

**AN ASSESSMENT OF
INAPPROPRIATE EMERGENCY DEPARTMENT USE
IN WINNIPEG, MANITOBA:
ITS EXTENT, CAUSES AND PROPOSED SOLUTIONS**

By Llew Crone

A Thesis

Submitted to the Faculty of Graduate Studies
in Partial Fulfilment of the Requirements for the Degree of

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ABSTRACT

Winnipeg's Emergency Departments (EDs) contain highly specialized staff and technical resources intended for the rapid diagnosis and treatment of life or limb threatening illness. When prospective assessment of patients' symptoms is used, approximately 30% of patients at Winnipeg's EDs don't require the use of emergency services. When alternative forms of care are readily available, that provide continuity of care and that are medically adequate, such use of EDs is inappropriate. Inappropriate use may be attributed to patients' perception of enhanced convenience, certainty of service and high quality care compared to the alternatives. These perceptions are for the most part inaccurate. In terms of convenience, certainty of service during office hours and overall quality of care, service from General Practitioners compares favourably to emergency service. These misconceptions were created and maintained by incentives inherent in the fee-for-service method of remunerating physicians for their services, by incentives to ED staff which encourage the over-servicing of patients, and by incentive to those holding elected public office. In effect, EDs are used inappropriately because the general population has been encouraged to do so. So long as inappropriate users are not discouraged from using the ED or encouraged to use alternative services, attempts to curtail inappropriate use will likely prove futile. Currently the incentives for both providers and users of ED services are flawed. First, an approach to more appropriate ED use will require that GPs have an incentive to welcome and pursue the patronage of those suffering unexpected illness. Second, ED staff must be given incentive to discourage inappropriate ED use. Third, elected public officials are rewarded for the provision and maintenance of unjustified ED facilities and they must have the incentive to restrict usage.

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CHAPTER ONE

INTRODUCTION

Fiscal concerns and interest in the overall quality of patient care are grounds for investigating inappropriate use of EDs. According to an article in the International Journal of Health Services, the Canadian system of health-care provision is one of the world's best (1992, 645). Yet fiscal realities in Canada now dictate a close examination whether Canada can continue to fund ever-increasing health-care costs. A recent critique of the Canadian medical system by Dr. W.V. Weiss, in his book titled Healthcare: Conflicting Opinions, Tough Decisions, summarizes the problem as follows: "the restructuring of the Canadian economy, changing demographics, an ageing population, rapid technological change, increasingly demanding and knowledgeable consumers, are all driving not only Canada's but every country's health systems into insolvency." (1992, 15). Medical outlays at all levels of government in Canada now consume approximately 10% of GDP and are still rising both absolutely and proportionately. In an article on "Trends and Developments in the Pattern of Health-care," Hunt adds that costs of health-care systems -like other service industries driven by increasing technical sophistication and need for expensive skilled labour, are themselves forever increasing. (1988, 118-119). In their work on factors influencing health-care delivery, and Deber and Rondeau state flatly that "the Canadian health-care system, having been subject to continuous incremental growth, has become increasingly unwieldy and expensive" and they criticize it as "unresponsive to demonstrated need" (1990, 387). Inappropriate use of emergency services may contribute to these expenses. For instance, some Winnipeg residents select their local emergency department (ED) over a walk-in clinic or over a family physician

In general, one third of provincial budgets are now being consumed by health-care costs (Linton, 1989, 285, Crippen, 1985, 403), and according to Rachlis and Kushner, 52% of provincial funds allocated for health spending is allocated to hospitals, ambulances and capital projects (1994, 240). The real threat of decreasing federal health-care contributions deeply worries the provinces who can simply no longer justify unwarranted consumption of health services. According to Amiram Gafni and his associates, "both government officials and members of the medical profession have suggested that unwarranted use may be an important contributor to health-care costs" (1990, 582). In many cases treatment of minor illness in an ED setting may be unnecessary if office-based treatment is also available and a visit to an ED is said to cost considerably more than a typical visit to a physicians office (Houston, 1992, 18). In the United States, information relating to ED costs is readily available: the average ED visit costs about \$ 120; a visit to an independent general practitioner (GP) costs the Province of Manitoba \$15.40 (Harte, 1994). While the figure of \$120 US is not readily applicable to the cost of visiting a Winnipeg ED, the ratio of costs is nevertheless very substantial. Consequently, inappropriate use of EDs may contribute substantially and unnecessarily to health-care costs resulting in an unnecessary drain upon the public purse.

In addition to financial considerations, the implications of performing primary care in a emergency setting may also prove to be sufficient grounds for concern about utilization patterns of EDs. Primary care includes "personal and family health services, preventative care, rehabilitative care, proper referral to specialised facilities and services and health education" (Steele, 1972, 1) According to Kekke, when primary care is performed in an ED, patients truly in need of emergency services are denied resources, personal records are not maintained, "episodic care is not co-ordinated over time," preventative care is not

necessarily encouraged, and follow-up treatment is not a primary concern (1990, 238). Weighing fiscal and social costs associated with inappropriate ED use suggests that study of the causes of inappropriate uses of EDs is worthwhile.

Regardless of the reasons for investigating ED use, students of inappropriate ED use often target naive or ignorant users of ED services as the cause of the problem, and consequently educational efforts are recommended. For decades, students of health-care policy have been reporting that a problem exists with inappropriate use of hospital emergency departments (Nguyn, 1992, 157, Calan, 1984, 57, Alben, 1975, 1064). Most studies focus on patient behaviours as the cause of the problem and tend to ignore conditioning of patients by physicians, ED staff and those holding public office. Suggestions for improvement concentrate on educating the consumer, rather than providing incentives for providers to allocate effectively health-care resources. Surinder Singh, boldly concluded a research report on ED utilization by stating that "this problem can be dealt with satisfactorily only by educating patients in the most appropriate use of available resources" (1988, 1180).

This thesis will seek to demonstrate that inappropriate use of emergency department services is caused by incentives within the health care system that condition both the development and use of such facilities. It will be argued that the inappropriate use of EDs arises from incentives within the health-care system which create misconceptions as to the availability and quality of alternative forms of basic health-care. Incentives in the fee-for-service method of physician remuneration have created advantages for the use of EDs. This arrangement has attracted marginal users to the location, while the physicians, nurses, and administrative staff who operate emergency departments may have incentives to maintain the existing volume of use. Incentives inherent in the manner in which politicians are able to obtain and distribute health related rewards have encouraged

those holding public office to emphasize the establishment and use of hospital based services. The problem actually originates with the initial design of the system. As the Manitoba White Paper on Health Policy states, problems of this nature "are essentially technical and organizational in their sources and not moral or linked to persons" (Miller, 1972, 2). It will be demonstrated that ignorance or naivety on the part of consumers of emergency services is but a symptom of incentives which encourage patients to be misinformed about the nature of alternative services. As Gafni states, "... conditions appear to encourage (or at least not discourage) unwarranted use." (1982, 582). The perspective adopted in this thesis places less blame than the existing literature does on the utilization patterns of patients and points instead to a design flaws in the health system. This paper will argue that naivety or ignorance on the part of those who use ED services inappropriately is but a symptom of incentives which are the causes of inappropriate ED use. In no way is the paper intended as an assessment of the extent to which inappropriate use of EDs contributes the fiscal or social costs that may be associated with inappropriate ED use.

Prior to investigating incentives within the system of health care provision, an analysis will be presented to identify that a significant percentage of ED use in Winnipeg is indeed inappropriate. This approximation of the extent of inappropriate ED use in Winnipeg will be presented in chapter two. Chapter three is an analysis of the characteristics of the health-care infrastructure that attract inappropriate users to EDs. Chapters four, five and six argue that these characteristics are but symptoms of systemic problems: that inappropriate use of EDs arises from incentives within the health-care system that create and maintain misconceptions about the alternatives to ED service. Incentives to GPs, ED staff, and those responsible for the creation of ED facilities will be addressed in turn.

Chapter seven will provide an assessment of the proposed solutions to inappropriate ED use.

CHAPTER TWO
AN APPROXIMATION OF THE EXTENT OF INAPPROPRIATE
EMERGENCY DEPARTMENT USE IN WINNIPEG

The extent to which EDs are used inappropriately depends on the definitions assigned to their role and to inappropriate use. The role of the ED can be determined through an analysis of its relation to the rest of the hospital and a comparison with alternative services. In general, the services that a hospital provides are classified as either "in-patient" or "out-patient" care. In-patients are those who are "admitted" to the hospital. They receive hotel-like accommodation including a designated bed and room, in addition to assistance with all aspects of required personal care. Out-patients do not receive such intricate service because they are expected to stay at the hospital for less than 24 hours. Patients who stay longer than 24 hours are generally admitted to the hospital and considered "in-patients" (Chandrakant, 1974, 1041). Outpatients are "day-patients" scheduled for minor surgery or visitors to the ED. According to Baltzan, "an emergency department is distinguished from an out-patient department by the absence in the former of the need for a prior appointment." (1972, 251) Because visits are temporary in nature, the ED has traditionally been constructed and furnished for the purpose of prompt treatment of life-threatening illness. Consequently, Chandrakant stresses that "a well organised emergency department restricting its primary care practice can provide comprehensive emergency service, most effectively utilizing manpower and facilities" (1974, 1039). ED staff are generally the patient's first contact with medical care for the particular ailment, much like office-based practitioners, clinic-based professionals and public-health nurses. A dual role is therefore performed in the ED: administration of prompt life-saving

treatment and professional diagnosis. These roles dictate that the facility be equipped with highly skilled staff and appropriate technological capability.

Compared to alternative forms of care, including office-based GPs, EDs are resource-intensive, and best suited for only particular types of care. The fixed costs of EDs include drug inventories, extensive technological equipment, and initial capital expenditures. Variable costs include highly-trained personnel. These components contribute to relatively high overhead costs. David Crippen is one of many researchers who argues that these highly specific resources are best suited to the treatment of emergencies, and are next to wasted when devoted to marginal or "inappropriate" users. He maintains that the use of highly-skilled and specialised physicians for the treatment of minor ailments occurs because the patient, who is the sole judge of the appropriateness of an ED visit, has "no conception of the costs required to support an inventory of expensive hardware and personnel and that these costs must be included in the treatment of simple, non-emergency disorders." (1985, 403-404).

The frustrations experienced by providers of emergency care are graphically summarised by Lester Lave in his article on the use of emergency services. He portrays the ED physician as a "specialised and sharpened scalpel, which it finds is being used to chop wood" and notes that "complaints are legion about the stupidity and reluctance of people who insist on using the emergency room or public ambulance system for problems that are not emergencies and indeed, are often not even medical problems ... how can people be so unthinking as to misuse this fine instrument that the medical-care system has provided?" (1975, 91) Assuming that these services are readily available elsewhere and assuming that they are equally "effective," they represent less cost to society (Woodward, 1992, 1656). The role of the ED is therefore characterised by resource-intensive care for

the treatment of serious illness, which is potentially frustrated by the overabundance of minor illness.

The ED role is characterised by one-time, quick-fix procedures and not repeat or extended speciality care. According to Smith, "hospital emergency departments have been traditionally geared to handle the single visit case which is disposed of in one way or another as quickly as possible with no follow-up" (1972, 9). One study of a particular ED disclosed that follow up treatment was recommended in 62% of cases and 69% of the referrals were to physicians (Bain 1971, 36). Such referrals often involve patient interaction with a different institution or individuals with little or no access to previous records. Koning therefore maintains that the traditional ED is not necessarily the appropriate setting for primary treatment of patient complaints, such as "preventative measures," early intervention, "and continuity of care through episodes of illness." Ongoing use of EDs for primary care usually does not serve patients well because it often entails "postponed care, long waits in the ED, and episodic care that is not coordinated over time," in addition to minimal opportunity for preventative care, such as health screenings, patient education, and immunizations. (1993, 44-46) Recently, the College of Family Physician of Canada argued that "fragmented care through episodic treatment in Emergency departments ... is not quality care if one believes in the principle of continuity of care. Continuous care by a family physician who knows the patient well, will result in less duplication of investigations and less need for referrals" (1994, 5). As Smith states, "better quality care can be rendered in a non-hospital health centre" (Smith, 1972, 9).

Having defined a fairly narrow, albeit still crucial role for EDs, it is now necessary to provide a definition of inappropriate use. Gafni argues that "it is necessary to develop a measurable, empirically-determined definition of unwarranted patient use before an attempt to measure, and if necessary reduce the

scope of the problem" (1982, 584). To this end, Benz conducted a study in which patients were labelled "inappropriate" if the condition for which they were attending had not worsened in the previous 24 hours (1982, 1135). While this criterion is easily measurable, it is unsatisfactory as a patient with a minor scrape or cold symptoms could be classified as appropriate. However, other approaches to defining inappropriate ED use are few and far between and most literature on the subject classifies patients according to the urgency of their condition and not the appropriateness of the visit. For example a 1971 study of an ED in Halifax, Nova Scotia, stratified patients in terms of the urgency of their condition into three categories of emergent, urgent and non-urgent. Emergent was defined as ""condition requires immediate medical attention: ... delay is harmful; disorder is acute and potentially threatening to life or function."" Urgent was described as ""condition requires medical attention within ... a few hours, there is possible danger to the patient if medically unattended; disorder is acute but not necessarily severe"" The patient was classified as non-urgent when the ""condition does not require the resources of an emergency service; referral for routine medical care ... may not be needed; disorder is non-acute or minor in severity"" (Stewart 1971, 5). These definitions of degrees of urgency are similar to the signs posted on walls at Winnipeg EDs. While the degree of urgency helps to determine how imperative ED service is, it does not necessarily help to determine if the patient requires the services of an ED.

Stoddart and Woodward provide a more suitable definition of inappropriate use as: "unwarranted use of the medical system involves seeking or providing medically unnecessary services or services that cost more than other available services that are equally effective (1990, 286). If the term "available" entails that the required service may be readily obtained elsewhere within a 12 hour period, or that the service has already been scheduled by a medical professional,

then this definition may be applied to inappropriate use of EDs. Prior to finalizing the definition, the term "necessary" needs to be qualified. One must establish who will make the judgement of "necessary" and when the assessment is made relative to the professional diagnosis of the illness.

Walsh maintains that interpretation of appropriate use is problematic, as it is subjective and leads to differing interpretations by physicians, nurses, and patients (1990, 28). The notion that the opinions of appropriate ED use differs considerably between patient and provider is further substantiated by a military physician, Dr Bary Wolcot. He suggests that while medical professionals, ED patients and society all "agree on the role of the emergency department, each has a different definition of what constitutes an emergency. Each definition has a commonality with the other, but they are far from identical" (1979, 242). Wolcott uses the analogy of three interlinked circles which have common areas, but do not completely overlap. Each circle represents the definition espoused by one of the groups, and the common areas represent the common ground among them (figure 1, Appendix). A patient experiencing a bad headache, the result of a blood clot in the brain, and a patient experiencing discomfort from an ingrown nail are examples of emergencies which do not fall into common areas. The former is unique to the physician's definition, and the latter to the patient's. Based on Gifford's findings, it appears as if ED patients typically define an emergency in much broader terms than their attending physicians. Twenty one percent of those who thought themselves urgent were judged to be non-urgent, and 14% of those who thought themselves to be non-urgent were judged to be urgent (Driscoll, 1990, 28). The scenario is best demonstrated by Wolcott's observation of the universal comment among ED staff: "Most of these people don't belong here: they are not emergencies" (1979, 241).

If medical professionals and patients have different understandings of what constitutes an emergency, which group should determine the criteria of inappropriate use of EDs? Would an analysis of inappropriate ED use based on the patient's assessment of their symptoms be considered valid? The patient's perspective, known as the subjective measure of health status, is often felt to be invalid, for it does not always verify the findings of trained professionals. However, an article written by Ware and associates on "Choosing Measures of Health Status" testifies that medical professionals do not even agree among themselves as to what constitutes an emergency. It also acknowledges that patients and providers rely on different sources of information, which are often not shared, however, one's perception of their own health status is a likely predictor of patient-induced use. For these reasons, Ware claims that the patient's perspective is valid and cannot be ignored. (1981, 623-624)

These findings are supported by a 10-year study of the relationship between people's perception of their health status, and the number of visits to various types of health-care facilities. The population sample surveyed included 1/60 th of the general population in a Swedish health-care region. It was discovered that a strong correlation exists between one's perceived deterioration of health and visits to the ED, while only a weak correlation existed with respect to visits to a general practitioner (Kakau, 1991, 105-107). Those who feel they are in need of treatment for decreased well being tend to visit the ED as opposed to a GP.

In addition, other students of ED utilization argue that potential relief of anxiety (Department Vol 3, 1975) and pain (Elliot, 1978) are legitimate grounds for going to an ED. These studies demonstrate that the use of the ED for a non-emergent complaint is not necessarily inappropriate, depending on how one defines inappropriate, on whom one asks, and when. For the purpose of this

study, inappropriate ED use will therefore be defined on the basis of symptoms communicated to the attending professional prior to initial diagnosis. The study will thereby be confined to the talking patient who presents themselves to ED officials.

Given hindsight, and a physician's diagnosis, use of an ED for a particular illness may appear to have been inappropriate. For instance, consider the use of an ED for chest pains that could be symptoms of indigestion or a heart attack. In the case of indigestion, emergency care is not required, whereas with a heart attack it could be vital. Consequently, a scenario which appears to be inappropriate use of services to a physician after a diagnosis has been made, may be perceived as appropriate by a patient based on a their assessment of symptoms prior to professional diagnosis. To address this dilemma, the Emergency Medical Services of the American College of Emergency Physicians commissioned a study by Dr. Marilyn Gifford and her associates. A survey of 10 000 ED patients and physicians at hospitals representative of the U.S. system was conducted. Patients were classified according to the immediacy of their emergency needs. In retrospect, and on the basis of professional diagnosis, 9.4% of cases were labelled "immediate," as it was later determined that the patient was in need of treatment within minutes of their arrival, 23.4% were deemed to be "urgent" patients who required attention within 1 to 2 hours, and 29.6% were classified as "prompt" patients who required medical service in the following 2 -12 hour period. If inappropriate use of the ED is defined as medical service granted to patients who were later found not to need service within a 12 hour period, then the remaining 37.6% of users may be classified as inappropriate.

However, when the classifying criterion was changed from retrospective assessment to the physician's initial response to the patient's symptoms, 12.6% were thought to require "immediate" medical attention, 26.3% were classified as

urgent and 29.6% were assessed as requiring "prompt" service. Only the remaining 33% of patients could be defined as inappropriate. This represents a decrease of 4.6% when symptoms, as opposed to post-diagnosis criteria, are used. Furthermore, on arrival at the ED, 44.4% of the patients in Gifford's sample assessed their need for medical attention as "immediate," and an additional 44.1% felt that their case warranted "urgent" or "prompt" service. Only the remaining 11.5% of cases could be deemed inappropriate when the patients own assessment of symptoms was used as the determining criterion. This represents a decrease of 26.1% in inappropriate use if a patients own assessment of symptoms is used. In spite of the foreign, and perhaps dated nature of Gifford's research, it adequately demonstrates that a marked difference exists in the extent of inappropriate ED use, depending on whether the provider or the patient determines appropriateness and when the assessment of appropriateness is made relative to the professional diagnosis.

As it has been established that the judgement of "necessary" ought to be made by an attending medical professional, and that the assessment ought to be made based on the symptoms communicated to the same professional, relative to the final diagnosis of the illness, the definition may be finalised. Use of an ED is inappropriate when treatment is sought for illness which is not life or limb-threatening on the basis of symptoms communicated to an ED professional, and when equivalent, yet, less costly treatment alternatives are available within a twelve hour period or when alternative services have already been scheduled by a medical professional and the symptoms of the illness are unchanged. In summary, ED use is inappropriate when treatment at the ED is not deemed to be necessary. This established, the extent and causes of inappropriate ED use may be established.

To what extent is the use of Winnipeg's EDs inappropriate? On the basis of existing literature, this question cannot be answered definitively. In 1970, the

Department of National Health and Welfare published Emergency Services in Canada. It reported that statistics were kept on emergency department use by at least three Manitoba hospitals during a five-year period, yet not a single Manitoba hospital reported that its emergency department had been the subject of a research project or special study. During the same period, sixty Saskatchewan hospitals affirmed that their ED has been the subject of a such a study (36). There have been two recent studies of EDs in Manitoba, both commissioned by Manitoba Health. However, the Final Report of the Manitoba Provincial Emergency Services Review Task Force (1993) was not solely intended to assess the extent or nature of inappropriate ED use, and the report by Aarer and Sheps titled ER use in Winnipeg Hospitals 1991 is unavailable at the time of writing. Moreover, the unit manager of Winnipeg's main teaching hospital is not aware of any more recent studies on use of the department (Bergas, 1994).

Lacking studies on inappropriate ED use in Winnipeg this study must proceed on the basis of findings in other jurisdictions. Studies on the basis of patients' symptoms are rare, however. This is due to the predominance of studies based on post diagnosis assessment by professionals and the labelling of marginal users as "non-emergency" or "non-urgent" rather than inappropriate. In summary, available studies present real limitations. Not only are they conducted elsewhere, they are based on diagnosis and not symptoms, or on the basis of degrees of urgency, and they therefore lend little insight into the extent of inappropriate use in Winnipeg. Still, taken together the studies allow for some cautious generalizations and speculations about the extent of inappropriate ED use in Winnipeg. Where possible, emphasis will be placed on studies that utilize the symptomatic self assessment criteria for inappropriateness as established above. The studies have been grouped according to the degree of patient urgency they address. Where possible, the country of origin has been given in brackets after the main author's

name and the urgency rating is followed by the nature of the diagnosis which is also in brackets.

Literature about the existence and extent of inappropriate ED use throughout the Western World will now be assessed. Overall generalisations that may be made about the phenomena in other jurisdictions will then be applied to the situation in Winnipeg. This comparative approach will be used on the grounds of the previously-mentioned vacuum with respect to ED studies in Manitoba, and the exceptionally thorough body of foreign ED-related literature. The latter may be attributed to the British National Health System (NHS) and American Medicaid and Medicare, under which a multi-tiered approach to the financing of health-care exists. Under the NHS, "all citizens are entitled to and expected, to register with a general practitioner who has responsibility for managing his patients long-term health care." Because of longer waits and general dissatisfaction with publicly provided GP service under the NHS, EDs are viewed by the public as a desirable alternative to the GP system. (Lewis, 1982, 211, 212) Because of the existence of multi-tiered health provision systems, the British and American incidents of inappropriate ED use may be particularly acute, as indicated by the wealth of reports about the British experience of dramatically-increased ED use following the introduction of the NHS and the American experience of those with little or no health insurance. Studies relating to the international experience of "non-emergency" ED use will be followed by a similar assessment of "non-urgent" ED use. These classifications will then be related to the occurrence of inappropriate use. To help clarify the relationship between different international experiences and classifications of ED use, a chart summarizing the findings of the following surveys is located in the appendices.

British literature specifically related to non-emergency use of EDs includes a year-long study. From a random sample of 637 patients, six percent were

professionally assessed as requiring emergency treatment, while 59% self-assessed their condition as warranting emergency service. (Calan, 1957, 58-60) Beth Brodsky of the New School for Social Research, and Deborah Padget of the New York University, prepared an overview of American literature on visits to EDs for reasons that are not life-threatening. They maintain that there is little consensus on a definition of non-emergency use, but that it is widely accepted that only a small percentage of ED patients have ailments for which immediate treatment is required. In support of their conclusion, Brodsky and Padget cite two studies. The first, titled "Utilisation of the Hospital Emergency Department" maintains that between 6 and 10% of ED patients require immediate treatment. The second, based on the findings of the 1980 National Medical Care Utilization and Expenditure Survey, and prepared for the National Center for Health Statistics, maintains that 15% of ED patients require immediate treatment. (1992, 1192)

The findings of Brodsky and Padget confirm the earlier cited Gifford study in which American physicians assessed 12.6% of patients to be in need of emergency care based on initial perception of the patients symptoms. However, the Gifford study provides further insight into the phenomena of inappropriate ED use as the remaining 87.4% were not thought to be in need of immediate care, and 33% were not deemed to be in need of medical assistance within the next twelve hours. When the patient's own assessment was used, 56% felt that their circumstances did not warrant immediate emergency treatment, and 11.5% felt that treatment was not required in the next 12 hours. Similarly, in a Swedish study by Helen Hansagi and associates, only 41% felt that their complaints did not warrant emergency treatment (Hansagi, 1991, 51).

In the Canadian context, Dr. Eugene Vayda supervised a pair of studies on ED users at hospitals in Hamilton, Ontario, during the early 1970's. For the first study, initial research was conducted over a three week period at St. Joseph's

hospital located in the city's urban core. The records of all 2 608 patients having received ED diagnosis during this period were assessed. Attending physicians were asked to rate the patients condition as an emergency, urgent, or non-urgent according to clearly predefined criteria. The case records were later reviewed by a single "validator" who was not aware of the physician's verdict. According to the physicians diagnosis, 5.6% were emergencies, 60.7% were urgent and 33.7 were non-urgent. According to the validator, 2.1% were emergencies, 59.7 were urgent, and 38.2% were non-urgent. Agreement between the attending physician and the valuator occurred only 79.8% of the time, with the valuator tending to classify less cases as emergencies and more as non-urgent. (1973, 700-701). The second study was conducted at a near-by suburban community hospital over a two week period. The physicians rated 4% of visits as emergencies, 52% as urgent, and 44% as non-urgent. While the results from the two studies are fairly consistent, the percentage of non-urgent visits as the community hospital was significantly higher. Nevertheless, roughly 95% of the visits to the ED were found to be for conditions which were deemed not to require immediate medical attention. (1975, 961-964).

One may therefore generalize that according to retrospective physician assessment of ED visits throughout the western world, between 4 and 15% are for emergencies requiring immediate medical attention. Dr. Moe Lerner, former director of Winnipeg's Seven Oaks ED, estimates that 5% percent are true life threatening emergencies (1994). On the basis of physicians' diagnoses, it may therefore be generalised that between 85 and 95% of ED use in the western world is for medically-determined non-emergencies, and that Canadian urban centers, including Winnipeg, tend towards the higher end of this range. For arguments sake, let it be assumed that 95% of Winnipeg's ED visits are for concerns that are not life or limb threatening, and that between 41 and 54% of patients would not

consider their symptoms to warrant an emergency. These findings offer a reasonable degree of certainty, but non-emergency use of EDs is not necessarily inappropriate. A closer indication of inappropriate use may be determined by an assessment of non-urgent use. However, attention to non-urgent, as opposed to non-emergency, ED use comes at the expense of additional uncertainty.

In the previously mentioned sources, some attention was paid to non-urgent use. In Gifford's study non-urgent use according to physicians was 33% and according to patients was 11.5%, and in Vayda's studies it was rated at 33.7, 38.2 and 44%. The Swedish study cited earlier indicated that 25% of cases were diagnosed as less than urgent (Hansagi), and the former director of a Winnipeg ED feels that 75% of attendees don't necessarily require emergency services (Lerner, 1994). In addition to these sources, a report prepared for the American Hospital Association defines non-urgent use of emergency services as "care for conditions that are not life-or limb-threatening, do not require immediate care, and probably could be treated in a physician's office or other primary care site" (Koning, 1993, 44). For the report, a survey was conducted at all "community hospitals in four fairly typical metropolitan areas during a one week period." It concluded that in each metropolitan center, at least one third of visits to the EDs of study fit their definition of non-urgent, and reported that "43% of ED visits across the country were for non-urgent conditions." However, according to their definition, a severely twisted and possibly fractured ankle would be considered non-urgent grounds for attending an ED. Considering that a bad sprain may cause as much damage and pain as a break, who would consider the diagnosis, treatment, advice and reassurance that ED service can provide to such an individual to be inappropriate? Consequently, even the term "non-urgent" may not be considered synonymous with "inappropriate." In addition, high levels of inappropriate use due to low reimbursement rates under the American public

insurance system "effectively discourages physicians from participating in the Medicaid program". Subsequently, "those on Medicaid are left with no place to go to receive care but the ED" for all forms of primary care. Assuming that a definition for inappropriate which is less stringent than one given for non-urgent, and a higher rate of physicians' reimbursement in Canada for publicly-insured services, it would be expected that the rate of inappropriate use in Winnipeg would be somewhat less than 43%.

The "Report of the Working Group on Special Services in Hospitals" maintains that "Studies done in Canada and the United States have confirmed that in an undifferentiated Emergency Unit, true emergency cases comprise approximately 5% of the total emergency visits, urgent visits comprise approximately 40% and non-urgent visits in excess of 50% of the load (Ministry of National Health and Welfare, 1981, 7). However, non-urgent use of an ED is not necessarily inappropriate. Consider the example of chest pains mentioned earlier. Should the cause of the pains be diagnosed as indigestion, the case may later be classified as non-urgent, yet appropriate use of the ED. As inappropriate use of EDs for concerns such as minor lacerations, and perceived need of antitetanus shots at the ED during regular office hours are the topic of concern, the extent of inappropriate use is likely to be somewhat less than 50%. In such cases, the patient may be better served by an office-based GP who is more likely to be familiar with the patients case history, and better positioned to offer follow up, and preventative care. "Fragmented care through episodic treatment in emergency departments and walk-in clinics is expensive and not quality care if one believes in the principle of continuity of care. Continuous care by a family physician who knows the patient well, will result in less duplication of investigations and less need for referrals" (College, 1994, 5). Consequently, the extent of ED use for which office-based care could be deemed more appropriate is some what less than 50%.

Several British studies address cases of ED patients with minor complications who could have been treated elsewhere. In retrospect, Paul Myers found that 54.2% of patients attending an ED during regular office hours, "could have been treated by a general practitioner." Myers maintains that these results confirm findings of a similar study conducted in Scotland, in which 58% of ED patients fell into the same category. Yet another study relates to ED attendance during 90 randomly selected 3 hour periods over the course of a year. Of those attending during regular GP office hours, 42% were identified by nurses as having symptoms of primary-care problems (Dale and Green, 1992, 988). Two studies directly address the phenomena of inappropriate use. One is based on 200 interviews with patients attending an ED during GP office hours over a 4 week period. In retrospect, an assessment was made using the medical record and interview information for each case. It was determined that 39% of the visits were "inappropriate" (Bellavia, 1991, 26). Another report cites a study presented by B. Farrel for a meeting of the British Society of Social Medicine. It concludes that 12% of visitors to an ED were deemed "inappropriate." (Nguyn, 1992, 157).

Little is known about the parameters of the last mentioned study. However, all four of the other studies mentioned in the preceding paragraph were retrospective and conducted during the GP office hours. The first two studies were based on physicians' diagnosis, and they yielded consistent results. The third and fourth studies were at least somewhat based on the patients' symptoms and they also yielded consistent results. It may therefore be weakly concluded that in the British experience, retrospective assessment reveals that in excess of 50% of patients could have been treated elsewhere, and based on symptomatic assessment by professionals, approximately 40% of patients could be treated elsewhere. If assessment were based on the patients own assessment of symptoms, it is likely

that the percentage would be even lower, and if physicians services were as equally available to all, the percentage would be even lower still.

It appears as if a trade off exists between the statistical certainty of the results which a study offers and its ability to identify inappropriate behaviour. Studies which pertain to non-emergency use of EDs offer a high degree of certainty, yet shine little light on the appropriateness of the visits. Studies pertaining to non-urgent use of EDs offer less certain results but are more reflective of inappropriate use. One attempt to specifically study inappropriate use of EDs contains a very low degree of certainty. Walsh identified a medically-determined definition of inappropriate use and studied the records of 2 000 patients. Those under the age of 16, over the age of 60 and those admitted to the hospital were excluded from the study. Furthermore, 20% of those studied were deemed unclassifiable, and the medically determined definition did not take into account services readily available from alternative forms of care. For example, antitetanus injections are readily available from GPs, yet they were defined as medically appropriate in the ED setting. The study labelled 27.5% of the cases included in the survey as "inappropriate". (1990, 28). The study of appropriate behaviour entails subjective analysis and offers a relatively low degree of statistical certainty.

In summary, it may be concluded that a large percentage of those who present themselves to EDs do so with complaints which professionals do not consider an emergency, and a large minority of patients have complaints which they themselves do not consider an emergency. These appear to be characteristics of EDs throughout the Western world, and in the absence of evidence suggesting otherwise, EDs in Winnipeg appear to be no exception. Establishment of the actual extent to which inappropriate use does in fact occur proves difficult as conclusions regarding non-urgent and inappropriate ED use made on the basis of

available literature must only be cast as tentative. Inconsistency among definitions of similar terms, attempts to quantify subjective interpretations and varying circumstances affecting differing national conditions are elements which attribute to varied findings. However, based on literature from other jurisdictions, when physicians outside the ED are equally available to all, and based on patient self-assessment of symptoms, less than 40% of patients can be equally as effectively treated elsewhere. This approximates the 41 to 52% mentioned earlier who did not consider themselves to warrant an emergency. It also approximates the supposition that only a proportion of the 43 and 50% of those deemed non-urgent in American studies could be deemed inappropriate under Canadian circumstances. A report prepared by Barer and Stoddart for the 1992 federal provincial meetings on health issues states that "researchers and reviewers of the health services routinely find that 15% to 30% of a wide range of services are provided inappropriately" (Woodward, 1992, 1656). This reinforces the above generalisations.

Based on interviews with health professionals in Winnipeg, it is estimated that approximately one third of ED patients can be just as effectively treated elsewhere. Nurse Mowat maintains that 30% percent of patients at the HSC adult ED do not really need to be there. When ED physician, Dr. Neil Hart was given the author's definition of inappropriate ED use, he estimated that one third of ED use was inappropriate. For the purpose of this paper, the use of EDs will be deemed inappropriate when the symptoms communicated to an ED professional dictate that adequate and less costly treatment alternatives could have been utilized. Given that the purpose of this paper is not a precise measure of inappropriate use but an investigation of its causes, the measure of the extent of inappropriate use at Winnipeg's EDs will be assumed to be between 15 and 40%. More accurate determination of inappropriate ED use must be left for others to

determine. Given a definition and a rough awareness of the existence and extent of inappropriate ED use, its causes and possible remedies may now be investigated.

CHAPTER THREE
THE CHARACTERISTICS OF EMERGENCY DEPARTMENTS THAT
ATTRACT INAPPROPRIATE USE.

For the individual with symptoms of a non-urgent ailment, there exists a variety of health-care options. When professional help is sought, these options include a visit to a clinic or office-based general practitioner (GP) or an ED. If continuity of care and efficient resource use are of concern, the former may be considered the most appropriate type of care. However, the preceding chapter demonstrates that the latter is often the preferred form of care. What are the overriding characteristics of the provision of health-care that attract people with minor complaints to the ED? Once the decision to pursue non-emergency medical attention has been made, why is a visit to the ED the chosen form of care? Students of ED use often maintain that convenience, certainty of receiving service and the perceived overall quality of care are factors that encourage inappropriate ED use. These characteristics will be discussed in turn, followed by evidence demonstrating that they are only symptoms of much broader systemic problems.

In cases where "free" ED services are available, it appears as if attendance for minor illness is often a matter of convenience. The extent to which convenience may contribute to inappropriate use of EDs has been quantified in an earlier cited report compiled by Josephine Bellavia and Derek Brown. Two hundred patients were interviewed during a four-week study period. Only those who were capable of walking and only those in attendance during GP office hours were surveyed. Of these, 39% were found to be inappropriately using the facility and 10% maintained that the hospital was more convenient than their GP's office (1991, 28-29). Similarly, Lester Lave compiled an assessment of patient's motives for non-emergency use of EDs in his article titled "Incentives Affecting Use of

Emergency and Other Acute Medical Services." He reports that 6% of patients frequenting an ED, without attempting to contact a GP, revealed that the hospital was more convenient than their GP. (1974, 104) In an article titled "Incentives and the Consumption of Preventative Health-care Services," Schweitzer addresses self-initiated "worried" visits to health facilities. It was discovered that the use of a hospital for this sort of visit is often attributed to the convenience arising from the absence of a need for an appointment (1974, 50).

Lewis studied the use of British EDs. He discovered that as a result of the formation of the National Health System, EDs became a favoured source of care for those experiencing non-urgent complaints. This was ascertained by numerous studies conducted in the late 1950s and early 1960s. Further studies conducted in the late 1960s and 1970s found that the percentage of casual attendees with non-emergency conditions remained high, and that the number of patients attending EDs was increasing, in spite of interim policy efforts to restrict the use of EDs to treatment of emergencies for which the skills and facilities of a GP could prove inadequate. Due to the increasing occurrence of casual attendance at EDs, a group of regional councils commissioned an extensive study to determine why "patients with minor complaints refer themselves to" EDs. The sample was composed of 2715 patients attending 19 hospitals. It was discovered that "the majority of them did not try to contact a general practitioner prior to going to the hospital, although they believed he/she would attend to them in an emergency, and previous waiting periods for an appointment with their general practitioner were not excessive." They had not been inconvenienced by their GP, yet preferred to use the ED. In a subsequent and related study, all ED nurses who were part of the "staff establishment" at the same 19 hospitals were surveyed. Of the 260 respondents, an overwhelming majority agreed that patients with minor conditions attend the ED for various reasons related to convenience. An analysis of these

related studies reveals that patients did not consider the use of GPs to be overly inconvenient, yet they are believed to prefer EDs as a matter of enhanced convenience. (1982, 212-219)

The policy measures introduced to make EDs less attractive to convenience users included changing the name of EDs from "Casualty" departments to "Accident and Emergency Departments (A&E)," charging for services and increasing the responsibility of attending nurses. A report prepared by Jeremy Dale and Judith Green of King's College School of Medicine and Dentistry maintains that in spite of these efforts, there has "been no convincing evidence of a reduction in the apparent use of A&E for primary care problems as a result of any of these measures and such usage continues to be perceived by providers as an inappropriate demand on resources and staff skills" (1992, 988). Why is it that efforts to curb ED use for the sake of convenience prove unsuccessful? The following paragraphs will argue that convenience arising from residential proximity to EDs and the ease with which ED services may be accessed over-ride efforts to make EDs unattractive to casual users.

Geographical proximity has been addressed by several studies of ED utilization. Dale and Green studied patients requiring primary care who attended an ED during regular office hours. They defined primary care attendees as "self-referred patients with symptoms likely to be caused by conditions not in need of immediate or urgent care and unlikely to require hospital admissions" or those with "non-urgent complications of long term conditions." (995). As their description of those using the ED for primary care closely matches the definition of inappropriate use established in the previous chapter, their study is well suited to an assessment of why EDs are used inappropriately. They determined that a statistically significant correlation exists between close geographical proximity to the ED and use of the facility for primary care. (1992, 995)

This confirms the findings of a survey designed to identify patterns of ED use among patients belonging to a particular general practice. The research of McKee and associates was designed to test methods of identifying physicians whose patients demonstrate unusually high rates of attendance at EDs. Rather than reveal practice habits, it made a significant contribution to the understanding of the behaviour of ED patients. A random sample of 1 in 20 ED visitors was used to identify 1029 patients for interview purposes. To enhance accuracy of the research, the distance between the patient's residence and the hospital was determined using the patient's postal code. Their area of residence was then located on a grid, and the distance to the hospital measured. It is not known why distance from the residence was used as opposed to the distance from the locale at which the illness occurred, however some interesting findings were obtained. First, patients were grouped according to the electoral district in which they resided and according to the general practice they used. Second, aggregate attendance rates and mean distance travelled for each group were then compared. Distance from the ED was found to explain 38% of the variation of ED utilization rates between practices, and 53% of the variation in attendance rates between electoral wards. Further analysis of the socio-economic data did not contribute additional certainty to these findings. Variation in rates of ED use were determined to depend greatly on one's place of residence, moderately on one's General Practice and little at all on one's socio-economic classification. These results were further verified through informal questioning of ED staff as to their perceptions of the origins of patients. The authors concluded that "those living nearest to an accident and emergency unit tend to use it as a substitute for general practice." (McKee, 1990, 1150-153).

In the Canadian context, similar results were obtained by Stewart and associates in their study of ED utilization in Halifax, Nova Scotia. They

discovered that the highest utilization rates occurred among census tracts in close proximity to the ED, and thus concluded that utilization rates are inversely proportional to the distance one resides from the ED. (1971, 51).

Explanations for the relationship between the distance from the ED and attendance for the sake of convenience are provided by Schnider and Dove. They have determined that a small percentage of ED patients who have chronic medical complaints, and who live close to the hospital, account for a disproportionate percentage of minor ED use. In the university-affiliated emergency clinics studied, "23% of the patients accounted for 73% of the ER visits". Eighty one percent of patients visited the centre because of an "unpredictable mild chronic problem" or to obtain a prescription renewal. Previous use of the ED, chronic conditions, and residence close to the facility were found to be predictors of these sorts of visits (1983, 57-61). Those individuals residing close to EDs tend to be of the impression that the ED represented an appropriate form of care for chronic conditions. Assuming that alternative sources of care for minor illness are readily accessible, using the ED because it is the closest source of primary medical care represents inappropriate use of ED facilities.

Geographical convenience may also be complemented by socio-economic considerations. In addition to citing close geographical proximity to the ED as one of the most significant determinants of ED utilization, Stewart also maintains that the rate of ED use is also influenced by socio-economic status. In his study, the highest utilization rates were observed among census tracts with low socio-economic indicators. Stewart attributes this to a long standing custom for those with low incomes to use the hospital for primary care. Consequently, Stewart states that the "traditional practice of seeking health-care, associated with socio-economic status and location of an area in relation to the Emergency Department, are the most important determinants in the rate of use." (1971, 51-52) Similarly,

Chandrakant maintains that proximity and socio-economic status also determine non-urgent rates of ED use. He states that "the ratio of non-emergency to urgent cases increases with the proximity of the hospital and with the proportion of low income and minority groups in the local community" (1974, 1039). Dunlop explains this pattern by suggesting that lower socio-economic status is often accompanied by less knowledge of the health care system and therefore less awareness of alternatives to EDs (1974, 29).

Non-urgent use of the ED occurs out of convenience arising from residential proximity. When close proximity is combined with low socio-economic status, increased rates of non-urgent use follows. However, Shesser argues that demographic indicators prove insignificant relative to the ease with which ED services may be accessed (1991, 743). It will now be demonstrated that the convenience associated with ED attendance extends to this ease of access.

According to Harris, patient use of medical services "is related to the net price paid (out of pocket, time and psychological cost), not the stated price" (1990, 1208). Inappropriate users of EDs are attracted to the facility because of the ease with which service may be attained. This occurs because the costs associated with obtaining an appointment, with waiting for an appointment and the inconvenience of a scheduled appointment are minimal at EDs. When frequenting an ED, no appointment or reference is required (Schweitzer, 1974, 50, Padgett, 1992, 1191). Consequently, no costs are incurred in attempting to arrange an appointment. If the services of a GP were pursued, time and telephone costs would be incurred in attempting to contact the GP, and the possibility exists that treatment could be refused or made so unattractive as to discourage the pursuit of GP service.

Several research efforts have addressed the costs ED patients associate with having to wait for an pre-arranged appointment. In Paul Myers' study, 150

consecutive visitors to an ED were interviewed. The research was conducted during regular GP office hours and excluded those patients with serious emergency problems for which the reason for attending the ED was self-evident. Twenty one percent of the patients maintained that they were using the ED because they felt they couldn't wait to see a GP. Green asked patients why they didn't go to a GP for treatment of their condition. Fourteen percent cited either too long a wait for an appointment, or too long a wait at a walk-in facility as their reason for not consulting a GP (1992, 989). The Lewis study of nurses perceptions reveals that 92% of the 260 nurses surveyed agree that marginal patients attend the ED because they believe they will receive immediate diagnosis and service (1982, 217). Once the decision to seek professional care has been made, it appears as if patients wish to obtain diagnosis as soon as possible. As Lave states in his report, consumers "desire a "no appointment" service where problems can be treated as they occur" (1974, 106). Similarly, Vayda observed that minor users want rapid one day diagnosis (1975, 965). Patients with minor illness use EDs because they wish to avoid the costs associated with arranging and waiting for an appointment.

Consumers of health-care services also choose to use ED services to minimize the inconvenience arising from having to accommodate the schedule of physicians. Should the services of a GP be used, the patient would be required to present themselves at a fixed time, and then wait for the physician to become available. However, if the patient frequents the ED, he can "can be treated at his own time as no appointment is required" (Baltzan, 1972, 255). According to Weiss, "people generally expect longer waiting times if they choose this route rather than going to their regular doctors, or to a walk-in clinic for minor problems" (1992, 16), yet this outweighs the inconvenience of attending a prearranged appointment. However Baltzan maintains that ED service is "efficient, as review of 2423 visits indicated that the median portal to portal time

for a patient was 60 minutes including the time required to notify the physician." (1972, 255). Furthermore, Dr Stanley Bain supervised a month-long survey of 3622 ED patients at Canada's North York General Hospital. He defined a non-urgent patient as "one who could have been adequately diagnosed and treated in a physician's office or in his own home." Sixty percent of these patients were discharged within an hour of their arrival and 80 percent were discharged within an hour and a half. (1971, 34). On the vast majority of occasions, ED treatment for minor complaints occurs within an hour and a half of one's decision to seek medical assistance, and the process may begin at the convenience of the ED patient. Consequently, the inconvenience arising from having to accommodate a physicians schedule is generally minimal if an ED is used.

In addition to benefits associated with the absence of an appointment system, EDs are also characterised by other relatively low costs. For many, the ED represents the path of least resistance (Weiss, 1992, 95). Diagnosis, treatment, and admission to hospital may all be performed under the same roof and consequently, delay and transportation may be minimized. This is especially the case when patients feel that a visit to a GP would prove redundant as they would only be referred to the ED anyway (Walsh, 1990, 28). Furthermore, the ED presents as being relatively non-intimidating as one may enjoy the attention and the "mateship" attained by being surrounded by others suffering unexpected trauma (Shelma, 1974, 50). The minimal inconvenience associated with ED use are appropriately summarised by Lave's statement that EDs are the "best known," most available, easiest to be seen at, least intimidating, (and) lowest cost" form of care (Lave 1974, 92).

Generalisations may be made about the characteristics of health-care consumers who use EDs for their ease of access. Kelman compared patterns of ED use by patients who did and did not have a relationship with a GP. Those

without a GP tended to be young heads of households, who were recent arrivals in the community (1976, 1189). These findings are meaningful, as a significant proportion of Canada's population are known not to have an established relationship with a GP. For example, Baltzan determined that 6.75% of Saskatoon's ED users did not have a GP (1972, 255). Furthermore, in Walsh's study, 12% were found to not have a GP (1990, 28) and in Bain's study, 16% revealed that they had no family physician (1971, 34). Shesser found that those patients who present to an ED for minor illness are no different from the general ED population in terms of race, education and socio-economic background. Rather differentiation occurred in their low incidence of chronic complaints, and their lack of having an established provider of primary care. Patients who do not often require medical service and who have not established a relationship with a regular provider of care use the ED for the ease with which timely treatment can be obtained. Shesser further qualified these findings by generalising that "patients with lower socio-economic status tend to use the ED because of its convenience and the absence of other medical-provider relationships; higher socio-economic status patients use the ED because they can not quickly make an appointment with another provider or they are away from home." Shesser finds that those with relatively high incomes also tend to use the ED for its ease of use and that demographic indicators prove insignificant relative to ease of access. (1991, 743-7)

The use of EDs for convenience arising from the minimal costs associated with their use are best summarised in the words of Shesser, Baltzan and Lave. Shesser concludes that "minor illness patients are in general well educated, well insured and employed, and have income similar to (if not higher than) that of the average ED population. Although the exact reason for ED use varied by background, all study group sub populations wanted rapid (within one day) access to professional attention for their minor illness." (1991, 747) Baltzan states that

the ED "visit is initiated more often by the patient than the doctor and once there the patient is treated in a relatively short period of time. The illness so managed do not have a diagnostic, therapeutic or prognostic uniformity but rather are characterised by their acute and totally unexpected onset." (1972, 251) Lave argues that the decision to use an ED is based on "the cost of seeking care -in money, time, and transportation -as well as the cost of getting information about where to go, the cost of going into an unfamiliar setting, and so on." (1974, 93). Convenience, via geographical proximity and ease of use, draws inappropriate users to EDs.

Inappropriate users are also drawn to ED facilities out of uncertainty as to the availability of GPs and out of uncertainty as to the services that GPs offer. The study by Dale and Green sought to determine the perceptions health-care consumers possess regarding the services offered by GPs. It was discovered that during the weekday GP office hours of 9 am to 6 PM, 13.7% of those attending the ED for primary care thought that their GP's office was shut, and 6.3% maintained that their GP was otherwise unavailable for reasons such as vacation (1992, 989). The report does not indicate if any local GP offices were in fact closed at the time, however, it is unlikely that GP service was unavailable due to the usual practice of hiring a fill-in physician or asking another local physician to cover urgent cases (Harte, 1994). It appears as if a significant proportion of ED users were unaware of alternative services, or possibly unwilling to utilize them.

In Lewis' survey of ED nurses, 93% agreed that patients with minor ailments attend EDs because they perceive that they cannot get an early appointment with their own GP, and 98% agree that "the patient finds it convenient to attend ... because of 24-h(our) availability." Because no appointment or referral is required and because EDs generally operate 24 hours a day, medical service is "eventually available, and rarely refused" (Brodskey, 1992,

1191). Unlike GP offices, there is no risk of service being unavailable. Consequently, those not wishing to wait for diagnosis on presentation at a GP's office, and those who are uncertain or unaware of the services provided by GP's, choose instead to visit the ED. This occurs regardless of how trivial their complaints may be, or in some cases because the problem is thought to be too trivial to warrant the attention of a GP. Therefore, certainty of service, regardless of condition, is a characteristic of EDs that encourages inappropriate use of the facility. As Baltzan reports, EDs provide service "...24 hours a day, seven days a week, 365 days a year.... It is the demand for this service which appears to be responsible for the great increase in the use of the emergency room by patients and doctors" (Baltzan, 1972, 256).

Much uncertainty exists as to the services that GPs provide. A British study sought to investigate social circumstances influencing the decision to go to the ED once the individual had deemed the pursuit of professional care to be necessary. A random sample of 637 patients was included in a year-long survey. Of those incurring the ailment in their own home and making their own decision to go to the ED, most were suffering lacerations and felt that it was "inappropriate to visit their GP, or felt that the GP would refuse treatment" (Calan, 59, 1984). This indicates that in the British case, patients perceive that basic medical care is often not available outside the hospital, and that GPs will not provide office-based service when treatment of cuts is involved. In the Bellavia study, 52% of patients realised that their illness did not warrant emergency status. The authors ascertained that these patients attended the ED out of a perceived need for an X-ray or stitches, "even though X-rays merely confirm a suspected diagnosis," and GPs perform stitching (1991, 29). Similarly, Bain determined that 30% of ED visits pertained to treatment of lacerations (Bain, 1971, 33).

These findings are confirmed by Myers' study. When patients were asked why they attended the ED during the hours of GP operation, 47% responded that they anticipated that they would need tests or treatment that a GP couldn't offer. In aggregate, 81% of those interviewed gave questionable answers as to why they ought to be treated at the ED. These responses included the perceived need for tests, dislike of one's GP, and the 2% who "just happened to be in (the) hospital anyway." It was determined that only 37% of the patients attending for less serious problems required hospital-based treatment. To some degree, this 44% difference represents the widely held belief that GPs are unable to treat minor illness which is sudden and unexpected and that they are "unable to suture lacerations or give tetanus injections." (1982, 879-882).

Similarly, the sentiment that patients are unaware of the services offered by GPs is shared by the great majority of nurses in Bradbury's survey (1982, 217). Calan states that EDs "are rapidly becoming the central source of care for minor trauma as the GP's role in minor casualty work is minimal" (1984, 63). Furthermore, Walsh determined that 42% of ED patients felt that their GP would be unable to assist them (1990, 28), Shesser determined that many patients perceived the treatment they required was "outside the expertise of their usual provider" (1991, 747). Ironically, Kyle has demonstrated that general practitioners can deal with 98% of all who attend community hospital EDs (Peppiatt, 1980, 14). In the words of Shesser, "poor understanding of the health-care system" and "incorrect patient perceptions of their regular practitioner's abilities" contribute to the inappropriate use of EDs (1991, 744). This may be attributed to the real or perceived 9-5 weekdays role of the physician (Bain, 1971, 33).

In addition to uncertainty surrounding the availability of GP service, perceived superiority of ED service draws inappropriate users. The supposed superiority of ED service arises from the perceived deficiency of general practice,

the facilities available at the ED and the perceived superiority of ED staff. Green's report reveals that 14.9 % of day-time visitors to an ED had been to a GP but were dissatisfied, an additional 7.4% did not go to a GP as a result of past inadequacy of service. In all, 39.9 percent of the patients surveyed were in attendance at the ED due to perceived deficiency of general practice relative to the ED. (1992, 989) Similarly, Walsh discovered that patients use the ED out of mistrust of their GP. (1990, 28), Bain found that patients use EDs even when told by a GP that ED services are not necessary (1971, 36) and Walsh reports that 4% of ED patients had already been diagnosed by a GP but came to the ED seeking a second opinion (1990, 28). These findings complement the already-mentioned finding of Myers in which patients revealed that they came to the ED for treatment of minor illness because they disliked their GP.

Exceptional facilities are available to EDs because of their proximity to acute care hospitals. Consequently, "a wide range of diagnostic and therapeutic facilities are available in one place." (Baltzan, 1972, 255). These are facilities that are not economically justifiable in general practices. They include X ray machines, MRI devices and CAT scans. Weiss notes that it is easier to have a MRI or CAT scan performed unnecessarily if one goes to an ED (1992, 95). Dr. Harte, an ED physician at Winnipeg's Victoria Hospital, was questioned about inappropriate use of technology available at the ED. He reports that patients with non-life-threatening symptoms who have already been scheduled for a CAT scan 2 or 3 weeks in the future often visit the ED with hopes of attaining immediate access to the facility. In some cases the scan is scheduled for the next day, yet the patient wishes to have it moved up. (1994) The Lewis and Bellavia surveys also demonstrate that the patients' perceptions of technical facilities influence their decision as to how to pursue diagnosis. Lewis found that a great majority of the nurses agreed that patients prefer the ED for the technical services available, and

Bellavia discovered that as many as 25% of patients anticipate that they would require an X ray, and that "of those who had not seen their GP, 74% felt that if they had seen him or her they would have been referred to the A&E (ED) in any case." Consequently patients attend EDs due to a perceived need for the use of specialised facilities (1990, 28). According to Gumper, the practice of initially visiting a GP is often shunned in favour of immediate access to better facilities. The public "does not accept the hierarchical model with its emphasis on professional referral." (1991, 140) Instead, those suffering minor illness often prefer to attend EDs for the access to specialised facilities they offer.

The perceived superiority of ED staff may also serve to inappropriately draw minor-illness patients. Bellevia's study reveals that 1% of patients attended the ED as opposed to a GP because they felt that the physicians offered more thorough service (1991, 29). Similarly, others are known to prefer EDs as "the service is quality-controlled because it is in an accredited institution" (Baltzan, 1972, 255). The results from the earlier mentioned Vayda surveys were compared. It was discovered that the enhanced socio-economic status of patients from the neighbourhood of the community hospital were over-represented at the more distant, but "better appointed" hospital in the city core. From this, it was determined that the better educated were more apt at knowing where the best service could be obtained. (1975)

Perceived convenience, certainty and overall superiority of service are the characteristics of the health-care delivery system which attract inappropriate users to the ED, in spite of the availability of alternatives. This occurs because users feel EDs offer the best of one or more of these three criteria. However, during regular office hours, similar convenience, availability, and overall quality of service are available to inappropriate ED users in the office of general practitioners.

It will now be demonstrated that the superior convenience of EDs is mythical, as GPs offer comparable geographical convenience and ease of access. The 1994 edition of the Winnipeg Yellow Pages includes a nine page listing under the title "physicians." This section contains only nine irregular-sized advertisements, all of which project the special features of the yellow pages, and it contains standard sized listings for approximately 920 "physicians and surgeons." The GPs are then cross referenced according to locality, for which a map is provided. There appears to be no shortage of GPs in greater Winnipeg, or in any of its communities. Baltzan's study of ED use in Saskatoon reveals that no resident lived more than one mile from an office-based physician (1972, 252). Given the quantity and geographic dispersion of physicians in Winnipeg, and assuming that the distance one has to travel to a physician does not differ greatly from Baltzan's Saskatoon findings, the geographic inconvenience caused by the local of physicians appears minimal.

In addition to favourable geographic dispersion, Winnipeg's physicians provide surprisingly easy access if their services are requested for the treatment of sudden illness. This was ascertained by a survey of physician's receptionists. Those included in the sample were selected from the "Physician and Surgeon by locality guide" in the Winnipeg Yellow Pages. The physicians are listed according to 13 communities within the city. Among these communities a north to south corridor was selected, passing through the outer suburbs and the inner city core. Receptionists at offices located in the 8 communities which made up this cross section were surveyed. Physicians who indicated in the listing that they practised a speciality or that they were part of a clinical practice were excluded, the former because their skills were unlikely to include minor surgery, and the latter because it was assumed that minor treatment would be granted on at least a first-come first-serve basis.

In total, the receptionists of 16 physicians were asked to participate. One refused outright and another revealed that the doctor was a child psychiatrist. After a brief introduction, including a mention of the academic purpose of the questions, the receptionists of the remaining 14 physicians were asked "if I were a regular patient, and I were to state that "I have a cut in need of treatment. May I see the Dr. as soon as possible? How soon would I be able to see the doctor? How would this differ if I had never visited the doctor before?" These questions were posed to all the receptionists between 10:30 am and noon on the same Wednesday morning.

The response was overwhelmingly consistent. In all cases the patient would be seen that day, if not within the hour. On one occasion, this would be by appointment only, and on another, it was stated that, "over the phone, severe cases would be referred to emergency." The predominant policy was that patients who came to the physician's office with an urgent complaint would be seen prior to waiting patients. Patients who had not been to the office previously would be treated no differently. However, one receptionist indicated that patients who were new to town or who didn't have a physician would be treated no differently, but, this might not be the case for those who already had a local family physician. One internal medicine specialist, inadvertently included in the sample, would perform the required treatment, yet would ask that the patient find a GP for the next similar occurrence. In spite of the primitive nature of this survey, it indicates that Winnipeg's physicians do not refuse treatment, nor refer minor complaints to the ED. GPs, and even a specialist are willing to provide prompt treatment for sudden illness to those who ask for it. Not only are Winnipeg GPs geographically convenient, but they also offer ease of access for those suffering unexpected illness.

In addition to revealing ease of access to GPs, the survey also demonstrates that during office hours, GPs are available and provide certainty of service. If unexpected minor illness is treated by one's own GP, then continuity of care is attained at the possible expense of access to speciality facilities at the ED. A trade-off exists between immediate availability of equipment exclusive to EDs and the continuity of care that general practice offers. The notion the EDs provide better convenience, access to service and overall quality of care for the treatment of unexpected minor illness during office hours is consequently fictitious.

As Winnipeg GPs are not unwilling to provide competent, yet timely, treatment to those experiencing minor illness, why do patients not utilize these services? Admittedly barriers to the use of GPs exist. According to Smith, such barriers include language differences, "illiteracy, mental retardation, (and) extreme poverty" (Smith, 1972, 2). Assuming that one is able to use a phone book and has access to a phone, GP services are not unused because these barriers make them inaccessible. If one were to search the Yellow Page directory for the word "Doctor," one is referred to the "Physicians & Surgeons" section where many physicians list twenty-four hour a day answering services, and several offer "7 days a week" availability or "no appointment necessary." Steel argues that "finding a physician and getting health-care is particularly difficult for families who change communities or move within a city. When health needs become critical, many families find the emergency rooms and out-patient clinics of general hospitals the only available resource in the provision of primary health-care." (1972, 2). EDs are not the only available source of care. Furthermore, for those able to make a phone call, a long-term relationship with a general practitioner is relatively easy to establish. Supplementary to the Yellow Pages, the Manitoba chapter of the Canadian College of Family Physicians maintains a list of members of the college who have indicated that they are accepting new patients. Surprisingly, young

physicians do not dominate the list, as those in the process of starting a practice are able to draw from patients seen during their period as interns. Consequently, a demographically diverse choice of established physicians is available. The list is updated twice yearly, and it is made available to any one who requests it. (College, 1994 b) This is not to say that established physicians are welcoming all comers. The situation is quite the opposite, as a great majority of family practices in Winnipeg (College b, 1994), and elsewhere (Steele, 1972., 4), are said to be full. However, GP services are available. Despite the availability of GPs for timely and long-term care, patients do not necessarily utilize these services.

GP services remain under used because patients simply are not aware of these services and because they are unaware of how to access these services. The study conducted by Josephine Bellavia and Derek Brown contains fascinating revelations about the gap between patients perception and capabilities of office-based physicians. Patients attending an ED were questioned as to the services their general practitioner offered, and as to the nature of their symptoms. Of the 200 patients surveyed, an astounding 25% were not aware that family practitioners gave injections, 49% didn't realise they administered stitches, and 48% didn't know if their own family practitioner would perform minor operations. Of those attending the ED during regular office hours, 16% felt that they required an injection, stitches, or that their problem was too trivial to bother a GP with. The patient's assessment of need appears valid as the number who perceived a need for stitches equalled those who actually received them. However, their choice of location appears odd as only 3.5% of patients with cuts were treated in an operating theatre. Consequently, 96.5% of patients attending for treatment of cuts could have been treated in the office of a general practitioner. (1991, 28-29)

In Calan's study, he also addressed patients with lacerations. He compared patients with cuts to six other types of complaints. For all comparisons, he

discovered that the cut patient was more likely to go directly to an ED without attempting to contact a GP. In all cases, the results were statistically significant and ironically, patients with conditions that could not easily be treated by a GP, such as fractures, were far less likely to go directly to a hospital than a patient with a cut. (1984, 62-63) It appears that a large proportion patients with minor illness do not attend GPs because they are unaware of the services that GPs offer. Patients fail to realise that, although the vast majority of GPs may be closed to new patients and although it may require days or even weeks to schedule a normal appointment with a regular provider of care, in the event of urgency, special service is generally available on request. Bain's research addressed 501 ED patients who did not have a GP. Of these, 50.1 % had not previously needed one, 17% could not find one, and 14.8 % preferred to come to the ED for all medical problems (Bain 1971, 33-34). Those who use EDs for minor illness either do not know how to access timely service from GPs, or they are unaware that GPs offer a superior quality of service when continuity of care is taken into consideration. Patients also fail to realise that they do not even have to be a regular patient of a particular GP in order to receive timely service.

People with minor problems desire prompt attention for their condition, preferably on a walk-in basis, and without an appointment. When health needs become critical, hospitals are not the only available source of such care. Why is it that consumers of health-care are unable to access GP services when unexpected illness occurs? Many studies find that youth and relatively short length of residency are predictors of high ED utilization (Brodskey, 1992, 1189). How is it that the young and the mobile are unable to obtain prompt service from a general practitioner? Are they unaware of the services that GPs offer? Do they find it difficult to establish contact with a GP on the spur of the moment when an accident or injury occurs? As Shesser states, "poor understanding of the health-

care system" and "incorrect patient perceptions of their regular practitioner's abilities" contribute to the inappropriate use of EDs (1991, 744).

GPs offer convenience and certainty of service during regular office hours, yet many patients are unaware of how to access these services at the onset of sudden illness. GPs offer the best overall quality of care, however, patients do not generally appreciate the value of continuity of care. Because general practitioners do indeed offer convenience, certainty, and overall quality of care, the following chapters will argue that these often cited attributes of inappropriate ED use are but symptoms of a wider systemic problem. Causes of the problem are the characteristics of the system of health-care provision which facilitate misconceptions about the nature of GP service. These characteristics are the incentives to the organisers and providers of medical services which contribute to patients misconceptions are the source of the problem. If the GPs in Winnipeg, ED staff, and politicians in favour of institutional care are treated as organizations onto themselves, then the writings of Clark help to explain the incentives which contribute to the behaviour which encourages over-use of EDs. Clark writes that a large proportion of the activity that takes place within associations "may be explained by understanding their incentive systems. All viable organizations must provide tangible or intangible incentives to individuals in exchange for contribution of individual activity to the organizations ... the incentive system may be regarded as the principal variable affecting organizational behavior." (1961, 130)

An example of the manner in which incentives to those who allocate medical resources influence patients perceptions and use of ED services helps to clarify the impact of incentives on misconceptions held by health-care consumers. McKee writes that "the association of attendance rates and distance (between the patient and the hospital) may be partially explained by the judgement of general practitioners about which conditions should be treated medically in hospital."

McKee's statement is based on evidence that GPs working near to a hospital are more likely than those further away to believe that patients with minor conditions should go directly to the emergency department. (1990, 152). This demonstrates that those living near to hospitals do not necessarily use EDs for minor illness out of ignorance or convenience, but rather they do so because their physicians have the incentive to encourage patients to use the ED for unexpected minor illness. It will now be argued that GPs have the incentive to contribute to the creation and perpetuation of myths pertaining to the availability of their services, and consequently, it is these incentives which cause and sustain the inappropriate use of EDs.

CHAPTER FOUR
INCENTIVES WITHIN THE FEE-FOR-SERVICE METHOD OF PHYSICIAN
REMUNERATION THAT DRIVE INAPPROPRIATE ED USE.

This chapter examines the impact of the physician remuneration system on the use of EDs. It will be argued that because of incentives inherent in the fee-for-service (FFS) method of remunerating GPs for their services, treatment of unexpected illness does not necessarily appeal to GPs. Consequently, misconceptions about the nature of GP service prove convenient to the GPs themselves. A survey of British GPs "found that they tended to avoid regularly handling certain specified minor problems which often present to hospital." It was discovered that the majority of practitioners undertook the selected procedures occasionally (44%) or not at all (41%) with only a minority undertaking them often. The most common minor surgery procedures performed were "abscess drainage, suture of lacerations and removal of foreign bodies from eyes." With particular attention to cuts requiring medical attention, 7.4% treated these often, 70.4% occasionally and 22.2% never. (Myers, 1982, 881) Misconceptions exist as to the convenience, services and overall quality of care that GPs are willing and able to provide. In effect, inappropriate use of EDs is favourable for FFS GPs. First, the FFS method of paying Manitoba's GPs will be outlined. Second, the incentives inherent in FFS will be addressed. Third, the implications of these incentives for inappropriate use of EDs will be assessed.

In no way is this chapter intended to indicate that Winnipeg's general practitioners are unethical or corrupt. Rather, its purpose is to demonstrate that physicians are rational actors who are compelled to participate in a scheme which provides incentives for particular types of behaviour, some of which may not be in the best interest of society at large. It should also be noted that any remuneration

system will create incentives which, depending upon the perspective adopted, can be seen as positive or negative.

To identify the incentives of concern, a brief overview of Manitoba's system of "fee-for-service" is necessary. Fees paid to physicians for a particular procedure are established by negotiation between representatives physicians and the provincial government. These representative entities are the Manitoba Medical Association and the Minister of Health (1994, Manitoba Health #34, 2). The negotiated "fee" for a listed procedure corresponds to the amount for which the physician may bill the health department per unit of the "service" rendered. These are recorded by the physician, who in turn, bills the Manitoba Government accordingly (Manitoba Health Physicians Manual, 1992, R1). Consequently, "fee-for-service" physicians are private actors who do not receive a base or guaranteed salary, holiday pay, overtime rates or other benefits. Nor are they able to bill in accordance with the social or technical complexity which some patients present. "Fee-for-service" provides incentives to service the most simple forms of patients as it is "procedurally oriented and volume driven" (College, 1994, 2). These incentives will now be discussed.

As the FFS method of remunerating physicians has been outlined, the incentives inherent in this payment system will now be addressed. According to R.G. Evans, one of Canada's outstanding health economists, a FFS physician is "a supplier of a particular class of service whose income and work satisfaction are related to the volume he supplies and the price he receives for them" (Evans, 1974, 162). As practice habits are positively influenced by potential income, physicians are said to engage in profit-maximizing behaviour. For the FFS physician operating under a public payment scheme, profit, or income, is the residual of aggregate billing less expenses. Under these circumstances there exists an incentive to maximize the dollar quantity of billings, and minimize expenses. The

former may be attained by maximizing the quantity of procedures performed, or by maximizing the dollar value of billings per unit of time. The latter may be achieved by minimizing overhead costs. These three means for maximizing income and the manner in which they discourage unscheduled use of GPs for family physicians will now be analysed in turn. This assessment will be based on the assumption that all motivational attributes other than economic well-being and leisure are suppressed, such that intrinsic satisfaction, professional integrity, and societal commitment plays little role in influencing the practice habits of physicians.

In an assessment of the manner in which incentives influence physicians' behaviour, A.L. Hillman maintains that FFS physicians attempting to attain a maximum income have the "incentive to do more, because more service leads to more payment" (1989, 86). When a physician is paid a FFS, each additional procedure provides additional revenue. According to A.C. Enthoven and R. Kronick, "so long as the revenue gained contributes to desired income, there exists an incentive to perform the service". Fee for service rewards physicians for doing more regardless of whether "more is appropriate" (1991, 2532).

There may become a point where the additional revenue does not contribute to additional income. This may occur when the financial costs of providing the service consume all the revenue generated due to costs, such as overtime wages for staff. There may also become a point where additional revenue does not contribute to desired revenue. This may occur when a combination of the financial costs and personal costs incurred in providing the service exceed the benefit derived from additional revenue. Evans also reports that physicians are more likely to pursue a optimal income, rather than maximum income as they are likely to value alternatives to making money. (1974, 166, 173). The most notable of these personal costs is the inconvenience of forgoing leisure. So long as the costs of providing additional service remain relatively low, there

exists an incentive to keep on providing additional units of service. As costs incurred include time that could be spent pursuing other activities, additional service would ideally be performed within an established period of time, such as a standard work day. FFS physicians therefore have the incentive to maximize the number of procedures performed in a desired amount of time.

There are a number of means by which physicians may maximize the number of procedures performed in a given period. One method of attaining an optimal quantity of service is to maintain a well-organised flow of scheduled patients. A practice filled with expected visitors allows for planning and organization of a physicians schedule to incorporate blocks of service and leisure time, with minimal unproductive gaps. Physicians may further maximize the quantity of service they are able to provide by incorporating an in-office waiting period for patients. This minimizes gaps which would occur when patients require less time than expected and allows for absorption of time made available by last minute cancellations. The ideal form of practice for the physician who wishes to attain an optimal mix of income and leisure therefore consists of a controlled flow of scheduled visits in conjunction with an incorporated in office waiting period, with emphasis on volume of procedures.

In addition to maintaining schedules and waiting periods, physicians may optimise the number of procedures performed if they administer each procedure in a minimal amount of time. This does not necessarily indicate unethical practice, as organization, the employ of support staff and experience may also serve to decrease the time commitment per procedure. Minimal time commitment per procedure allows an optimal quantity of patients to be processed in a given period of time and thereby contributes to revenue maximization. This is yet another characteristics of fee-for-service remuneration which provides incentive for physicians to manipulate their practice habits so as to achieve an optimal income.

In addition to the quantity of service, there exists an incentive for FFS physicians to emphasise the administration of procedures which provide the best payment per unit of time. For instance, the Task Force Reports on the Cost of Health Services in Canada states that "one of the most significant influences of the fee schedule on the patterns of practice of primary care physicians, particularly general practitioners, is the obvious discrepancy between the fees allowed for various services" (National Health, 1970, 259). Consequently, the physician may exert direct influence on the demand function of the consumer by altering the patient's perception of his needs and of the capacity of medical technology to satisfy them (Evans, 1974, 163). While two activities may be reimbursed with the same dollar amount, each may involve differing rates of reimbursement per unit of time. Assuming that multiple-treatment options exist, "physician's decisions about the resource mix used to diagnose or treat a given condition are based on the relative cost to the patient, the relative cost to the physician, and the efficacy of the treatment" (42). Because insurance does not encourage consumers to be cost-conscious, and because physician spending is not limited, physicians are able to "encourage decisions in favour of more costly care" (Enthoven, 1991, 2532). All other things being equal, the greater the rate of payment per unit of time, the greater the potential for generating more revenue. Conversely, those procedures which have relatively low re-reimbursement rates per unit of time are likely to be marginalized.

Any procedure which entails "out-of-pocket" expenses on the part of the physician is also likely to be marginalized. GPs have the incentive to attempt to maximize income by minimizing overhead costs. According to the College of Family Physicians of Canada, these include rent, equipment, legal and audit services and staffing (1994, 2). However, the fees paid to physicians do not reflect additional overhead costs which are incurred in particular cases. If a procedure is

performed on a fee-for-service basis at the hospital, material costs such as dressings and equipment and services including sterilisation, record keeping and security are assumed by the institution. If performed in the office or the patient's home, these costs come at the expense of the physician. Harris reports that "physicians were sensitive to out of pocket costs" (1990, 1211) Procedures requiring additional overhead costs reduce potential for income, and are therefore likely to be performed in a hospital setting, or possibly not at all. The Task Force Reports on the Cost of Health Services in Canada reveal that this occurs because "a physician has some discretionary power regarding the proportion of his income devoted to expenses, and consequently, he can influence, with certain limits the extent to which the direct effects upon his gross income are translated into changes in his net income." (National Health, 1970, 219) According to Charles Wright at Vancouver General Hospital, incentives exist for "fee for service" physicians to obtain optimal income by maximizing their revenue and minimizing their costs. These incentives cause "disproportionate recognition of [certain] procedures" (1992, 35): Those which best fit into a high volume and scheduled practice are favoured.

According to Hillman, "research has shown that financial incentives change clinical behaviour in the aggregate" (1989, 4). The following examples are but a few of the situations in which changes in physicians' practice behaviour have occurred in response to income potential. Changes in the practice habits of physicians were observed in Denmark, when "fee for service" type incentives were introduced. A large increase occurred in the number of diagnostic and treatment services provided by GPs, and a significant reduction occurred in the incidence of referral to specialists and to hospitals" (Krasnik, 1990, 1698). As the alteration in the practice habits was likely due to favourable changes in perceived financial

reward, this demonstrates that "fee for service" does have the capacity to influence the quantity and type of service that physicians choose to perform.

The phenomena of increased quantity and reduced time commitment per procedure are often observed when governments restrict or reduce the reimbursement rates for procedures included in a fee schedule (Milton, 1991, 65, Harris, 1990, 1212). This was observed when a price control effort during the Nixon Administration restricted increases in fees to physicians to 3%. The volume of patient visits rose 8 to 15%. When the controls were lifted, prices rose 23%, and volume of GP visits dropped 9% (42).

In Manitoba, an example of physicians' ability to tailor their practice habits to enhance revenue is the allegation of "patient sharing" during the 1970's. In 1985, Manitoba Health released a report by Roch, Evans and Pascoe titled Manitoba and Medicare, 1971 to the Present. The report maintains that in spite of a dramatic increase in the quantity of physicians, and no corresponding change in population, physicians were able to maintain full practice schedules. It is suggested that patient levels were maintained because physicians increased the quantity of services extended per patient. In effect, they were able to stimulate demand for their own services. As of 1971, there were 155.5 physicians per 100 000 residents in Manitoba. This increased to 172.7 per 100 000 by 1976. The report reveals that a 50% increase occurred in the number of active GPs, per unit of Winnipeg's population, during the 1970s. (1985, I -IX, 88) This validates Evans claim that physicians are able to influence demand for their services to the extent that they are immune to increases in the supply of other physicians (1974, 170).

Ironically, the physician to population ratio at the beginning of the decade was already excessive. A study prepared for the World Health Organization maintains that beyond 150 physicians per 100 000 residents, no marginal returns to society are experienced (Hunt, 1988). Similarly, federal involvement in the

provision of health services was launched on the recommendations of the Hall Commission which advocated that 154 physicians per 100 000 were desirable (Desjardins, 1989, 14). Consequently, income considerations are known to influence changes in the practice habits of Winnipeg's GPs and these changes do not necessarily occur in the best interest of society.

Because physicians are individually operating actors who are subject to incentives which encourage the attainment of an optimal mix of income and leisure time, they attempt to earn as much as possible with a minimal commitment of time and effort. This is not an unreasonable behaviour for society to expect from any privately acting professional. Riel Cloutier, a former employee of Manitoba Health maintains that some of Winnipeg GPs admit that they prefer treatment slots be filled with the most simple requests for treatment: those that represent the best financial reward per period of time, and the least inconvenience (1994). As it currently exists, the publicly funded FFS method of paying physicians for their services provides incentives to enhance the revenue a physician may generate by maximizing the quantity of service provided, including the structuring and pre-planning of visits, and by favouring relatively high-paying procedures. As Evans states, a setting in which income is determined by volume "creates strong economic incentives for the physician to over-emphasise the supply of his own services to the exclusion of substitutes and to bias the patient's 'choice' of service towards those which yield the highest net revenue per time unit for the physician" (1974, 163). Consequently, incentives inherent in the FFS remuneration of physicians discriminate against procedures which are unscheduled, time intensive, relatively poor-paying, or likely to involve "out-of-pocket" expense and these incentives are known to actually influence the behaviour of physicians.

It will now be argued that FFS incentives contributed to and help to sustain inappropriate use of EDs. Several decades ago, the financial well being of GPs

could be enhanced by performing select procedures at the ED, as the role of the ED physician and the GP were one and the same. As late as 1970, all but one of Manitoba's ED physicians were paid on a fee-for-service basis (National Health, 1970). They were not full-time ED employees, as the family physician and the ED physician were essentially one and the same. Physicians in a given community traditionally maintained their own independent office-based practice in addition to occasionally providing service at the ED. As the 1975 Department of National Health and Welfare report on Emergency Services in Canada states, "patients of a non-emergent nature are either returning to the emergency department for follow-up care, or are patients of physicians providing coverage in the unit." (Department Vol 3, 1975, 38). According to Weiss, "there was a time, which many patients remember, when you would call your family doctor for some emergency, and he would more often than not meet you at the emergency department and deal with it personally" (1992, 96). In both capacities, physicians was reimbursed for their efforts on the same "fee-per-unit of service" basis.

Financial well-being of GPs was enhanced by responding to FFS incentives. Consequently, those patients who might interfere with the attainment of an optimal income were encouraged to use the GPs service in the ED setting. The option of treating patients at the ED allowed physicians to solidly book their office schedule with "general" patents. Rather than disrupt a well organised practice for patents requiring timely treatment, physicians could ask their patients to meet them later on, during their turn working at the ED. The Manitoba Provincial Emergency Service Review Task Force reports that it would not be unheard of for Winnipeg physicians to respond to a request for unscheduled service by requesting that the patient meet them at the ED when the physician would just happen "to be on rounds" (Lerner, 1993). This also allowed GP the opportunity to attain additional billings in the office and ED settings.

Income could also be enhanced by performing GP treatment in the ED setting when access to ED resources would minimize the time required for a given treatment. In the event of socially or technically complex cases, GPs could enhance the speed of treatment by utilizing the support staff and facilities provided by the hospital. Should a more lucrative treatment option exist that could only be performed in the ED setting, GP's could encourage the patient to meet them at the ED.

As physicians were able to bill the same amount for a procedure regardless of the location in which it was performed, the avoidance of overhead costs were perhaps the most significant financial incentive for GPs to encourage patients to frequent EDs. If administered at the hospital, costs of materials and services were assumed by the institution. As additional costs to the physician were incurred when working in the community, physicians were able to retain more of their revenue if services were provided in the hospital (National Health, 1970, 261). These benefits were particularly applicable when the physician was called into service in the off-hours. If the physician were to open their office in the off-hours for the treatment of even the most minor form of illness, costs associated with security and the opening and closing of the practice would be incurred. If the physician were to simply meet the patient at the ED, security concerns would be assumed by the hospital and no opening and closing of the facility would be required. As Harris maintains, the ED allowed the physician increased efficiency, additional treatment time, reduced stress, reduced hassle (Harris 1990, 1210). These characteristics of FFS reimbursement for physicians services were, at one time, incentives for GPs to encourage patients to use the ED under certain circumstances.

In Manitoba, the relationship between family practice and the ED has changed significantly since the late 1960's. According to Dr. Moe Lerner, this may

be attributed, at least in part, to the rise of emergency medicine as a respected speciality onto itself (1994). Consequently, physicians came to specialise in emergency service on a full-time basis, they chose not to maintain independent practices, and "a general decline (occurred) in the utilization of hospital facilities" by GPs with hospital privileges (Smith, 1972, 3). This helped to squeeze general practice out of the realm of the hospital. The physicians found working in Winnipeg's EDs are no longer GPs working in turn, but are almost entirely full-time emergency professionals. At the community hospitals, they are salaried employees. They are highly skilled in the practice of rapid diagnosis and treatment of unexpected, yet life-threatening, complications.

As ED facilities are no longer readily accessible to GPs, office-based treatment of unexpected minor illness now proves inconvenient to GPs. The treatment of minor lacerations will be used to demonstrate the extent of this inconvenience. It has been selected as it proves particularly unfavourable to GPs, yet GPs are capable of undertaking it in an office setting, and as it has been demonstrated in the previous chapter that requests for stitches are a common characteristic of those who attend EDs inappropriately.

First, the treatment of lacerations is not likely to be favoured by GPs as it is not conducive to a high-income general practice. Treatment of unexpected illness does not accommodate the ideal of a high-volume general practice as physicians have been conditioned to operate on an appointment basis for efficient treatment of predictable concerns, complications of chronic problems, and follow-up care. To perform prompt treatment to a significant proportion of walk-in patients without encountering financially disruptive gaps or emotionally disruptive queues appears difficult. Baltzan argues that it is "almost impossible to devise an appointment system that will accommodate illness of less than one or two days' duration. Attempts to fit these patients into such a schedule (especially when such illness

appear to account for at least 20% of the practice) will cause inconvenience to patients with both the acute non-predictable and chronic predictable illness." If a practice were designed to incorporate a significant percentage of sporadic and unexpected visits, it is bound to contain periods of unproductive time, and consequently, loss of income (Baltzan, 255, 1972). Similarly, Vayda suggests that "daytime emergency department use is probably a result of the difficulty of fitting patients with short-term illness into physicians' appointment schedules" (1975, 965).

Second, reimbursement rates for the treatment of lacerations by GPs does not financially reflect the time required for treatment. Diagnosis, preparation of equipment, disinfection, the procedure itself, dressing and cleaning of the equipment and facility afterwards require time that could be otherwise spent treating additional clients. According to DR. Neil Harte, a GP may be capable of administering treatment to a complex yet minor wound, yet unenthusiastic about doing so, because the time required for the stitching alone may be equivalent to the aggregate of numerous "general" visits, yet the physician's reimbursement is only equivalent to two "general" visits (1994). A general visit is defined by Manitoba health as "the service rendered to a patient who consults the physician for a condition - usually relatively minor - which does not require as full an assessment as" a physical examination. It was reimbursed at the rate of \$16.15 in the 1992 Manitoba Health Services Insurance Plan Physicians Manual. Minor surgery is classified as "wound repair ... simple," and it is reimbursed at a rate of \$30.00 per procedure. (R-3, A-10, D-2) While the performance of minor surgery is rewarded at a higher rate than a "general" visit, it does not prove financially worthwhile given the additional time and preparation normally required, and given that additional reimbursement for more complex cases is not generally available

(College of Family Physicians). Consequently, "fee for service" favours "general" visits over the administration of time intensive procedures such as minor surgery.

Third, the fees paid to GPs do not accommodate out-of-pocket costs which are incurred when treating minor lacerations. As revenue gained from the procedure is the same regardless of the location in which it is performed and as additional costs to the physician are incurred if the treatment is not performed in the hospital, an incentive exists for office-based physicians to favour procedures for which they incur minimal expenses. Likewise, when material and service expenses are anticipated, an incentive exists for physicians to treat the patient in a hospital. Furthermore, the fee schedule does not compensate for non-financial costs incurred by GPs when treating socially or technically complex patients. These include the additional hassle characterised by some patients experiencing lacerations and the increased risk of law suit a physician experiences when working in isolation (Cloutier, 1994). Consequently, the loss of access to EDs and incentives in the "fee for service" method of reimbursing physicians for their service discriminates against time-intensive service, relatively low returns, and "out of pocket" expenses associated within office provision of unexpected minor illness.

Incentives existed for GPs to provide certain treatment at EDs. While GPs have been removed from EDs, there has been no incentive for them to bring these services into their offices. The shift in practice behaviour from predominance of house visits to office visits was not accompanied by relative alteration in the remuneration for each of these services (Evans, 1974 , 171). Similarly, the shift from ED to the office of the GP for treatment of minor, yet timely, complaints has not necessarily been accompanied by a relative change in physicians remuneration. Furthermore, GPs have not been compensated for their loss of family-practice participation in hospital care, including expense-free provision of timely service. Understandably, the Canadian College of Family Physicians argues that any

significant change in financial arrangements between physicians and the provincial health service commissions will have to address this consideration. In the mean time, any reluctance for GPs to actively pursue treatment of unexpected minor illness, especially in the off-hours, is thereby understandable, as it is much more convenient to have such patients attend the ED. As incentives for GPs to bring timely treatment of minor illness into their office practice have not necessarily been established, it is convenient for GPs to allow misconceptions about the nature of the service to remain. In the absence of reasons for GPs to encourage patients to change their behaviour, a hang-over effect exist from the days in which patients were actively encouraged to frequent the ED.

To induce rationally-acting GPs to pursue enthusiastically prompt treatment of timely illness such as minor surgery, it must become financially attractive relative to other services they are capable of providing. GPs perform emergency type treatment infrequently not because they refuse, nor because they are unwilling to perform this service, but because patients with these conditions have not been encouraged to present themselves to GPs. In the British case, Green maintains that this phenomenon represents a failure of general practice (1992, 987). In Canada, the failure does not lie in general practice, but in the fee schedule. GPs no longer have the financial incentive to recruit or pursue such patients, and patient use of EDs has allowed physicians to pursue more lucrative treatment (Harris, 1990, 1210). If returns were greater, were relatively enhanced for time-intensive practices, and were enhanced to underwrite costs associated with procedures requiring equipment or materials, then GPs would have the incentive to achieve a optimal income via a lower volume practice, to incorporate time-consuming procedures, and to bring resource-intensive procedures back into the realm of general practice. As Crippen states, "office based physicians have a minimum of expensive technology to support, and economical treatment of

nonemergent complaints can be a staple commodity" (1985, 404). In the absence of such incentives, "fee-for-service" has provided overriding incentives for family physicians to not actively discourage minor, yet urgent use of EDs.

Because physicians are still willing, however reluctantly, to provide these services when requested, inappropriate use of ED service must be attributed to the behaviour of consumers. However, consumers cannot be blamed for inappropriate use, as GPs have encouraged them to use the ED in the past, and as they have yet to be encouraged to use the system appropriately. Among those who have not taught consumers appropriate use are the GPs themselves. GPs are not to blame either, for the system in which they are compelled to participate does not provide the incentive to teach appropriate use, makes inappropriate use of EDs convenient for GPs, and in the past, encouraged GPs to request that patients use the ED for timely or complicated service. Kelman and associates suggest that "the problem ... is not inappropriate use of the hospital emergency room but rather limitations in the existing pattern of functioning of the private office practice base of medical care in the community which provides incomplete access and service for individuals and families experiencing health problems they regard as requiring care." (1976, 1191). This chapter has taken Kelman's hypothesis one step further and demonstrated that incentives inherent in the balance within Manitoba's FFS schedule that encouraged and continue to sustain inappropriate ED use. However, incentives to ED personnel and elected representatives must also be considered.

CHAPTER FIVE
INCENTIVES WITH IN THE HOSPITAL ORGANIZATION THAT DRIVE
INAPPROPRIATE ED USE.

If the previously mentioned assumptions by Clark apply to EDs -namely that contribution to organizations is explained by incentives, then to what extent do incentives encourage ED staff to provide care that need not be performed in the ED setting? This chapter will argue that inappropriate use of EDs occurs because ED staff have incentives to encourage their use. The term "staff" is to include all professionals employed at an ED, and those who are primarily responsible for its administration. The incentives which are applicable to ED staff include those which relate to the possibility of closure of the ED, reprimand in the form of litigation, and reprimand from within the medical community. These incentives will be discussed in turn. Incentives also exist which relate specifically to administration, salaried providers, or fee-for-service staff. These will also be discussed.

Following a brief assessments of the nature of funding for Winnipeg's EDs and their security as organizations, it will be demonstrated that ED staff have the incentive to not discourage inappropriate ED utilization for fear of the department closing. Weiss states that EDs in general are financed by lump-sum payments negotiated between hospital officials and provincial health officials. Such lump-sum payments are based on past levels of activity within the department and they are based on negotiations conducted to establish minimal staff levels without creating an overload of waiting patients (1992, 97).

According to Ed Glambouskie at Manitoba Health, activity levels are a function of the quantity of ED visits and the overall complexity of those visits (1994). As global budgets are established in advance of the period for which they are intended, they are based on past use and expected continuation of trends.

According to Riel Cloutier, an administrator at Winnipeg's St Boniface hospital and a former employee of Manitoba Health, these trends tend to be fairly consistent (1994). In the Journal of Public Health Policy, M. Terris argues that because the entire governmental contribution is predetermined, global budgets are the financial tool of choice when services are primarily financed under the universal insurance program (1991, 61). With the exception of special projects and the wages of fee-for-for-service physicians, EDs are funded from a global budget as determined by ED, hospital and governmental officials.

The current levels of financial resources allocated to EDs has been challenged by the academic community, by activities in other provinces, and by recommended policies from within Winnipeg. Mary Jane Fulton, one of Canada's foremost figures in the field of health policy queried of the quantity of EDs in the Ottawa area in her book titled Health-care in Canada. A Description and Analysis of Canadian Health Services. She notes that Ottawa has less than one million residents and it has 9 EDs that operate 24 hours a day. She maintains that this ratio is excessive, as sound research demonstrates that only one fully equipped 24 hour ED is required for every half million residents. Not much imagination is required to assess what she would have to say about Winnipeg, where the ratio is comparable to that in Ottawa. Winnipeg has seven 24-hour adult EDs for a population of approximately three quarters of a million. This comparison clearly suggests that the academic community has developed sound arguments for the drastic reduction of the quantity of EDs in cities such as Winnipeg.

In the other prairie provinces, governments have announced the closing of EDs. Recently this has occurred in Saskatoon, and Calgary. In Saskatoon, Denise Close prepared a utilization study recommending that the city's emergency departments be consolidated. The release of her findings was pre-empted by governmental action to this effect, as one of the city's three EDs was to be closed

nightly until May 1995, when it would be closed outright. In Calgary, closure of two EDs and the opening of another was announced by the Calgary Regional Health Authority on Friday July 15th, 1994 (Walker, A1-2).

Rationalization of ED services in Winnipeg has also been raised recently in the Final Report of the Manitoba Provincial Emergency Services Review Task Force. It recommends that the Misericordia ED should "at least" be closed nightly, and that full closure of the ED and its transformation into a primary care clinic be considered. The Task Force also recommends various other ED closures, with the possibility of eventually closing or partially closing up to 5 EDs. According to the report, the extent to which EDs ought to be closed depends on the impact of previous closures and on the effect of proposed staffing reductions at 6 of the 7 adult EDs (Lerner, 1993, 2, 4).

In spite of these threats, the security of Winnipeg's EDs may appear sound as attempts at closing a particular Winnipeg ED have proved futile on at least two occasions. A source who wished to remain unnamed maintains that several decades ago, Manitoba Health offered the then proposed Seven Oaks facility to the administration of the Misericordia Hospital in exchange for the closure of the existing facilities. This attempt to close the Misericordia proved futile. More recently, the government of Manitoba attempted to close the Misericordia outright. The undisclosed source maintains that this attempt was thwarted by the involvement of the Archbishop in the political process, and by threats from representatives of the hospital with respect to the launching of a lawsuit which would be timed to coincide with the pending provincial election. For the sake of credibility, it is necessary to note that this source is named elsewhere in this paper, and appears in the list of interviews at the end of this document. Dr. Michael Rachlis, another of Canada's leading experts in health policy was questioned about the difficulties experienced by the Government of Manitoba in attempting to close

the Misericordia on CBC Radios's Radio Noon in August, 1994. Dr Rachlis maintains that these and similar difficulties are concentrated in Manitoba and Ontario, where viable three party political systems exist and where elections were pending. It appears that the number of Winnipeg's EDs could be significantly decreased should any one political party become predominant. While hospital administrators have been able to prevent ED closures in the past, given a change in Manitoba's political climate, the threat of ED-closure could be enhanced.

Given that changes in budgetary allocations to EDs are based on use and complexity statistics, and given the that insecurity exists as to the continued existence of some of Winnipeg's EDs, an incentive exists for staff to encourage inappropriate use so that utilization data may be enhanced. Consequently, it is conceivable that it is to the advantage of ED staff to accommodate any one who walks through the door in the most thorough way possible, so as to avoid displacement via cutbacks. This occurs because budget cuts, or closure present a threat to ED staff through the potential for layoff or displacement. Similar behaviour may guide the behaviour of hospital administrators whose jobs and reputation may be on the line if rationalization occurs. To this effect, Sublett reports that hospital officials fear that the closing an ED is the first step towards phasing a hospital out of acute care and becoming less of a hospital (1991, 1489), and Fulton argues that EDs provide a source of pride to the institution and a source of revenue to physicians practising elsewhere in the hospital (1988, 309, 264). Consequently, the elimination of the ED is seen as: the first step along the line to elimination of acute care status, the loss of a lucrative source of admissions, and a threat to administrative positions. It may be argued that this provides an incentive for administrative staff to encourage ED use so as to retain their own job and to provide continued employment for staff.

Because low utilization rates also place the jobs of non-administrative staff at stake, salaried and fee-for-service providers of care may also have the incentive to enthusiastically over-service patients. Inthoven has argued that "one of the main drives in the present system is for each specialist to exercise his or her speciality, not to produce desired outcomes at reasonable costs." (1991, 2533). Where there is fear of displacement, an incentive exists for the provider to enhance use so as to have the opportunity to continue to exercise his or her speciality in the given setting. In the case of treatment provided on a fee-for-service basis, Manitoba's former Minister of Health, Laurent Desjardins, has argued that "too often, the profession will wish to develop ways of keeping more doctors busy by increasing their scope of activities" (1989, 18). If the possibility of an ED closure, or the displacement of ED physicians does exist, providers of ED care have the incentive to over-provide services to avoid these consequences. It is evident that administration, salaried staff and fee for service staff have the incentive to not discourage inappropriate ED use in order to avoid ED closure or personal replacement.

While incentives to over service patients out of fear of ED closure do exist, they may be insignificant relative to other factors. For instance, unionized staff with significant seniority and "bumping privileges" may be assured employment regardless of the existence of the ED. Under such circumstances, they may not have the inclination to encourage ED or to work harder so as to enhance use levels. Also, it appears as if ED administrators have means other than use statistics for justifying desired staffing levels. Statistics on the quantity and extent of ED use may be used to determine changes in funding levels, however, Trish Burgel, the unit manager at the HSC ED, maintains that statistics about quality assurance and risk management would be more effective tools for retaining or enhancing desired staffing levels(1994). Furthermore, changes in budgetary allocations based

on changes in utilization rates do not by themselves force closure of EDs or entire hospitals. Relative to the age of the facility, room for further expansion, proximity to other EDs and general accessibility, utilization rates may have little influence on potential for ED closure. For instance, four decades ago, the Manitoba Hospital Commission Report expressed concern about the futility of future capital investments at the Misericordia Hospital. This recommendation was based on the age of the facility, its limited potential for physical expansion and its close proximity to other hospitals. More recently, the Task Force Report expressed concerns about the accessibility of the Misericordia ED to vehicle traffic. Similarly, the Saskatoon ED slated for closure was in part selected for its close proximity to the other hospitals (Close, 1994). As the possibility of ED closure or the laying off of staff is not necessarily determined by utilization rates, the incentives for staff to enhance the use of EDs may not translate into actual practice. Thus, while the incentive to over-provide does exist, it is unlikely to be acted upon. However, where the potential for displacement as a result of reduced use exists, emergency staff may be less active in discouraging inappropriate use. In an earlier mentioned study, Walsh found that 27.5% of ED patients were deemed to be inappropriate. He maintains that "there are clearly financial incentives for hospitals to try and shift as many of these patients back to their GP as possible for treatment" (1990, 31). Similarly, Weiss states that "it is well known in the US and Canada that shifting of hospital Out Patient Department or clinic activities to private facilities saves costs by getting around nursing union's ridged staffing regulations." (1992, 143). All aspects considered, it is questionable whether hospitals really have the incentive to shift these patients back to general practice, leaving alone the question of what would happen to the status of Winnipeg EDs if overall ED use was reduced by 27.5%. Such a drastic shift would have immediate repercussions on staffing levels, on the status and

reputations of the affected hospitals and on the popularity of the government of the day. In terms of job security, ED staff do not benefit from reduced use of the department, inappropriate or otherwise, as the quantity of physicians and salaried staff employed is somewhat volume-driven. So long as potential for displacement exists via reduced patient volumes, there exists some incentive to maintain a high volume of patients. Out of fear of the closure of ED, staff have the incentive to enhance ED use. Even though ED staff may not respond to incentives to encourage additional ED use, the same incentives hinder the realization of a drastic reduction in the extent of inappropriate ED use. ED staff have the incentive to not work towards a reduction of ED use for fear of displacement arising from the closure of the department. Incentives to ED staff thereby maintain the status quo.

The fear of litigation provides another incentive for staff to over-service inappropriate users of ED facilities. In an earlier chapter, it was demonstrated that consumers of emergency services desire and attain access to what they perceive to be the best available form of timely care. In Winnipeg, they do so at no additional financial cost to themselves. According to Enthoven, this access to service at minimal cost creates high expectations of emergency care and the possibility of a law suit if these expectations are not met (1991, 2532). In an American study, Lundberg maintains that attempts by physicians to minimize the possibility of litigation include the over-prescription of medical services (1981, 2195). While the frequency of medical litigation is not as severe in Canada, Coyte and associates report that "the growth rate in both frequency and severity is similar in" Canada and the US, and that when attempts at litigation are successful, average rewards are similar (1990, 274). Over-prescription of medical service may include the performance of tests to confirm a diagnosis, or the provision of service under circumstances where it is suspected that the service is not necessary. According to Cloutier, this is done to protect the provider's judgement and according to Weiss,

"collectively, doctors admit to some wasteful practices, but they tend to defend them as a response to patient or consumer demand, or their concern about litigation" (1992, 19).

Fear of litigation applies to all staff. Traditional business law dictates that an employer is legally responsible for the liability of an employee. For example, an employer is generally liable for the damages caused by someone employed to drive a truck. Consequently, an employee cannot generally be held liable for an on-the-job mishap. According to Neil Harte, this is not the case for providers of medical services, salaried or otherwise employed, as they may be sued. Insurance against litigation is not provided by their employer, and must be obtained elsewhere. Furthermore, lawyers generally sue even those remotely involved in a mishap, so all staff are concerned. (1994)

While litigation provides an incentive for the over-provision of service, conscious activity to this effect does not necessarily follow. Nurse Mowat at the HSC ED can recall only two cases in which nurses were involved in litigation procedures. Because she views these cases as exceptional, she maintains that the fear of litigation has no effect on the service she provides (1994). Similarly, in Harris' investigation of the determinants of physician behaviour, he writes that "there is no solid evidence to support the contention that a substantial number of decisions are made to avoid malpractice charges." (1990, 1216)

Incentives for all staff to over-service ED patients also arise from interactions within the medical community. These internal incentives often take the form of possible reprimand from licensing bodies, supervisors and peers in response to the breach of rules, guidelines and professional protocol. For instance, professional norms dictate that no one presenting to an ED is denied at least a diagnosis by a provider of emergency service. Such is reinforced by rules and guide lines dictating that requests for service may not be refused. As a

consequence, the predominant sentiment within the culture of ED use is "that most of these patients be considered emergencies until they have received assurance from a professional person, particularly a physician, to relieve their anxieties" (Department Vol 23, 1975, 38). This is complemented by the notion that it is "the gravest error is to send someone home who should have been admitted (Siegler, 1988, 25) Lundberg maintains that this sort of "peer or supervisor pressure" contributes to physicians overuse of medical services (1981, 2195). Consequently, influences from within the medical community encourage the over-servicing of those who come to EDs, regardless of the severity of their symptoms.

Internal incentives which encourage the over servicing of ED patients include administrative efforts. Hillman, maintains that "management's goals should be to educate, motivate, or constrain" to facilitate the most effective decisions. This is done by limiting staff to a "range of options that reflect management's decisions about what is appropriate, high-quality, efficient medical care." Limits placed on the behaviour of medical staff have included "treatment protocols ..., regulations, administrative constraints, practice guidelines or parameters, prospective utilization review, utilization management, "cookbook" medicine, and simply "controls." These kinds of rules have altered the behaviour of medical professionals in the past, and they are often enforced by sanctions such as the removal of privileges (Hillman, 1989, 2) While rules may help to establish specific review criteria with respect to new practices, to restrict provision of service on demand, to spread new information, and to standardize medical practice that may also be out of date, conflict, confuse, or be too rigid or unfounded.

Internal incentives offer differing degrees of effectiveness. Feedback includes information from peers and supervisors communicated to providers of care. It assesses the provider's practice habits, including the futility of services

provided. Behaviour within an organization "can be greatly facilitated when data about the system's functioning are collected, fed back to members, and used to provide opportunities for diagnosis and action." However, uncertainty exists as to whether results from feedback warrant the implementation of information structures (Lundberg, 1981, 2197-8). The adoption of rules, supported by the dissemination of information and finally the possible use of reprimand are often advocated. For instance, the Taskforce report suggests that ED physicians be educated and, if necessary, disciplined so as to have immunizations and changing of dressings performed outside the hospital (Lerner, 1993, 10). However, Harris argues that "professional etiquette" is more an incentive than the threat of repercussions and that "peer interactions" and "explicit" standards "may be more influential than financial incentives" (Harris, 1990, 1210) Peer review is said to be a highly effective incentive as it "plays on the physician's sense of achievement and desire to excel" by way of ranking relative to other professionals (Lungberg, 1981, 2197) Should a patient complain that they were refused treatment, under-treated, or mistreated the fear of repercussions exists. According to Nurse Mowat at the H.S.C. ED repercussions include possible suspension, a letter in the employees file or a request that the staff member write a letter of apology (1994). To avoid such repercussions, all ED staff have the incentive to over-service patients.

The over servicing of ED patients also occurs due to incentives which are solely applicable to those responsible for the administration of EDs. According to Clark, administrators are expected to enhance to condition of their organization whenever possible. He states that "changes in the organizations activities and purposes are predicted by assuming the executive's function is to perpetuate his group, and by assuming that he alters incentives to adapt to changes in the supplies of incentive-yielding resources." Consequently, administrators respond to changes in the availability of rewards. (Clark, 1961, 129) When over servicing of

inappropriate ED patients contributes to the perpetuation of the department and to the attainment of additional rewards, administrators have the incentive to encourage inappropriate use of EDs.

The existence of an ED may be enhanced by maximizing the resources made available to it. According to Ed Glambouskie at Manitoba Health, this may include the procurement of special concessions from hospital administration, and Manitoba Health for trial or pilot projects. (1994) This includes the paradox of the ED at Winnipeg's Grace Hospital described by Dr. Moe Lerner. Extensive renovations have recently been undertaken, a reputable patient education program exists, and ironically, a severe reduction in the quantity of patient visits use has occurred (1994)

The existence of the ED may also be enhanced by creating work for under-utilized, but occasionally needed staff. In Fulton's book titled Health Care in Canada. A Description and Analysis of Canadian Health Services, she provides a highly variable graph representing arrival rates at an ED (1988, 311). Expected variations occur on a daily and weekly basis, yet staffing levels are relatively unchanging. Administrators have the incentive to keep under-utilized staff on hand "just in case," and to recruit and maintain the best possible staff in order to be as prepared as possible for big and unexpected accidents. Otherwise under-utilized staff may be kept busy through the servicing or over serving of inappropriate ED users.

Over servicing of patients may also occur as a result of incentives inherent in "fee-for-service" remuneration for ED physicians. Lundberg, argues that "fee-for-service" physicians have the financial incentive to over-prescribe ED services (1981, 2195) As the incentives inherent in the "fee for service" remuneration for ED physicians are similar to those incentives to GPs already addressed, only those incentives which currently contribute to the financial well being of Winnipeg's

"fee-for-service" ED physicians will be discussed. These include incentives to provide services for which time requirements are relatively low, incentives to provide procedures for which remuneration is relatively high, and incentives to encourage repeated use of the ED facility.

The income of "fee-for-service" physicians is attractively enhanced by the treatment of inappropriate ED users as relatively minor time commitments are typically required by the attending physician. According to Ed Glambuskie at Manitoba Health, the income of ED physicians at the HSC and St. Boniface Hospitals is derived from billings to Manitoba Health for each procedure performed. The ED physicians pool the earnings they receive from these billings and from this consolidation, each physician receives a salary (1994). The salary to each physician may be enhanced by increasing the aggregate value of the physicians' billings. This occurs because the amount billed for a given procedure is predetermined. This fixed rate proves lucrative only so long as the time expended by the physician is minimal. Minimal time expended on a procedure is also beneficial as more time remains available for the performance of additional procedures.

For instance, physicians at the St Boniface and HSC EDs are allowed to bill Manitoba Health for administering stitches. While arrangements may be made for additional payment under extreme circumstances, the physicians' remuneration generally does not fluctuate with the time or effort expended. Should the laceration prove to be relatively complicated, a physician may be required to spend considerably more time stitching it, and yet, the physician may only bill for the predetermined amount. Consequently, only the stitching of the most minor of lacerations proves lucrative as these cases enhance the physicians' income potential at the fixed rate while entailing a minimal opportunity cost. In this manner, "fee-for-service" physicians have the financial incentive to covet "cream" cases and to

over-emphasise ED services which are relatively simple. Consequently, the income of fee for service physicians is enhanced by treating the easiest cases in any particular treatment category. In effect, inappropriate visits may be considered desirable as they help to off set the financial liability caused by treating the more complicated cases. In this manner, patients presenting with minor illness may be coveted as they help to supplement the income of physicians' (Sublett, 1991, 1491).

Because inappropriate users generally present with conditions that are relatively easy to treat, and because remuneration does not necessarily fluctuate according to the time and effort expended on particular cases, the income of "fee-for-service" physicians tends to be enhanced through the treatment of those who present to the ED inappropriately. Consequently "fee-for-service" physicians at the St. Boniface and HSC EDs have the financial incentive to favour or over-prescribe ED services which are relatively simple.

Assuming that all ED procedures entail the same complexity and time requirements, some procedures prove to be more lucrative than others. Consequently, "fee for service" physicians have the incentive to favour certain procedures. Dr. Hsiao of the Harvard School of Public Health conducted a study of the resource intensity to remuneration ratio of physicians services. He found that procedures involving surgery and diagnostic testing proved to be the most lucrative -an incentive exists for physicians to perform "unnecessary tests and operations" (Economist, 1988, 37). Given a minor laceration, an ED physician could conceivably bandage the wound and instruct the patient to frequent their GP or a clinic should a problem arise. For this the physician would be able to bill \$18.50. Should the physician decide to stitch the same laceration, the full \$30.00 may be billed. The difference in time required for the two procedures may be marginal, yet an additional \$11.50 is earned by the ED physicians if the stitching is

performed. (1992, Ministry, A-10, A-22) In this manner, "fee-for-service" physicians have the financial incentive to favour or over-prescribe ED services which are financially favourable.

Incentives which encourage physicians to prescribe repeat use of medical services have been studied at a resident-staffed hospital outpatient clinic. Residents were randomly assigned to fee-for-service or salaried remuneration for a nine-month period. Under fee-for-service, more visits per patient were observed and more "well" patients were seen. Well patient visits for "well-care" were likely more frequent under the fee-for-service system as physicians missed fewer scheduled "check up" type visits, and because there existed an incentive to provide continuity of care by discouraging visits to alternative forms of care. The study concluded that the fee-for-service "reimbursement method ... motivated physicians to influence the use of outpatient services by their patients" (Hickson, 1987, 344). While this study is not directly applicable to ED physicians, it demonstrates that physicians have the incentive to see more patients, and have the incentive to encourage visits by "well" patients under fee-for-service remuneration in an outpatient setting. The perceived need for education and threats of repercussions in order to deter fee-for-service ED physicians from prescribing return visits has already been cited. This demonstrates that FFS ED physicians have incentives to encourage return visits to EDs.

Enthoven states that "our health-care financing and delivery system contains more incentives to spend than to not spend. It is based on cost-unconscious demand. Key decision makers have little or no incentive to seek value for money in health-care purchases," and that "the dominant open-ended fee-for-service system pays providers more for doing more, whether or not more is appropriate"(1991, 2532). This occurs because "fee-for-service" remuneration provides physicians with the financial incentive to favour or over-prescribe ED

services which are relatively simple or financially favourable. Lindburg maintains that physicians particularly responsive to financial incentives which contain dividends and penalties. (1981, 2199) The fee-for-service method of remuneration includes both, however penalties for encouraging or providing inappropriate care appear minimal. Patients may be subtly enticed, or not discouraged from visiting a "convenient but inappropriate facility, then" the system billed for telling the patient they have selected the wrong form of medical care. This "leaves physician's motives up to considerable debate" as "physicians are not likely to discourage any admissions that pay their salary. To allow inappropriate patients to be seen in non-cost-effective facilities is to encourage it (inappropriate use)." (Crippen, 1985, 404) As Crippen asks, "does the willingness of a medical industry to provide expensive expertise for convenience clinic patients necessarily mean providers should be reimbursed at rates inflated by a technology not actually utilized? (1985, 405)

There have been cases in which financial incentives have succeeded in reducing over-prescription of procedures. These include peer review of requests made by physicians for service reimbursement, penalties for prescribing inappropriate service, rewards for reducing costs incurred in the care of patients, and lump sum payments for the care of a patient in a diagnostic grouping, regardless of the extent of services provided. These cases demonstrate that health-care professionals can reduce the extent of service provided when "the reimbursement system does not include financial rewards that encourage extra services." (Lundberg, 1981, 2199)

Incentives for the provision of inappropriate ED care also apply specifically to salaried staff. As salaried staff have the capability to influence inappropriate use by not referring patients elsewhere and by encouraging patients to come back for stitches and follow-up care, they have the potential to encourage inappropriate ED

use. Salaried staff may have the incentive to create additional work via treatment of inappropriate users so as to reduce the possibility of staff reductions. Cloutier was questioned about incentives for salaried staff to enhance usage rates. He concedes that incentives for salaried staff to enhance use may exist, however, he states that these are not necessarily observed in actual practice. He maintains that salaried staff desire that patients seek appropriate forms of care and that these override any notions for the creation of additional work, should such even cross their minds. The last thing a securely-employed individuals with seniority wish to do is create unsatisfying and unnecessary work for themselves. Unionized staff with sufficient seniority and adequate qualifications are moved to other departments should their position be eliminated.(1994) Furthermore, staffing levels are not necessarily based on usage rates. According to the recommendations of the Taskforce Report, staffing levels at a particular Winnipeg ED should be reduced to coincide with other facilities (page 1). This is merely one instance in which staffing levels are not volume driven. Incentives for salaried staff to encourage inappropriate use so as to avoid a reduction in staffing levels are therefore weak.

Stronger incentives for staff to encourage inappropriate use do exist. Because fee-for-service physicians have an incentive to enhance billings per physician, the discouragement of inappropriate use by salaried staff would diminish the salary potential for fee-for-service physicians. This occurs even though salaried staff might prefer that inappropriate users attend elsewhere because better care and reduced work load might ensue. (Cloutier) According to one of the nurses interviewed at the HSC ED, because of income considerations, "fee-for-service" physicians would "kill" if they knew a patient had been discouraged or turned away by nursing staff. Consequently, salaried staff have the incentive to encourage inappropriate care due to pressure from physicians. This occurs in the

form of not immediately referring patients elsewhere, and of not gently encouraging inappropriate users to attend elsewhere. (Arris, 1994)

Incentives within the ED to provide inappropriate care exist, but are generally weak. It is unlikely that salaried staff encourage inappropriate use so as to sustain employment. With the exception of fee-for-service to physicians, incentives to ED staff are generally weak, and unlikely to translate into decisive action. However, the policy of granting professional ED diagnosis to all who present, and fee-for-service payment to physician's associations likely encourage inappropriate use of EDs. Even these may pale in comparison to consumer behaviour learned during the era in which the GP and the ED physician were one and the same and services outside the hospital were not insured.

CHAPTER SIX
THE POLITICAL ATTRIBUTES OF INAPPROPRIATE EMERGENCY
DEPARTMENT USE

Up to this point, the thesis has examined incentives applicable to ED patients, physicians and ED staff which have led to the heavy reliance on ED use for the care of unexpected illness. However, politicians at various levels of government have a significant influence on the number of EDs in operation, on their budgets and on the remuneration systems for physicians. Of course, politicians do not have complete freedom in their decision-making on health spending as they must deal with the interested parties, public opinion and competing demands for scarce tax dollars from other policy sectors.

Similar to the analysis of the motivations of other actors within the health care system, this chapter applies to the self-interested model of behaviour to interpret the actions of politicians on the ED issue. This chapter argues that elected politicians have had the incentive to promote and facilitate the use of institutionally-based health-care services. In his article titled "The Theory of "Rent Seeking": Some Reflections" Hartle treats parliamentary politics as a game. In the game, "the object of the individual politician is (to) be the head of government or at least to hold a senior portfolio in the cabinet." Consequently it is required that the politician "appeal to the maximum number of marginal (uncommitted) voters in his own constituency ... and his party must appeal to the maximum number of marginal voters in marginal constituencies, defined as those who have a high proportion of uncommitted voters." To win the game, marginal voters must be offered an attractive "bundle" in return for supporting the game player. Similarly, Hartle argues in The Expenditure Budget Process of the Government of Canada: A Public Choice-Rent Seeking Perspective, that politicians indulge in rent-seeking

behaviour when they obtain rewards for marginal voters in exchange for future electoral support (1988, XVIII) Those holding public office have the ability to influence the quantity and allocation of capital expenditure and in the past, they have had the opportunity to obtain political "rent" by doing so. Because emphasis has been placed on capital expenditure, funds destined for the provision of health-care service have tended to drift toward the creation and maintenance of institutionally-based services at the expense of community-based health-care such as office-based practices, and home-based care. Detailed analysis of incentives to politicians proves difficult; therefore, this chapter will place emphasis on evidence which demonstrates that the provision of institutionally-based forms of care have been favoured. Three examples of the historical favouring of institutional care by those holding elected public office will be discussed. These are the emphasis put by the federal government on the financing of hospitals, federal financing of hospital services including subsidies for the treatment of indigent ED patients, and the favouring of institutional care within Winnipeg. It will then be argued that the favouring of institutional services contributes to misconceptions with respect to the service of GPs.

One of the most dramatic examples of the favouring of institutional care in response to political incentives is the introduction of a \$13 000 000 hospital construction grant intended to stimulate the development of hospital facilities. The plan, its justification, its emphasis and its effects will be outlined prior to arguing that it was the product of political opportunism. Under the terms of the grant, the federal government provided up to \$ 1 500 per hospital bed created so long as the relevant provincial government matched the contribution, and so long as the federal contribution did not exceed one third the cost of the facility. The plan was introduced by Prime Minister Mckenzie King's Liberal government in 1948 as a response to an estimated national shortage of 60 000 hospital beds. The shortage

was said to be the result of increased construction costs, and a shortage of labour and materials arising from the war effort. (Canada, 6197, 1948)

So began an era of large-scale federal and provincial involvement in hospital development regardless of potential for alternative forms of care, and regardless of duplication of services. King's announcement was geared towards the provision of beds, rather than improved health, let alone improved health service: health status was supposedly proportional to the number of beds available. When defending the program during supply debates in the house, King's minister responsible for health was so bold as to state that "this grant is intended to encourage the building of new beds" (Debates, 1948, 6108). Thus, the bed was to be the desired goal, and rationalisation of existing facilities would not be rewarded. Hospitals were desired; not improved care or alternative forms of care. Furthermore, there existed no mandate to discourage duplication of hospital services (Deber, 127, 1992). Hospital beds were desired, not efficient use of public resources. This was also exemplified in another health proposal of the same era, as success in the battle against arthritis was measured in the number of new beds that could be secured for passive treatment of its victims (Canada, 1948, 1777).

In terms of its stated goals, the hospital construction grant was immensely effective. In an assessment of the problems relating to Canada's method of health-care delivery, Rachlis and Kushner report that "the provinces viewed the federal government's national Health Grants program as a great bargain, and responded by building many new hospitals, which often duplicated existing facilities This was a tremendously seductive enticement to provincial governments and it totally skewed the way provinces decided to spend money on health." Those elements of the system of health-care provision that were eligible for federal assistance experienced rapid expansion. The fastest growth occurred in

the 1950's when direct federal grants were available for specific hospital construction projects. This was particularly so in Manitoba where spending on hospitals increased by 70%, without any appreciable increases in inflation, labour costs, or population. (1989, 27, 28)

The introduction of large scale federal involvement in the development of hospitals may have been a reflection of genuine public need, or political opportunism. At the time of King's announcement, hospital facilities were perceived "to be insufficient in number, inadequate, and outdated, and government action was said to be necessary." Sources for finance could no longer be confined to "municipal governments, religious groups, voluntary insurance programs, and patient payments" (Deber, 1992, 127). Given the wake of depression and war, it would not be unreasonable to assume that some genuine need for hospitals did exist. However, King's initial announcement and subsequent governmental actions hint at political opportunism.

Political opportunism may be detected in the peculiar circumstances surrounding the announcement of King's program. An analysis of the debates in the federal Parliament reveals that the program was not mentioned in the Speech from the Throne, as was considered tradition. It was announced without warning, it was delivered with by-elections and relevant provincial elections immediately pending, and it was announced on the verge of King's retirement. In addition, King promised that the Liberal government would "proceed" with plans to implement the promised health-insurance scheme if it were returned to office (Canada, 1948, 3931-3939). The implementation of the program has been interpreted by Malcolm Taylor as a monument to King's legacy. Taylor maintains that King was convinced by his minister responsible for health that "he should not end his long career without at least initiating the program of health insurance which had been for so long a stated Liberal objective" (1978, 163). These

circumstances may be interpreted as political reasons for the large-scale federal involvement in the provision of hospital services.

Further suggestions of political opportunism have been revealed in a lengthy analysis of political decisions contributing to Canada's health-care system. The author of this work, Malcolm Taylor, notes that every one of the thousands of projects financed by the grant was publicly announced by the Liberal's minister responsible for health. The political currency this generated is reflected in Taylor's statement that "few Cabinet ministers ever reaped such volumes of publicity from a single program" (1978, 164). The political opportunities provided by the program are also exemplified by Taylor's finding that the Liberal election platform during a following campaign was explicitly designed to obtain as much political currency from the grants program as possible. Taylor also reveals that opportunism was well-rewarded as "the health grants program had yielded a high rate of political return." (1978, 188). The grant program emphasised the provision of additional hospital beds, and it was most successful in terms of its stated goals and in terms of the political rewards it generated. Those holding elected public office were able to bias the allocation of health-care resources towards the development of institutions and they reaped political rewards by doing so.

It will now be argued that provincial and federal governments encouraged hospital dependence on the part of health-care consumers through the provision of "free" hospital services. First, the services insured and their institutional bias will be presented. Second, the notion that institutionalization was politically driven on the basis of previous partisan promises will be discussed. Third, the possibility that institutionalisation was the product of partisan pride will be assessed.

Taylor provides a detailed account of the terms and of the bias of federal involvement in hospital insurance. The Liberals, under the leadership of St. Laurent, made no definite commitment to any form of health insurance in the 1949

and 1953 election campaigns and received an overwhelming majority of the seats in the House of Commons on both occasions. (165-66, 206) However, as the 1957 election approached, the Liberal government of Louis St Laurent was anxious to introduce the Hospital Insurance and Diagnostic Services Act. To do so, the government repealed the previous condition that federal contributions towards the financing of hospital services only if a majority of the provinces representing a majority of the country's population provide universally accessible hospital insurance. (1978, 217) Consequently the terms of the act dictated that the federal government would finance 25% of the operating and maintenance costs of in-patient hospital services in a given province, in addition to 25% of the country wide average cost of said services, so long as a provincial insurance program was "universally available" (1978, 217, 221). In return, the federal government dictated that "the provincial government would have to establish a hospitals planing division; it must license, inspect, and supervise hospitals and maintain adequate standards; it must approve hospital budgets; it must approve the purchase of furniture and equipment by hospitals; it insured services available to all on uniform terms and conditions." (1987, 230) Subsequently, approximately fifty percent of the cost of medically necessary hospital services were financed by federal contributions, and there were "no incentives to use less expensive" alternatives to institutional care (Deber, 127, 1992). Ironically, the Liberals were defeated shortly after the passage of the bill (Taylor, 1978, 231).

With the advent of publicly administered hospital insurance, Manitobans were granted access to "free" medical services, if admitted to hospital. These included costs incurred in a hospital for standard accommodation, supplies and facilities, nursing service, drugs, consultation, diagnosis, and treatment. In addition, some out-patient procedures were also covered by the Manitoba Hospital Services Plan. However, consultation and diagnostic services administered to

those patients not admitted to hospital were exempt from the program. (Annual Report of The Manitoba Hospital Service Plan, 1960). Consequently, a scenario arose in which a patient might have to pay for a procedure "out of pocket" if it were performed at home, in a physicians office, or to a out-patient at a hospital, but not if one were admitted to the hospital for treatment. When given a choice, patients will generally elect to use the mode of treatment which is perceived as free (Taylor, 1978, 192), and consequently preference for hospital-based care arose.

The Federal Liberal party had long promised health insurance. However, the eventual insurance program was hospital-based because of promises relating to the hospital-grants program. King justified his party's politically rewarding indulgence in the field of hospital creation by promising that the grant for the construction of hospitals was the foundation of a comprehensive health insurance program (Federal Debates, 1948, 3934). He argued that insured services couldn't possibly be offered on a universally prepaid basis until the required facilities were in place (Taylor, 1978, 164). It was not acknowledged at the time that insurance of GP services might therefore constitute a logical initial step towards comprehensive insurance, as independently operating physicians would not necessarily depend upon public institutions, and could still contribute to universally enhanced health status. Once the perceived shortage in hospital facilities had been alleviated, the federal government continued to delay the implementation of insurance. On succeeding King, St. Laurent proclaimed a dislike for the concept of health insurance, and not surprisingly shelved its implementation. He cited foreign turbulence and subsequent need for military spending with respect to Korea (Taylor, 1978 184), and a supposed continuing inadequacy of hospital facilities (Canada, 1953, 3932) as his justification for delaying public-health insurance. It is ironic that the hospital-grants program was shortly there-after halved as a consequence of its success (Canada, 1953, 4685). However, the

government was skilfully pressured into fulfilling its promise of insurance by opposition and provincial politicians (Canada, 1953, 4694-4704 and Taylor, 1978 207-210). Reliance on the unavailability of hospital facilities as an excuse for delay of health insurance therefore compelled the Liberals to be hospital-centric in their eventual implementation of insurance schemes.

Health insurance was also hospital-based because of the success of the hospital grants program. It is known that hospitals were generally experiencing high operational deficits (Taylor, 1978, 199). Further analysis would likely demonstrate that sufficient maintenance and operational financing was not available for the hospital facilities that were developed as a result of the grants program. Consequently, federally-instigated hospitals required further financial assistance. Public insurance of hospital services provided the much needed capital and subsequently, furthered the political provision of institutionally-centered medical services. When health insurance was first introduced, it is likely that it was hospital-centric as opposed to service or physician-based because of the federal grants for hospital development. Consequently, political implications of the grants program necessitated the introduction of hospital-centric insurance.

It is highly likely that health insurance was also institutionally-based as a result of political pride on the part of the federal Liberal party. Since its announcement as a policy goal by King in 1918 (Canada, 1948, 3932), the introduction of health insurance had remained the coveted goal of the Liberals (Taylor, 1978 163). Decades later, the goal was usurped, as implementation of health insurance had been independently accomplished by the provincial affiliate of a rival party, and by 1950, four provinces had adopted their own hospital insurance programs. The plans proved to be politically popular, but expensive. Consequently the federal government was pressed into honoring their earlier cost-sharing proposal. The CCF's hospital-insurance program in Saskatchewan was a

source of contention for the federal liberals. (Taylor, 181-2) Because the provincial governments were able to deliver the "health insurance" long promised by the federal Liberals, it is likely that the Liberals were forced to "follow suit" out of political pride. Once the hospital insurance plan, its institutional bias, and its political attributes are examined, it is evident that parliamentary governments encouraged hospital dependence on the part of health-care consumers through the provision of "free" hospital services.

In the late 1960's, a member of Manitoba's Legislative Assembly argued before the legislature that the provincial interest was best served through the provision of as much public service as possible. He maintained that numerous small hospitals ought not to be closed to create better facilities at a larger one, and that "people shouldn't have to drive 27 miles to a hospital when all that's necessary to give the service is to do a little bit of construction work and not too much special equipment ... They have a very distinct pride in the fact that in their community they have the medical services, they have a hospital." (1967, 665) This statement classically represents the "more is better," and "my community has to have a hospital too" rationale behind demands for the development of a hospital in Winnipeg's north end. The following paragraphs will argue that the development of Seven Oaks Hospital demonstrates that the abundant supply of hospitals in Winnipeg is the consequence of individual efforts towards political prosperity and not efficient use of public resources: that the construction of surplus EDs was based on bids for political prosperity rather than genuine need. It will be argued that "more is better", and "it is only fair that my community gets one too" really did dictate political decision-making relevant to the project. First the recommendations of numerous organizations commenting on the construction of Seven Oaks will be reviewed to demonstrate that development of the hospital and its emergency department was an inefficient use of public resources. Second, it

will be argued that the creation of the hospital was driven by political incentives which encouraged the provision of institutional health-care services.

A number of major reports assess the merit of a hospital in Winnipeg's north end. In the late 1950's a moratorium was placed on all future hospital construction in Manitoba, pending the completion of a study designed to assess and prioritize possibilities for further development (Province of Manitoba, 1960, 15). Subsequently, the Manitoba Hospital Survey Board reported that a number of extensive development projects in the Winnipeg area proceed, but that a hospital in the north end should not be contemplated. The report stipulated that only when considerable municipal financial support, a suitable site, staffing commitments and expected demographic trends materialised should a north end hospital be considered. This report essentially buried any immediate demands for a hospital in the north end.

A decade later when planning for the hospital was on the verge of completion, a report addressing the consolidation of hospitals in Winnipeg's core area made a brief assessment of the city's hospital facilities. It revealed that use of Winnipeg's active treatment hospitals had "shown an actual decline of 11% despite a decrease in the number of children (low users) and an increase in the number of older citizens (high users)" between 1966 and 1974, per unit of population (Clarkson, 1975, 15). Similar results were observed for the province as a whole. The authors "wondered whether there was a need to build another active treatment hospital in Winnipeg at this time" (37). Assuming that the population of Manitoba would quickly rise to 1.3 million, the authors predicted that the addition of the Seven Oaks hospital might satisfy consumer demands well into the 1980's (33). The catchment area for Winnipeg hospitals is considered to coincide with the Manitoba boundaries. To this day the province's population remains around the same one million mark. In addition to the decreased rates of usage, the perceived

future need for the hospital was based on grossly over estimated-demographic data. From a city-wide perspective, this report demonstrates that the addition of the Seven Oaks hospital was clearly redundant.

Several years later, similar suggestions were made in another non-governmental publication. Based on an extensive 10-month survey of health concerns in North Winnipeg, the report of the Co-operative Housing Association of Manitoba urged that the Seven Oaks hospital not be built. The organization suggested that "while a case might be made that the Seven Oaks Hospital is needed due to the "unfair" physical distribution of present hospital facilities, it is obvious that Winnipeg does not need any more acute hospital bed facilities." (1972, 87) In reference to out-patient facilities such as the emergency department, it was noted that downtown hospitals were more accessible to 50% of North Winnipeg residents, and the hospital would be poorly located with respect to ease of accessibility and expected demographic development (1972, 87). The housing co-operative made these suggestions knowing that construction was scheduled to begin within the year.

Even the provincial government of the early 1970's was opposed to further hospital development. The release of the Manitoba Government's White Paper on Health Policy (Miller) in 1972 symbolizes the end of the golden age of hospital construction. Prior to its release, the Grace and Victoria hospitals had been completely rebuilt on new suburban sites. In the paper's aftermath, numerous politically-oriented delays in the planning of Seven Oaks occurred. These will be discussed shortly. The report prescribed "short-run measures that freeze particular costs while workable policy for the long-run is devised" (1). In addition, it proposed that "The new [cost containment] problems are essentially technical and organizational in their sources and not moral or linked to persons. ...The heart of the matter is that the system has largely lost touch with any method of a simple and

effective kind of providing incentives to use scarce resources efficiently"(2). It noted that the number of hospital employees had doubled between 1960 and 1970 (6), in spite of the above-mentioned decreases in the rate of use. Given that the writing of the report is accredited to cabinet ministers, it is not surprising that it failed to cite political implications as a driving force behind inappropriate use of health-care resources. The report advocated the use of community health-care centers in place of proposed hospitals. While no direct attack was made on the proposed Seven Oaks hospital, it is likely that the paper was intended as governmental resistance to the plans of the Manitoba Health Services Commission. This sentiment is best indicated by the White Paper's suggestion that "it might be necessary to introduce regulations under present acts to allow the (regional) boards to assume powers previously held by provincial agencies" (60).

The readily available reports commenting on the development of the proposed north-end hospital are numerous and were produced by a variety of governmental and non-governmental organizations. They are unanimous in their criticism of the project. On what basis was Seven Oaks justified, and more importantly, why was it equipped with an ED? The question is perhaps best posed by Crippen who asks, does "every community hospital really need an emergency department staffed by full-time physicians to watch for potential emergencies" (1985, 404). As already mentioned, the document prepared for the Department of National Health and Welfare titled Emergency Services in Canada reveals that no Manitoba hospitals reported that they had been the subject of a research project or special study between 1969 and 1974. However, during this period, the Manitoba Hospital Commission oversaw development of a new emergency department at Misericordia (1970), a new emergency intensive-care unit at Grace Hospital (1973), and the construction of the new Concordia Hospital (1972) (Respective Annual Reports of the Manitoba Hospital Commission). Development was taking

place at more than 50% of the city's EDs. The Seven Oaks ED supplemented this boom, albeit on questionable grounds.

It will now be argued that this inefficient use of resources occurred out of political opportunism. Laurent Desjardins was Manitoba's Minister of Health at the time the Seven Oaks Hospital was opened. When questioned as to the nature of the forces which contributed to the development of the hospital he stated that they were "strictly political," and that they were driven by various levels of politicians, including aldermen and mayors (1994). Two instances of political opportunism have been selected for assessment. These are the peculiar circumstances surrounding the initial approval of the hospital "in general," and resistance to alterations in the plans of the proposed hospital. Just prior to the provincial election campaign of 1966, a sudden policy reversal occurred as the government's response to pressures for construction of the hospital changed from long-term denial of need, to approval "in general" of the hospital just prior to the 1967 provincial election campaign (Manitoba, 1967, 697). In the early 1960's, the provincial minister responsible for hospitals, Saul Miller, represented the Seven Oaks constituency. In addition to quoting experts on the matter, the minister maintained that there was no need for a hospital in his area as most residents could just as easily go downtown. This claim was repeated by the minister just weeks before the 1966 election. Ironically, immediately prior to the election campaign, it was announced that the government had agreed in principle that there ought to be a hospital in the north end. The government's north-end candidates fought the election on the basis of support for a hospital, and were all defeated (1967, 670). Nevertheless, physical plans for the hospital were initiated shortly after the election.

The Manitoba Hospital/Health Services Commission (the Commission) is an agency of the provincial government that was charged with the planning and

organization of a "balanced hospital system," the recommending of a budget to the minister, and the administration of the federal-provincial hospital construction grant program; it was responsible for financing and constructing hospital services. Ideally, the Commission was a planning body somewhat removed from politically dominated-decision making. However, in the Manitoba Legislative Assembly, it was suggested that this was not the case as there had been no logical planning on the part of the Commission. Instead, building was permitted whenever the Commission was subjected to significant political pressure (Manitoba, 1967, 666). The sudden approval in general of the Seven Oaks hospital is one such occurrence.

The other instance of political opportunism in favour of institutional-care services was the provincial government's unsuccessful attempt to downgrade the hospital design to that of a clinic, and failing this, its unsuccessful attempt to reduce its proposed size and capabilities. These attempts may be considered rational efforts to efficiently allocate public resources. However they were frustrated by the political efforts of elected municipal officials, not the least of whom were members of the Seven Oaks Hospital Board. Canadian hospitals are managed by "community control with independent boards of trustees" (Deber, 1992, 134). In its formative stages, the Seven Oaks hospital was no exception. However, the board members were, for the most part, municipally elected officials who were subsequently appointed to this leading role. The board members may therefore be considered rent-seeking politicians as their political future could be greatly enhanced by practising economically inefficient behavior. Rewards, such as conveniently-located emergency services, were sought for marginal voters in exchange for future electoral support. Future political prosperity for board members could be seen to hinge upon successful attainment of their stated mission: to oversee the completion of "one of the best hospitals in the city" (Jager, 1972).

The Debates Proceedings of the Manitoba Legislative Assembly at the time of controversy about the proposed nature of the north-end facility prove revealing. The minister responsible for health maintained that "all bodies asked for the best, the finest, the largest, the most expensive they can. I'm not critical of them, in their position I would do the same. Every department of the government comes to Cabinet asking for probably twice as much as they know they are going to get in the final analysis, and that's human nature...I don't think that's the problem at all" (1974, April 19th). This statement was uttered in the midst of suggestions that conflict of opinion existed between the government and the Seven Oaks Hospital Board, and between the Commission and the Hospital Board. The former debate was a matter of constructing what was traditionally built twenty-five to fifty years ago, or doing what was "right for the people" as experts had warned the government not to go ahead with building of a hospital (1974). The latter debate included questioning with respect to delays of construction (April 5th 1974), and debate as to rumours of possible reduction in size and service at Seven Oaks, and the possibility that it be scrapped in favour of a community clinic (April 19th, 1974). It appears as if the sentiment of the members of the Commission, the Seven Oaks Hospital Board, and the municipal governments differed greatly from the authors of the previously mentioned reports, the government of the day included. Ironically, the all-powerful provincial government was unable to control its spending destiny.

Based on the comprehensive nature of the major reports relating to Seven Oaks development, it is evident that there was little if any genuine need for a hospital in the city's north end, and that those demanding a hospital there were doing so on the basis of rather optimistic demographic expectations and political opportunism along the lines of "more is better," and "it is only fair that my community gets one too."

It will now be demonstrated that political favouring of capital expenditures, such as hospitals, creates misconceptions about the worth of medical services which are not institutionally-based. Political favouring of institutional expenditure created an abundant supply of services which were characterized by minimal costs to the consumer. These characteristics included relatively minimal financial costs and ease-of-access to EDs stemming from the sheer abundance of these facilities. Such misconceptions arise because a bias in the relative costs associated with GP service were politically induced.

Political favouring of institutionally-based expenditure created an abundant supply of hospital services which were characterized by minimal costs to the consumer. The consumer experienced minimal costs as hospital-based services were heavily subsidized, if not free, and as the sheer abundance of hospitals allowed for ease of access. Prior to the introduction of universal hospital insurance, EDs did not exist as we know them today. In Manitoba, primary-care services for the urban poor were administered on a charity basis through the out-patient departments of various hospitals (Manitoba Hospital Survey Board, 1961, 33). According to Baltzan, those who could afford private payment schemes received a higher standard of care which was preferably delivered by an independently acting family practitioner in the home or office (1972, 251). Consequently, hospital out-patient services were often regarded as second rate, and were most commonly frequented by those who could not, or chose not to pursue fee-for-service alternatives (Clarkson, 1975, 14).

The advent of hospital insurance eliminated this type of service as care need no longer be conducted on a charity basis. The indigent patient could be admitted to the hospital, as some insured services could be performed on outpatients and costs of services that were not insured could now be subsidized by the performance of other publicly funded services. Primary outpatient services

were still provided at a minimal cost to the consumer, but the source of the subsidies for the treatment were no longer provided on a charity basis. When those in need of primary care could not be admitted to the hospital for insured care, the financial costs of care could still be subsidized as overhead and staffing costs incurred in the ED could be subsidized by the hospitals state-financed operating budget. For example, one could frequent a GP for service and be billed for overhead and GP services, or frequent the ED free of charge. In the case of the latter, the patient could be admitted to the hospital and the costs assumed by hospital insurance, or the patient could receive outpatient services where overhead costs were assumed by the hospital and treatment could be provided by an intern free-of-charge. Primary care services were state subsidized via the back door of the hospital- the emergency department door. The use of the hospital for "free" out-patient primary-care service was by no means new. However, because the first wave of health insurance ignored independent or private primary-care services, and yet allowed for their public subsidy through the hospital, the use of the ED for inappropriate care was entrenched and was no longer solely applicable to the indigent. It was not for another decade after the implementation of hospital insurance that this inadequacy was addressed (Miller, 1972, 29). In the meantime emergency departments continued to be developed and consumer attitudes with respect to appropriate use of EDs were perverted by the failure of the cost-sharing program to insure physician services outside the hospital.

State-financed institutions also provided convenience to the consumer because of the sheer abundance of EDs, themselves the result of the abundance of hospitals in Winnipeg. A norm arose in which "every active care hospital had to have one." Consequently, ED development became synonymous with hospital development. Furthermore, ED use has been found to correlate with the number of beds a hospital operates (Department of National Health and Welfare, 1975, 3).

Abundance of hospital facilities has led to an abundance of emergency service in Winnipeg. As convenience of EDs is one of the more often cited symptoms of inappropriate use, and as abundance allows for ease of access, political emphasis on hospital-based expenditure contributed to the minimal costs of pursuing care in an ED setting.

Given an abundance of hospital facilities and state financing of hospital services, those with minor illness therefore preferred to visit an ED to the more costly alternative of frequenting a GP for adequate yet less resource-intensive care. Not surprisingly the use of EDs increased dramatically in the wake of the hospital insurance program (Vayada, 1973, 699, Baltzan, 1972, 251). Instead of assisting in the development of alternatives, politicians were promoting hospitals, and the resource-intensive emergency care they provide. The approach was a political success, yet in terms of effectively and efficiently allocating public resources, it was less than optimal.

Past decisions currently contribute to the thousands of inappropriate emergency department visits a year. As cost-shared programs between the federal and provincial governments covered only medically-necessary interventions, preference was given to hospitals and physicians, and not necessarily preventative measures or community care. Therefore, "skewed patterns of delivery" exist as "Canada's system is far more physician and hospital-intensive than planners would consider optimal" (International Journal of Health Services, vol 22#4, p 645-668, 1992, p 647) The introduction of parliamentary governments into the field of hospital development, the selective introduction of health insurance, and the building of the Seven Oaks Hospital are three examples which suggest that political manoeuvring contributed to the abundant availability of emergency-department services. Consequently, blaming the consumer alone for inappropriate use of emergency departments will contribute to an misunderstanding of the

perceived problem. If incentives still exist for elected officials to provide a maximum quantity of institutional service, and to subsidize exclusively their use, the problem will continue, regardless of other policy measures. If consumers of health-care services have no incentive to change learned behaviour, then the problem will also continue. If abusive consumer behavior is seen to be the cause of the problem, rather than a symptom of less abstract problems, then policy efforts such as education campaigns will be mistargeted. The general population is not ignorant or abusive, it has been encouraged to use the system inappropriately.

CHAPTER SEVEN

THE PRESCRIBED SOLUTIONS FOR INAPPROPRIATE ED USE

The previous chapters have analysed the extent of inappropriate use of emergency departments and have examined some of the possible causes. While it is not possible to assign precise weight to the various factors involved, it is clear that the causes go beyond patient abuse of the system and include wide ranging factors such as physician remuneration and institutional norms and values. Inappropriate use occurs not necessarily because people are naive or ignorant, but because incentives exist which have encouraged providers of health care services and facilities to encourage the use of institutionally based services. A multitude of solutions for the inappropriate use of EDs have been proposed or implemented. These solutions will now be presented. They include education, triage, incentives to consumers and incentives to providers. The advantages and successes of these solutions will be discussed, and then they will then be assessed in terms of their potential to effectively address inappropriate use of EDs.

The most commonly prescribed solution to the misuse of ED resources is patient education. Patients place high degrees of faith in the services of the ED and perceive that these services are relatively convenient. They desire, demand, and receive timely access to what is perceived to be the best available service. A gap exists between the perception of an emergency as determined by suffering patients and the perception of resource-conscious individuals. It is maintained that this gap may be bridged by educational efforts. For instance, Surinder Singh, a GP trainee at London's Sydenham Green Health Centre, attributes much inappropriate use of EDs to patients' misperception of the services available to them from their own GP, and of the perceived urgency of their personal condition. He concludes that patient education with respect to use of resources is paramount

to improving the appropriateness of ED use. Similarly, Bellavia reports that 52% of the walking wounded interviewed at an ED during the office hours of local GPs "admitted that they did not feel that their problem was an emergency or were not aware that facilities such as suturing were offered by their GP," and furthermore, "patients did not understand why they had to wait" for medical service. Bellavia concludes that these "findings identify a need for patient education," and suggests that a video presentation be used in the ED waiting area outlining the differences in care priorities assigned to different classifications of patients. (1991, 29).

In Winnipeg, many of those reporting to the Emergency Services Task Force (the Task Force) felt that public education, or lack thereof, was a "major driver of costs" in emergency services. Consequently, the Task Force recommends "judicious use of public education in the appropriate use of emergency services," including signs displaying triage information in EDs, the use of in-house written and video material, and the use of local media. (1994, 18, 75-76) The perceived need for education is by no means recent. The 1970 Task Force Reports on costs of Health Services in Canada states that "the individual patient and his family must be educated to realize that facilities outside the hospital are to his advantage in both financial and health terms" (National Health, 1970, 74).

Various types of patient education have been utilized or recommended. These have included in-house display of materials, professional intervention, and the use of the mass media. One cannot help but notice the large signs in Winnipeg's EDs stating definitions of the various classifications of urgency. These are an example of a passive form of in-house education intended to inform users of the priorities for patient care exercised by the emergency departments. In other jurisdictions, pamphlets and audio visual displays are used in a similar manner. The Winnipeg Free Press recently reported that waiting rooms in the United States have been equipped with video messages advertising health-care products. This

form of education is anticipated in Canada in the near future (Aug 16, 1994, P2), and could easily be used to promote appropriate use of health-care facilities.

In-house intervention requires that medical professionals attempt to educate particular inappropriate users through personal consultation. To this end, Sandy Mowat, a nurse at the HSC ED, revealed in an interview that patients using the ED for primary care are encouraged to utilize the nearby Health Action Centre for future concerns of a similar nature. On occasion, nurses help patients make appointments for alternative care, or present patients with a business card for the Health Action Centre. However, this sort of intervention is only provided if time permits and the inclination exists (1994). The Task Force recommends that both types of in-house education be further utilized in Winnipeg. It also adds that, when possible, in-house material ought to be used after treatment as to "afford citizens a modicum of courtesy and comfort in their perceived time of need" (1994, 18, 76).

For decades, mass media have been increasing the publics' expectations of EDs by making people want to be a part of the "big picture." Mass media communicate potential medical breakthroughs and the benefits of tests with little attention to the actual effectiveness of such treatments. Continuous reinforcement of this nature instills false and inflated expectations of medical service. Furthermore, exciting ED drama sells advertising slots. For years, the TV show Emergency attracted prime-time viewers. Today, no fewer than four prime-time TV shows promote the personal attention, the convenience, and the array of diagnostic and treatment facilities available at an ED. These shows include Chicago Hope, Rescue 911, University Hospital, and ER (TV Scene, 1995, 26,29, 32, 35). The promotion of ED use on television may be subtle, yet its ability to create inflated expectations of emergency services cannot be ignored. When discussing the effect of the mass media on the consumption of health resources,

family practitioner Dr. Weiss, states that "No modern Medicare system has understood the implications of the media and of consumerism in the commoditization of health services" (1992, 26). For decades, ED organizations have been encouraged to counteract these influences by using the mass media as an educational tool for the correction of these perceptions of emergency medicine (Department, 1975, 27).

There is a clearly established need for physicians to be better informed about the services they have the potential to provide. Calls for the education of physicians are often based on challenges to the knowledge they possess. For instance, Lindburgs study reveals that most physicians are unaware of the costs of the medical services they prescribe (1981, 2195). These calls are also based on the questionable benefits of many routine medical procedures. In their report to the "Interprovincial Conference on Health Affairs", Woodward and Stoddart maintain that uncertainty exists as to the proven merit of many medical procedures (1992). In attempts to educate physicians, "discussions, seminars, workshops, case reviews, mortality conferences," the use of specific types of administrators and media have been used (Lundberg, 1981, 2196) Additional types of education to physicians include interviews to establish knowledge targeting a specific classification of physician, attempts to define objectives, "establishing credibility through a respected organizational entity and authoritative sources of information, active physician participation," stimulating presentation and repetition. (Harris, 19990, 1216-17)

Bertakis demonstrates that educational efforts do indeed have the potential to alter successfully the behavior of those who inappropriately consume or provide emergency services. In his study, new patients at a university-affiliated GP clinic were randomly assigned to a research group or a control group. Those in the control group were given a guide book for use of the facility, and those in the

research group were given the guide book and a verbal presentation on the contents of the booklet. The book contained information on how and under what circumstances patients should use the clinic, and when to use emergency facilities. It was discovered that those who received the oral presentation tended to use the clinic and ED services in a significantly more appropriate manner. Inappropriate visits were classified as those for which material was covered in the booklet, unnecessary visits for medication refills, non-emergency visits to the ED, or visits to the ED without previously contacting the clinic or the on-call physician. (Bertakis, 1991, 411-412)

Bertakis also reports that the success of educational intervention is proportional to the extent of the intervention. In a separate study, three randomly-selected groups were offered differing levels of educational intervention with respect to self care awareness. The groups were stratified according to the information and support services made available to them. The extent of the decrease in use of medical services was found to be directly related to the level of intervention they were given. Those having received written materials, individual counselling and access to a phone information service demonstrated most behavioral change during the length of the study. Those given only written materials and individual counselling demonstrated less behavioral change, but more change than those given only the reading material. (1991, 416) This demonstrates that individual counselling on appropriate use of facilities has its merits.

Individual counselling has also been recommended by Woodward and Stoddart in their writings. They maintain that "the most effective intervention would be for physicians to challenge the patient appropriately and provide education about the procedure or referrals, while maintaining their role as gate keepers to specialized services. Because the patients can always go elsewhere to get insured services, however, we recognize that it would take a concerted effort

by physicians to reduce use in this way." (1990, 285). When attempting to mobilize physicians in this manner, Lundberg reports that dissemination of information to physicians tends to be most successful when a respected senior-level expert is employed for the task and that charisma may play some role (1981, 2196) While successes have been reported, desired behavioral change resulting from educational efforts are difficult to achieve.

In certain circumstances educational interventions either do not work at all, their effects are only temporary, or the behavioral change obtained is not the desired result. Educational attempts have failed outright when patients motives for inappropriate attendance have been ignored, when the purpose has only been to disseminate factual information, and when education recipients have been mistargeted. Attempts which ignore patients' motives include those inspired solely by cost containment. Education efforts designed merely for the purpose of cost-containment are "destined to fail" as they are likely to neglect the consideration that "patients have a completely different conception of what constitutes an emergency than those bearing the cost burden for their health-care. Patients have little incentive to consider the cost-benefit ratio of emergency services or seek out more cost-efficient alternatives. Their priority is availability and convenience, not cost effectiveness" (Crippen, 1985, 404).

The failure of educational efforts to alter behavior include Lundberg's study of an extensive educational effort implemented with the goal of making physicians more aware of the costs of the services they prescribed. No improvement in the physicians knowledge was attained. The study "casts doubts on the ability of even intensive educational programs to affect (desired) knowledge." He maintains that further difficulties in the teaching of factual information arise from the scarcity of relevant data.(1981, 219). Lunberg concludes that physician-oriented educational

efforts may be successful in the transmission of attitudes, but they are unlikely to be successful in the transmission of factual information (1981, 2197).

Educational efforts have also been known to fail outright when their recipients are mistargeted. While inappropriate users of EDs are known to have the same or better-overall education levels as appropriate users (Shesser, 1991, 747) subgroups of inappropriate users exist which do not respond to certain educational attempts, regardless of intensity. Dr. Mark Shields and his associates conducted a research project in which a target recipients were found not to respond to educational stimulus. Youth who had used an emergency department for asthma-related complaints over a four year period were randomly divided into a control and an experimental group. Those in the experimental group and their parents were given group instruction and telephone-assistance privileges, in order to prevent future attacks and to attain more appropriate use of emergency facilities. The youth were predominately from a marginalized segment of society, and no appreciable behavior change was realized from the educational efforts. Shields concludes that successful intervention is deceptively complex. Consequently, it should "be targeted at key groups who will actively participate and benefit" and that it should "be validated for specific socioeconomic groups before implementation." (Shields, 1990, 36-38). Staff at the HSC ED expressed similar concerns and advised that educational efforts should ignore the marginalized elements of society that are known to be difficult to educate and less receptive to traditional educational means. To support this advice, one of the nurses mentioned that some well-known patients continue to walk right past the Health Action Clinic on their way to the ED for treatment of minor illness, despite attempts at intervention (Arris, Burgel, 1994).

When educational efforts do indeed achieve behavioral change, they are often only temporarily successful. For example, Lundberg discovered that success

may only last for several months, as performance levels tend to return to their normal levels when the educational effort is discontinued (1981, 2196). Harris makes the same observation, and adds that in general, physicians' efforts at education "are labour and time-intensive, and have a narrow margin of benefit over costs." This finding is based on research similar to the previously mentioned relationship between desired patient behavior and levels of intervention. Harris has determined that physicians also require a level of personal intervention in proportion to the desired behavioral change. Consequently, the more one desires to influence the behavior of a patient or physician using education, the more resources one needs to expend. (1990, 1216-17) The marginal and temporary nature of education attempts are reiterated by recent experience in Alberta where all citizens who had used health services received an itemized cost statement. Consumers were not billed, but only informed as to the costs of the services they have provided. These efforts have proved fruitless as Alberta remains just as frustrated as other provinces.

Even when educational efforts do succeed in altering behavior, it may not be the desired behavior that is realized. Although Bertakis found that the provision of literature and personal intervention improved patient-use of resources, there was no significant difference in the number of visits to the clinic, other clinics, or the affiliated ED over the following year. The education helped patients to use the facilities more effectively, but they did so just as often as the control group. (1991, 411-412) However, Bertakis also reports that these findings closely resemble the results of another study in which patients were given a book, and offered a series of ten two-hour work shop sessions about self care. The researcher discovered that "despite an increase of 125 percent for patient self-care knowledge scores, no significant program effect, either on frequency or on the total cost of clinic visits resulted." (1991, 416).

Numerous types of education have been used or advocated in literature regarding ED use. The need for education is based on the bridging of a perceived gap between the perceptions of the resource-conscious individual and the provider or consumer of medical care. Education is the predominant call among researchers addressing solutions to the misuse of EDs. While education can achieve the dissemination of knowledge, success is often found to be proportional to the extent of intervention and it may not necessarily decrease the quantity of ED visits. Success is incredibly resource intensive and the costs of distributing books on appropriate care, individual counselling, and the provision of phone-in information services to the general population would likely prove prohibitive. These costs would be incurred without certainty of desired results and assurance that changes in behavior would out-last the educational effort. Educational efforts need to be reinforced if the attained results are to be sustained. Failure is likely if education fails to account for the reasons patients choose to attend EDs inappropriately, if merely based on attempts to disseminate information and if not targeted at specific categories of inappropriate users. Failure can also occur if recipients of educational efforts are not willing or able to comply, or inclined towards behavior change. Education, in itself, tends to address the symptoms of inappropriate use of medical facilities in that it attempts to induce appropriate behavior rather than address the reasons why inappropriate behavior exists. It resembles fire fighting, rather than fire prevention. This phenomenon is exemplified in a study by J. Lomas and associates titled "Do Practice Guidelines Guide Practice? The Effect of a consensus statement on the Practice of Physicians." It was discovered that "guidelines for practice may predispose physicians to consider changing their behavior, but that unless there are other incentives for the removal of disincentives, guidelines may be unlikely to effect rapid change in actual practice." (1989)

Triage is another often advocated means for reducing inappropriate ED use. Triage, meaning to sort according to quality, was first applied to wool (1727), then coffee (1825), and most recently wounded people (1930) (Zeigler, 1988, 2) According to an evaluation by S.L. Alben, the purpose of triage in the ED setting is "to provide immediate brief medical evaluation of all incoming patients, determination of the general nature of the problem, the trend of service needed and the appropriate referral" (1975, 1063). Triage is often recommended as a solution to inappropriate ED use because it alleviates the congestion caused by inappropriate users in the emergency treatment area. For example, Dr. C.P. Shah reports that the ED at Toronto's Sick Children's Hospital experienced a six-fold increase in the number of non-urgent visits between 1967 and 1972. The high incidence of residents from within two miles of the hospital, of respiratory disorders and of infection among non-urgent users suggest that the ED was to a large extent being used for concerns of a primary care nature. A triage program was implemented to alleviate the congestion caused by primary care users and to enhance the speed of treatment by directing patients to an appropriate level of care. Of the patients sent to the primary care clinic, 49% had a minor respiratory illness, and 1% required hospitalization. (1974, 1039). Furthermore, an analysis of patients coming to the triage area of another large hospital found that 8% were referred to speciality clinics, 46% were assigned to the adjacent general clinic, and 43% were referred to the emergency department. Of this latter group, it was discovered that 36% were not emergencies. Of those presenting to the ED, only 7% were in need of emergency treatment. These findings confirm that many consumers choose the ED as their preferred location for primary health-care (Alben, 1975,1063). Calls for triage are based on attempts to direct primary care patients away from the ED treatment area when the volume of non-emergency patients causes ED congestion. It is also advocated on the basis that it may help

staff to provide care to those in the greatest medical need and to assign appropriate levels of care.

Various types of triage exist. They vary with the usage levels and the resources of the ED. When resources and usage levels are extreme, a patient presents to a triage desk, is registered with the hospital, and is assigned an urgency status on the basis of symptoms communicated to a triage specialist. ED care is given to patients whose condition is thought to be urgent, and non-urgent patients are referred to an adjacent primary-care clinic. After a diagnosis and possible treatment have been performed, further sorting may occur. Patients may be directed elsewhere for appropriate forms of follow-up and subsequent care. This helps to prevent follow-up visits in which a patient may incur hours of wait. At the other extreme, resources and usage levels may be minimal. If so, all walk-in patients coming to the ED control desk, are assigned a priority status to their illness by a nurse. Patients are not made aware of their status, and they are treated when ED resources become available to their level of concern. Most triage programs lie between the two extremes. For example, at the HSC, primary-care cases are "fast tracked" by a specially trained attendant, but they are not necessarily sent elsewhere. As already mentioned, ED staff refer patients to the near by "Health Action Centre" for follow-up care and subsequent minor concerns (Mowat, 1994).

Effective triage programs improve quality of care for emergency patients, as they reduce delay and alleviate congestion. Alben confirms that "an overload of non-emergency cases may result in increased and unacceptable delays in rendering prompt care to true emergencies" (1975, 1063), and Shah acknowledges that in cases where the employment of full-time double diagnosis may be warranted, triage certainly helps to alleviate congestion in and around emergency treatment areas (1974, 1043). Nevertheless, it may prove to be disadvantageous, as it is

resource-intensive if adequately performed, and inaccurate and potentially deadly otherwise.

Alben argues that triage is resource-intensive in that it requires additional training, manpower, facilities, funds, and paperwork (1975, 1067). In addition, further resources are often consumed when an adjacent clinic is established. Frequently, the use of triage entails the set-up of a primary-care clinic nearby even though the community may not require an additional facility. However, for triage to prove effective, the additional facility must be created in close proximity to the ED. Consequently, other resources may be under-used. The above-mentioned case in which people walk past the Health Action Centre on their way to the HSC ED is an example of this. Triage may also be considered disadvantageous in that it has the potential to be inaccurate. In one study, 3% of patients were mistriaged, and two out of 500 were sent to the clinic and then referred back to the ED. Alben argues that this situation is of particular concern as the patient may have left the hospital rather than go to the clinic, and may have suffered unnecessarily while waiting in the "fast track" (1975, 1067)

Triage also leads to resource wastage through duplication of service. Much of the medical profession is of the impression that the appropriateness of an ED visit cannot be determined until a physician has performed a diagnosis of the patient, as only physicians are capable of credible assessment because others are more likely to miss hidden complications. Because of the level of expertise required, patient diagnosis is a resource intensive procedure. Dr. David Crippen has written an article on cost-effectiveness in emergency medicine. He argues that triage by physicians causes minor-illness patients not to be seen once under appropriate circumstances in a GP's office, but to be diagnosed at least twice, and if the patient is then referred to a GP, the health insurance system is billed at least twice. (1985, 403-404) For example, consider a concerned patient coming to the

ED with a painful lump: the patient is diagnosed in the triage process, is then diagnosed again by an ED physician working their turn in the clinic and the system is billed. The patient is then referred to an office-based practitioner, and is once again diagnosed, and yet another billing occurs. Had the patient appropriately visited a "lumps and bumps" clinic or a GP, it is probable that only one diagnosis, and only one billing would have occurred, instead of triple diagnosis and double billing.

Triage may be an appropriate tool for alleviating congestion in the immediate proximity of emergency treatment areas. However, triage in itself only addresses the consequences of inappropriate ED use. It does not address the problem of inappropriate use, it only sorts the symptoms. It fails to address the notions that consumers with symptoms of minor illness are inclined to demand, and indeed receive, on-the-spot medical attention from highly-trained and highly-specialized emergency resources, that physicians lack the incentive to scare away business, and that nurses don't always have the time or inclination for pursuing this occasionally frustrating task. There may be room for the rise of a diagnosis-oriented triage profession in which individuals are trained to the same extent as ED physicians in aspects of rapid and accurate identification of symptoms and referral, yet this would not differ from the service offered by existing GPs or the nurse practitioner. Except for cases of very high volume, triage may prove resource-intensive and redundant.

Incentives to consumers are also prescribed as solutions to excessive ED use. These include measures taken to make the ED less attractive to inappropriate users relative to alternative forms of care. Dr. Weis reports that an attempt was made to enhance Scandinavian primary-care clinics to entice consumers who would otherwise use ED facilities (1992). Clinic hours and diagnostic facilities were improved with the goal of making clinics the most attractive form of timely

care. Another common method of improving the relative attraction of alternative facilities for the administration of primary-care is to provide priority-care to urgent and emergent cases in the ED setting. This results in the infamous waits incurred by those ED patients experiencing relatively minor illness. Because of the predominance of waiting periods, the need for their existence, their merit and their failings will be discussed.

The need to form patient queues arises when the demand for emergency services exceeds the immediate availability of those services. The highly cyclical arrival-rates of patients, the highly variable staff resource required by emergent patients, and the relatively consistent staffing arrangements characteristic of organized professions cause demand to exceed provision of service. Patient arrival rates are cyclical as they tend to peak in the evening, on weekends, and immediately after weekends. They tend to be at a minimum in the morning hours. Demand for service increases in conjunction with the overall activity levels of health consumers, and with the perceived inaccessibility of alternative forms of timely care. The demands placed on providers of emergency care also fluctuate with the resource-requirements of ED patients. The potential backlog caused by the presence of multiple occurrences of severe trauma are easily imaginable.

While demand for services fluctuates heavily, the employment of ED staff remains surprisingly consistent. Nurse Mowat revealed that scheduling of nurses at the HSC adult ED is based on a fixed rotation. No accommodation is allowed for surges that may be predicted months in advance, including the aftermath of a typical summer weekend. Furthermore, little accommodation is allowed for anticipated fluctuations within a given day. Fifteen percent of visits occur between midnight and 8 AM at a typical ED, yet nursing levels at the HSC ED are maintained at 80% of their daily maximum, and the number of nurses on staff during the relatively quiet late morning hours is only one less than during the

anticipated evening rush. Little accommodation is allowed for unanticipated surges within a given day, as no standard on-call provision exists, and nursing staff may only be borrowed from other departments where a surplus exists (1994). This example is only intended to demonstrate that EDs are typically staffed at highly consistent levels. Because patient arrival rates and the resource requirements are highly variable, the resources available for minor illness are also of a highly variable nature. Because the means to employ additional primary care resources on a short notice basis are minimal, demand exceeds supply of these services, and patient backlogs occur. The waiting periods that arise from these backlogs serve as an unplanned deterrent to use of an ED for primary care.

Backlogs for primary-care users may be successful deterrents to inappropriate use of EDs in that they incorporate non-financial costs, they do not induce unnecessary health costs to society, if circumstances are ideal, they require relatively little administration, and they may contribute to efficient use of medical resources as they direct marginal users elsewhere. As demonstrated in an earlier chapter, minimal cost barriers to highly skilled resources are a characteristic that draw inappropriate users to EDs. Costs to consumers include the inconvenience caused by the opportunity cost of idle time spent waiting for medical service. When ED services are rendered under ideal circumstances, and observed from a utilitarian perspective, waiting times incurred by those with minor illness serve to reduce overall health detriment to consumers. Ideal circumstances infer that those who stand to gain the most health from medical service are given medical priority. This requires that unnecessary service is not provided, that no mistakes are made as to who receives priority service, and that agreement exists on the priorities assigned. Under these circumstances, the ill-health incurred in time spent waiting by one with low need-for-health-care-status is more than made up for by the prompt service given to one with a high need-for-health-care status. Given limited

resources, grading of patients according to need-for-health-care status serves to improve societies overall health status. So long as waiting periods incurred by those with relatively minor conditions contribute to an overall improvement in health status they may be considered advantageous.

Waiting periods arising from the grading of patients according to need-for-health-care status may also be considered advantageous as they may contribute to efficient use of medical resources by shifting the provision of ED service into periods in which the department would otherwise be under-utilized. When the capacity to provide ED service exceeds its demand, ED resources are available, yet unused. The delay of service that arises from patient backlogs shifts provision of minor service into these under-utilized periods. Rather than commit temporary resources during peak periods, and maintain under-utilized resources during slow periods, the waiting experienced by the less urgent cases helps to ensure more consistent use of the available resources.

Waiting periods arising from patient stratification may be considered an unacceptable method of deterring inappropriate use of EDs in that the opportunity cost of a patients time is highly variable, stratification of patients does not always occur in an ideal fashion and preventable errors will occur. Waiting periods deter individuals to different extents, regardless of the appropriateness of their visit. At one extreme, an individual may not mind several hours in the company of fellow sufferers in the warm environment of the ED waiting room, while at the opposite extreme, the same individual with heart attack symptoms and a busy schedule may decide not to frequent the ED for fear of the potential inconvenience caused by the repeat of a long wait incurred on a previous visit. Not only do waiting periods have the potential to discourage appropriate use, but they may also embitter all types of users, and deter early diagnosis and treatment. The frustration experienced by waiting consumers may merely direct patients to equally

inappropriate, yet accessible forms of care. A further disadvantage of the deterrence caused by waiting periods is the potential of avoidable suffering, medical damage and on the rare occasion, death. Waiting periods are clearly not a suitable method of encouraging appropriate use of alternative facilities as they do not enable consumers to better access appropriate care, they do not enable consumers to attain timely appointments from receptionists and they do not encourage general practitioners to become more available or more flexible.

Financial incentives to consumers of health services are perhaps the most controversial of solutions advocated for the phenomena of inappropriate ED use. The need for financial incentives is of a highly topical nature as their effectiveness of financial incentives has been the subject of much controversy. (Lundberg, 1981, 2199). Many researchers have argued that because Canada implemented insured reimbursement of fee-for-service medical services, the health system invites abuse as it eliminates incentives for consumers and providers to be frugal. For example, Weiss maintains that our system leaves out "the most important force for modernization: built-in incentives on the part of patients and health service providers to minimize costs by the rational method of economic self-denial (individual fiscal responsibility) operative in every other sphere of life." Consequently, "The grass-roots health care provider does not feel disposed to do much, nor does the public" in attempts to rationalize or improve the circumstances under which services are delivered. (1992, 82) Similarly, researchers Woodward and Stoddart maintain that the inappropriate use of medical services occurs because there are no direct-out-of pocket costs to the consumer (1990, 284). From this void in incentives for consumer responsibility arises the alleged need for incentives which encourage cost conscious behavior on the part of the consumer.

A nominal fee charged to the consumer for the use of an ED service is one type of consumer-based incentive. User fees may be levied as a flat-fee per visit,

as a percentage of the costs of the service rendered or on a means tested basis. In the ED setting, a fee-per-visit regardless of appropriateness, or service rendered, appears to be the most convenient form of incentive from the perspective of administration. To charge in accordance with a percentage cost or on the basis of the patient's means would be require a major overhaul of information services to the ED. A user fee explicitly assigned to the use of an ED is currently utilized in Quebec, and formerly existed in Saskatchewan. The user fee has been addressed by one of Canada's leading researchers in the area of health economics, Robert Evans. Evans often refers to the issue of user fees as a zombie: an idea that should be dead and buried, but keeps coming back to haunt us: one that should no longer be discussed in papers of this nature. Nevertheless, user fees continue to be entertained as a possible solution for inappropriate ED use. Consequently, this discussion would not be complete without drawing brief attention to their advantages and disadvantages in the ED setting. The more radical approach of paying consumers not to use health services will also be discussed.

Some of the advantages of user fees have been summarized in an article by Badgely and Smith. They state that user fees have been known to deter inappropriate use of medical services on the part of the consumer, and to reduce medical over servicing. Because a financial penalty is incurred by the consumer for each medical session, a tendency towards reduced use is anticipated. When the fee is levied per procedure performed, or as a percentage of the physician's billing, consumer concern as to the necessity of procedures arises, and the physician may be called upon to justify the necessity of the procedure. Consequently, the consumer and the provider engage in cost conscious behavior. User fees may also be considered advantageous in that they may reduce overall cost to the health system, and they do shift costs of providing care from society at large, to the individual user. (1979, 30)

Given the administrative complexity of levying a percentage-based or means-tested user fees and the predominance of the flat fee in the Canadian experience, only the disadvantages associated with the flat fee will be discussed. One disadvantage is that even a flat fee is costly to administer. Personnel is needed to collect and account for fees, and the clerical work assigned to medical staff are not necessarily the best way to utilize health resources. A task force reporting to the Department of National Health and Welfare in 1970 maintained that administrative costs incurred in the collection of a user fee often exceed the quantity collected. It is therefore likely that the implementation of a user fee could not be financed by its revenues. If the fee resulted in better allocation of existing health resources, its costs might be justified. However, it appears as if fees do not result in improved use of ED resources. The task force found that all hospital personnel surveyed "feel that the imposition of a utilization charge does not significantly deter (overall) abuse of the emergency unit." (Department Vol 3, 1975, 26). These feelings are confirmed by Baltzan's study of the introduction of user fees in Saskatchewan. He reports that "utilization fees payable by the patients to physician were introduced in the early part of 1968. Charges of \$1.50 for an office visit and \$2.00 for a home or emergency room visit were authorized by the provincial government. According to Baltzan, these fees were without apparent effect on the number of emergency room services but they were correlated with a decline in other primary services." (1972, 252). While user fees work elsewhere, they appear to have little effect on the number of ED visits. Consequently, they fail to justify their administrative costs.

In addition to being costly, and not altering levels of use, user fees discriminate disproportionately against marginalized elements of society, including the homeless, the poor and the elderly. Ironically, these are also the elements of society that are most likely to be in need of ED services under appropriate

circumstances. A flat fee, regardless of its rate, would provide little or no deterrent to some inappropriate users, and could prove prohibitive to these others. Even if the fee were nominal, the economically-disadvantaged would be inclined to delay the pursuit of medical assistance until circumstances worsened considerably. Those in need of urgent or possibly emergent care, yet without the means or disposition to finance a user fee may choose not to pursue care. Conditions may subsequently worsen, and the eventual costs to society may explode regardless of the deterrent fee eventually collected. Consequently, user fees are not recommended by the Task Force as "in some situations deterring patients from ER's is neither cost effective, nor appropriate and sound judgement should prevail" (Lerner, 1993, 75-76). Furthermore, if a user fee were to reduce successfully the use of ED physicians and the physician's services were on a fee-for-service basis, the deterrent fee would in turn reduce the earnings of a the physician. As physicians have the ability to influence demand for their own services, the result would be a mere shift to more lucrative, or preferred services (Evans, 1975, 164)

User fees may induce cost-conscious behavior on the part of many consumers and providers of health services, yet they fail to alter the extent to which EDs are inappropriately used. This occurs because fees are kept to a nominal fixed amount which have a disproportionate yet negligible overall effect on ED use. User fees are also costly to administer, they discriminate against marginal elements of society and they do not deter physicians from creating demand.

There exists a solution to the phenomenon of inappropriate use not yet assessed in literature relating specifically to EDs. Rather than charging patients to use the service, the general public is paid not to use the service. This occurs in Singapore. Weiss is one of the few researchers who have published details of the

Singapore model. He reports that a 6% income tax is deducted by the employer and transferred to an individual's special non-governmental medical trust account. The employee's medical services are paid from this account, and the residual and the interest are returned to the citizen on retirement (1991, 109-110). Assuming that annual credits may not be revoked to cover future medical costs, and assuming that those who do not have a surplus are not charged for services rendered, such a system has numerous advantages. Those who have yet to consume the years credit are in effect billed the full amount of the services they pursue, and thus, have an incentive to be informed and to be frugal. These users may be charged in accordance with the true costs of care in an ED setting. This will encourage users with means to pursue more cost-effective forms of care, and yet those who do not have a surplus, or who exist on the margins of society are not discouraged from pursuing medical attention. Those in need and without means, have services available to them, and those with means have the incentive not to use the health system inappropriately, and no additional means testing is necessary.

Little literature exists on the subject, particularly of a critical nature, so disadvantages are difficult to ascertain. An obvious disadvantage of paying consumers not to use the system is the cost of implementing and administering the required management-information system. However, the Canadian health-insurance systems are already billed for each procedure performed, and citizens in Alberta are already informed as to the cost of the services they consume. The Task Force maintains that health card systems are currently in place which could be modified to inform users of medical costs incurred in Manitoba (Lerner, 17, 1993). Keeping annualized central records of the services an individual consumes is no obstacle either financially or technologically. While this is not a study in actuarial science, it is conceivable that a credible program of this nature might

generate societal savings, would likely improve the health of individuals by encouraging appropriate forms of care, and has the potential to maintain "free" access to health-care for the marginalized elements of society, children included. Aside from the potential disadvantage of cost, even if incentives existed for consumers to be frugal, so long as incentives for physicians to over-prescribe exist such a program would be doomed to failure. Providers must also be targeted.

Inappropriate use of ED is often considered a problem relating to the habits of consumers. However, recommendations for encouraging appropriate medical use are occasionally directed at providers. The need for behavioral change on the part of the provider is attributed to perceived waste of human resources within the health system. Numerous authors maintain that waste exists because providers of health services have no reason to be frugal and that incentives are required to reduce the waste of human resources. Eastough maintains that the health industry maintains a "high degree of slack under the safe blanket of cost reimbursement"(1987, 288). Because physicians receive payment regardless of the relative merit of a procedure, they have little reason to weigh the cost of a service in relation to its benefit to the patient or society at large. Similarly, Woodward and Stoddart maintain that services are inappropriately provided because there are "few economic incentives to deliver care in the most effective or efficient fashion" and that this appears "to encourage, or at least do not discourage, unwarranted use" of the medical system by those who provide care. (1990, 284) "Reducing detrimental or non-beneficial excess use is the major goal of the physician component of a total incentive compensation plan," as this facilitates "productivity improvement, cost reduction, and enhancement of service quality." To optimize the use of ED facilities through reduction of this sort of waste, a personal effort on the part of staff is required. According to Clark, "the incentive system may be regarded as the principal variable affecting organizational behavior (1961, 130)

"the challenge for senior management and trustees is to find a means whereby all parties are motivated to work towards a common goal" (Eastough, 1987, 287). Chester Barnard argues that ""The contributions of personal efforts which constitute the energies of organizations are yielded by individuals because of incentives."" To induce a personal effort towards a desired goal, incentives are required. Bernard concludes his statement by saying that members of an organization "" must be induced to co-operate, or there can be no cooperation."" (Clark, 1961, 132)

There are various types of incentives which may be used to induce providers of ED service into co-operation. According to Eastough, physicians' organizations maintain that "ethical physicians" are influenced by non-financial incentives to manage the treatment of their patients efficiently (1987, 279). Lundberg cites examples of successful non-financial incentive programs in his study. These include administrative and peer interventions and systems of formalized feedback to providers. (1981, 2195). Further evidence of the success of non-financial intervention is contained in Eastough's report. He maintains that in the United States, "the majority of clinicians from 1984 to 1987 appear to have operated in one direction: to curtail duration of patient stay and also admission rates, across a wide range of payer groups, even if some would actually make the hospital money if clinicians would inflate admission rates on non-Medicare patient days. Eastough maintains that "the physician community is responding to pressure from Medicare ... programs ... and pressure from private utilization review efforts." (1987, 281) The current attempts to shift stitch removal out of the sphere of ED practice at the HSC (Lerner, Burgel, 1994) is yet another example of a seemingly successful administrative intervention. These sorts of incentives complement Clark's model as they "create conditions under which contributions of activity become habitual, where contributors rarely assess the benefits of the

incentives they receive against the opportunity costs of incentives they forgo by not joining alternative organizations." (1961, 133)

It has been established in an earlier chapter that ethical medical professionals do indeed respond to financial incentives. Altered financial incentives have been advocated as solutions to inappropriate use of medical facilities. For instance, Weiss recommends that a new fee code for physicians be introduced. This "unnecessary visit counselling service" would financially reward physicians for taking the time to address the subject of unwarranted use of medical services with their patients (1992, 81). Alternatively, a proposals by the Task Force suggests that fee-for-service incentives be replaced by those inherent in a lump-sum payment to a single organization of ED physicians (Lerner, 1993). Other incentives of this nature might include a global budget for the labour component of ED services, with a percentage of any residual paid as a bonus to the participants. Incentives of this nature are riddled with advantages and disadvantages. These will be discussed in turn.

Eastough's article addresses many of the advantages inherent in financial-incentive programs offered to members of a health-care organizations. He maintains that "a good incentive compensation plan is good for the institution, the individuals involved, and society as a whole." (1987, 279). To demonstrate that institutions benefit from enhanced performance of employees, Eastough borrows a quote from one of the outstanding figures in the field of management science, Peter Drucker, who maintains that "'incentive programs can hold together a productivity program and make it work better. If the employee compensation incentives are sufficient, the employee will work smarter ... One has to assume that the individual human being at work knows better than anyone else what makes him or her more productive.'" (1987, 277) In this manner, incentives provide further stimulus for the provision of quality service. While it may appear as if an incentive

exists to minimize staff in an incentive pool, Eastough maintains that the inconvenience inherent in understaffed organizations greatly exceed the financial rewards. In this manner, physicians at the HSC and St. Boniface EDs may have the desire to reduce the number of participants in their income pool. However, the inconvenience anticipated as a result of reduced staffing acts as a deterrent. Eastough also argues that institutions with favorable incentive programs are able to recruit and retain valued staff. This occurs because organizations that fail to reward their members adequately discover that their valued contributors move elsewhere. (1987, 277-289)

While advantages may be anticipated from financial-incentive programs, institutional, individual and societal disadvantages also exist. One institutional disadvantage of financial incentive programs pertains to a trade-off between their elitist and possibly offensive nature and their effectiveness. Eastaugh asks "at what level would the incentive pay be offered: to individuals, to physician groups, to a single medical staff group, or to physician-nonphysician teams?" He maintains that if only an elite group are to be included in the program, "middle manager morale, other employees' morale, institutional market image, scheduling efficiency, and the resulting down time from the inefficient scheduling are in jeopardy" (1987, 278). Yet if more than an elite group are included, rewards are not viewed as special and effectiveness suffers. This phenomenon is exemplified by Clark's statement that "unless a commodity, a status, or an activity is relatively rare, it provides no inducement to anyone." (1961, 132). Furthermore, the earlier-mentioned task force report to the federal government reveals that Canadian hospitals are not allowed to re-distribute savings arising from reductions in operating costs. This greatly reduces the incentive to reduce actual costs. (1970, 52-53) Consequently, financial incentive programs may have minimal benefits for health organizations.

The health status of the individual patient may suffer if financial incentives to medical professionals cause unfavourable changes in behaviour. Previously mentioned study of physicians at a the chain of Boston clinics reveals that physicians do indeed change their behaviour in response to incentives which encouraged maximal billings. When an incentive exist to enhance ones billings, a tendency towards the most expensive forms of treatment exists (The Economist, 1988, 37), and the most expensive procedure may be utilized, even though it may not be in the best interest of the recipient. In this manner, incentives to providers do not always contribute to the patients best interest.

One societal disadvantage to financial incentive programs is their cost of implementation, particularly if additional management information systems are required. The report of the federal task force states that Canadian hospitals "could achieve greater efficiency if incentives programs were based on sharing the savings in operating costs ..., (however,) basic standards of performance for most staff positions in hospitals have not been defined, so there exists now little basis on which incentives to hospital workers could be paid". (National Health, 1970, 51). Furthermore, the implementation of an incentive system "requires that the health institution already have a strong value system" (Eastaugh, 1987, 278).

A multitude of solutions for the inappropriate use of EDs have been proposed or implemented. Examination of theses solutions reveals that disadvantages and failures are characteristic of each solution, and these are often predominant. It appears as if patient education, provider education, administrative changes, and rewards or deterrents to patients and providers do not necessarily reduce inappropriate use of EDs. Green reports that concerted efforts were made by British policy makers in an attempt to curb inappropriate use of EDs. These included calling EDs "Accident and Emergency" departments, the use of nurse practitioners, the introduction of user fees, and using fiscal means to encourage

GPs to provide surgical treatment. He states that there has been, "no convincing evidence of a reduction in the apparent use of A&E for primary care problems as a result of any of these measures and such usage continues to be perceived by providers as an inappropriate demand on scarce resources and staff skills. (1992, 987).

CHAPTER EIGHT

CONCLUSION

This thesis has argued that EDs contain highly specialized staff and technical resources intended for the rapid diagnosis and treatment of life or limb-threatening illness. When prospective assessment of patients' symptoms is used, approximately 30% of patients at Winnipeg's EDs don't require the use of emergency services. When medically adequate alternative forms of care are readily available, that provide continuity of care, such use of EDs is inappropriate. Inappropriate use may be attributed to patients' perception of enhanced convenience, certainty of service and high-quality care compared with alternatives. These perceptions are for the most part inaccurate. In terms of convenience, certainty of service during office hours and overall quality of care, service from General Practitioners compares favourably to emergency service. These misconceptions were created and maintained by incentives inherent in the fee-for-service method of remunerating physicians for their services, by incentives to ED staff which encourage the over-servicing of patients, and by incentive to those holding elected public office. In effect, EDs are used inappropriately because the general population has been encouraged to do so.

So long as inappropriate users are not discouraged from using the ED or encouraged to use alternative services, attempts to curtail inappropriate ED use will likely prove futile. Currently the incentives for both providers and users of ED services are flawed. First, an approach to more appropriate ED use will require that GPs have an incentive to welcome and pursue the patronage of those suffering unexpected illness. Second, ED staff must be given incentive to discourage inappropriate ED use. Third, elected public officials are rewarded for the

provision and maintenance of unjustified ED facilities and they must have the incentive to restrict usage. Given the complexities involved in disentangling the various forces and pressures at work in this complex matrix, the relative efficacy of these contributing factors is difficult to ascertain. However it is likely that fee-for-service remuneration for physicians and the relative abundance of ED service in Winnipeg play a much larger roll than the incentives for ED staff to encourage ED use.

Efforts at reducing inappropriate ED use are bound to failure if they do not address past and present incentives inherent in the provision of emergency services. Calls for patient-education illustrate this dichotomy. If educational efforts are founded on the assumption that inappropriate users go to the ED out of ignorance, then the mere provision of applicable information ought to correct the problem. However, patients must have the incentive to change learned and reinforced behaviour. So long as GPs do not have the incentive to provide rapid treatment for unexpected illness, ED staff do not have the incentive to discourage inappropriate use and an abundance of ED service remains, changes in patient behaviour are unlikely to occur. As patients attend the ED for perceived low-cost provision of the best available care, they will only change their behaviour if a more reputable form of care is made available to them at the same overall cost, or if the costs of pursuing alternative care are perceived to be relatively low. To this effect the only successful function of patient education is provision of information about better sources of care, or lower-cost care. Similarly, if physicians are motivated by maximum returns for their effort, then physician education will only succeed if higher returns or reduced workload are realized. Efforts to provide other forms of education will be ignored, will fail to influence behaviour, or will be forgotten.

The use of triage for the purpose of reducing inappropriate ED use also fails to address past and present incentives inherent in the provision of emergency

services. In effect, the accommodation of inappropriate ED users in a hospital setting facilitates or encourages the causes of inappropriate use related to GP under-servicing and ED over-servicing of unexpected minor illness. When triage exists, local GPs may pursue more lucrative forms of care, institutional staff may encourage present and future use of their facility and political rent may be obtained through the provision of additional hospital related treatment areas to the community. Triage does little to address the incentives which discourage the use of alternative facilities which may be less costly in terms of dollar costs of treatment and continuity of care.

The provision of incentives to consumers provides a more suitable solution to inappropriate ED use as they have the potential to counteract past and present incentives to providers of medical services. Incentives to consumers may cause patients to challenge the preferences of their GP and of institutional staff. The cost to benefit ratio associated with ED-based care and return visits may be altered to favour alternative forms of care. Similarly, incentives to providers of medical services make it worth while for GPs and ED staff to promote alternatives to inappropriate use of EDs and worthwhile for GPs to provide these services.

While approximately 30% of those attending Winnipeg EDs may be deemed inappropriate, this thesis has made no attempt to determine the extent to which this is problematic. However, if a reduction in the extent of inappropriate use is desired, the successful solution must be multifaceted. It must include incentives for GPs, ED staff and elected officials to provide correct information about GP services to potential ED users. It must also include incentives for potential ED users to change learned behaviour. While education would likely be a large component of any such solution, schemes relying on education alone are bound to be limited in their effectiveness. Perceived ignorance on the part of health care consumers is not the driving force behind inappropriate use of ED. It

is but a symptom of problems inherent in the incentive systems to those who provide, create and maintain emergency services. Revisions to the fee schedule for the explicit and stated purpose of curbing inappropriate ED use are required. This could entail the separation of the wage and overhead cost components of physician remuneration, so as to ensure fair payment physicians for the services provided, and removal of incentives which discriminate against in-office provision of minor surgery. ED staff must be given the incentive and the ability to refer inappropriate patients to appropriate forms of care. For instance, EDs in other jurisdictions provide lists of local physicians who are accepting patients. Health care resources are often allocated in exchange for rented support from the electorate. If inappropriate use arising from an abundance of EDs is to be addressed, rational decisions pertaining to the maintenance of existing ED resource allocation need to be made by those who have a minimal vested interest in their outcome.

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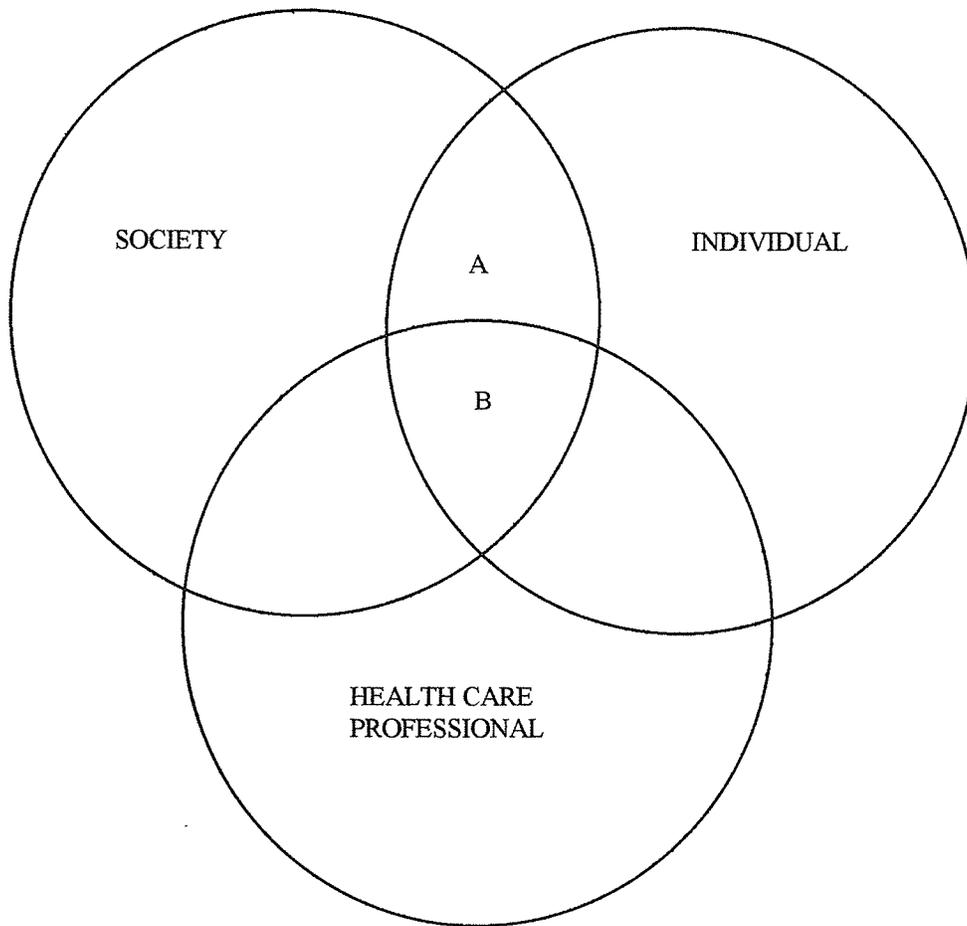
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- Arris, Beth. ED nurse, Health Sciences Centre ED.
- Bergal, Trish. Unit Manager, Health Sciences Centre ED. Aug 9th, 1994.
- Brown. Institute for Clinical and Evaluative Studies, Sunnybrook Medical Centre, Toronto. June 22, 1994
- College of Family Physicians of Canada: Manitoba Chapter. Secretary. Aug 11, 1994.
- Close, Denise. Saskatchewan Health Services and Research Commission. June 1994.
- Cloutier, Riel. Former employee of Manitoba Health, Current Administrator at St. Boniface Hospital. July 5th, 1994
- Desjardains, Laurent, Former Minister of Health. July 1994
- Glambuski, Ed. Manitoba Health, July 1994
- Harte, Neil. ED Physician, Victoria Hospital
- Hurley, Jeremiah E. Health Policy Analyst, McMaster University. June, 1994.
- Latokie, Morine. Manitoba Health. July 12th, 1994
- Lerner, Moe. former ED Director at Seven Oaks Hospital, Manitoba Health. March 10th, 1994, June 22, 1994.
- Mowat, Sandy. ED Nurse, Health Sciences Centre ED. Aug 9th, 1994.
- Stewart, Gloria. Manitoba Health. June 24th, 1994

APPENDIX 1

Differing Definitions of an Emergency as portrayed by Dr. Bary Wolcot (1979,242)



Area "A" represents the definition of an Emergency shared by society and the individual, but not shared by health care professionals

Area B represents the definition of an emergency that is common to society, the individual, and health care professionals.

Appendix 2. Summary of Studies Relating to Inappropriate Use o

Main Author

Urgency Rating (Type of Diagnosis)

Non Emergency

Calan (Britain)	94% Non Emergency (Physician) 41% Non Emergency (Self)
Brodsky (USA)	90-94% Non Emergency 85% Non Emergency
Gifford (USA)	87.4% Non Emergency 54% Non Emergency (Self)
Hansagi (Sweden)	41% Non Emergency (Self)
Vayda (Can)	94.4% non Emergency (Physician/Symptoms) 96% Non Emergency (physician)
Summary	85-96% of ED visits are Non Emergencies 41-54% of ED visits are self assessed as Non Er

Non Urgent

Vayda(Can) (1973)	33.7% Non Urgent (Physician)
Vayda(2) (1975)	44% Non Urgent (Physician)
Gifford	33% Non Urgent
Koning (US)	43% Non Urgent
Ministry (Can) (1981)	55% Non Urgent
Summary	33-55% Of visits are Non Urgent

Treated Elsewhere/ Primary Care/ Inappropriate

Meyers (1) (UK)	54% Elsewhere (Physician)
Meyers (2) (UK)	58% Elsewhere (Physician)
Dale (UK)	42% Primary Care Concerns (Patient)
Bellavia (UK)	39% (Patient)
Nguyn (UK)	12% Inappropriate (Unknown)
Walsh	27% Inappropriate (Physician)
Woodward (Can)	15-30% Inappropriate
Mowat (Can)	30% Don't Need ED (Nurse)
Harte (Can)	33% Inappropriate (Physician)
Summary	12-58% of patients could be treated elsewhere, need only primary care or are inappropriate