Under-use of Tobacco Dependence Treatment Among Wisconsin’s Fee-for-service Medicaid Recipients

Marguerite E. Burns, MA; Michael C. Fiore, MD, MPH

ABSTRACT

Background—Wisconsin Medicaid enrollees are eligible for treatment for tobacco dependence at minimal charge to the enrollee. This paper describes an evaluation of the use of this treatment within the Wisconsin fee-for-service Medicaid program.

Methods—Pharmaceutical claims data for Medicaid fee-for-service patients were analyzed for the year 1999 to determine rates of treatment use.

Results—Of 261,435 adults enrolled in fee-for-service Medicaid for 1 or more months, only 1131 adults received pharmacotherapy for tobacco dependence in 1999 at a modest cost of approximately $135 per treatment user. This represents less than 2% of the adult Medicaid fee-for-service patients who smoke.

Discussion—Few Medicaid fee-for-service enrollees are receiving evidence-based treatment for tobacco dependence, the leading preventable cause of illness and death in Wisconsin. The 16,000 Wisconsin physicians caring for these patients are urged to intervene with every Medicaid patient who smokes. To assist in this effort, the Wisconsin Medicaid program’s coverage for tobacco dependence treatment is explained and a series of myths are corrected.

BACKGROUND

The strong association between smoking status and income level has been well established. In Wisconsin, smoking prevalence rates vary from 16% among adults with a household income of $75,000 or more to 31% among adults with a household income of less than $15,000. Currently, the Wisconsin Medicaid program purchases and provides health care for approximately 495,000 individuals within this high smoking prevalence population. Physicians and health plans have a significant opportunity to reduce the health and economic burden that smoking imposes on these patients and their health care payers. Moreover, they have at their disposal a key tool for doing so, the Medicaid program’s coverage for tobacco dependence treatment.

Since 1996, the Wisconsin Medicaid program has included coverage for tobacco dependence treatment (TDT). The federal government does not require that state Medicaid programs provide any coverage for TDT. Rather, it is considered an optional service. Wisconsin is 1 of 25 states that have opted to provide this coverage, recognizing the devastating effects of tobacco use in general and on this high prevalence population in particular. Over the past 5 years, Wisconsin’s Medicaid coverage has grown to include all FDA approved prescription medications for TDT and applies to both fee-for-service (FFS) and Medicaid managed care programs.

Insurance coverage for TDT is an important component of a comprehensive strategy to reduce smoking. It has been shown to increase patient use of TDT and to reduce smoking prevalence within commercial health plan populations. Moreover, it has been shown to do so at the modest cost of $99 to $328 per treatment user depending upon the design of the insurance benefit. The Wisconsin Medicaid program’s TDT coverage is comparable to the benefit designs evaluated in these earlier studies and is consistent with the findings and recommendations of the recently published Public Health Service guideline, Treating Tobacco Use and Dependence. This analysis assesses the extent to which Medicaid FFS patients take advantage of this coverage and receive pharmacotherapeutic treatment.

METHODS

As indicated above, two models of health care delivery serve Medicaid patients in Wisconsin, a fee-for-service model and a managed care model that
includes 13 health maintenance organizations (HMOs) in Wisconsin. This analysis focuses exclusively on the FFS program.

The Wisconsin Medicaid Program maintains a database of outpatient, inpatient, and pharmaceutical claims for FFS Medicaid beneficiaries. Enrollment eligibility, demographic, and pharmaceutical claims data were obtained for any individual, aged 18 years or older, with at least 1 month of Medicaid eligibility in 1999 and 1 or more claim(s) for nicotine replacement therapy (NRT) or Zyban. Cost data represents the Wisconsin Medicaid program’s reimbursement to pharmacy providers. For purposes of this study, a pharmaceutical claim indicates a patient’s use of the TDT coverage provided by the FFS Medicaid program and constitutes “treatment costs.” Additional costs that may have been incurred by the physician including provider time are not included.

RESULTS

The FFS program includes Medicaid beneficiaries enrolled in most of the Wisconsin Division of Health Care Financing’s (DHCF) health care programs. In December 1999, FFS enrollees represented approximately 53% of 444,645, the total population receiving health care through the Wisconsin Medicaid program. In general, the FFS population is older and more disabled than the Medicaid managed care population. The December 1999 FFS population included, for example, approximately 16% of the total Medicaid beneficiaries enrolled in Aid to Families with Dependent Children (AFDC) and Healthy Start who tend to be young and female and 97% of those enrolled in elderly, disabled, and other Medicaid coverage.

The particular sample for this analysis included adults with at least 1 month of Medicaid eligibility in 1999. In 1999, 261,435 adults were enrolled in the FFS Medicaid program for 1 or more months. Less than 1% of this population, or 1131 individuals, received pharmacotherapeutic treatment for TDT. The average cost per treatment user was $134.55.

DISCUSSION

At an average of $135 per treatment user, TDT is a low cost treatment to the state, and one that has been shown to be cost-effective. It is also one that is grossly underused within the FFS Medicaid program. Assuming a smoking prevalence rate of 24%, the rate for adults overall in Wisconsin, fewer than 2% of FFS Medicaid patients who smoked obtained TDT in 1999. However, given the low-income status of Medicaid enrollees in general, their actual smoking rate is probably higher. A finding of low treatment utilization, where a cost-effective treatment is provided at minimal charge to the patient (i.e., $1/Rx) and at modest charge to the payer, demands further attention.

Low utilization of a TDT insurance benefit has been found elsewhere; however, it was explained largely by the substantial treatment costs charged to the patient. Curry and colleagues found that when a TDT insurance benefit required significant cost sharing between the patient and the health plan, just 2.4% of patients who smoked took advantage of it annually. By contrast, when the benefit was provided to patients at no charge beyond a standard co-pay, 10% of patients who smoked obtained treatment annually. FFS Medicaid enrollees are not required to share a significant cost of TDT with the Medicaid program. Thus, treatment cost barriers cannot explain the low utilization rates found in the FFS Medicaid population.

Limited patient awareness of TDT coverage and acceptance of the treatments offered may also affect the treatment utilization rate. Similarly, limited physician awareness of the Medicaid program’s TDT benefit may contribute to treatment under-use. Physicians view smoking cessation as very important for promoting health, and consider it their responsibility to provide tobacco dependence treatment to their patients who smoke. However, at a minimum, effective intervention with patients who smoke requires knowledge of smoking status, familiarity with potential treatment options, and awareness of

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**Table 1. Study Population 1999 FFS Medicaid Enrollment By Eligibility Status**

<table>
<thead>
<tr>
<th>Eligibility</th>
<th>Number</th>
<th>Percent</th>
<th>Average Age</th>
<th># / Male %</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFDC</td>
<td>41,828</td>
<td>15.9%</td>
<td>29</td>
<td>6722 / 16%</td>
</tr>
<tr>
<td>Healthy Start</td>
<td>14,974</td>
<td>5.7%</td>
<td>25</td>
<td>21 / 0.1%</td>
</tr>
<tr>
<td>Disabled</td>
<td>97,407</td>
<td>37.2%</td>
<td>46</td>
<td>43,511 / 45%</td>
</tr>
<tr>
<td>Elderly</td>
<td>69,951</td>
<td>26.7%</td>
<td>80</td>
<td>20,204 / 29%</td>
</tr>
<tr>
<td>Other + Non title XIX</td>
<td>37,275</td>
<td>14.3%</td>
<td>33</td>
<td>13,133 / 35%</td>
</tr>
</tbody>
</table>

**Table 2. 1999 Tobacco Dependence Treatment Costs (1999 dollars)**

<table>
<thead>
<tr>
<th>Treatment Users</th>
<th>Treatment</th>
<th>Total Annual Cost to FFS Medicaid Program</th>
<th>Cost per Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1131 FFS Medicaid Enrollees</td>
<td>Prescription NRT and/or Zyban®</td>
<td>$152,176</td>
<td>$135</td>
</tr>
</tbody>
</table>
**Figure 1. Myths about the Wisconsin Medicaid Program’s coverage for Tobacco Dependence Treatment**

| Myth 1 | Medicaid patients must be enrolled in a smoking cessation counseling program to obtain pharmacotherapy. |
| Fact 1 | Medicaid patients need not be enrolled in a smoking cessation counseling program to obtain pharmacotherapy. (See important note below.) |
| Myth 2 | The physician must document the Medicaid recipient’s participation in a smoking cessation counseling program directly on the prescription. |
| Fact 2 | The physician is not required to document the provision of smoking cessation counseling on the prescription. |
| Myth 3 | The Wisconsin Medicaid program’s coverage for tobacco dependence treatment only applies to treatment provided by a primary care physician. |
| Fact 3 | The Medicaid program’s coverage for tobacco dependence treatment applies to treatment provided by any Medicaid certified Wisconsin physician. (Physicians who are unsure of their Medicaid certification status should consult their fiscal administrator. If the physician currently bills and receives payment from the Medicaid program, s/he is Medicaid certified.) |
| Myth 4 | Combination therapy (e.g., nicotine patch + Zyban®, nicotine patch + PRN nicotine replacement therapy) is not covered by the Wisconsin Medicaid program. |
| Fact 4 | The Wisconsin Medicaid program covers combination therapy. |
| Myth 5 | The Wisconsin Medicaid program provides coverage for FDA approved prescription medications for smoking cessation only. Since the nicotine patch is only sold over-the-counter, it is not available. |
| Fact 5 | Wisconsin Medicaid coverage is limited to FDA approved prescription medications for smoking cessation. However, the nicotine patch is available OTC and by prescription. To prescribe nicotine patch, for Medicaid patients indicate “leg-end nicotine patch on the prescription. |
| Myth 6 | The Wisconsin Medicaid program does not provide coverage for smoking cessation counseling. |
| Fact 6 | The Wisconsin Medicaid program provides reimbursement for office visits to obtain tobacco dependence treatment—including both counseling and pharmacotherapy provided by a physician or other certified Medicaid provider. |

* Physicians are expected to adhere to the standards of care for tobacco dependence treatment outlined in the 2000 Public Health Service Clinical Practice Guideline on Treating Tobacco Use and Dependence. At a minimum, these standards recommend that they provide brief advice to quit in addition to any pharmacotherapeutic treatment provided. As with any medical intervention, provision of advice to quit or counseling should be noted in the patient’s medical record. Physicians are also encouraged to refer patients to free smoking cessation counseling resources including the Wisconsin Tobacco Quit Line (1-877-270-STOP) and programs offered by manufacturers of smoking cessation products.

The availability of those treatments for the patient. This latter piece of information is often determined by a patient’s insurance status and is not transparent. Anecdotal reports to the Center for Tobacco Research and Intervention suggest that there may be a lack of familiarity with the scope and terms of the Medicaid program’s TDT benefit among physicians. Moreover, these reports reveal several common myths about the TDT benefit available through the Medicaid program that may affect the extent to which it is used.

The “facts” outlined in Figure 1 apply to both the Medicaid FFS and managed care programs. However, it’s important to note that health plans participating in the Medicaid managed care program may provide additional services to their patients who smoke and may require physicians to comply with the plans’ prescribing practices. A complete description of the Medicaid program’s TDT benefit, and how to access it is included in Figure 2.

This study has several limitations. Smoking prevalence data for the Medicaid FFS population is not available. Given the socioeconomic characteristics of this population and the association between low-income and high smoking prevalence, it is likely that the smoking rate among FFS Medicaid enrollees exceeds the state’s adult average of 24%. As reported elsewhere in this issue, Carr et al. found a 45% rate of smoking among Medicaid managed care enrollees. This smoking prevalence rate suggests a possible upper boundary for the FFS population. However, the different demographic profiles of the two populations make it difficult to generalize from managed care enrollees’ smoking behavior to that of FFS enrollees. In the absence of a documented smoking prevalence rate for the FFS population, this analysis conservatively estimates a 24% prevalence rate.

Medicaid coverage for TDT includes coverage for both pharmacotherapy and for an office visit to obtain that treatment. However, for purposes of this study, only a pharmaceutical claim indicates a patient’s use of the TDT coverage provided by the FFS Medicaid program. The use of a pharmaceutical claim as the measure of patient use of TDT likely underestimates the total TDT provided by physicians and may underestimate the total TDT accepted by patients. Patients who received only non-pharmacologic treatment (e.g., tobacco use assessment and physician advice to quit), patients who were offered over-the-counter medications, and patients who received, but did not fill, a prescription for TDT were not included in this analysis due to the limited availability of such data.
Figure 2. Medicaid TDT Benefit Design - 2001

<table>
<thead>
<tr>
<th>Pharmacy</th>
<th>Coverage for FDA-approved use of prescription Nicotine Replacement Therapy (NRT) and Zyban (i.e., generic nicotine patch, Nicotrol nasal spray, Nicotrol inhaler, and/or Zyban) Combination therapy including NRT and Zyban, or nicotine patch and PRN nicotine replacement therapy is allowable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office visit</td>
<td>Office visits for the sole purpose of treating tobacco dependence are reimbursable. Physicians (and other certified Medicaid providers) should indicate the appropriate ICD-9 diagnostic code: e.g., 305.1 for Tobacco Use Disorder, and select the appropriate billing code from the Preventive Medicine Treatment Codes, 99383-99387 for new patients and 99393-99397 for established patients.</td>
</tr>
</tbody>
</table>
| Requirements & limitations | Office Visits: The State of Wisconsin does not require prior authorization for an office visit for tobacco dependence.  
Pharmacotherapy: Repeated courses of treatment, consistent with FDA-approved use of smoking cessation prescription medications, are allowable.  
Smoking Cessation Counseling: Physicians are expected to adhere to the standards of care for tobacco dependence treatment outlined in the 2000 Public Health Service Clinical Practice Guideline on Treating Tobacco Use and Dependence. At a minimum, they should provide brief advice to quit in addition to any pharmacotherapeutic treatment provided. As with any medical intervention, provision of advice to quit or counseling should be noted in the patient's medical record. Documentation of the provision of counseling directly on the prescription is not required. Physicians are also encouraged to refer patients to free smoking cessation counseling resources including the Wisconsin Tobacco Quit Line at 1-877-270-STOP and programs offered by manufacturers of smoking cessation products.  
Co-payment for prescription medication: FFS patients are required to pay a $1 co-pay per prescription medication with a monthly maximum of $5 paid to any one pharmacy. |

b. This benefit description represents the minimum coverage for tobacco dependence treatment available to all Medicaid beneficiaries, including fee-for-service and Medicaid managed care patients. Health plans participating in the Medicaid managed care program may supplement this coverage and may require clinicians to conform to their customary procedures and protocols related to prescribing and billing practices.  
c. Guidelines for pharmacists: Pharmacotherapy for TDT is diagnosis-restricted. That is, pharmacists must include an appropriate diagnostic code (e.g., 305.1 Tobacco Use Disorder) on the claim that they submit to the State of Wisconsin Medicaid Program. If the tobacco dependence treatment medication (i.e., NRT or Zyban) is prescribed for reasons unrelated to tobacco use and dependence, the pharmacist must comply with Wisconsin Medicaid program prior authorization guidelines.  

**Relatedly, this analysis does not capture the cost of the office visit or, as is more often the case, that portion of it that is allocated to tobacco dependence treatment. Tobacco use treatment is inconsistently coded and thus difficult to reliably assess. Thus, the cost per treatment user presented here likely underestimates the treatment cost. There is some evidence to suggest, however, that inclusion of clinician time may not substantially alter the overall cost per treatment user. Estimates for brief physician counseling of the type that may occur as a portion of an office visit have been conducted elsewhere. Cromwell and colleagues assign a cost of $5.91 for a three-minute physician intervention (1995 dollars) that is consistent with the Public Health Service clinical practice guideline, Treating Tobacco Use and Dependence. As physician time allocated to TDT increases, so too would the cost per treatment user.**

**CONCLUSION**  
The Wisconsin Medicaid FFS program’s coverage for TDT is comprehensive, flexible, of high potential efficacy - - - and underutilized. The Wisconsin Medicaid program plans to undertake an initiative to inform Medicaid patients in both the FFS and managed care programs about the availability of TDT, and to prompt physicians and health plans to intervene with them. The approximately 16,000 Wisconsin physicians currently certified as Medicaid providers in the FFS program have a significant opportunity, and important resources available to them, to help their Medicaid patients who smoke. Given the extraordinary and disproportionate toll tobacco exacts on Wisconsin Medicaid enrollees, this resource must be more consistently utilized.

**ACKNOWLEDGEMENTS**  
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The Affordable Care Act (ACA) expands Medicaid's tobacco dependence treatment (TDT) coverage; however, these expansions differ in comprehensiveness based on Medicaid eligibility category. PURPOSE Medicaid recipients in states with the most generous coverage (counseling without copayment and pharmacotherapy with copayment) had the highest predicted successful quit rates (8.3%). Those living in states with no TDT or pharmacotherapy-only coverage had lower predicted successful quit rates (range=4.0%-5.6%). CONCLUSIONS Under-use of tobacco dependence treatment among Wisconsin's fee-for-service Medicaid recipients. Wis Med J 2001; 100: 54â€“8. OpenUrl. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service; June 2000.