinic patients have smoked for a mean of 25 years. The typical patient smokes within 10 minutes of waking each day. The average patient has had three prior unsuccessful quit attempts. Sixty percent have symptoms of a health problem caused by tobacco use. More than 50% have had prior mental health treatment and about 25% have had prior treatment for other addictions. The majority of our patients (90 %) attend the Clinic for help to stop smoking, with 5% attending for help to stay stopped after a recent quit attempt and 3% seeking help to reduce their tobacco use.

Table 1. Demographic characteristics of patients assessed at the Tobacco Dependence Clinic at UMDNJ-School of Public Health during 2001 (N=230) and 2002 (N=356) total for both years (N=586).

<u>Age</u>	<u>2001</u>		<u>2002</u>		<u>TOTAL</u>	
	Mean	(range)	Mean	(range)	Mean	(range)
	43.2	(15-75)	45.8	(15-80)	44.6	15-80
<u>Gender</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>#</u>	<u>Percent</u>	<u>#</u>
Male	36.1	83	39.3	140	38.1	223
Female	63.1	147	60.7	216	61.9	363
<u>Children</u>						
Number of patients who have children	57.8%	135	59.8	213	59.4	348
Patients with children under 19 yrs of age	30.8%	71	25.3	90	27.5	161
<u>Race</u>						
Caucasian/White	72.5	166	67.1	239	69.1	405
African American	19.7	45	20.5	73	20.1	118
Asian or Asian Indian	2.6	6	2	7	2.2	13
Hispanic/Latino	2.6	6	8.1	29	6.0	35
American Native	0.4	1	.3	1		2
Other, or declined to answer	2.2	6	2.0	7	2.0	13
<u>Education</u>						
Did not complete High School	8.7	20	12.6	45	11.1	65
HS degree or GED	25.3	52	22.5	80	22.5	132
Some College or Technical School	35.4	81	35.4	126	35.3	207
College Degree	21.8	50	20.8	74	21.1	124
Graduate Degree	8.7	20	8.4	30	8.5	50
<u>Employment</u>						
Full-time employment	50.2	115	48.9	174	49.5	289
Sick or disabled	16.2	37	12.4	44	13.8	81
Part-time employment	10.5	25	8.4	30	9.3	55
Unemployed	8.7	20	11.0	42	10.5	62
Retired	5.7	13	7.3	26	6.5	39
Homemaker	4.8	11	2.8	10	3.6	21
Student full or part-time	3.9	9	7.5	27	6.2	36
<u>Insurance (some have more than one)</u>						
Have Health Insurance	89.8	203	86.5	308	87.2	680
Private Insurance	67.8	156	64.6	230	65.9	386
Medicare	13.9	32	14.6	52	14.3	84
Medicaid	7.4	17	8.1	29	7.8	46

Table 2. Referral Source of Patients seen in 2001

Referred By	2001(n = 230)		2002 (n=356)		total (n=586)	
	Percent	Number	%	n	%	n
Health Care Provider*	38.1	85	31.2	111	33.4	196
Family/friend/colleagues	27.8	62	30.1	107	28.8	169
Newspapers/magazines	11.7	26	5.6	20	7.8	46
Brochure/pamphlet/poster	4.5	10	7.8	28	6.5	38
Volunteer/self-help organizations+	4.0	9	2.0	7	2.7	16
Quitline	3.6	8	.3	1	1.5	9
Health fairs	3.1	7	.8	3	1.7	10
Media or general info line**	2.2	5	1.7	6	1.9	11
QuitNet	1.8	4	4.2	15	3.2	19
Other	3.1	7	6.5	23	5.1	30
Missing	3.1	7	2.5	9	2.7	16
School/employer.	7.3	26	4.4	26		

* Mostly physician offices but included nurses, mental health counselors, and dentists

+ ACS, ALA, NicA, Church group

** Hospital helpline and radio

Table 3. Resident county and selected municipalities for patients seen in 2001, 2002 and total for both years.

	<u>2001</u>		<u>2002</u>		<u>Total</u>		<u>Municipality</u>	<u>2001</u>	<u>2002</u>	<u>Total</u>
	%	n	%	n	%	n		n	n	n
Middlesex	74.8	172	71.1	253	72.5	425	New Brunswick	28	51	79
							Edison	21	36	57
							North Brunswick	17	23	40
							East Brunswick	14	19	33
							Highland Park	12	16	28
							Piscataway	7	17	24
Somerset	12.2	28	8.2	29	9.7	57	Somerset	13	14	27
							Somerville	3	4	7
Union County	3.9	9	3.7	13	3.8	22				
Mercer	1.3	3	5.6	20	3.9	23				
Monmouth	3.0	7	3.9	14	3.7	21				
Hunterdon	1.3	3	3.4	12	2.5	15				
Others	3.4	8	4.1	15	3.9	23				

Table 4. Tobacco use characteristics and clinical indicators of patients assessed at the Tobacco Dependence Clinic of the UMDNJ School of Public Health during the year 2001 (n = 230).

<u>Characteristics of patient's tobacco use</u>	2001			2002			total		
	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>
How long used tobacco (years)	28.5	28	1-64	24.1	23	0-65	25.5	25	0-65
Cigarettes per day	23.3	20	0-90	22.5	20	0-100	22.8	20	0-100
Minutes before first use in morning	26.5	10	0-500	27.0	10	1 -480	26.8	10	0-500
Previous Quit attempts	8.5	4	0-100	7.5	3	1-101	7.8	3	0-101
Expired Carbon Monoxide (ppm)	18.7	17	0-131	18.3	17	0-62	18.4	17	0-131
	2001			2002			total		
	<u>Percent</u>	<u>number</u>		<u>%</u>	<u>number</u>		<u>%</u>	<u>number</u>	
Patients who report smoking pack per day or more	65.6	151		75.8	270		71.8	421	
Patients who report smoking within ½ hour of waking	80.4	185		85.7	305		83.6	490	
Patients who report waking at night to smoke	46.1	106		46.9	167		46.6	273	
Patients who have a smoking-caused health problem	62.6	144		57.9	206		59.7	350	
Patients who have had previous mental health treatment	57.8	133		51.1	182		53.8	315	
Patients who have had previous addiction treatment	26.9	62		23.6	84		24.9	146	
Patients who smoke light/low tar cigarettes	57.8	133		58.4	208		58.2	341	
Patients who smoke menthol brand cigarettes	37.3	86		32.6	116		34.5	202	
Reason for coming to the Quitcenter									
Help to stop smoking	91.3	210		90	318		90.1	528	
Help to stay stopped	6.1	14		3.7	13		4.6	27	
Help to cut down	2.2	5		3.4	12		2.9	17	
Missing data		1			13		2.4	14	

Overall Treatment Outcomes

Of the 356 patients assessed in 2002, 322 (90.4%) chose a Quit Date and planned an attempt to stop smoking at the clinic (some had already quit and some chose to try to quit another time). Abstinence or quit rate is defined as a report of not a puff of tobacco smoked during the previous seven days, verified by an expired carbon-monoxide measurement of less than 10 parts per million in those followed up at the clinic (rather than by phone). Significant reduction is defined as smoking half or less than half of the number of cigarettes being smoked per day prior to treatment. *Any patient who had set a quit date and was not reached for follow-up was counted as continuing to smoke at least the same amount of cigarettes as at intake.*

Outcome One Month After Quit Date

As shown in the table below, 167 patients assessed during 2002 (51.9% of those having tried to quit) were abstinent at one month, and an additional 45 (14%) reported cutting their cigarette consumption down by at least half. All patients who claimed to be abstinent and had their expired carbon-monoxide measured at the 4 week follow-up were verified as abstinent with carbon monoxide reading of less than 10 (typically around 1 or 2 p.p.m.) compared with an average of 18 p.p.m. at assessment.

Outcome Six Months After Quit Date

92 of the patients assessed during 2002 (28.6%) were abstinent six months after their Quit Date, and 46 (14%) continued to smoke but with reported cigarette consumption reduced by at least 50%.

Of the 92 patients who were abstinent at six month follow-up, 60 (65.2%) reported that they had been abstinent since their Quit Date, six months previously. Of the remaining abstinent patients, 18 had been abstinent for more than 30 days, while 11 had been abstinent for the last 30 days or less (3 patients report abstinence but no data on how many days). The average length of time since last cigarette in this group is 85.7 days.

More detailed tables of clinical outcomes are in Appendices 1 and 2. **These show that over the first two years of operation 51% of patients treated remained abstinent a month after quit date, as do 30% six months later.**

Table 5. Four week and Six month follow-up data among patients seen for intake in 2002 and who set a quit date at the Clinic (n =322).

	<u>Number of patients</u>	<u>Percentage</u>
4 Weeks		
Total follow-ups	273	79.1%
Smoking at least the same amount as at intake*	79	24.5%
Smoking less but not significantly less.	31	9.6%
Patients smoking sig. less (<51%)	45	14.0%
Patients quit	167	51.9%
* Includes 49 (15.2%) who could not be contacted		
6 Months		
Total number of follow-ups	203	62.4%
Smoking at least the same amount as at intake*	150	46.9%
Smoking less, but not significantly less	33	10.2%
Patients smoking sig. less (<50%)	47	14.0%
Patients quit	92	28.6%

* Includes 119 (35%) who could not be contacted for follow-up

Types of Treatment Provided

All patients at the Clinic receive a comprehensive assessment, usually consisting of at least a one-hour appointment. Most patients are then treated with a combination of individual or group counseling, plus pharmacotherapy.

In order to provide some indication of typical treatment content, two aspects of treatment provided at the Clinic are described in more detail: Withdrawal-Oriented Group Therapy and Pharmacotherapy.

Withdrawal-Oriented Group Therapy

Withdrawal-Oriented Group Therapy is a particular type of group format that focuses on helping patients to manage nicotine withdrawal symptoms using pharmacotherapy and group support. It aims to enable patients to maintain abstinence from tobacco during the first month after their Quit date, when withdrawal symptoms are at their worst and when most relapses take place. Between January 2001 and December 31, 2002 the Clinic conducted 15 regular 6-week group treatments for smokers, each group taking place from 7 to 8-30 p.m. for six consecutive Tuesday evenings.

A total of 226 patients were scheduled to attend these groups, with 204 (90.3%) actually attended an initial meeting. This first group meeting is set up as an information and preparation group, with the second group meeting, a week later, being the planned Quit Day for the group. For the purposes of calculating abstinence outcomes following this type of treatment, we consider those who attend the second (Quit Day) group or one thereafter to have formally entered group treatment.

Table 6 Quit group attendance & abstinence for patients registered in 2001 and 2002

	<u>2001</u> (n=230)	<u>2002</u> (n=356)	<u>Total</u> (n=586)
Enrolled in group	110	116	226
Attended	102	102	204
Attended Quit Day group or one thereafter	87	93	180
Abstinence at 4 weeks of those formally entering treatment	54 =62.1%	71 =76.3%	125 =69.4%
Abstinence at 26 weeks of those formally entering treatment	35 =40.2%	46 =49.5%	81 =45.0%

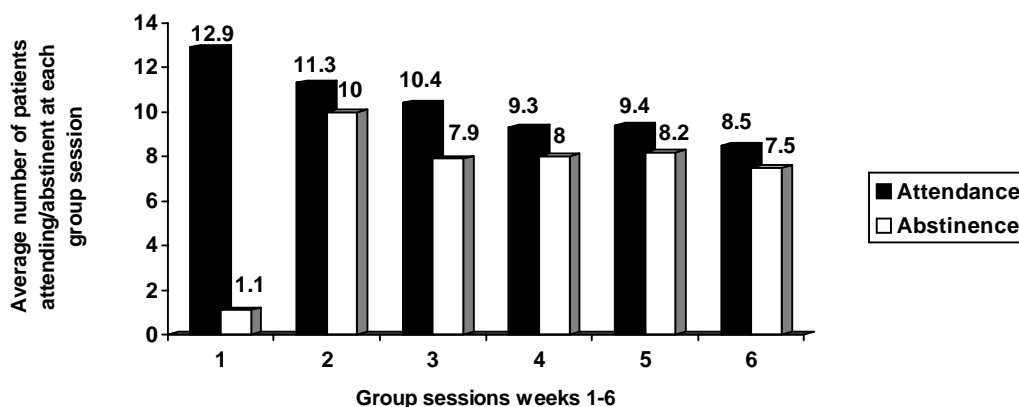
*Abstinence at 4 and 26 weeks is only known if follow-up complete, those not reached for follow-up are counted as continuing smokers.

**Some patients enrolled in more than one group over the 2001-2002 time period. Numbers shown reflect new patients registered in the clinic within each calendar year.

Attendance at Quit Group and rates of abstinence

As shown in the Figure 3 below, attendance at group typically drops off slightly as the weeks progress, from around 11 at group 2 to around 8 at group 6, with the majority of participants at each group session being abstinent.

Figure 3. Attendance/abstinence at tobacco withdrawal groups at UMDNJ Tobacco Dependence Clinic, Jan. 2001-Dec. 2002



Increased group attendance is related to increased abstinence rates at both 4 week and 6 month follow-ups. Tables 7 and 8 below shows that 27.9% (19/68) of group participants who attended 3 or fewer groups were abstinent at 4 weeks and 14.7% (10/68) were abstinent at the 26 week follow-up. Whereas for people who attended more than 3 groups 83.1% (113/136) were abstinent at 4 weeks and 55.9% (76/136) were abstinent at the six month follow-up.

Table 7 Abstinence at 4 weeks by number of group sessions attended

	<u>1 to 3 Group Sessions</u>		<u>4 to 6 Group Sessions</u>	
	n	(%)	n	(%)
No Smoking	19	(28%)	113	(83%)
Smoking	49	(72%)	23	(17%)
Total	68	(100%)	136	(100%)

Table 8 Abstinence at 26 weeks by number of group sessions attended

	<u>1 to 3 Group Sessions</u>		<u>4 to 6 Group Sessions</u>	
	n	(%)	n	(%)
No Smoking	10	(15%)	76	(56%)
Smoking	58	(85%)	60	(44%)
Total	68	(100%)	136	(100%)

*Abstinence at 4 and 26 weeks is only known if follow-up complete, those not followed-up are counted as continuing smokers.

Pharmacotherapy

The US Public Health Guideline on Tobacco Dependence Treatment recommends that each person who wants treatment for tobacco dependence be offered medication to aid quitting. Of 273 new patients treated in 2002 who completed a 4 week follow-up, 240 (87.9%) reported using medications to aid in their quit attempt. The number of patients using medications to quit has remained over 80% during the first two years of clinic operations. Most patients used more than 1 medication (Table 10) and the large majority of these patients continue to use the medications as of the 4 week follow-up (Table 11). Specific medication combinations are provided in detail in Appendix 3.

Table 9 Types of medications used as reported at 4 week follow-up

<u>Medication type</u>	<u>Number using</u>	<u>% (of all those who use medications n=240)</u>
Gum	36	15.0
Patch	174	72.5
Spray	5	2.1
Inhaler	171	71.3
Zyban	96	40.0
Other	1	

(nortriptyline) (“Patch study” was reported but probably not anything additional to use of the patch)

*total exceeds number of patients because many patients use more than 1 medication.

Table 10. Number of meds used as reported at 4 week follow-up

<u>No. Meds Used</u>	<u>2001 (N=138)</u>	<u>2002 (N=240)</u>	<u>Total (N=378)</u>
1 medication	47 (34.1%)	65 (27.0%)	112 (29.6%)
2 medications	58 (42.0%)	115 (47.9%)	173 (45.8%)
3 medications	25 (18.1%)	51 (21.3%)	76 (20.1%)
4 medications	6 (4.3%)	9 (3.8%)	15 (4.0%)

*2001 data included 2 patients who used “other” medication without a “first line” med.

Table 11. Med use among patients with a Quit Date who completed 4-week follow-up

<u>Medication Use</u>	<u>2001 (N=169)</u>	<u>2002 (N=273)</u>	<u>Total (N=442)</u>
Used medication	138 (81.7%)	240 (87.9%)	378 (85.5%)
Still using at 4 wk.	104/138 (75.4%)	171/240 (71.3%)	275/378 (72.8%)

Individualized pharmacotherapy and abstinence

The Clinic makes full use of the effective tobacco dependence treatment medications and individualizes the pharmacological support to suit the needs of each patient- including those who prefer not to use medication. Most of the patients attending the Clinic have used at least one of these medications before, but frequently the dose of nicotine being absorbed was insufficient and the medication was stopped too soon.

Patients who use multiple medications and patients who use medications for longer periods of time are significantly more likely to be abstinent at follow-up. 24% of patients who used no medications were abstinent at the 4-week follow-up while 46% who used 1 medication, 69% who used 2 medications and 83% of those who used 3 medications were abstinent at that point. Table 12 shows the increase in quit rates that corresponds with continued use of medication from Quit date until follow-up.

Table 12 Abstinence by continued use of medication through follow-up:

Med Use	<u>4 Week (n = 273)</u>		<u>26 week (n = 203)</u>	
	Still using %(n)	Stopped use %(n)	Still using %(n)	Stopped use %(n)
<u>Smoking status</u>				
Smoking	18%(31)	74%(75)	31%(22)	67%(89)
Abstinent	82%(140)	26%(27)	69%(49)	33%(43)
Total	100%(171)	100%(102)	100%(71)	100%(132)

Summary and Targets for 2003-04.

Summary

The Clinic has continued to grow and to improve its services. We have treated over 500 patients, most of whom are highly addicted to tobacco, and achieved very respectable short and long term outcomes (2 year totals of 51% and 30% abstinence at one and six month follow-ups). For comparison, the U.S. Public Health Service Guideline reports an average long-term abstinence rate of 22% from 55 trials involving “high intensity counseling”.

Within the Clinic we also observe signs that increased treatment intensity for both group counseling and pharmacotherapy will result in better outcomes. For example, among patients attending Withdrawal-Oriented Group Therapy, of those attending 1-3 group sessions, 15% are abstinent at six -month follow-up, whereas of those attending 4-6 group sessions, 65% are abstinent at six- month follow-up. Similarly, we find that our patients who use more medication and use it for longer periods of have significantly higher success rates. This type of data from within the Clinic reinforces the evidence in the scientific literature suggesting that structured group support and pharmacotherapy are effective components of tobacco dependence treatment and should continue to be aggressively encouraged within the Clinic.

Demand for the Clinic’s services from 2002 to 2003 has continued to grow. We have also improved in our outreach to underserved populations as the clinic is serving more minorities, unemployed, people without insurance, and people without a high-school diploma.

Goals for 2003

The main aims for 2003 are therefore to maintain a high standard of patient care while increasing the volume of patients seen and improving the follow-up and documentation.

Clinic targets for 2003 are as follows:

- Assess at least 40% more new patients than in 2002 and therefore see over 500 patients in 2003.
- Increase the proportion of patients who identify as Hispanic/Latino and Asian to at least 12%.
- Increase to at least 10% the proportion of patients who are college students. .
- Achieve follow-up rates of at least 80% at both the 4 week and 6-month follow-up points.
- Maintain high abstinence rates at four week and six month follow-ups.

This report was prepared by Jonathan Foulds PhD (jonathan.foulds@umdnj.edu), Michael Burke EdD, and Emily Perry MPH, with assistance from staff and faculty at the Tobacco Dependence Program at UMDNJ-School of Public Health. The Tobacco Dependence Program is funded by the New Jersey State Department of Health & Senior Services as part of New Jersey’s Comprehensive Tobacco Control Program.

Date: July 31, 2003

Appendix 1 Summary of patients' follow-up and smoking outcomes at 1-month post quit date for patients assessed during 2001 and 2002

4 weeks after quit date

	2001			2002			Total		
	Patients assessed	Patients with Quit Date (intent to treat)	Successfully followed	Patients assessed	Patients with Quit Date (intent to treat)	Successfully followed	Patients assessed	Patients with Quit Date (intent to treat)	Successfully followed
Total Number	230	201(87%)*	159(79%)**	356	322 (90%)*	273 (85%)**	586	523(89%)*	481(92%)**
Percent patients reporting quit	42.6% (n=98)	48.8%	61.6	46.9% (n=167)	51.9%	61.2%	45.2% (n=265)	50.7%	55.1%
Percent of patients smoking at least as much per day or not successfully followed	38.3% (n=88)	29.4% (n=59)	10.7 (n=17)	31.7% (n=113)	24.5% (n=79)	11.0% (n=30)	34.3% (n=201)	26.4% (n=138)	9.8% (n=47)
Patients smoking less but not significantly less	3.9% (n=9)	4.5%	5.7%	8.7% (n=31)	9.6%	11.4%	7.1% (n=40)	7.6%	8.3%
Patients smoking < 50% of cigarettes at intake	15.2% (n=35)	17.4%	22.1%	12.6% (n=45)	14.0%	16.5%	13.7% (n=80)	15.3%	16.6%

* Percentage = number of quit dates set as a percentage of total number of assessments

** Percentage = number of follow-ups completed as a percentage of those with quit date (intent to treat)

Appendix 2 Summary of patients' follow-up and smoking outcomes at 6-month post quit date for patients assessed during 2001 and 2002

6 months after quit date

	2001			2002			Total		
	Patients assessed	Patients with Quit Date (intent to treat)	Successfully followed	Patients assessed	Patients with Quit Date (intent to treat)	Successfully followed	Patients assessed	Patients with Quit Date (intent to treat)	Successfully followed
Total Number	230	201 (87.%) *	143(71%)**	356	322 (90%)*	203 (63%)**	586	523 (89%)*	346 (66%)**
Percent patients reporting quit	27.0% (n=62)	30.8%	43.4%	25.8% (n=92)	28.6%	45.3%	26.3% (n=154)	29.5%	44.5%
Percent of patients smoking at least as much per day or not successfully followed	50.4% (n=116)	43.3% (n=87)	20.3% (n=29)	51.9% (n=184)	46.7% (n=150)	15.3 % (n=31)	51.2% (n=300)	45.3% (n=237)	17.3% (n=60)
Patients smoking less but not significantly less	9.1% (n=21)	10.4%	14.7%	9.3% (n=33)	10.2%	16.3%	9.2% (n=54)	10.3%	15.6%
Patients smoking < 50% of cigarettes at intake	13.5% (n=31)	15.4%	21.7%	122 (n=47)	14.6	23.2%	13.1% (n=77)	14.7%	22.2%

* Percentage = number of quit dates set as a percentage of total number of assessments

** Percentage = number of follow-ups completed as a percentage of those with quit date (intent to treat)

Appendix 3. Specific combinations of medications reported by patients at 4 week follow-up.

<u>Medication/s</u>	<u>2001 (N=138)</u>	<u>2002 (N=240)</u>	<u>Total (N=378)</u>
Patch only	20 (14.5%)	30 (12.5%)	50 (13.2%)
Gum only	1 (0.7%)	3 (1.3%)	4 (1.1%)
Inhaler only	12 (8.7%)	22 (9.2%)	34 (9.0%)
Zyban only	13 (9.4%)	10 (4.2%)	23 (6.1%)
Nasal Spray only	1 (0.7%)	---	1 (0.3%)
Patch + Gum	1 (0.7%)	8 (3.3%)	9 (2.4%)
Patch + Inhaler	26 (18.8%)	71 (29.6%)	97 (25.7%)
Patch + Zyban	12 (8.7%)	9 (3.8%)	21 (5.6%)
Patch + Spray	1 (0.7%)	---	1 (0.3%)
Gum + Inhaler	---	3 (1.3%)	3 (0.8%)
Gum + Zyban	1 (0.7%)	3 (1.3%)	4 (1.1%)
Inhaler + Spray	---	1 (0.4%)	1 (0.3%)
Inhaler + Zyban	17 (12.3%)	20 (8.3%)	37 (9.8%)
Patch + Gum + Inhaler	3 (2.2%)	4 (1.7%)	7 (1.9%)
Patch + Gum + Zyban	3 (2.2%)	5 (2.1%)	8 (2.1%)
Patch + Inhaler + Spray	---	1 (0.4%)	1 (0.3%)
Patch + Inhaler + Zyban	17 (12.3%)	39 (16.3%)	56 (14.8%)
Gum + Inhaler + Spray	---	1 (0.4%)	1 (0.3%)
Gum + Inhaler + Zyban	2 (1.4%)	1 (0.4%)	3 (0.8%)
Patch + Inhaler + Spray + Zyban	---	1 (0.4%)	1 (0.3%)
Gum + Inhaler + Spray + Zyban	---	1 (0.4%)	1 (0.3%)
Gum + Patch + Inhaler + Zyban	3 (2.2%)	7 (2.9%)	10 (2.6%)
Gum + Patch + Spray + Zyban	1 (0.7%)	---	1 (0.3%)
All five "First Line" medications	2 (1.4%)	---	2 (0.5%)
"Other" without any "First Line"	2	---	2 (0.5%)