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LETTER FROM THE EDITOR

Welcome to the *Academy of Health Care Management Journal.* We are extremely pleased to be able to present what we intend to become a primary vehicle for communication of e-commerce issues throughout the world.

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ARTICLES for Volume 4, Number 1

A BASELINE STUDY OF THE FACTORS THAT SHOULD BE USED TO MEASURE THE EFFECTIVENESS OF TELEMEDICINE

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ABSTRACT

Alaska is an expansive and complex geographic area with many rural communities of small villages and few towns in remote locations. In addition, inadequate healthcare facilities in these locations makes health care management a challenging task in the state of Alaska. Therefore, it is important to find an effective alternative, such as telemedicine, for delivering health care in remote regions of rural Alaska. The objective of this paper is to create a baseline result from the pre-telemedicine data that is important in measuring telemedicine effectiveness after its implementation. In this paper, we focus on data gathered before implementation of the telemedicine to identify factors significant to patients' satisfaction. Four different regions: Maniilaq, Norton Sound, Yukon Kuskokwim, and Bristol Bay Area are selected for the implementation of telemedicine. Regression analysis is used for identifying factors that are important to patients' satisfaction. Regression models are estimated separately for each region, and a separate model is used for all regions combined. The most important factor revealed from the analysis in terms of magnitude and statistical significance is "the perceived level of prescribed treatment" across all regions. The "amount of time that health care provider spent with the patient" is also emerged as an important factor. Another important factor is the "ability to communicate". All these factors are found statistically significant regardless of the geographic region considered in this paper. Therefore, these important factors may be used for the post-telemedicine effectiveness measure.

INTRODUCTION

Alaska's expansive and complex geographic features have created communities that are characterized by many small villages in remote locations. Alaska encompasses a land area close to 20% of the entire United States. Overall, the state's population density measures one person per square mile. Because of this sparse population, health care management is a very difficult task in Alaska. Therefore, Alaska is a valuable test-bed for efficient delivery of health care using telecommunications and information technologies.

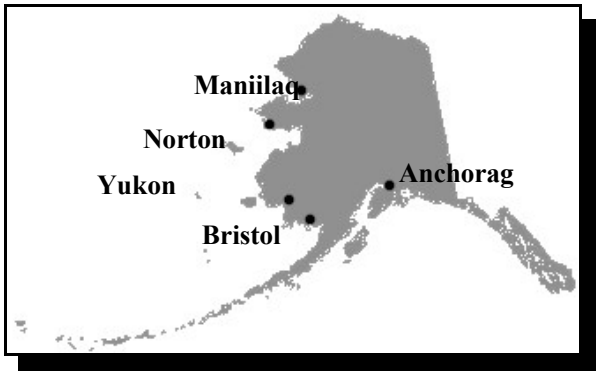
About 40% of Alaska's resident population lives within the Anchorage Metropolitan area and another 20% of the population reside near Juneau and Fairbanks. Rest of the population is considered to live in remote rural regions of Alaska. All major health care facilities, such as Alaska Native Medical Center, Columbia Alaska Regional Hospital, Providence Alaska Medical Center and the Veteran's Administration (Billingsley et. al., 2002) are all located in Anchorage. Therefore, rural residents are isolated from a vast array of medical care without enduring high costs (such as, air fare). Despite the fact that, no region in Alaska is classified as "official health professional shortage" (Forkner, Reardon, & Carson, 1996) area, at 36% below the national average, Alaska ranks 48th in doctors per residents. More importantly, if the doctors are distributed equally, each would have to care for over 600 square miles or close to 650 residents, what makes Alaska a unique place for telemedicine test-bed to construct efficiency in health care management. In the rural areas, primary health care is provided in approximately 250 villages by 800 community health aides/practitioners (CHAPs). These CHAPs receive remote medical advice from physicians at a regional medical center by long-distance telephone during a specified time of the day (Berman & Fenaughty, 2005; Fisher, Pearce, Statz & Wood, 2003).

These scenarios lead us to explore an effective alternative of health care delivery (Whitten, Buis & Mackert, 2007), such as telemedicine, in the remote regions of Alaska. To this end, a consortium of Alaska health-care providers, Telecommunications carriers, University of Alaska Anchorage and the State of Alaska jointly implementing and evaluating the effectiveness of telemedicine in rural Alaska. This project is led by the University of Alaska with the following partners: Alaska Native Health Board and four regional Native health corporations.

Currently, patients can receive rudimentary health care at the *village* level. If necessary; patients can be referred to the region's Health Center or *town* level and then to the Alaska Medical Center in Anchorage. Primary health care is provided by

community health aides/practitioners (CHAPs) whose training takes a minimum of 14 months to complete (Fisher, Pearce, Statz & Wood, 2003). If the CHAP does not have standing orders from a supervising physician, he/she consults by long-distance telephone with a physician (Boultinghouse, Hammack, Vo & Dittmar, 2007) at the regional (town) clinic at a designated time of the day (Berman & Fenaughty, 2005). Patients needing urgent care are referred to the nearest regional hospital where more medical services and some specialists are available. Very serious cases are referred to Anchorage for specialized medical care.

This project is focused on otolaryngology as its major effort. Historically, Alaska Native children have disproportionate burden of ear infections compared to non American Indian/ Alaska Native (AI/AN) populations. In addition, Alaska Native children have more than the other American Indian groups. Parkinson et al. (1999) found that 88% of the Alaska Native infants had their first acute otitis media episode before 1 year of age. Homoe (2001) summarizes modern epidemiological studies that are done in Alaska from 1960s to 1980's that almost uniformly mentioned prevalent otitis media problems in children as well as adults. Curns et al. (2002) report that AI/AN children, especially AI/AN infants, have higher otitis media associated outpatient and hospitalization rates than those for the general US population of children. In recent years, Alaska region had higher rates of otitis media associated hospitalizations for children younger than five years of age than any other AI/AN region in the US.



We have selected four different rural regions for this study in western Alaska (as shown in the map): Maniilaq (MN), Norton Sound (NS), Yukon Kuskokwim (YK), and Bristol Bay (BB). This study area includes the Alaska Native Medical

Center (in Anchorage), four different regional hospitals health care facilities and 28 remote Native health clinics in villages (Fisher, Pearce, Statz & Wood, 2003). The mere fact that no network of roads exist connecting these regions or with the other parts of the state of Alaska constructs a natural response to attempt to deliver health care using telecommunications and information technologies. At the heart of the Maniilaq region, is the Maniilaq Health Center located in the town of Kotzebue. Located north of the Arctic Circle, the region is 550 air miles from Anchorage. The Norton Sound region's health center (Norton Sound Hospital) is located in the town of Nome, which is approximately the same distance by air from Anchorage. Three hundred miles to the south is the town of Bethel, where the Yukon Kuskokwim Delta Hospital serves the Yukon Kuskokwim region. Another 175 miles to the south lies the town of Dillingham , which serves as the economic, and transportation center for the Bristol Bay region. Here in Dillingham, the Kanakanak Hospital serves the region surrounding Bristol Bay. Bristol Bay region also is isolated from Anchorage by 350 air miles. Nearly 70% of the residents of these regions live in villages that are not connected by road to the regional centers (Berman & Fenaughty, 2005). Although, there are some regular passenger vehicles available within each region, the only feasible way for these people to travel to Anchorage for medical care is by air. Given this environment, one of the goals of this telemedicine project is to bring some much-needed specialized medical care for these people who live in these remote regions and make the health care management more resourceful in Alaska.

The primary objective of this paper is to create a baseline result from this pre-telemedicine data that may be used for comparison of results after the implementation of telemedicine. Any deviation (upward/downward) from the baseline result can be attributed to the telemedicine. In this paper, we therefore focus on data gathered before implementation of the telemedicine (pre-telemedicine or baseline data) and identify factors significant to the patients' satisfaction in providing health care (Mair & Whitten, 2000; Allen & Hayes, 1995). These factors will then be used to measure the effectiveness of the delivery of tele-health care to the remote regions of Alaska after telemedicine intervention. Moreover, this will provide a baseline information upon which any upward shift can be attributed to the success of telemedicine. Patient satisfaction is an important and widely used factor (Brick, Bashshur, Brick & D'alessandri, 1997; Sargeant & Kaehler, 1998; Williams, May & Esmail, 2001; Agrell, Dahlberg & Jerant, 2000) to measure the quality of health care system, such as telemedicine. Other studies (Berman & Fenaughty, 2005; Morin et al., 1996; Aoki et al., 2004; Johnston et. al., 2004) focused on cost effectiveness as a proxy to socioeconomic benefits of telemedicine.

In the context of patient satisfaction research in telemedicine, a review of literature can be found in Williams et al. (2001). A "satisfaction" can be defined as, patient's perception about the quality of health care service provided by a health care provider. We consider satisfaction to be an important measure to improve the current health care system or to assert an alternative system of health care delivery. One of the reason to use patient satisfaction (Sixma et al., 1998; Woods et al., 1999; Huston & Burton, 1997; Sitzia & Wood, 1997; Pradeep et al., 2007) as a performance measure is to identify factors that show if the health care system is performing at or above the expectation level. Therefore, data collected after telemedicine implementation will be used (in our future research) to compare and contrast with this baseline result using intervention modeling to observe the performance (Frey, Harmonosky & Dansky, 2005) of telemedicine effectiveness. Intervention modeling approach will be adapted in our future research (next phase) to observe the improvement (if any) from baseline result due to telemedicine execution that will translate the result into a meaningful outcome, such as, improved quality of life (Von Essen et al., 2000; Fitzpatrick, 1993). Among others, Choudhury (2007) have applied intervention model to observe shift (upward/downward) due to interference in a time series data. This statistical model is pertinent to interrupted time series data to observe the impact of an outside shock that interrupts the data. Thus, the objective of this current paper is to use pre-telemedicine (baseline) data to identify factors that have significant relationship with the patient satisfaction which will create a baseline result for our future intervention analysis.

MATERIALS AND METHODS

The four regions in this study encompass twenty-eight rural villages and constitute a population of about 11,000. During pre-telemedicine period, patients completed questionnaires assessing their satisfaction with the health care visit at the village level and also at the regional (town) level. Questionnaires are only completed when the patient complaint is an "ear event." A patient's satisfaction questionnaire is used to collect information and to assess patient comfort level, ease of access to health care, communication ability of health care provider, and overall satisfaction on the current method of health care system. Responses are scored on a five-point scale of 1 to 5 (1 = Completely Disagree; 2 = Generally Disagree; 3 = Undecided; 4 = Generally Agree; 5 = Completely Agree). Cronbach's alpha coefficient is used to test the internal consistency of the survey. Reliability coefficient Cronbach's alpha that assesses the internal consistency for scales ranged from 0.64 to 0.90. In addition,

demographic information is also obtained including age and gender. Patients who are referred to a regional Health Center also completed a similar questionnaire assessing their satisfaction with the health care visit at the regional (town) level. This also is only for visits related to ear problems.

Model Development

Statistical technique "regression analysis" is used to develop a model that captures the relationship between patients' satisfaction and several different factors that are associated with health care delivery. Thus, regression model determines factors that are important for impacting patient satisfaction in providing health care. In many research investigations, regression analysis is usually used to develop a functional relationship between predictors and response variables to identify factors that are responsible for movement in the response variable. Further discussions on regression models and their likelihood functions can be found in Choudhury et al. (1999). In this research, we have estimated separate regression models for each geographic region and also a model for the combined region. For all regression models we have examined various measures in order to determine the highest statistical correlation, on a multivariate level. We have also tested age and gender effect with various combinations of factors. Age is not found to be statistically significant, when introduced into the model as a continuous variable. However, age is found to be statistically significant in some of the regions when introduced as a categorical variable. Age is grouped into seven different categories as follows: 0-5 years, 5-10 years, 10-15 years, 15-20 years, 20-40 years, 40-60 years, 60 years and above. These age groups are then introduced into the regression model as indicator variables. Stepwise regression is used to ensure that the most important factors stay in the model. Stepwise regression adds and removes variables sequentially based on significance level (p-value) of the variables. We have used p-value to be 0.15 to enter into the model and 0.10 for removal from the model. Therefore, we make certain that only those variables stays in the model that are statistically significant at 10% level. Thus a subset of identified important variables from step-wise regression results along with correlation matrix of all variables and further statistical test, we arrive at our final specification of regression models for the combined regions (all four), Maniilaq, Norton Sound, Yukon Kuskokwim, and Bristol Bay as follows:

Combined Regions (all four):

$$SATISF = \beta_0 + \beta_1 DURATION + \beta_2 COMMUNICATION + \beta_3 TREATMENT + \epsilon \quad (1)$$

Maniilaq:

$$SATISF = \beta_0 + \beta_1 DURATION + \beta_2 COMMUNICATION + \beta_3 TREATMENT + \epsilon \quad (2)$$

Norton Sound:

$$SATISF = \beta_0 + \beta_1 DURATION + \beta_2 COMMUNICATION + \beta_3 TREATMENT + \beta_4 AgeGroup\ 10 - 15 + \epsilon \quad (3)$$

Yukon Kuskokwim:

$$SATISF = \beta_0 + \beta_1 DURATION + \beta_2 COMMUNICATION + \beta_3 TREATMENT + \beta_4 AgeGroup\ 20 - 40 + \epsilon \quad (4)$$

Bristol Bay:

$$SATISF = \beta_0 + \beta_1 DURATION + \beta_2 COMMUNICATION + \beta_3 TREATMENT + \beta_4 AgeGroup\ 15 - 20 + \epsilon \quad (5)$$

Where:

SATISF	= overall level of satisfaction of health care provided to the patient;
DURATION	= level of patient's satisfaction for the amount of time that health care provider spent with the patient.
COMMUNICATION	= patient's perception of the communication understood by the health care provider.
TREATMENT	= patient's perception of the quality of treatment provided by the health care provider.
AGE GROUP 10-15 YRS	is coded "1" if patient's age is between 10-15 years, "0" otherwise.

AGE GROUP 15-20 YRS	is coded "1" if patient's age is between 15-20 years, "0" otherwise.
AGE GROUP 20-40 YRS	is coded "1" if patient's age is between 20-40 years, "0" otherwise.

Regression models are estimated using SAS procedures (see SAS/STAT User's Guide, 1993).

RESULTS

In this section we report results of statistical analysis from baseline data investigating the factors that are important for identifying patients' satisfaction in health care delivery for telemedicine purposes. The data for this pre-telemedicine (baseline) study are collected from four different geographic regions in western Alaska. Summary statistics for patient satisfaction in each region and all regions combined is reported in Table 1.

Average patient satisfaction level is highest (4.71) in Maniilaq and lowest in Bristol Bay (4.56) region. Even though there seems to be little or no differences in average satisfaction between these four regions, there appears to be a difference in average satisfaction between "Town" and "Village" level. Average patient satisfaction is consistently lower at the "Town" compared to "Village" irrespective of the regions. Percentage distributions of patients' by gender and age-group are reported in Table 2. In addition, a graph is also provided to portray patients' distributions by age-group and gender.

About 76% of the patients at the village level are under 15 years of age (see Table 2). Moreover, 52% of the patients at the village level are under five years of age. A similar distribution is also observed in those who are referred to the regional Health Centers. One notable fact is that, patient satisfaction is fundamentally determined by the accompanying adults, specifically for the younger patients and this may have contributed to the reason that younger age groups do not appear to be a causal factor in overall satisfaction (see Table-3). Therefore, it is essential that the method of health care delivery by otolaryngology-focused telemedicine intervention understand the specific needs of this age group, and the impact of someone other than the patient themselves conveying otitis-related symptoms.

Table 1: Summary Statistics of Patients' Satisfaction with Health Care Visits.				
Geographic Region		Mean	Standard Deviation	n
Bristol Bay	Town	4.38	0.86	68
	Village	4.60	0.60	310
	All	4.56	0.66	378
Maniilaq	Town	4.57	0.72	283
	Village	4.75	0.56	1261
	All	4.71	0.60	1544
Norton Sound	Town	4.39	1.04	56
	Village	4.67	0.63	663
	All	4.65	0.68	719
Yukon Kuskokwim	Town	4.44	0.66	202
	Village	4.61	0.60	714
	All	4.57	0.62	916
All		4.65	0.63	3557

Table 2: Percentage Distribution of Patients						
		Geographic Regions (%)				
Age Groups	Gender	Bristol Bay	Maniilaq	Norton Sound	Yukon Kuskokwim	(%) All
0-5 yrs	Female	2.10	11.93	4.49	7.05	25.57
	Male	2.02	11.73	5.85	6.99	26.59
	All	4.12	23.66	10.34	14.03	52.16
5-10 yrs	Female	0.91	3.66	1.88	2.02	8.47
	Male	0.91	4.20	1.79	2.27	9.18
	All	1.82	7.87	3.66	4.29	17.64
10-15 yrs	Female	0.51	1.68	0.71	0.88	3.78
	Male	0.37	1.02	0.54	1.02	2.95
	All	0.88	2.70	1.25	1.90	6.73

Table 2: Percentage Distribution of Patients						
Age Groups	Gender	Geographic Regions (%)				(%) All
		Bristol Bay	Maniilaq	Norton Sound	Yukon Kuskokwim	
15-20 yrs	Female	0.40	0.85	0.54	0.31	2.10
	Male	0.26	0.63	0.31	0.23	1.42
	All	0.65	1.48	0.85	0.54	3.52
20-40 yrs	Female	0.99	3.52	1.62	1.59	7.73
	Male	0.45	1.42	0.63	0.82	3.32
	All	1.45	4.94	2.24	2.41	11.05
40-60 yrs	Female	0.77	2.50	0.68	0.57	4.52
	Male	0.40	1.34	0.37	0.68	2.78
	All	1.16	3.84	1.05	1.25	7.30
60- -- yrs	Female	0.14	0.34	0.20	0.26	0.94
	Male	0.03	0.31	0.17	0.14	0.65
	All	0.17	0.65	0.37	0.40	1.59

Regression analysis is performed to identify factors that are significant to patient satisfaction and also to observe the degree of explanatory power of these factors. Therefore, "overall patient satisfaction" is used as the response variable in these regression models. In addition to other factors characterizing the health care encounter, gender is also included in the development of regression models. All five regression models (equations 1-5) are estimated (using SAS) and reported in Table 3. The coefficients for "GENDER" after controlling for other factors are not found to be statistically significant and therefore not reported in this paper. The most important factor in terms of magnitude is found to be "the perceived level of prescribed treatment" across all the geographic regions. The "amount of time that health care provider spent with the patient" is also important in statistical significance and magnitude. Another factor "ability to communicate" is found to be equally important. All these factors are statistically significant regardless of the geographic region. Therefore, these three factors may be used in the post-telemedicine effectiveness measure.

Table 3: Regression on Patients' Satisfaction by Geographic Regions

Variables	All Regions Combined	Maniilaq	Norton Sound	Yukon Kuskokwim	Bristol Bay
Intercept	0.69278 (0.0001)	0.77274 (0.0001)	0.38408 (0.0004)	0.87065 (0.0001)	0.55565 (0.0013)
DURATION	0.21076 (0.0001)	0.21821 (0.0001)	0.20177 (0.0001)	0.20622 (0.0001)	0.22057 (0.0001)
COMMUNICATION	0.19575 (0.0001)	0.15766 (0.0001)	0.26059 (0.0001)	0.19719 (0.0001)	0.13757 (0.0289)
TREATMENT	0.45167 (0.0001)	0.46768 (0.0001)	0.45905 (0.0001)	0.41888 (0.0001)	0.51841 (0.0001)
AGE GROUP 10-15 YRS			0.12369 (0.0339)		
AGE GROUP 15-20 YRS					0.15197 (0.0935)
AGE GROUP 20-40 YRS				-0.10059 (0.0247)	
Model R^2	66%	67%	70%	61%	61%

DURATION = level of patient's satisfaction for the amount of time that health care provider spent with the patient.

COMMUNICATION = patient's perception of the communication understood by the health care provider for his/her needs and concerns.

TREATMENT = patient's perception of the quality of treatment provided by the health care provider.

AGE GROUP 10-15 YRS is an indicator variable, coded "1" if patient's age is between 10-15 years, "0" otherwise.

AGE GROUP 15-20 YRS is an indicator variable, coded "1" if patient's age is between 15-20 years, "0" otherwise.

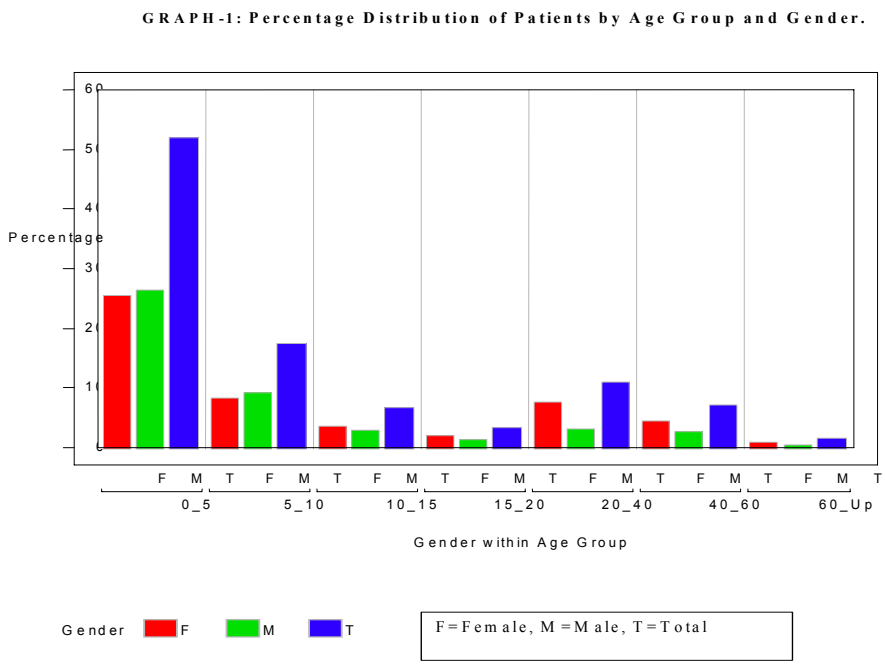
AGE GROUP 20-40 YRS is an indicator variable, coded "1" if patient's age is between 20-40 years, "0" otherwise.

P-values are provided in parenthesis.

DISCUSSION

The results that are presented in this baseline study are intended to focus on the key issues that are important to determine the level of patient satisfaction with health care visits. At this preliminary stage of the project, results indicate that, if the communication improves (let's say) by 1 point the overall patient satisfaction will increase by as much as one fourth of a point (0.26) in Norton Sound (see Table-3). Similarly, if the patient's level of concurrence of prescribed treatment increases by 1 point, the overall patient satisfaction will increase by half a point (0.52) in Bristol Bay. In other words, patient's overall satisfaction can be increased by one full point by improving the patient's level of agreement on prescribed treatment by 2 points. Therefore, these results suggest that important factors that should be considered to measure the effectiveness of the future telemedicine project are: duration of consultation, communication ability, and agreement on prescribed treatment.

Figure1: Percentage Distribution of Patients by Age Group and Gender.



Another interesting observation in this study is the age category of the majority of patients who are seeking the health care. The majority of the patients are under the age of 15 years, and more than half of these patients are under 5 five years of age. This is expected given that the focus of the telemedicine intervention is about otolaryngology. This is an appropriate application of telemedicine for Alaska and should receive close consideration when allocating resources and implementing delivery of telemedicine in rural Alaska. Otolaryngology has been shown to be a promising application of telemedicine by Burgess et al. (1999) and Melcer et al. (2002).

In general, Table 1 indicates that the patients' satisfaction level is higher at the village level compared to regional (town) Health Centers. This drop in satisfaction may be attributed to: (1) high expectations of the expertise and service that would be provided at the regional Health Center, and/or (2) the patients' unfamiliarity with personnel at the regional Health Centers resulting in a less comfortable setting and reduced effectiveness in communication between the patient and health care provider. This proportion of disparity remains similar for all four regions and therefore, suggests non-personable service at the regional Health Centers as oppose to their own village. Fisher et al. (2003) found that the CHAPs, who are mostly located in the villages, are retained in their job for a significantly longer time period than either the doctors or the nurses who are primarily in the regional health centers. Therefore, it makes sense that patients find health care providers (at the village level) who are indigenous and speak the same language as the patients themselves to provide more satisfying experience than health care providers (at the regional level) from a different culture.

The complete measure of success for telemedicine technology in rural Alaska will require further study. However, we believe that our baseline study brought forward some important issues and factors that will help to improve the delivery of telemedicine technology and also assist to enhance health care management in Alaska. Moreover, these baseline results will be employed to measure the telemedicine effectiveness.

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EMPLOYEES' PSYCHOLOGICAL EMPOWERMENT VIA INTRINSIC AND EXTRINSIC REWARDS

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ABSTRACT

In recent years, empowerment is considered to be a panacea for many organizations in the modern competitive and turbulent business environment, especially in the service sector where employees come into contact with customers. Moreover, rewards play an important role in motivating employees and leading them to have an appropriate attitude to the customers. Although rewards are one of the most fundamental human resource policies, there is a dearth regarding the systematic study of the whole range of them and their effect on the employees' psychological empowerment. The purpose of this paper is to contribute to this gap by providing a review of the studies on the relationships between rewards and psychological empowerment and proposing a research agenda concerning the examination of the impact of four intrinsic (information, trust, skill variety, recognition) and four extrinsic rewards (financial rewards, job security, relationships with supervisor, relationships with co-workers) on employees' psychological empowerment.

INTRODUCTION

In a competitive and turbulent environment in which organizations are anticipated to be faster, leaner and provide more qualitative services, empowering employees is considered to be a *sine qua non* work practice (Bowen & Lawer, 1995; Fulford & Enz, 1995). Particularly, in the tertiary sector where employees and customers interact, the development of an empowered workforce is of utmost importance. Employees that will come into contact with customers are responsible for customers' satisfaction and therefore are a crucial part of the entire organization's

effort to win and retain the later. For this reason, it is important for employees to take initiatives, to be autonomous, to experience satisfaction from their work and feel that they contribute to the operation of their company. Thus they need to feel empowered in their working environment. For the reasons cited above, it seems essential to explore the employment conditions that can empower human resources.

Recently, many studies have been conducted *vis-à-vis* the understanding of the term empowerment, as well as its antecedents and consequences. However, there are voids in this scientific area to which the paper intends to contribute. Furthermore, rewards comprise a vital human resource policy which influences human motivation in the workplace. Although rewards are one of the most fundamental human resource policies, in the context of empowerment there is a dearth regarding the systematic study of their influence to the psychological empowerment. The aim of this study is to advance the argument for the relationships between intrinsic and extrinsic rewards and employees' psychological empowerment. The relationships between a major part of the whole range of rewards, some of which with no previous empirical research on, and the employees' psychological empowerment will be analyzed on theoretical base and a proposal for a relevant research in nursing sector will be consequence.

APPROACHES TO EMPLOYEES' EMPOWERMENT

In the workplace the notion of empowerment emerged in the late 1980s and lately it has received increased attention from the academic and business society. This is due to the perception that empowerment can significantly help both organizations and employees. In fact, it is recognized to be "part of everyday management language" (Wilkinson, 1998, p.40). Empowerment has also been considered as a management practice which can be implemented in every organization and in every sector (Lashley, 1999). Especially, in the service sector where the customer participates in the exchange process, employees' role becomes very significant. As a consequence, employees' behavior and the provision of service in general can affect organization's performance. Despite the great importance that has been attributed to the notion of empowerment and the plethora of papers that have been written, the empirical research in this field is limited. According to Dimitriades "the systematic and rigorous study of employee empowerment is still in its infancy" (2005, p.81). In fact, contrary to the significance of empowerment in the service sector, the gap in the literature is larger in this sector and especially in empirical studies referring to customer contact employees (Melhem, 2004). Empowerment is a term which includes a variety of practices and has diversely been used by academics and managers. As a

result, it is logical for empowerment to present a range of definitions. However, in the most simple and generic form empowerment "is concerned with giving employees more authority and discretion in task and context related issues" (Melhem, 2004, p.73).

Academic literature approaches empowerment twofold: a) structural b) psychological .The emphasis in the structural approach is on these management practices that aim to grant power and decision – making authority to employees so as to make the latter to participate in organization's outcomes. Bowen & Lower (1995), define empowerment as the granting of four features: a) information about organizational performance, b) rewards based on organizational performance, c) knowledge that enables to understand and contribute to organizational performance, d) power to make decisions that influence work procedures and organizational direction. Moreover, Kanter (1979) stated that empowerment results from decentralization, from the lack of many hierarchical levels and finally from employees' participation. These ideologies claim that dual benefits will be accomplished by providing employees with more power and authority. On the one hand, the complexity of organization's procedures is better encountered; on the other hand employees will be more committed and effective. Although this approach established the notion of empowerment, it presents one disadvantage; it does not refer to the psychological state of the empowered. In other words, it considers that these management practices will result, *ipso facto*, in empowering employees and as a consequence it ignores the subjective perception of employees. The second, psychological, approach is based upon this dearth.

The psychological approach was initiated by Conger & Kanungo (1988), who described empowerment as a psychological state and more specifically a psychological enabling. They define it as "a process of enhancing feelings of self-efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and informal techniques of providing efficacy information" (p. 474). Thomas & Velthouse (1990), extended this approach by defining power as energy; to empower means to energize, and it is related to "changes in cognitive variables (called task assessments) which determine motivation in workers" (p. 667). Finally, Spreitzer's (1995) model based on their approach defined empowerment as intrinsic task motivation manifested in four cognitions: meaning, competence, self-determination and impact.

Meaning is termed as "the value of a work goal or purpose, judged in relation to an individual's own ideals or standards" (Spreitzer, 1995, p. 1443). This term is

similar to one of the critical psychological states in the Job Diagnostic Survey of Hackman and Oldham (1975) named meaningfulness. In other words, this assessment refers to the "intrinsic caring about a given task" (Thomas & Velthouse, 1990, p. 672).

Competence, or self-efficacy, is "an individual's belief in his or her capability to perform work role activities with skill" (Spreitzer, 1995, p. 1443). This assessment has been used by Bandura in clinical psychological literature under the terms self –efficacy or personal mastery. According to Bandura (1977), people that experience low personal mastery avoid situations that require the relevant skills and, therefore, this avoidance leads them to prevent from confronting fears and developing competencies (Thomas & Velthouse, 1990).

Self-determination is defined as "an individual's sense of having choice in initiating and regulating actions" (Spreitzer, 1995, p. 1443); for this reason, few authors used the term "choice" (Thomas & Velthouse, 1990). Self-determination involves autonomy in the initiation and continuation of behaviors and processes in the workplace including work methods, pace or effort (Spreitzer, 1995).

Impact is "the degree to which an individual can influence strategic, administrative or operating outcomes at work" (Spreitzer, 1995, p. 1443). This assessment refers to the "degree to which a behavior is seen as making a difference in terms of accomplishing the purpose of the task, that is, producing intended effects in one's task environment (Thomas & Velthouse, 1990, p. 672). Impact seems, *prima facie*, similar to locus of control; yet, it is different because locus of control is a global personality characteristic whereas impact is influenced by the work context (Spreitzer, 1995).

The psychological approach examines whether and to what extend an employee is empowered since the state of empowering is not a yes or no situation but, on the contrary, it is a "continuous variable" where "people can be viewed as more or less empowered, rather than empowered or not empowered" (Spreitzer, 1995, p. 1444). Additionally, without ignoring the value of the structural approach, it has to be mentioned that the real benefits of empowerment will be shown only when the employee experiences empowerment. For instance, in case of management's granting power to employees if the employee does not feel that he is capable of acting effectively then it is obvious that the outcomes will not be beneficial for both the employee and the organization (Siegall & Gardner, 2000). To put it differently, what psychological perspective of empowerment offers is its subjective dimension, namely how the employee *per se* experience empowerment. In fact, this approach considers that reality is socially constructed in contrast with the structural approach which

regards it objective (Corsun & Enz, 1995). This fact is very important because under these -subjective- circumstances psychological empowerment "offers a way to capture these employee interpretations and thus move away from objectivist approaches to the concept whether of a mainstream or critical nature" (Peccei & Rosenthal, 2001, p. 849). Apart from this advantage, the psychological approach offers other benefits as well. For example, contrary to the structural approach, there is unanimity in the definition of psychological empowerment. Moreover, measuring empowerment with these four cognitions offers the opportunity of systematic research regarding both its antecedents and outcomes (Menon, 2001).

To summarize with, the notion of empowerment in the literature is defined by two types which are not different but not same as well. Their fundamental disparity is connected with the idea that psychological approach takes into consideration the subjective dimension of each employee as it claims that an organizational change in the workplace variables will not necessarily lead to actual empowerment. Nevertheless, both approaches consider empowerment to be a management practice which is beneficial for both the employee and the organization. The former feels more satisfied and committed and as a result the latter achieves better performance.

Regarding the antecedents of psychological empowerment found in the literature, these are related to personal factors such as gender (Koberg et al., 1999; Yeh & Lin, 2002; Dimitriades & Kufidou, 2004), locus of control (Spreitzer, 1995; Koberg et al., 1999; Dimitriades & Kufidou, 2004), age (Yeh & Lin, 2002; Hancer & George, 2003; Dimitriades & Kufidou, 2004) and tenure (Koberg et al., 1999; Yeh & Lin, 2002). Antecedents of psychological empowerment regarding to the work context comprises factors like information for the organization or employees' performance (Spreitzer, 1995; Spreitzer, 1996; Howard & Foster, 1999; Melhem, 2004), leader or supervisor (Koberg et al., 1999; Siegall & Gardner, 2000; Peccei & Rosenthal, 2001), climate (Spreitzer, 1996; Mok & Au-Yeung, 2002), rewards based on performance (Spreitzer, 1995; Melhem, 2004) and training (Peccei & Rosenthal, 2001).

Concerning the outcomes of empowerment, customers' and employees' satisfaction (Fulford & Enz, 1995; Hocutt & Stone, 1998; Koberg et al., 1999; Laschinger et al., 2004; Regina et al., 2006; Yagil, 2006), organizational commitment (Bhatnagar, 2005), employees' performance (Geralis & Terziovski, 2003; Regina et al. 2006), leadership (Spreitzer et al., 1999) are emphasized by researchers.

Few research attempts to examine the mediating role of empowerment between factors like emotional exhaustion and customer satisfaction (Yagil, 2006) and leadership and organizational commitment (Avolio et al., 2004).

REWARDS AND EMPOWERMENT

Rewards defined as "anything that reinforces, maintains and strengthens behaviour in a firm" (Goodale et al, 1997, p. 198), could be seen as extrinsic and intrinsic. Extrinsic rewards (financial rewards, job security, relationships with supervisor, relationships with co-workers) derived from the actions of others, such as supervisors, and are controlled by managers; whereas intrinsic (information, trust, skill variety, recognition) are less tangible and result from the person or job itself (Beardwell & Holden, 1994). The influence of rewards on empowerment has been the object of previous research with Spreitzer's (1995) and Melhem's (2004) works, being the most prominent. However, both researches identified rewards as financial rewards only and they examined the impact of this kind of (financial) rewards on empowerment. Moreover, some researchers partly studied both intrinsic and extrinsic rewards among other personal and environmental factors in the context of empowerment. As a consequence, the literature lacks empirical findings exploring the relationships between the whole range of rewards and empowerment. As it is previously mentioned, the purpose of this paper is firstly to present the literature review in a holistic basis, concerning a major part of rewards and their relationships with dimensions of empowerment, and secondly to propose a research agenda in the framework of which rewards' influence on psychological aspects of empowerment will be examined. Afterwards, the main rewards and their relations with empowerment are analyzed, concluding in the hypotheses of the proposed research.

Information / Feedback

Information as an intrinsic reward (Beardwell & Holden, 1994) was one of the first factors examined in relation to psychological empowerment (Spreitzer, 1995; Spreitzer, 1996). Rosabeth Moss Kanter (1989, p.5) encourages organizations which want to create an empowering workforce to "make more information more available to more people at more levels through more devices". Additionally, as Nonaka (1988) claimed the diffusion of information between the various levels of each organization enforce the feeling of employees' autonomy.

The two types of information, the (a) information about an organization's mission, and the (b) information about performance (Lawer, 1992) could be seen as fundamental rewards empowering employees. The former plays an important role in employee's empowerment as it is difficult for them to take initiatives without being informed about the future and the mission of the organization. In other words, information leads employees to see the "big picture" and consequently realise and understand their roles and their decisions in the workplace. (Bowen & Lawer, 1992). Additionally, it helps employees to develop the sense of meaning and purpose (Conger & Kanungo, 1988).

Regarding information about performance of a work unit, it helps employees to understand how effective their units operate in order to make decisions for the future organization's performance. Moreover, this type of information enhance the sense of self –efficacy and make people understand that they comprise an integral part of organization (Spreitzer, 1995).

H1: Consequently, we assume that information is positively associated with psychological empowerment.

Skill variety

Skill variety is an intrinsic reward whose importance was enforced after the foundation of Job Characteristic Model by Hackman & Oldham (1976). This model continues Herzberg's two factor theory (1959) which claimed that intrinsic rewards can motivate employees. Hackman and Oldham stated that five core job characteristics can lead to internal motivation one of which is skill variety. Skill variety is defined as "the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the person" (Hackman & Oldham, 1976, p. 257). This feature is likely to affect psychological empowerment because when such variety is required for the completion of the work, job is considered to be meaningful and important.

Furthermore, skill variety is possible to influence the impact, a dimension of psychological empowerment, "because completing an entire task through the use of many skills invests a sense of personal ownership in its outcomes" (Liden et al., 2000, p. 408). This reward is hypothesized to be linked to the other two dimensions of psychological empowerment as well. Regarding self – efficacy, it seems logical when a project needs various and important skills to create a sense of enabling. Finally, self – determination is possible to be related to skill variety because when an

employee complete a task from beginning to end by using a variety of skills, then it is likely that the employee will feel autonomous and having choices in determining the task (Hackman & Oldham 1975; Lawer, 1992).

H2: Consequently, we assume that skill variety is positively associated with psychological empowerment.

Recognition

The reward of recognition of employees' efforts and outcomes as a motivation force emerged in the 1950's when Herzberg (1959) established the theory of motivators and hygiene factors. Recognition is possibly one of the most powerful, less used and less costly method to empower, enforce and reward employees (Wiley, 1997). In fact, on some occasions, employees prefer recognition and praise than money (Nelson, 2005). This reward has been associated with organizational commitment, job satisfaction and organizational involvement (Romzek, 1985; Saunderson, 2004). Furthermore, when employees are recognized for their efforts they develop an image for themselves and therefore their self – esteem is enhanced. Taking into consideration the inadequate research attention this reward received from the business and academic society, it seems reasonable that there is a lack of empirical studies linking recognition to psychological empowerment. Nevertheless, based on the above, it is likely that recognition affect organizational variables and more specifically psychological empowerment.

H3: Consequently, we assume that recognition is positively associated with psychological empowerment.

Trust

Trust is defined as the "willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995, p.711). This factor is regarded as one of the most primary elements of the well – organized and successful organizations. Furthermore, managerial trust on employees is particularly important especially in two cases; where cooperation is fundamental and in the tertiary sector where contact between employees and customers occurs (Nyhan, 2000). In this last case, employees interact

with customers and comprehend various matters and problems arose and as a result they can provide respective solutions. For this reason, employees should feel that they receive trust from the supervisors. For instance, according to Kotter (1995) organizations which adopt changes in their operation should encourage employees to take initiatives and propose innovative and new suggestions and ideas; and this can be implemented only in a culture of trust.

Concerning psychological empowerment, in the literature there are few empirical studies which implicate trust. For example, some authors assume that without trust it is difficult for empowering practices to be applied (Rothstein et al., 1995). Moreover, Spreitzer & Mishra (1999) with their study show that when managerial trust exists, it is more likely for managers to involve employees in the decision making process. However, despite the theoretical setting in the empowerment literature and the study previously mentioned, in the service sector there is limited research effort (Melhem, 2005, Chiang & Jang, 2008) investigating this link. Therefore, it is necessary to scientifically found the hypothesis that managerial trust is an antecedent of psychological empowerment.

H4: Consequently, we assume that managerial trust is positively associated with psychological empowerment.

Financial Rewards

These rewards are concerned with the payment an employee receives by offering labour. They are regarded as very essential rewards that can be offered from the management and with significant effect on employees' working behaviour. In fact, for many years, as previously mentioned, financial rewards were characterized as the unique rewards in the workplace. In order for these rewards to be effective, few conditions must exist. There should be a connection between pay and performance and additionally this link should be made clear to the employee (Kufidou, 2001).

The lack of payment methods – systems leads to the decrease of self –efficacy (Conger & Kanungo, 1988). Moreover, Bowen & Lower (1992) stated that payments based on performance contribute to empowerment. Organizations interested in empowering their employees and creating committed workforce should develop a payment system which will reward performance and not the position. In the context of empowerment, financial rewards were the first empirically studied. Authors (Spreitzer, 1995; Melhem, 2004) showed that there is a connection between

these two variables, though there is a dearth in the existing empirical studies (Melhem, 2004).

H5: Consequently, we assume that financial rewards based on performance are positively associated with psychological empowerment.

Job Security

In the last years job security has been of growing research interest due to the changes that business environment has undergone. Keen competition which leads organizations to re – construct and be leaner, merges as well as the use of flexible employment conditions are some of the most important changes which enforce employees' experience of job insecurity. Greenhalgh and Rosenblatt (1984, p. 438) define job insecurity as the "perceived powerlessness to maintain desired community in a threatened job situation". Under these circumstances, job security is believed to be one of the most essential factors that influence employees' motivation (Wiley, 1997; Gould-Williams & Davies, 2005) and other organizational attitudes such as organizational commitment and job satisfaction (Ashford et al., 1989; Borg & Elizur, 1992). Furthermore, lack of job security can cause employees psychological reactions such as low self –esteem and self – confidence (Wiley, 1997). Additionally, employees may not take responsibilities and initiatives when they feel that, to some extent, they are insecure regarding their job. However, despite its salient role in the modern flexible and insecure business environment, there are not many empirical studies examining this link (Bordin et al., 2007).

H6: Consequently, we assume that job security is positively associated with psychological empowerment.

Relationships with Supervisor

One of the most essential relationships developed in the workplace is between supervisor and employees. From human relations school era there was an emphasis on this type of relationship. Positive relationships with their supervisors lead employees to have positive attitude to their workplace. In fact, especially in the service sector, it is often assumed that supporting and good relationships with

supervisors and managers can help subordinates reciprocate towards customers (Peccei & Rosenthal, 2001).

With regard to psychological empowerment, it is stated that a gap in the relevant literature exists. There are authors who investigated the link between supportive supervisor's behaviour and empowerment (Parker & Price, 1994; Keller & Dansereau, 1995). The above research studies, however, are referred to the concept of empowerment as a form of perceived control over the procedures in their work and as a participation in the decision making process. Regarding the notion of empowerment as a psychological construct there are few empirical studies examining supportive and good relationships with supervisor as its antecedent (Sparrowe, 1994; Corsun & Enz, 1999; Liden et al., 2000; Peccei & Rosenthal, 2001). This is oxymoron, as there are studies which, in a theoretical context, support this link. For instance, Conger & Kanungo (1988) highlight the significance of supervision in enhancing employees' empowerment. Moreover, Deci et al. (1989) supported that leader plays an important role in providing subordinates with experiences relating to empowerment. More specifically, they held that interpersonal relationships and the climate created in the workplace enforce the sense of self – worth and self – determination.

H7: Consequently, we assume that good relationships with supervisor are positively associated with psychological empowerment.

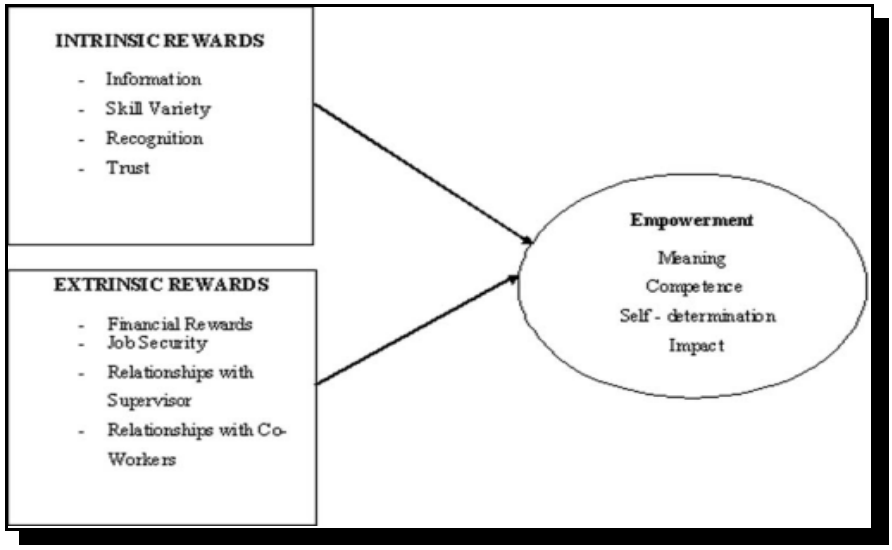
Relationships with co-workers

Apart from the relationships with supervisors, employees establish relationships among them in the workplace. This kind of association is also significant because good relationships among workers can influence the general attitude towards organization. In such a case, employees in order to feel empowered they need to feel supported from their co-workers. (Quinn & Spreitzer, 1997). An important element of good and strong relations is the willing of employees to help each other. Such helping behaviours are defined as the actions that peers engage in, beyond their formal requirements, and are useful for both the co-workers and the organization (Brief & Motowidlo, 1986). Employees who help one another "empower through their support and by providing others with the opportunity to reciprocate" (Corsun & Enz, 1999, p.211). In relation to psychological empowerment, there are few empirical studies linking it to this reward (Corsun &

Enz, 1999; Liden et al., 2000). Yet, it is assumed that good relationships among peers can positively influence dimensions of psychological empowerment.

H8: Consequently, we assume that good relationships among co-workers are positively associated with psychological empowerment.

Figure 1: The relationship between extrinsic and intrinsic rewards and employees' psychological empowerment



THE PROPOSED RESEARCH

The above theoretical hypotheses are proposed to be examined in the health care sector and specifically in nursing. Nursing as a part of tertiary sector reflects significant academic interest. In recent years, few management tools and practices are "transferred" in this sector with a view to becoming more competitive and effective. This scientific and academic importance is proved by the numerous textbooks and journals regarding the field of nursing management. Particularly, regarding the practice of empowerment, it is implemented more and more frequently in nursing (Kuokkanen et al., 2007). Manojlovich (2007) argues that when nurses feel powerless

in their workplace then they are ineffective and experience job dissatisfaction. This hypothesis has been empirically tested as in the last decade academics, mainly Laschinger, put an emphasis on the concept of empowerment and its antecedents and outcomes. The nursing research concerning empowerment includes variables such as trust (Laschinger et al., 2000; Laschinger & Finegan, 2005), job satisfaction (Manojlovich & Laschinger, 2002), job strain (Laschinger et al., 2001), leader behaviour (Greco et al., 2006) and job tension (Laschinger et al., 1999). However, despite the plethora of papers examining a variety of factors relating to empowerment, there is a gap regarding its relationship with rewards. The proposed research aims to advance the argument for the relationships between intrinsic and extrinsic rewards and nurses' psychological empowerment.

Regarding the proposed research, survey data will be collected from Greek, both private and public, hospitals. Questionnaires will be distributed to full - time nurses, a category of employees who are in contact with customers – patients, in order to determine the impact of both extrinsic and intrinsic rewards on each cognitive dimension and overall psychological empowerment. Below, the paper in hand, presents the scales proposed to be used in the future research. It is worthy to mention that the relevant validity and reliability tests of the research instruments will establish them in a different cultural context from the dominant as the Greek one is.

Psychological Empowerment

Psychological aspects of empowerment will be measured using a 12 – item scale originally developed by Spreitzer (1995). These measures comprises four three – item subscales for each of the dimensions of empowerment, namely meaning (e.g. "The work I do is very important to me"), perceived competence (e.g. "I am confident about my ability to do my job"), self-determination (e.g. "I have significant autonomy in determining how I do my job") and finally impact (e.g. "My impact on what happens in my department is large").

Information

The scale that will be used to measure information was also taken from Spreitzer (1995, 1996). They concern employees' information about an organization's mission (e.g. "I understand the strategies and goals of the organization").

Skill variety

This reward will be assessed using the items developed by Price and Mueller (1986). Some examples are "my job has variety" and "I have the opportunity to do (various) a number of different things in my job".

Recognition

Five items will be used for this scale taken from Appelabum & Kamal (2000). Examples of the instruments are: "When I do a good job, I am always told so by my supervisor/manager" and "My manager/supervisor often acknowledges when I have done good work".

Managerial Trust

Managerial trust to employees will be assessed according to three items (e.g. "I think the manager and supervisors trust me" and "I am able to do what the management trusts me to do") developed by Cook & Wall (1980).

Financial Rewards

Spreitzer's instrument (1995) will be used to measure this variable. Participants will be asked if their payments depend on their performance. An example item is, "my pay level depends on my performance".

Job Security

Job security will be measured using the instruments from Oldham et al. (1986). This comprises ten items (e.g. Regardless of economic conditions, I will have a job in this organization) referring to how secure employees feel in their workplace.

Relationships with supervisor

This variable will be assessed using the items taken from Liden & Maslyn (1998) which concern the interpersonal relationships between supervisor and employees such as "I like my supervisor very much as a person".

Relationships with co-worker

Relations with co-worker will be measured using a six item scale developed by Abbey et al. (1985). Some examples of these items are: "My co-workers have treated me with respect" and "My co-workers have cared about me as a person".

CONCLUSION

Empowerment is a contemporary human resource practice of great importance which is widely recognized in the present competitive business context. This is even more significant in the tertiary sector as direct contact and communication between employees and customers exists. Service excellence and customer's satisfaction comprise the most fundamental organization's goals and the way to achieve these, presupposes human resources feel empowered. Only under these circumstances, customer contact employees are likely to develop that moment of truth with the customer which will make the difference in comparison with the competition. Consequently, it mainly lies with employees to present the best image of the organization.

Despite the important role of empowerment in the contemporary environment, its systematic study regarding services is in its infancy. Moreover, the link between rewards and empowerment in the literature is deficient. Particularly, in nursing, there is a void in empirical studies investigating rewards in the empowerment context. The present paper endeavors to theoretically contribute to these gaps by laying the foundations for future empirical research in the specific scientific discipline.

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HOSPITALS, COMMUNITY HEALTH, AND BALANCED SCORECARDS

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ABSTRACT

Community health improvement has been part of many hospitals' mission statements and strategic plans, although it has been less common in their actual work. Recently, hospital industry leaders and stakeholders have called on hospitals to do much more to improve health status in their local communities. For hospitals to satisfy external demands for improved community health, they must re-direct some of their goals, resources, activities, and work processes.

Many hospitals are using balanced scorecards (BSCs) as a management tool. Scorecards give a 'balanced' view of hospital performance by using four (or more) categories of indicators: financial, customer satisfaction, business processes, and learning/growth. This tool is supposed to link mission, strategy, resource allocation, operational processes, and outcomes to guide management to achieve the organizational mission, vision, strategy, and goals. Hospitals' BSCs have been internally focused and have not included community health improvement. This has led hospitals away from – rather than toward – community health improvement. The next step in hospital BSCs should be to add measures of a hospital's community health status. This would steer hospitals more toward community health and help them make decisions, allocate resources, implement activities, and modify processes in ways that would improve local community health.

INTRODUCTION

Since at least the mid-1990s, hospitals have been urged to take responsibility for improving the health status of their communities. This has come from health care management literature (e.g., Campbell, 1998; Griffith, 1997; Olden & Clement, 1998; Shortell, Gillies, Anderson, et al., 1996; Sigmond, 1995), professional organizations including the American College of Healthcare Executives, American Hospital

Association, and the Commission on Accreditation of Healthcare Management Education, and prominent health care executives themselves (McNerney, 1995; Newbold, 1995; 1998). Shortell, Gillies, Anderson, et al. (1996) suggested that hospitals should shift to provide both public/community health care and institutional/traditional health care, and doing so would mean hospitals must evaluate community health status to make improvements and provide services meeting community needs. Fos and Fine (2000) asserted that hospitals have a social responsibility to their community to improve public health. They believed that understanding community health status is a success factor for health care executives and their hospitals in the twenty-first century because in order to plan, organize, and deliver services to the community, they must first understand community health status. These authors urged health care executives to shift toward a more external focus. Hospitals have begun to do that by becoming more involved in community health assessments and creating programs to improve community health. This is especially true of not-for-profit hospitals that contribute to their communities to maintain tax-exempt status.

Besides engaging in more community health, hospitals have also implemented new approaches and tools for organizational performance assessment including the balanced scorecard (BSC). This method has been widely adopted and is now standard in the hospital industry. The health care management literature has a growing knowledge base on hospital use of BSCs [see Zelman, Pink, & Matthias (2003) for an extensive reference list]. Hospital managers and other internal stakeholders have wide access to BCS reports, often on computers that provide frequent updates and sophisticated linkages to other management systems. External stakeholders are receiving some of this information as hospitals become more open and transparent in response to stakeholders' demands, pay-for-performance, and other factors. The BSC tool is more than a scorecard measurement device however. It "serves a balanced perspective for senior management to design, develop, deploy, and direct the strategic plan to achieve the mission and vision of the organization" (Jones & Filip, 2000, 50). The BSC links mission, strategy, operational processes, and outcome, and thereby guides management in making decisions by which to achieve the organizational mission, vision, strategy, and goals (Bloomquist & Yeager, 2008). The BSC as created by Kaplan and Norton (1992; 1996a; 1996b; 1996c) is focused on finance, customers, business processes, and learning/growth. It has been criticized as too internally focused (Fletcher, Guthrie, Steane, et al., 2003; Leitch & Davenport, 2002; Voelpel, Leibold, Eckhoff, et al., 2006) and thus has been modified by some organizations (including hospitals) to contain more external measures. However, it

appears that in their BSCs, hospitals generally do not measure their community's health status or their own community health activities and efforts. Although many hospitals do include improved community health status in their long range plans, they do not include it in their BSCs. Since the scorecards do not consider this part of their strategy, mission, processes, and performance outcomes, these BSCs do not fulfill the comprehensive purpose of BSCs, as explained above.

We believe the next step in hospital balanced scorecards should be to include community health status. The purpose of this paper is to explain why this is necessary and how it could be done. This paper draws from the literature to show that important stakeholders of hospitals are demanding hospitals to take much more responsibility for community health status and population health improvement. Next, we explain the origins, purpose, and approach to balanced scorecards. Contemporary hospital BSCs are then described and critiqued emphasizing that these scorecards are not sufficiently externally focused. Combining this and returning to the notion of hospitals improving health status in their communities, we then urge hospitals to expand their BSCs to include and account for community health status. Proposed health status measures (based on community health status assessment indicators) are suggested along with data-gathering sources and methods. Recommendations and implications are offered to help hospital boards, leaders, and managers improve the health status of their communities. We think this paper will be important to these people (especially at not-for-profit hospitals) and it will help them to achieve their mission, vision, strategies, and goals pertaining to community health status.

HOSPITALS' RESPONSIBILITY FOR COMMUNITY HEALTH STATUS

Health is commonly defined as and can be taken to mean "complete physical, mental, and social well-being, and not merely the absence of disease or injury" (World Health Organization, 1978). Although hospitals historically have focused on serving just the ill and injured, in 1996 Shortell, Gillies, Anderson, et al. argued that hospitals should provide both community health care and institutional health care to improve the overall health of populations. As noted earlier, health scholars, professional associations, health management texts, and health care leaders have further emphasized that hospitals are responsible for improving the health of their local populations (rather than just caring for the ill and injured). By the late 1990s, many hospitals did have long-range plans that included improving the health of their communities (Olden & Clement, 2000) … but most hospitals were not actually doing

a great deal to implement that part of their plans. To improve health status, hospitals must reach to the community level, collaborate with external organizations in the community, continually measure community health status, and implement programs and services to improve community health and well-being. Hospitals seeking to improve community health status confront difficult barriers, including history, inertia, lack of funding and reimbursement, diffused responsibility for health, and more urgent demands and expectations.

Many health care stakeholders are now calling on hospitals and their leaders to overcome the obstacles and take much more responsibility for their community's health. Recently the hospital industry strongly advocated that hospitals play a major role in improving the health status of their populations. The American Hospital Association (AHA) is the largest trade group for hospitals in the United States. Its mission is "To advance the health of individuals and communities. The AHA leads, represents, and serves hospitals … that are accountable to the community and committed to health improvement" (National Steering Committee on Hospitals and the Public's Health [NSC], 2006, 28). The AHA's vision is "A society of healthy communities, where all individuals reach their highest potential for health" (NSC, 2006, 26). The AHA has been urging its member hospitals to do much more to improve population health status in their communities. The AHA supported the National Steering Committee on Hospitals and the Public's Health, which argues that hospitals cannot afford to not be involved in improving their community health status. "Hospitals must look beyond their walls and the immediate sick" (NSC, 2006, 7). The NSC (2006, 8) laments that the "ultimate goal of the U.S. health care system, to improve the health of the American public, is but forgotten by most medical providers, payers, and consumers." There is too much focus on treating illness rather than preventing it – the focus must shift to prevention and wellness. Its Report (2006, 9) states that "death, disease, disability, quality of life, and reduction in harm are key health status indicators used to examine and compare aggregate rates of morbidity and mortality for community, state, and national populations." Additionally, the AHA's Trust Counts Now report (King & Morah, 2006) challenges hospitals to integrate their business model with a public health model and thereby balance organizational financial health with community population health. To gain and maintain the trust of others, hospitals must demonstrate the characteristics of model hospitals including: relating their own well-being to that of their community, seeing beyond a limited acute care provider role, collaborating with others to solve community problems, and dedicating resources to improve quality of life in their community. This report urges that hospitals adopt a public health mission, which

should then guide their strategic planning and resource allocation. Not-for-profit tax-exempt hospitals, in particular, should pay close attention to this to help avoid challenges to their tax-exempt status.

Besides the AHA, the largest professional association for health care executives states that "two key organizational objectives should be considered in the CEO's performance evaluation: 1) the organization's contribution to community health and 2) the organizational success" (American College of Healthcare Executives, 2003, 1). Additionally, the Commission on Accreditation of Healthcare Management Education (CAHME) requires that graduate health management education curricula include "assessment and understanding of the health status of populations, determinants of health and illness, and health risks and behaviors in diverse populations" (CAHME, 2007). Authors of popular texts used for such curricula emphasize the importance of population health care planning and management as part of the job for future health care managers. Shortell and Kaluzny (2006, 10) assert that in the transformation of health care now underway, "managers actively pursue continuous improvement of quality and individual and community health." Authors Fos and Fine (2005), in a text used in graduate health administration programs, argue that hospitals have a social responsibility to improve the public's health. Health care management has become more population-based and community focused, and the managerial use of epidemiology now includes application to health status, quality of life, and the burden of disease within a community. The Baldrige National Quality Program's Health Care Criteria for Performance Excellence considers community health to be a core value; those Criteria require actions to create population-based community health to support the health of the community (Baldrige, 2007). Finally, the National Center for Healthcare Leadership (NCHL) competency model includes the "ability to align one's own and the organization's priorities with the needs and values of the community … and to move health forward in line with population-based wellness" (NCHL, 2005, 5).

In summary, clearly hospitals are expected to improve the health and wellness of their communities' populations. This paper next explains the balanced scorecard as a management (not merely a measurement) tool for hospital executives.

CREATION OF THE BALANCED SCORECARD

In the 1980s and early 1990s, many companies responded to the competitive changing environment by undergoing fundamental changes themselves. Given extensive organizational change, managers needed ways to assess progress toward

organizational goals, give feedback on changes, and guide organizational improvement. Also, as organizations used more teamwork and were concerned with how work processes affected performance, they wanted to systematically inter-relate performance measures for work units, departments, and the organization (Yee-Ching, 2006).

Kaplan and Norton (1992; 1996a; 1996b; 1996c) responded to these needs and developed a balanced scorecard tool to enable businesses to measure four perspectives of organizational performance: financial, customer service, internal business processes, and capacity for learning and growth. Businesses had been financially focused, but were realizing that other perspectives were needed to monitor and control performance. The BSC approach helped them do that by focusing on the four performance dimensions, connecting them to strategic goals, and sharing performance information in the organization (Daft, 2004). Using the BSC framework, managers could choose measures they thought were most important for each BSC dimension. This made the BSC flexible and adaptable to each business. Daft (2004) and Norton and Kaplan (2006c) offer typical measures for the four perspectives:

Financial:	*profits, revenue growth, return on investment, expense reductions*
Customer service:	*customer acquisition, satisfaction, and retention*
Internal business processes:	*production costs, production volume*
Potential for growth and learning:	*new services, employee satisfaction and retention*

Kaplan and Norton (1996c) believed that short-term measures should link to the organizational unit's long term strategic goals so the BSC could guide employees, work activities, and short-term objectives toward long-range goals. Thus, according to Kettenun (2006), a BSC should have both short-term performance drivers (as leading indicators) and long-term performance outcomes (as lagging indicators). In this way, good BSCs embed the cause and effect logic of the organization and reflect

which processes, operations, activities, resources, and work are expected to 'cause' the desired effects or goals.

Today, BSCs help businesses link operational processes to strategy, integrate many organizational units and subunits, measure multiple aspects of performance, focus on outcomes, and communicate to employees throughout the business. By doing this, the organization goes beyond just monitoring and controlling performance – the organization states its strategy to its employees and directly connects their work to the business goals via cause-and-effect relationships embedded in the BSC. The BSC goes beyond other performance measurement systems by linking performance drivers to performance outcomes and by linking organizational work to organizational goals. Although the BSC model was developed initially for business corporations, it has since been used by many other types of organizations such as government agencies, libraries, and hospitals. Zelman, Pink, and Matthias (2003) found that a variety of health care organizations use BSCs although the standard BSC is often customized to better reflect the industry and organization in acute care, long term care, mental health care, managed care, and medical group practice.

HOSPITAL BALANCED SCORECARDS

As early as 1995, shortly after the initial development of the BSC, Baker and Pink argued that the BSC principles and purpose could be applied to and used by hospitals. During the rest of the 1990s and continuing to the present, the literature has reported and discussed application of the BSC to the health care industry, to a wide range of health care organizations, and to hospitals in particular (Dunn & Walker, 2006; Zelman, Pink, & Matthias, 2003). Pieper (2005) asserted that BSCs became common in hospitals because information technology systems enabled them, the public demanded more information, managers wanted to reduce information overload, and leaders wanted to focus on critical factors affecting mission, vision, strategy, and goals.

Hospitals have developed their own BSCs by creating specific measures for hospitals generally reflecting the original four BSC perspectives. Griffith, Pattullo, and White (2005) examined records of best practice hospitals' measurement and assessment systems. The five health care systems studied all either won the Malcolm Baldrige National Quality Award in Health Care or are organized and operate similarly and are considered to have advanced quality measures. One of them, St. Luke's Hospital (Kansas City, MO), adapted its balanced scorecard template to include the following measurements:

Financial:	*total margin, operating margin, operating cash flow, days cash on hand, and cost per case mix index adjusted discharge.*
Customer satisfaction:	*would recommend (inpatient, outpatient, emergency department), overall satisfaction (inpatient, outpatient, emergency department), longer than expected wait time (inpatient, outpatient, emergency department), responsiveness to complaints, outcome of care, inpatient active admitting physician ratio, and outpatient admitting physician counts.*
Growth and development:	*community inpatient market share, eligible inpatient market share, eligible inpatient profitable market share, inpatient primary care physician referral ratio, and outpatient referral counts.*
Clinical and administrative quality:	*inpatient clinical care index, outpatient clinical care index, patient safety index, operational index, state quality indicator index, infection control index, medical staff clinical indicator index, and net days in accounts receivable (inpatient and outpatient).*
People:	*human capital value added, retention, diversity, job coverage ratio, competency, and employee satisfaction.*

Other systems used similar types of measures (Griffith, Pattullo, & White, 2005).

Within the industry, different types of hospitals (e.g., academic, military, community, specialty, not-for-profit, system-affiliated, etc.) have adapted the BSC to fit different missions (Zelman et al., 2003). These scorecards are important for strategic management of the organizations, informing stakeholders, assessing departmental performance, and obtaining accreditation. Yap, Siu, Baker, et al. (2005) reviewed literature reporting BSCs for hospitals and other health care organizations

since the mid-1990s. They found that organizations customized the standard BSC to reflect their unique strategies, goals, and measures. Today, these scorecards are widely used in the health care industry and numerous HCOs successfully use them to guide strategy. Although some health care BSCs have measured access, social commitment, and community focus, these BSCs are primarily internally focused. In a study of hospitals conducted by Vaughn, Koepke, Kroch, et al. (2006), BSCs of 139 hospitals averaged about 30 indicators grouped in such categories as clinical quality, efficiency, patient safety, customer perspective, financial perspective, and employee perspective – generally internal measures focusing on the organization but not the community.

CRITIQUE AND LIMITATIONS OF BSCS AND HOSPITAL BSCS

The BSC method is useful, but it has several limitations in general and in particular for hospitals. First, it was created for businesses in the private sector and does not reflect all critical performance expectations of multiple stakeholders (Fletcher, Guthrie, Steane, et al., 2003; Leitch & Davenport, 2002; Wicks & St. Clair, 2007). This "draws managerial attention away from other … views that might provide a better picture of the business" (Voelpel, Leibold, Eckhoff, et al., 2006, 50). This is especially relevant for hospitals, which have many stakeholders both internally and externally.

Related to that limitation, the BSC is further limited because it is too internally focused. "It widely ignores the needs of an interlinked and highly networked innovation economy in which companies …are embedded into a network that consists of many other actors such as suppliers, local communities, alliance partners, unions, and the final customer, who seems to be the only 'external' accounted for by the BSC" (Voelpel, Leibold, Eckhoff, et al., 2006, 52). An organization is part of an ecosystem comprised of many organizations (Daft, 2004). It has many powerful external stakeholders, yet these are hardly acknowledged. The standard BSC was not designed to help an organization manage relationships with external stakeholders (other than customers) that are crucial inputs to achieving the organization's mission, strategy, and goals (McAdam, Hazlett, & Casey, 2005).

Some organizations including hospitals have already modified the original BSC of Kaplan and Norton, and new BSC approaches (Dunn & Walker, 2006; Wicks & St. Clair, 2007) continue to be created. Yet, based on what is in the literature, hospital BSCs still do not include community health process or outcomes. Typically, the only external measurements in hospitals' BSCs are for market share and customer

satisfaction. This is a critical limitation compromising the purpose of a BSC that is supposed to directly link mission, goals, strategy, resource allocation, activities, and performance to guide both short- and long-term planning and decisions. As noted earlier, many hospitals do include community health improvement in their long term goals. But by omitting community health measures in their BSCs, hospitals are forgoing use of the BSC to help link hospital resource allocation and operations to their community health goals. Worse, their BSCs are directing them away from – rather than toward – achieving their community health improvement goals. Hospitals could more successfully integrate community health goals with their operations and resource decisions if their BSCs included community health. Ultimately, this would help hospitals achieve those aspects of their goals, long range plans, and missions.

IMPLICATIONS AND RECOMMENDATIONS FOR HOSPITAL LEADERS

We believe that hospital leaders must take the next step in developing their balanced scorecards. They should modify BSCs to include community health status that is demanded by stakeholders and that is already included in many hospitals' mission, vision, and long range plans. Hospitals must of course continue to reflect financial performance, customer service, internal business processes, and capacity for learning and growth (the four traditional perspectives) in their BSCs. But hospitals must also reflect their work to improve community health status. This paper explained that hospitals are expected to include community health in their missions, visions, goals, and strategies, and many already do that. Hospitals should next include community health measures – both leading and lagging indicators – in their balanced scorecards, based on the underlying purpose and logic of BSCs that directly link strategy and resource allocation to progress toward goals. We now explain how that can be done.

First, hospital leaders must define 'the community' and its geographic area based on a group of zip codes, a radial distance, a governmental jurisdiction (such as a county), or some other approach. This will enable the hospital to identify the population and subpopulations (based on age, gender, ethnicity, and other variables) whose health status it intends to improve.

Second, hospital leaders must establish health status goals, if they have not already done so, for the population and selected subpopulations (such as children, women, and minorities). Then they must think through the logic of how to achieve those goals so that work processes, activities, programs, decisions, and resources can

be linked goals. The forced critical thinking about how to achieve the measured outcomes in a BSC is as valuable (perhaps more valuable) as the actual measurement of the final outcomes in the scorecard. This is similar to the process of strategic planning being as valuable as (or more than) the actual strategic plan itself. Critical thinking about how to achieve a community health goal will lead to lower level goals and objectives by various units and departments; their outputs will be inputs to achieve higher level health status outcomes.

Third, hospital leaders should create a BSC performance perspective that is externally focused and can appropriately include community health status measures. This could be done by changing one of the four traditional BSC perspectives or adding a new one. As an example, Voelpel, Leibold, Eckhoff, et al. (2006) proposed a BSC for business that is quite different from the standard BSC. It has four different perspectives: customer value, systemic change and renewal, networked extended business processes, and stakeholder value. The latter two could link a hospital's external stakeholders and inter-organizational relationships with its own strategic goals and performance, which could all help the hospital improve its community's health status. These new perspectives extend externally to business partners who are essential in the organization's total value chain. This BSC approach could identify relevant community partners and linkages. This would force the hospital to explicitly think about how external stakeholders, partners, and inter-organizational relationships affect its own strategic goals including community health status improvement.

Fourth, hospital leaders will have to select appropriate BSC targets and measures – both actual health outcomes for the community population (lagging measures) and process drivers (leading measures) such as activities, processes, and resources the hospital intends to allocate to achieve the health status goals and outcomes. These measures will enable managers to assess resource allocation and operational performance in relation to community health status targets while also assessing how well they are meeting those targets. Short-term measures should link to the organizational unit's specific longer-range strategic goals because the BSC should clearly guide employees, operations, budgets, resources, and short-term objectives toward achievement of long-range goals. Some short-term steps and measures, for example, could involve forming linkages with external partners such as schools, youth organizations, and pediatric medical groups. Others steps could involve delivering health education in the community to the general public (rather than existing patients). Long-term outcome targets and measures or progress can assess health status in the community. Since health status changes gradually, long-range targets and annual measures over a period of years might be more useful than

monthly or quarterly measurements. Although BSCs often use short-term targets and measures, long-term targets and measures of progress over a multi-year span can be created. For example, Emory Healthcare uses some three-year targets in its BSC (Bloomquist & Yeager, 2008). The Pennsylvania Division of the American Cancer Society has some of its BSC targets set five years into the future along with short-term performance drivers that can move the organization and health status toward those five-year goals (American Cancer Society, 2007). This approach recognizes that although health status changes slowly, those targets must be in the BSC to focus the organization and guide its resources and decisions toward those targets.

Fifth, hospital leaders need to create data collection systems. Hospitals will need sources and methods to regularly gather community health status data for their BSC. Many hospitals have been participating in community health needs assessments (Olden & Clement, 2000) and thus should be familiar with where and how to gather health status data. Measures of community health status can be drawn from community health needs assessments, although these may need to be customized to fit a hospital's service area and population. Hospitals can obtain publicly available online secondary data from the Center for Disease Control and Prevention, their state department of health, and other organizations.

Challenges will arise when trying to link changes in community health status to a specific hospital's goals, activities, resources, and performance. Hospital executives may think a hospital by itself cannot greatly affect a community's health status and so the hospital BSC ought not include health status. We disagree with that view for two reasons. First, the American Hospital Association website chronicles the success of hospitals throughout the country that have implemented successful programs to improve the health of local populations. The NOVA Award winners and the Foster G. McGaw Award winners provide powerful examples of how hospitals have improved community health status.

Second, if community health status measures are not even in the hospital's BSC, then the hospital is unlikely to give sufficient resources and effort to the community health status part of their mission. Recall that the real purposes of a BSC are to help leaders communicate goals and strategy to all employees, make prudent decisions, allocate resources, integrate organizational departments and units, link lower-level work processes to end goals in a cause-and-effect logic that employees understand, measure multiple dimensions of performance, and give feedback to employees and managers about goals and strategies. This will not be happen with respect to community health status if there are no relevant indicators to measure baseline, progress, outcomes, processes, and comparison to benchmarks in a

hospital's BSC. The goals are unlikely to be achieved if the health status goals and the processes to achieve them are not embedded in multiple levels of the BSC. As Jones and Filip (2000, 50) state regarding a BSC at their hospital, "performance measures drive behavior." If health status performance is not even measured, behavior is not likely to be driven toward it. They add that "This methodology serves a balanced perspective for senior management to design, develop, deploy, and direct the strategic plan to achieve the mission and vision of the organization" (50). Also, recall that a BSC should have both drivers and outcomes. So even if the final community health status outcomes cannot be clearly linked to a single hospital's performance, that single hospital should measure its own drivers (efforts, processes, activities, and resource allocations) toward those desired strategic long term outcomes. It must be sure that it is making its own contribution toward the community goal.

Examples can illustrate these recommendations. The American Hospital Association (2006) advocates that hospitals help reduce prevalence of obesity and diabetes in their communities. Smoking prevention and cessation are also needed. A hospital could define its community, identify its population, and identify a subpopulation of children in grades K-6 and another subpopulation of youth ages 10-15. The hospital sets a goal of reducing obesity and overweight by 10 percent in the coming year for children in grades K-6. It sets a second goal of reducing the prevalence of tobacco smoking among youth ages 10-15 by 5 percent in the next year. After setting goals, how would the hospital know if it has allocated sufficient resources, implemented appropriate services and processes, and made appropriate operational decisions to achieve the goals of lower obesity and tobacco use? How would the hospital know if its lower level processes and objectives are being properly executed to contribute to those end goals of lower tobacco use and lower obesity? How would the hospital know how much progress is being made toward those goals? And how would the hospital know if it achieves the two goals?

Answers to these questions could be obtained by modifying the hospital's BSC and implementing the recommendations made earlier. The hospital should include its two outcome goals (for obesity and tobacco use) in its BSC. It then should select short term drivers or leading indicators of processes and activities that, if achieved, would lead to goal accomplishment. These might include educational programs, obesity testing clinics, nutrition counseling services, after-school exercise activities, and opening a children's fitness center for the first goal. For the second goal, the processes might include public awareness campaigns for youth, working with local convenience stores to check ages for sale of tobacco, and arranging for

'role model' high school students to speak in middle school classes. The hospital would embed in its BSC the measures of success for these lower-level processes; their inclusion would drive executives to allocate sufficient funds and resources for them. These measures should fit with the BSC structure of 'scorecards within scorecards' with measures set at different levels of the hospital to understand how what happens at one level can affect a higher level goal. Outputs and outcomes at lower levels (e.g., in a hospital's primary care clinic, pediatric service, or health education department) may be processes and activities toward achieving higher level health status goals and outcomes of decreased child obesity and youth smoking. Short term drivers could include community participation in a hospital's obesity and smoking prevention health promotion, disease prevention, and wellness programs. By doing so, the hospital increases the likelihood of achieving its two goals. In the short term, hospitals could measure participation in the wellness programs aimed at these health risk factors and problems. In the long term, actual measures of community prevalence of obesity and smoking could be measured.

Continuing with the recommendations, the hospital would create short term and long term measurement systems for childhood obesity and tobacco use among youth, using either secondary data (such as from local department of health surveys) or primary data. The primary data would be an added expense, but if the hospital is serious about achieving its goals, it will allocate resources to measure the progress and results. As an analogy, hospitals often allocate many thousands of dollars to measure patient satisfaction because patient satisfaction is a goal. We believe the same should be done for health status goals. We acknowledge that satisfied patients generate revenue to pay for patient satisfaction measurement systems, whereas non-obese and non-smoking children do not. However, in the long run, the hospital is likely to benefit financially by reducing its costs of caring for some of the uninsured obese patients and tobacco-addicted patients. Additionally, the hospital will earn good will and positive recognition that may increase customers for revenue-producing services.

CONCLUSION

The hospital industry has often adopted management innovations that were developed for other industries (Arndt & Bigelow, 1998). These innovations have then been modified to fit the health care industry and management of health care organizations that may differ from traditional businesses and industries. The balanced scorecard is an important management innovation that hospitals have adopted from

outside the health care sector. We think hospitals should modify this management tool to help them improve community health status. By doing so, hospitals will more fully achieve their missions, strategic plans, and goals. Further, they will fulfill external stakeholders' demands and expectations that hospital do more to improve the health of their local populations.

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CHARGING FOR MEDICAL TELEPHONE CARE

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ABSTRACT

Telephone care in pediatrics accounts for large component of care delivered to patients and their parents. These types of calls range from very simple interactions such as medicine refills to very complex medical decision-making and coordination of care for patients with complex medical problems. These patient calls often are the substitute for face-to-face care, and many times is the patient and parents preferred method of obtaining medical advice.

All of these telephone calls often go unrecognized by third party payers but represent expense and risk to medical liability. Many health plans expect physician access be available to their members by phone, yet, this is rarely acknowledged as a reimbursable service. Further, telephone advice can be a money saving practice for insurance companies. It can help to relieve some of the burden in already overcrowded medical offices and emergency rooms, by decreasing the need for costly visits. As pressures rise in medicine for cost containment it seems telephone care, if properly practiced with established guidelines and documentation, can decrease cost and allow for patient satisfaction. This paper will explore the value of charging for telephone care and the economic impact of this practice in a market driven health care system.

INTRODUCTION

The practice of using the telephone as a means for physicians to care for their patients has a long history. This was first described in the *Lancet* in 1879, where a physician used a newly invented telephone to evaluate an infant with croup. Since that time, the practice of using the telephone to diagnose and manage patients has

increased dramatically. Almost 100 years after the *Lancet* article a study by Bergman et al. (1964) demonstrated that physicians in general spend 12.5% of their day on the phone. Hessel and Haggerty (1968) found that pediatricians spent 27% of their time on the telephone. "During the 1970's the telephone was described as having 'become as much a part of the physician's equipment as the stethoscope'" (Elnicki, Ogden & Flannery, 2000). Fosarelli (1987) reported that a single pediatrician can find him or herself managing over 50 calls per week and primary care physicians can receive up to 300 calls per week, half of which are clinical in nature (Hallman, 1989). As society continues to become more connected with mobile and cordless devices and the demand for wanting services and goods in real time increases, the use of the telephone can only increase. As information technology has advanced over the last decade, mobile phones and email access has become commonplace and individuals conduct business effectively by these methods. These patient calls often are the substitute for face-to-face care, and many times is the patient and parents preferred method of obtaining medical advice. Many individuals can contact a physician by phone 24 hours a day, seven days a week. In fact, insurance companies can place clauses in their contracts that require a physician or representative to be available to their patients 24 hours a day 7 days a week.

The type of care delivered over the phone by physicians and nurses varies by specialty, but in general can include triage and advice, medicine adjustments, care co-ordination with other specialists or ancillary services, counseling, and discussing test results. Both patient and physician may initiate the encounter to access the information that he or she desires to obtain. The use of the telephone can be a very effective means of communication between the patient and physician. Studies have shown that telephone care decreases missed appointments, increases patient compliance and ensures appropriateness of follow up care. Kempe, Luberti and Hertz (2001) noted that parents were highly satisfied accessing after hours nurse call centers and compliance to advice for urgent care and home care was 80%. Further, they found that parents followed the instructions they heard from the health care provider 92.6% of the time. A study of urban primary care centers by Caplan (1983) found 89% of callers were satisfied with advice given by physicians after hours. A study of after hour nurse triage call centers by Kempe (2007) found parents were very happy with the care they received after hours by a nurse. The public therefore seems to value this service. The use of the phone is both valuable and effective at achieving its goal of streamlined care that is both appropriate and adhered to easily.

Besides being satisfied with telephone care, studies have shown it to be effective in the management of patients and have demonstrated cost savings.

Telephone care has been shown to decrease missed appointments and increase compliance after emergency room visits (Goldman, et al., 2004). In the area of diabetes, telephone care has been shown to decrease hospitalizations and emergency room visits (AAP policy statement). A telephone program integrating psychotherapy in primary care patients beginning antidepressant therapy found improved patient satisfaction and outcomes (i.e. improved depression) (Simon, Ludman, Tatty et al., 2004). Barber, King, Monroe et al. (2000) found that appropriateness of referrals to emergency rooms to be 80.5% when calls were addressed by a call center with standard protocols as compared to 60.8% in controls. The use of the telephone for patient care has shown the potential for accurate care with improved compliance at a cost savings.

As telephone care has become more commonplace and is the preferred method of care in certain situations, the medical community has responded by performing research into telephone care effectiveness. Authors such as Schmitt and Thompson have published protocols and pathways to aid nurses and physicians in assessing patient symptoms over the phone and help determine the proper course of action for patients in acute situations. The American Academy of Pediatrics has also established a section dedicated to telephone care in response to increases in the numbers of medical call centers, increases in telephone technologies and the interest in telephone protocols. This section promotes education and research into medical telephone care. With the increased interest in telephone care there is a push for increased quality, documentation and accountability.

Though telephone care is widely utilized, reimbursement for these services is not widely accepted by health insurance. The key question becomes whether reimbursement for medical telephone care creates the right incentives for improvements in health care. It has been shown that patients who belong to an HMO are more than twice as likely to call their physician as compared to other patients (Hannis, Hazard, Rothschild 1996). Reimbursement or payment is important for many reasons. The process of a telephone encounter involves taking a history and medical decision making that is similar to that of an in-office visit. The telephone practice can be more difficult because there is no physical exam. These efforts take time and expertise. A study has shown that calls to internists averaged 5.3 minutes per call (Radecki, Neville, Girard, 1989). Letourneau (2003) estimated that total time spent on telephone calls by nurses in a pediatric neurology clinic to be double that of the time spent on the phone. With each phone call there is medical liability and practice expense associated. The use of the telephone for care can decrease patient utilization of face to face services and therefore decrease cost to the health insurance

plan. A study by Wasson, Gaudette, Whaley et al. (1992) found that substituting telephone care for selected clinic visits decreased utilization of medical services. This decrease in utilization can decrease health care expenditures.

Productivity

Health Affairs (2006) reports that health care spending reached 2.1 trillion, up 6.7 percent from 2005. This moderate increase occurred because of a slowdown in spending in many areas, especially payment to physicians. Many health economists believe that the moderation in the escalation of the rising costs of health care is due to a decrease in physician monopoly power.

Productivity is an economic concept that indicates a ratio of output compared to input. It is essentially a measure of production efficiency. This efficiency is really the value of output that is produced relative to the costs of the inputs used. The key to productivity in the delivery of health services relies on participation of the physician. The doctor still has great control over health care spending including hospitalizations, prescriptions and referrals to specialists. According to Feldstein (2007) the knowledge and motivation of the physician is crucial to the efficiency of health care delivery in this country.

The producer is concerned with producing the profit maximizing output with the least costly combination of resources. In the production of health services the physician is one of the most important resources used in the production process. The physician is also the most critical component in controlling the productivity of the other factors of production involved in producing medical care services.

Moore (2002) defines physician productivity as a measure of the work or output of the doctor and is usually measured in terms of patient encounters during a given period of time. There are many things that are capable of affecting the output or efficiency of the physician including the incentives offered for work performed. In order to reduce the costs of delivering health care services the motivations of physicians must be better understood.

Feldstein (2007) argues that efficiency in the production process consists of two very important components. These components include production efficiency and efficiency in consumption. Efficiency in production of medical care requires offering a given treatment at the lowest possible cost. A medical treatment can include medical advice given by a physician to a patient through any one of the available communication devices including returning a phone call to a patient.

Efficiency in consumption involves the consumer making deliberate choices of what to consume depending on the expected benefits derived from the purchase and the costs borne by the consumer for the purchase. This is usually not an accurate evaluation of how the consumer purchases medical services. This is because he or she does not have requisite knowledge of the value of the medical purchase and quite often the cost of medical services is not paid by the consumer.

Offering incentives for physicians to return phone calls to patients in a timely manner offers the possibility of increasing both the efficiency in the production of medical services and the consumption of these services by the consumer. These incentives will only be found in a well developed market based system of health care delivery.

Economic Incentives

Feldstein (2005) points out that medical care can be provided in many different settings that include hospitals, physician offices, and the internet and even through phone calls and emails from providers of care including physicians. It is very clear that providers of medical care have an incentive to minimize their costs by attempting to increase their own productivity. This concept works best when the right incentives are used to encourage efficient use of scarce resources.

Getzen (2007) argues that the way in which physicians are paid for their services determines the incentives they face to work harder. The type of payment made to physicians also determines the access that a patient has to a physician. It stands to reason that a physician will be more likely to return calls to a patient if a payment for services rendered is offered by the insurance company or the patient. It may prove to be a more efficient way to receive medical expertise than scheduling an appointment with the doctor at a later date or going to an emergency room for medical advice which is much more costly.

Williams and Torrens (2008) there needs to be a greater effort to extract more efficiency from physicians through innovative delivery arrangements. If we are attempting to receive medical information from the doctor there are others ways to meet this objective without having a face to face encounter with the physician. The use of communication devices by the physician and patient is one way to achieve this objective. In order for this to happen, the communication process must be incentivized by the insurance provider.

Financial Incentives

The current financial reimbursement system encourages providing care in an office setting. Studies have shown that the reimbursement for telephone care would be more than offset by the savings incurred when physicians begin to provide more efficient telephone care rather than seeing patients face-to-face. These studies estimate the potential financial advantages provided by telephone care per call in the range of $42 - $55. Specifically, Bunik, Glazner, Chandramouli and Bublitz (2007) performed a net-cost analysis to estimate costs/savings attributable to an after-hours call center advice line. Comparing direct parental intent before triage with the outcomes of triage to assess the potential savings to the health care delivery system they estimated a savings of more than $42 per call. In similar studies, Bogdan, Green, Swanson, Gabow and Dart (2004) estimated savings at $54.77 per patient and Cariello (2003) estimated a potential cost savings of $54.42 per call.

The results of this research indicate that a significant number of patients would have unnecessarily gone to an emergency department or urgent care facility for treatment. Telephone medical care would likely result in substantial financial benefits through the reduction of potential overuse of in-office and emergency department visits.

RESULTS

There is no question that the costs of health services must be stabilized without causing a reduction in the quality of medical services available to patients in this country. There have been several innovative suggestions made over the last few years on how to increase the efficiency of medical care delivery and also improve the quality of these medical services.

In 2006, The American Academy of Pediatrics published a policy statement on payment for telephone care, which supports the reimbursement of telephone care provided to established patients. In fact, in 2007 billing codes for telephone care were developed and will be published in the American Medical Association's 2008 CPT manual, the reference for coding medical encounters for billing. There are many concerns with instituting a billing system for telephone care, which includes creating a barrier to care, especially for those who have no insurance or unable to pay. Also, the economic impact of billing for telephone care and how it will affect health care expenditures is largely unknown.

DISCUSSION

Getzen (2007) argues that greater efficiency can involve very large costs to the individuals involved in the process. Over the last several years managed health care plans have attempted to cut the costs of delivering health services but only succeeded in alienating the most important component of the delivery process, the physician. A more rational way of reducing the costs of health services delivery would have been the use of economic incentives to change the behavior of physicians.

One of these possible ways of improving access to physician services that could result in better medical outcomes for the patients may have been the improvement and frequency of physician patient encounters. These encounters can occur through email and phone calls between physicians and patients if the doctor receives concrete incentives to play an active part in this additional mechanism to deliver medical advice to patients.

One of the major factors in a market becoming more efficient is the availability of incentives that can change the behavior of resource suppliers. The physician still remains the most important factor in the production of successful medical outcomes for the patient. The question becomes how we incentivize the physician to become more efficient in the delivery of successful medical outcomes for their patients.

Responding to medical telephone calls is time consuming, but it sustains the goal of continuity of care and in areas of the country where sub-specialists are underrepresented telephone care can help fill the void. Telephone care is cost effective and can be used to decrease medical expenditures incurred during traditional office visits. It also offers a convenience to the patient as there is no waiting time in the office or emergency room. Further there is real cost associated with each telephone encounter, from time taken for the call, medical liability incurred to the cost of the phone line and answering service. Letourneau (2003) estimated that total time spent on telephone calls by nursed in a pediatric neurology clinic to be double that of the time spent on the phone. Besides the actual phone call there is time needed for chart retrieval, documentation and even sometimes a secondary call. Reimbursement for telephone care has become a topic that is being recognized and supported in the medical community. Currently most physicians do not charge nor submit for reimbursement of their telephone care. This partly has been due to potential low reimbursement not justifying the time and expense involved in documentation and billing and collection costs (Melzer & Poole 2002).

There are many reasons to charge for telephone care. Emergency departments around the country are in crisis and overcrowding is a major concern. Lack of access to care has been associated with increased number of emergency room visits. A 2004 study by Johnson and Rimsza concluded that access to pediatric care is associated with a significant decrease in emergency room utilization. A study of HMO patients found that one third would have gone to the emergency room if they were unable to reach their physician (Hannis, Hazard, Rothschild, 1996-internist). The use of the telephone may potentially decrease emergency room visits by providing that access that patients need. By diverting unnecessary emergency room visits, there would be the potential for a cost savings to health care plans and third party payors.

A physician can be more productive, being able to treat more patients in one day when both face to face visits and telephone visits are combined. One can also envision that as a result of patients receiving telephone care, clinics could have less crowding. This means less wait times for patients in the clinic and also for those talking on the phone, no wait time at all. Also if calls are reimbursed, documentation will be required to substantiate the call and its value. This could lead to improved medical documentation which is always important to patient care. Complete and accurate documentation of all patient encounters can decrease confusion about advice given and avoid prescribing errors as examples.

Currently, the incentive by insurance is to bring patients into the office for visits. Physicians are paid by in office patient encounter by indemnity insurance plans. If one keeps a patient at home, there is no payment. This needs to be changed. If a physician is reimbursed for care that prevents a visit, the whole health care system would decrease its cost. Studies demonstrating telephone care cost effectiveness and safety have supported the idea that reimbursing physicians for the service may decrease health care costs (Melzer & Poole 2002). As high deductible health plans start to become more common-place, patients will start to look for a combination of care that is both quality and economical. In certain defined situations telephone care will be able to fill that need. In a survey from Albany, New York, parents indicated they were willing to pay 25 dollars to prevent an emergency room or primary office visit (Sorum & Mallick, 1998). But according to Melzer (2002) in a 1999 survey in Seattle only 35% of patients who used an after hours call center were willing to pay for their telephone care. More studies are needed to demonstrate the cost effectiveness of telephone care, as little research exists in this area. To this end more physicians need to utilize the new CPT codes and advocate for

reimbursement. This can be encouraged by educating physicians on the quality of telephone care and how to properly charge for it.

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MANAGEMENT DILEMMA FOR HEALTHCARE PROVIDERS IN THE WAKE OF HURRICANE KATRINA

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ABSTRACT

This manuscript examines a unique management issue that confronted staff from three separate healthcare providers in the aftermath of Hurricane Katrina. The deaths that occurred in the New Orleans area at St. Rita Nursing Home, Lafon Nursing Home, and Memorial Medical Center were followed by criminal investigations. For caregivers at two of the facilities, criminal indictments were issued.

In the U.S., civil litigation in nearly all business arenas is commonplace, especially when there is the possibility that there has been negligence, or that a person has suffered injury or wrongful death. There was after Hurricane Katrina, however, the use of criminal prosecutorial action by the Louisiana Attorney General, which sought to criminalize the actions of healthcare givers who lost patients while facing the challenges of heretofore unheard of failure of levees and the catastrophic flooding that came as the result of those failures.

The tragedies at each of the aforementioned healthcare facilities were examined, with attention given to reconstruction of the management decisions at each. The specter of criminal indictment and charges to managers and caregivers for each of the three healthcare facilities, is discussed. Healthcare management implications for the future now must include not only civil liability concerns but also the possibility of criminal prosecution.

INTRODUCTION

For healthcare professionals in the United States, the threat of litigation by patients (or former patients) is an ever-present concern. They can face litigation

alleging misdiagnosis, failed treatments, or personal injury or even wrongful death. Even if the healthcare practitioner is genuinely innocent of allegations in litigation, the cost of the legal defense is frequently measured in tens of thousands of dollars.

Along with the inundation of thousands of homes, businesses and private and public healthcare facilities, the floodwaters of Hurricane Katrina in the New Orleans area tested not only the emergency procedures that were in place, but also the mettle of those who struggled amid the chaos to save those who were in their care.

The deaths in St. Bernard Parish at St. Rita Nursing Home, and in Orleans Parish at Lafon Nursing Home, and Memorial Medical Center, were followed by criminal investigations. Criminal indictments were issued for caregivers at two of the facilities. USA Today described what is possibly the first-ever criminal trial of emergency responder action during a natural disaster. Parker in a 2007 article in *The Economist* reported the comment of New Orleans native and publisher of the *Gambit Weekly*, who said, "*Nobody has ever been put on trial for how they responded to Katrina,"* (p. 35). Parker added, *"Hurricane Katrina's awful aftermath still poses legal and moral questions. Three recent cases, in particular, have offered ample opportunity for chin-tugging. To what extent can people be held to account for actions that may have caused or hastened the death of others during the worst of times?"* (p. 35). *The Economist* (2007) provides one of the most stomach-wrenching realizations *"... perhaps nobody would have died if the federally built and guaranteed levees had done their job"* (p. 35). It seems that no one took seriously, the possibility that the levees could ever fail.

In this manuscript, we provide a look at the breakdown of the social infrastructure of New Orleans through the lens of published news reports on the conditions there in the immediate aftermath of Hurricane Katrina. We make much use of direct quotes from media sources, as they convey the frustration, passion, and fervor of the post Hurricane Katrina scenario as it unfolded. We examine media reports and other materials to frame and discuss the disposition of the criminal proceedings. We then discuss the implications for healthcare managers of the growing threat of prosecution when persons in their care perish, followed by a discussion of the possibility of political motivations behind such action.

COMBAT CONDITIONS IN THIRD-WORLD COUNTRIES: RESCUE AND SURVIVAL IN POST-KATRINA NEW ORLEANS

In order to understand the immediate post-Hurricane Katrina environment in New Orleans, one must review the breadth, width and depth of the disaster as it

impacted the infrastructure of public and private institutions. This consideration must also include the people affected by Hurricane Katrina, as they were the patients and clients of the medical facilities that were in chaos.

Once the levees failed in St. Bernard and Orleans Parishes, the Gulf of Mexico's storm surge quickly inundated 80-85% of the populated areas. Had the levees held, the New Orleans area would have shrugged-off another near miss of a deadly hurricane, and probably would have been a source of help to those on the Mississippi gulf coast across whom the eye of Hurricane Katrina passed. The levees failed and the situation was one of primordial survival.

News media from across the globe reported the tragedy and suffering in the wake of Hurricane Katrina. *The Washington Post's* Whoriskey and Skipp (2006) reported a grim picture of healthcare in flooded New Orleans, describing a flooded city with desperation at hospitals and nursing homes. They wrote of fetid conditions, of elderly, frail people in facilities without air-conditioning, medical supplies, and without staff able to provide basic care. *"Doctors pleaded for helicopters and boats and feared looters"* (p. A03).

The rescues did take place, with rescuers using every means available. *The National Revue's* Dolinar (2005) reported on rescue efforts. He wrote that the U.S. Coast Guard *"claimed more than 24,000 rescues and evacuated another 9,000 from hospitals and nursing homes"* (p. 35). He described the efforts of the Louisiana Army National Guard's 1-244th Aviation Battalion and 812th. Med-Evac unit, which moved a mix of ten Black Hawk helicopters and six Huey helicopters into action in New Orleans after Hurricane Katrina.

> *"It was like a scene from a Stephen King movie. We just got back from Iraq and saw nothing like this kind of devastation there."*
>
> Capt. Shawn Vaughn, a Black Hawk pilot
> with the Louisiana Army National Guard
>
> (Dolinar, 2005, p. 38)

Dolinar (2005) reported that most of the Louisiana National Guard helicopter crews were from New Orleans and knew the city well, which was a boon for their rescue efforts. He reported on their selfless efforts to help their neighbors:

> *"The regrettable underside of this familiarity was that most lost everything they had in Katrina. One pilot was plucked from his sunken home by his own unit, and began flying again a few hours later.) The Black Hawk operation was a textbook example of quick-and-dirty improvisation: Lacking rescue hoists, crews adopted the nervy tactic of landing directly on rooftops to take on passengers, while applying power to keep the helicopters light so they wouldn't collapse the storm-weakened buildings. Some stripped out their seating to increase capacity to 30 passengers standing, or to carry stretchers for the elderly and disabled"* (p. 38).

Heroic Rescue Efforts

Caravans of hunters and sport fishermen with boats on trailers headed to New Orleans to rescue people trapped in flooded homes and hospitals. Police, fire and other federal, state and local organizations from a multi-state region sent people to help.

Dolinar (2005) reported from the ground:

> Orleans Parish civil sheriff Paul Valteau saw a part of this massive effort close up, when he pulled off the Franklin Ave. interstate exit at 3 P.M. on Monday, August 29, shortly after the storm had passed and levees had broken. *"They were screaming and hollering everywhere,"* he recalls. Submerged homes and businesses stretched into the distance. Survivors stood on rooftops, water up to their waists and rising. Desperate pounding and shrieking came from attics. One man, a double amputee, clung to a tree as water surged around him. *"I saw things I never saw in 23 years as sheriff,"* Valteau says. *"I saw things I never want to see again."* But he also saw Coast Guard helicopters dodge power lines to winch the endangered to safety. He joined one of the ad hoc rescue crews launching boats from the off-ramp. *"We weren't alone. Hundreds of people who had boats showed up at interstate exits and launched their boats Monday afternoon"* (p. 35).

Once the New Orleans survivors of Hurricane Katrina were finally evacuated, the fight for survival was not over. "*Older persons who left their homes*

or healthcare facilities suffered overwhelming stress in New Orleans shelters, and many died. Of the 37 evacuee deaths reported by the Harris County Medical Examiner during this period, 23 occurred in persons over the age of 65" (Gavagan, Smart, Palacio, Dyer, Greenberg, Sirbaugh, Fishkind, Hamilton, Shah, Masi, Ivey, Jones, Chiou-Tan, Bloodworth, Hyman, Whigham, Pavlik, Feigin, Mattox, 2006, p. 936).

The Scene at the New Orleans Morial Convention Center

Survivors of the Hurricane Katrina floodwaters in New Orleans were directed to the Ernest N. Morial Convention Center. These survivors found new challenges, as the convention center had no utilities, no flushing toilets, no food, no water, and almost no police. Gangs of thugs harassed many of the survivors. Transportation away from the scene was slow to arrive, as was any sort of relief from the tropical heat and squalor. People died. Some of the dead were stacked like cordwood in one of the refrigerated sections of the facility. Of course, without electricity, the sealed doors mainly served to contain the smell of decaying flesh.

> *"They had paraded the lifeless body throughout the crowd of evacuees, yelling, "Look, this is what they are doing to us!""*
>
> (Yoes, 2006, p. 67).

Patrick Yoes' book, *Chest Deep and Rising* (2006) conveyed "*a moment when the future seemed out of reach, and out of control. It was a time when our world collapsed all around us. It was a time of ever-changing challenges, unspeakable horrors, and survival. Equally important, it was a time of bravery, heroic acts, and selfless devotion by America's first responders"* (Yoes, 2008, Chest Deep and Rising, info. section). While moment-by-moment existence for the survivors massed at the convention center was brutal, dignity for the dead was also scarce. Yoes was a member of a team of police who snatched a group of nurses from the mayhem at the convention center. They described their ordeal to their rescuers, "*One nurse explained how an elderly woman at the convention center had died after suffering a high fever for over 18 hours. Several thugs had taken the body from family members and loaded it onto a motorized cart used by the Convention Center maintenance crew. They had paraded the lifeless body throughout the crowd of evacuees, yelling, "Look, this is what they are doing to us!""* (Yoes, 2006, p. 67).

Callimachi (2006) described the ordeal of Herbert Freeman, Jr. and his elderly mother. He evacuated his elderly mother to the convention center for rescue. His mother had *"broken both hips, ate through a feeding tube and wore a pacemaker"* (para. 3). He did not feel that he could evacuate her before the arrival of Hurricane Katrina. When floodwaters rose, he *"found a boat, placed her wheelchair inside and floated to higher ground, eventually arriving at the convention center, where there was no food, water or medical care"* (para. 3). He brought his mother to the convention center in her wheelchair two days after Hurricane Katrina stuck. There they waited in the summer heat. His elderly mother died in that wheelchair. *"A fleet of buses arrived four days after she died and when they did, Freeman was not allowed to take his mother's body, forced to board the bus at gunpoint*" (para. 3).

The Astrodome, Houston, TX

The evacuees from New Orleans were bussed and flown all across the United States. A primary destination was the city of Houston. Gavagan et al. (2006) reported:

> On September 1, 2005, with only 12 hours notice, various collaborators established a medical facility-the Katrina Clinic-at the Astrodome/Reliant Center Complex in Houston. By the time the facility closed roughly two weeks later, the Katrina Clinic medical staff had seen over 11,000 of the estimated 27,000 Hurricane Katrina evacuees who sought shelter in the Complex (p. 936).

SAL AND MABLE MANGANO: ST. RITA NURSING HOME, CHALMETTE, LA

This analysis begins with an examination of the post-Hurricane Katrina events that surrounded St. Rita's Nursing Home, where thirty-five people died when floodwaters from a levee break inundated the area. Sal and Mabel Mangano, owners of St. Rita's Nursing Home were charged with 35 counts of negligent homicide and 24 counts of cruelty to the infirm. The first counts were for each of the 35 who died at St. Rita's; the latter counts were for the difficulties and hardships suffered and endured by the residents of St. Rita's who escaped and survived. According to the Associated Press (2007), Sal and Mable Mangano decided to shelter in place following the August 29th, 2005 storm. The nursing home flooded to the roof and 35

people perished (para. 4). The flooding overtook the one-story nursing home in less than 20 minutes (Jurist, 2007, p. 1). See Annex 1 for the text of the indictment, which includes the names of the deceased.

USA Today (Parker (2007) described St. Rita's Nursing Home as a *"signature scene of the horror that followed Katrina, and the Manganos' decision not to evacuate the home as floodwaters rose in the New Orleans area outraged the city's residents"* (p. 1A). Parker added that when 'Sal and Mabel Mangano were arrested after 35 people drowned in their nursing home in the wake of Hurricane Katrina, they became vivid symbols of the inept preparation and response to the disaster' (P. 1a). The Manganos faced possible prison sentences of five years for each count of negligent homicide; each count of cruelty carried a possible sentence of ten years.

DR. ANNA POU, NURSE LORI BUDO AND NURSE CHERI LANDRY: MEMORIAL MEDICAL CENTER, NEW ORLEANS, LA

"It was stifling. We were hoisting patients floor to floor on the backs of strong young men. It was as bad as you can imagine," said Dr. Gregory Vorhoff, who stayed throughout the storm and eventually hitched a ride on a boat to seek help (In Katrina Chaos, 2006, p. 1A). Whoriskey (2006) Temperatures inside Memorial Medical Center rose to over 100 degrees, *"the generators didn't work, toilets backed up, and nurses had to resort to improvising care. Rescues were sporadic"* (p. A03).

"I did not murder those patients."

Statement by Dr. Anna Pou on "60 Minutes"
(Johnson 2006 para. 5).

Foster (2007a) wrote for The Associated Press about Dr. Anna Pou, and nurses Lori Budo and Cheri Landry were arrested, charged with murder, after an investigation by Louisiana Attorney General Charles Foti's office. The three women were accused by Foti of using a lethal injection of drugs to put seriously ill patients to death, after allegedly determining that the patients in their care were for a number of reasons unable to be moved or evacuated. Reid and Baldwin (2006) wrote, *"The three are alleged by authorities in New Orleans to have given four elderly patients a "lethal cocktail" of morphine and another drug as conditions in the city's Memorial Medical Centre rapidly deteriorated in the days after the hurricane struck"* (para. 2).

"They took the law into their own hands."
Statement by Louisiana Attorney General Charles Foti
(Konigsmark, 2006, p. 3A)

Dr. Pou and nurses Budo and Landry were at Memorial Medical Center in New Orleans when the levee system protecting the city failed, and the streets around the facility were inundated by floodwaters swollen in the aftermath of Hurricane Katrina. Foster (2007a) reported that the electric service failed, and temperatures in the facility rose to 110 degrees on the floor where the critically ill patients were situated. Supplies were running out. Looters raided a credit union across the street from the hospital. No less than thirty-four patients died at Memorial Medical Center, an eight-story hospital with 317 beds. Reid and Baldwin (2006) documented the long wait that all endured before help arrived: Patients and staff had to wait four days before being moved to safety. The public did not seem to blame the doctor or the nurses. *"Few here believe the charges, and prefer to view the three women as heroes who cared for hundreds of patients trapped in a sweltering hospital with no electricity, running water or garbage removal"* (Johnson, 2006, para. 18).

SISTERS OF THE HOLY FAMILY: LAFON NURSING HOME, NEW ORLEANS, LA

"Nineteen elderly residents of Lafon nursing home, run by the Sisters of the Holy Family in New Orleans, died in the days after Katrina hit Aug. 29, 2005. Flooding destroyed much of the food, drinking water and medicine inside the sweltering building, and it took days for help to arrive" (Foster 2007a, p. 1) *"Like Saint Rita's, the nuns at Lafon decided not to evacuate. However, two days before Katrina made landfall, the Sisters of the Holy Family evacuated elderly nuns living on the second floor of the nursing home, but not the lay residents on the first floor. All 60 nuns living in the motherhouse across the street also evacuated"* (Associated Press, 2007, para. 5). *"During the hurricane, nuns from the Sisters of the Holy Family who operated the Lafon Nursing Home, decided evacuation posed a greater risk to patients than remaining within the home"* (Jurist, 2007, p. 1). *"About 20 staff members, including a half-dozen nuns, rode out the hurricane at the nursing home with more than 100 residents.* (Foster, 2007a, p. 1).

> *"Although flooding was about 3 feet deep in the first floor of the building, the staff was able to evacuate residents to the second floor.*

But much of the food, drinking water and medicine was destroyed by the flooding. Conditions deteriorated further when the generator failed, causing temperatures inside the home to soar. Staff members flagged down emergency vehicles to try to get help, but none arrived until the fourth day when a staff member's relative found a bus. Three dozen residents were taken to a nursing home in Houma. The next day, two FEMA workers arranged for a squadron of Black Hawk helicopters to take the remaining residents to a makeshift hospital at New Orleans' Louis Armstrong International Airport" (Foster, 2007a, evacuation section).

DISPOSITION OF THE PROSECUTORIAL ACTIONS

Mable and Sal Mangano

"Mable and Salvadore Mangano - counts 1-35, negligent homicide, the jury finds the defendants NOT GUILTY. On counts 36-59, cruelty to the infirmed, the jury finds the defendants NOT GUILTY". From the records of:*State of Louisiana versus Salvador A. Mangano, Sr. and Mabel B. Mangano (07-WFLN-12 Negligent Homicide and Cruelty to the Infirm, Trans.). 20th Judicial District Court, West Feliciana Parish, Louisiana*

Dr. Anna Pou, Nurse Lori Budo, and Nurse Cheri Landry

Parker and Jervis (2007) described the outcome: In July 2006, Louisiana's Attorney General Charles Foti *"charged the three with second-degree murder for allegedly euthanizing four patients. A New Orleans grand jury declined to indict them"* (p. A4).

Sisters of the Holy Family

Chatelain (2007) reported on the decision of New Orleans District Attorney Eddie Jordan regarding the prosecution of the Sisters of the Holy Family. *"On Monday, [Sept. 10, 2007] Jordan's office announced, "after a thorough review of the facts and applicable law, he [Jordan] has concluded that no criminal conduct occurred. With*

> *this finding, the investigation of the deaths at Lafon Nursing Home is concluded and will not be presented to the Orleans Parish grand jury*" (p. 1). On September 11, 2007, the Associated Press reported on Jordan's decision against prosecuting the Sisters of the Holy Family, reporting that, "*Jordan's decision not to file criminal charges comes just days after a jury found the owners of Saint Rita's nursing home in Saint Bernard Parish not guilty of 35 counts of negligent homicide and 24 counts of cruelty to the infirm"* (p. 1).

Chatelain (2007) wrote about the aftershock in the medical and legal communities, expressing a growing concern about a perceived unfairness in prosecutorial action. *"Because no charges had been filed against the nuns, attorneys representing the Manganos suggested that their clients had been unfairly singled out"* (p. 1). *"The public's reaction was unsparing--towards Mr. Foti. Doctors from all over the country weighed in on Dr Pou's behalf. It was up to New Orleans's district attorney, Eddie Jordan, to seek charges against the doctor and her two assistants. Perhaps with a finger to the winds, Mr. Jordan emerged in July saying he had failed to persuade a grand jury to issue an indictment"* (*The Economist*, 2007, p. 35).

"Bright lights during New Orleans' darkest hour."

American Medical Association (AMA) and
American Nursing Association (ANA)

(*Medical Ethics Advisor*, 2007, p. 103)

Calling Pou and other physicians and nurses who stayed with their patients through the desperate conditions that followed the hurricane "*bright lights during New Orleans' darkest hour"* in a statement released after the grand jury refused to issue charges, American Medical Association (AMA) and American Nursing Association (ANA) leaders expressed concern about the actions taken against the doctors and nurses. "*[The AMA and ANA] continue to be very concerned about criminalizing decisions about patient care, especially those made during the chaotic aftermath of a disaster, when medical personnel and supplies are severely compromised,* "according to the statement issued by the AMA and Silver Springs, and MD-headquartered ANA (*Medical Ethics Advisor,* 2007, p. 103).

THREAT TO HEALTHCARE PROVIDERS: THE LOOMING SWORD OF CRIMINAL PROSECUTION

Added to the almost certain promise that healthcare providers who remain behind to care for victims in the midst of and in the aftermath of a hurricane will encounter death, disease, injury, thirst, heat, lack of sleep, and near-battlefield conditions, along with civil litigation for any perceived misjudgment, there now looms a new and more serious threat. That threat is that a prosecutor somewhere, who is removed and insulated from the fight for survival in the hurricane impact area, will criminally prosecute healthcare managers and caregivers. The October 1, 2007 issue of *Modern Healthcare* discussed the dilemma. Cheryl Peterson, a senior policy fellow for The American Nurses Association said ``If you want practitioners to continue to respond to disasters, you cannot put them in a position-when they are making very difficult decisions-where they'll be second-guessed by someone who was not there" (Blesch, 2007, p. 6). What has evolved is a "Catch 22"-type scenario for these managers and caregivers. Johnson (2006) wrote that *"many in the city's medical community fear that ongoing prosecutions at Memorial and at nearby St. Rita's nursing home, for not evacuating its patients, will have deadly ramifications for future storms"* (para. 19). Despite an AMA policy that opposes *"the attempted criminalization of healthcare decision-making especially as represented by the current trend toward criminalization of malpractice"* (Blesch, 2007, p. 6), the post Katrina ordeals endured by caregivers and managers presents a significant threat to the healthcare industry. There seems to be a *"growing willingness among prosecutors to go after providers in the criminal justice system rather than allow hospital administrators, medical boards and malpractice lawyers sort out the facts and penalties when care goes wrong"* (Blesch, 2007, p. 6). The criminal trial of Mable and Salvadore Mangano provides an illustration of healthcare management decisions examined under a prosecutorial microscope. The case against them *"seemed damning. Prosecutors were able to suggest strongly, for instance, that the Manganos had declined to evacuate their elderly patients because they didn't want to spend the money. All the other nursing homes in St Bernard were evacuated and all but one of their 200 patients survived"* (*The Economist*, 2007, para. 5).

REACTION TO THE CRIMINALIZATION OF HEALTHCARE MANAGEMENT AND CAREGIVER DECISIONS DURING AND AFTER HURRICANE KATRINA: THE ROLE OF POLITICS?

Can you have your cake and eat it too?

Louisiana Attorney General Charles Foti's office instigated civil and criminal litigation that appear on their face to be at odds with each other. In a widely publicized state court criminal trial Foti was prosecuting Mable and Salvadore Mangano for negligent homicide and cruelty, but at the very same time, he was in a federal court blaming the U.S. Corps of engineers for levee failures in New Orleans and St. Bernard Parish. Foster (2007b) described the chaos of this conflicting approach to justice in report appearing in an *Associated Press Financial Wire*, *Business News* report. The Manganos cited in their trial a conflict of interest on the part of Foti, asking that he be barred from pursuing the case against them since it was such in conflict with his case in federal court. Using Foti's federal court action against him in state court, the attorney for the Manganos' asked the state judge to make Foti's federal court actions regarding flooding from Katrina part of the their case (Foster, 2007b, para. 4). Amid the prosecutions, and threats of prosecutions, Foti ran a campaign for reelection. Those whom Foti accused of criminal wrongdoing, subsequently accused him of timing actions of his office with his campaign fundraising attempts.

In 2007, Blesch in an article in *Modern Healthcare* discussed the outrage about Foti's actions:

> *"Critics of the prosecution in New Orleans compare it to the discredited rape case against Duke University lacrosse players. ``I know how this works,'' said Mike Ruggio, a former prosecutor for the U.S. Justice Department's criminal division. ``A lot of prosecutors look at these cases as career-building,'' said Ruggio, now a partner in the Washington office of Polsinelli Shalton Flanigan Suelthaus. The consequences can be devastating to the defendants, even when the charges are dropped or defeated at trial"* (p. 6).

The St. Petersburg Times (2006) reported that *"Dr. Anna Pou, the doctor arrested in the deaths of four patients at a New Orleans hospital after Katrina filed suit accusing Foti of using her arrest to fuel his re-election bid"* (para. 17). Similar accusations were made during the Mangano trial; a review of the trial records finds several pieces of dated Foti campaign literature. Those dates are curiously close to releases by his office of information about the Pou and Mangano cases.

The Voters Say NO to Foti

Louisiana Attorney General Charles Foti lost not only the cases against healthcare providers in the aftermath, but also his job. *USA Today's* Parker and Jervis (2007) described the election: "*Foti, 69, became the first Louisiana attorney general in more than 35 years to lose a primary, according to state election records. He finished last in a three-way race Saturday, failing by a narrow margin to qualify for the runoff Nov. 17"* (p. 4A). Parker and Jervis reported the criticism that Foti received for his ill-fated efforts to prosecute the doctor and nurses at Memorial Medical Center. *"There was a tremendous amount of backlash against him,"* says Clancy DuBos, a New Orleans native, attorney and owner of *Gambit Weekly*, which chronicles politics in Foti's home base. *"The people he angered are organized, highly educated and very likely to vote -- and very likely to not forgive"* (p. 4A).

HEALTHCARE MANAGEMENT IMPLICATIONS

This discussion of healthcare management implications focuses upon hospitals and senior-care facilities. In the interest of clarity, definitions from *Stedman's Online Medical Dictionary (2008)* clarify the roles of hospitals and nursing homes:

> Hospital: *An institution for the treatment, care, and cure of the sick and wounded, for the study of disease, and for the training of physicians, nurses, and allied health personnel.*

Nursing
Home: *A convalescent home or private facility for the care of individuals who do not require hospitalization and who cannot be cared for at home.*

While both hospitals and nursing homes tend to serve primarily local populations and client-bases, their express purposes and functions are quite different. Managers of the two types of healthcare organizations, upon learning their facilities and residents in their care are in the path of an approaching hurricane must make decisions utilizing the best information and experiential resources available. As these two kinds of healthcare organizations perform different functions and services, management objectives are not always identical. The essential difference between the two is that hospitals tend to have a defined function in the time of crisis, i.e. immediate emergency care of sick and wounded, a service not offered by nursing homes.

A particular problem for hospitals and nursing homes is the evaluation of the risk of moving seriously ill patients. The stress to these patients of such an evacuation is in itself a risk. Healthcare providers must decide which has less risk: remaining in a facility during a hurricane event, or evacuation. The information that is available regarding a hurricane's track can vary from hour to hour. The severity of the hurricane's winds, rains and tidal action diminishes the further one is from the eye or center of the storm. Moreover, the risks can be somewhat different depending upon which side (east or west) of a gulf hurricane you happen to be. In the case of the aftermath Hurricane Katrina and the New Orleans area, the severity of one's situation varied exponentially depending upon how far east or west one was located, and if the property was on land that was above or below the level of seawater and the tidal surge.

This makes for an extraordinarily difficult situation for healthcare managers. It becomes a matter, particularly in the case of very frail patients, if they evacuate, some will die from the move, and if they remain in place, some may die. Several Atlantic hurricanes enter the Gulf of Mexico each year. Healthcare providers cannot constantly shuttle patients. It is a logistic impossibility if there is any desire to maintain a quality healthcare environment. City of New Orleans' former health director, Dr. Brobson Lutz, is reported to have said in an the English-language edition of *Agence France Presse "The bottom line is, it extremely difficult to evacuate nursing homes and hospitals every time there is a hurricane in the gulf that looks like it might approach New Orleans"* (Johnson, 2006, para 20).

The Washington Post's Whoriskey and Skipp (2006) discussed management decisions by hospital administrators, in the New Orleans area in the wake of Hurricane Katrina. Amid criticism that patients should have been evacuated beforehand, health-care authorities have praised the "heroic" actions to save and comfort stranded patients. Some patients were simply too weak to transport, they said, and it was deemed better to stay open during a hurricane to cater to storm victims" (p. A03). Even when contemplating an evacuation, the kind of evacuation can be possibly no better than remaining in place. Government officials urged late evacuees to go to the New Orleans Convention Center. Acting upon that advice, some patients were evacuated to the Convention Center, where there was no provision for their care. This chaotic scenario, according to Kipnis (2007), may create *"circumstances that may be unheard of in civilian medical care (that) are tragically more familiar in military medicine"* (p. 81). He argued that conditions arising during and after Hurricane Katrina were in some ways similar to those encountered on a battlefield.

DISCUSSION

The severity of the disaster of Hurricane Katrina clearly tested the limits of endurance of all in who found themselves in its path. Men and women died in nursing homes and in hospitals. Caregivers were tested in battlefield conditions but their location was in one of the oldest cities in the United States. This great city soon resembled a flooded nightmare in a third-world country. Survival for many depended upon the ability to innovate, to adapt and overcome in the face of crumbled infrastructure, confusion and chaos.

Unless and until relief in the form of insulation from civil and criminal liability is granted to healthcare professionals, managers, and other caregivers when responding and acting during a declared emergency, a prudent management decision may be to exit the business of healthcare altogether. The lesson of Hurricane Katrina shows that not only is there the likelihood of civil litigation filed after the fact, but that there is a growing specter that healthcare efforts that fail may well be the basis of a criminal prosecution. While insurance can offset the cost of litigating allegations of malpractice, insurance does not insulate from a caregiver from a criminal accusation and prosecution, nor fund the defense of those charges.

The situation becomes additionally complex when considering the realities of hurricane activity in the Gulf of Mexico. Satellite images may show a hurricane's cloud formation as literally stretching across the entire Gulf of Mexico. Yet, a peek

out of a window may show sunny skies and mild conditions. A hurricane's landfall is more often than not incredibly devastating at the center of the activity, but the damage declines significantly the further one is removed from the center. For example, in New Orleans and in St. Bernard Parish, had the levees held, there would have been some power outages that may have taken a day or so to resolve and of course there would have been the assorted roof damage and tree limbs downed. Life would have resumed to normal in relatively short order, with a uniform gasp of relief that once again, New Orleans dodged destruction. The big news would have been that the Mississippi gulf coast endured damage that was far greater than the landfall of Hurricanes Camille and Betsy combined.

Health care managers had lose-lose propositions before them as Hurricane Katrina approached. *Evacuate,* and there is a high chance that at least some people in their care will die if moved; or *Stay*, and rely upon generators and a stock of food, water, medicine and other supplies, along with trained staff to maintain healthcare services. But with Hurricane Katrina, something happened that was not supposed to happen. Federal, state and local officials guaranteed assured everyone at all levels that given the levees, pumps and drainage infrastructure, this was under control. Given this, heathcare managers and caregivers considered remaining in place with stockpiled resources as a reasonable plan that kept the best interest of those in their care in mind.

Then, the levees failed.

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ANNEX 1

FROM: State of Louisiana versus Salvador A. Mangano, Sr. and Mabel B. Mangano (07WFLN-12 Negligent Homicide and Cruelty to the Infirm, Trans.). 20th Judicial District Court, West Feliciana Parish, Louisiana

A True Bill
Indictment for Negligent Homicide

The GRAND JURORS of the State of Louisiana, duly impaneled and sworn in and for the body of the Parish of St. Bernard, in the name and by the authority of the said State, upon their oath, present that one Mabel B. Mangano [and] Salvador A. Mangano, Sr....late of the Parish of St. Bernard, on or about the 29th day of August in the year of Our Lord two thousand five with force and arms in the said parish aforesaid, and within the Jurisdiction of the Twenty-Fourth District Court, for the Parish of St. Bernard

Count 01: Negligently killed Lilliam Banta, in violation of 1950 LA.R.S. 14:32.
Count 02: Negligently killed Adel Cousin, in violation of 1950 LA.R.S. 14:32.
Count 03: Negligently killed Mary Darsam, in violation of 1950 LA.R.S. 14:32.
Count 04: Negligently killed Rosemary Davis, in violation of 1950 LA.R.S. 14:32.
Count 05: Negligently killed Zerelda DeLatte, in violation of 1950 LA.R.S. 14:32.
Count 06: Negligently killed Jane Denley, in violation of 1950 LA.R.S. 14:32.
Count 07: Negligently killed Agnes dePascual, in violation of 1950 LA.R.S. 14:32.
Count 08: Negligently killed Helen Fahrenholpz, in violation of 1950 LA.R.S. 14:32.
Count 09: Negligently killed Maxine Frisschertz, in violation of 1950 LA.R.S. 14:32.
Count 10: Negligently killed T. J. Gallardo in violation of 1950 LA.R.S. 14:32.
Count 11: Negligently killed Shirley Hartdegen, in violation of 1950 LA.R.S. 14:32.
Count 12: Negligently killed Josephine Johnson, in violation of 1950 LA.R.S. 14:32.
Count 13: Negligently killed Mabel Johnson, in violation of 1950 LA.R.S. 14:32.
Count 14: Negligently killed Mildred Kramer, in violation of 1950 LA.R.S. 14:32
Count 15: Negligently killed Harold Kurz, in violation of 1950 LA.R.S. 14:32.
Count 16: Negligently killed Laura Lae, in violation of 1950 LA.R.S. 14:32.
Count 17: Negligently killed Gladys LeBlanc, in violation of 1950 LA.R.S. 14:32.
Count 18: Negligently killed Mary Lind, in violation of 1950 LA.R.S. 14:32.
Count 19: Negligently killed Jack Lott, in violation of 1950 LA.R.S. 14:32.
Count 20: Negligently killed Shirley Mares, in violation of 1950 LA.R.S. 14:32.
Count 21: Negligently killed Lucille Melerine, in violation of 1950 LA.R.S. 14:32.
Count 22: Negligently killed Shirley Meyer, in violation of 1950 LA.R.S. 14:32.
Count 23: Negligently killed Helen Montalbano, in violation of 1950 LA.R.S. 14:32.
Count 24: Negligently killed Laureta Morales, in violation of 1950 LA.R.S. 14:32.
Count 25: Negligently killed Janet Parker, in violation of 1950 LA.R.S. 14:32.
Count 26: Negligently killed Helen Perrett, in violation of 1950 LA.R.S. 14:32.
Count 27: Negligently killed Emile Poissent, in violation of 1950 LA.R.S. 14:32.
Count 28: Negligently killed Janet Rashkin, in violation of 1950 LA.R.S. 14:32.
Count 29: Negligently killed Bernie Robino, in violation of 1950 LA.R.S. 14:32.
Count 30: Negligently killed Eva Rodrigue, in violation of 1950 LA.R.S. 14:32.
Count 31: Negligently killed Anna Schielder, in violation of 1950 LA.R.S. 14:32.

Count 32: Negligently killed Robert Spinks, in violation of 1950 LA.R.S. 14:32.
Count 33: Negligently killed Mike Thompson, in violation of 1950 LA.R.S. 14:32.
Count 34: Negligently killed Inez Vidrios, in violation of 1950 LA.R.S. 14:32.
Count 35: Negligently killed Mary Wagner, in violation of 1950 LA.R.S. 14:32.

ANNEX 2

FROM: State of Louisiana versus Salvador A. Mangano, Sr. and Mabel B. Mangano (07WFLN-12 Negligent Homicide and Cruelty to the Infirm, Trans.). 20th Judicial District Court, West Feliciana Parish, Louisiana

EXTRACT FROM THE MINUTE BOOK, END OF THE TRIAL

(From Page 2)

Judge charged the jury at 3:18 p.m.
Judge completed jury charges at 3:45 p.m.
Jury exited courtroom at 3:47 p.m. to begin deliberation.
Court in recess until Jury returns
Court reconvened at 5:17 p.m.
Jury returned to the courtroom at 5:24 p.m.
Jurors exited the courtroom at 5:28 p.m. to continue deliberation.
Court in recess at 5:29 p.m.
Court reconvened at 7:38 p.m.
Jury reached verdict
Court read the verdict

Mable and Salvadore Mangano - counts 1-35, negligent homicide, the jury finds the defendents NOT GUILTY. On counts 36-59, cruelty to the infirmed, the jury finds the defendants NOT GUILTY.

Court released the jurors to speak to the press if they desired.
Defendants are discharged.
Jurors discharged at this time.
Court adjourned at 7:46 p.m.

UNDERSTANDING HEALTHCARE COSTS AND EVALUATING HEALTH INSURANCE FOR SMALL BUSINESS EMPLOYEES

Don B. Bradley, III, University of Central Arkansas
Matthew D. Hobbs, QualChoice of Arkansas

ABSTRACT

The purpose of this research is to address how small businesses can reduce health care costs and ensure the availability of health insurance for their employees. This is an important issue for small businesses today due to the continual increase of health insurance costs over the past two decades. Looking beyond traditional managed care plans, this research presents other viable options available to small businesses to provide cost-saving, employee-friendly health insurance.

The current trend of increasing health care costs forces small businesses to find creative solutions to manage health care plans (i.e., preferred provider organizations, health maintenance organizations, and point of service plans) to remain profitable while still offering quality health insurance to their employees. The double-digit rise in premiums over the past two decades has been caused by a variety of factors, including the limited capabilities of small businesses. Overall, the aging of Americans has led to a higher demand for health care services. This increased demand has substantially affected the rising costs of health care. Likewise, specific increases for small business health insurance premiums can be attributed to the weak negotiating power of small businesses and a lack of financial resources. The rise in health care costs associated to these factors have led some small businesses to reduce health insurance benefits, such as low deductibles and mental health benefits, or simply drop health insurance altogether.

As a result of increased health care costs, small businesses are being forced to choose between providing necessary health benefits for their employees or maintain profitability in a heavily competitive global economy. Fortunately for small businesses, several alternatives to manage care plans are currently available. These

alternatives were considered in the final recommendations of this research. These also include flexible spending accounts (FSAs), high-deductible health plans (HDHPs), health reimbursement accounts (HRAs), health savings accounts (HSAs), health insurance premium stipends, small business health insurance purchasing alliances, and government intervention. While government intervention is beyond the control of small businesses, the other options listed are possible alternatives to help employers offer affordable, dependable health insurance.

After carefully reviewing the options available, three recommendations were formulated as the best alternatives to managed care plans. The three recommendations for small businesses provided in this paper are to (1) adopt high-deductible health plans (HDHPs) with health reimbursement accounts (HRAs) and flexible spending accounts (FSAs), (2) give employees the option of receiving a health insurance stipend for private health insurance policies or participating in an employer-sponsored HDHP, and (3) consult with regional health insurance cooperatives to find the lowest possible health insurance rates on either HDHPs or managed care plans.

Although the recommendations in this research are viable options for any small business, employers must remember that the underlying factors in choosing a health care plan are the amount of money the employer can contribute to the plan and the demographics of the small business, which includes the age and sex of employees and their medical history. Assessing these factors, in addition to consulting the recommendations in this research, will allow small businesses to care for the medical needs of their employees at a time when health care costs continue to rise substantially.

INTRODUCTION

The issue of health insurance plays an important role in a small business' ability to attract, provide for, and retain its employees. The basic core of health insurance allows individuals to "protect themselves from the potentially extreme financial costs of medical care" while also ensuring "they have access to health care when they need it"(Claxton & Lundy, 2008). In a world that is forced to deal with a plethora of medical issues – from simple hindrances such as the common cold to deadly scenarios involving cancer or heart disease – health insurance provides many employees the satisfaction of knowing they are prepared in the face of a medical emergency. The fact that nearly "158 million nonelderly people were insured through employer-sponsored health insurance in 2006" demonstrates that many

employees not only need health insurance but also expect their employers to provide it (Claxton & Lundy, 2008).

Unfortunately, the cost of health care coverage in the United States continues to be a major burden for small employers. In a 2004 National Federation of Independent Businesses (NFIB) Research Foundation survey, it was found that "there is no problem that creates more emotion than the rising cost of health insurance" (Phillips, 2004). This is primarily due to the fact small businesses "have struggled with double-digit increases in health insurance costs during the past four years," in reference to 2001 through 2004 (Phillips, 2004). Such increases are unsustainable at that rate of increase over a long period of time for small businesses to maintain profitability and still offer health insurance to their employees. As a result, this paper will look at the background of the health care cost crisis facing small business owners, examine possible resolutions to cost-effective implementation of health care coverage for small businesses, and suggest recommendations for small businesses to successfully manage health care coverage while maintaining reasonable costs.

RECENT TRENDS IN SMALL BUSINESS HEALTH CARE COSTS

Since 1982, the NFIB Research Foundation has conducted six surveys to determine the greatest issues facing America's small businesses. In all but one of those years (1986, 1991, 1996, 2000, and 2004), the NFIB found that the cost of health insurance was the number one business problem among small businesses. In the 2004 survey – which is based upon 4,603 responses from small businesses – it was reported that 65.6% of respondents labeled the cost of health insurance as a "critical" issue while only 3.4% claimed it was "not a problem" (see Appendix A to compare the top 10 problems found in the 2004 survey)(Phillips, 2004). To understand the critical nature of the health care cost issue, notice in Appendix A that the next highest-rated "critical" problem was workers' compensation costs at only 32.8%. Clearly small businesses are struggling with rising health care costs.

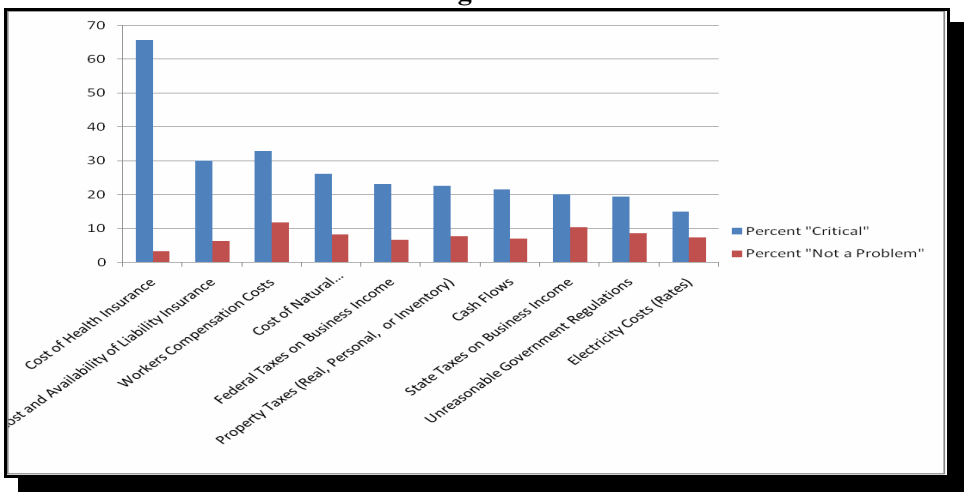
During the five NFIB Research Foundation studies that listed the cost of health insurance as the greatest problem, one survey was conducted during a recessionary period, three surveys were conducted during an expansionary period, and one survey was conducted between recessionary and expansionary periods. Additional data in the survey shows that health care costs are "the number-one problem for all small firms, regardless of legal form," which includes the classifications of proprietorship, partnership, c- and s-corporations, and limited

liability corporation (Phillips, 2004). The survey also demonstrates that the cost of health insurance is the number one problem across all industries (i.e., finance, science/technology, etc.) and all population types (i.e., most urban, urban, and towns/rural) (Phillips, 2004). Such data suggests that health care costs have been and will most likely continue to be a great problem for all types of small businesses in every industry and all areas of the country, no matter how weak or strong the economy is performing.

The Kaiser Family Foundation and the Health Research and Education Trust produced a substantial amount of health insurance cost data in their *2006 Employer Health Benefits Survey*. This survey received responses from 2,122 businesses, of which 97.5% were small businesses (the study classifies small businesses as companies consisting of three to 199 employees) (Claxton et al., 2006). In addition to reporting data from businesses surveyed, the Kaiser study also lists key data related to health care costs over an 18-year period. The 2006 report shows a "moderation in the rate of premium growth for 2006, the third consecutive year in which the growth rate has declined…however, growth in health insurance costs outpaced the rate of inflation and the growth in workers' wages" (Claxton et al., 2006). The graph in Appendix B traces the percentage increase in health insurance premium costs over an 18-year period, starting with 1988. During the 2000s, health insurance premiums have risen 8.2% (2000), 10.9% (2001), 12.9% (2002), 13.9% (2003), 11.2% (2004), 9.2% (2005), and 7.7% (2006) (Claxton et al., 2006). As the study notes, "premiums for family coverage have increased by 87% since the year 2000" (Claxton et al., 2006). Likewise, the cost for single coverage in 2006 was $4,242 per year while the cost for family coverage was $11,480 per year (Claxton et al., 2006). The study also points out that during 2006, small businesses "reported a higher rate of increase" at 8.8%, which is significantly more than large businesses whose costs were only 7% higher (Claxton et al., 2006). Even more so, small businesses consisting of three to 24 employees reported an increase of 10.5% in their health insurance premiums (Claxton et al., 2006).

Table 1: Top Ten Small Business Problems			
Problem	Rank	Percent "Critical"	Percent "Not a Problem"
Cost of Health Insurance	1	65.6	3.4
Cost and Availability of Liability Insurance	2	30.1	6.4
Workers Compensation Costs	3	32.8	11.8
Cost of Natural Gas/Propane/Gasoline/Diesel/Fuel Oil	4	26.1	8.3
Federal Taxes on Business Income	5	23.2	6.8
Property Taxes (Real, Personal, or Inventory)	6	22.7	7.7
Cash Flows	7	21.6	7.1
State Taxes on Business Income	8	20.2	10.5
Unreasonable Government Regulations	9	19.5	8.7
Electricity Costs (Rates)	10	15.1	7.5
Source: National Federation of Independent Businesses, *Small Business Problems and Priorities* (2004)			

Figure 1



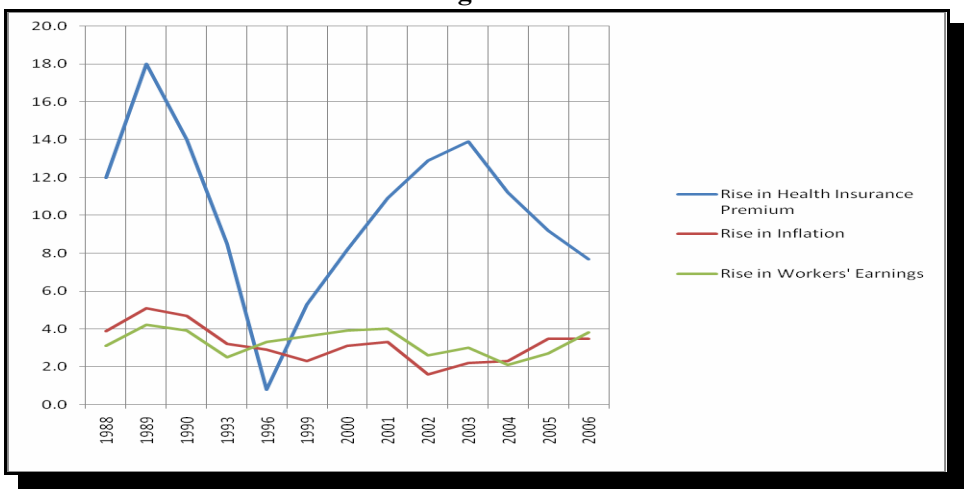
In addition to surveying premium costs, the Kaiser study also surveyed employers on the types and number of plans they offered to their employees and the amount of money employers contributed to employees' health insurance premiums. Based upon the data, 88% of employers only give their workers one plan type option (Claxton et al., 2006). In terms of the type of plans, most small business employees are covered by traditional managed care plans. For example, preferred provider organizations (PPOs) make up 55% of all plans, point of service (POS) plans comprise 19%, and health maintenance organizations (HMOs) represent 17% (refer to Appendix C) (Claxton et al., 2006). In reference to the traditional managed care plans, employers on average paid 84% of the premium cost for individual coverage and 73% of the cost for family coverage. Even with employer contributions, however, employees paid approximately $515 per year for individual coverage and $3,550 per year for family coverage (refer to Appendix D for individual coverage premiums and Appendix E for family coverage premiums for all major plan types).

Table 2: Percentage Increase in Health Insurance Premiums Between 1988 to 2006

Year	Rise in Health Insurance Premium	Rise in Inflation	Rise in Workers' Earnings
1988	12.0	3.9	3.1
1989	18.0	5.1	4.2
1990	14.0	4.7	3.9
1993	8.5	3.2	2.5
1996	0.8	2.9	3.3
1999	5.3	2.3	3.6
2000	8.2	3.1	3.9
2001	10.9	3.3	4.0
2002	12.9	1.6	2.6
2003	13.9	2.2	3.0
2004	11.2	2.3	2.1
2005	9.2	3.5	2.7
2006	7.7	3.5	3.8

Source: Kaiser Family Foundation, *Employer Health Benefits* (2006)

Figure 2



THE EFFECTS OF RISING COSTS AND HOW SMALL BUSINESSES HAVE RESPONDED

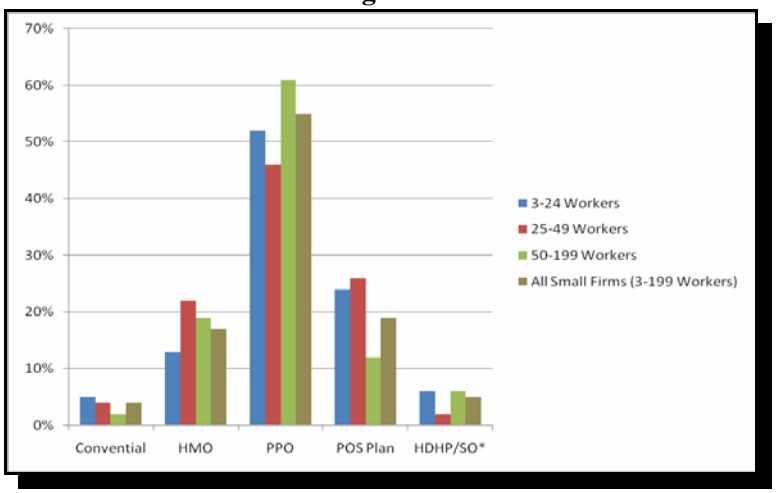
When considering the rising costs of health care insurance – particularly for small businesses – one must wonder why these costs have continued to rise exponentially in 14 of the past 16 years. The cause of high premium increases can be associated to national trends and costs specifically associated with small businesses.

Table 3: Health Plan Enrollment by Firm Size

Firm Size	Conventional	HMO	PPO	POS Plan	HDHP/SO*
3-24 Workers	5%	13%	52%	24%	6%
25-49 Workers	4%	22%	46%	26%	2%
50-199 Workers	2%	19%	61%	12%	6%
All Small Firms (3-199 Workers)	**4%**	**17%**	**55%**	**19%**	**5%**

Source: Kaiser Family Foundation, *Employer Health Benefits* (2006)
*HDHP/SO refers to a High Deductible Health Plan with some sort of savings vehicle, such as a Health Reimbursement Account (HRA) or Health Savings Account (HSA)

Figure 3



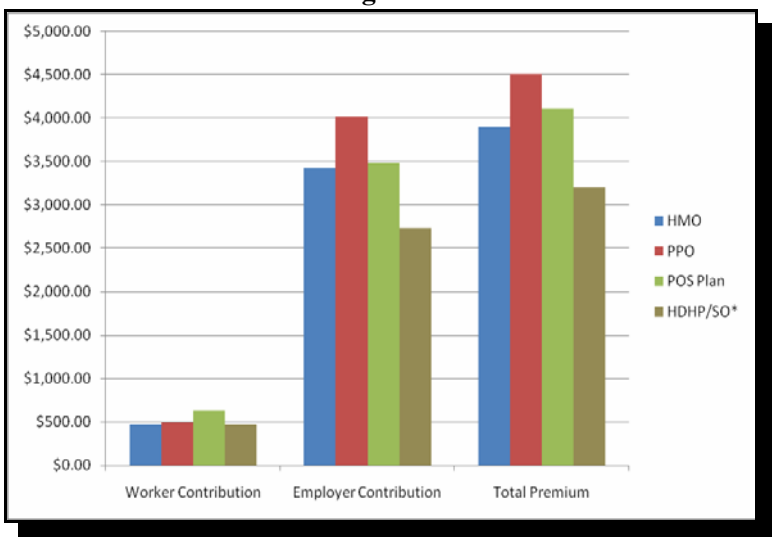
National trends show that America is an unhealthy nation that spends a large portion of its income on health care. According to the National Center for Health Statistics (NCHS) in a 2007 report, "the United States spends more on health per capita than any other country, and U.S. health spending continues to increase, though the rate of increase has slowed for the third consecutive year" (National Center, 2007). The report goes on to demonstrate that "spending increases are due to increased intensity and cost of services and a higher volume of services needed to treat an aging population" (National Center, 2007). The intensity and cost of services can partly be attributed to the number of chronic diseases suffered by Americans.

Table 4: Average Annual Premiums for Individual Coverage in Business Firms

Plan Type	Worker Contribution	Employer Contribution	Total Premium
HMO	$472.00	$3,427.00	$3,899.00
PPO	$491.00	$4,014.00	$4,505.00
POS Plan	$631.00	$3,478.00	$4,109.00
HDHP/SO*	$474.00	$2,732.00	$3,206.00

Source: Kaiser Family Foundation, *Employer Health Benefits* (2006)
*HDHP/SO refers to a High Deductible Health Plan with some sort of savings vehicle, such as a Health Reimbursement Account (HRA) or Health Savings Account (HSA)

Figure 4



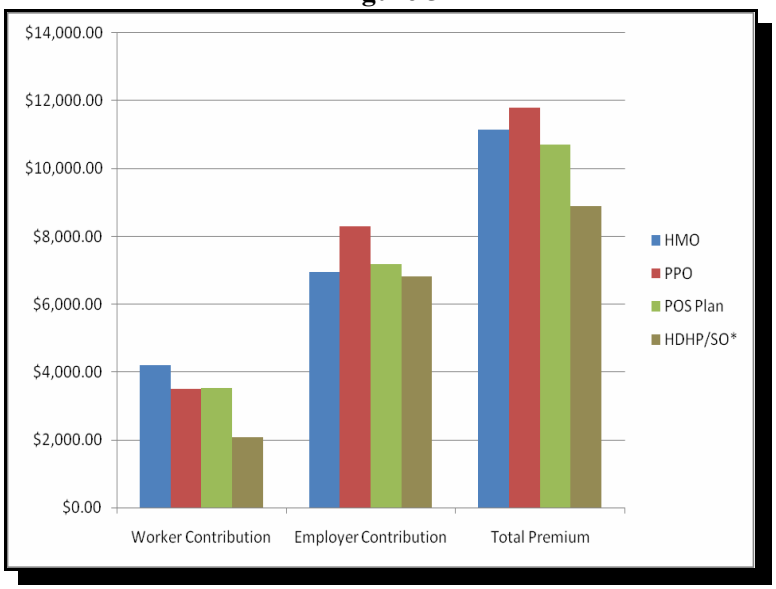
Authors George Menshaw and David Brown claim that cardiovascular disease is a "major cause of…rising health care costs" (Mensah & Brown, 2007). The NCHS contends that obesity – another chronic disease – is "associated with an elevated risk of heart disease, diabetes, and some types of cancer" (National Center, 2007). The report also lists other chronic conditions that plague America's health, such as high cholesterol levels, psychological distress, arthritis and musculoskeletal conditions (which limit mobility, thus leading to less active people), and untreated dental problems (National Center, 2007). In addition, the added pressure of an aging population that is living longer has led to an increase in demand for medical services. Thus, the strain on America's health industry has caused an increase in costs.

Unfortunately, small businesses have also incurred high health care costs due to the characteristics that make them smaller companies. Some authors claim that small businesses are faced with rising health care costs because of their "limited ability…to negotiate affordable group health insurance contracts with health insurance companies and…[the] limited financial capacities of smaller businesses to be able to afford to pay the employer responsibility component of group health insurance benefits" (Cebula, Gubenko & McGrath, 2007). Other authors claim that health care cost increases are "partly attributable to employers choosing looser managed care products in response to the managed care backlash, combined with

rising corporate profits and a tightening labor market" (Benoit et al., 2007). While I would not argue that small businesses' rising corporate profits are to blame for increased health care costs, I do believe there is validity in the claim that rising costs are a direct result of less demand for managed care programs.

Table 5: Average Annual Premiums for Family Coverage in Small Firms			
Plan Type	Worker Contribution	Employer Contribution	Total Premium
HMO	$4,192.00	$6,945.00	$11,137.00
PPO	$3,497.00	$8,296.00	$11,793.00
POS Plan	$3,519.00	$7,187.00	$10,706.00
HDHP/SO*	$2,066.00	$6,830.00	$8,896.00
Source: Kaiser Family Foundation, *Employer Health Benefits* (2006) *HDHP/SO refers to a High Deductible Health Plan with some sort of savings vehicle, such as a Health Reimbursement Account (HRA) or Health Savings Account (HSA)			

Figure 5



The result of smaller businesses having limited financial resources to apply towards health care costs and limited ability to negotiate with insurance companies has been for some small businesses to discontinue health care coverage for their employees. For example, the number of small firms offering health benefits in 2006 was 60%; in 2000, that number was at 68%. (Claxton et al., 2006). The effect of higher health insurance costs on firms with three to 24 employees can be seen in that smaller firms "are least likely to offer health insurance… [with] only 48% of firms with 3 to 9 workers [offering] coverage compared to 73% of firms with 10 to 24 workers and 87% of firms with 25 to 49 workers" (Claxton et al., 2006). This data has been confirmed by the United States General Accounting Office (GAO), which reported in an October 2001 report that "many small employers…do not offer health benefits to their workers," especially "the smallest employers – those with fewer than 10 employees" (Allen, 2001). Other statistics show that "more than 80% of the uninsured are workers or their dependents, and 60% of these workers are employed by small firms with fewer than 100 employees (Hadley & Reschovsky, 2002). The same authors used a survey completed in 2000 to emphasize that one out of every seven employers would eliminate health insurance coverage if health insurance premiums rose over 10%. This statistic is staggering when one considers that there were double-digit hikes in health insurance premiums every year between 2001 and 2004.

In addition to simply dropping health insurance coverage, some small businesses have continued to insure their workers by passing the added expenses on to employees. In the GAO report, it was noted that while the premiums of small and large companies were "similar, the health plans offered by small employers were slightly less generous on average," which includes "slightly higher average cost-sharing requirements" and the absence of certain benefits such as psychiatric and chiropractic care (Allen, 2001). Even more significant is the fact that small employers' health insurance premiums would be significantly greater if "they provided coverage to their uninsured workers and those who were not offered coverage" (Allen, 2001). The same report found that many of those uninsured by small businesses "were less healthy than those who were insured by comparably sized employers" (Allen, 2001). Including these uninsured employers into a small business' health insurance policy would undoubtedly increase the company's premiums.

A final reason small business health insurance premiums have raised is due to insurance agencies' "costs to administer employer-based health insurance and [to] protect against potentially large health care costs" (Allen, 2001). The GAO reports

that of a typical small business' health care premium, roughly 20 to 25% goes directly towards the administrative functions of that plan. This is much higher than the 10% administrative charges that large businesses face, mostly because larger businesses have a less per-person administrative charge than small companies with few employees (Allen, 2001). In addition, many insurance companies will underwrite a health insurance policy for each employee of a small firm based upon that employee's health record, thus allowing the insurance company to determine the health risk of the company. If employees have poor health, the insurance company will balance the added risk with higher premiums.

As health care insurance premiums and costs continue to rise, small businesses must look to other options that help reduce the increasing costs of group health insurance.

ALTERNATIVES TO MANAGED HEALTHCARE INSURANCE

The results of the Kaiser Family Foundation's *2006 Employer Health Benefits Survey* show that 91% of all health plans offered by small businesses are managed care plans, which consist of PPOs, HMOs, and POS plans. When coupling this fact with the rising health care premiums for small businesses, it is reasonable to assume that managed care plans have been a major cause of the rising cost of health insurance. Fortunately for small businesses, there are alternative ways to provide affordable health care for employees. This section of the paper focuses on different types of health care accounts available to small employers and possible options available through the federal government.

Flexible Spending Accounts (FSAs)

A flexible spending account (FSA) is similar to a savings account that is "funded from pretax earnings" by the employee "to pay [for] qualified medical expenses" (Siegal, 2007). FSAs fall under the cafeteria guidelines from the Internal Revenue Code section 125 (Simmons, 2001). The tax benefit to FSAs is that employees can deduct the funds from their salary, thus reducing their tax liability.

From a small employer standpoint, FSAs are fairly easy to incorporate into the company's selection of insurance plans; however, most employers must utilize a third party to administer the plan. Depending upon the size of the small business, these administrative costs can be high. For employees, FSAs provide great flexibility

in determining how much of one's salary to defer for health-related costs. Even so, FSAs operate under the "use-it-or-lost-it rule," which means designated funds must be recouped before the end of the plan year or the employee will lose the funds (Siegal, 2007).

Health Reimbursement Accounts (HRAs)

Much like an FSA, health reimbursement accounts (HRAs) are made up of "untaxed" funds that are redeemable upon a qualified health care expense (Siegal, 2007). The major difference between FSAs and HRAs is that an employee's HRA is "funded solely by employers (Claxton et al., 2006). In addition, HRAs also allow unused balances to be carried over to the next year. In some cases, HRAs "can be accompanied by [a high deductible health plan (HDHP)] or other insurance plan, but doesn't have to be" (Siegal, 2007). With a HDHP, "the employee pays for health care first out of his or her HRA and then out-of-pocket until the health plan deductible is met" (Claxton et al., 2006).

HRAs are a powerful tool for small employers that are vulnerable to paying high health insurance premiums for their employees. HRAs place greater responsibility on the employee to be conscientious when making health care purchases, thus hampering their urge to be frivolous in the use of health care funds. Due to the HDHP having a large employee deductible, HRAs also eliminate the burden of high health insurance premiums while giving employers the ability to help workers cope with health care costs. The added advantage for young employees is that unused health care costs can be rolled over into the next plan year. The opposite is true for older workers, who are likely to have more health issues and less time to save and rollover unused portions.

Health Savings Accounts (HSAs)

Health savings accounts (HSAs) are much different from the other accounts listed in this section in that they are not employer-sponsored. However, they are still an excellent tool for employers to manage health care costs because they provide employees the ability to fund on a pre-tax basis "through payroll deduction" (Claxton et al., 2006). In addition, HSAs can be funded by an employer if the company decides to do so on a non-taxable basis to the employee. Most employers encourage employees to open HSAs if that employer offers a HDHP, mostly due to the fact that the associated health plan includes a high employee deductible. Like a FSA and

HRA, funds can be used to pay for qualified health care expenses. However, the major difference between the three accounts is that HSAs earn interest on their balance. In addition, HSAs must be accompanied by a HDHP, whereas FSAs and HRAs do not (Siegal, 2007)..

Private Health Insurance Stipends

Small businesses that cannot afford high premiums for group health insurance have the option of providing stipends to employees. By providing stipends, employers are able to efficiently assist employees in paying for health insurance while maintaining low costs. For example, employers do not have to pay administrative fees to third parties when issuing stipends. In addition, employers do not have to waste time shopping for, maintaining, and renewing group health insurance plans. An added benefit for employees is that stipends give them the freedom and flexibility to choose their own individual health plan.

Health Insurance Purchasing Alliances

Health insurance purchasing alliances – also called cooperatives – are a great asset to small businesses. Often times, small businesses "are not well informed about the insurance options available to them because, unlike large employers, they do not have specialized staff to manage their employee benefit programs" (Wicks, 2002). Likewise, small business owners' lack of health insurance experience and time cause them to not possess necessary information when dealing with insurance agents (Wicks, 2002). These disadvantages have caused many small businesses to team together and form health insurance purchasing alliances. As a combined force, small businesses in an alliance are treated more like their larger business counterparts. Other advantages include lower administrative costs due to consolidated "marketing, educating, billing, and servicing tasks" and "negotiated contracts" that offer an array of individual health plans (Wicks, 2002). Finally, the joining together of small businesses creates greater "risk-pooling" by spreading the risk of low, average, and high health risk small businesses (Wicks, 2002). The result is lower premiums that larger businesses enjoy. In addition, lower premiums allow small businesses that were not previously offering health insurance to join in.

Proponents of health insurance purchasing alliances point out that several cooperatives have been successful in the United States. Critics of alliances, however,

contend that cooperatives "have not…lowered the cost of coverage," mostly due to the fact that "less than five percent of small employers" participate (Allen, 2001).

Government Intervention

Some American citizens have called for the government to do its part in reducing small businesses' cost of health insurance. One major argument has been for the government to provide federally-funded health insurance to all small businesses. This is because some proponents believe public health insurance for small businesses would ease the cost of health care insurance. Their argument states that small businesses could be covered under an extension of the State Children's Health Insurance Program (SCHIP) by organizing "a small group health insurance market" and then "subsidizing the cost of coverage for low-wage employees" (Borzi, Rosenbaum & Smith, 2001). Likewise, some have called for the government to simply subsidize health insurance by providing tax credits to small businesses that cannot pay for group health insurance. They argue that this can be done through a variety of options, such as itemized deductions, above-the-line deductions, nonrefundable credits, and refundable credits (Fuchs, James & Merlis, 2002).

RECOMMENDATIONS IN DEALING WITH RISING HEALTH CARE COSTS

Based upon the data presented thus far, small businesses should consider all options before choosing to implement a traditional managed health care plan (PPO, HMO, and POS plan). The best method for a business to approach deciding what type of health care plan to offer its employees is to ask several questions that appropriately assess the needs of the company and its employees: How many workers are employed by the firm? What are the demographics of the company, especially in regard to age, sex, family size, health condition, and lifestyle? How much money can the firm put towards a group health insurance plan? Will the employer reimburse the same amount for individual and family policies or will they favor one type of plan over the other? Can the firm determine on its own merit what type of plan to enact, or should it enlist the services of an insurance broker (who typically charge hefty commissions)? Likewise, is the firm willing to pay for administrative costs associated to certain managed care plan alternatives? Through these questions, it should be apparent that not all small businesses have the same needs. As a result, it would be imprudent to assume that the recommendations considered within this paper

are meant to be universal options for all small businesses. While the recommendations within this paper can work for companies of different nomenclatures, each company should still base their decision off of their individual characteristics.

In reviewing the different alternatives presented in the previous section of this paper, there are a variety of ways for small businesses to create a unique, personalized health care plan for their company. With that in mind, the following information presents three recommendations that small businesses can implement in order to reduce health care costs.

Recommendation #1:

HDHP with an Accompanying HRA and FSA

The first recommendation would be for small businesses to consider dropping their traditional managed care plan and adopting a high deductible health plan (HDHP) with a health reimbursement account (HRA) and a flexible savings account (FSA). There are several strong points to adopting this type of arrangement. First and foremost, a HDHP will cause premiums to greatly decrease. This would be ideal for companies who have a small group of healthy employees that do not require regular medical treatment. A HDHP would greatly benefit those who are more concerned with covering unexpected, costly medical emergencies. Secondly, with the additional HRA, employees who are more prone to regular visits to the doctor or have a family to insure can utilize funds distributed by the employer before having to use their own money. Thirdly, employers' have discretion as to the amount of money they will place in the employees' HRAs. As a result, some employers may choose to save costs by not contributing large amounts into employee HRAs. Finally, the implementation of an FSA allows employees who assume they will spend more than the amount of money in their HRA to store money away on a pre-tax basis to compensate for the additional expenses they plan to incur. Thus, this would be a great alternative for employers because it allows their health plan to appeal to a broad group of people while at the same cutting the expense of high premiums for traditional managed care plans.

Appendix F calculates the annual premium savings employers and workers recoup by switching to a HDHP with HRA plan from traditional managed care plans (PPOs, HMOs, and POS plans). Based upon the information reported in the Kaiser Family's *2006 Employer Reported Benefits*, small businesses (and their employees)

who switched to a HDHP with HRA plan in 2006 saved a combined annual total of $693 (single coverage) and $2,241 (family coverage) compared to a HMO plan, $1,299 (single coverage) and $2,897 (family coverage) compared to a PPO plan, and $903 (single coverage) and $1,810 (family coverage) compared to a POS plan (Claxton et al., 2006). These figures are based upon average employer and worker contributions to the health plan, which means employers could possibly save even more money by not contributing as much towards the employee's HDHP premium or the employee's HRA.

There are some weaknesses associated to this type of health plan arrangement. First, the effect of lower premiums in a HDHP is that employees will have a greater deductible to meet. Older employees who have more serious health conditions will be forced to spend more of their own money (either through their HRA, FSA, or personal cash) before they meet the requirements of their deductible. Thus, this plan may not resonate well with employees who have serious medical conditions that require more care. Also, this type of arrangement would likely involve higher administrative fees due to having a HDHP, HRA, and FSA. While the administrative costs would most likely be alleviated by the lower monthly premiums, employers should do a cost-analysis before committing themselves to one type of arrangement over another.

It is important to note that employers may choose to use a health savings account (HSA) rather than a HRA. One benefit of using a HSA is that employees can earn interest on their balance. However, because HSAs are not created by the employer, an employee who leaves the company will have full access to all funds in their HSA. The HRA was favored in this
recommendation because it provides some incentive for current employees to stay with the company, as they cannot take their HRA balances with them upon termination (Claxton et al., 2006).

Recommendation #2:

Option of a Private Health Insurance Stipend or a HDHP

A second recommendation would be for employers to give their employees the option of choosing between receiving a private health insurance stipend or a company-sponsored HDHP. There are many benefits associated to this recommendation for both the employer and the employee. Private health insurance stipends transfer the burden of selecting a health plan from the employer to the

employee. For the employer, there is less time and energy spent towards locating the best possible group health insurance policy. Likewise, employees are given more control over the type of health plan they want. Some employees will choose to have an individual policy that only covers life-threatening medical conditions. Choosing this option would allow them to retain the portion of the stipend that they do not use for health insurance. Other employees can choose to use the entire portion of the stipend on a managed care plan because it suits their needs better. This is a great benefit for employees because often times, a company is made up of individuals who have differing medical needs and differing views on what type of health insurance they desire. Stipends give all employees the freedom to choose what they want.

Secondly, offering employees the option to choose a company-sponsored HDHP will most likely satisfy employees that cannot obtain private health insurance or desire their employer to shop around and determine the best health insurance policy. Due to the fact that businesses consist of employees with varying medical needs, some employees will be better suited by a group-sponsored HDHP. This is because some employees have health conditions that disqualify them from purchasing individual policies, such as cancer. Group health insurance is their only option if they wish to insure themselves and their families. In addition, company-sponsored HDHPs qualify for HSAs, which would therefore allow employees to open personal HSAs to put towards the any medical costs. HSAs also allow employees with HDHPs to earn interest on their money and retain all unused amounts from year to year and job to job. For the employer, this type of arrangement only calls for administrative fees associated to the HDHP, as the HSAs are the sole responsibility of the employee.

The major drawback to this type of health care arrangement is that employees who are disqualified from obtaining individual health insurance due to chronic medical conditions will feel as though they have no option other than to accept the HDHP. While the employer cannot control the medical conditions of their employees, some workers will feel that they should be given other alternatives to the HDHP, such as a traditional managed care plan or additional employer-sponsored funds into individual HSAs. In addition, some employees will choose to not purchase any health insurance and simply pocket the health insurance stipend. While this still saves the company money upfront (health insurance stipends are typically much lower than employer contributions to group health insurance policies), the short-term consequences (car wreck, massive stroke) and long-term consequences (chronic health conditions that develop over time) of employees who choose not to have health insurance could have a detrimental effect on the employee and the employer. As a

result, employers should be upfront with the workers about the reasoning for offering this type of health care arrangement and find ways to ensure their employees are properly covered by health insurance, even if that means requiring them in their job contract to carry health insurance.

Recommendation #3:

Health Insurance Alliances

A final recommendation would be for companies to actively seek out health insurance cooperatives in their region in order to take advantage of cost-savings associated with these alliances. Many alliances are able to offer a variety of health plans, which include both traditional managed care plans and HDHP with HRAs and HSAs. For employers not comfortable with switching to a HDHP from a traditional managed care plan, small group alliances may be their last hope in reducing health care costs.

One possibility for small businesses located in Arkansas is to join the Central Alliance Program (CAP). Since 2004, CAP has been successful in accomplishing two goals: reducing the premiums of its members and allowing small businesses to cover more of their employees (Eden, 2008). While CAP charges local chamber of commerce fees and broker fees, these costs are typically minimal when compared to the money they save by joining the alliance. For employers struggling to provide affordable managed health care plans, regional cooperatives can be a huge asset.

Although alliances usually help small businesses lower health insurance premiums, employers should consider various drawbacks to this option. First, insurance rates may still be high for companies that have older, unhealthy employees. Although alliances help spread health risks by pooling together small businesses, insurance companies base a significant portion of the insurance premium on the demographics of the particular business applying for health insurance. Also, some alliances are dominated by one insurance company which leads to lower competition. With less competition, there is likely to be higher rates and less negotiating power. Even with these drawbacks, however, small alliances may still be the best option for companies pursuing lower health insurance costs.

CONCLUSION

The recommendations presented in this paper are not exclusive. As a result, small businesses should place more emphasis on the needs of their company and employees rather than the benefits offered by these recommendations. Small businesses can only be successful in reducing health care costs through adequate research and choosing a plan that meets their needs.

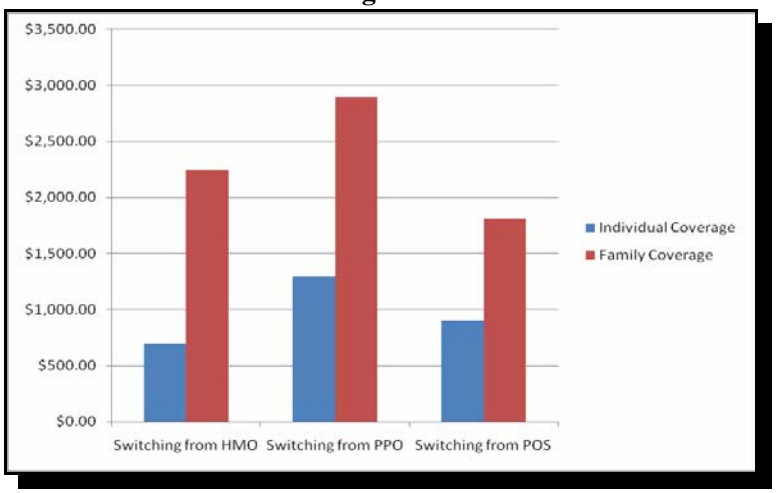
Health care costs will continue to be a burden on America's small businesses into the near future. As small businesses struggle with the added pressure of health care costs, there are ways to help lower the risks that health care costs pose to a company's profitability. While some of the alternatives described and recommended in this paper may be unconventional, small businesses will no less benefit from understanding the current health care cost crisis and considering the options available to offering their employees quality medical benefits. Although the rise in health insurance premiums and health care costs will not be stopped by the simple efforts of small business health insurance cooperatives or the introduction of new types of medical health plans, such actions may allow small businesses to provide their employees with much needed health insurance while maintaining a competitive and profitable advantage in the global economy.

Table 6: Total Annual Premium Savings by Adopting a HDHP/SO* Plan

Individual Coverage			Family Coverage	
HMO	$3,899.00		HMO	$11,137.00
HDHP/SO*	$3,206.00		HDHP/SO*	$8,896.00
Switching from HMO	$693.00		Switching from HMO	$2,241.00
PPO	$4,505.00		PPO	$11,793.00
HDHP/SO*	$3,206.00		HDHP/SO*	$8,896.00
Switching from PPO	$1,299.00		Switching from PPO	$2,897.00
POS Plan	$4,109.00		POS Plan	$10,706.00
HDHP/SO*	$3,206.00		HDHP/SO*	$8,896.00
Switching from POS	$903.00		Switching from POS	$1,810.00

Source: Kaiser Family Foundation, *Employer Health Benefits* (2006)
*HDHP/SO refers to a High Deductible Health Plan with some sort of savings vehicle, such as a Health Reimbursement Account (HRA) or Health Savings Account (HSA)

Figure 6



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