Comparison of Five Measures of Motivation to Quit Smoking Among a Sample of Hospitalized Smokers

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OBJECTIVE: **To compare the predictive validity of several measures of motivation to quit smoking among inpatients enrolled in a smoking cessation program.**

METHODS: **Data collected during face-to-face counseling sessions included a standard measure of motivation to quit (stage of readiness [Stage]: precontemplation, contemplation, or preparation) and four items with responses grouped in three categories: "How much do you want to quit smoking" (Want), "How likely is it that you will stay off cigarettes after you leave the hospital" (Likely), "Rate your confidence on a scale from 0 to 100 about successfully quitting in the next month" (Confidence), and a counselor assessment in response to the question, "How motivated is this patient to quit?" (Motivation). Patients were classified as nonsmokers if they reported not smoking at both the 6-month and 12-month interviews. All patients lost to follow-up were considered smokers.**

MAIN RESULTS: **At 1 year, the smoking cessation rate was 22.5%. Each measure of motivation to quit was independently associated with cessation ($p < .001$) when added individually to an adjusted model. Likely was most closely associated with cessation and Stage was least. Likely had a sensitivity, specificity, positive predictive value, negative predictive value, and likelihood ratio of 70.2%, 68.1%, 39.3%, 88.6%, and 2.2, respectively.**

CONCLUSIONS: **The motivation of inpatient smokers to quit may be as easily and as accurately predicted with a single question as with the series of questions that are typically used.**

KEY WORDS: **motivation; smoking cessation; inpatients; predictive validity.**
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Inpatient smoking cessation programs can be effective[1–5] at increasing smoking cessation rates and cost-effective when compared with routine medical interventions.[6,7] For several reasons, hospitalization represents a vital opportunity to counsel smokers to quit. First, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), which accredits more than three quarters of all U.S. hospitals, mandates that hospitals be smoke-free, making hospitalization a time of obligatory cessation for the majority of inpatients who smoke.[8,9] Second, hospitalized patients are likely to feel a heightened sense of vulnerability to illness, possibly inspiring them to reevaluate their health behaviors.[10] Third, hospitalization provides multiple opportunities for smoking cessation counseling from a range of health care providers, removing the barriers of time and travel that often limit participation in formal programs.

With or without the structure of a formal cessation program, smoking cessation guidelines from the Agency for Health Care Policy and Research (AHCPR) recommend using hospitalization as an opportunity to encourage smokers to quit.[7] Counseling smokers to quit is best done with an understanding of the smoker's motivation to quit, as motivation has consistently been a powerful predictor of eventual cessation.[11,12] Motivation is typically assessed using Prochaska and DiClemente's stages of change, a continuum of behavior change consisting of discrete stages: precontemplation (not considering quitting in the next 6 months), contemplation (planning on quitting in the next 6 months), preparation (planning on quitting in the next month with past quitting experience), action (the first 6 months after quitting), and maintenance (6 months or more after quitting).[13] This model has been used extensively in the design of smoking cessation counseling interventions among inpatients and outpatients.[3,4,11,14–16] For example, when a smoker is not considering quitting, time may be better spent motivating the smoker to consider reasons for quitting rather than discussing the specifics of nicotine replacement therapy.[17,18]

The algorithm used to determine the stage of readiness to quit smoking was developed in the outpatient setting and may not be appropriate for clinical use with inpatient smokers for several reasons.[19] First, because of a nationwide policy forbidding smoking in hospitals, many patients who have not had a cigarette since admission may misclassify themselves as being in a more advanced stage (e.g., "After this heart attack, I'll never smoke again"). Second, as hospitalization encourages patients to think seriously about their habits, the standard questions for assessing motivation may misclassify smokers of low motivation as being more motivated to quit. Third, a smoker's motivation to quit is currently assessed using a three-question algorithm, which may prove too cumbersome for clinical use.[20] A simpler method—if as accurate—would be better. Preliminary work has been done to validate a single-item measure of motivation to quit smoking, which could serve as a model for similar clinical measures.[21]

We undertook this investigation among a cohort of smokers enrolled in an inpatient smoking cessation program to compare several measures of motivation to quit in the hope of identifying a more accurate and possibly simpler method.

METHODS

Between June 1, 1995, and June 1, 1996, smokers admitted to four community hospitals in the Baltimore area were considered for enrollment in an inpatient smoking cessation program. The program was based on the Johns Hopkins Bedside Smoking Cessation Program, which has been described in detail elsewhere.[15] This evaluation represents the first 12 months of experience at each hospital.

Patients were screened on admission for smoking status, and all current smokers (smoking within 1 week prior to admission) were considered for the program. Few patients were excluded as the program's first mission was to provide patient services, and patients were included without regard to their level of motivation. The intervention was presented to patients as part of routine inpatient care. Two hospitals had one full-time counselor, one had a single half-time counselor, and another had one full-time and one half-time smoking cessation counselor on staff. Given the demands on the counselor and concern for long-term follow-up, patients were not approached by counselors, unless a consult was scheduled by a physician, if they were pediatric, surgical, or psychiatry patients, older than 75 years of age, or current substance abusers. Estimating the smoking prevalence to be 25%,[7] and that medical patients (including subspecialties) constituted approximately 25% to 40% of admissions at the four hospitals, 18% to 42% of eligible inpatient smokers were approached by the counselors across the four hospitals. Similar procedures were followed for screening and enrolling patients at the four hospitals, as the volume of admissions at the hospitals (9,000–12,000 per year) precluded enrolling all eligible smokers.

Counselors approached medical and obstetric patients in their rooms. Each counselor followed a scripted interview protocol that combined data gathering with cessation counseling. Following discharge, patients were sent a letter and received a second self-help manual designed for smokers returning home after hospitalization,[22] and their physician received a letter describing the patient's participation in the intervention. Patients received a follow-up counseling telephone call 1 week, 1 month, 6 months, and 12 months after discharge. Specific counseling messages were based on the individual's stage of readiness to quit smoking [23,24] and are described in detail elsewhere.[15] All smokers, regardless of their motivation to quit, received the same level of intervention.

We studied smokers who were counseled at least 14 months before August 1, 1998, allowing two more months to complete the 12-month follow-up. Our main outcome measure was abstinence at 6 and 12 months; only patients who were followed at 6 and 12 months and reported no current smoking at both times were considered non-smokers. All patients who were lost to follow-up at 6 or 12 months or reported smoking at either time were considered smokers, a method supported in the development of the AHCPR Smoking Cessation Guidelines.[7] We chose this conservative measure of smoking cessation to minimize the misclassification of recent quitters as long-term quitters. No attempt was made to verify cessation biochemically owing to the large number of participants and the fact that the intervention was implemented as a clinical service and not as a research protocol. To assess the sensitivity of our findings, we repeated the regression analyses excluding smokers who were lost to follow-up at either 6 or 12 months.

Data Collection

Baseline measures included patient demographics, smoking history, withdrawal symptoms with past quit attempts, triggers for smoking, current withdrawal symptoms, motivation to quit, history of smoking behavior changes, and measures of addiction to nicotine (e.g., Fagerstrom Tolerance Questionnaire).[25,26] The length of the counseling interview was recorded by the counselor. At the end of hospitalization, the discharge diagnosis and length of stay were obtained via the hospital computer system. Baseline interview data were entered by hand, and follow-up telephone interview data were entered directly into the computer database during the telephone call.

Assessment of Covariates

During the baseline counseling session, patients were asked several questions to assess their level of motivation to quit smoking. Five measures of motivation were assessed and are assigned one-word titles for convenience. Stage of change (Stage) was assessed with the following questions: "Are you seriously thinking about quitting smoking in the next 6 months?" "Do you have a specific plan to quit smoking in the next 30 days?" Have you made a serious attempt to stop smoking in the last 12 months that lasted for at least 1 week and was not because you were in the hospital?"[27,28] Precontemplation consisted of smokers who were not thinking of quitting in the next 6 months. Contemplation consisted of smokers who were "seriously thinking about quitting smoking in the next 6 months" but either were not planning on quitting in the next month or in the past year had not made a serious attempt to quit that lasted at least 1 week. Preparation consisted of smokers who had a specific plan to quit in the next month and in the past year had made at least one serious attempt to quit that lasted at least 1 week.

Three additional measures of motivation were assessed, each using a single question. Patients were asked, "How much do you want to quit smoking?" (Want) and

responded with "very much," "somewhat," or "not at all." Patients were asked, "How likely is it that you will stay off cigarettes after you leave the hospital?" (Likely) and responded with "very likely," "somewhat likely," or "not likely." Patients were asked, "Please rate your confidence level on a scale from 0 to 100, where 0 means there's no chance of quitting and 100 means that you're confident about successfully quitting in the next month" (Confidence). For the purpose of this analysis, these continuous responses were categorized: 0% to 33%, 34% to 66%, and 67% to 100%.

Motivation questions were asked at slightly different times of the interview, but were all asked prior to counseling. Stage was asked first, followed by questions regarding smoking history (e.g., cigarettes per day, time to first cigarette) and current withdrawal symptoms. Likely, Want, and Confidence were then asked in succession. At the end of the interview, counselors were asked "How motivated is this patient to quit?" (Motivation) and responded with "very," "fairly," "just a little," "not at all," or "can't judge." The response "can't judge" was excluded from the analysis as counselors used this response to categorize only 31 patients. The responses "just a little" and "not at all" were collapsed into a single category as they were infrequent responses.

Data Analysis

All data analysis was carried out using SPSS for Windows, version 7.5.1. Patients who were hospitalized at the time of the 6-month or 12-month follow-up ($n = 7$) or who died before the 12-month follow-up ($n = 72$) were excluded from the analysis. To compare baseline variables to continuous smoking cessation, we used χ^2 testing for categorical variables and the unpaired Student's t test for continuous variables.

Multivariate analyses were performed using logistic regression. A base model was created using baseline demographic (age, gender, race, marital status, and education level), smoking history (age at smoking initiation, Fagerstrom Tolerance Questionnaire, anger with previous quit attempt, and belief that smoking is related to a current symptom or disease), and hospital (hospital site, discharge diagnosis, and length of stay) variables as potential confounders. Each of the motivation variables of interest was added separately to the base model. Motivation variables were compared with each other on the basis of their contribution to the overall model χ^2.

RESULTS

Over 12 months, 1,317 smokers participated in the program. Of these, 343 (26%) were lost to follow-up at 6 or 12 months and considered to be smokers. Baseline patient characteristics can be found in Table 1. Because several patients had missing data, the number of patients differs slightly for each variable. No more than 15 patients

Table 1. Baseline Characteristics and Discharge Diagnoses of Study Subjects

Characteristic	n	Patients, (%)
Age, y		
18–24	40	(3.0)
25–44	463	(35.2)
45–64	607	(46.2)
65+	204	(15.6)
Gender		
Male	631	(47.9)
Female	686	(52.1)
Race		
White	893	(68.4)
African American	413	(31.6)
Marital status		
Unmarried	668	(51.2)
Married	637	(48.8)
Highest level of education		
Less than high school	321	(24.5)
Finished high school	557	(42.4)
More than high school	435	(33.1)
Cigarettes per day		
1–20	915	(70.1)
21–40	338	(25.9)
>40	52	(4.0)
Discharge diagnosis type		
Cardiovascular	343	(25.9)
Infectious diseases	203	(15.4)
Respiratory	165	(12.5)
Gastrointestinal	124	(9.4)
Musculoskeletal/connective tissue	72	(5.4)
Neoplastic	43	(3.3)
Pregnancy	33	(2.5)
Other	278	(21.0)
Stage of readiness to quit		
Precontemplation	394	(22.9)
Contemplation	778	(60.5)
Preparation	214	(16.6)

had missing data for a variable of interest. Patients had a mean age of 49 years, and there were slightly more women than men. Approximately one third were African American and one quarter had not finished high school. Almost a third reported smoking more than 20 cigarettes each day. One quarter were discharged with a diagnosis of cardiovascular disease. The majority were in the contemplation stage of readiness to quit, and nearly 17% were in the precontemplation stage.

Discharge diagnosis was strongly associated with stage of change (data not shown); 23.4% and 27.0% of patients with a cardiovascular and respiratory diagnosis, respectively, were in the preparation stage compared with only 17.2% and 14.1% of patients with a gastrointestinal and musculoskeletal diagnosis, respectively ($p < .01$)

The 12-month follow-up rate was 76.0%. The prevalence of smoking cessation at 12 months was 35.4% among those interviewed. The prevalence of smoking cessation decreased to 22.5% after classifying as smokers

Table 2. Univariate Associations of Motivation Variables and Smoking Cessation
at Both 6 and 12 Months (*n* = 1,317)

Motivation Variable	Total, %	Smoking, %	Not Smoking, %
How likely is it that you will stay off cigarettes after leaving the hospital? (Likely)			
Very likely	40.6	60.7	39.3*
Somewhat likely	35.2	85.3	14.7
Not likely	24.2	93.4	6.6
Stage of change (Stage)			
Preparation	23.0	69.7	30.3*
Contemplation	60.3	78.0	22.0
Precontemplation	16.7	90.7	9.3
How much do you want to quit smoking? (Want)			
Very much	60.1	72.0	28.0*
Somewhat	30.3	84.2	22.0
Not at all	9.5	88.8	11.2
How motivated is this patient to quit [counselor rating]? (Motivation)			
Very motivated	38.9	68.7	31.3*
Somewhat motivated	38.9	78.8	21.2
Just a little/not at all	22.2	89.1	10.9
Confidence level for quitting success? (Confidence), %			
67%–100%	58.6	70.1	29.9*
34%–66%	28.3	87.1	12.9
0%–33%	13.1	89.0	11.0

*p < .001.

those who were lost to follow-up at either 6 or 12 months and those who were smokers at 6 months (*n* = 68).

The distribution of motivation variables and their univariate associations with smoking cessation appear in Table 2. The responses to Likely and Motivation in our population were the most evenly distributed as neither had one response for more than 41% of the population. All five motivation variables were significantly associated (*p* < .001)

Table 3. Adjusted Odds of Smoking Cessation Among Multiple Measures of Baseline Motivation to Quit
in Four Separate Logistic Models* (*n* = 1,317)

Motivation Variable	Odds Ratio (Confidence Interval)	Model $\chi^{2\dagger}$
How likely is it that you will stay off cigarettes after leaving the hospital (Likely)		
Not at all likely	1.0 (reference)	255.9‡
Somewhat likely	2.3 (1.3, 4.0)	
Very likely	7.3 (4.3, 12.6)	
Stage of change (Stage)		
Precontemplation	1.0 (reference)	176.2‡
Contemplation	2.7 (1.5, 4.8)	
Preparation	3.8 (2.1, 7.1)	
How much do you want to quit smoking? (Want)		
Not at all	1.0 (reference)	195.0‡
Somewhat	1.5 (.73, 2.9)	
Very much	3.2 (1.7, 6.2)	
How motivated is this patient to quit [counselor rating]? (Motivation)		
Just a little/not at all	1.0 (reference)	218.0‡
Somewhat motivated	2.4 (1.5, 3.8)	
Very motivated	4.7 (2.9, 7.8)	
Confidence level for quitting success? (Confidence)		
0–33%	1.0 (reference)	207.7‡
34–66%	1.2 (.65, 2.3)	
67–100%	3.3 (1.9, 5.7)	

*Each characteristic individually adjusted for the following variables: demographic—age, gender, race, marital status, education level; smoking history—age at smoking initiation, Fagerstrom Tolerance Questionnaire, anger with previous quit attempt, belief that smoking is related to a current symptom or disease; hospital—hospital site, discharge diagnosis, length of stay.
†Baseline model χ^2 = 167.2.
‡Significance of model vs. baseline < .001.

Table 4. Multivariate Models Examining the Contribution of Measures of Motivation to Quit Smoking in Predicting Eventual Cessation*

Motivation Variable	Model 1†		Model 2‡		Model 3§		Model 4∥		Model 5¶	
	χ^2	p	χ^2	p	χ^2	p	χ^2	p	χ^2	p
Stage	—	—	176.2	<.001	—	—	—	.92	238.3	.71
Likely	—	—	255.9	<.001	—	>.001	—	<.001	—	—
Want	—	—	195.0	<.001	—	—	—	.44	256.5	.31
Confidence	—	—	207.7	<.001	—	.04	—	.05	238.3	.05
Motivation	—	—	218.0	<.001	—	—	—	.10	258.4	.09
Overall	167.2	—	—	—	189.3	—	246.3	—	—	—

*χ^2 for overall model and p values for significance of variable in model are presented.
†Model 1: covariates only (see Methods).
‡Model 2: motivation variables separately in model with covariates.
§Model 3: stepwise regression of motivation measures and covariates.
∥Model 4: motivation variables added together in a single model with covariates.
¶Model 5: motivation variables added separately to a model including Likely.

with eventual smoking cessation. For each motivation variable, there was a stepwise, graded association between level of motivation and subsequent smoking cessation.

Five separate logistic regression models were created that included one of the motivation variables in addition to the demographic, smoking history, and hospital variables listed earlier. The four measures of motivation were each independently associated with smoking cessation at 6 and 12 months, although to different degrees. Likely was the best single motivation measure at predicting subsequent cessation, as judged by its contribution to the overall model (Table 3). Stage added the least amount to the model, although patients in the preparation or contemplation stage were significantly more likely to stop smoking than those in the precontemplation stage. The five measures of motivation were subsequently added together (Table 4), in the presence of the same set of 14 potential confounders, and added no power to the model ($\chi^2 =$ 246.3) that included Likely as the only measure of motivation. Neither using stepwise regression (Table 4, model 3) nor adding each motivation variable separately to a model including Likely (Table 4, model 4) produced a model that was significantly better at predicting smoking cessation than the model with Likely as the sole measure of motivation to quit smoking.

Given the apparent utility of Likely to predict cessation and the fact that Likely and Stage both consist of three categories, the categories of each variable were compared in Table 5. Likely and Stage were highly associated. The advantage of Likely in predicting cessation as compared with Stage can be seen by comparing patients in the preparation stage with those who were "very likely" to quit, each representing patients with the highest likelihood of quitting. Patients in the preparation stage who were "not likely" to quit had only a 14% chance of quitting, while those in preparation who were "very likely" to quit had a 39.4% chance of quitting. By comparison, the chance of quitting for patients who were "very likely" to quit did not differ much among patients categorized as being in the precontemplation (40.0%), contemplation (37.2%), or preparation (39.4%) stage of change.

In order to understand the practical utility of the single question, "How likely is it that you will stay off cigarettes after you leave the hospital?" we analyzed the sensitivity, specificity, and likelihood ratio for each response, using eventual quit status as the standard for comparison (data not shown). We examined two cutoffs for likely: (1) "very likely"; and (2) "somewhat likely"/"not likely." The sensitivity, specificity, positive predictive value, negative predictive value, and likelihood ratios using cutoffs 1 and 2 were: (1) 70.2%, 68.1%, 39.3%, 86.6%, and 2.2; and (2) 92.9%, 29.2%, 27.9%, 93.4%, and 1.31.

DISCUSSION

This analysis examined the predictive validity of several measures of motivation to quit smoking among a cohort of hospitalized smokers. A second objective was to identify a simpler and potentially more accurate predictor of smoking cessation for use in a clinical setting. After adjusting for demographics, smoking history, and hospital variables the question, "How likely is it that you will stay off cigarettes after leaving the hospital?" (Likely), with responses "very likely," "somewhat likely," and "not likely," was the most accurate and most evenly distributed motivational measure for predicting smoking cessation. As a single question, Likely was no less accurate at predicting smoking cessation than the best estimate of motivation given by the counselor. This is surprising given that counselors had access to information gathered over 30 to 60 minutes with each patient and access to responses for all measures of motivation. Analyses showed no difference in the association of Motivation and cessation between the 3 years of baseline interviews or between the four hospitals. Similar results were found when subjects lost to follow-up were excluded rather than being classified as smokers.

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**Table 5. Correlation* Between Two Measures of Motivation to Quit and Percentage of
Smokers Quitting at 12 Months (*n* = 1,317)**

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	Stage‡		
Likely†	**Precontemplation**	**Contemplation**	**Preparation**
Not likely	6.5% (10/153)	5.6% (8/143)	14.3% (3/21)
Somewhat likely	8.9% (4/45)	15.6% (52/333)	14.3% (12/84)
Very likely	40.0% (6/15)	37.2% (110/296)	39.4% (74/188)

*p < .001.
†*How likely is it that you will stay off cigarettes after you leave the hospital?*
‡*Stage of readiness to change.*

Tailoring counseling messages to the patient's motivation to change is fundamental to patient-focused counseling, a method for encouraging change that has been applied to a variety of health behavior changes (e.g., smoking cessation, nutrition changes in patients with hypercholesterolemia, and problem drinking).[29–31] Patient-focused counseling protocols have typically left assessment of motivation to change to physicians, who may choose to use a validated questionnaire like the stages of change or their own method. The stages of change may be too cumbersome an instrument to use clinically, given the frequency with which clinicians are encouraged to use clinical algorithms.

The results should, in part, be explained by examining the model from which the stages of change questions are taken. The transtheoretical model of behavior change hypothesizes that one's motivations to change are paramount and closely relate to the psychological processes of change that are used. The transtheoretical model includes elements of self-efficacy that are not assessed in stages-of-change questions.[32] Self-efficacy theory posits that behavior change is more likely if individuals have a strong belief in their ability to make the change.[33,34] Self-efficacy, as it pertains to smoking cessation, is typically assessed by asking individuals how confident they are that they could resist the temptation to smoke in a variety of situations. Self-efficacy is a potent predictor of smoking cessation[34,35] and is closely associated with motivation.[36] The Likely question appears to incorporate elements of the stages questionnaire (motivation to quit) and elements of self-efficacy (ability to refrain from smoking once the individual has quit). The question, "How likely is it that you will stay off cigarettes after you leave the hospital?" is worded in such a way as to ask two questions: "How likely is it that you will quit?" and "If you quit, how likely is it that you will be able to remain a nonsmoker after you leave the hospital?"

Another explanation of the results is that the standard stages-of-change questions are not appropriate, as they are worded, for inpatients. Motivation to quit in this population has been rarely examined in any systematic fashion. Rohren et al. found that the stage of change was predictive of cessation after 6 months.[37] This study, however, was of both outpatients and inpatients, including those admitted specifically for smoking cessation services. It is likely that the smoking bans in hospitals and the fact that smokers are often hospitalized for conditions related to their habit modify the quitting process in some way. Hospitalization may accelerate the pace of quitting, which would explain the decreased utility of a time-based motivation questionnaire like the stages of change, and the fact that inpatients tend to quit at a much higher rate than outpatients.[1,4,16] To that end, the study by Rohren et al. shortened the time frame for the contemplation stage from 6 months to 1 month and removed the preparation stage from the algorithm.

Our study has the following strengths: a relatively large sample, the inclusion of smokers of low motivation to quit, a wide range of discharge diagnoses, a full year of patient follow-up, and an intervention based in community hospitals. Like all studies, ours has certain limitations. First, smoking status was determined by self-report. Although our results were not confirmed biochemically, we chose a conservative measurement of smoking cessation and found cessation rates commensurate with those of other intervention trials. Furthermore, as our intervention was delivered primarily by telephone, counselors were not an integral part of the patient care team and eventual quitting status was not reported to the patient's physician, we feel that self-report should be accurate for our use. Counting those lost to follow-up as smokers, a method supported in the AHCPR Smoking Cessation Guidelines,[7] did not significantly influence our results.

Second, we did not assess the homogeneity of the intervention effect as performed by the five counselors; given their varying backgrounds, there may have been a difference in the effectiveness of their counseling. The results were similar with and without hospital location in the model. In a similar study at the Mayo Clinic, there was no significant difference between the quit rates among patients seen by the four counselors.[37]

Third, information about use of nicotine replacement therapy was not available for subjects who continued to smoke. Among those who had quit smoking, between 2.1% (at 1 year) and 8.6% (at 1 week) were using nicotine replacement therapy, so we suspect that overall rates of use were low and therefore assume the effect of this potential confounder to be small. In most cases, the smoking cessation counselor recommended the use of nicotine replacement therapy, but the ultimate decision rested with the patient's physician.

Fourth, all conclusions must be understood in the context of an inpatient smoking cessation program. The survey questions compared in this study were part of a 45-item questionnaire and may not be as accurate at predicting cessation if asked out of this context.

Fifth, as a minority of smokers at each hospital were screened, these results may not be applicable to all inpatient smokers. Although hospitals differed in the distribution of patients' discharge diagnoses (data not shown) and the percentage of eligible smokers enrolled, the hospital variable did not alter the association between Likely and eventual cessation, and the results were the same among those with and those without a cardiovascular diagnosis. There was a wide variation in participants' motivation to quit and discharge diagnoses in our sample; this highlights an advantage of carrying out this research in the setting of a routine clinical service as opposed to the setting of a randomized trial, which tends to have more narrowly defined inclusion and exclusion criteria, thereby limiting generalizability.

The goal of this study was to compare several simple measures of motivation to quit smoking to find a more accurate and possibly simpler method of measuring motivation to quit smoking for use in a clinical setting. To that end, we have identified that the single question, "How likely is it that you will stay off cigarettes after you leave the hospital?" with possible answers of "not likely," "somewhat likely," and "very likely" is more accurate at predicting smoking cessation at 12 months than a standard multiple-item clinical measure of readiness to change or several other single-item measures. We see this being used to triage services more appropriately; knowing that 93.4% of patients who answer "not likely" will not quit in the long-term may prompt physicians to address other health risk factors (e.g., physical activity) or consider a different or more intensive smoking cessation intervention given that clinical time is limited.

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REFLECTIONS

Tea

Chinese men die grunting.
This is the way.
Lao Tsu never said so, huh,
But this is the way.

I have heard them saying,
"More
tea
now,

Huhgh,"

As their wives pour the tea
Into delicate porcelain cups.

This has always been the way.
Always has been.
Always.

Huhgh.

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