

2002

# Like lemmings over a cliff : a study of Alberta physician burnout

Goodfellow, Renee L

Lethbridge, Alta. : University of Lethbridge, Faculty of Management, 2002

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**LIKE LEMMINGS OVER A CLIFF: A STUDY OF ALBERTA  
PHYSICIAN BURNOUT**

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2000

A research project submitted to the School of Graduate Studies Council of the  
University of Lethbridge in partial fulfillment of the requirements for the degree

**MASTER OF SCIENCE IN MANAGEMENT**

The University of Lethbridge  
Lethbridge, Alberta Canada  
September 2002

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## **Abstract**

### ***Like Lemmings over a Cliff: A Study of Alberta Physician Burnout***

The prevalence and severity of physician burnout in Alberta was investigated. A total of 1161 out of 6584 (17.6%) practicing physicians, retired physicians, residents, and medical students responded to the survey either by fax, mail, or electronic version. The survey consisted of one demographic section and four burnout measures, one of which was the Modified Maslach Burnout Inventory (MMBI). More specifically, and relative to the Alberta physician population numbers provided by the Alberta Medical Association (AMA), 22 % were practicing physicians; 9.2 % retired; 7.5 % residents, and 1.3 % medical students. Based on the Phase Model, almost half (i.e., 48.6%) of Alberta physicians are found to be in an advanced phase of burnout (i.e., phases VI, VII, & VIII). A comparison of these data with other occupations and countries is also offered.

## **Acknowledgements**

There are many important organizations and people who have made this study possible. To begin, I would like to thank all those who have provided funding for this study – namely, the Alberta Medical Association, the Rural Physician Action Plan, the Family Physician Support Program. A sincere thank you to those people who work for the Alberta Medical Association, for the time that you have contributed to the organization of events leading to this project. Thank you to the physicians of Alberta for taking the time to participate.

To Robert T. Golembiewski for traveling a great distance (Athens, Georgia) to partake in my defense. As you are the developer of the Phase Model of Burnout and the proprietor of a novel of accomplishments particularly in the field of burnout, it was an honor to have you share your expertise.

A special thank you to Robert A. Boudreau. Bob, thank you for always believing in my abilities, for providing me with the knowledge, support, and encouragement that I needed to complete this project. Not only were you a mentor and supervisor, but also you were and are a friend. I will always value and never forget the tremendous amount of time and commitment that you gave in order for me to successfully complete this project.

To Rob Wedel, for your insightful input not only as a project committee member, and a member of the team for this project, but also as a physician of Alberta. Your contributions Rob hold tremendous value to the quality of this project.

To Robin Robertson, a consultant for the Alberta Medical Association under the Physician Family Support Program, and a member of the research team. Your input raised much awareness to the sensitivity of issues surrounding this project, thank you.



## **Dedication**

For my family

To Scott my soul-mate, for encouraging me to go after my dreams.

To Doug my brother and friend. You have always been a role model for me, constantly inspiring me to do my best.

To Mom and Dad for teaching me the value of hard work and for your love and support, which without would have made my return to academics extremely difficult.

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## **I. Literature Review**

To begin this chapter, brief accounts will be provided on the history of burnout, how much has been done in the recent past, followed by a description of the Phase Model approach. Next, extended coverage on physician burnout, contributing factors and results of burnout, barriers to getting help, as well as evidence to suggest physicians are burning or are burned out is presented. A listing of the primary research objectives and propositions of the present study concludes this chapter.

### ***Burnout: A Historical Account***

The first reference to burnout made by Bradley (1969) appeared over a generation ago. A few years later, Herbert Freudenberger (1974) presented the first descriptive account of burnout, in which he observed that certain individuals within human services came to be “inoperative” as a result of exhausting physical and mental resources. To be sure, other concepts were used earlier to describe similar experiences (e.g., overstrain, shell-shock), and as well, practitioners and workers showed signs of *burn-out* long before it first appeared in print. Nonetheless, the significance of Freudenberger’s “discovery” along with its timing serves as a poignant reminder for both present realities and future promise (Boudreau, 2002). The experience of burnout includes descriptions of momentary states of low energy, severe depression requiring hospitalisation, and all in-between conditions. Burnout circa 2002 seems to be more widespread, of longer duration, and more virulent than most people believe—a kind of workplace plague affecting occupations, cultures, and countries alike. Popular press and academic journal offerings suggest that burnout has become the single, most important workplace issue; and there is little chance of it disappearing into the new millennium any time soon (for

recent examples see Birchard, 2001; “Teachers drop out,” & “Canadians feeling weight of the world,” 2001; “The stressed,” & “Alberta stress levels,” 2001).

### ***Burnout (1969-1989)***

In 1990 Kleiber and Enzmann published, *Burnout. Eine Internationale Bibliographie- An International Bibliography*. Their German/English bibliography includes 2496 citations covering the years 1969 to 1989. In an attempt to update and expand on Kleiber and Enzmann’s efforts, Boudreau, 2002 created a bibliography on burnout sources and citations covering the period 1990 to the present.

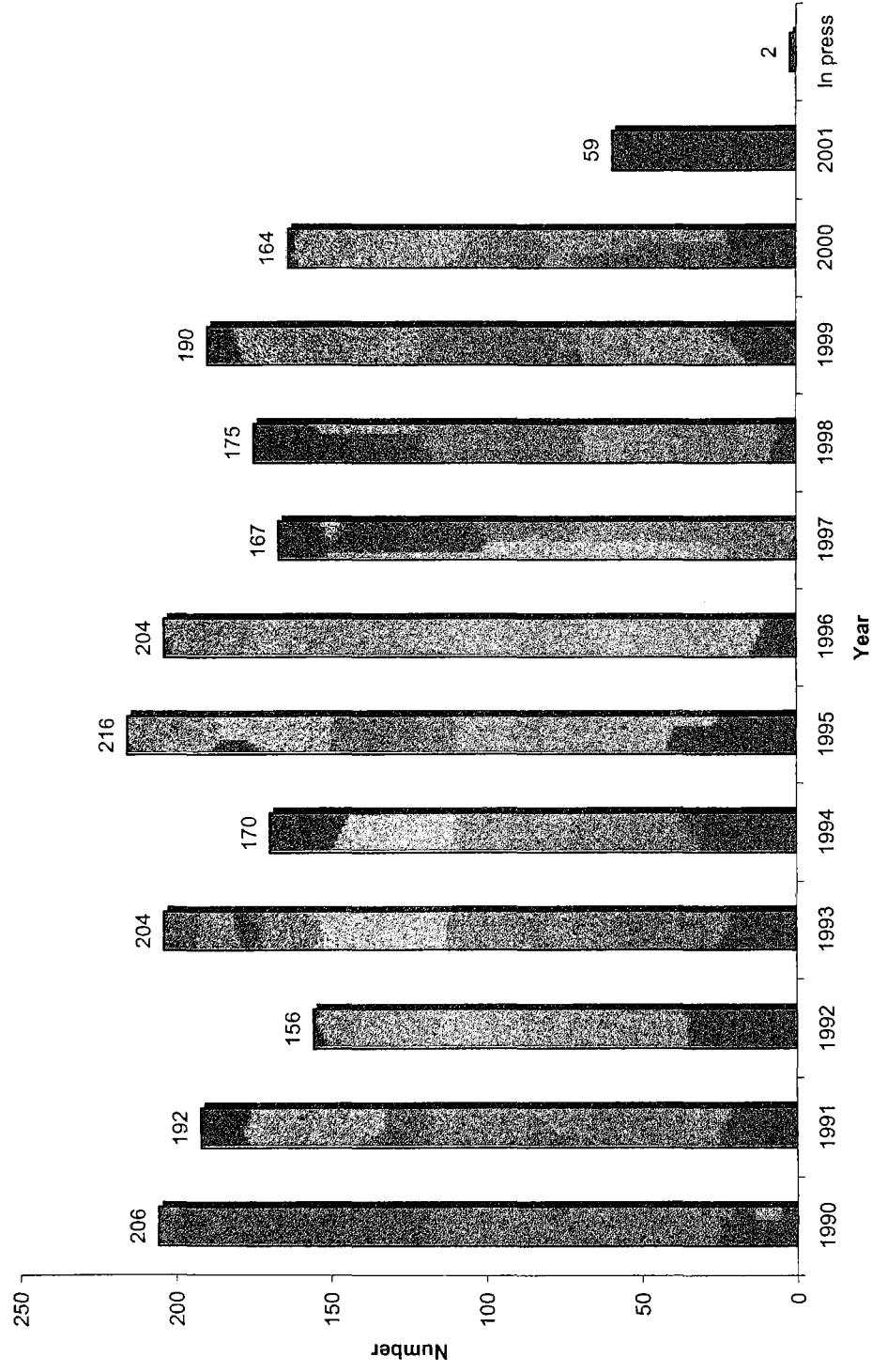
### ***Burnout (1990-Present)***

Boudreau (2002) has identified 2138 reference citations to date. Figures 1 and 2 display the publication of burnout sources by years and types, respectively.

Unlike Kleiber and Enzmann’s results, which indicated a significant upward trend in the publication of literature related to burnout from 1969 to 1989, preliminary analyses of burnout publications between 1990 and the present suggest a strong albeit steadier trend in burnout publications. Almost as many references on burnout have been published in the 13 years from 1990 to 2002 as there were published in the 30-year period covered in Kleiber and Enzmann’s bibliography.

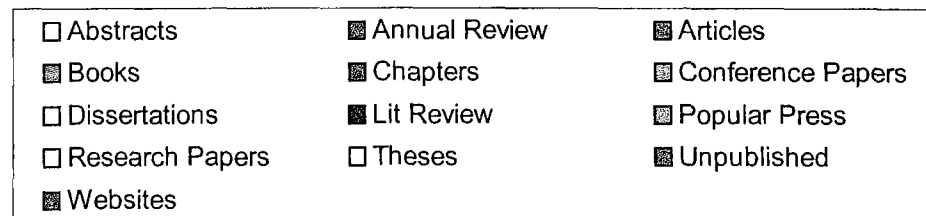
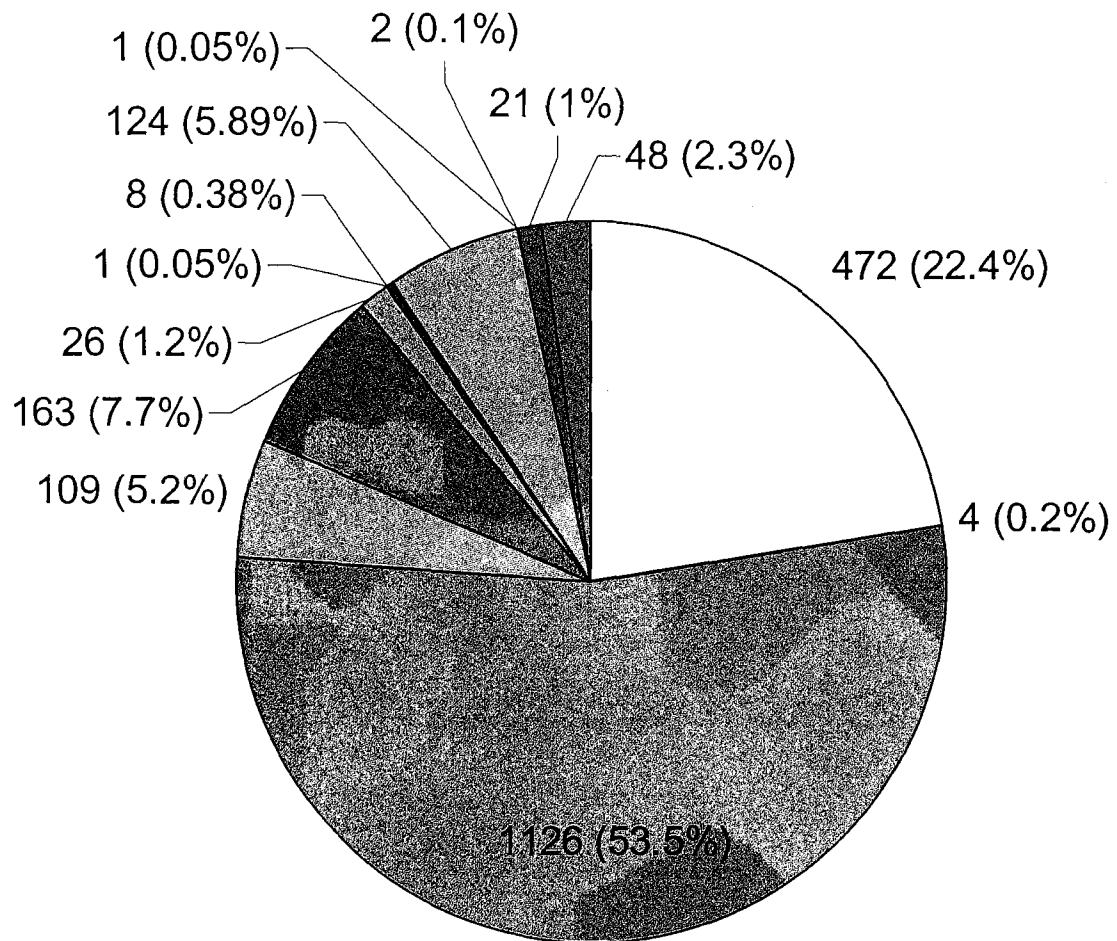
Kleiber and Enzmann categorized their references into 6 separate types of publications. Boudreau’s (2002) work uses 13 categories primarily because during the intervening period between the two bibliographies, the form of publication types have

Figure 1. Number of References by Years





**Figure 2. Burnout Literature: 1990-2002 by Type**



changed and increased dramatically. For example, websites were not used at the time of the Kleiber and Enzmann publication but are included in Boudreau's (2002) work.

### *Measures of Burnout*

A couple of years after Freudenberger (1974), Christina Maslach (1976) offered her observations within a human services purview. Maslach interpreted burnout as “a reaction to job-related stress that results in the workers becoming emotionally detached from clients, treating clients in dehumanized ways, and becoming less effective on the job” (Maslach, 1976, p. 16). Maslach's annotations were deeply rooted within the human service sector so that when Maslach and Jackson, (1981) developed their measurement, the Maslach Burnout Inventory or MBI, it was largely predicated and validated based upon sample populations within health and service occupations.

Since the advent of the MBI, there have been over forty burnout measures produced. They have taken on multiple forms such as questionnaires, interviews, self-descriptions, expressions by drawing, and do-it your-self tests. Through all of the various attempts to measure and define burnout though, Maslach's initial ideas and hers and Jackson's instrument, the MBI, have stood the test of time, so to speak. Time and time again, researchers have added to the burnout literature (Balogun, Helgemoe, Pellegrini, & Hoeberlein, 1995; Farber, 1984; Yadama, & Drake, 1995) proclaiming success using reliable and valid versions of the MBI. Shaufeli and Enzmann (1998) further support this claim with their analysis of 1976 to 1996 burnout studies that indicated over ninety percent of these studies have used the MBI or some form of it.

## *The Phase Model Approach and the Modified*

### *Maslach Burnout Inventory*

Maslach, Shaufeli, & Leiter (2001) define job burnout as a psychological syndrome in response to chronic interpersonal stressors on the job. According to them, job burnout includes the dimensions of *depersonalization*, a lack of *personal accomplishment*, and *emotional exhaustion*.

*Depersonalization* is characterized by the treatment of clients as objects rather than human beings. Maslach and Jackson (1986) describe the individual experiencing depersonalization as being callous and cynical towards co-workers, clients, and the organization. (Note: over the years, terms such as ‘student’, ‘patient’, & ‘recipient’ have been used interchangeably with the word ‘client’.)

*Personal Accomplishment* (reversed) is typically signified by a negative evaluation of oneself. This usually is associated with a lack confidence and failure to progress with work, even as it piles up.

*Emotional exhaustion* is branded by a lack of energy and a feeling that one’s emotional resources are used up. This is usually compounded by feelings of not being able to ‘give of oneself’ as once before.

Golembiewski and his co-workers (e.g., Golembiewski, Boudreau, Munzenrider, & Luo, 1996) have both refined the MBI measure and expanded the subscale dimensions with the introduction of the Phase Model Approach. Responses to the Modified Maslach Burnout Inventory or MMBI are subdivided into High (HI) or Low (LO) on *Depersonalization*, *Personal Accomplishment* (reversed), and *Emotional Exhaustion* based on norms from a large global population. (Note: It has been suggested that the

performance of the Phase Model based on universal norms works best when used for large-sized populations [Golembiewski & Deckard, 1994]). This permits the assignment of each individual into one of eight progressive phases of burnout where I is the least advanced and VIII being the most advanced (see Figure 3). The Phase Model approach treats each of the dimensions as unequal, each contributing differently to the overall burnout phase. *Depersonalization* is considered the least virulent contributor to burnout and *Emotional Exhaustion* the most. Golembiewski et al., (1996) characterize individuals in Phase I as those capable of treating others with respect and “recognizing their contributions as important; they see themselves as doing well on jobs that are socially worthwhile; and they have an abundance of emotional resources for coping with more stressors than they are experiencing.” In contrast to Phase I, individuals in Phase VIII confine themselves from social involvement. As a result they “can lack information as well as social support, also their work is not rewarding psychologically.” These individuals characteristically do “poor on jobs that they consider largely unattractive...and are in a deficit condition for mobilizing emotional resources to deal with new stressors.” (Golembiewski et al., 1996, p.60)

In addition to the assignment of individuals to the burnout phases, the Phase Model also highlights the importance of movement across the phases, which subsequently has not been featured in this study. However, it may be of interest for readers to know that there are acute and chronic flight paths.

Acute flight paths include the following: I to V to VIII. Notice that they all include a high assessment on emotional exhaustion. On the other hand, the basic chronic flight path is from I to II to IV to VIII. “Interpretively the high depersonalization phase

**Figure 3. Phase Model of Burnout**

<b>Subscales</b>	<b>Phases of Burnout</b>							
	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>	<b>VII</b>	<b>VIII</b>
Depersonalization	LO	HI	LO	HI	LO	HI	LO	HI
Personal Accomplishment (rev.)	LO	LO	HI	HI	LO	LO	HI	HI
Emotional Exhaustion	LO	LO	LO	LO	HI	HI	HI	HI

(Phase II) deprives an individual of important information, which over time can impede performance in task (Phase IV), and these two conditions then can coexist at levels of strain beyond the individual's comfortable coping capabilities reasonably labeled 'emotional exhaustion' (Phase VIII)." (Golembiewski et al., 1996, p. 60)

### ***Physician Burnout***

It has been established thus far that the study of burnout is rooted in healthcare. Therefore it is no surprise that physicians are likely candidates when it comes to the study of burnout. The following description will outline the contributing factors to physician burnout, subsequent results, and barriers to getting help. Finally, a collection of evidence from anecdotal reports and selected citations suggesting physicians are indeed in trouble will be provided.

### ***Contributing Factors***

Physicians are currently facing diminishing autonomy in the face of health care reform. The following stressors are but some of the many identified by Myers (personal communication, February 9th, 1999): geographical restrictions of medical practice, lack of remuneration for one's work, increasing paperwork, an increased sense of being exploited, changing demographics of patients, increasing intrusion into the physician-patient covenant, an increased likelihood of complaints to the College of Physicians and Surgeons, office medical peer review, increased probability of lawsuits, dissolution of partnerships, bed shortages, operating room closures, ER pressures, and increase in the number of medical doctors being charged with harassment (sexual and other) or are subject to harassment themselves in the medical workplace, can't find psychiatrists to take new patients, and difficulties in selling one's practice. Compounding these are

personal and familial stressors. Other reports suggest that the current emphasis on encouraging physicians to care more about patients as individuals and to reach higher personal achievements, without adequate time and support, adds to physician burnout (McManus, Winder, & Gordon, 2002).

### ***Results of Burnout***

As a result of physician burnout, it has been suggested that a sense of futility can begin to permeate their attitudes that in due course sets the stage for poor coping. This can adversely impact their own health as well as that of their patients (Velamoor, Kazarian, Persad, & Silcox, 2000). Due to shame, guilt, and isolation physicians may resort to self-medication, alcoholism, and the desperate act of suicide.

### ***Barriers to Getting Help***

A major barrier to getting help for some physicians is the inability to acknowledge his/her symptoms when ill. A study featured in the British Medical Journal (cited in Birchard, 2001) highlights that doctors feel pressure to appear physically well and are poor at looking after themselves. Doctors report working through, and expecting colleagues to work through illnesses they would not expect patients to go to work with. Additionally, when illness is self-acknowledged by physicians, fears of confidentiality breeches keep them from telling someone as associations encourage psychiatrists and colleagues of troubled physicians to report any problems that he or she may be having due to the adverse impacts on self and patients.

### ***Evidence Suggests Physicians are in Trouble***

Co-variation has been established between the different phases of burnout and over a hundred variables. More specifically, Golembiewski et al., (1996) find that as phases progress from I to VIII, job involvement and all facets of job satisfaction decrease. Turnover increases, both in intent and actual departures, group cohesion decreases, physical and emotional symptoms increase, features of family life deteriorate, and indicators of performance fall. Cordes and Dougherty (1993) suggest that burnout is an antecedent to negative organizational outcomes such as absenteeism and a decrease in productivity while individual cases of decreases in mental and physical are also recorded (Cordes & Dougherty, 1993; Felton, 1998).

Other studies on physicians reinforce these results. Lloyd, Streiner, and Shannon (1994) in their study on Canadian Emergency Physicians reported links between burnout and an intention to leave the job. Brook and McGlynn (1996) report on how burnout affects the level of care that patients get. The evidence so far proves rather alarming. Some suggest that because of the relationship between burnout and work overload, burnout of health care workers may ultimately be an important indicator of health care overload (Grunfeld, Whelan, Zitzelsberger, Willan, Montesanto, & Evans 2000)

Studies reporting relatively high levels of burnout among physicians are on the rise. Chambers and Belcher (1994) report that 60.7 % of the 704 general practitioners surveyed have high levels of exhaustion or stress on three or more weekdays. Deckard, Meterko, and Field (1994) state that 58 % of the physicians in their study have scores high in emotional exhaustion. Doan-Wiggins, Zun, Cooper, Meyers, and Chen (1995) emphasize that 25.2 % of physicians surveyed in their study feel burned out. Schweitzer



(1994) writes that 50 % of the 474 participants responding to his survey consisting of Pines and Aronson's Burnout Measure are classified as at risk for burnout or are burned out. Grunfeld et al., (2000) report that of the 122 Ontario physicians responding to the Maslach Burnout Inventory portion of their survey, 53.3 % show high levels of emotional exhaustion, 22.1% show high levels of depersonalisation, and 48.4 % show low levels of personal accomplishment. Finally, in a longitudinal study on UK doctors, increasing levels of emotional exhaustion and lower levels of personal accomplishment are assessed using an abbreviated nine-item version of the Maslach Burnout Inventory and are reported for the year 2000 as compared to 1997 (McManus et al., 2002). Although there are many of these reports on physician burnout, no research to date has focussed on Alberta. In an effort to fill this gap, I offer you the following objectives.

### ***Primary Research Objectives***

The five primary objectives of this study are:

- i. To measure and report on Alberta physician burnout rates.
- ii. To compare burnout levels of Alberta Physicians to other occupations both in Canada and worldwide.
- iii. To further assess the reliability and validity of four different burnout measures used in this survey study.
- iv. To further refine the Boudreau Burnout Questionnaire (BBQ) so that it may be used in future studies on burnout within healthcare and other occupational settings.

- v. To present recommendations on the basis of the research results as to possible methods of recognizing and assessing burnout among Alberta physicians.
- Several practical choices will also be addressed.

### ***Propositions***

The following propositions form the basis of the present study:

*Proposition A:* Within the population under study (Alberta physicians) there is a high prevalence of burnout.

*Proposition B:* The Modified Maslach Burnout Inventory is an effective tool, in terms of its reliability and validity, for capturing the prevalence and severity of burnout among Alberta physicians.

*Proposition C:* The Boudreau Burnout Questionnaire (BBQ) dimensions (i.e., [De]personalization, [In]competence, Emotional Exhaustion/ Energy, Fatality/Resilience) are highly inter-correlated with the respective dimensions of the Modified Maslach Burnout Inventory and the other two burnout measures used in this study.

*Proposition D:* As a substitute for the MMBI, the BBQ is a valid measure to use for both assessing burnout among Alberta Physicians as well as classifying doctors using the Phase Model approach.

## **II. Method**

This study began in January 2002 and for purposes of this Master of Science in Management research project ended September 2002 (see Table 1 for project milestones). It represents a collaborative effort involving many individuals including a primary-investigator, two co-investigators (a practicing physician in southern Alberta, and a consultant for the Alberta Medical Association [AMA]), a Master of Science in Management candidate, numerous employees located in the Edmonton Alberta Medical Association office, and the physicians of Alberta.

At the outset of the study, the Alberta Medical Association reported that there were 6,806 physicians currently working in Alberta. The AMA also indicated that there were 79 registered physicians living outside of Alberta. This latter group was not included as part of the study. The 6,806 physicians serve an Alberta population of over 3 million people (Statistics Canada, 2001).

### ***Participants***

For the purposes of this study a population total of 6806 Alberta physicians (both AMA members and non-members) were identified. Among these included practicing and retired physicians, residents and medical students, working within various fields of the health care system. (Note: Unless otherwise specified, the term 'physician' is used in this document to refer to practicing physicians, retired physicians, residents, and medical students combined).

### ***Measures***

The collection of survey data (Stablein, 1996) was the primary focus of this study. A survey questionnaire consisting of 104 questions was developed.

**Table 1**

**Alberta Physician Burnout Study Project Milestones**

NO.	ACTIVITIES	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG.	SEPT.
1.	Preliminary discussions											
2.	Research team formed											
3.	Target population finalized											
4.	Development of survey											
5.	Survey finalized											
6.	Ethics approval <sup>a</sup>											
7.	Survey participants identified by AMA											
8.	Paper and electronic surveys finalized											
9.	Distribution of surveys											
10.	Compile data											
11.	Analyze Data <sup>b</sup>											
12.	Project Write-up											

*Note.* <sup>a</sup> The University of Lethbridge Human Subjects Research Committee ethics approval policies are in accordance with those of the Tri-Council Policy Statement provided by the Canadian Institute for Human Research, 2000.

<sup>b</sup> One presentation from this work was made in August 2002. Other presentations based on this work are scheduled in October 2002, November 2002, and March 2001.

**Demographic items.** These eighteen items included questions about age, gender, social status, medical specialty, population size of the community the physician presently works in, whether or not the physician has hospital privileges, if they work solo or in a group (and if group what is the primary group setting), main form of payment plan, distance from the physician's office to the closest referral centre, how many hours per month are worked in medicine teaching, doing administrative work, clinical work (including patient files), on call from home or hospital, or other. The remaining demographic questions included years of practice, years in present position, and years in present work location.

**Boudreau Burnout Questionnaire (BBQ).** A forty-item measure with a 7-point intensity scale (1=False to 7=True). The BBQ consists of four different sub-scales including emotional exhaustion/energy, (de)personalization, (in)competence, and fatality/resilience. Emotional exhaustion refers to feelings of work-induced emotional strain. Depersonalization refers to an inability to feel compassion for others. Incompetence refers to the degree to which a person perceives doing well on worthwhile tasks. Beyond exhaustion, the fatality subscale looks at broader societal issues and impacts affecting the person (Boudreau, 1998).

**Modified Maslach Burnout Inventory (MMBI).** A 23-item measure, using a 7-point intensity scale (0=Very much UNLIKE me, 7=Very much LIKE me). The MMBI consists of three separate sub-scales including emotional exhaustion, depersonalization, and decreased personal accomplishment (Golembiewski, Boudreau, Munzenrider, & Luo, 1996).

***Burnout Measure (BM).*** A 21-item measure using a 7-point frequency scale (1=Never, 7=Always). The BM primarily focuses on feelings and experiences of emotional exhaustion (Pines & Aronson, 1988).

***Overall self-assessment of burnout.*** A 9-point intensity scale (1=not at all burned out, 9=very burned out) responding to the following definition of burnout: “The tendency for committed physicians to lose enthusiasm for their work and to become less effective in managing the stress of emotional contact with patients. Symptoms may include some or most of the following: fatigue, withdrawal from patients and colleagues, cynicism, irritability, difficulty relaxing off work, physical manifestations of anxiety and depression, and feelings of diminished enthusiasm and effectiveness at work” (Rafferty, Lemkau, Purdy, & Rudisill, 1986).

At the end of the 103-question survey, a section for qualitative comments was also included. A complete copy of the survey is included in Appendix A.

### ***Procedure***

The intent of the research team was to have all surveys filled out electronically. However, not all physicians had access to a computer. Thus, a multi-method approach for survey distribution was used in this study. That is to say, physicians received either an electronic, fax, or mail version of the survey. Specifically 3,942 members and 57 non-members received a covering letter via e-mail asking them to go to a *Website* and complete an electronic version of the survey. A total of 963 members and 63 non-members were faxed a covering letter and survey. Finally, 1,540 members and 241 non-members received a covering letter and survey in the mail. The total number of AMA

members and non-members participating in the study was 6,806. Copies of the two covering letters sent to AMA members and non-members are presented in Appendix B.

***Mail-out.*** On the 17<sup>th</sup> of June (see Table 1 again), I drove from Lethbridge, Alberta to the Alberta Medical Association located in Edmonton. Working together with various AMA employees, we prepared packages for the mail-out distribution. The 1781 envelopes were then stamped and mailed from the AMA office the following day.

***Faxes.*** A total of 1026 surveys were faxed at the same time. Canadian Corporate News located in Calgary sent the faxes. The mail and fax versions of the survey were identical and appear in Appendix A.

***Electronic version.*** At the same time as mail and fax versions of the survey were being distributed, the AMA was also e-mailing 3,999 covering letters to physicians asking them to participate via a website/electronic copy of the survey. A copy of the electronic version of the survey is presented in Appendix C.

The AMA via e-mail on June 30th, July 3rd and 16th, 2002 respectively, sent out three reminders.

### ***Data Quantification/Management***

Data obtained from the electronic surveys were originally coded in a spreadsheet format and then loaded into *SPSS 10.0*. Data obtained from fax and mail surveys were manually coded by two different individuals using *SPSS 10.0*. A compare program was then used to confirm that the data was free from any input errors.

Two *Word* files, one containing the qualitative comments from the electronic returns and one containing the qualitative comments from the mail and fax returns were also created.

All mail and fax surveys are kept in a secure place. The Curriculum Redevelopment Center at the University of Lethbridge is storing the electronic survey responses. Only members of the research team have access to the original data.



### **III. Results**

A total of 1161 practicing physicians, retired physicians, residents, and medical students (AMA members & non-members) responded to the survey between June 18<sup>th</sup> and September 18<sup>th</sup> 2002.

#### ***Survey Response Rates by Method***

***Mail.*** Of the 1781 original surveys mailed-out, 26 were returned to sender leaving a total of 1755. A total of 311 out of 1755 (17.7%) physicians mailed their surveys back.

***Fax.*** Of the 1026 fax surveys sent out, 137 could not be transmitted. A total of 123 respondents out of 889 (13.8%) completed the fax version of the survey.

***Electronic.*** Of the 3999 e-mails sent out to Alberta physicians, 59 bounced back with a sender error message. A total of 727 out of 3940 (18.5%) physicians responded electronically.

Overall, a total of 1161 out of 6584 (17.6%) physicians responded in this study. This overall response rate is comparable to previous Alberta physician surveys completed in 2000 and 2002 (Tudor Williams, personal communication July 30<sup>th</sup>, 2002).

Of the 1161 physicians responding to the survey, a total of 438 or almost 38% offered some form of qualitative commentary.

#### ***Participant Profile***

The general participant profile for this study is a 46-year-old male practicing physician, married with one child living in an urban centre. More specific information about participants' profiles is offered below.

- 39% female, 61% male

- Age range from 20 to 87
- 83.4% married/common law
- Number of children currently living at home ranges from 0 to 8
- Average years of practice is 17.1; current position is 10.6; present work location is 9.1

A selected listing of demographic information obtained in this study is presented in Table 2. The numbers and percentages of physicians by specialty are represented in Table 3.

The demographic profile presented in these tables generally mirrors the population of Alberta doctors. Interestingly enough, when looking at the number of respondents from the four different subcategories (i.e., practicing physicians, retired physicians, residents, & medical students) relative to the numbers representative of the province as provided by the Alberta Medical Association, we find the majority of our respondents are practicing physicians representing almost 1 in 4 of all practicing physicians in the province. The specific numbers relative to the population numbers provided by the AMA (Ava Butterworth, personal communication, July 25, 2002) are presented next.

1022/4735 (22%) practicing physicians

47/582 (9.2%) retired<sup>a</sup>

65/870 (7.5%) residents

11/850 (1.3%) medical students

*Note.* <sup>a</sup>This number is extremely conservative due to the nature of existing definitions (as provided by the AMA) of what constitutes a 'retired' physician.

**Table 2**

**Sample Size, Means, or Comparative Percentages for Alberta Physician Selected Demographic Items**

	<i>n</i>	<i>P</i>	AMA <sup>a</sup>		<i>n</i>	<i>P</i>	AMA <sup>a</sup>
Practicing Physician	1028	89.1	74.8	Resident	65	5.6	11.2
Retired Physician	49	4.2	6.2	Medical Student	12	1.0	14.0
Canadian Graduates	889	77.8	72.9	Hospital Privileges	808	71.4	-----
International Graduates	254	22.2	27.1	No Hospital Privileges	323	28.5	-----
Specialists	626	55.0	48.7	Number working Solo	299	26.5	-----
Non-Specialists	511	44.9	51.2	Number working in Group(s)	824	73.0	-----
Associations <sup>b</sup>	224	26.6	-----	Multi-Specialty Clinics <sup>b</sup>	51	6.0	-----
Community Health Centers <sup>b</sup>	28	3.3	-----	Partnerships <sup>b</sup>	117	13.9	-----
Family Practice Clinics <sup>b</sup>	229	27.2	-----	Other <sup>b</sup>	179	21.2	-----
# working in rural <sup>c</sup> settings	162	14.1	13.9	Payment-Fee For Service	891	79.0	-----
# working in regional <sup>d</sup> centers	1028	13.7	13.3	Payment-Salary	148	13.1	-----
# working in urban <sup>e</sup> centers	822	72.0	72.8	Payment-Alternative Payment Plan	84	7.4	-----

Table 2 (continued)

Sample Size, Means, or Comparative Percentages for Alberta Physician Selected Demographic Items

	<i>n</i>	<i>P</i>		<i>M</i>
Married/Common Law	1028	89.1	Hrs/month on call (Home & Hospital)	65
Single	49	4.2	Medical Student	12
Divorced	889	77.8	Hospital Privileges	808
Widowed	254	22.2	No Hospital Privileges	323
Separated	626	55.0	Number working Solo	299

*Note.* *n* does not sum to total number of respondents (1161) because of missing data or “other” categories not reported here. Missing data were treated as list-wise deletion.

Population sizes of rural, regional center, and urban center were based on definitions provided by T. Williams (2002).

<sup>a</sup>Population percentages of AMA registered physicians; <sup>b</sup>Primary type of group setting worked in; <sup>c</sup>Population base of 0 to 15, 000;

<sup>d</sup>Population base of 15, 001 to 100,000; <sup>e</sup>Population base >100,000.

**Table 3**

**Sample Size and Percentages for Selected Alberta Physician Specialties**

	<i>n</i>	<i>P</i>	AMA <sup>a</sup>		<i>n</i>	<i>P</i>	AMA <sup>a</sup>
Anesthesia	53	7.1	8.9	Neurology	11	1.5	2.4
Cardiology	11	1.5	2.8	Obstetrics & Gynecology	35	4.7	4.9
Community Health	8	1.1	.8	Occupational Medicine	5	.7	.4
Dermatology	1	.1	1.4	Oncology	4	.3	.8
Diagnostic Imaging	27	3.6	.5	Ophthalmology	14	1.9	3.3
Emergency	43	5.7	2.3	Orthopedics	23	3.1	1.0
Endocrinology & Metabolism	6	.8	2.8	Pediatrics	54	7.2	8.2
Gastroenterology	7	1.0	1.9	Physical Medicine & Rehab.	8	1.1	1.0
Infectious Disease	9	.9	1.1	Psychiatry	70	9.3	11.9
Intensive Care	8	1.2	1.7	Radiology	12	1.6	1.7

**Table 3 (continued)**

**Sample Size and Percentages for Selected Alberta Physician Specialties**

	<i>n</i>	<i>P</i>	AMA <sup>a</sup>		<i>n</i>	<i>P</i>	AMA <sup>a</sup>
Internal Medicine	51	1.1	9.6	Respiratory Medicine	8	1.1	1.5
Laboratory	27	6.8	13.8	Rheumatology	4	.5	1.0
Medical Examiner	2	3.6	-----	Sport Medicine	5	.7	-----
Mental Health—General	1	.3	-----	Surgery	60	8.0	13.1
				Urology	7	.9	1.4

*Note.* *n* does not sum to total number of respondents (1161) because of missing data or “other” categories not reported here. Missing data were treated as list-wise deletion.

<sup>a</sup>Population percentages of AMA registered physicians.

### ***Alberta Physician Burnout Rates***

***Phase Model Assignment: Universal vs. local norms.*** Based on scores from the MMPI each physician was assigned to one of the eight phases of burnout using universal norms (Golembiewski et al., 1996, p. 51). (Note: Universal norms are defined here as the median cutoffs available from two larger U.S populations [Golembiewski, Munzenrider, & Stevenson, 1986]; local norms refer to the median cutoffs for the three dimensions for a specific study and sample). These assignments presented in Figure 4 indicate that almost half (i.e., 48.6 %) of Alberta physicians are in an advanced phase of burnout (i.e., Phases VI, VII, & VIII). A comparison of phase assignments using universal vs. local norms (i.e., for *dp* 18 vs. 19, for *pa* [rev] 26 vs. 25, for *ee* 23 vs. 29) for both eight and tri-phase assignments are presented in Figures 5 and 6 respectively.

***Phase Model assignment by methods: Fax, mail, or e-mail.*** From here on, only percentages based on universal median splits are reported. As part of this project, an analysis of mean scores for each question ( $n=85$ ) in each of the four-burnout measures was conducted. Based on this analysis it appears that responses are similar regardless of survey method. Notwithstanding the similarities across methods, it is interesting to note the differences albeit slight in burnout phase assignments across the three methods shown in Figure 7.

***Phase Model assignments by occupational groups.*** In Figures 8, 9, and 10 a series of Phase Model comparisons depicting Albertan and American physicians, Alberta physicians and other Alberta healthcare workers ( $n = 1284$  [sites J & II in Golembiewski et al., 1996 & Barsky, 1999]) and Alberta physicians and Canadian workers are presented. Taken together, these figures clearly demonstrate that Alberta physicians

evidence the highest rates of burnout; they are clearly the most at risk! Such a finding that physicians have a relatively higher burnout rate in comparison to other occupations including those within the healthcare system seems to be a common trend among other studies that have measured physician burnout (e.g., Grunfeld et al., 2000).

***Burnout Measure.*** Based on ranges identified by Ayala Pines and Elliott Aronson (1988), Figure 11 offers a comparison of Alberta physicians with a sample of New Zealand workers (Boudreau, 1998). Fifty-five percent of Kiwis ( $n = 1099$ ) are either showing signs of burning out or are already burning out as compared with 72.9% of the Alberta physicians who participated in this study.

#### ***Measures and Subscales: Properties, Statistics, Reliabilities and Intercorrelations***

Descriptive statistics for the overall self-assessment of burnout, the Burnout Measure, the three subscales in the MMBI, and the four subscales in the BBQ are presented in Table 4. In addition to these the range of item-total correlations for the seven subscales and the Burnout Measure are also listed. Moreover, the results presented in Table 5 send a strong signal that the four-burnout measures and their relevant subscales are all highly reliable and valid. For example, statistically significant correlations were found between the comparable subscales (DP, PA [rev], EE) of the MMBI and the BBQ ( $r = 0.74, 0.68, 0.86$ ). Also, consistent with findings by Rafferty et al., (1986) significant correlations were found between the overall self-assessment of burnout and the emotional exhaustion subscales. Finally, all of the reliability alphas (Cronbach, 1951) were found to be between .7 and .9 with the exception of the Fatality/Resilience subscale of the Boudreau Burnout Questionnaire.



### *Factor Analyses for the MMBI, BM, and BBQ*

Tables 6, 7, and 8 present the rotated factor matrix scores and item-total correlations for the three principle measures of burnout used in this study. All items presenting a factor loading of 0.4 or under (Gorsuch, 1983) and/or having more than one factor loading at the same level were dropped. A perusal of the loadings indicates that emotional exhaustion is the single most dominant dimension attributable to the burnout experience.

**Table 4**

**Alberta Physician Burnout Survey Measures: Selected Properties, Descriptive Statistics, & Reliabilities**

Subscale/Measure	Response	Items	Range	Mean	Median	SD	Item Total Correlations --to--
Overall self-assessment	Intensity	1-9	1	1-9	4.4	4.0	2.3
DP/P- BBQ	Intensity	1-7	10	10-56	23.6	23.0	7.6
IN/C- BBQ	Intensity	1-7	10	10-61	30.5	31.0	8.3
EE/E- BBQ	Intensity	1-7	10	11-70	37.3	38.0	11.6
FA/RES	Intensity	1-7	10	15-62	33.3	33.0	7.5
MMBI- DP	Intensity	1-7	10	8-51	19.5	19.0	7.7
MMBI- PA (reversed)	Intensity	1-7	8	8-51	25.1	25.0	6.9
MMBI-EE	Intensity	1-7	7	7-49	27.5	29.0	10.6
Burnout Measure	Frequency	1-7	21	1.1-6.9	3.3	3.3	.92

*Note.*  $n = 1161$ . BBQ= Boudreau Burnout Questionnaire; DP/P = Depersonalization/Personalization; IN/C =

Incompetence/Competence; EE/E = Emotional Exhaustion/Energy; FA/RES = Fatality/Resiliency; MMBI = Modified Maslach

Burnout Inventory; DP = Depersonalization; PA (reversed) = Personal Accomplishment (reversed); EE = Emotional Exhaustion.

For BBQ items, all positive items were reversed such that high scores equal high levels of burnout. For MMBI Personal

Accomplishment items, all positive items were reversed so that high scores equal high levels of burnout.

**Table 5****Measures and Subscale Intercorrelations and Alphas<sup>a</sup>**

<i>Measure/Subscale<sup>b</sup></i>	1	2	3	4	5	6	7	8	9
1. Overall self-assessment	---								
2. DP/P- BBQ	.45	<b>.77</b>							
3. IN/C- BBQ	.56	.66	<b>.73</b>						
4. EE/E- BBQ	.76	.53	.69	<b>.87</b>					
5. FA/RES- BBQ	.58	.60	.67	.69	<b>.57</b>				
6. MMBI- DP	.55	.74	.64	.58	.57	<b>.79</b>			
7. MMBI- PA (rev)	.47	.65	.68	.62	.59	.59	<b>.77</b>		
8. MMBI- EE	.79	.46	.61	.86	.61	.60	.49	<b>.92</b>	
9. Burnout Measure	.77	.49	.64	.85	.68	.60	.55	.82	<b>.87</b>

*Note.* All correlations are significant at the 0.001 level (one-tailed).

<sup>a</sup>Cronbach Alpha coefficients for each subscale/measure are shown in **bold** in the diagonal.

<sup>b</sup>BBQ = Boudreau Burnout Questionnaire; DP/P = Depersonalization/ Personalization; IN/C = Incompetence/Competence; EE/E = Emotional Exhaustion/Energy; FA/RES = Fatality/ Resiliency; MBI = Maslach Burnout Inventory; DP = Depersonalization; PA = Personal Accomplishment (reversed); EE = Emotional Exhaustion; BM = Burnout Measure.

**Table 6****Rotated Factor Matrix Scores & Item-Total Correlations for the Modified MBI (MMBI)**

Scale Items		Factor 1 EE	Factor 2 PA (reversed)	Factor 3 DP	Corrected Item-Total Correlations
MMBI-1	Emotional Exhaustion (-)	.87			.82
MMBI-2	Emotional Exhaustion (-)	.84			.79
MMBI-3	Emotional Exhaustion (-)	.78			.72
MMBI-4	Depersonalization (-)			.68	.44
MMBI-5	Personal Accomplishment(+)		.51		.36
MMBI-6	Depersonalization (-)			.74	.51
MMBI-7	Depersonalization (-)	.54			.51
MMBI-8	Personal Accomplishment(+)		.65		.53
MMBI-9	Emotional Exhaustion (-)	.88			.86
MMBI-10	Personal Accomplishment(+)		.73		.57
MMBI-11	Depersonalization (-)			.65	.63
MMBI-12	Depersonalization (-)	.54			.45
MMBI-13	Personal Accomplishment(+)	.70			.41
MMBI-14	Emotional Exhaustion (-)	.74			.71
MMBI-15	Emotional Exhaustion (-)	.66			.59
MMBI-16	Depersonalization (-)			.62	.53
MMBI-17	Depersonalization (-)	.53			.54
MMBI-18	Personal Accomplishment(+)		.59		.54
MMBI-19	Personal Accomplishment(+)		.64		.58
MMBI-20	Personal Accomplishment(+)		.65		.46
MMBI-21	Emotional Exhaustion (-)	.73		.60	.71
MMBI-22	Personal Accomplishment(+)		.42		.36
MMBI-23	Depersonalization (-)				.46

*Note.* 1 to 7, intensity, Very much UNLIKE me-Very much LIKE me scale; 23 items: 7 Emotional Exhaustion; 8 Personal Accomplishment (rev.); 8 Depersonalization. For purposes of the analyses presented here, all positive items were recoded so that a higher score for each question and sub-scale indicates a higher score of burnout. Principle Component, Varimax (6 iterations) rotation; 3 factor solution explains 53% of the variance. All items have one loading of .40 or greater. There are no duplicate loadings.

**Table 7****Rotated Factor Matrix Scores & Item-Total Correlations for the Burnout Measure (BM)**

Scale Items	Factor 1 Feeling	Factor 2 Being	Factor 3 Positives	Corrected Item- Total Correlations
BM Item 1(-)		.84		.66
BM Item 2(-)	.53		.45	.69
BM Item 3(+)			-.79	.61
BM Item 4(-)		.86		.66
BM Item 5(-)		.70		.73
BM Item 6(+)			-.74	-.62
BM Item 7(-)		.76		.74
BM Item 8(-)	.52	.48		.73
BM Item 9(-)	.56		.47	.69
BM Item 10(-)		.76		.77
BM Item 11(-)	.57	.42		.73
BM Item 12(-)	.74			.66
BM Item 13(-)	.40	.72		.74
BM Item 14(-)	.72			.73
BM Item 15(-)	.68			.69
BM Item 16(-)	.47			.56
BM Item 17(-)	.74			.74
BM Item 18(-)	.78			.62
BM Item 19(+)			-.75	-.64
BM Item 20(+)		-.49	-.69	-.69
BM Item 21(-)	.63			.56

*Note.* 1 to 7, frequency, Never – Always scale; 21 items: 17 negative and 4 positive statements. Principle

Component, Varimax (6 iterations) rotation; three-factor solution for Eigen values greater than one explains 69% of the variance. Only loadings of .40 or greater are included.

**Table 8****Rotated Factor Matrix Scores & Item-Total Correlations for the Boudreau Burnout****Questionnaire (BBQ)**

Scale Items		Factor 1 E/E	Factor 2 (IN)C	Factor 3 (DE)P	Factor 4 Fat/Res	Corrected Item-Total Correlations
BBQ 1	(In)competence (-)	.63				.40
BBQ 2	Exhaustion/Energy (-)	.61				.50
BBQ 3	(In)competence (+)		.54			.37
BBQ 4	(De)personalization (-)				.42	.43
BBQ 5	(In)competence (-)			.42		.50
BBQ 6	(De)personalization (-)					.34
BBQ 7	Exhaustion/Energy (+)			.57		.39
BBQ 8	(De)personalization (-)	.46				.43
BBQ 9	Fatality/Resilience (+)					.21
BBQ 10	(In)competence (+)		.55			.38
BBQ 11	(De)personalization (+)				.54	.56
BBQ 12	Fatality/Resilience (+)	.52				.29
BBQ 13	Fatality/Resilience (+)	.52				.51
BBQ 14	Exhaustion/Energy (-)	.72				.71
BBQ 15	(In)competence (-)					.28
BBQ 16	Fatality/Resilience (+)	.43	.43			.44
BBQ 17	(De)personalization (+)		.67			.50
BBQ 18	(De)personalization (-)				.61	.40
BBQ 19	(In)competence (+)		.71			.38
BBQ 20	Fatality/Resilience (-)				.73	.27
BBQ 21	Exhaustion/Energy (+)			.53		.49
BBQ 22	Fatality/Resilience (-)	.63				.45
BBQ 23	Exhaustion/Energy (-)	.74				.70
BBQ 24	Exhaustion/Energy (+)	.64				.65
BBQ 25	Fatality/Resilience (+)			.42		.08
BBQ 26	Exhaustion/Energy (-)				.61	.29
BBQ 27	(In)competence (+)					.40
BBQ 28	Fatality/Resilience (-)			.62		.42
BBQ 29	Exhaustion/Energy (+)	.69				.77
BBQ 30	(In)competence (-)	.46		.42		.49
BBQ 31	(In)competence (+)		.51			.26
BBQ 32	Exhaustion/Energy (-)	.64				.63
BBQ 33	(De)personalization (-)				.67	.36
BBQ 34	Fatality/Resilience (-)	.45		.44		.45

**Table 8 (continued)**

**Rotated Factor Matrix Scores & Item-Total Correlations for the Boudreau Burnout**

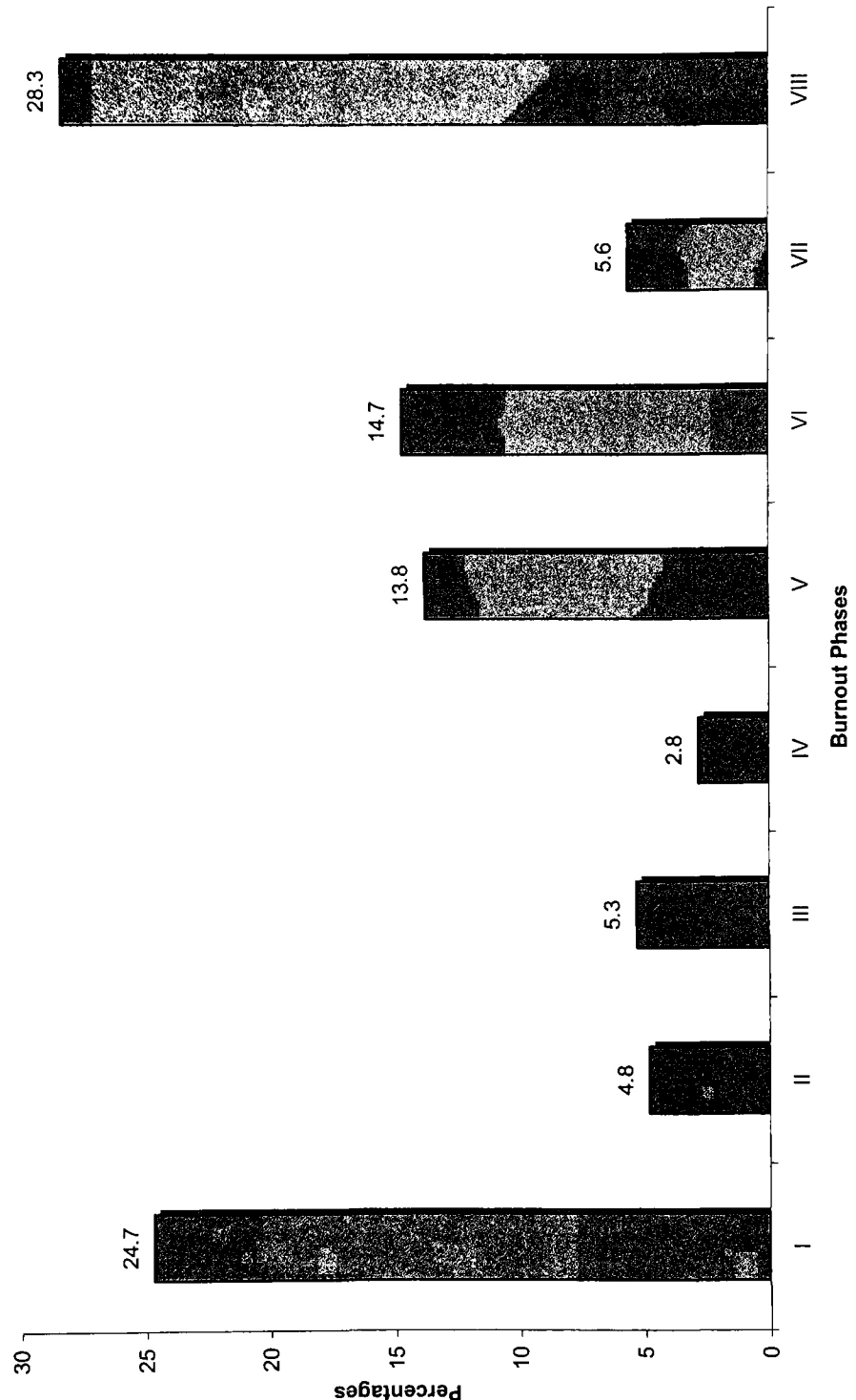
**Questionnaire (BBQ)**

Scale Items		Factor 1 E/E	Factor 2 (IN)C	Factor 3 (DE)P	Factor 4 Fat/Res	Corrected Item- Total Correlations
BBQ 35	Fatality/Resilience (-)	.53				.34
BBQ 36	(De)personalization (+)		.67			.48
BBQ 37	(De)personalization (+)		.75			.53
BBQ 38	(In)competence (-)			.58		.47
BBQ 39	(De)personalization (+)		.55			.44
BBQ 40	Exhaustion/Energy (+)	.63				.66

*Note.* 1 to 7, intensity, False – True scale; 40 items: 5 negative and 5 positive statements for each of the four burnout dimensions (Emotional Exhaustion/Energy, Incompetent/Competent, Depersonalization/Personalization, Fatality/Resilience). For purposes of the analyses presented here, all positive items were recoded so that a higher score for each question and each sub-scale indicates greater virulence or burning out.

Principle Component, Varimax (7 iterations) rotation; four-factor solution for Eigen values greater than one explains 44% of the variance. Only loadings of .40 or greater are included.

Figure 4. Alberta Physician Phases of Burnout, Universal Norms





**Figure 5. Phases of Burnout, Universal vs. Local Norms**

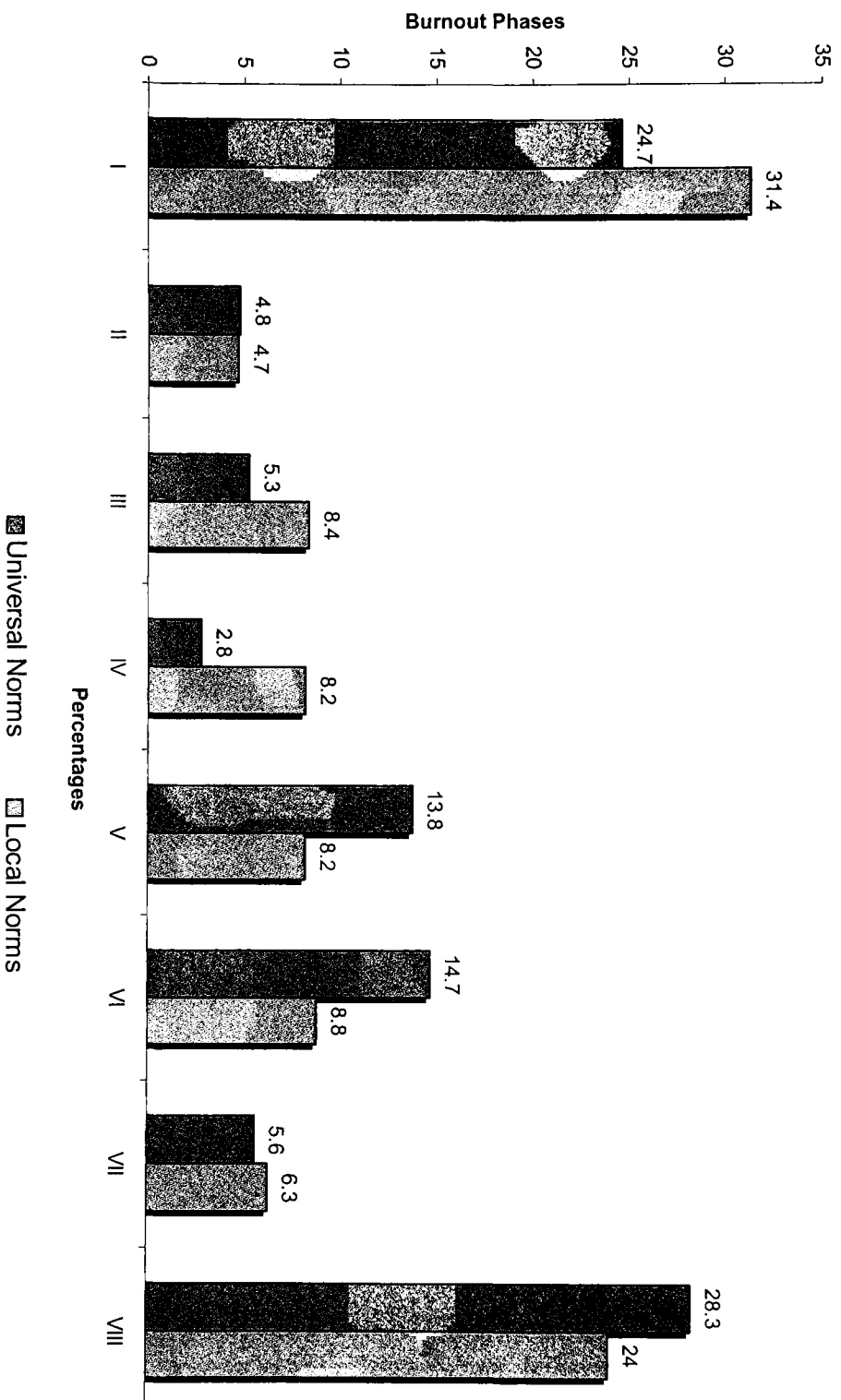


Figure 6. Tri-Phase Classification: Universal vs. Local Norms

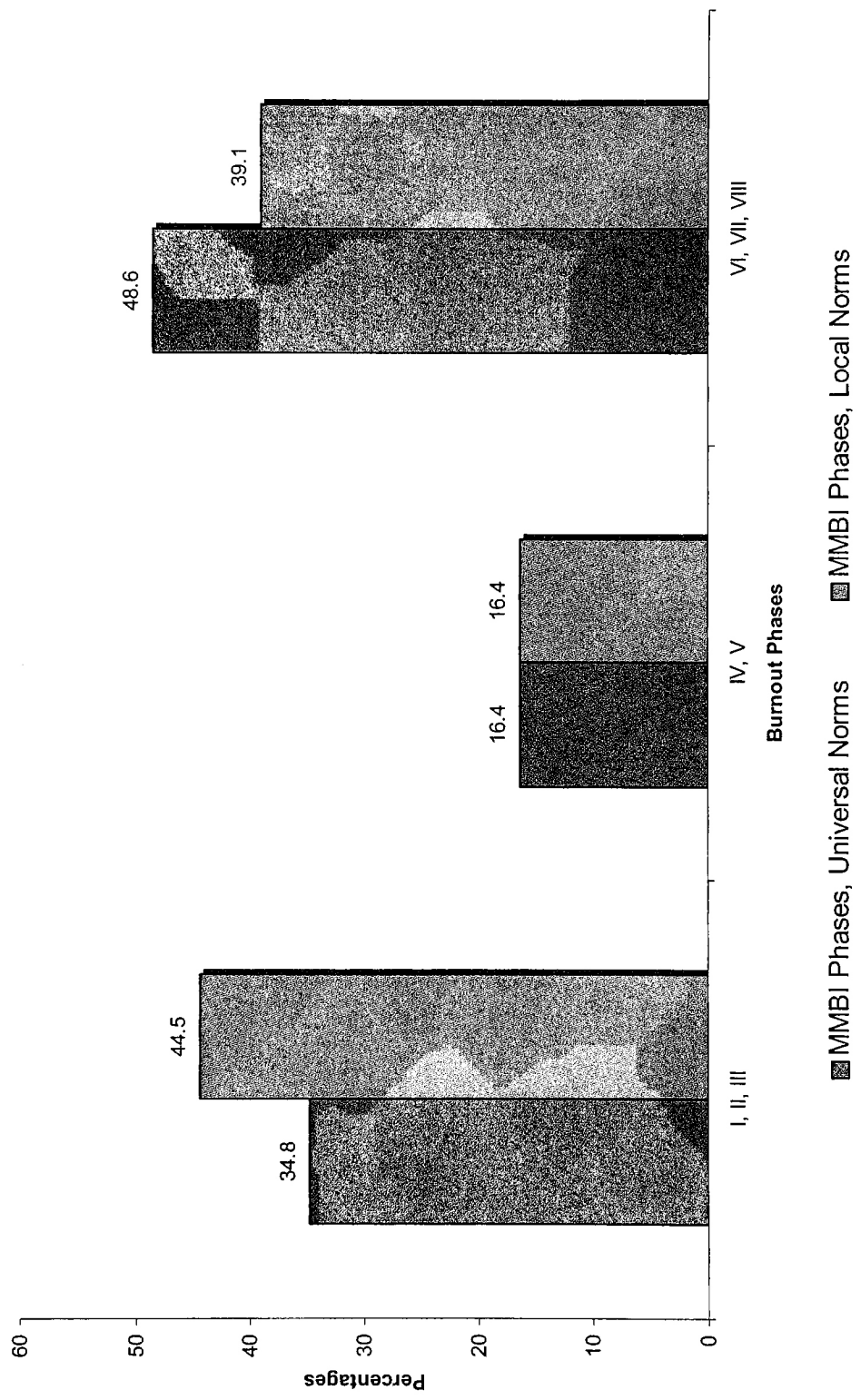


Figure 7. Burnout Phases by Survey Methods

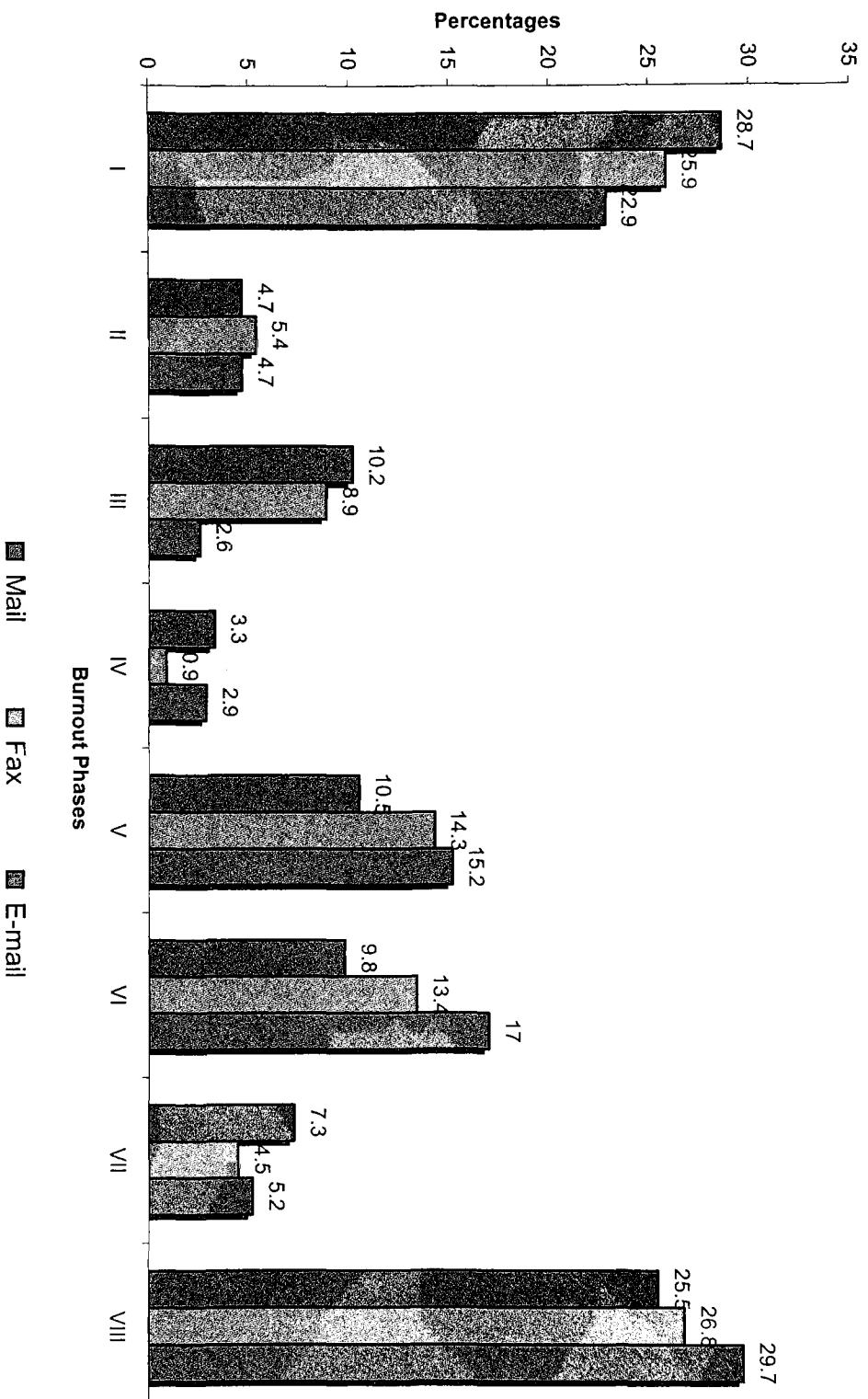
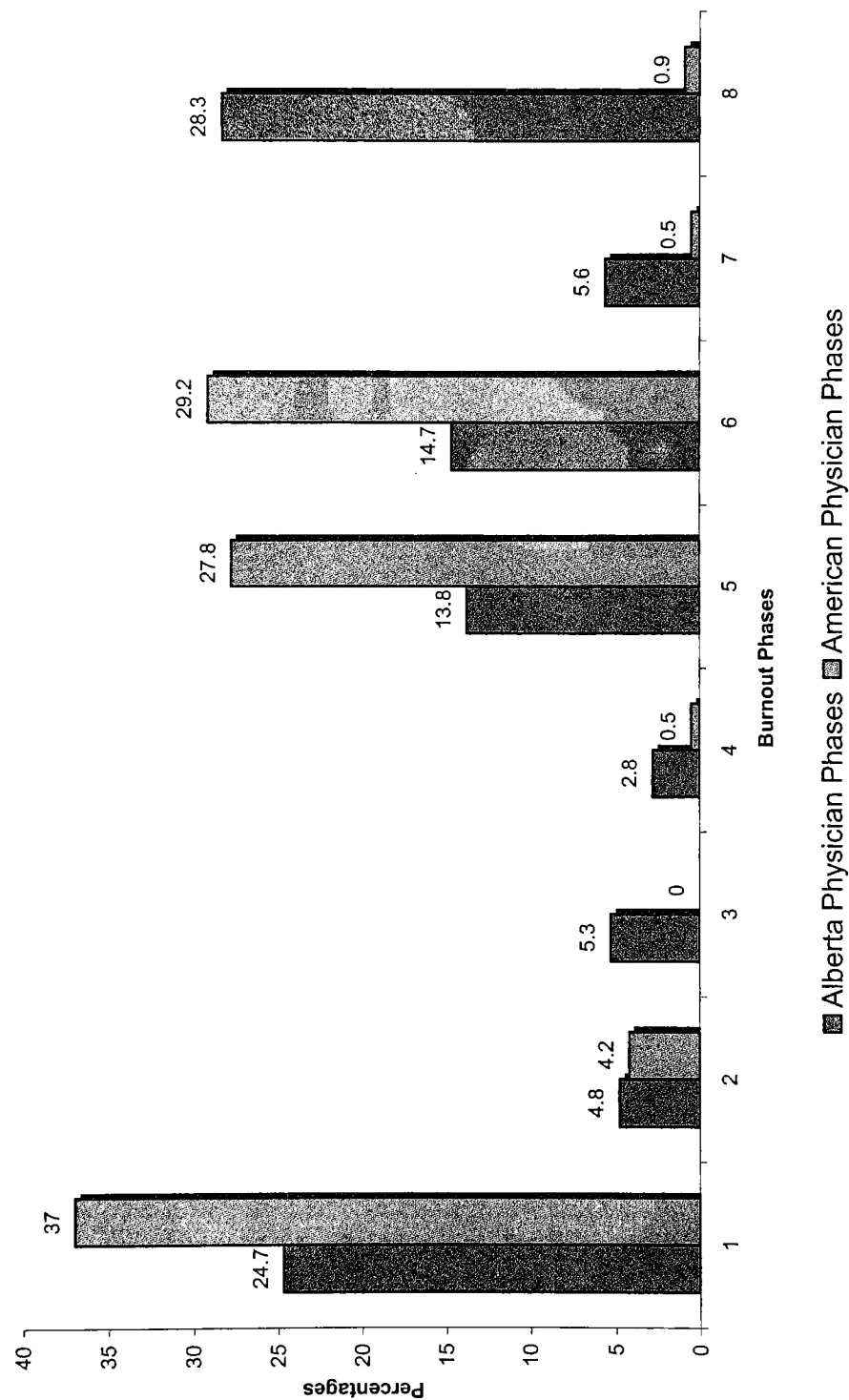


Figure 8. A Comparison of Albertan and American Physician Burnout Phases



Note. The source for American physician burnout phases ( $n = 254$ ) can be found in (Golembiewski & Deckard, 1994).

Figure 9. A Comparison of Alberta Physicians and Selected Health Care Workers

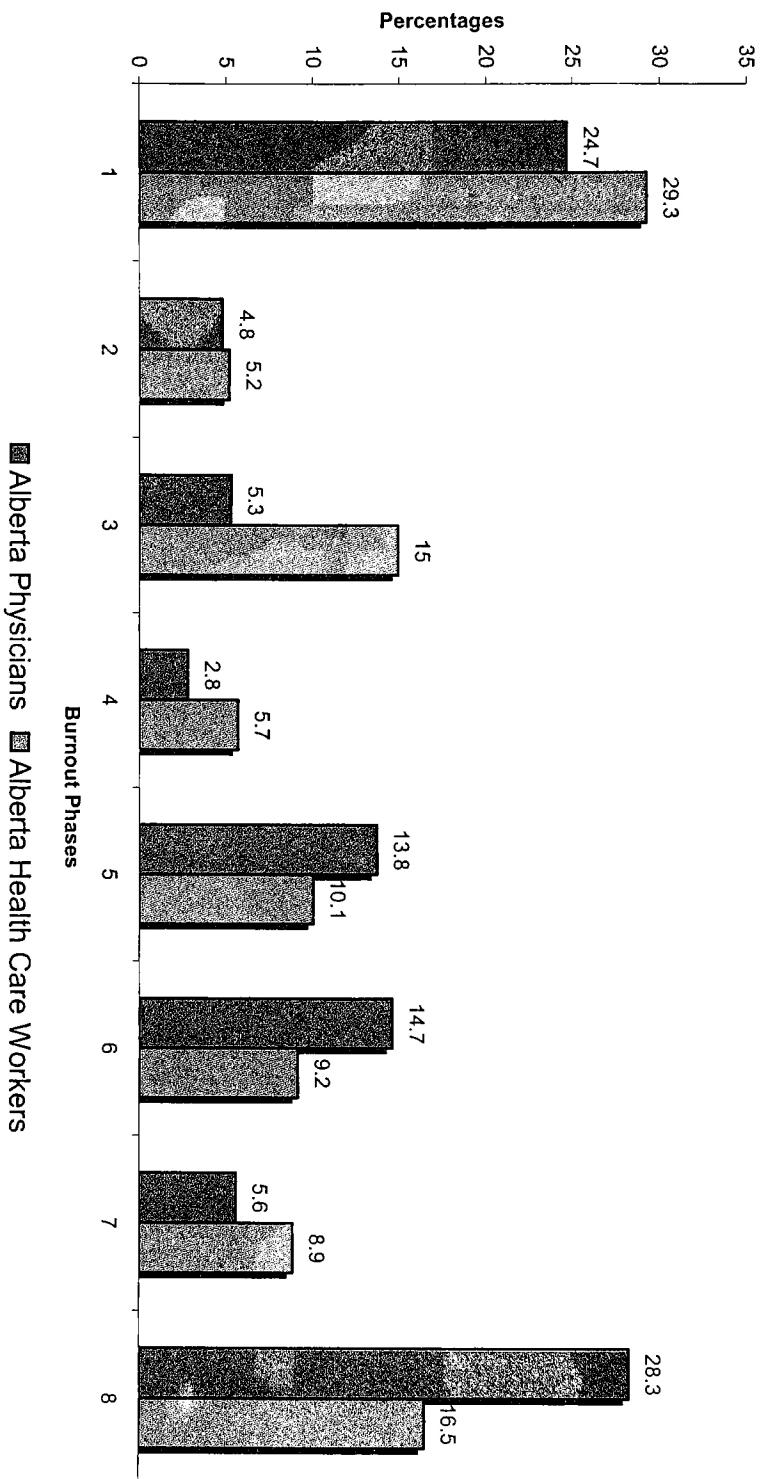
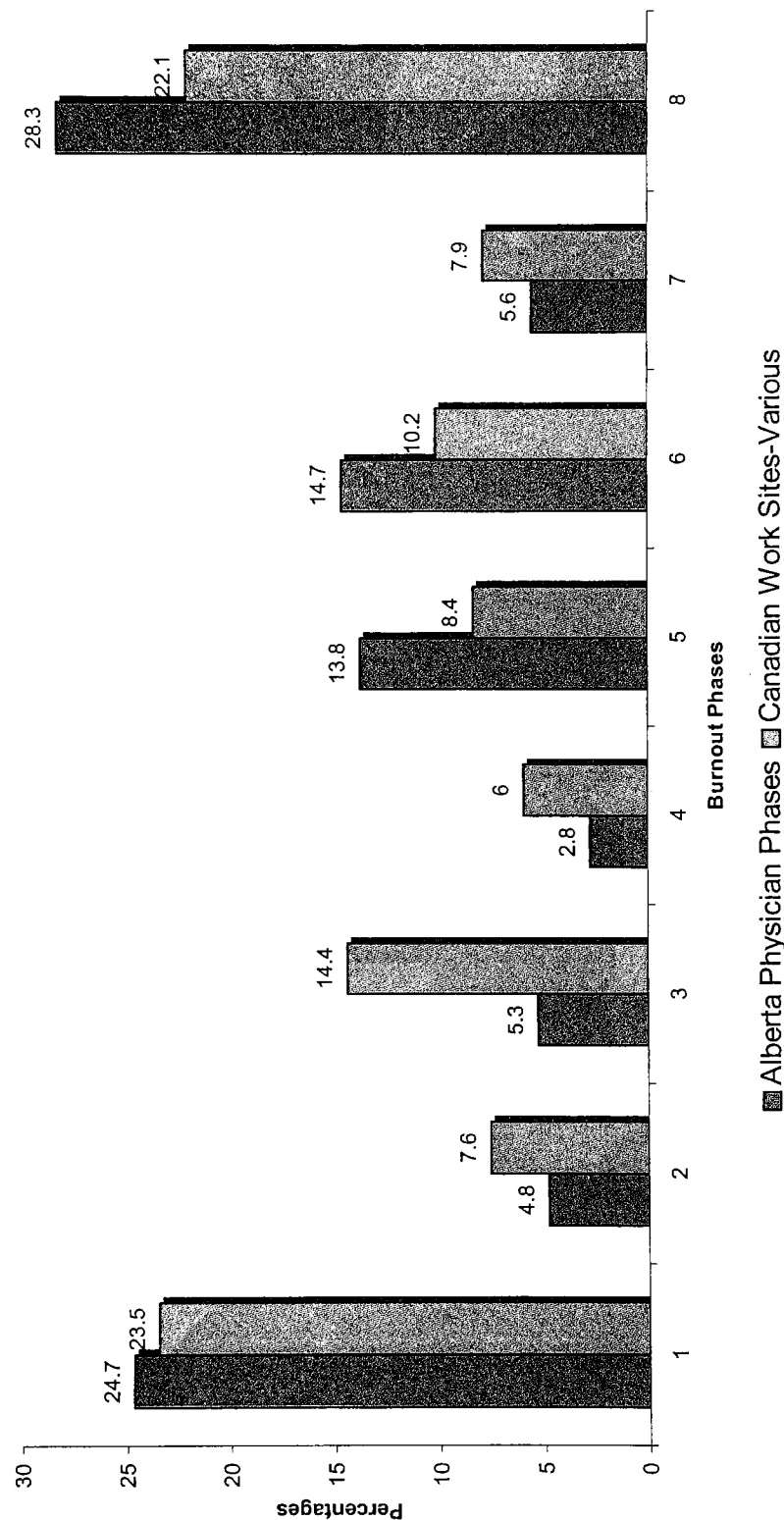
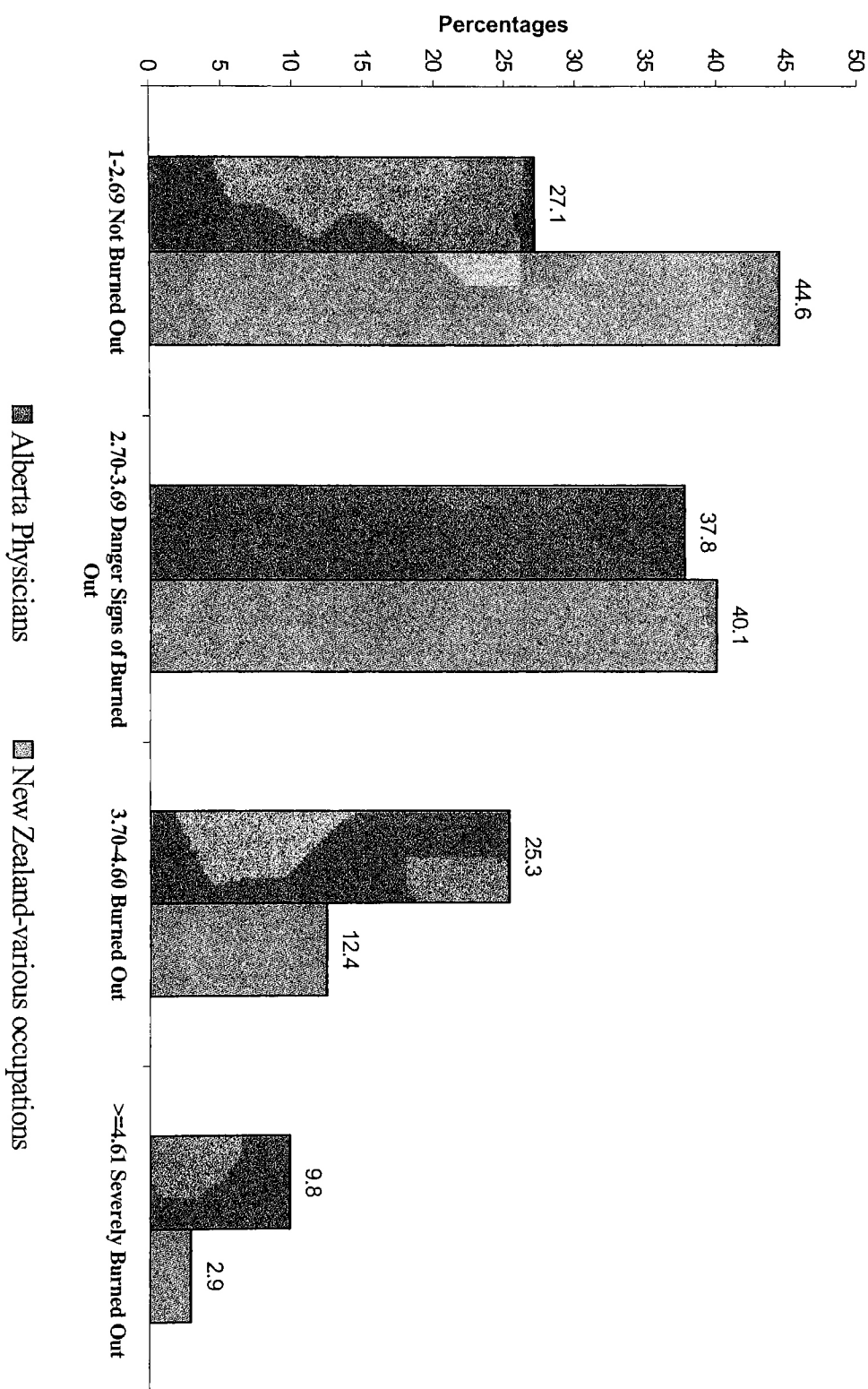


Figure 10. A Comparison of Alberta Physicians and Selected Canadian Workers



Note. Sources for selected Canadian worksites ( $n = 3526$ ) can be found in Golembiewski et al., 1996. These sites are listed as follows: F, G, I, O, P, Q, R, S, V, X, Z, AA, NN, QQ, RR, and site 7.

**Figure 11. Burnout Measure Scores: A Comparison Between Alberta Physicians and New Zealand Workers**



#### **IV. Discussion**

Two years ago I required four months off work for burnout. I learned a lot about myself...and returned to the workplace...I burned out again. This time, I don't think I will return to the workplace as a physician...Life is too short, and my family and I deserve my best, not just the leftovers of what I could give after I honestly did my best to be a good and caring physician.  
(Reference: 1 0316)

Through the support of various agencies including the Alberta Medical Association, the College of Physicians and Surgeons of Alberta, the Physician and Family Support Program, and the Rural Physician Action Plan, the present study investigated the prevalence and severity of burnout of Alberta physicians. A triangulation of sources including practitioners' and physicians' anecdotal experiences, available published literatures in management and medicine, along with the quantitative and qualitative findings from this study, suggests that Alberta physicians circa 2002 evidence some of the highest levels of burnout ever recorded. From these results it is clear, that if physicians are to continue to be a source of support and healing for their patients, then they must together with support agencies and government begin the serious task of "healing themselves."

Towards this end, the Discussion Chapter is divided into several sections including Physician Burnout Experiences, Methodological and Theoretical Considerations, Limitations, Future Research Directions, and Practical Choices. Each discussion section reflects a melding of quantitative results, available literatures, and physician voices.



### *Physician Burnout Experiences*

The findings from this study suggest that when compared with other occupations, worldwide, physicians, and specifically Alberta physicians, are sick and at risk. This is true whichever way you choose to measure the burnout experience. For example, with the MMBI, almost half of the doctors are in an advanced phase of burnout while according to the BM results, 72.9% of physicians are either showing *danger signs of being burned out*, are *burned out*, or *severely burned out*. These findings are further reinforced with the overall self-report measure of burnout result that 40 % of physicians are on the slippery slope to being *very burned out* (i.e., a score of 6, 7, 8, or 9 on the 9-point scale). Compared with similar studies on physician burnout (e.g., Burke, 1995; Freeborn, Schmoldt, Klevit, & Marton, 2001; Grunfeld et al., 2000; McManus et al., 2002; Sutherland, & Cooper, 1992; Velamoor et al., 2000), these results suggest that as an occupational group, physicians generally, are more at risk than any other kind of health care worker and that the plight of the job as physician is in fact worsening.

Workloads continue to climb and the number of the available medical staff to cope with the workload is going to diminish—physician burnout will only increase in the next 5-10 years. (Reference: 1 0043)

I've inappropriately criticized/lashed out at...staff when it hasn't really been their fault but it has been incredibly busy, requiring me to multi-task. I've cried with my office door closed after the gazillionth [person] has come in needing my assistance, interrupting my work, and not having realized how busy I am. (Reference: 1 0039)

Shift work...sleep poorly. Night shifts are very difficult to do now. Futility working in a system with a lack of beds, continuous backlog of patients, and unhappy families. Fast food mentality of society placing pressure on MDs to order tests with tomorrow seemingly not quick enough. Fellow staff burnout...miserable, disrespectful of one another as a phone call means more work...creating non-caring attitudes for patients' needs. (Reference: 3 0264)

I do not find my work stressful at all, even when things are going very badly. However, I do find my workplace stressful. I find the lack of integrity and professionalism within the profession very stressful and

disillusioning. I suspect I am not alone. (Reference: Anonymous personal communication, July 25<sup>th</sup> 2002)

In order to better understand the physician burnout experience, some discussion of the contributing reasons, symptoms, and strategies used by physicians to cope is presented next.

### ***Reasons Why Burnout May be Getting Worse?***

In the rich contextual accounts offered by physicians in this study, many reasons were given for why burnout is getting worse. Among these include, lack of government and agency support, information overload, peer review, malpractice suits, fee for service system, chronic patients, shift work, emergency overcrowding and bed shortages, expectation of volunteerism, memory problems, lack of friends, feelings of lost control over ones work, on-call duty, too many family commitments, pay inequities, managerial incompetence, computer technologies, poor equipment, gender conflict, and pace of work.

...I am not alone in feeling this way - in our profession, concern over litigation/ involvement in malpractice lawsuits ourselves may be one of our biggest, most recent, most unrecognized contributors to physician burnout (Reference: 1 0114)

Heated discussions with patients over inadequate resources, e.g., ability to get timely non-emergent consults, increasing demands to fill out others' referral forms, decreasing their work but increasing mine, coping with patients expectations of immediate results of treatment and access to diagnostic resources. (Reference: 1 0228)

Dealing with overcrowding issues and being the "safety net" for the system in the Emergency Department - we can NEVER say "no, we can't deal with any more" yet we are expected to run on fewer beds, fewer hospitals, sicker patients, a larger population, and fewer primary care physicians. (Reference: 1 0069)

My burnout experiences have been self-induced. They occurred when I did not realize I had control over my situation even though it was difficult choice I had to make. I have realized I have to control my schedule with respect to work; I need to be careful with my commitments to teaching, seminars, and office projects. I also have an extended family that supports me and gives me a different perspective. (Reference: 2 0074)

Many of these reasons as well as others have been documented extensively in both the popular and academic press (e.g., Adams, 2002; Doan-Wiggins et al., 1995). What is alarming is that they appear to be growing in frequency and intensity. Many of the doctors also noted that when it comes to burnout the “line” between work and home is often blurred and that the key is to try to strike a *balance* between the two.

The biggest contributor for burnout for me is the impossibility of balancing my feeling of obligation towards my patients, and my need for personal and family time, and the guilt that comes when that is sacrificed. There are few that would argue that delivering a baby, or caring for someone ill or dying in hospital is not a worthy endeavor, but when is it more important than missing an important event with your family. I feel guilty over the message that my children repeatedly get, “You’re the most important thing in my life, just not right now.” (Reference: 1 0705)

### ***Symptoms of Burnout***

As the environmental demands that tax or exceed our ability to cope, continue to increase in both frequency and intensity, the symptoms of burnout inevitably follow. For the sample of doctors in this study, these symptoms manifest in various behavioral, physical, and social forms including feelings of guilt, inability to concentrate, bullying, decreasing confidence, irritability, insomnia, swearing at pagers, snapping at nurses, anxiety, withdrawal from family and work, lack of libido, weight loss/gain, divorce, lack of enthusiasm, frustration, despair, and chronic migraines. The symptoms range from nuisance to life threatening.

Presently on antidepressants, have cut work hours spent seeing patients by 1/3 and # of patients per day by 60%. Have stopped hospital work due to symptoms. If survey conducted 1-2 years ago, answers would have been overwhelmingly pessimistic and negative. Ongoing symptoms for the past 6 years. (Reference: 3 0272)

I had a nervous breakdown...related to a variety of personal and professional stresses. (Reference: 1 0330)

Ultimately resorted to self-medication to treat stress and burnout. Attempted suicide. (Reference: 1 0373)

According to the doctors, these symptoms also manifest themselves in affecting patient care (Burke, 1995).

Call and associated fatigue are major contributors to burnout in my opinion. I'm always less focused, less patient, irritable etc., when sleep deprived. This also contributes to anxiety (i.e. errors, etc). (Reference: 3 0178)

There have been times when I know I am not as sharp as I should be and occasionally get things not quite right. (Reference: 1 0207)

[Burnout] common in physicians – makes them very dangerous. I have dealt with some. Burnout – not a DSM (IV) diagnosis and should be. (Reference: 3 0274)

### ***Dealing with Burnout***

Strategies for dealing with burnout are as varied as the symptoms and causes of physician burnout reported here (e.g., Huby, Gerry, McKinstry, Porter, Shaw, & Wrate, 2002; Rout, 1996). The variety of strategies identified in the qualitative comments covered the spectrum from good to bad—from medication, talk and cognitive therapy, early retirement, reduced hours, spiritual healing, leaving town, shared call, sleep, outside interests, and learning to say no, to substance abuse and even death.

I burned out years ago (about 10 years ago). Have had to take antidepressants for many years in order to cope and will do so as long as I am in practice. (Reference: 3 0285)

I am a recovering addict.... After...years in recovery I burned out and relapsed...I was impaired at work and have now found the true path of recovery. (Reference: 1 0454)

I was getting burnt out 5 years ago before I spent time away and returned motivated and continue working hard. (Reference: 3 0195)

My burnout prevention consists of:

- 1) Do what you want when you want
- 2) Don't overwork yourself
- 3) Stay away from all those fruitless...meetings
- 4) Don't take work home on holidays
- 5) Get rid of hostile, ungrateful, or confrontational patients
- 6) Continue to work while you still enjoy it and patients appreciate you and your work (Reference: 3 0281)

I have taken a year off from my practice with good results. (Reference: 20116)

As highlighted with this last quote, Grundfeld et al., (2000) report a link between burnout and a physician's inclination to leave medicine. This strategy may be effective for the individual doctor but may further exacerbate the problem of the doctor shortage, add to the pressures within the system, and ultimately impact on patient care.

Improving now with more rest, but was very low/tired/depressed last month or two. Have decided to give up [specialization] as a result of burnout. (Reference: 1 0236)

I have quit due to depression, 12 months ago, after gradually reducing workload to 6 hrs/week (one evening). Much happier. (Reference: 3 0261)

Developing an effective set of coping strategies may need to start at the earliest beginnings of the physician's career journey. Genevieve Campbell and Jason Roth (1997) suggest that all physicians learn about the bodies' response to stress in medical school and then it is usually forgotten or suppressed in order to meet the demands of work. This irony has not been lost by some of the participants in this study.

If it's any help: I just suffered a [life threatening health problem]. I'm at my ideal body weight, non-smoker, and normal lipid profile and blame it on stress. (Reference: 3 0153)

Getting help for me is a major problem, as I am...trained and can always see the strategies that the counsellors are adopting...Some days I feel a complete failure, and have moments of despair. Chronic fatigue is an ever present problem, and I don't think I actually get pleasure from anything. I have great respect for my fellow docs at the clinic. They have high standards, and I trust their medical skills and attitudes. I worry about one of them as she seems very distressed some days, and am supportive as I can be. I also feel that the reception staff are great people. It's difficult to give lots of compliments if you don't feel so good yourself. I think that if you have gone through a major burnout as a doc that you probably never recover. I mean you see too much suffering and death in the job. How can you ever come to terms with it? I recently had [a life threatening disease], nobody else in my family has ever had [this disease] before. Stress MUST have played a part. (Reference: 1 0611)

Having gained a greater appreciation of what the physician burnout experience is we can now turn to examine some of the more specific method and theory issues addressed in the present research project.

## *Methodological and Theoretical Considerations*

### *A Comment on Response Rates*

In Baruch's (1999) meta-content analysis of what constitutes an acceptable response rate, he suggests response rates of 36% +/- 13% are acceptable for a sample of MDs. There are several factors that probably served to lower the overall response rate of this study. For one, the study was done in the summer and consequently the vast majority of medical students (98.7%) did not participate. Other factors were mentioned by several of the participants.

Many of my colleagues said they did not have time to fill out the survey  
(Reference 1 0372)

I wonder what kind of bias the survey will have because of voluntary  
response to the questionnaire (i.e., would a burnt-out depressed person be  
less likely to respond?) (Reference: 3 0239)

I believe the response to this survey will be decreased...by the failure of  
anonymity through e-mail and fax returns. (Reference: 3 0287)

Overall, the response rates of 17.6% for all physicians and 22% for all practicing physicians are comparable to similar studies done in Alberta. Moreover, based on conversations with several stakeholders as well as comparisons with available population data, participants from this sample fit the general profile of the Alberta physician population at large (see Table 2 & 3 again).

### *Multi-Method Approaches*

**Response rates.** A multi-method approach was used in this study so that all the physicians in the province would be given the opportunity to complete the burnout survey. That is to say, while the AMA has e-mail addresses for the majority of physicians, it does not have them for all and for those exceptions the physicians were either faxed or mailed a copy of the survey. Interestingly enough, the response rate was higher for surveys filled

out electronically than for either the fax or mail methods used in this study. This contradicts Couper, Blair, and Triplett, 1997,(cited in Shaefer & Dillman, 1998) who report that mail and fax versions have a higher rate of response. Other possible advantages of using electronic surveys are increases in response rate timing (Mehta & Sivadas, 1995), candour of responses (Sproull, 1986 in Mehta & Sivadas, 1995), fewer data management errors, sample control, and significantly lower costs. Such benefits of electronic surveys must be juxtaposed with the possibility that method might impact on who and what participants say (e.g., sample coverage error).

*Sample coverage error.* Parker (1992) and Schuldt and Totten, (1994) have criticized electronic surveys for being limited to subscribers who are primarily people interested in technology and who are therefore typically not representative of most populations (Parker, 1992). This was probably not the case in this study. With rapid changes in technology within the field of medicine, the majority Alberta doctors are familiar with computer technologies, the Internet, and e-mail. However, in order to address any potential *sample coverage error* that strict e-mail usage may have created (Dillman & Tarnai, 1988), our multi-method approach to surveying allowed for those respondents who did not have access to e-mail to respond via other methods (i.e., fax & mail).

*A question of ethics.* As hinted at in the last quotation, a number of participants expressed concern about the anonymity of their responses, especially those sent as faxes. Every attempt was made to handle these in a confidential way.

*A question of method variance.* As part of the data management process, responses to each *question by method of return* were examined. For the most part, there

were some interesting albeit non-significant differences between responses by methods. As a result, method variance in this study was deemed to be minimal (cf. Figure 5 again in Results, p.30 for methods by phases comparison).

To sum up, there are always choices and compromises to be made when you are deciding on the appropriate methods (e.g., Stablein, 1996) of data collection and data sources. Some of specific concerns involved in the multi-method approach adopted here include questions of response rate, cost, sample coverage, ethics, and possible method variance. On balance, a multi-method approach (including e-mail and a web-based instrument) was the best for this study and probably should be considered in any future studies of physician health issues.

### ***Multiple Measures of Burnout***

This is a pointless exercise, and 5-10 years too late. A survey with a menu of solutions would be much more relevant. (Reference: 3 0058)

Your survey has ironically been a little therapeutic for me! Thank-you! (Reference: 3 0135)

The severe cuts in health care have severely affected doctors and their patients leading to stress and burnout. If your group would add a page of questions on this problem your survey would be valid. (Reference: 3 0147)

Largest source of work related stress is trying to balance family and work needs—this should have been addressed in this survey. (Reference: 3 0060)

Very good questions. Right to the point. Before the 1994 health care reform, I experienced all the symptoms asked in your questionnaire. (Reference: 3 0169)

Thanks for the opportunity to participate in this study—the results will be interesting! (Reference: 3 0204)

Are you totally fed up with long wishy-washy questionnaires? (Reference: 3 0286).

Perhaps a measure of burnout is that I resent the length of the survey and think there could be less repetition and so less call on my time. But you are doing something important! (Reference: 1 0617)



The multi-faceted nature of the burnout construct means it is difficult to conceptualize and measure. In an attempt to be as reliable and valid as possible, four different measures were used in this study. As indicated in the results, all four measures of burnout demonstrated high levels of reliability, convergent, and construct validity. The usefulness of multiple measures and vantage points for assessing burnout levels has been suggested in previous studies (Rafferty et al., 1986). In addition to arguing for the use of multiple measures in assessing physician burnout in any future studies several psychometric issues deserve attention here.

*Multiple items within measures.* Participating physicians had lots to say about the survey as is evidenced in the quotes above. Some were critical of its length, others of the type of questions asked (see Appendix A again), and still others of the amount of time it took to complete the survey. Although these criticisms, in whole or in part, may have had an influence on participants' responses, the validity and reliability of the measures used, and more specifically, the content adequacy of the questions was of paramount importance. To be sure of content adequacy, it is critical to ask many questions, especially in the case of a multi-dimensional construct like burnout. Schriesheim, Powers, Scandura, Gardiner, & Lankau, (1993) refer to the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education who all agreed that content adequacy was an essential psychometric property of any measuring instrument because inferences would be drawn from the administration of the instrument. It would therefore be vital that the sample of items contained in the measure be a representative sample of the content universe of the underlying theoretical construct. Goodfellow (2002) reports that the number of questions

used in a sample of 50 published burnout measures ranges from 1 to 47, with a median of 25 questions. Future study of physician burnout will need to include multiple questions to assess the various burnout dimensions and the apparent ambivalence between “the love for the work and the pressures to leave it.”

I love my work but it is getting more difficult to do. Expectations are high from patients. have even decreased my expectations of myself, which is difficult to do as my own high expectations got me to where I am. I am NOT doing the same high quality of work that I did when I started practice. Not all my phone calls get done by the end of the day etc. I struggle with not feeling that I have done as good a job as I would like to do at the end of each day. I don't like it. In the long run, people don't get the care they deserve because of this. Clinically, I am as sound as one can be in this ever expanding field of knowledge. Acute medical issues are dealt with to the best of my ability but the system lets me and my patients down. I called 15, no exaggeration, [specialists] to get [a patient] help with an unusual problem last week!!!...What do you do?  
(Reference: 1 0289)

Used to have a great deal of zeal and energy - that's gone. Period. Ask me to do another case - no thanks. I used to relish it. Ask me to do a consult at the end of the day, specifically asking me with my expertise; do I really have to? I used to really enjoy that involvement,- no more. Home at the end of the day - paperwork be damned, I'd rather sit in front of the computer and do something fun. In-tray is piled up...Overworked and underpaid... (Reference: 1 0260)

***Intensity and frequency scale responses.*** Two of the measures of burnout used in the present study (i.e., MMBI, BBQ) were originally developed using both frequency and intensity scales. In the present study only an intensity scale was used in these measures. The BM uses a frequency response scale while the overall self-assessment scale uses a 1-9 intensity, response scale (Rafferty et al., 1986). Generally speaking, studies have found minimal differences between the two types of response scale (see for example, Anderson & Iwanicky, 1984; Gaines & Jermier, 1983) although Boudreau (1998) reports factor analytic results suggesting that frequency responses may not be as robust as intensity responses using similar measures of burnout. Finally, Densten (2001) added that the intensity of feelings as opposed to the occurrence or frequency was more

critical when measuring burnout. All in all, any researchers interested in measuring physician burnout should be aware of not only *what is being asked* but just as importantly, what *type of response* is being asked for as well. Both will impact on the type and quality of data that is collected.

***Positive/negative questions and the BBQ.*** The MBI (in its various forms) and the BM are clearly the two most popular measures (Schaufeli & Enzmann, 1998) used in the research on burnout. The high levels of reliability and validity of the BM and MMBI found in the present study have been reported in many previous studies as well. The MBI's usefulness as a measure of physician burnout has also been supported in previous studies by Burke (1995), Grunfeld et al., (2000), and McManus et al., (2002). However, these popular measures are not without their problems. For one the BM is really a uni-dimensional instrument (e.g., emotional exhaustion) trying to measure a multi-dimensional construct. As well, the MBI in its various forms (i.e., Human Services Survey, Educators Survey, General Survey) has been developed using cultural-specific colloquialisms, and fewer questions with little regard for balancing positive and negative questions across the three dimensions being measured. For example, in the MMBI, all the *Depersonalization* and *Emotional Exhaustion* questions are worded negatively while the *Personal Accomplishment* questions are all positive. No one has really asked whether that serves to bias responses. Recently Maslach and others (e.g., Maslach, Jackson, & Leiter, 1996; Maslach, Schaufeli, & Leiter, 2001, & Maslach, 2001)) have begun to acknowledge the flip side of the burnout coin. However, this is done more at the conceptual and not at the methodological and measurement levels. In an attempt to deal with these shortcomings, the BBQ (Boudreau, 1998) was used in this study. From all

appearances, the BBQ appears to offer a viable and improved substitute to the MBI and BM as both a measure of burnout and as a means of classifying individuals using the Phase Model Approach. As far as the present research focus is concerned, the next generation of the BBQ used to study physician burnout must also include items about family and work as well as job-specific questions (e.g., on-call, litigation, payment systems).

Much of my perception of burnout is altered by the fact that I am a widow(er) with young children. It is hard to know how much of burnout is due to work or how much it relates to my personal situation. (Reference: 1 0310)

Most of my answers apply to work but some are influenced by home problems and I wasn't sure if you wanted us to separate them... (Reference: 1 0197)

### ***Phase Model Approach: Issues of Structure and Process***

In addition to methodological considerations, the results of this study have relevance for future theory development in the study of burnout. The *Phase Model* approach identifies three separate dimensions of burnout --depersonalization, lack of personal accomplishment, and emotional exhaustion. In describing their individual burnout experiences, physicians time and time again made reference to these dimensions. Here is a sampler of these physician voices.

*Depersonalization*—We work with such a load and at such a pace that we have no choice but to disengage from our patients a significant amount of the time. It is not a reaction but a necessity. There is also a sense of hopelessness that comes from continued “promises” from administration with persistent failures. It is clear that we are “replaceable”; not a concept that promotes “buy-in” and a strong desire to “remain involved.” It is interesting to note that with the increased workload, there is an equal decrease in the social contact with co-workers, such that new co-workers and co-workers leaving are no longer celebrated in their arrival or their departure, - they merely come, or are replaced. As we drop these “social bits and pieces,” we continue to provide the best possible care under increasingly difficult circumstances, but the weave of the fabric of medicine is thinning significantly and I fear the majority are not aware – many just don’t have time to care. Enough. (Reference: 1 0699)

*Personal Accomplishment* (rev)—I have been in practice for over twenty years and have not been subjected to the intensity and chronicity of stress that I currently encounter. Although an increasing workload is a factor, a more significant component is a sense of lack of control over working conditions and the ability to arbitrate between conflicting demands that need attention. The consequence is a feeling of faded accomplishment and indifference from colleagues. (Reference: 3 0216)

*Personal Accomplishment* (rev)—I am far less ambitious in my career, happy with the status quo and have no desire to move on. However there are a number of accomplishments I would like to achieve at work in the next few years. Life is very pleasant at the moment – good health, good income, good lifestyle. My...children are a real source of pride for me. They are my greatest accomplishments. All those years of juggling work, exams, and family has paid off. (Reference: 2 0001)

*Emotional Exhaustion*—The main problem is a lack of adequate resources. We do mainly crisis intervention as a result, which is very physically and emotionally exhausting. (Reference: 3 0166)

*Emotional Exhaustion*—I feel burned out physically...but I have never felt burned-out emotionally and feel optimistic and useful. (Reference: 3 0164)

The numbers and descriptions of underlying dimensions of burnout continue to be debated in the academic literature. In her study of measures, Goodfellow (2002) identifies a range of one (e.g., Pines, & Aronson, 1988) to eight (e.g., Emener, Luck, & Gohs, 1982) dimensions. The BBQ used in the present study (cf. MMBI) proposes four dimensions: (De)personalization; (In)competence; Energy/Exhaustion; Fatality/Resilience. All of this suggests that the Phase Model in its present form may need to be expanded. Whether this expansion involves moving from eight dimensions to twenty-four dimensions or some number in-between is really only speculation at this time. Any proposed changes in the Phase Model from its present form must reflect a balance of the theoretical and practical. It is interesting to note that the AMA and the Physician and Family Support Program have used an approach by Helliwell (1998) that describes burnout as a syndrome consisting of three stages.

Finally, in addition to questions of structure and how many burnout dimensions there may be, we should also consider the question of process or movement through

burnout stages or phases. This is certainly a contentious issue in the published literature (cf., Leiter, 1989) and many qualitative comments offered by the doctors spoke to their own of progression and escalation of burnout. Unfortunately due to the cross-sectional (cf., longitudinal) design of the present study, not much more can be said about the movement across the phases of burnout at this time. However, that doesn't mean it is unimportant!

In retrospect, the present chapter has served to provide information on the burnout experiences of physicians as well as the methodological and theoretical considerations via the quantitative results, available literatures, and the voices of Alberta physicians. So where do we go from here? In effect, I will end this discussion with some treatment of a couple of limitations of the present study, suggestions for future research, and practical choices.

### *Limitations of the Research*

- i. Due to the scope of this study, little attention has been given to how demographic groups (e.g., men vs. women; rural vs. urban; family practice vs. other specializations) might differ in terms of their burnout levels. More specifically, their *depersonalization*, *emotional exhaustion*, and lack of *personal accomplishment* levels. Such comparisons will be left for future presentations and publications.
- ii. Many potential participants from the primary population sample ( $n = 6,885$ ) stated various reasons for not participating in the survey. Some physicians commented on being asked to complete other surveys during the same time period. Others commented on the length of the survey, as

the typical time for filling out the survey was approximately 15-20 minutes. An additional factor limiting the response rate was running the study during the summer months.

### *Future Research Directions*

The present study was extremely large in scope. Beyond this study's immediate focus on the prevalence and severity of Alberta Physician burnout, several possibilities for future research seem more obvious than others.

- i. Addressing the issue of *methods* of surveying is a study within this study. A comparison of e-mail/web, fax and mail methods and results would certainly be valuable for any future research faced with multi-method choices.
- ii. The present study used survey data of a quantitative nature. However, there was a qualitative comment section as well which subsequently was not formally analyzed for themes and incorporated into the present study due to time constraints. Analyzing this rich data and establishing patterns and links with the quantitative results would be valuable to researchers, practitioners, and physicians alike.
- iii. a. The present study has longitudinal potential. Recently in Canada, key stakeholders (e.g., physicians, government, regional authorities, decision-makers in healthcare facilities, medical schools, Deans, faculties of Undergraduate and Postgraduate programs, program directors, representatives for national, provincial, & territorial medical organizations) have pointed their attention towards the need for improving

physician health and healthcare in general. Revisiting the present study at a later time after attempts have been made to improve the current healthcare situation will provide a wealth of baseline information that may lead to areas where action taken has or has not been successful.

b. In terms of the Phase Model and looking at the progression of burnout phases, it would be beneficial to begin serious consideration of designing longitudinal and not just cross-sectional studies.

iv. Assumptions outside the system and those within need to be challenged. Dialogue in its various forms needs to be encouraged.

This is a cop-out. No need for burnout. Doctors here seem to be a bunch of grumblers. (Reference: 2 0052)

I think that we will see the term 'burn out' more and more, primarily used as a cop out for wanting to have more money for less time and effort put in to one's profession. Actually, as I spout off here, I feel that I am starting to sound a bit cynical, so I think that I should stop. (Reference: 1 0249)

Related to the above quotes provided by two Alberta doctors it would be interesting to do a study on burnout levels and the associated physical manifestations. That is, to scientifically measure levels of stress hormones (e.g., epinephrine) in individuals who have indicated high levels of burnout in this and other stress and burnout studies.

Perhaps this may be the kind of concrete evidence people need to believe in the negative impacts that burnout has on our society and on the profession of doctoring.



### *Practical Choices*

Moving from the “So what?” to the “Where to now?” questions, comment on some practical choices will conclude this chapter.

What is needed is a diagnostic understanding of what the phenomenon of burnout is. The present study has served to examine physician burnout in Alberta. What about the rest of Canada? In order to get a sense of where Alberta physicians stand in relation to those of the rest of the country, a nation-wide study on physician burnout is needed.

At the individual level, programs are needed to provide support for physicians. Existing programs need to be maintained and sustained and perhaps new ones created. In essence I am saying, “physician heal thyself” by healing each other. Provide incentives for physicians to form support groups. Dealing with stress is not as difficult when one knows that there are others who are feeling the same way. If the status quo remains however, then the primary strategy for dealing with burnout will involve various forms of avoidance (e.g., time-off from the job, using locums, leaving the profession entirely).

I’m taking a leave of absence. I would like to quit medicine.  
(Reference: 2 0087)

Note: This [referring to burnout survey answers] was true as of mid-march. The feelings were so overwhelming that I have been on a leave of absence since and will probably not return to clinical work.  
(Reference: 3 0073)

And if the strategy of choice remains avoidance (in its various forms), this creates a further shortage of doctors, which in turn creates more work for those that are left, resulting in added stressors and eventually burnout, which ultimately impacts on patient care. If we are really worried about patient care then we must worry about the care and health of physicians as well. These are inexorably connected.

The results of my answers are a reflection of my having corrected a near burn-out period in my career about 2 years ago. I have moved

from a position with little authority but complete accountability to superiors with little responsibility and competency (i.e., the “Dilbert Syndrome”); to a situation where I have more control over my professional and personal life. One cannot continue to be stressed from unfinished work and expectations, unrealistic on-call hours, and regular working days that included week-ends without it having a negative effect on family life and professional stamina. *My current arrangement is still far from perfect, but includes leaving my shift without expectations outstanding, having no on-call hours, and complete protection of week-ends, stat holidays, and family events. The problem with this life correction is that if all physicians began moving in this direction, the current health care system would collapse. The reduced availability of physicians in Canada may be an early symptom of such a trend.* [Italics added] (Reference:1 0661)

At the support systems and government levels, the problem of physician burnout and the need for more resources also needs to be acknowledged. Different ways to address this doctor shortage are required (e.g., alleviate the difficulties that international medical graduates face when trying to come to Canada to practice). Acting on greater financial support is imperative (e.g., help physicians out with their huge debts after medical school to help them have a better start with their careers).

The system requires fundamental change in the manner in which health care providers are expected to work and are treated in society. Methods of remuneration should be stable and reflect the investment of years of schooling (i.e., unpaid labour & student loans), and encourage time for providers to renew their profession (e.g., paid time for new skills training, applied research, or alternate activities such as dedicated physical activity). As physicians age and/or become more empowered due to their decreased availability, decision makers will really need to create a working environment that promotes a positive and sustainable experience. Otherwise, increasing numbers of physicians may tune out without a contingency in place. Hopefully, this survey will help policy makers in making sound and effective changes to health human resources in Alberta. However, I remain a depreciating optimist on the last point. (Reference: 1 0661)

Until such measures are taken, physicians are left with bleak hope, and with that, perhaps the only attractive hope is one of retiring.

Have been working in high intensity...environment for years. Am tired and need a change of life. RETIRING...YI-HA!! (Reference: 3 0072)

This last quote clearly indicates a very effective individual strategy for dealing with burnout. Unfortunately unlike most doctors in this province, leaving is not an option at this time. But that may change.

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**Appendix A**  
**Physician Stress and Burnout Survey**



# Physician Stress and Burnout Survey



## Current Demographic Information

Your gender: \_\_\_\_\_ Female \_\_\_\_\_ Male

Your age: \_\_\_\_\_ years

Are you?

1 Married/Common Law \_\_\_\_\_ 2 Single \_\_\_\_\_ 3 Divorced \_\_\_\_\_ 4 Widowed \_\_\_\_\_ 5 Separated \_\_\_\_\_

How many children/dependants do you have living with you? \_\_\_\_\_

What describes you best?

\_\_\_\_\_ Practicing Physician (e.g., clinical, lab, administrative, teaching) 1

\_\_\_\_\_ Retired Physician 2

\_\_\_\_\_ Resident 3

\_\_\_\_\_ Medical Student 4

Are you an international medical graduate? Yes \_\_\_\_\_ No \_\_\_\_\_

Are you a: Specialist \_\_\_\_\_ Non-specialist \_\_\_\_\_

If specialist, select your primary area from the list below (please check only one)

- |                                     |  |
|-------------------------------------|--|
| 1. Anesthesia _____                 | 15. Neurology _____                          |
| 2. Cardiology _____                 | 16. Obstetrics & Gynecology _____            |
| 3. Community Health _____           | 17. Occupational Medicine _____              |
| 4. Diagnostic Imaging _____         | 18. Ophthalmology _____                      |
| 5. Emergency _____                  | 19. Orthopedics _____                        |
| 6. Endocrinology & Metabolism _____ | 20. Pediatrics _____                         |
| 7. Family/General Practice _____    | 21. Physical Medicine & Rehabilitation _____ |
| 8. Gastroenterology _____           | 22. Psychiatry _____                         |
| 9. Infectious Diseases _____        | 23. Radiology _____                          |
| 10. Intensive Care _____            | 24. Respiratory Medicine _____               |
| 11. Internal Medicine _____         | 25. Rheumatology _____                       |
| 12. Laboratory _____                | 26. Sport Medicine _____                     |
| 13. Medical Examiner _____          | 27. Surgery (General & Specialized) _____    |
| 14. Mental Health—general _____     | 28. Urology _____                            |

What is the population size of the community you work in?

- 1 Less than 5,000 \_\_\_\_\_
- 2 5,001 to 15,000 \_\_\_\_\_
- 3 15,001 to 100,000 \_\_\_\_\_
- 4 Greater than 100,000 \_\_\_\_\_

Do you have hospital privileges? Yes \_\_\_\_\_ No \_\_\_\_\_

What is the main form of payment for your work?

- 1 Fee for Service \_\_\_\_\_ 2 Salary \_\_\_\_\_ 3 Alternate Payment Plans \_\_\_\_\_ (e.g., capitation, contract)

Do you consider yourself working mostly:

Solo \_\_\_\_\_ In a group \_\_\_\_\_

If you have checked *group*, please indicate the primary type of group setting you work in.

- 1 Associations \_\_\_\_\_
- 2 Community Health Centres \_\_\_\_\_
- 3 Family Practice Clinics \_\_\_\_\_
- 4 Multi-Specialty Clinics \_\_\_\_\_
- 5 Partnerships \_\_\_\_\_
- 6 Other, please specify \_\_\_\_\_

What is the distance from your office to the closest referral centre? \_\_\_\_\_ kms

How many hours per month do you work in medicine...

...on call from home or hospital \_\_\_\_\_ hrs per month  
...doing clinical work including patient files \_\_\_\_\_ hrs per month  
...doing administrative work \_\_\_\_\_ hrs per month  
...teaching \_\_\_\_\_ hrs per month  
...Other (please specify) \_\_\_\_\_ hrs per month

Number of years in practice \_\_\_\_\_

Number of years in present position \_\_\_\_\_

Number of years in present work location \_\_\_\_\_

## Physician Stress and Burnout Survey—Measure 1

The following 40 statements refer to experiences in your work and in your job.

Using the 1–7 rating scale, circle the most appropriate number based on the degree to which that statement is **currently** FALSE or TRUE for you. A “1” indicates that the item is completely FALSE and untrue about you. A “7” indicates that the statement is absolutely TRUE for you.

Do not spend too much time in answering the statements. Your first response is generally your best response.

	FALSE						TRUE
	1	2	3	4	5	6	7
1. I am tired of having to solve other peoples’ problems.	1	2	3	4	5	6	7
2. I wish I could relax more.	1	2	3	4	5	6	7
3. I believe I am helping build a better life for others through the work I do.	1	2	3	4	5	6	7
4. I treat people as objects or things to be manipulated in the workplace.	1	2	3	4	5	6	7
5. I have trouble living up to others’ expectations.	1	2	3	4	5	6	7
6. I routinely compromise the quality of my work.	1	2	3	4	5	6	7
7. I handle work pressures better than most.	1	2	3	4	5	6	7
8. I feel alienated and detached from my co-workers.	1	2	3	4	5	6	7
9. People who work with me are concerned about my well being.	1	2	3	4	5	6	7
10. I empower others to succeed.	1	2	3	4	5	6	7
11. I feel comfortable with the way I treat others in the workplace.	1	2	3	4	5	6	7
12. The quality of Canadian work life is improving.	1	2	3	4	5	6	7
13. I am comfortable with the person I have become.	1	2	3	4	5	6	7
14. Work has become a real struggle for me.	1	2	3	4	5	6	7
15. At times, the constant change in available information and technologies interferes with my ability to get the job done.	1	2	3	4	5	6	7
16. I am excited about the prospect of new challenges that lie ahead.	1	2	3	4	5	6	7

	FALSE						TRUE
	1	2	3	4	5	6	7
17. I readily acknowledge the contributions of my co-workers.	1	2	3	4	5	6	7
18. I wish I was more tolerant of others in my job.	1	2	3	4	5	6	7
19. I try to encourage and support a collaborative work culture.	1	2	3	4	5	6	7
20. I regret many of the things I have said and done to others on the job.	1	2	3	4	5	6	7
21. I maintain a consistently high energy flow throughout the workday.	1	2	3	4	5	6	7
22. I feel a career change is long overdue.	1	2	3	4	5	6	7
23. I am still tired, even after a vacation or break away from work.	1	2	3	4	5	6	7
24. I am living a rich, full life and not just surviving in my work.	1	2	3	4	5	6	7
25. The organization would have difficulty surviving without me.	1	2	3	4	5	6	7
26. I regularly have emotional outbursts at work.	1	2	3	4	5	6	7
27. All who work with me appreciate the consistent effort I bring to the job.	1	2	3	4	5	6	7
28. Compared to others, I am a failure.	1	2	3	4	5	6	7
29. I feel refreshed and alert.	1	2	3	4	5	6	7
30. I lack the desire and creativeness to complete many tasks.	1	2	3	4	5	6	7
31. I can sense when other workers are having difficulties.	1	2	3	4	5	6	7
32. At the end of the workday I simply have nothing left to give.	1	2	3	4	5	6	7
33. I have acted in an unprofessional manner towards others in the workplace.	1	2	3	4	5	6	7
34. I am weak and unable to cope anymore.	1	2	3	4	5	6	7
35. I feel betrayed by those in charge.	1	2	3	4	5	6	7



	FALSE						TRUE
	1	2	3	4	5	6	7
36. I enjoy working on a team.	1	2	3	4	5	6	7
37. I really do care about my co-workers.	1	2	3	4	5	6	7
38. At times, I question my own competence and wonder about my ability to continue to do the job.	1	2	3	4	5	6	7
39. Working with people is exhilarating for me.	1	2	3	4	5	6	7
40. I really enjoy the prospect of getting up and going to work every day.	1	2	3	4	5	6	7

## Physician Stress and Burnout Survey—Measure 2

The next 23 statements refer to **YOUR REACTIONS TO YOUR WORK**. For each statement, write a **NUMBER** in the blank to the **LEFT**, based on the **DEGREE** to which each statement is **LIKE** or **UNLIKE** you. Make certain you use **LOW** numbers to describe statements which are **UNLIKE** you, and **HIGH** numbers to describe statements **LIKE** you.

	Very much UNLIKE me	1	2	3	4	5	6	7	Very much LIKE me
_____ 1.									
_____ 2.									
_____ 3.									
_____ 4.									
_____ 5.									
_____ 6.									
_____ 7.									
_____ 8.									
_____ 9.									
_____ 10.									
_____ 11.									
_____ 12.									
_____ 13.									
_____ 14.									
_____ 15.									
_____ 16.									
_____ 17.									
_____ 18.									
_____ 19.									
_____ 20.									
_____ 21.									
_____ 22.									
_____ 23.									

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## Physician Stress and Burnout Survey—Measure 3

How often do you have any of the following experiences? Please use the 1 to 7 scale given below for your responses to the 21 statements.

	1	2	3	4	5	6	7
	Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always
_____ 1.							
_____ 2.							
_____ 3.							
_____ 4.							
_____ 5.							
_____ 6.							
_____ 7.							
_____ 8.							
_____ 9.							
_____ 10.							
_____ 11.							
_____ 12.							
_____ 13.							
_____ 14.							
_____ 15.							
_____ 16.							
_____ 17.							
_____ 18.							
_____ 19.							
_____ 20.							
_____ 21.							

## Physician Stress and Burnout Survey—Measure 4

"Think of yourself over the past six months keeping in mind the following definition of burnout: the tendency for committed physicians to lose enthusiasm for their work and to become less effective in managing the stress of emotional contact with patients. Symptoms may include some or most of the following—fatigue, withdrawal from patients and colleagues, cynicism, irritability, difficulty relaxing off work, physical manifestations of anxiety and depression, and feelings of diminished enthusiasm and effectiveness at work."

Now rate yourself as to how burned out you feel you are from 1 to 9.

Not at all  
Burned Out

Very Burned Out

1

2

3

4

5

6

7

8

9

"Modified from the Overall Self-Assessment of Burnout by Rafferty, Lemkau, Purdy, & Rudisill 1986)."

Comments on your *burnout experience(s)* Etc

## **Appendix B**

### **Covering Letters**



CMA Alberta House  
12230 106 Ave NW  
Edmonton AB T5N 3Z1

Email  
amamail@albertadoctors.org  
insurance@albertadoctors.org  
Website [www.albertadoctors.org](http://www.albertadoctors.org)

June 20, 2002

Telephone (780) 482-2626  
Fax (780) 482-5445  
Membership Benefits  
1-800-272-9680  
24-hour Message Line  
1-800-232-7294

Dear Alberta Physicians:

We often hear from physicians that they are experiencing significant stress in their personal and professional lives. The Alberta Medical Association's (AMA) Physician and Family Support Program (PFSP) and Dr. Robert Boudreau, from the Faculty of Management, University of Lethbridge, have developed a research study to determine the prevalence of stress and burnout among Alberta physicians.

Dr. Boudreau, the principal investigator on the study, has been studying and writing about burnout around the world for over 15 years. Working with Dr. Boudreau are co-investigators Dr. Robert Wedel, a family physician from Taber, and PFSP staff.

Please take 20 minutes to participate in the survey, which includes demographic questions and four self-report measures of burnout. The four measures will allow us to validate this research against prior research findings. **Deadline for survey returns is July 17.**

Your participation in this study is completely voluntary, confidential and anonymous, and will contribute to a better understanding of the incidence and effects of stress on our physician population. Better understanding of the issues will assist us in planning for appropriate prevention, assessment and treatment of problems.

Although the results of this study may be presented or published, only aggregate, summary information will be reported. Individual anonymity will be completely preserved. The data may also become part of a future national study on physician burnout. A summary of results will be posted on the AMA website by September 30.

This study has been considered and approved by the University of Lethbridge, Human Subject Research Committee, and conforms to acceptable ethical guidelines and standards as described in the Tri-Council Policy Statement for the ethical conduct of research involving humans.

Copies of this letter have been distributed to all physicians and trainees in the province via email, fax or mail. To those receiving this by email, please go to [mdburnout.uleth.ca](http://mdburnout.uleth.ca) and enter user name: oldman; password: river. If you have received this via fax or mail and would prefer to use the web page, please do so.

Your contribution to this study is appreciated. If you have any questions, please contact Dr. Boudreau by email: [boudreau@uleth.ca](mailto:boudreau@uleth.ca); telephone: (403) 329-2646; or fax: (403) 329-2038.

Yours truly,

A handwritten signature in black ink, appearing to read "R. Hollinshead", written over a horizontal line.

Robert M. Hollinshead, MD, FRCSC  
President

RMH:alb

h:\public affairs\bg\pfsp\letter to members re pfsp burnout survey june-02.doc



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June 20, 2002

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Yours truly,

A handwritten signature in black ink, appearing to read "Robert M. Hollinshead".

Robert M. Hollinshead, MD, FRCSC  
President

## **Appendix C**

### **Electronic Survey**





## Physician Stress and Burnout Survey

Welcome to the Alberta Physician Stress and Burnout Survey Site. The demographic questions and the four measures of this survey will take approximately 20 minutes to complete. Thank you again for participating in this study of physician stress and burnout. You can withdraw from this survey at any point in time.

[Begin Survey](#)

---

# Physician Stress & Burnout Survey

## Current Demographic Information

Your gender:

- ☐ Female  
☐ Male

Your age:

years .

Are you?

- ☐ Married/Common Law  
☐ Single  
☐ Divorced  
☐ Widowed  
☐ Separated

How many children/dependants do you have living with you?

children/dependants

What describes you best?

☐

- ☐ Practicing Physician (e.g., clinical, lab, administrative, teaching)  
☐ Retired Physician  
☐ Resident  
☐ Medical Student

Are you an international medical graduate?

- ☐ Yes  
☐ No

Are you a:

- ☐ Specialist  
☐ Non-specialist

If specialist, select your primary area from the list below:

What is the population size of the community you work in?

- ☐ Less than 5,000
- ☐ 5,001 to 15,000
- ☐ 15,001 to 100,000
- ☐ Greater than 100,000

Do you have hospital privileges?

- ☐ Yes
- ☐ No

What is the main form of payment for your work?

- ☐ Fee for Service
- ☐ Salary
- ☐ Alternate Payment Plans (e.g., capitation, contract)

Do you consider yourself working mostly:

- ☐ Solo
- ☐ In a group

If you have checked *group*, please indicate the primary type of group setting you work in.

- ☐ Associations
- ☐ Community Health Centres
- ☐ Family Practice Clinics
- ☐ Multi-Specialty Clinics
- ☐ Partnerships
- ☐ Other

If "Other," please specify

What is the distance from your office to the closest referral centre?

 kms

How many hours per week do you work in medicine?

...on call from home or hospital	<input type="text"/>	hrs per month
...doing clinical work including patient files	<input type="text"/>	hrs per month
...doing administrative work	<input type="text"/>	hrs per month
...teaching	<input type="text"/>	hrs per month
...other (please specify) <input type="text"/>	<input type="text"/>	hrs per month

**Number of years in practice:**

years

**Number of years in present position:**

years

**Number of years in present work location:**

years

Next page

# Physician Stress & Burnout Survey

## Measure 1 - Page 1

The following 40 statements refer to experiences in your work and in your job.

Using the 7-point FALSE-TRUE scale, click on the most appropriate dot based on the degree to which the statement is currently false or true for you.

Do not spend too much time in answering the statements. Your first response is generally your best response.

---

1. I am tired of having to solve other peoples' problems.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

2. I wish I could relax more.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

3. I believe I am helping build a better life for others through the work I do.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

4. I treat people as objects or things to be manipulated in the workplace.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

5. I have trouble living up to others' expectations.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

6. I routinely compromise the quality of my work.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

7. I handle work pressures better than most.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

8. I feel alienated and detached from my co-workers.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

9. People who work with me are concerned about my well being.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

10. I empower others to succeed.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

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# Physician Stress & Burnout Survey

## Measure 1 - Page 2

The following 40 statements refer to experiences in your work and in your job.

Using the 7-point FALSE-TRUE scale, click on the most appropriate dot based on the degree to which the statement is currently false or true for you.

Do not spend too much time in answering the statements. Your first response is generally your best response.

---

11. I feel comfortable with the way I treat others in the workplace.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

12. The quality of Canadian work life is improving.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

13. I am comfortable with the person I have become.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

14. Work has become a real struggle for me.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

15. At times, the constant change in available information and technologies interferes with my ability to get the job done.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

16. I am excited about the prospect of new challenges that lie ahead.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

17. I readily acknowledge the contributions of my co-workers.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

18. I wish I was more tolerant of others in my job.

False ☐ ☐ ☐ ☐ ☐ ☐ ☐ True

19. I try to encourage and support a collaborative work culture.

False ☐ ☐ ☐ ☐ ☐ ☐ ☐ True

20. I regret many of the things I have said and done to others on the job.

False ☐ ☐ ☐ ☐ ☐ ☐ ☐ True

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# Physician Stress & Burnout Survey

## Measure 1 - Page 3

The following 40 statements refer to experiences in your work and in your job.

Using the 7-point FALSE-TRUE scale, click on the most appropriate dot based on the degree to which the statement is currently false or true for you.

Do not spend too much time in answering the statements. Your first response is generally your best response.

---

21. I maintain a consistently high energy flow throughout the workday.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

22. I feel a career change is long overdue.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

23. I am still tired, even after a vacation or break away from work.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

24. I am living a rich, full life and not just surviving in my work.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

25. The organization would have difficulty surviving without me.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

26. I regularly have emotional outbursts at work.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

27. All who work with me appreciate the consistent effort I bring to the job.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

28. Compared to others, I am a failure.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

29. I feel refreshed and alert.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

30. I lack the desire and creativeness to complete many tasks.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

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# Physician Stress & Burnout Survey

## Measure 1 - Page 4

The following 40 statements refer to experiences in your work and in your job.

Using the 7-point FALSE-TRUE scale, click on the most appropriate dot based on the degree to which the statement is currently false or true for you.

Do not spend too much time in answering the statements. Your first response is generally your best response.

---

31. I can sense when other workers are having difficulties.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

32. At the end of the workday I simply have nothing left to give.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

33. I have acted in an unprofessional manner towards others in the workplace.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

34. I am weak and unable to cope anymore.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

35. I feel betrayed by those in charge.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

36. I enjoy working on a team.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

37. I really do care about my co-workers.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

38. At times, I question my own competence and wonder about my ability to continue to do the job.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

39. Working with people is exhilarating for me.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

40. I really enjoy the prospect of getting up and going to work every day.

False   ☐   ☐   ☐   ☐   ☐   ☐   ☐   True

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# Physician Stress & Burnout Survey

## Measure 2 - Page 1

The next 23 statements refer to **YOUR REACTIONS TO YOUR WORK**.

For each statement, select the dot corresponding to the **DEGREE** to which each statement is **UNLIKE** or **LIKE** you.

---

1. I feel emotionally drained from my work.

Very  
much  
UNLIKE  
me

☐☐☐☐☐☐☐

Very  
much  
LIKE  
me

2. I feel used up at the end of the workday.

Very  
much  
UNLIKE  
me

☐☐☐☐☐☐☐

Very  
much  
LIKE  
me

3. I feel fatigued when I get up in the morning and have to face another day on the job.

Very  
much  
UNLIKE  
me

☐☐☐☐☐☐☐

Very  
much  
LIKE  
me

4. I feel uncomfortable about the way I have treated some co-workers.

Very  
much  
UNLIKE  
me

☐☐☐☐☐☐☐

Very  
much  
LIKE  
me

5. I can easily understand how my co-workers feel about things.

Very  
much  
UNLIKE  
me

☐☐☐☐☐☐☐

Very  
much  
LIKE  
me

6. I feel I treat some co-workers as if they were impersonal "objects."

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

7. Working with people all day is really a strain for me.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

8. I deal very effectively with the problems of my co-workers.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

9. I feel burned out from my work.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

10. I feel I'm positively influencing my co-workers' lives through my work.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

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# Physician Stress & Burnout Survey

## Measure 2 - Page 2

The next 23 statements refer to **YOUR REACTIONS TO YOUR WORK**.

For each statement, select the dot corresponding to the **DEGREE** to which each statement is **UNLIKE** or **LIKE** you.

---

11. I've become more callous toward co-workers' lives through my work.

Very much UNLIKE me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much LIKE me
------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	----------------------------

12. I worry that this job is hardening me emotionally.

Very much UNLIKE me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much LIKE me
------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	----------------------------

13. I feel very energetic.

Very much UNLIKE me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much LIKE me
------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	----------------------------

14. I feel frustrated by my job.

Very much UNLIKE me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much LIKE me
------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	----------------------------

15. I feel I'm working too hard on my job.

Very much UNLIKE me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much LIKE me
------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	----------------------------

16. I don't really care what happens to some co-workers.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

17. Working directly with people puts too much stress on me.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

18. I can easily create a relaxed atmosphere with my co-workers.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

19. I feel exhilarated after working closely with my co-workers.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

20. I have accomplished many worthwhile things in this job.

Very much UNLIKE me ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much LIKE me

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# Physician Stress & Burnout Survey

## Measure 2 - Page 3

The next 23 statements refer to **YOUR REACTIONS TO YOUR WORK.**

For each statement, select the dot corresponding to the **DEGREE** to which each statement is **UNLIKE** or **LIKE** you.

---

21. I feel like I'm at the end of my rope.

Very  
much  
UNLIKE  
me

☐☐☐☐☐☐☐

Very  
much  
LIKE  
me

22. In my work, I deal with emotional problems very calmly.

Very  
much  
UNLIKE  
me

☐☐☐☐☐☐☐

Very  
much  
LIKE  
me

23. I feel my co-workers blame me for some of their problems.

Very  
much  
UNLIKE  
me

☐☐☐☐☐☐☐

Very  
much  
LIKE  
me

Next Page

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# Physician Stress & Burnout Survey

## Measure 3 - Page 1

How often do you have any of the following experiences? Please use the 7-point scale given below for your responses to the 21 statements.

---

1. Being tired.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

2. Feeling depressed.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

3. Having a good day.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

4. Being physically exhausted.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

5. Being emotionally exhausted.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

6. Being happy.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always
-------	--------------------------	--------	-----------	-------	---------	--------

7. Being "wiped out."

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

8. "Can't take it anymore."

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

9. Being unhappy.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

10. Feeling run-down.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

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# Physician Stress & Burnout Survey

## Measure 3 - Page 2

How often do you have any of the following experiences? Please use the 7-point scale given below for your responses to the 21 statements.

---

11. Feeling trapped.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

12. Feeling worthless.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

13. Being weary.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

14. Being troubled.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

15. Feeling disillusioned and resentful.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

16. Being weak and susceptible to illness.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always
-------	--------------------------	--------	-----------	-------	---------	--------

17. Feeling hopeless.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

18. Feeling rejected.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

19. Feeling optimistic.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

20. Feeling energetic.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

21. Feeling anxious.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Never	Once in a great while	Rarely	Sometimes	Often	Usually	Always

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# Physician Stress & Burnout Survey

## Measure 4

"Think of yourself over the past six months keeping in mind the following definition of burnout: the tendency for committed physicians to lose enthusiasm for their work and to become less effective in managing the stress of emotional contact with patients. Symptoms may include some or most of the following—fatigue, withdrawal from patients and colleagues, cynicism, irritability, difficulty relaxing off work, physical manifestations of anxiety and depression, and feelings of diminished enthusiasm and effectiveness at work."

Now rate yourself as to how burned out you feel you are on this 9-point scale.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not at all Burned Out								Very Burned Out

Modified from **The Overall Self-Assessment of Burnout 1986**  
by Rafferty, Lemkau, Purdy & Rudisill

Your Burnout experience(s) etc...

Submit

# Thank You

Your responses have been saved in our database.

All of your responses will be handled in a confidential and professional manner.

Thank you very much for your cooperation.