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Preventing Harm in Resuscitation Medicine

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Assumptions regarding urgency and impaired patient competence during resuscitation have left resuscitation medicine relatively free of the influence of medical ethics. As a consequence resuscitators are without clear guidance during decision making. The aim of this thesis is to develop an applicable model for ethical deliberation during resuscitation, and in so doing, to minimize the harms of resuscitation.

During resuscitation urgency and impaired patient competence conspire against an adequate consideration of the principles of biomedical ethics espoused by Beauchamp and Childress. The alternative to resuscitation, when resuscitation is indicated, is usually death. Consequently, it is generally perceived that consent is not required for resuscitation because resuscitation brings benefit and prevents harm and because the patient is not in a position to give or withhold consent. These perceptions have encouraged the use of the terms ‘withholding’, ‘withdrawing’ and ‘futility’, each of which is counter to good decision making during resuscitation. However, these perceptions are wrong. Resuscitation may not bring benefit, or its benefit may be limited. It may cause a great degree and variety of harms, and the patient is in a position where some forms of consent are applicable.

To minimise the harms of resuscitation, and to maximise the respect for the principles espoused by Beauchamp and Childress, we should employ the model of presumed consent with professional substituted judgement. This involves the resuscitators gathering as much information about the patient as they can, and with their acquired professional knowledge of the likely outcome of the resuscitation, the resuscitators can then exercise their moral imagination by imagining themselves as the patient, with the patient’s condition and values system, and asking “would I want this treatment?” If the answer to the question is, “No, I
would not”, then the resuscitation should not proceed. To resuscitate without regard for the patient’s perceived wishes is a harmful disrespect for the patient’s autonomy.

Often, a decision to proceed will be made on the basis of an uncertain balance of benefit and harm, and an alternative of certain death if resuscitation is not undertaken. Furthermore, the perception of the harms and benefits from the patient’s perspective may be unclear and under such circumstances it is appropriate to give the patient a trial of treatment. However, the balance is dynamic, with a clearer view of the likely benefits and harms emerging as the patient responds or does not respond to resuscitation endeavours, and therefore the question must be re-considered. As soon as the answer becomes, “No I would not want this resuscitation,” then the resuscitation must stop, as the resuscitators can no longer presume the patient’s consent. In this way the patient’s autonomy is resurrected and the principles of beneficence and non-maleficence are favourably balanced.
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Chapter One
Introduction

The vigour of youth and the wisdom of age

In the Emergency Department (E D) of an urban hospital lay a man of unknown name and advanced, but uncertain age. His age was uncertain and name unknown because his profound unconsciousness prevented him from telling any who might enquire. If he had been able to tell then he would have told many other things as well. He would have told of the brief feeling of pain and then fluttering in his chest as he stood at his window. He would have tried to explain the feeling of doom as his vision went grey then black, and his knees buckled to be first to the ground. He would have told of his visit to a doctor several days earlier at which he was informed that his pain was almost certainly angina and that a heart attack was looming.

“You need to be admitted to hospital,” the doctor had told him. “You need to be hooked up to a heart monitor. There is a 10% chance your heart will develop fatal complications.”

He had explained to the doctor that 10% seemed pretty good odds at his age, that he didn’t want people jumping out of cupboards with machines to jump-start him, and that fatal complications would be a blessed release from his miserable existence.
"I'm too old and wise for that," he had said. "If I was young and vigorous perhaps, but the wisdom of age and the vigour of youth only meet in passing."

The heart attack ensued, as forecast, and the fatal complications set in as he stood at his window. Soon after, he lay in the Emergency Department of an urban hospital, where a handful of doctors and nurses considered his future. They considered the response to treatment so far, the time his brain had gone without oxygen, his age and the rhythm of his heart. They discussed concepts such as withholding further treatment, withdrawing the artificial ventilation already begun and the likely futility of on-going resuscitation.

"Where was his family? What would they want? What would he want? What is the right thing to do?"

**Emergency Medicine**

Emergency Medicine is a speciality with a youthful vigour and philosophical ethics is an academic pursuit with the wisdom of age. These two interact in the field of medical ethics, yet this interaction has been limited despite the gravity of the moral decisions asked of emergency medicine specialists. To date, the vigour of youth and the wisdom of age have met only in passing.

In his work Epidemics [1] Hippocrates wrote: 'As to disease, make a habit of two things: to help, or at least to do no harm.' The principles of helping (beneficence) and doing no harm (non-maleficence) have been the stalwart of bioethics until recent times. The application of medical ethics, as it relates to emergency medicine, will be expanded in Chapter Three, but suffice it to say that in the past three to four decades we have seen the growth of medical ethics from the paternalistic leanings of the Hippocratic approach to the near universal embrace of the principlism espoused by Beauchamp and Childress [2].
In the early 1960s John F Kennedy proclaimed that America would put a man on the moon within ten years and that “cardiopulmonary resuscitation (CPR) would save thousands of hearts too good to die” [3]. Amid this optimistic milieu came the realisation that medical emergencies deserved greater attention from the profession. A little more than ten years after man did walk on the moon the first edition of Rosen’s definitive textbook of emergency medicine was published [4] in the same year as the first edition of Beauchamp and Childress’ Principles of Biomedical Ethics [2]. Both medical bioethics and emergency medicine have blossomed in the two decades since and both of these texts are now in their fourth editions.

Emergency medicine is a medical speciality practised throughout the world, and defined primarily by the medical treatment administered to patients attending emergency departments. An emergency department is a dedicated area in a hospital designed and resourced to receive and manage patients of all types with real or perceived emergencies.

Resuscitation is an important part of emergency medicine and involves the timely application of medical interventions to restore patency of a patient’s airway, adequate breathing and an adequate circulation of blood to a patient’s vital organs. Of the vital organs the brain is the one most sensitive to deficiencies of the airway, breathing or circulation. When the heart has stopped pumping blood to the brain, the cells of the brain will accumulate damage after only a few minutes and survival becomes increasingly less likely as time without a circulation progresses beyond 6 to 8 minutes [3].

In circumstances where impairment to the airway, breathing or circulation is life threatening then death will ensue without resuscitation. However resuscitation involves interventions that in themselves bring harm, and these harms will be explored in Chapter Seven. In addition, the benefits of resuscitation are commonly minimal, and these will be explored in Chapter Two. The doctors and nurses involved in resuscitation are charged
with considering the harms and benefits in their deliberations, and this thesis will explore how this might be done with the greatest respect for the principles of biomedical ethics.

However, before embarking on this exploration it would be valuable to discuss the breadth of resuscitation and define our area of focus, to present the particular difficulties resuscitation brings to biomedical ethical deliberations and to briefly introduce the concepts of withholding and withdrawing life sustaining interventions.

**Resuscitation**

In Egypt approximately 3500 years ago the inversion method of resuscitation was described, involving hanging the patient by the feet, applying chest pressure to assist expiration and releasing pressure to assist inspiration. [5]. Old Testament prophets described accounts of resuscitation using terms such as “crouching over”, “mouth to mouth”, “breathing into” and “pressing upon”[6]. Nearly one millennium ago authors recommended ventilating via a bellows and a tube in the trachea. In 1767 the Dutch Humane Society published guidelines for resuscitation of victims of drowning stating; “keep the victim warm, give mouth to mouth ventilation and perform insufflation of smoke of burning tobacco into the rectum”[5]. Various other accounts of resuscitation include the use of flogging, bouncing on a trotting horse, rolling over a barrel and sporadic descriptions of divine intervention. Interposed among these accounts of resuscitation is found the evolution of current concepts [6]. External chest compression was first described by John Howard in the 18th century. Early this century Crile described an experimental method in animals combining chest compression, artificial respiration and parenteral adrenaline. In 1956 Zoll published his accounts of defibrillation. Safer and Elam formally presented mouth to mouth ventilation in 1958, and in 1960 Kouwenhoven, Jude and Knickerbocker [7] rediscovered external chest compression while testing defibrillation on an animal model of ventricular fibrillation. The paper describing this discovery is widely attributed as being the usher of the modern era of cardiopulmonary
resuscitation (CPR). During the ensuing four decades we have seen CPR evolve into a very sophisticated and highly resourced response to victims of out-of-hospital cardiac arrest.

In 1966 the first National Conference on CPR in the United States of America was convened and from this conference came the recommendation that the method of CPR be disseminated. By 1977 twelve million Americans had been trained in CPR and sixty to eighty million more planned to be trained. In 1992 the fifth CPR conference further defined basic life support and advanced cardiac life support guidelines and also suggested a number of avenues for increasing our investment in CPR to improve the apparently poor dividend to date.

Resuscitation involves a variety of medical interventions on a heterogeneous population of patients with a wide range of pathologies. A patient with a ruptured spleen due to a blow from the handlebars of the bicycle, from which she has fallen, will require treatment for her internal bleeding. Although her circulatory shock will impair her cognition, the impairment will vary according to the extent of shock, and she may remain sufficiently able to consider treatment options for herself. The patient, presented at the beginning of this chapter, had suffered a cardiac arrest, and was unable to make any contribution to deliberations. Patients with head injuries, severe asthma and a variety of other life threatening conditions will fall between these extremes and will make a greater or lesser contribution. The issue of patient competence will be raised again in Chapter Five. Furthermore, the patient’s response to resuscitation will vary according to the disease, the seriousness of the disease, co-morbid diseases and the patient’s intrinsic ability to respond. Although the elucidations of this thesis have relevance and application to each resuscitation scenario, the focus will be on resuscitation from out-of-hospital cardiac arrest.
Out-of-hospital cardiac arrest describes the condition where a patient with a normal airway, breathing and circulation, suddenly, and usually without warning or preamble, develops a rhythm of the heart which fails to produce a circulation. As a consequence the patient’s brain promptly stops functioning and he or she falls unconscious. In such a state there is a loss of airway patency and spontaneous breathing, in addition to the absence of a circulation. In contrast to other resuscitation scenarios the patients are relatively homogeneous (adults over fifty years of age with a male predominance), the condition is reasonably defined (a single event at an instant in time) and it has been well researched. Henceforth, the relatively tangible condition of out-of-hospital cardiac arrest will be the focus of this thesis, unless otherwise stated.

Difficulties resuscitation brings to biomedical ethics

There are two components of resuscitation that conspire against adequate consideration of the principles of biomedical ethics. The first of these is urgency and the second is the impaired ability of the patient to make reasonable autonomous decisions. Urgency may be a barrier to the application of these principles in any given case. It is often appropriate to perform resuscitation assuming these deliberations might occur more fully when time permits, rather than withhold resuscitation on the basis of limited deliberation.

The impaired competence of patients undergoing resuscitation complicates the principle of respect for autonomy, as the patient is commonly limited in his or her ability to receive information, comprehend it, consider it in context and make a rational decision on the basis of this consideration. It is common practice not to seek, or to ignore the wishes of the patient, and instead to presume that resuscitation is the right thing to do based on arguments of beneficence and non-maleficence. Thus, it is generally perceived that consent is not required for resuscitation because resuscitation brings benefit and prevents harm, and because the patient is not in a position to give or withhold consent. Although this approach does not usually mean bad things are done, it is a flawed approach.
Resuscitation may be harmful in a number of ways and some form of consent must be obtained, just as for any other medical intervention. This concept will be developed in subsequent chapters.

The unique aspects of ethics in emergency medicine, compared to primary care, have been outlined by Sanders [8]. In emergency medicine patients are often brought in by ambulance, police or family rather than choosing to enter the medical care system. They do not choose their physician, and the emergency department (ED) doctors and nurses are not known to the patient and family, nor do they necessarily have their trust. Similarly the ED staff have no prior knowledge of the patient’s values or beliefs. The patient attending the ED has suffered an acute change in health, and anxiety, pain, alcohol, and altered mental status are frequent accompaniments.

In the ED decisions are made quickly, with less time for reflection and deliberation and with less opportunity to consult with patient, family, other physicians, ethics committees, lawyers, courts or ethicists. In addition the work schedule for the ED staff is uncontrolled, and often stressful, limiting the time staff can afford a patient, and restricting the opportunity for a private and controlled discussion. Furthermore the activation of an emergency medical system, including an emergency call to the ambulance and transfer to an emergency department, brings with it an expectation that resuscitation will occur, and that it offers hope of a good outcome. Perceptions of the value of resuscitation will be explored in Chapter Two and the option of withholding resuscitation within such expectations will be discussed below.

**Withholding and withdrawing**

When resuscitators consider that the next step in resuscitation is not to be taken, usually because it is considered futile, (futility will be discussed at length in Chapter Eight), then
the term 'withholding' is used. When an intervention has already been delivered, but is thought inappropriate to continue, usually because it has not brought the hoped for benefit, then the term 'withdrawing' is used. Although there is an obvious practical difference between not providing a treatment and providing it but then stopping the provision, there is argument as to the moral difference between the two.

Beauchamp and Childress [2] promote the dominant modern view that it is neither morally better nor worse to withdraw treatment than to withhold it. This contrasts with the prior held view that clinicians who withdrew treatment (an act leading to death) were more morally culpable than those who withheld treatment (an omission leading to death) [9].

Iserson [9] argues that emergency physicians should continue to make a moral distinction between the withdrawal and withholding of medical treatment. He argues:

...The distinction between withdrawing and withholding medical treatment has never disappeared, and it is not likely to do so in the future. Three reasons for this include the lack of patient information, the societal expectations about emergency medial care, and the different emotional impact of the two actions in the emergency setting.

...The typical E D patient who arrives in cardiac arrest or profound shock or with massive trauma often lacks not only an authoritative past medical history and history of the presenting episode but even a verifiable identity. Without this vital information, clinicians often have little insight about prognosis unless they cannot reverse the acute process. This common situation pushes emergency physicians to intervene, opting to withhold care only in the rare situation in which they have all the appropriate information.

...In three special circumstances, the withholding of emergency medical treatment is generally accepted: in an obviously dead patient, in a disaster/battlefield triage, and in situations that are dangerous for the providers. Pre-hospital providers suffer few barbs for not attempting to resuscitate patients with rigor mortis or dependent lividity or those who have been charred beyond recognition or decapitated (four standard emergency medical services reasons for not resuscitating patients).

...Finally, the nature of emergency settings makes the withholding of treatment more public than its later withdrawal. Although in other medical settings
clinicians often withhold care quietly and unobtrusively, this is not the case in emergency medicine. The withholding of treatment is the most obvious and traumatic of all decisions. In emergency medicine, the situations in which intervention is needed are patently obvious. The patient is rushed into the E D, or the ambulance screams to the scene. What then? To do nothing requires enormous effort, the clinical assurance that he or she is certain of all relevant information, and a sense of personal security. Later withdrawal of care, however, is often performed (by another team) after more data has been gathered, in a more secluded setting, after consultation with surrogate decision makers.

In emergency medicine a morally significant difference rightfully exists between the withholding and withdrawal of medical treatment.

Iserson’s arguments are coherent and pragmatic. He stresses that withholding resuscitation is seldom achievable as resuscitators have insufficient information prior to initiating resuscitation efforts to be comfortable that the resuscitation is hopeless. In addition he argues that societal expectations are for attempts to be made and that doing nothing (i.e. withholding resuscitation) is emotionally difficult because of these expectations and because of the uncertainty with which the decision is made. Withholding is usually a final decision, with an unlikely recourse to make things right if the decision is wrong. Proceeding with resuscitation maintains the options of carrying on or withdrawing.

There are very real pragmatic differences between the two but do these differences make them morally distinguishable? The differences I have summarised, from Iserson’s arguments, suggest withholding is a more difficult and less practical task for the resuscitator, but does that make it more right or wrong? I will revisit this moral argument in Chapter Nine and subsequently suggest that Iserson’s pragmatic differences become irrelevant if the concepts of withholding and withdrawing are abandoned. To pre-empt this argument I will conclude that we should not be seeking a justification to stop resuscitation (i.e. withhold or withdraw) but instead we should be seeking permission to resuscitate, just as we seek consent for all other medical interventions.
In addition I will entertain a number of other questions, which trouble the perceptive resuscitator. Does proceeding with resuscitation, without question, sometimes bring more harm than good? If so, can we develop a more sophisticated approach to decision making so that we limit the harms of resuscitation medicine? If ‘futility’ is used as the measure of whether it is worth proceeding or not, how do we define it, and how do we apply it? Should futility be used in this way or is there a better way of measuring the worth of our resuscitation endeavours? What of those many resuscitationists who are misled by the terms withholding and withdrawing such that they withhold for fear of not being able to withdraw later, thereby depriving some who might benefit, or they do not withdraw in the mistaken belief that once a decision has been made to resuscitate, withdrawal seems a contradiction, a change of mind and a loss of face? Why, in resuscitation medicine, do we seek reasons to withhold or withdraw when the precedent in all other areas of medicine is to seek permission (consent) to proceed? How, in a setting of significant impairment to patient competence, can we honour the principle of respect for patient autonomy while not neglecting our duties of beneficence and non-maleficence? This thesis will explore these questions and seek to provide a model for ethical decision making in resuscitation medicine, which is both pragmatic and morally robust.

At the start of this thesis a case was presented. We came to know much about the patient, yet his resuscitators knew none of this. Troubled by this ignorance, and by urgency, they posed the question; “what is the right thing to do?” They, and many like them, have been offered little guidance in answering this question. This thesis is for them.
Before proceeding further we must have an understanding of what resuscitation has to offer. To this end, there follows an extensive review of the published literature describing the outcome of various types of resuscitation, but with a focus on resuscitation from out-of-hospital cardiac arrest.

In Christchurch, New Zealand, the Canterbury Regional Ambulance serves a population in excess of 300,000 people over a large metropolitan suburban and rural area. Ambulances are staffed by ambulance officers with training to four levels. Paramedics represent the highest level and are trained in advanced cardiac life support, including the use of defibrillation, endotracheal intubation, intravenous access techniques and administration of a small pharmacy of resuscitation drugs. All other officers are proficient in the use of defibrillators. The response to out of hospital cardiac arrest in Christchurch involves despatching the nearest available ambulance followed by a second crew of paramedics if necessary. (A “two-tiered” response).

A written record was completed for all adult victims of cardiac arrest attended by the Canterbury Regional Ambulance service for the years 1992 and 1993. An analysis of this data has been presented previously in the New Zealand Medical Journal [10].
Among the information collated and analysed were the presumed aetiology of the arrest (cardiac or non cardiac), whether or not CPR was performed by bystanders, the initial cardiac rhythm on ambulance arrival, whether or not the patient survived to hospital admission, and whether or not the patient survived to discharge from hospital.

Patients who suffer cardiac arrest have one of four cardiac rhythms demonstrable when the cardiac monitor is attached. These are asystole (no electrical activity), electromechanical dissociation (normal or relatively normal electrical activity), ventricular tachycardia (an abnormal, fast rhythm) or ventricular fibrillation (markedly disordered electrical activity). Ventricular tachycardia (VT) and ventricular fibrillation (VF) may come on suddenly, for a variety of reasons but most commonly secondary to atherosclerotic disease of the arteries supplying the heart muscle, thereby depriving the muscle of adequate blood flow, and causing irritability of the heart’s electrical system. Ventricular tachycardia or fibrillation cause most out-of-hospital cardiac arrests [3]. The importance of this is that the treatment for these two rhythms is defibrillation with a direct current electrical shock from a defibrillator. There is no other useful treatment for this condition and the longer the heart remains in these rhythms, the longer the brain (and other vital organs) go without oxygen and the less responsive the heart becomes to defibrillation attempts.

Patients who presented to the Canterbury Regional Ambulance during 1992 and 1993 who had cardiac arrest secondary to non-cardiac pathology (i.e. trauma, poisoning, respiratory failure etc) were excluded from the analysis. Cardiac arrest is the final common pathway in all deaths, but the term ‘out-of-hospital cardiac arrest’ refers to a primary cardiac event. There were a total of 283 cardiac arrests ranging in age from eleven to eighty-eight years with a median age of sixty-four years. 70% had ventricular fibrillation or tachycardia on arrival of the ambulance, and 50% received CPR from a bystander. Fifty-five patients were resuscitated sufficiently to be admitted to hospital. Thirty patients (11%) survived to
hospital discharge. All but one of the survivors had ventricular fibrillation or tachycardia on arrival of the ambulance.

What this means for the people of Christchurch is that nearly 300 patients, mostly around the seventh decade of age, suddenly collapsed in the community, with no cardiac output. Half of these had CPR begun where they fell, by family, friends, neighbours or strangers. All were attended by an ambulance, which rushed, with lights and sirens, to the scene, and 70% had electric defibrillation where they lay. A little over three quarters of these people were declared dead at the scene, and the remainder had their resuscitation continued in hospital. After a period in hospital, many on ventilators in the intensive care unit, 11% survived to be discharged. None of these was healthier than before their cardiac arrest, and most had some impairment to their health as a consequence of their ordeal.

The reported survival to hospital discharge rates for out-of-hospital cardiac arrest victims, range from less than 2% to 33% [11]. Survival rates of a low as 1.3% have been reported from Chicago, and 1.4% from New York City [12,13]. The authors of these studies suggest that increased response times, inadequate bystander CPR and socio-economic factors contribute to the low survival rate in large urban areas. However among the best survival rates published come from Seattle and urban and suburban King County, Washington. [14] Rates around the world are similar, but publications in recent years have suggested poor survival rates in many cities (Nagoya, Japan 4.6% [15], Slovenia 4.2% [16], Amsterdam 9% [17], Taipei 1.4% [18], Auckland 13% [19]).

The explanation for the wide range in survival has been vigorously sought. It is, at least in part, contributed to by inconsistencies in methods of data collating and reporting [20-22]. Consequently an international consensus for the uniform reporting of data from out-of-hospital cardiac arrest (The Utstein style) has been achieved [23-25]. Data published since the adoption of the Utstein style should be more usefully compared. The data from
Christchurch used this style, and it is of interest to note that much of the data from international centres, suggesting poor outcome, was subsequent to the adoption of the Utstein style.

It has been suggested that the average survival rate throughout all the United States of America may be as low as 3% [26]. The American Heart Association concedes that the investment in cardiac arrest resuscitation has not reaped the dividends hoped for, but the solution they suggest is to invest more. Based on the best outcome figures published, in systems with high levels of bystander CPR, fast ambulance response times and rapid establishment of advanced cardiac life support, and with no apparent scope for improvement, the American Heart Association has defined the best achievable outcome figures of 15 - 20% survival to hospital discharge (25 - 30% for those in VT or VF on arrival of the ambulance. This subgroup of patients, with potentially defibrillatable rhythms, has a greater chance of survival) [14]. To promote this achievement they recommend the promulgation of the “chain of survival” concept, defining four essential links in the emergency medical services response to out-of-hospital cardiac arrest.

The first link of the chain is achieving early access to the emergency medical services. This involves education about and early access to, the emergency medical service dispatchers. The second link encourages early CPR. This implies a high level of preparedness and willingness of bystanders to perform CPR. The third link is early defibrillation involving a rapid response from those with defibrillation capabilities. The fourth link is early advanced care, meaning the timely involvement of personnel capable of intubation, rhythm interpretation and drug administration.

There is little doubt that early CPR improves survival. If CPR is begun within 4 minutes of collapse, survival may be improved by as much as 11 fold over those for whom CPR was begun after 4 minutes [14].
There is now a perceived decline in the willingness of both the lay public and health professionals to learn and perform CPR. Even some basic life support instructors have conceded that they would not give CPR to a stranger for fear of becoming infected with the human immunodeficiency virus (HIV) [27], and paramedics [28], doctors [29], nurses [30], and potential bystander providers [31] have voiced similar concerns. Although HIV and Hepatitis B cannot be exchanged by mouth-to-mouth, a variety of other pathogens can, for example a variety of respiratory viruses and bacteria including meningococcus [32].

Early defibrillation is the most useful link in the chain of survival, as approximately 85% of sudden cardiac arrests are due to VT or VF [33]. Defibrillators are now available with fully automated or advisory function (automatic external defibrillators) allowing use by minimally trained personnel. Recent models have been shown to be accurate and reliable. Trials of their use by members of the public have been mostly disappointing [14] however, there is a consensus that health professionals who may come across cardiac arrests in the line of their work, should have defibrillation capabilities.

Seattle and King County, Washington, have two of the highest survival rates from out-of-hospital cardiac arrest [11]. They use, and recommend, a two-tiered response. The first responders are among a more mobile, more numerous group of personnel with automatic external defibrillators, followed closely by paramedics capable of advanced cardiac life support. Comparative studies suggest that paramedic only responses have poorer survival rates, probably because the paramedics are more highly resourced, less numerous and less consistently able to respond rapidly to cardiac arrest victims [11].

Since the chain of survival concept was promulgated in 1991 [14] attempts have been made to make the further investment to improve education about, and access to
emergency medical services, to continue CPR training with an emphasis on ensuring a
defibrillator is on the way as soon as possible, to encourage the use of automatic external
defibrillators, and to fine tune a two-tiered response to these victims including advanced
care from a paramedic. However publications since the widespread adoption of the
Utstein style, in recent years, have not achieved the 15-20% survival hoped for. Indeed
survival rates in Christchurch, in 1998, were 10% compared to the 1992-1993 rate of
11%, described above (personal communication). Before and after studies have shown no
significant increment in survival at a rural hospital where advanced cardiac life support
was taught [34] nor after the introduction of defibrillators to an ambulance service [35].

The community has evolved an expectation that a sudden collapse in the street will be
accompanied by a visit from an ambulance, lights and sirens going, and travelling at
speed, with subsequent heroic endeavours to pull the victim back from death’s clutches.
However, most people seem to misperceive the value of these endeavours. Television
viewing is a primary source of information concerning CPR for 70-90% of older persons,
yet CPR as depicted on television may foster misleading expectations [36]. In ninety
seven episodes of three television programmes (“ER”, “Chicago Hope”, and “Rescue
911”) all of which screen on New Zealand television, there were sixty occurrences of
CPR, and these resulted in 77% short term survival and 67% depicted or implied long
term survival. Only one of the survivors suffered any disability as a consequence of his
cardiac arrest [36].

Mead and Turnbull [37] noted that a sample of elderly patients and their relatives
overestimated the effectiveness of CPR and that their main source of information was
television drama. 33% of hospitalised elderly patients, without cognitive impairment,
when interviewed, had not heard of CPR. Of those who had heard of it 11% did not know
it involved chest compressions, 6% did not know it involved mouth to mouth breathing
and 8% did not know it was needed when the heart stopped. 79% wished to have CPR
performed if necessary, but prior to discharge from hospital, and after an explanation of what CPR was, 69% consented to CPR if necessary [38].

In contrast when 105 emergency physicians, nurses and medical technicians, who regularly resuscitated cardiac arrest victims, were asked what they would like done if they were the arrest victim, 65% wanted resuscitation to cease before the second dose of adrenalin (i.e. brief attempts only), and 10% wanted no resuscitation at all. Only 3% were willing to consent to full resuscitation as they currently practice on their patients [39]. In Christchurch over 100 Emergency Nurses at a Conference were surveyed to ascertain their views regarding their own resuscitation, by taking them through it on paper and asking after each successful intervention whether they would like to stop or to move on to the next intervention. The results were similar, with approximately 10% wanting no resuscitation, most wanting an abbreviated form and only a few wanting full resuscitation efforts as they commonly practised on their patients. (Ardagh, M. unpublished research – this research involved leading over 100 Emergency Nurses through the stages of resuscitation from cardiac arrest, and asking that they imagine themselves as the patient and that they record, anonymously on a data sheet whether they would consent to further resuscitation at each key step in the resuscitation algorithm. The data sheets were subsequently collected and analysed by the author. This research is attached as Appendix One).

In this chapter so far, we have heard that 15-20% of out-of-hospital cardiac arrest victims may survive to hospital discharge, but commonly 10% or fewer survive, and the average may be 3% or less. Survival rates do not appear to be improving significantly despite effort and resources being put into the steps of the “chain of survival”. Generally people seem to overestimate the usefulness of resuscitation from cardiac arrest, but even so 20 to 30% of elderly patients would not consent. Those who undertake resuscitation of victims of cardiac arrest, and therefore are well informed of what it entails and the likely outcome, would consent infrequently to resuscitation as it is currently practised, and
would prefer a considerably more limited trial of resuscitation than is usually administered.

If many do not want it, most are poorly informed and those better informed want even less of it, then questions must be asked about the morality of the wholesale application of resuscitation to victims of cardiac arrest. However, before these questions are entertained, I will briefly present survival rates from resuscitation from other life threatening conditions, the quality of health of the survivors, predictors of survival and the cost of resuscitation.

Outcome of resuscitation from other life threatening conditions

Cardiac arrest afflicting patients already admitted to hospital is a different process. Although many are sudden cardiac events, like out-of-hospital cardiac arrests, the majority are cardiac arrests complicating the disease for which the patient was admitted. Although resuscitation efforts are more timely and more sophisticated, the contribution of the underlying disease (e.g., pneumonia, other sepsis, major trauma etc) means the reported survival rates of in-hospital cardiac arrests are similar to those reported for out-of-hospital cardiac arrest [40]. However, given the heterogeneity of the patients who suffer it and their diseases that contribute to it, comparability of in-hospital cardiac arrest data is difficult. When the subgroup of admitted patients who suffer an isolated sudden cardiac arrest, of cardiac cause, is studied then good survival rates are recorded. In an Australian study 39% of such patients survived [41], and in the cumulated data of supervised cardiac rehabilitation exercise programmes for patients with recent heart attacks, out of 101 ensuing cardiac arrests 89% survived after rapid defibrillation by their supervisors [14]. These studies emphasize, that for sudden cardiac arrests of cardiac origin, which are mostly VT or VF, timely defibrillation (within an ideal maximum time of 8-10 minutes [14]) brings about a very good outcome. CPR, it seems maintains the heart in VF
delaying its inevitable decay into asystole, and therefore prolongs the opportunity to
defibrillate [42-45].

However survival when the context is complicated by other diseases, is less certain.
Patients, who suffer cardiac arrest while already in the Intensive Care Unit for other
illnesses, do very poorly. Landry et al, report 114 cardiac arrests in their intensive care
unit. Only six (5%) survived to hospital discharge, four of these were dead within a year,
and the other two were severely disabled [46]. Rates for survival to hospital discharge
after cardiac arrest of a few percent or less have been reported in patients with underlying
chronic disease [3, 47], cancer [48], acquired immuno-deficiency syndrome [41] and after
cardiac arrest secondary to trauma [50,51].

These results are not surprising. Cardiac arrest may be a sudden cardiac arrhythmia, in
which case vital organs are intact until the moment of arrhythmia, and prompt restoration
of a normal rhythm may leave them unharmed. Alternatively it may be an arrhythmia as a
consequence of the heart suffering hypoxia from prolonged compromise of airway or
breathing, or poor blood supply secondary to haemorrhagic or other forms of shock. If the
arrhythmia is a consequence of prolonged airway breathing or circulation compromise
then vital organs such as brain and kidneys, will already be damaged, prior to the cardiac
arrest, and prompt restoration of a normal rhythm will not reverse this. In-hospital cardiac
arrests, and cardiac arrests complicated by other diseases, are usually of this type.
Consequently resuscitation from cardiac arrests of non-cardiac origin tends to have a
lower rate of survival, and a significant health impairment in those who do survive [52].

Cardiac arrest in children is similar, as most paediatric cardiac arrests are secondary to
prolonged impairment of airway, breathing or circulation. Asystole is the most common
initial rhythm in out-of-hospital paediatric cardiac arrest, indicating the heart has simply
stopped after a prolonged insult. The leading causes of cardiac arrests in children are
sudden infant death syndrome, trauma, airway obstruction and drowning [53]. Published survival to hospital discharge rates are in the range of 8 to 10% [53,54]. However survival rates vary according to the degree of the initial insult, and if intervention begins prior to the cardiac arrest then outcomes will be better.

Victims of near-drowning who are severely unwell but still with a beating heart, (i.e. not in cardiac arrest) also have a high mortality. 25% will die after being taken to the emergency department and 6% of the survivors will have neurological sequelae [55]. Patients who have sustained severe head injury, but who are not in cardiac arrest, have a 76% survival rate, but 14% are severely disabled and 7% are left in a vegetative state [56].

If the resuscitators of these patients are to make the right decisions then they should have knowledge of the patient’s prognosis. Unfortunately the published literature, which I have summarised, offers only a little assistance. Victims of out-of-hospital cardiac arrest, due to a sudden cardiac event, are a reasonably homogeneous group, but other insults, leading to cardiac arrest or merely threatening it, are immensely variable. In Christchurch, as stated at the beginning of this chapter, we know that 10% of those with out-of-hospital cardiac arrest will survive to hospital discharge, but this does not tell the Christchurch resuscitator whether the patient in front of him or her is one of the 90% or one of the 10%, and it tells him or her even less about whether this patient would accept these odds.

The next step, therefore, is to identify what indicators displayed by an individual patient help in determining the likely prognosis.

**Prognostic indicators**

Prognostic indicators have been published for life threatening presentations such as near-drowning [55,57-60] (duration of submersion, duration of resuscitation and type required,
response to resuscitation, temperature of water), head injury [56,61-63] (age, hypotension, type of brain injury, other injuries, severity of unconsciousness), major trauma [50,51,64-66] (injury severity, head injury, time to surgery, age, pre-existing disease) and other conditions. Similarly attempts have been made to define prognostic indicators for out-of-hospital cardiac arrests. Although there are no prognostic factors, which determine definite survival or definite non-survival, there are a number of predictors of good and poor outcome, which can be usefully employed [5,14,32,40,67-75].

CPR commenced within 4 minutes and defibrillation within 8 minutes of collapse in a patient with ventricular fibrillation and an apparently good premorbid health is prognostically very promising. Any deviation from this suggests a poorer outcome. Cardiac arrest, which is not witnessed, has poorer survival, primarily because of delay in recognition and response to the arrest. Asystole and electromechanical dissociation, on arrival of the monitor, are associated with very poor survival rates. A defibrillatable rhythm (VF or VT) is potentially salvageable but with increasing delay significant neurological sequelae are likely. Resuscitation efforts successful within 15 minutes have a good prognosis, 15-30 minutes intermediate prognosis and beyond 30 minutes a good outcome is extremely rare.

A variety of underlying illnesses culminating in cardiac arrest are associated with a poor outcome, as previously described. Also, patients confined to their home prior to the arrest, have an outcome much worse than those previously active. Age is not an independent predictor, but the aged often carry co-morbidities, which are negative prognostic indicators.

Recently scoring systems have been suggested, based on clinical and laboratory criteria, to predict outcome, but these remain un-validated. However, despite the assistance of these numerous predictors, Lawrence et al when they retrospectively applied them to 443
cardiac arrest patients, found that they still would have miscategorised 24% of the survivors as non-survivors [76].

So where does this leave the resuscitator? The research presented confirms what might have been intuitive. That is, that survival relates to; the premorbid health of the patient, the severity of the insult, the duration of the insult, the speed of the resuscitation, and the response to resuscitation.

The quality of health of the survivors

Before we move on to the ethical basis of resuscitation decision making it is necessary to consider the quality of health of those who do survive. Again concentrating on out-of-hospital cardiac arrest, a number of studies have attempted to measure quality of outcome for the survivors and most of these have done so by assessing patients for neurological impairment.

In New York five out of seven survivors were assessed as having good neurological and good overall outcome [77]. In Glasgow 89% of survivors were normal, or mildly impaired, 8.5% were moderately impaired and 2% were severely impaired, with 1 patient remaining in a coma [78]. Of the 680 who went home 176 died over the next four years, giving a four year survival after discharge of 68%. The independent predictors of mortality after discharge were increased age, heart failure and cardiac arrest not due to definite myocardial infarction. In Scandinavia, fifty-four survivors were assessed at twelve months with neuro-psychological tests. 48% had moderate to severe disabilities, and 52% had no or mild disabilities. Many of those disabled were suffering from depression [79]. In San Francisco, Hsu et al assessed thirty five patients, out of ninety three survivors from a total of 3130 out-of-hospital cardiac arrests [80]. Of these 34% said their quality of life was worse, 38% said it was the same and 28% said it was better than before the cardiac arrest.
arrest. In addition the authors assessed a variety of neurological and health quality scoring systems. A little over one half of patients scored normally and the remainder had some impairment, but the scoring systems commonly used correlated poorly with the patients’ subjective assessments of quality of life.

In summary, although there is some variation in quality assessment according to the method used some useful guidance can be taken from the data presented. Applying this data, if 100 out-of-hospital cardiac arrests occur in Christchurch, ten will survive to hospital discharge. Of those ten more than one half, and perhaps eight or nine out of ten, will be unimpaired by measures commonly employed. Three or four will consider their quality of life to be worse and three or four will be dead within four years. Considering this, we are able to conclude that those who survive out-of-hospital cardiac arrest have a reasonable chance of a worthwhile outcome.

However, it must be reiterated that timely management of out-of-hospital cardiac arrest will restore blood flow to minimally injured vital organs. In contrast, other life threatening conditions, with prolonged impairment to airway breathing or circulation, will inevitably have more serious injury to vital organs, particularly the brain. Six percent of survivors of near drowning have neurological sequelae [55], 21% of survivors of severe head injury are severely disabled [56], and one third of survivors of cardiac arrest, while already in-patients of the intensive care unit, are left severely disabled while the other two thirds are dead within one year [46].

Once again there is no certain way of predicting those who will survive well. However, as it was concluded when considering predictors of survival, the premorbid health of the patient, the severity of the insult, the duration of the insult, the speed of resuscitation, and the response to resuscitation will give some indication of the quality of life for those who survive.
The cost of resuscitation

Attempts to define the cost of resuscitation have relied on varying assumptions and differing cost inclusions in the analysis. Some have included hospital costs, others hospital charges and some have attempted to account for the cost of pre-hospital care and rehabilitation. Perhaps the most useful analysis for out-of-hospital cardiac arrest was undertaken by Lee et al, who reviewed outcome data and cost studies to conclude that the cost of CPR per six month survivor was approximately 407,000 United States dollars (range about $344,000 - $967,000). They went on to estimate that the cost per quality adjusted life year (QALY) was 226,000 United States dollars (USD) (range 191,000 – 537,000) [81]. They conclude that “while CPR may be cost-effective in some situations, it is clearly well beyond the range of commonly accepted boundaries in others.” They note that there is no consensus with regard to the level of cost that is justifiable to save a life. They suggest that more selective use of CPR would make it more cost effective.

Murphy argues similarly [82]:

New strategies are needed to curb the proliferation of life-sustaining therapies that rarely benefit patients. If a therapy is rarely effective and rarely desirable it is considered medically inappropriate. If the marginal cost-effectiveness ratio is inordinately high, it is considered economically inappropriate. If a therapy is either medically or economically inappropriate it should not be automatically offered.

They illustrate their model with an analysis of out-of-hospital cardiac arrest resuscitation for chronically ill older people.

More recently Hilberman, Kutner, Parsons and Murphy [83] revisited the question of appropriateness of CPR. In a review of the published literature related to cost/benefit, they noted that the cost of CPR for the 40% of people with high chance of survival is less than USD10,000 per year of life saved, but for the 60% with low chance of survival it is
approximately USD 400 000 per year of life saved. This makes it the most expensive intervention of the 14 they listed, with the next most expensive, (coronary care unit for patients with low risk of myocardial infarction) at USD 208 000. These figures, and an argument using principles of biomedical ethics (to be presented in Chapter Three) lead them to conclude that CPR should be offered selectively. Specifically, after a detailed review of the outcome literature, the authors recommend the following;

Cardiac arrest must occur for CPR to be a relevant intervention but cardiac arrest is not a sufficient indication for CPR. Since the decision not to perform CPR is irreversible, it is appropriate for there to be a bias toward its initiation. However the extensive outcomes literature and ethical analysis justify a more limited application of CPR than do present ...policies. Therefore we recommend:

1. CPR should be performed when it is indicated.
2. CPR should not be performed when it has been refused or is not indicated.
3. CPR should be performed infrequently when the intervention is relatively contraindicated.

Other medical care should be provided to patients independently of resuscitation status. Providers must specifically exclude race or socio-economic factors from consideration.

...CPR is indicated:
1. For witnessed arrests;
2. For a cardiac rhythm of VT or VF;
3. During operations and procedures; and
4. As part of well-justified experimental protocols.

CPR is not obligatory.

CPR is not indicated:
1. If the patient does not want CPR;
2. If the arrest is unwitnessed, unless some sign of life persists;
3. If CPR is not started within 6 minutes of the arrest, or has continued more than 30 minutes (except hypothermia);
4. For patients in a persistent vegetative state, in coma or with severe heart or lung failure, advanced cancer, or other end-stage illness.

CPR is relatively contraindicated:
1. If it is known that the patient had significant physical deterioration prior to the cardiac arrest:
2 For persons who have severe dementia (CPR is intended to prevent premature death and is not appropriate in a person who has advanced and debilitating symptoms of aging):

3 For patients with cancer (who rarely survive CPR according to the medical literature) However, some patients have minimal cancer and deserve CPR:

4 For victims of the AIDS epidemic for whom cardiac arrest is a late complication.

After a review of the outcome literature, including a cost analysis, and a discussion around the principles of medical ethics, the authors have provided these recommendations to aid resuscitators. However, I perceive three difficulties with them. Firstly, although they are a useful application of outcome figures derived from populations of patients, they lose validity when applied to individuals. Most with unwitnessed cardiac arrests do not survive, but some do. Which is my patient? Cancer patients do badly, but not all. When does cancer become more than minor? When is a cardiac arrest in an AIDS patient due to AIDS and when is it coincidental? What would my patient want? And so on.

Secondly, it appears that this is an ‘all or nothing’ recommendation. That is - you either do CPR or you don’t. There appears no cognisance taken of the patient’s response to treatment so far, as a guide to likely outcome.

Finally, it is cumbersome. It is too cumbersome for the resuscitationist actively undertaking the resuscitation. Indeed the authors seem to have derived it to aid the formation of preconceived ‘do not resuscitate’ orders, rather than for decision making while in the midst of the resuscitation in question. Resuscitation is dynamic, for which the standard applied must respond to the evolving situation.

How then should the resuscitationist make moral decisions while in the midst of the resuscitation? To answer this, we need to explore methods of bioethical deliberation.
An elderly lady presents to the Emergency Department after a fall while shopping. “I may be old but I’m not stupid”, she says. She seems to understand that an intertrochanteric fracture of the femoral neck needs an operation. She seems to appreciate all the risks of going home with such a fracture untreated. “Yes, yes, clots in the leg, pneumonia, the pain, the burden on my family. He told me that already, but quite simply I choose to go home.”

An intravenous cannula was placed after bargaining to help her pain. A generous dose of morphine was given and by morning her fracture had been internally fixed.

Did the emergency physician do the right thing? There is little doubt that internal fixation was the best therapeutic option for this condition. The patient was saved from significant suffering, morbidity and probably death. Furthermore her family were saved the burden of caring for her for weeks or perhaps months. Yet is this enough to reconcile the betrayal of trust and the deliberate dismissal of her explicit wishes?

Did the emergency physician do the right thing by the man with the debilitating terminal illness who was resuscitated after attempted suicide, or the man with severe chronic
airways disease and a ruptured abdominal aortic aneurysm whose family said “do
everything possible for him”, or the girl who said she did not want her mother to know
after attempted suicide, or the patient with a high blood alcohol level about whose
intention to drive home the emergency physician informed police, or the patient
unconscious after overdose who provided an opportunity to trial a new treatment? How
can we judge if we do the right thing in these cases and the many others that abound in
emergency medicine?

Ethics is the theoretical study of how moral judgements should be made and justified.
Medical ethics applies this analytical study to the practical dilemmas, which arise in
medical practice. Emergency medicine and medical ethics must become better
acquainted. This chapter introduces a framework for considering ethical questions in
emergency medicine. First I will, briefly describe the principles expounded by
Beauchamp and Childress, and then I will go beyond principlism to describe models of
ethical deliberation which may offer the resuscitator more practical assistance.

Beauchamp and Childress [2] give a framework for applied medical ethics which has
become the most widely used framework for medical ethical deliberations. They list four
prima facie principles for application to specific situations. These principles are felt to
underlie medical practice and form the foundation for resolution of ethical disputes. The
principles are not absolute, but should be followed if there are no overriding
considerations to the contrary. Should there be competition among the principles in a
given context then the relative weight of each principle, considering the good and the bad
consequences of applying that principle, is determined and the best action derived. Of the
four principles, autonomy (self-determination) and beneficence (producing benefit), are
held by most ethicists as central in medical ethics. Some see non-maleficence (not
causing harm) as separate. Others see it as part of beneficence, and some would add
justice (acting fairly) and others such as privacy and veracity. The relative value of
principles will be discussed in subsequent chapters.
1. Respect for autonomy

The word autonomy is derived from the Greek autos (self) and nomos (rule) and refers to an individual’s self-determination or self-governance. This includes the abilities to understand, reason, deliberate, and make an independent choice. An autonomous choice is actual self-governance by someone who is an autonomous person.

This principle has grown in stature and although its relative merits are debated it has an important place in our ethical deliberations [84,85]. It will be discussed further in a subsequent chapter but in short, autonomous persons should not have their autonomous choices subjected to controlling constraints by others. To do so is to deprive individuals of a fundamental right and is to treat them as less worthy by denigrating them to a position where they are deemed incapable of self-governance. However, if the patient has impaired autonomy (perhaps from psychiatric illness affecting reasoning, deliberation and independent choice) or if there are substantial conflicts with other principles (if the autonomous choice would seriously injure another for example) the principle of respect for autonomy may be over-ruled.

2. Non-maleficence

Non-maleficence, or the principle of avoiding harm in therapeutic endeavours, is an established maxim attributed to Hippocrates. ‘First do no harm’ is a commonly invoked guiding principle, which has obvious appeal. The principle of avoiding harm therefore has maintained its place in the principles of Beauchamp and Childress, but in this setting does not necessarily have priority over other principles. That is, we will not always have ‘do no harm’ as our first, or prime consideration. Commonly some harm is tolerated, for example when delivering chemotherapy for cancer, or undertaking surgery which is known to have certain complications, because consideration of the other principles tell us
our actions are right despite doing harm to the patient. Non-maleficence is a principle we should follow unless, in a specific circumstance, honouring other principles gives us good reason to over-ride it.

3. Beneficence

Beneficence, or the principle of bringing benefit to the patient in therapeutic endeavours, is related to the more passive principle of non-maleficence. Beneficence similarly has obvious appeal and as such risks being ill considered because it ‘goes without saying’. However, we should be reasonably certain of the benefits of our interventions before they may be considered right. For example, the performance of gastric lavage (stomach washout) on a non-consenting patient after a trivial overdose some hours earlier is ethically unjustifiable as there is insufficient benefit to override our principles of respect for autonomy and non-maleficence [86]. Benefit may be perceived by the professional delivering the care or by the patient receiving it. Ideally both perceptions will be similar, but this ideal is not always achieved, particularly if the patient is unable to communicate their perception. A ‘patient centred’ standard of beneficence describes an outcome which “now or in the future would be regarded by the patient as worthwhile”[87]. The different perspectives of a ‘professional centred’ and a ‘patient centred’ standard of beneficence will be revisited in this thesis.

In order to consider the benefit, information is needed regarding the outcomes of our interventions and to this end research becomes an ethical necessity so that we have the evidence upon which to judge competing principles.

4. Justice
The principle of justice is an essential balance to the first three principles, which apply primarily to the individual. Justice, or the concept of fairness, is best addressed by questioning whether or not there are any others who might be adversely affected by a particular action. For example, in a mass casualty incident the performance of a hopeless resuscitation may be unjust as it deprives another of resuscitation facilities. The concept of distributive justice might influence which services are purchased by the state and in the case of the lady with the femoral neck fracture it might be unjust to the family to allow her discharge home, as they would be expected to care for her.

Applying the other principles to this case may help the deliberations regarding the rightness of the actions. There is a question of injustice to the family as already mentioned but the weight of this injustice cannot be determined without consulting them. The benefit of the operation and the harm avoided by not allowing the patient home are significant and lend further weight to the rightness of the doctor’s actions. However the principle of respect for autonomy has not been honoured. The patient is an autonomous person and overriding her autonomous choice represented a significant insult to the patient.

In summary, the modern emergency physician may make moral decisions in the context of the principlism espoused by Beauchamp and Childress, considering beneficence, non-maleficence, respect for patient autonomy and justice, and weighing the relative merits of application of these principles in a given scenario.

However, the emergency physician undertaking resuscitation faces difficulties, despite this assistance. The patient is usually cognitively impaired by an altered level of consciousness, is commonly frightened, and often in pain. In this context respect for patient autonomy is difficult to achieve. The likely benefits of resuscitation are hard to define, not only because the published data on resuscitation outcomes are poor and
frequently they have limited application to the individual in question but also because the resuscitators are working in a relative vacuum of information regarding the patient’s background health and physiology. The harms of resuscitation are generally not considered as their discussion is all but absent in the medical literature [88], and they are difficult to predict in the information vacuum suggested above. The decisions are urgent, and consequently rushed, and the milieu is emotive.

Consequently resuscitators recognise pragmatic difficulties and personal observation, based on sixteen years of resuscitating, suggests they err towards a paternalistic consideration of beneficence as they perceive it, or towards seeking guidance from a proxy. Both of these will be discussed in subsequent chapters, however neither necessarily correctly answers the question; “what is the right thing to do?” Before these issues are explored further it is necessary to go beyond principlism to consider alternative perspectives on moral decision making in medicine.

**Beyond Principlism**

Soren Holm [84] is among those who criticise the principlism of Beauchamp and Childress. He argues that they have developed a “common-morality theory”, “taking its basic premises directly from the morality shared in common by the members of a society - that is, unphilosophical common sense and tradition.” He continues by claiming that their theories are developed from American common morality and therefore mirror certain aspects of American society, and may, for this reason alone, be untransferable to other contexts and other societies.

In addition he claims they have underdeveloped the positive obligations incorporated in beneficence and justice, with consequent undue emphasis given to autonomy and non-maleficence. He concludes that “we are presented with a structure for moral reasoning
which cannot give any definite answers to moral problems, or perhaps more accurately
can produce almost any answer we want.”

Beauchamp and Childress, in the fourth edition of their book, defend the ‘four principles
approach’ against the criticisms of Holm and others [89]:

Principles guide us to actions, but we still need to assess a situation and formulate
an appropriate response, and this assessment and response flow from character
and training as much as from principles...Almost all great ethical theories
converge to the conclusion that the most important ingredient in a person’s moral
life is a developed character that provides the inner motivation and strength to do
what is right and good.

Holm, in his criticism, identifies an influence of “communitarianism”, he describes as an
American “common-morality”. Gillon alludes to the influence of a “virtue ethic”, by
emphasising the role of character in decision-making. I will progress this discussion of
caracter shortly.

In addition to Holm, others have voiced criticism of the four principles of Beauchamp and
Childress [90,91] some of which have been responded to in the fourth edition of the book.
Professor Beauchamp himself, in his defence of principlism, writes that at least many of
the contemporary alternative approaches to bioethics are both valuable and mutually
consistent, not mutually exclusive rivals; and some of them are “much more like good
friends than hostile rivals” [92].

John M Stanley discussed the international application of the principles in his description
of the important deliberations of the ‘Appleton Project’ [93]. In 1988 thirty-three
delegates from 10 countries gathered in an attempt to create guidelines for medical
decisions concerning the end of life. One year earlier most of these delegates had
discussed a number of cases which had raised persistent ethical issues, and after the
second meeting a set of guidelines was published as ‘The Appleton Consensus: Suggested International Guidelines for Decisions to Forgo Medical Treatment’ [94]. Subsequently 152 groups in 15 countries were tasked with renewing these guidelines and the comments of these were used to refine and revise the guidelines in 1991. A number of important insights were gained through this process, and some of these will be presented in this thesis, however, of significance now is the way the four principles were accommodated. The groups accepted that the four principles were a starting point for deliberation regarding the cases, summarising the values and norms upon which to build discussion. However, concern was raised that, when applied to the context of a real case and a real decision, rigid application may screen out relevancies important to the decision making.

Howard Brody wrote, in the study edition of the guidelines (1990) [93] that “we must replace rules-language with virtue-language and return to the task of addressing questions of character and integrity which rules-approach tends to ignore”. It was suggested that the four principles be considered ‘ideals rather than laws’ or ‘rules of thumb’ not kept or broken but ‘approximated’. Nicholson [95] writes: ‘The four principles are rationalist, and derived from theory, with little to say to the complexity and joyful variety of real life’ and continues to argue the attraction of the four principles to doctors, who have a tendency to embrace formulaic structure for the resolution of problems in medicine. However, the devotional application of the principles, as if they are the solution to the problem, may be a problem in itself. The principles are the starting point for deliberation, with the “complexity and joyful reality of real life” requiring thought beyond this structure. Nicholson quotes George Weiss [96] Professor of the history of medicine who observes: “In their analyses of complex situations, ethicists appear grandly oblivious to the social and cultural context in which these occur, and indeed to empirical refinements of any sort.” Finally he emphasises the importance of the “moral agent”, somewhat separate from the four principles, but assisted by the structure they provide. In essence he emphasises the significance of the patient’s context, and the importance of the doctor’s virtues. He suggests that the way forward is the development of duty-based ethics, which
seek the answer to the questions: “What ought I to do?” and embodies the “moral agent” employing the four principles as one consideration, among several.

The task for the resuscitator, charged with the responsibility of making moral decisions, is not easy, and attempts to provide a simple framework for moral deliberation are insufficient without character and the exercising of it. However good character alone, is not enough. Gillon argues, in a paper entitled ‘Conscience, good character, integrity, and to hell with medical ethics?’[97] that ‘it is a necessary part of medical and indeed premedical, education that students and doctors are educated to have a good conscience, a good character and integrity, but as soon as attempts are made to explain what is meant by these qualities the need for some sort of additional critical analysis becomes apparent.’

Good character, or virtuousness, includes good conscience, integrity and other virtues, which make a good doctor. However, to argue that the virtues are the cornerstones of moral philosophy, and that doctors do not need to understand the philosophical underpinnings of their morality; they simply have to be of good virtuous character, is to offer no assistance to the resuscitator. If virtues, be they related to conscience, integrity or others, define “what ought I to do” then the virtuous resuscitator, without an understanding of moral philosophy, nor a template for moral decision making, would simply need to follow his or her “gut feeling”. If the question is “should I relieve this man’s pain?” or “should I tell this lady the truth about her condition?” then the virtues of compassion, and truthfulness give clear guidance. However, when the questions become more difficult, and the context more complex then further help is required. If there are treatment options which each bring varying and unpredictable benefits and harms, and it is uncertain how the patient would perceive each of the mixes of benefit and harm which might ensue, and the likely mixes are changing continuously as the patient does or does not respond to treatment then reliance on one’s virtues is insufficient.
A final word on principlism goes to Gillon:

The four principles plus scope approach (scope refers to an assessment of the degree of application of each of the principles to a specific situation) approach is clearly not without its critics. And the approach does not purport to offer a method of dealing with conflicts between the principles. But I have not found anyone who seriously argues that he or she cannot accept any of these prima facie principles or found plausible examples of concerns about health care ethics that require additional moral principles.

The four principles plus scope approach enables health care workers from totally disparate moral cultures to share a fairly basic, common moral commitment, common moral language, and common analytical framework for reflecting on problems in health care ethics. Such an approach, which is neutral between competing religious, political, cultural and philosophical theories, can be shared by everyone, regardless of their background. It is surely too important a moral prize to be rejected carelessly or ignorantly; for the sake of mere opposition; or for the fun of being a philosophical “Socratic gadfly” [98].

For the resuscitationist then, the four principles of Beauchamp and Childress, promoted and defended by Gillon, provide a valuable template, around which their virtuous character can work allowing the “moral agent” to speak. However, significant difficulties persist, relating to urgency and impaired patient competence, and these were discussed earlier in this chapter. For practical application in resuscitation medicine, this template needs to be developed further.

**Narrative ethics**

It is not my intention to develop a treatise on theories of moral philosophy, nor their application, but instead to develop a method for resuscitationists to determine what is the right thing to do, and to minimise the harms of resuscitation medicine. To this end case-based ethics and narrative ethics deserve consideration. Nicholas and Gillett [99], in their presentation of a narrative approach to teaching medical ethics, support the four principles approach but add,
However, the limitations of principles are now becoming obvious. There are philosophical difficulties with criteria for application of the principles, problems with how one resolves conflict between principles, and an unease amongst practitioners arising from the realisation that the realities and practicalities of clinical practice are not paid sufficient attention.

As already suggested in this chapter the realities of resuscitation medicine introduce enormous difficulties into the application of the four principles.

Casuistry is case based ethics, without necessarily having reference to a philosophical framework. In this way cases, and the resolution of the dilemmas they present, form the framework for subsequent deliberation [100]. Cases become precedents, and for doctors an experiential method is attractive, as much of medical expertise is based on previous experience. However, precedents, without an independent framework within which the precedent develops risk the promulgation of assumptions, misperceptions and bias by not subjecting cases to critique within a defined moral framework. Even so, experience remains an important contributor to decision making in resuscitation medicine. In particular, prior experience of the likely benefits and harms of a resuscitation endeavour, in a similar case, should aid decision making.

Narrative ethics, (like casuistry), recognises the centrality of story or narrative in ethics[99];

A narrative ethic recognizes that events (such as decisions about whether or not to consent to chemotherapy) are embedded in the total narrative of people’s lives. Clinical choices are not isolated from all else that happens in people’s lives but are part of an ongoing narrative. Moral choices made, like all decisions, are part of an effort to live a life that has coherence and meaning. The health professional and the patient do not make choices on the basis of abstract principles (although these may aid reflection) but on the basis of their efforts to live a life with some sort of integrity.

This approach to ethics recognizes that human understanding is socially situated, that we develop our sense of what is right or appropriate, what is good or is to be resisted, out of our total life experience - the people we have known, the previous
experiences we have had, the ideas and frameworks that have made sense in the past. Rather than trying to find an approach, which escapes from or removes the specifics of culture, history or relationship, a narrative ethic seeks to make visible these particulars and to take seriously the messy and complicated business of negotiating meaning and action. The meaning of an event, and the action to be taken, must embody the framework of goodness which that person inhabits.

Narrative ethics differs from casuistry. Although both use the case as the focus, narrative ethic sees the case from the perspective of the narrator – the patient [101,102]. As such the story is told as it relates to the patient and from within their context. Contributing to the content and the emphasis of their narration will be their values, life experience, influences on their lives such as loved ones or belief structures, their fears and aspirations.

Brody [103] describes a doctor-patient interaction beyond the patient-narrator and doctor-listener. He describes a ‘relational ethic’ with the doctor as co-author, constructing a joint narrative of illness and medical care. The “right course of action” [104] may not relate cleanly to an abstract principle, but instead, without significantly violating principles it may be the action which best accommodates the desires and needs of the main characters in the patient’s story. Indeed multiple characters (patient, doctor, family, other loved ones and friends, social workers, nurses etc) may contribute to the narrative with multiple stories to be heard, with each being influenced by the chosen course of action [105-108]. Narrative ethics promotes two related influences in medical ethics. In medical ethics education the use of the patient’s narratives and other real and fictional stories contribute to an understanding of principles of medical ethics, and their application in a certain context (including the difficulties of their application). In addition the techniques validated in literary criticism can be practiced (who’s the narrator?; is the narrator reliable?; from which angle of vision does the narrator tell the story?; what has been left out of the narrative?; whose voice is not being heard and why?; what kind of language and imagery does the narrator use?; what effect does the language have on meanings that emerge from the text?) [101] and the honing of these skills may aid the understanding of the patient’s narrative. The use of literature [109] and film [110] for this purpose has
been well discussed and a useful summary of some important contributions to this
discussion was recently published by Anne Hudson Jones [101].

A review of the use of literature in medical ethics education, although interesting, is
beyond the brief of this thesis but suffice it to say that literature has assisted students of
medical ethics in the examination of ethical dilemmas in a defined context, the honing of
skills required for narrative analysis, oral reflection about what it means to be a good
person and a good doctor, and simply to help students “read in the fullest sense” [111].
“Although still controversial”, writes Jones [101], “the use of such stories as literary cases
to complement the teaching of principlism is the most basic way in which narrative has
been important to medical ethics.”

In addition to education the influence of narrative ethics of most relevance to this thesis,
is its potential to aid in decision making regarding real patients during the heat of
resuscitation. In this context it may seem, intuitively, to have less relevance. In
resuscitation medicine decisions are fast and often not well informed, the setting does not
promote the telling of and the listening to stories, and the patient may be in no state to
relate their narrative, even if time could allow it.

Resuscitators, perhaps more than most doctors, prefer a defined algorhythmic structure to
aid decision-making. Brody [104] points out that narrative ethics attracts the criticism
that it is a “soft” structure of decision making, without the rigour and the certainty of
principlism. It relies, it seems, on intuition and ad hoc opinions. However he develops an
argument suggesting that the clean scientific lines of the four principles, have more in
common with a narrative approach than is apparent on first analysis. The psychologist
Jerome Bruner [104] suggests that understanding and meaning have been achieved
through telling stories about the world we live in, and that all ways of knowing, including
the scientific, are in some way derivative from the narrative method. Rules, or principles
of science, describe patterns observed commonly in story after story. Principles then, are
a distillation of these common patterns, observed in recurring narratives, but removed
from them, and erroneously perceived as unrelated. “Thus the four principles”, explained Brody [104], “can serve as a tightly compressed synopsis of a very large body of experience.” James F Childress, in discussing the “misplaced debate” of “narrative versus norms” (he uses the term ‘norms’ in this context to mean moral norms, of behaviour, which include the principles he and Beauchamp champion) concludes that “we need both in any adequate ethics. Each plays a corrective, enriching and enhancing role in relation to the other.”

These authorities, who compare, contrast and ultimately combine the merits of principlism and narrative approaches reinforce the role of the principles as a starting point, to be applied with flexibility, within the relevant narrative. When the doctor and patient are strangers, as is commonly the case in resuscitation, and when opportunity conspires against appreciating the patient’s story, then principlism will have a larger part to play but the patient’s story should not be dismissed as a consequence of these difficulties.

**Summary**

The resuscitationist is guided by the four principles framework espoused by Beauchamp and Childress. Within this he or she exercises his or her virtuous character, and calls upon the experience of previous cases, particularly to aid prediction of the likely benefits and harms, which might ensue. In addition, and of great importance, he or she comes to know the patient’s story; his or her context, values, aspirations and world view and the interaction between the lessons learnt, the character of the agent and the narrative of the situation promotes the right course during resuscitation.

However, coming to know the patient’s story is difficult in resuscitation medicine - the patient may be unable to relate his or her story and urgency limits opportunity. Even so, I
will argue that the patient’s life story remains relevant to decision making in resuscitation medicine and how this is achieved will be entertained in subsequent chapters.
Chapter Four

Patients’ stories

In this chapter we will come to know three patients through three short stories. Each reveals to us, the readers, something of the central character’s context, but in each a differing amount of that context is available to their resuscitating doctors and nurses. The three stories are original works of fiction and consequently the characters are wrapped in a descriptive prose (much as real patients are wrapped in their own life context) which may seem out of place in an academic thesis of this kind. However, the use of fictional literature in medical ethics and education is an established trend which I discussed in the previous chapter. The use of stories in this thesis is a deliberate extension of the previous discussion of narrative ethics and the stories will be repeatedly referred to in subsequent chapters. As such these stories are superbly relevant to the evolution of a decision making method for resuscitators.

One story (Brian) is unfolding in the context of a resuscitation and gives us an indication, in a somewhat irreverent way, of the chaotic evolution of a resuscitation. Another (Agnes) describes a medical interaction, prior to a subsequent need for resuscitation and provides an opportunity to consider decision making with and without knowledge of the patient’s context. The third (Graham) has no bearing on the subsequent resuscitation at all, but lets us come to know the patient prior to his life threatening injuries. For the two stories not describing a resuscitation, a brief footnote has been added revealing how these two characters subsequently found themselves undergoing resuscitation.
In the chapters which follow, development of a moral decision-making process will incorporate referral to these 3 characters, and in summarising this thesis, I will come back to these stories again.
Story One.

Brian:

A life saved.

The vapours escaped his struggling chest. "Bubble bubble," through the viscous soup in his oropharynx. Down his cheek, the soup would dribble, like minestrone tears it fell, "plop, plop, plop," upon the ambulance stretcher. "Glurf", came the vomit through a mouth already full. "Blurp," followed a rush of vapours. "Glurf, blurb, bubble, plop," he continued like a boiling mud pool with his pink complexion getting muddier and muddier as he went.

"Quick, onto his side," said the young Doctor as he buttoned his white coat across his Bob Charles shirt. "Roll him onto his side."

"I'm a bit worried about his neck," said the Ambulance Officer who explained that the muddy man had fallen from a height and hit his head, hence his state of unconsciousness. A state which hadn't altered since his girlfriend had reported the accident to them.

"Well let's suck him out then," said the Doctor while turning on the suction at the wall and manoeuvring the suction catheter into the muddy man's overflowing mouth.

"Glurf, blurb, bubble, slurp."
“I don’t see any bruises,” said the Doctor as he continued to suction down the throat, up the nose, “slurp, slurp, slurp.”

“He’s pretty well out of it,” he continued as he quickly examined the muddy man. “See if you can get a good story from the girlfriend,” he gestured with his dripping sucker to a fellow doctor who had followed him in.

“I think we’ve met before,” he said to her as he sat down in the red seat opposite the red couch she sat upon.

“I did some of my nursing training here,” she sniffed and wiped her right cheek, as if to wipe a tear but there were no tears.

“Is he....?”

“Just a friend,” she said.

“What happened?”

She explained that he had been standing on a stool, which was balanced on a chair. He was reaching for something on top of the cupboard, a vase apparently, some flowers he’d bought.

A good friend perhaps?
She’d warned him, even to the extent of refusing to hold the stool steady, but he did it anyway. He overbalanced of course. She should have held the stool. What a fool.

She wiped the other cheek. There was no need to.

The fridge sticks out a bit, perhaps it was that, or maybe the edge of the cupboard. Whatever he hit, he hasn’t woken up since.

“The fridge, or maybe the cupboard,” he reported to the Doctor in the Resuscitation Room, “whatever he hit he hasn’t woken up since.”

“Damn this,” said the Doctor as he leant over the muddy man’s right arm. A newly placed needle sat in a vein bulging under the pressure from a tourniquet placed up stream. Blood dribbled freely from the needle’s open end and splashed upon the Doctor’s Reeboks as he searched desperately for the syringe he had placed handily just a moment ago.

The muddy man was looking a darker shade of grey despite having an oxygen mask on his face. His vomiting had not been controlled, but at least the mask was managing to contain it.

“Glurf, blurb, bubble, plop, plop, plop.”

“Any past history?” said Doctor One to Doctor two.
"Has he had any problem with his health in the past?" he asked her as he returned to his red seat opposite hers.

"In the past?" she echoed. Her eyes pierced his pupils with parallel emerald green laser beams. He began to repeat the question but only a high pitched whine came out. "No," she replied charitably, but she had turned away by now. A cigarette was perched on the edge of an ashtray and she took it, shook off the ash and then ground its filter through its face. "I didn't used to," she explained referring to the extinguished cigarette. She had started during her psychiatric nursing. Many psychiatric nurses smoke. Most of the patients too. He had smoked.

Which was he?

While she focused on lighting another cigarette his eyes were free to leave hers and look about a little. She was pale and thin. Her fair hair didn't sit upon her head but merely hung from it. Her dress showed no pride, but despite all of this her big green eyes promised unfathomed depths, and when they darted about the room, as they frequently did, he was drawn to follow them. He was drawn to leap and devour them like a fish jumping for flies. She was alluring. She was captivating. He was lured. He was captive. "I met him during my psychiatric nursing," she offered after drawing on her cigarette and giving a smoky sigh. He'd had a period in hospital, she explained, but that was a long time ago. She dismissed it as irrelevant and he accepted it as such.

"Nothing of note," said Doctor Two to Doctor One.
The muddy man had turned to clay. Pale and rigid. (Pale, rigid and occasionally twitching.) Some local seismic activity would periodically cause his right arm to shake briefly. His right leg would occasionally shake with it. The doctors’ eyes met across their patient. They silently shared the educated fear that two Californian seismologists might also share; the big one will come at any time.

“Valium,” cried Doctor One as he opened a cupboard. “Valium,” he repeated as he went through a drawer. “Valium,” was echoed around the room and eventually an ampoule of valium was unearthed, although it was not immediately clear whether it was intended for the doctor or the patient. “Drawn up and diluted with saline,” he instructed and he went to the clay man’s twitching right arm. As he did so the clay man arched and let out a muffled cry. His oxygen mask strained on the elastic strapping around his head and vomitus sprayed out each side between the mask and his cheek. He sprang up from the trolley, levitated, with only his heels and the back of his head maintaining contact. His bed clothes were thrown to the floor and a thin fountain of golden liquid arced away from his groin in a gentle curve over the room to his right.

With vomit in his left coat pocket and urine in his right the Doctor tried, with little success, to steady the clay man’s rhythmically shaking right arm. The syringe full of valium, with needle bared, was advanced repeatedly towards the mobile drip port in the clay man’s right forearm. Twice he plunged it into the patient’s skin, once into his own left thumb and finally into the rubber bung of the drip port. On this last occasion a violent jerk of the clay man’s arm saw the syringe, the needle and the drip fall out of the clay man’s arm and roll upon the floor.

“Rattle, rattle,” the clay man shook his trolley.
“Drip, drip, plop, plop,” various bodily fluids fell upon the floor.

“Rattle, rattle, drip, drip, plop, plop,” it continued until, after a few minutes, the rattling stopped and the clay man settled back onto his trolley.

Doctor One examined the back of the clay man’s right, and then left hand, searching for somewhere to replace the fallen drip. “There are scars on his hands” he said, “and his feet,” he noted. “Find out about the scars on his hands and feet,” he said to Doctor Two.

“His eyes took his and tried to convince them that she didn’t know what he was talking about.

“What happened to his hands and feet?” he asked as he settled back into his red chair. Her eyes gave up and joined her hands in her lap.

“They’ve been there as long as I’ve known him,” she muttered. That was two, or maybe three, years ago now. They had met in hospital, but he knew that already. She was a nurse, he was a patient. He had scars on his hands and feet even then. She didn’t know how he got the scars. He didn’t like to talk about it. He felt that no one would believe him. No one believed him about anything else he said so mainly he said nothing. He was so quiet, so lonely, so determined.

Her eyes sank beneath the waves. “It was probably the crucifixion,” she said as she wiped her eyes with the back of her hand. There were tears there now.
She never used to believe it. She used to think he had made the marks himself, perhaps with a cigarette end. He never used to argue the point. If he did he was ridiculed. If he was ridiculed he would withdraw completely. When he withdrew they would give him pills to open him up. When he tried to explain that he was really Jesus Christ they would give him pills to quieten him down. She hated it at that hospital. She hated it for him.

“Jesus Christ.” He said.

“How?” echoed Doctor One as he peered down the clay man’s throat. An instrument in the Doctor’s left hand held the clay man’s tongue to one side and lit the way with a small battery powered bulb. With his right hand he fed the suction catheter down as far as he could see, and a little further, to clear the debris in the clay man’s airway.

“Slurrup, slurp, slurp, slurrrup,” it sounded as the sludge slid up the transparent tube and disappeared into a plastic container. Periodically the doctor would have to pull the catheter out and remove a large piece of vegetable that had become stuck in the end of the tube.

“Slurrup, slurp, slurup, slop.”

Bending and craning the doctor caught a glimpse of the clay man’s vocal cords. With his left hand holding steady and his eyes held fixed on his target, he lifted the suction catheter in the air and said, “The tube, give me the tube.” The suction catheter was taken and a thick, clear plastic tube put in his right hand. Careful not to move his eyes nor his left hand he manoeuvred the tapered tip of the tube towards the tenuous view of the clayman’s vocal cords. With his eyes and his hands delicately poised he advanced the tube. As he
did so the tip of the tube obstructed his view completely. To compensate he pulled more firmly with his left hand on the instrument controlling the clay man’s tongue. The side of the tongue herniated around the instrument and to compensate he pushed more firmly with his left hand. A little more of the tongue squeezed through and so it continued until a critical volume of tongue was on the wrong side of the instrument precipitating an uncontrollable avalanche of tongue across the doctor’s line of sight. As he adjusted the instrument in order to round up the renegade tongue the battery powered bulb lighting his way flickered and died.

“Jesus Christ!” he repeated.

“Yes, Jesus Christ.” said Doctor two from near the door.

Doctor One, looking up now towards Doctor Two, advanced the tube blindly down the clay man’s throat, hoping it continued nicely through his vocal cords into his airway and not down his oesophagus towards his stomach.

“There we are,” said doctor one confidently and he proceeded to secure the tube in its present position. He then attached a rubber bag to the open end of the tube and he squeezed the bag in an effort to inflate the clay man’s lungs.

“Buddle urp,” it sounded.

He squeezed again. “Buddle urp,” again, like someone breaking wind in the bath. He squeezed again, and again, and again.

“Buddle urp, buddle urp, buddle urp.”

“Find out more about the psychiatric problem,” said Doctor One as he squeezed again.
“Is he still taking his medication?” he asked her.

“No, not for a long time,” she replied.

“Is he still seeing the people at the hospital?”

“No, not for a long time.” Her eyes bounced about the room again looking for a place to hide. They settled on the picture over his right shoulder. A farming scene. A print. A farmer standing beside a pile of hay with a horse and a cart close by. A previous occupant of the room, while waiting for bad news or worse, had taken to the picture with a black felt pen. The farmer’s peasant pants had been opened at the top and a generously proportioned caricature of a penis was protruding. The horse also had become a stallion. It was a logical extrapolation, she thought, that since their sexuality was displayed, expression of their sexuality must be pending. As the farmer and the horse were the only two creatures in their world this expression must be with each other. She smiled.

Doctor Two smiled ignorantly, but enquiring as he did so.

“The picture,” she explained, pointing. She described her thoughts. He crossed the narrow room and sat on the red couch beside her so that he could more easily see the picture she was discussing. She laughed again. He smiled, but in sympathy not in humour.

“Do you think I’m crazy?” she asked turning to him.

“You’re just a little upset,” he replied.
She took this to mean yes, but with extenuating circumstances.

“He’s not crazy,” she said.

He didn’t like it at the hospital. He seemed to get more and more medication. He used to have a glow, a radiance, a shine. The more they gave him the more the shine would fade. She knew him best and she could see him slowly disappearing. Who cares if he’s Jesus Christ or not. Whoever he is he was being bled dry. It wasn’t quick, it wasn’t on a hilltop, he wasn’t being nailed to a cross, but he was being crucified all the same. They were crucifying him, for the same reasons they did the first time.

The first time?

They didn’t believe what he said and they felt uncomfortable when he said it. That’s the reason, nothing more. He wasn’t dangerous, he wasn’t a problem to anyone.

The tide came in again and filled her emerald eyes. She turned away from him, leant her head in her hands, and sobbed at her knees. He put his arm around her shoulder and pulled her close to his chest. “It’s all right,” he said, “It’s all right.” He found his lips brushing the back of her head and pulled away at the realization.

She turned and looked up to him.

“Have you saved him?” asked Doctor Two of Doctor One.

“It’s not looking good,” replied Doctor One as he continued to squeeze the rubber bag. He wasn’t looking good, the clay man. His stomach was distended and hard. Rock hard. His skin was dry and cold. Stony cold. The clay man had turned to stone.

The screen monitoring the stone man’s heart bleeped away in the background while displaying a straight green line with occasional regular spikes.

“Beep, beep, beep.” regular and monotonous.

His stomach grew with each squeeze of the rubber bag. “Buddle urp, buddle urp, buddle urp.”

Doctor One would repeatedly detach the rubber bag and send down the suction catheter to stem the welling tide of vomitus escaping up the tube.

“Slurrup, slurp, slurrup, slop.”

“Bleep, buddle urp, beep, slurrup,” it continued until the heart monitor made a sound as if the little man inside going beep, beep, beep was being garrotted.

“Eeeeeeeeeeerwwwww”

The stone man lay unperturbed.
The screen of the monitor no longer showed an occasional regular spike on the straight green line but instead a pattern like a child’s first drawing. Doctor One muttered some profanities and squeezed harder and faster on the rubber bag.

“Buddle, buddle, buddle, buddle.”


Doctor One dropped the bag and pressed the green button on the defibrillator machine. A crescendo whine emitted from the machine. When it reached its peak a green light came on indicating that the machine was charged to 300 joules. He took a paddle in each hand. Each paddle looked like a travel iron, one marked sternum, one marked apex. With both paddles pressed firmly on the stone man’s chest Doctor One pressed the little red buttons on the paddles in unison. An ambulance officer leaning on the trolley at the stone man’s feet flew across the room and the stone man jumped and flopped as if he had just been dropped from a height but only the bounce was witnessed.

“What about this?” said a nurse as she picked up and reconnected a wire that had fallen from the stone man’s chest. Immediately the monitor returned to the straight green line with regular occasional spikes.

“Ah that’s better,” said Doctor One and he returned to squeezing the rubber bag.

“Beep, beep, beep, beep.”

“Buddle urp, buddle urp.”
“Shurp, slurrup, slop.”

“Eeeeeeeeee,” the little man going beep beep beep began screaming again. All eyes looked at the monitor screen. Now the straight green line with occasional spikes was shooting up and falling down and rolling round and round. The little man going beep beep continued to scream without drawing a breath and it seemed the other little man in the machine, the one who wields the green pen, was having some sort of convulsion.

“Ah, don’t worry,” said Doctor One, “it’s just a loose connection somewhere.”

Meanwhile the stone man was losing what little colour he still had. He became white, with occasional purple blotches, and his skin went tight and shiny. The stone man had turned to marble. There was not a flicker of life from his body, just the steady expansion of his ballooning belly. Occasionally, beyond the incessant screaming of the heart monitor, a faint sound could be heard coming from the marble man’s bottom. “Flurrup, flurp, flurp, flurp, flurp,” it sounded, every time Doctor One squeezed the rubber bag.

“Buddle urp, flurrup, flurp, flurp, flurp.” As Doctor One forced more and more air into the marble man’s stomach he would passively break wind in response.

“Eeeeeeeeee. Buddle urp, flurrup, flurp, flurp, flurp.”

The marble man wasn’t looking good.

“Things are not looking good,” said Doctor Two as he returned to his seat on the red couch beside her.
“Is he going to die?” she asked.

“I think so,” he said.

“Damn him,” she said and she began to sob into her knees. He took her by the shoulders once more and they stayed that way for a while. He noticed there had been an addition to the picture opposite them. A pencil outline of a naked lady was peering around from behind the haystack. The farmer now had a choice.

“I had no choice,” she said.

He sought explanation.

“I promised I would save him,” she continued. She had promised she would take him away from it all. So she took him away from hospital. She stopped all his medication. She took him home to her flat. She was fascinated by him, she felt so terribly sorry for him, perhaps she even started to love him. He had started to love her. The more comfortable he had become with her the more he had expressed his belief that he was Jesus Christ. Before long he was Jesus Christ all the time at home. Soon he was Jesus Christ out of the home as well. He would preach to the neighbours. He would threaten people with Hell’s fire. He would give up all their worldly goods and claim God would provide. Nothing was provided. Once the police brought him home after he had knocked over some stalls at a Church fete. She had to care for him. She lost her job. She was away from work too often. Her friends faded away. He was a thorn in her side, a yoke around her neck, a millstone. She began to hate him.

He had asked if she believed him. She had said that she did. Perhaps truthfully. He had told her he couldn’t live without her. He was dependent. Totally dependent. She had become his drugs.
She was trapped. She sought help. She got drugs. Antidepressants. She took them occasionally but mainly she saved them up. She had promised that she would take him away from it all. She had promised that she would save him. She had no choice. He couldn’t live without her. She couldn’t live with him. She had no choice. Neither of them could live.

They made a pact. They made a date, today’s date; a suicide pact for today’s date. They each would have half of her tablets. They would both die. They would both be free. Today came. She fed him half of the pills, and then she fed him the other half of the pills.

There was a knock at the door. A blood splattered Reebok pushed through with Doctor One’s Levied leg following closely behind.

There stood Doctor One in the doorway. His white coat looked like an uncooked pizza. He unbuttoned his coat and planted his hands into the pockets of his Levis. Standing up on his toes and then rocking down onto his heels he lay his chin against his chest and looked at the floor.

“I’m afraid,” he said and Doctor Two pulled her close to his chest, “he’s died.” There was a trickle down her cheek.

“I’d just like to know,” continued Doctor One. “We found antidepressant drugs in his blood you see. Is there any chance.......?”
“We were just discussing,” interrupted Doctor Two. “It seems her tablets have gone from her purse. He must have taken them some time before he climbed up to get the vase.”

Doctor One nodded, grunted understanding and retreated. Doctor Two held her firmly against his shirt until they were alone again in the small room.

“Don’t worry,” he said and he took her face in his hands and leaned his close to hers. “I’m going to take you away from all this. I can save you.” He stood and reached out his hand. “Come with me,” he said.

She went with him.
I had a rather busy day today. I had a heart attack and I met a most delightful young man. He looked after my heart for an hour or two. If I was sixty years younger he might have had it forever. Ha, but there I go again reminiscing about things that never happened. Perhaps I am stupid. I told him I wasn’t.

“Just because I’m old it doesn’t mean I’m stupid,” I said.

“You don’t have to be old to be stupid,” he replied.

“But you have to be stupid to get old,” I told him.

What a cheek he has. He suggested my age was irrelevant and that I’d probably been stupid all my life. What effrontery!

I’ve always thought they were arrogant little men, these young doctors. Prancing about in their ivory fortress picking on the sick and injured. What evil little dictators, what twisted masters of the power play. ‘I’m well and you’re sick and I hold the key to your future. Your pain is on my leash. Your disease is playing to my baton. Your future is in my hands. Give up and concede, you belong to me.’ What presumption.
And this young man had the gall to tell an old lady, more than three times his age, that she’d been stupid all her life. What a delightful young man.

“I must go home,” I told him as I’d told the doctor before him. I felt fine. Most of my pain had gone, (I might have told him all of it had gone), and I really felt quite well.

He showed me a strip of paper. It had a tendency to roll up at both ends and when he freed one hand to point to one of the relevant squiggles thereon, it would roll right up into a cylinder. I must confess I found it rather comical. But this strip of paper was apparently very serious. It was a vital piece of evidence that he repeatedly thrust in my face as if it was a murder weapon put before the accused in the dock.

“Members of the Jury, herewith exhibit A, a tracing of the heart of the accused. You will note that there is irrefutable evidence of a heart attack caused by decades of profound and blatant stupidity. If only this stupid old lady had given her heart to me sixty years ago.”

Ah but again, I reminisce about what never happened.

I was his age sixty years ago. At twenty-five I used to think about things that had never happened. At twenty-five I would call this dreaming. At eighty-five dreams cannot come true, there just simply isn’t the time. At eighty-five I call this reminiscing. The things that never happened never happened in the past.

“What will you do for me in hospital?” I asked him. He told me there was a ten percent chance I would drop dead. I tried to explain that this was very good news to me, for at the age of eighty-five I expected the chance to be much greater.
He seemed amused by the concept that having a heart attack reduces the likelihood of death and he suggested to the other young doctor that this warrants further research. He smiled, and so did I, but no one else did. We seemed to stand together, him and I, quite separate from everyone else thereabout. A machine went beep beep beep. Some feet went clonk clonk clonk. The other doctor went tut tut tut, but we two smirked like children. He might have taken my hand and we might have run off, laughing, to play in the garden. It would be spring time of course. I would twist the daisies into a chain and he would throw them into the air. We would whisper a few secrets. We would go up the hill and disturb the sheep just before lambing. We would watch the pregnant ones waddle uncomfortably away. We might be teenagers now and he would lie back in the soft spring grass on the hill and unbutton his shirt to let the sun warm his belly. I would put a sheep dropping in his belly button while his eyes were closed and he would jump up and shout out, laughing and cursing, and he would chase me back down the hill again, his shirt flapping behind him in the warm spring breeze. He might be older now and I would hold him tightly, his uniform tickling my skin, until he joined the parade up the gang plank and off to sea.

“And what if I drop dead in hospital? I hope nobody is going to leap out of the closet and thump on my chest.”

No answer was offered and I assumed therefore that someone might. How ludicrous. “Wake up and twist the daisies,” I said bluntly.

I fear I might have said something silly as it suddenly seemed that everyone’s eyes were focused on mine. Each of the eyes was saying “Well there you go, she certainly is stupid.” Each of the eyes, that is, except for his two. “What a delightfully stupid lady,” his said to mine.
“You can’t waste time and money, and drugs and equipment on someone who is naturally trying to die. I’m not afraid of death. Only dreamers fear death. It’s their tragedy if they die before their dreams are realised, but I have no dreams at all. I’m too old for dreams. I reminisce instead.” I suspect I was rambling somewhat but I felt a need to put my case. It is my heart after all, and I wanted to go home.

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“We will be able to manage at home?” he asked of me.

“The mood turned. The eyes turned and left the room. His stayed. What a delightful young man. His were the only eyes that listened. There before them, a stupid rambling old lady, but he heard what I had to say. He could see my point of view. He could see inside of me. He could see my heart. I suspect that he could see that today’s scar was nothing compared to the scar I’ve had for sixty years. We chatted for a while. I hadn’t chatted for a long time. My friends are mostly dead and the rest chat with their families. I never had a family. I can only reminisce.

He asked about my home. I told him. It’s quite plain of course but I can manage the kitchen, and there’s a seat in the shower. I like my showers. I told him about my other houses, especially about my father’s. What a grand house. It’s gone now. Wooden houses can’t last forever. It was near the bottom of the hill. Three stories high with a veranda around the first and chimneys atop the third. Except for along the main road there were very few houses up the hill in those days. It was all paddocks with a few pockets of bush. The sheep would meander about the paddocks and the fantails would flit about in the bush. Often in the summer the fantails would come down to our garden and sing to us. It seems quite absurd now but I used to be obsessed by the fantails in our garden. I was sure I could befriend them. I was sure that they considered me a special person.”
“It’s all right,” I would softly say as I inched closer, “It’s only me.” I was buoyed by apparent progress. I seemed to get a little closer to one everyday but always they would dart to a higher branch when I reached out my hand.

I reached out my hand and he held it as we chatted. What a delightful young man. I cannot remember the last time anyone held my hand. I can remember the first time. It was autumn, in our garden. Eventually this particular hand led me away from the fantails. They didn’t consider me a special person at all, but he did. Oh he most certainly did. And I, of course, thought he was a special person too.

“You know,” I told him, “there’s nothing more special than knowing someone thinks you’re special.” He agreed of course. I reminded him that he thought I was stupid. He said that there’s no reason I can’t be special and stupid at the same time. He explained that he had a dog like that and proceeded to illustrate both the dog’s stupidity and her specialness. Well that’s good enough for me. At eighty-five who can hope for more. I am stupid, but I’m special too. I laughed and squeezed his hand. I wanted to put my arms around him and his around me. I wanted to hold him tight. For sixty years I’ve waited to hold him again. For sixty years I’ve waited.

Do you know I can barely recall the view out my kitchen window? I sit and look at it everyday but I could not tell you the shrubs in the garden, nor the houses across the street. Yet I have etched clearly in my mind the scene as he climbed up the gang-plank, the tickle of his uniform the last time he held me, the smell of the gorse flowers as he chased me down the hill, and the feel of his hand as he led me away from the fantails. I was up the hill a few years ago. It was a bus trip for the old and stupid. We walked a short distance to some picnic tables when suddenly the warm spring breeze brought the sweet smell of gorse flowers to my nose. I turned and smiled expecting to see him there, his shirt
flapping behind him as he laughed and cursed and chased me down the hill. I wouldn’t have run this time. After all, I’ve been waiting sixty years.

“Can I get a bus home?” I asked him. I had called the ambulance you see. I must confess I was rather frightened when the pain began. I thought I was going to die. How silly. What a stupid old woman I am. Of course I’m going to die. You know, I think I might have panicked when I called the ambulance. They took me to the hospital.

Ah fate, you’ve been quite cruel to me you know. When I was full of the vigour or youth you led me up the garden path. How I rushed after you, fresh as the warm spring breeze, lively as a fantail, light as a daisy I ran, faster and faster until the path ended. Fate, you led me up a dead end path and then you made me wait there. I waited and I waited. You gave me good health and a long life simply to make me wait longer. When I was fresh and lively and light I had to stand and wait. When I was old and tired and heavy I had to stand and wait. Ah fate, you’ve been cruel. But today, in my final moments, you’ve shown me some sympathy. I thank you for that. Perhaps, one day, I might bring myself to forgive you.

But today fate, today was a busy day. I had a heart attack and I met a most delightful young man. A very special young man, and he thinks I am special too. He offered me a lift in his car. He was soon to finish work and he said he would drop me home. “Are you sure you won’t get into trouble?” I asked him.

“Of course not,” he assured me.

I imagined his car to be small, new and red but it was big, old and brown. He helped me into the front seat and on with the seatbelt. The car was full of the smell of musty dog.
My coat was covered in dog hairs when I got home. It seems I was sitting in the dog’s seat. The stupid and special dog. What an honour.

I didn’t know the way of course and he didn’t have a map. I told him I was old and stupid and he agreed. I think he might have even been getting a little grumpy with me. We drove for quite a while, but I was in no hurry. I smiled as he grew angry and he smiled too, when he saw mine.

I was twenty-five and he was taking me home.

We ended up at a house near the bottom of the hill. I don’t know how we got there. “That’s not my house,” I said. My father’s house used to be here somewhere. “This hill was all paddocks and bush.” I told him about the sheep and the fantails, the warm spring breeze and the gorse flowers.

“Wake up and twist the daisies,” he said.

We laughed, and drove on.

My house was not on the hill. My house was some way away. There was no gorse for miles and I hadn’t seen a fantail for years. A cool autumn wind blew from the south and jingled the chimes over my neighbour’s veranda.

“Cursed noise,” I thought as he led me to my door.

He took my keys and opened the door. He briefly searched the small house, but I assured him that I never have visitors. He turned on the lights and the heaters and put the jug on to boil.
“Is this your son?” he asked of the photo atop of the fridge.

Is this my son indeed. I told him he was young and stupid. “That photo is sixty years old,” I said. I had no son. I was your age when that photo was taken and so was he.” I was as fresh as the warm spring breeze, as lively as a fantail, as light as a daisy and as sweet as the smell of the gorse flower. I was rich too. Rich beyond my dreams. At times my wealth overwhelmed me. I would cry in his arms and he would ask me “what’s the matter?” I tried to explain but he thought I was stupid. Young and stupid. I was so happy then that every now and again I was consumed by a fear that it couldn’t last. I was so dependent. I was so vulnerable. Fate is a burglar. I was right, it couldn’t last. “Don’t be stupid,” he would tell me, “It will last forever.”

“He was young and stupid, just like you,” I said.

He poured the tea and I told him about my life. A simple story really, it stopped sixty years ago. “I like to reminisce,” I said, “I especially like to reminisce about what might have happened.”

“It still might,” he said.

Ha, reminiscing before the event. Who knows?

He put the cups in the sink. I didn’t expect him to wash them. I apologised again that I had no cake. “Don’t be stupid,” he said as he pulled on his coat. “Will you be all right?”

The southerly was icy cold now as it whistled through the open door.
“I’ll be fine.” I took his arm to reassure him but he remained as he stood. “Off you go,” I said.

He wiped a tear from my eye with his thumb. I got a surprise, I didn’t know there was one there. The sleeve of his coat tickled my cheek. And then it happened. Who would have thought? Reminiscences can come true. He took me in his arms and pulled me tight against him.

He took me in his arms.


I’m tired now. After all, I’ve had a busy day. I had a heart attack and I met a most delightful young man.

I think I’ll go off to sleep.

My heart needs a rest.
Footnote: In the early hours of the following morning Agnes’ neighbour, with the cursed wind chimes, hears a crash as Agnes knocks over the kitchen table during her fall to the ground. After some minutes of calling and knocking she eventually gains access to Agnes’ house through the bedroom window. She finds Agnes, calls her husband and then calls an ambulance. She learnt CPR some years ago through her husband’s Rotary Club, but she wasn’t sure if this was the right time to do it, nor if she could remember how.

The ambulance finds Agnes to be in ventricular fibrillation and after several minutes of resuscitation they manage to successfully restore Agnes’ heart to a normal rhythm. She is transported to hospital, with a good, strong pulse, but she hasn’t woken up. Indeed, she is not even able to breathe without the paramedic squeezing the bag.

In the Emergency department, across the hall from where she lay the previous day, a new set of doctors and nurses begin her hospital treatment. Her cardiac rhythm is unstable, reverting to VF from time to time. They wonder how long they should carry on with CPR and defibrillation.

Soon, the resuscitating team are joined by another doctor who claims to know Agnes quite well.
All the good lines are gone son, else I would have one for you. That I could turn a phrase until it caught the light. But that’s an old one, and it’s not even mine. All the heroes are gone son, else I would be one for you. That I could sit at your mother’s table with you two, but I am an old man and time has burgled me.

Did I ever tell you about your mother?

I was not much older than you son. I was driving then, my father had taught me. “Beware of ladies in Morris Minors and men wearing hats,” was his advice to me. Advice I still heed, although you don’t see many of either these days. I expect they’re all piled up in a roadside ditch somewhere.

I could give you worse advice son. So beware of ladies in Morris Minors and men wearing hats, and also Moonies at the door, reds under the bed, lumps in the milk, men telling you to be all you want to be, women expecting you to be all you long to be, fathers wanting you to be what they wanted to be and, most of all, beware of becoming obsessed about what might have been.
Forgive me for being less succinct than my father. Perhaps the world was more succinct in his time. Anyway son, just beware. Ah, a succinct sermon, a laconic lecture.

Just beware son.

Your mother would agree.

It was Friday night. I had no good lines then either, but who needs them. I poured a few drinks, mainly for me, but once or twice for her. She learnt my name while I could still say it and I carved hers into my heart.

The room faded in a melancholic haze and I sat in the corner and watched her through my beer. Sometime between then and passing out in the avocado dip I stood beside her as we all stepped in turn and rolled our arms to Saturday Night Fever. I was John Travolta, only sharper and lighter. After kicking a few shins and elbowing a few chests I asked her to watch me in the big game tomorrow.

Whether I exaggerated my importance or whether my dancing impressed her, I'll never know, but she assumed I was a rugby player of renown and she told me she would come.

I went back to my corner to have a celebratory drink and a swim in the dip.

It was some time before I awoke. The party was an old dog. Two friends were sleeping in the onion and cheese dip respectively. A couple was engaged in a form of sex very popular at the time. Vertical, swaying to “Hey hey my my”, fully clad, with their crotches rubbing noses through two layers of denim.
“Rock and roll can never die.”

I awoke with a hunger. The avocado dip had wet my face and my appetite. I gathered my two moribund mates and we planned a mission to the ‘Dog House’, the only takeaway bar open at that hour.

“One friend had a Morris Oxford. A solid green mound of British steel which looked, and moved like a tortoise. I was elected, by a vote of two to one, to be the least drunk and therefore the driver. Of course I was rotten, but like seatbelts, car seats for babies, and helmets for cyclists, drunk driving hadn’t yet become an issue. I cringe now thinking of this. The potential consequences were horrendous and I know many similar trips for a midnight feed have ended in tragedy. The financial consequences for the ‘Dog House’ are impossible to measure.

Beware son, I implore you again. We are blessed now with an increased awareness of our impending mistakes. I hope that is enough to warn us away from them. I must point out that it hasn’t been enough for me but I have the backbone of a volvox. I am sure son that you are built of more sturdy stuff.

It was a column shift, the Oxford. I’d never driven a column shift before but I didn’t let on. Utes and vans have column shifts and to admit I couldn’t use one was to admit I’d never been associated with utes or vans before. Anyway my friends had an altered state of consciousness. Sufficiently altered to tolerate my graunching, lurching hunt for a forward gear without passing comment. In fact they didn’t seem to notice that we never left first gear and that, even for the Oxford, we were travelling extremely slowly. At 5 miles per
hour a Morris Oxford can still put a reasonable dent in the back of a parked Honda Civic. Needless to say, with no conscious witnesses, I felt the dent was needless to mention.

It must have taken an hour, and all of my available concentration, to manoeuvre the Oxford onto Riccarton Road, around the park and through town to the Square. I was exhausted. I’d managed to burn half a tank of petrol travelling all the way in first gear and I wasn’t keen to drive home. Even if I could reverse out of the ‘Dog House’ carpark it was unlikely that we’d make it home if I was driving, so I was pleased to see my comrades emerging from their stupor as the Oxford’s motor spluttered to a halt.

They awoke with a vigour, a second wind.

Make the most of second and, God willing, subsequent winds son. At my age it is a struggle mustering the first, and a second is tantamount to fantasy. It was God’s cruellest punishment, for Adam and his descendants, to ensure that the wisdom of age and the vigour of youth only meet in passing. I would swap some of my wisdom for some of that vigour, for acquiring the knowledge when the energy is gone is a most depressing wisdom. That Friday night even the vigour of youth had deserted me. I was knackered. I had a strong urge to fall asleep in the car and the sight of the clientele of the ‘Dog House’ did nothing to entice me out. Everyone in the ‘Dog House’ was wearing a jacket with words and pictures on the back. Some of the jackets were sleeveless and the arms protruding looked a little like my legs except they also had words and pictures all over them. The general theme of all the words and pictures was something to do with Satan, Hitler or death. The occasional girlfriend’s name, or a tribute to an undoubtedly long-suffering mum, was scattered among the less friendly messages but did nothing to soften the overall impression.
I announced that I would stay in the car and promptly feigned sleep. Soon after my two friends had left and I had safely locked myself in the car, real sleep followed, and a most fitful sleep it was too. I was engulfed by a most extraordinary dream. There was a paddock, a rugby field. It was so neatly kept that the grass almost glowed, as if each blade had been polished and ironed. A few trees, (pines, willows, an oak or two), were scattered around and a haze floated amongst them, glowing in the afternoon sun. The haze drifted and lifted revealing two teams engaged in rugby; West Melton, the home team, my team and Lincoln, the champions, the visitors.

Through the thinning fog I could see the far side of the paddock where the West Melton right wing should be, where I should be. Perhaps, my son, I was at the pinnacle of my rugby playing career. I was playing in one of the most glamorous positions in one of the best teams in the country competition. I had trained long and hard for this. Originally I had aspirations of being one of the big men of rugby, a tight forward, but unfortunately I wasn’t big. I embarked upon a training programme of eating, running and lifting weights. I enthusiastically accomplished eating but unfortunately I replaced running and lifting weights with drinking. Such excesses of youth become very apparent when youth deserts you.

I wasn’t a great tight forward, nor much of a loose forward, in fact, I must confess my son, that I was put on the right wing in an attempt to keep me out of the way, to minimize the damage. When first relegated to the wing I had dreams of being a fast elusive hero. I would practise my side step with the pine trees in the park until one day a tree got the better of me and I found myself prostrate amongst the pine needles, with blood dripping from my nose.

Even without talent my son, without fitness and without dedication, I was still the right wing for West Melton seniors; the pinnacle of my career. But now, my dream suggested,
my pinnacle had passed, for the player standing on the right wing was not me. I had been further relegated from beside the sideline to over it. And what a familiar face my replacement had. She was shorter than I, with her 6-month pregnant belly perched upon her varicose legs. She looked at me and waved like mothers do; more conspicuously than you would like.

My mother was playing on the right wing in my place, and I found myself again within her pregnant abdomen. I had, with the licence that dreams allow, a view from within my mother’s uterus and a view from the sideline: a womb with a view.

Foetal, I vicariously played right wing, with a panoramic view besides.

The scoreboard saw my team leading the champions by 3 points with full time showing on the clock. The champions were bearing down on our line. The ball was moving through their backs and each would fall in turn, but not before they had passed the ball further wide. Our centre took their fullback who had joined the back line inside their centre, and that, fate decreed, left my mother to take both their centre and their left wing.

It was the ultimate dilemma, the gut churning, tossing and turning sweaty stuff of nightmares. Option one; take their centre, but risk letting their left wing in for the try. Option two; stay with your opposite number, allowing their centre the chance to score the winning try.

My mother needed guidance, she needed my guidance. “The man with the ball,” I cried, “when inside your twenty-five always take the man with the ball.” She took no heed. Her pregnant belly and varicose legs stood firm, determined to take option two.
"The centre will take the gap and win the game," I screamed, but still she took no notice. Oh, but for strong useful limbs.

Their centre took the gap. I covered my eyes and wept.

Suddenly my world was thrown around and I sloshed about inside my mother’s womb, bouncing against the walls like an astronaut in zero gravity. It seems, my other view suggested, that their centre had passed the ball to their wing despite a clear passage to the try line and my mother had then made the tackle on her opposite number with heroic ease.

Now we lay, my mother and I, beneath a gathering pile of rugby forwards. They pushed and rucked, and rucked and mauled. Back and forth I sloshed within my amnion. Back and forth they rocked the Morris Oxford. Two great tattooed uglies grunted obscenities and shook the car in which I slept. I awoke and gathered my orientation. There I was being tossed about inside a Morris Oxford by two Neanderthals who plainly wanted to take the car for a ride. I didn’t allow myself to be demeaned by the fact that they saw me not as an obstacle to their car conversion, but more as a means of gaining access to the vehicle. In fact, as I seemed so little of a threat to them I immediately agreed that any resistance would be pointless. I had a duty to turn up to the big game in reasonable physical condition. What’s more it wasn’t my car, so I promptly let them in, gave them the keys and lent them ten dollars for petrol. It made me feel good to be so generous and I only briefly paused to think that the usual inspiration for charity isn’t the fear that you’ll get the stuffing beaten out of you. In fact, I only briefly paused period as my two fed and watered friends were emerging to inspect the ruckus. I suspected that they may portion some of the blame for the loss of the car to me, so I deftly slipped into the shadows behind the Cathedral and I began the long walk home.
It's the coldest time of the night, just before the dawn, and I felt it as I pushed through my front door and staggered inside. In the kitchen last night's dinner still sat in the pan on the stove. Hungry as I was I pushed the pan aside and decided on toast and jam. An easy choice in theory, but in practice using our toaster was a laborious task. It was a fine old British toaster with flaps at each side that opened like wings but hinged at the bottom not the top. Like a bird on its back or perhaps a Gullwing Mercedes that had rolled on the high road to Monaco and now lay with its wheels facing skyward. When the inverted wing doors were opened a piece of bread was slotted in each side and the doors closed again. A plume of smoke was an indication to turn the bread to toast the other side although a degree of anticipation was recommended.

I had eaten four pieces of toast and jam before pieces five and six were ready. I took these last two and reclined on the couch. No sooner had I bitten the corner of number five than I was drawn, once again, into a disturbing sleep. In my dream I was sitting upon a giant old British toaster with wing doors hinged at the bottom. I was driving the toaster around the streets of Florence alongside the Ferraris, Lamborghiniis and Maseratis. I seemed to be attracting a good deal of attention. People would look, and point and laugh as I rattled by.

As my dream progressed there appeared in the sky over Florence a flying saucer, and from its massive underbelly there came a beam of green light. The beam dilated to engulf the whole of Florence and into that beam were sucked Italian sports cars like rice bubbles into a vacuum cleaner. The alien sports car enthusiasts then sped away into the stratosphere leaving my British toaster and a few tourist buses the only vehicles in Florence. Suddenly I found myself the toast of the town. The pretty Italian girls would smile and wave and I would wink and rattle on by. My Toasterossa was the smartest vehicle in Florence.

Then I saw her. Your mother stood across the Piazza.
She caught my eye. I waved. “Stay there,” I mouthed, “I’ll drive around”.

“OK,” she gestured.

The road cleared. I accelerated away, but my Toasterossa didn’t budge. I looked behind me. There was a tourist bus on my electrical cord, and a line of buses behind it. Your mother stood patiently fending away the advances of the Italian men.

“Hurry up,” she yelled, “I can’t say no forever.”

The buses were beeping and German and Japanese obscenities flowed from their windows. I couldn’t go forward, I couldn’t reverse, your mother couldn’t say no. I was in jam. What a jam. Strawberry, adherent to my face. I awoke with a start, and a piece of toast stuck to my forehead.

“Stay strong” I muttered, “Wait for me.” And then I drifted asleep again, with jam in my eyes, toast on my head, your mother on my mind, and the remaining alcohol in my circulation being metabolised into something that gathered behind my eyes and gnawed away at my brain.

I felt like I hadn’t slept for long, but when I awoke it was apparent that I had. The clock read ten past three. The game had started ten minutes ago. I gathered my gear and mounted my bicycle, but despite occasional bouts of furious peddling I arrived at the field with only moments left to play.

There was a stoppage. My team, West Melton, the home team, were on defence. Lincoln, the champions, were huddled in conference as the St John’s man attended to an injured
West Melton player. The scoreboard showed West Melton ahead by three points with full-time on the clock.

Then I saw her. Your mother stood across the field. She caught my eye. I waved.

“Stay there,” I mouthed, “I’ll come around.”

“OK,” she gestured.

I waited as the St John’s man helped our limping right wing from the field and then I set off to liaise with your mother. She looked delightful, as she sat upon the bonnet of her dented Honda Civic. I did you a great service son, choosing her to contribute the other half of your genome. Her eyes glowed and her hair shone back at the sun as she chatted to a man nearby.

Who was that man? He looked Italian.

Suddenly my progress was halted by a hand on my shoulder. I was directed to replace our injured right wing.

“Stay strong,” I whispered to her as I took to the field. “Wait for me.”

The game recommenced. The champions were bearing down on our line. The ball was moving through their backs and each would fall in turn, but not before they had passed the ball further wide. Our centre took their fullback who had joined the backline inside their centre, and that, fate decreed, left me to take both their centre and their left wing.
It was the ultimate dilemma, the gut churning, tossing and turning, sweaty stuff of nightmares. Option one; take their centre but risk letting their left wing in for the try. Option two; stay with your opposite number allowing their centre the chance to score the winning try.

I glanced to her. Your mother’s eyes were fixed on me. She awaited my decision, oblivious to the idle chatter of her Latin lover.

“The man with the ball,” I thought, “when inside your twenty-five always take the man with the ball.”

“Stay with your man,” I could hear my mother whisper, “always stay with your man.”

I made my decision. I had solved the ultimate dilemma. I smiled at her. “Watch this,” I thought and then I dived.

Not option one, not option two, I went for option three. Straight between the two of them I dived. Airborne between their centre and their left wing I had executed the ideal trajectory to intercept the inevitable pass. Your mother stood on tiptoes with her hands up to her mouth. Hopeful and expectant; these were the height of her feelings for me.

I doubt she ever appreciated the brilliance of option three, nor had explained to her that the execution is almost as important as the outcome. I will never be able to tell her these things my son. I would ask you to enlighten her to the merits of option three. I would ask you to tell her that there are many like me; heroes but for the flight of the ball. I would ask you, but that, of course would be impossible.
I don’t recall which of them actually scored the try. They both trotted across our try line untouched and one of them must have had the ball as I saw nothing of it. I lay winded, face down on the dirt. My belly flop onto the paddock was my only contribution to the game and I suppose it’s not surprising that your mother was not impressed. As I turned my head to spit out the grass I saw her walking away, her delicate shoulders protected from the easterly wind by an Italian arm.

If I had saved the try she would have leapt in the air for me. If I had broken my neck she would have run to me. But these things never happened, and, I will always regret my son, neither did you.
Footnote: Graham is the name of the man in the resuscitation room of the emergency department. The driver’s licence in his wallet tells that much. It also confirms his late middle age, but reveals little else. There is no indication of next of kin. There are no photos of a wife, nor children. He looks somewhat dishevelled - unshaven, a couple of teeth in need of repair and clothes he might do the garden in. He smells of alcohol too, and this, everyone is thinking, certainly contributed to him driving off the road. His car had been in that ditch for maybe an hour or more, before his cold, pale unresponsive body had been pulled out of it.

His head injury is severe, he is shocked from internal bleeding and his pelvic fractures will take months to heal.

“How aggressive should we be with this one?” a doctor asks another.
Chapter Five

What about consent?

New Zealand law, reflecting common law and statute elsewhere [112,113], has formalized a patient’s right to accept or refuse treatment options in the Health and Disability Commissioner’s Code of Health and Disability Services Consumers’ Rights 1996. This code is a regulation under the Health and Disability Commissioner Act 1994, and applies to all health and disability support services in New Zealand, including the service provided in emergency departments, and by others who resuscitate.

Right 6 of the code is the ‘Right to be fully informed’ and Right 7 is the ‘Right to make an informed choice and give informed consent’ [114].

Right 6 (2) states:

Before making a choice or giving consent, every consumer has the right to the information that a reasonable consumer, in that consumer’s circumstance needs to make an informed choice or give informed consent.

Right 7 states:
(1) Service may be provided to a consumer only if that consumer makes an informed choice and gives informed consent, except where any enactment, or the common law, or any other provision of this code provides otherwise.

(2) Every consumer must be presumed competent to make an informed choice and give informed consent, unless there are reasonable grounds for believing that the consumer is not competent.

(3) When a consumer has diminished competence, that consumer retains the right to make informed choices and give informed consent, to the extent appropriate to his or her level of competence.

(4) Where a consumer is not competent to make an informed choice and give informed consent, and no person entitled to consent on behalf of the consumer is available, the provider may provide services where

(a) It is in the best interests of the consumer, and

(b) Reasonable steps have been taken to ascertain the views of the consumer; and

(c) Either:

(i) The consumer’s views have been ascertained, and having regard to those views the provider believes, on reasonable grounds, that the provision of the services is consistent with the informed choice the consumer would make if he or she were competent; or

(ii) If the consumer’s views have not been ascertained, the provider takes into account the views of other suitable persons who are interested in the welfare of the consumer and available to advise the provider.

(5) Every consumer may use an advance directive, in accordance with the common law...

(7) Every consumer has the right to refuse services and to withdraw consent to services.

In the development of a decision making method for resuscitationists it is not my intention to consider the requirements of New Zealand, nor any other, statute, but instead to build it from sound moral argument. However, the code of Health and Disability Services Consumers’ Rights does serve to illustrate components of current thought regarding consent for treatment. Firstly, it emphasises that informed consent is the expectation, but that variations are possible when the patient is not competent to give informed consent. One option is to ask a “person entitled to consent on behalf of the consumer”. Another option is to act in a way “consistent with the informed choice the consumer would make if he or she were competent,” using information previously ascertained from the consumer,
or by taking into account the views of other suitable persons. The code also recognises that advance directives may be used "in accordance with the common law."

Each of these will be discussed further, but we may take from the code, as it is written, that one should get consent, when possible, but at times achieving consent is not possible. The code does nothing to alter the common view that "consent" means "informed consent" and that an inability to get "informed consent" means that consent is not achievable, and instead a guided beneficence, or soft paternalism (paternalism will be explored further) is all that is required.

In resuscitation it is common practice not to seek, or to ignore, the wishes of the patient, and instead to presume that resuscitation is the right thing to do based on arguments of beneficence and non-maleficence. Thus, it is generally perceived that consent is not required because resuscitation brings benefit, and prevents harm, and because the patient is not in a state to give or withhold consent. Similarly, the concepts of "withholding" and "withdrawing" life sustaining treatments, as discussed in Chapter One, have emerged from, and have reinforced, a common, misperception that resuscitation may only be "withheld" or "withdrawn" if there is permission or strong justification to withhold or withdraw. Otherwise the life sustaining treatment must proceed.

These perceptions leave resuscitation on its own among the medical interventions as one where permission is required to stop it, in contrast to all others (as reiterated by the code) where permission must be obtained to start it. However, there is no rational, moral, nor pragmatic argument to support this position. Although informed consent is difficult, due to urgency and impaired patient competence, there are alternative forms of consent able to be used. Before I discuss these, I will briefly review the elements of "informed consent", as other forms of consent can be compared to these.
Beauchamp and Childress present seven elements of informed consent [115];

(i) Threshold Elements (Preconditions)
1. Competence (to understand and decide)
2. Voluntariness (in deciding)

(ii) Information Elements
3. Disclosure (of material information)
4. Recommendation (of a plan)
5. Understanding (of 3 and 4)

(iii) Consent Elements
6. Decision (in favour of a plan)
7. Authorisation (of the chosen plan)

In the three patients’ stories presented earlier, each of the characters found themselves undergoing resuscitation. Agnes was unconscious after a cardiac arrest; Brian was unconscious after a drug overdose, the recipient of a messy resuscitation, which clearly was not going well. Graham was unconscious after road trauma, which included a severe head injury. None of these three had competence to understand and decide, nor voluntariness in deciding. Although information is occasionally imparted to patients with drug overdose, or head injury in the expectation that they may receive some of it, and find it reassuring, none of these three was in a situation where the three information elements could be realistically achieved. Similarly, they were neither able to decide nor to authorise the chosen plan. In summary it appears the elements of informed consent are irrelevant in these, and similar patients undergoing resuscitation.

However, on further consideration of the patients’ stories, some of these elements were entertained. Agnes had discussed the possibility of cardiac arrest previously and had expressed a desire not to be resuscitated from such a state. She had revealed, through the
elements of her life story she related, the context which saw her make this choice. When she ultimately presented for resuscitation, the resuscitators knew nothing of this. However, when they were joined by the doctor who knew Agnes’ story then some of the elements of informed consent were present.

During the previous discussions Agnes was competent and voluntarily expressed her decision. Indeed, she had reached a decision counter to that suggested by the medical staff, indicating an independence from any persuasion. Elements of informing were present, although we are left unaware of the detail. The story implied Agnes had the information she required, and understood it. Finally, Agnes clearly reached a decision and expressed it firmly. The resuscitators may still question the relevance of the previous dialogue to her current state. Does it still apply? Might she have changed her mind? Did she really understand it would be like this? However, a clear indication of Agnes’ wishes is available.

Graham, however, had given no such indication. He is severely injured after a car crash and the resuscitators know no more about Graham than is revealed by his driver’s licence, and the battered, dishevelled body in front of them. We, the readers, know of a disappointment, relating to love and the possibility of fatherhood, from his earlier life, but even with this knowledge it is difficult to predict how he would consent to treatment. Indeed Graham’s case illustrates a number of difficulties. The ‘threshold elements’ for consent are absent. The ‘information elements’ are impossible to relate to Graham in his current state. Indeed, they are difficult to relate at all. As was discussed in the ‘Outcomes’ chapter, predictions of outcome in a relative information vacuum is difficult. He is likely to have a persisting neurological injury if he survives, and he will need several weeks in bed, in hospital before he gets home, if he ever does. As things stand, with his constellation of injuries, the chance of him surviving at all is probably about one half. However, there is uncertainty and an excellent outcome remains a small, but real possibility. How does Graham view this information?
We, who ‘know him’, might suspect that his life’s regrets would leave him without a passion for life, that he would not risk survival with a significantly impaired quality of life in the slim chance of a good outcome and perhaps that his crash was not accidental but was a manifestation of his sadness and a deterioration into social isolation and alcohol dependence. However, even this is supposition, and insufficiently robust to base a decision of such importance. Furthermore, his resuscitators know nothing of Graham’s past and therefore must presume that Graham is a typical, average, man of his age, in his society. Perhaps then, he would want what the typical, or average man would want.

Brian, the first patient, whose resuscitation we witnessed, poses a further set of difficulties. In his story, his life unfolded through a close friend, relating it to a doctor as the resuscitation proceeded. The information forthcoming was valuable but was piecemeal, spread throughout the resuscitation. The whole story was revealed only as the resuscitation finished. Furthermore the information relayed to the ‘chief’ resuscitating doctor was second hand, and suffered a little in the transmission. Brian’s friend, who acted as his proxy for giving and receiving information, had issues of her own, which may have meant she didn’t necessarily represent the views of Brian. In this setting any form of consent, fulfilling the seven elements suggested by Beauchamp and Childress, is unlikely.

If I am to persist with my assertion that consent must be obtained for resuscitation, just as for any other medical intervention, then how might this be achieved?

Informed consent is difficult, as it is unlikely the seven elements will be present when the patients have greatly lowered competence, the situation is urgent, the information is trickling in, and the likely benefits and harms of an intervention are changing as the patient does or does not respond to resuscitation. However alternative forms of consent
are options, and a number of descriptions have been used for types of consent used in the emergency department [116].

Implied consent describes consent that is implicit in the fact that the patient used the emergency services, and therefore is agreeable to all that entails. Implied consent criteria are commonly used for those who present, of their own volition, for non-invasive medical care. However, patients undergoing resuscitation tend to be brought in by others, usually ambulance staff, in a state of impaired autonomy. Furthermore, implied consent confers the right to administer that treatment the patient would reasonably expect when they present. If the patient’s attendance is non-voluntary (i.e. without their will, and occasionally, for example, after attempted suicide, against their will) with impaired autonomy, and with ignorance of exactly what is going to happen and what the outcome might be, then the patient cannot imply consent and we cannot infer it.

Construed consent is a modification of implied consent, suggesting that if consent was obtained for an intervention then it could be construed for a related intervention. For example, if the patient called an ambulance, implying consent for ambulance care, then consent for more advanced care in the emergency department, could be construed. However, the initial inference of consent is flawed as suggested above, and therefore construed consent, on this basis, has limitations. Even if the initial implied consent was robust, extending that consent to more and more interventions creates difficulties. Each intervention brings with it a new balance of benefits and harms both because of the intrinsic properties of the intervention and because the patient has changed (got worse or better) in the interim. Any previous acceptance of a perceived balance of benefits and harms becomes redundant as the balance changes.

Presumed consent is appropriate when impaired autonomy renders the patient incompetent to give informed consent. Consent can be presumed if, based on a balance of
beneficence over maleficence, it is perceived that this patient, or another reasonable person, would consent in the same circumstances. In some common law precedents a “reasonable doctor standard” rather than a “reasonable person standard” of consent is employed. That is, consent can be presumed if a reasonable doctor, considering benefit and harm, and using accepted treatments, would also manage the patient in the way intended. Presumed consent is the model used in resuscitation most often. However, although the principles of beneficence and non-maleficence are well respected, autonomy is less so, and even beneficence and non-maleficence are seen as the resuscitators see them, and not as the patient might view them.

In Agnes’ case, the resuscitators have explicit guidance as to how she would perceive them. In Graham’s case, there is no guidance, and the resuscitators must proceed on the basis of a “reasonable person”, or “reasonable doctor” standard. How would the average, reasonable, late middle-aged man in this society, in this context, view the pros and cons of the intended interventions?

The use of the “reasonable person” standard, as opposed to the “reasonable doctor” standard, may encourage the resuscitators to take a view outside of their own personal context, thereby lessening the chance of a paternalistic action disrespecting patient autonomy. The reasonable person standard attempts to apply the patient centred standard of beneficence. I will discuss paternalism further soon, but in anticipation, it is worth stating that presumed consent, although a good model under difficult circumstances, does risk the ignoring or over-riding of the explicit or perceived wishes of the patient. It allows proceeding without seeking to know, and understand, the patient’s story.

Proxy consent is a model seeking the patient’s view, when the patient cannot give it. It involves obtaining consent for resuscitation from a family member, or other person, who is perceived to be able to speak on behalf of the patient. Proxy consent avoids the
criticism of medical paternalism as the decision is taken out of the physicians’ hands, and it is purported to better honour respect for autonomy. However the views of the proxy may not reflect the views of the patient. There may be occasional circumstances where the proxy declines resuscitation because of some financial or other benefit, which might accrue from the patient’s death. In Brian’s story, his proxy had interests which may have worked against a purely altruistic concern for the best wishes of her friend (indeed, one of the resuscitating doctors may also have had a vested interest in the outcome, however, this level of personal involvement is unusual and most often the resuscitators maintain a personal distance by virtue of the fact that they and the patients are strangers). More commonly proxies have a tendency to request more resuscitation than the patient would have wanted, for fear of becoming responsible for their death.

A survey of over 100 emergency nurses at a conference in Christchurch, asking them to consent to hypothetical resuscitations for themselves, and for a parent, for a variety of resuscitation scenarios, revealed that the nurses would tend to decline resuscitation for themselves significantly earlier than they would decline it for a parent. (M Ardagh. Unpublished data).

Proxy consent then, may not strongly respect patient autonomy. A modification is proxy consent with substituted judgement. The important difference is that the proxy is no longer asked “what would you like done for your loved one?”, but instead; “what do you think your loved one would like done?” In this way the proxy is asked to consider the options from the patient’s perspective, knowing what they know of the patient’s story. Of the consent options discussed so far, for the unconscious patient like Graham, with no prior expression of wishes known to the resuscitators, proxy consent using substituted judgement seems to best honour the principle of respect for patient autonomy.
However, it is limited in its ability to honour beneficence and non-maleficence. The likely outcomes (beneficence) of our resuscitation, as discussed previously, represent a probabilistic assessment of a complex interpretation of information, partly based on experience, partly based on knowledge of the published literature, and partly based on how the individual undergoing resuscitation seems to fit the picture. How the individual fits the picture changes frequently as they respond or do not respond to interventions, and as information emerges about their premorbid condition. As already discussed, an accurate description of the pros and cons of resuscitation, in any given context, at any given stage in the resuscitation, is very difficult, even for the resuscitators. To convey this somewhat intangible probabilistic assessment of complex information gathered from different corners of the resuscitators education and experience, in a hurried, emotive and ever-changing milieu, so that a proxy might use it rationally in decision making, is impossible.

Although a proxy, with a good knowledge of the patient, a clear head and no bias, using substituted judgement, may honour respect for the patient’s autonomy as best it can be under difficult circumstances, the resuscitators using presumed consent, best honour the principles of beneficence and non-maleficence.

Finally, the appropriate proxy may not be there when decisions are being made, and even if available may not be consulted due to the urgency of the decision making process. Proxy consent then, although with theoretical strengths, is pragmatically flawed. It is not the answer.

If presumed consent is the answer, what about autonomy? What about the patient’s story? Soon I will present a modification of presumed consent, which addresses this question, but before then, I will briefly discuss advance directives and the difficulties of different perspectives.
Advance Directives

In recognition of the loss of the ability to drive decisions when undergoing resuscitation, and the realisation that resuscitators will resuscitate those who don’t want it or shouldn’t have it, due to ignorance of these facts, many are electing to state their wishes prior to the event, and while still competent. There is much written about advance directives, of various sorts, and I do not intend to review this in detail. Instead I will briefly describe those aspects relevant to my decision making model.

Beauchamp and Childress [117] distinguish two types of advance directives: (1) living wills which are specific substantive directives regarding medical procedures that should be provided or forgone in specific circumstances, and (2) durable power of attorney (DPA) for health care or proxy directives. A DPA is a legal document in which one person assigns another person authority to perform specified actions on behalf of the signer. The power is “durable” because, unlike the usual power of attorney it continues in effect if the signer of the document becomes incompetent.

Although advance directives preserve autonomy, they do produce a number of problems [117]. First, the designated decision maker for a DPA may suffer the same problems of proxy consent described above. That is, a potential bias or conflict of interest, difficulty considering the pros and cons of interventions with limited and complex information in a setting of extreme urgency, lack of availability, or limited time for discussion. Second, some who change their preference fail to change a living will. Third, living wills will often struggle to predict the exact predicament in question. For example, if Graham had recorded a desire not to be resuscitated from cardiac arrest, what does this tell us about his desire to be resuscitated from severe trauma? If he requested not to be left in a severely brain damaged state, does that mean he wishes to forgo a chance of a good outcome? If Agnes had stated she did not want to be resuscitated from cardiac arrest, does that mean...
that she would decline a simple direct current cardioversion to revert her VF, with the potential for an excellent outcome if delivered within a few minutes of the onset of VF (which is not as it was in her story)?

The more vague the living will, the more questions can be asked when attempting to apply it. Did he mean this sort of heart attack? Did she really understand that simple interventions could help in this situation? If we were to ask her right now, would she still want the same thing? The more specific a living will, then the less likely it is to be relevant.

Resuscitation is many different things, and we have already seen that outcomes are variable and difficult to predict, as they are influenced by the premorbid condition, the severity of the insult, by the duration of the insult, by the delay to resuscitation and by the response to resuscitation. To compose a living will with easy application, which is not a blanket refusal of all resuscitation, is difficult.

The New Zealand Medical Association has published a proforma “Advance Directive for Health Care”[118]. It has space for name and address of the patient, at the top, and at the bottom space for the signatures of the patient, two witnesses and either a doctor or legal advisor stating the patient is of sound mind and understands the meaning and implication of the directive. The body of the form states this:

It is my express wish that if I should develop
(a) senile, severe degenerative brain disease (due to Alzheimer’s disease, arterial disease, AIDS or other agency) or
(b) serious brain damage resulting from accidental or other injury or illness, or
(c) advanced or terminal malignant disease, or
(d) severely incapacitating and progressive disease of the nerves or muscles, and have become mentally incompetent to express my opinion about accepting or declining life-sustaining treatment, and if two independent physicians conclude that, to the best of current medical knowledge, my condition is irreversible, then the following points should be taken into consideration:
• In the event of a cardiac arrest, regardless of the cause, I should not be given cardio pulmonary resuscitation.
• Any separate illness - for example pneumonia or a kidney condition - that may threaten my life, should not be given active treatment, unless it appears to be causing me undue physical suffering.
• During such an advanced illness, if I should become unable to swallow food, fluid or medication, then these should not be given by any artificial means except to relieve obvious suffering.
• During such an illness, if my condition deteriorates without reversible cause, and as a result my behaviour becomes violent, noisy, or in other ways degrading, or if I appear to be suffering severe pain, then any such symptoms should be controlled with suitable drug treatment, regardless of the consequences on my physical health and my survival, within the extent of the law.
• Other requests (specify) -

Finally, these instructions are given;

This directive should be kept with the patient’s personal papers, with copies lodged with the GP and legal advisor and in hospital notes where appropriate. The patient is advised to carry a card advising that a ‘living will’ exists.

This is a carefully considered and well-constructed document, giving a set of conditions and responses, which are likely to provoke little argument. It relies on the presence of significant premorbid conditions with a subsequent need for life sustaining care, either related or unrelated to the premorbid pathology. The difficulties for the resuscitators are 1; the ‘living will’ may not be available to read prior to or during the resuscitation; and 2; even if available, the resuscitators may have no knowledge of the premorbid state of the patient. In addition, the decisions seem to be good ones, in that they promote the limiting of unnecessary suffering for those with a poor quality of life. A resuscitator may have more difficulty accepting an apparently bad decision such as a preconceived do not resuscitate order from a patient with a good quality of life and the potential for a good outcome.
The Emergency Medical Service Do Not Resuscitate Order (EMS DNR order) is a document implemented by statute for resuscitation in a number of states of the United States of America, and pending in others [119]. It allows potential patients of the ambulance service the opportunity to formulate an advance directive declining consent for resuscitation. Hall [119] identifies dilemmas posed by EMS DNR orders. The first involves an individual possessing such an order who suffers a sudden catastrophic, yet easily reversible event that could prove to be terminal. Examples given are choking on a piece of meat or an anaphylactic reaction such as that caused by a bee sting. Each of these is easily treated, and if all goes well, the patient is restored to previous health. The second dilemma is an individual with an authorized EMS DNR order who requires resuscitation from a suicide attempt.

Hall suggests that most who make up an EMS DNR order envision it as allowing them to refuse a complex hospital resuscitation and stay in the intensive care unit, but blanket refusal of pre-hospital resuscitation will also negate simple and effective ‘rescues’ like those above. Refusal of rescues of this type are unlikely to be the intention of the patient, and consequently the EMS DNR order thwarts the exercising of their autonomy in these specific instances.

The case of the attempted suicide also causes difficulty. The EMS DNR order is considered an expression of the patient’s autonomy yet the act of attempted suicide is considered, at least until proven otherwise, to be undertaken in a state of impaired competence (impaired by psychiatric illness, causing distorted perception and reasoning).

Hall argues, that for good moral reasons, the EMS DNR orders should be overruled in the circumstances discussed above, as they may not respect the patient’s autonomy and do not respect principles of beneficence and non-maleficence.
For the purpose of decision making during resuscitation any advance directive or other indication of the patient’s likely decision, gives the resuscitators valuable assistance in determining whether they have consent to proceed, but for reasons outlined above, the directive may not be morally binding.

**Different Perspectives**

In the British Medical Journal (BMJ) in 1995 [120] a lawyer, two medical ethicists, a psychiatrist and an emergency medicine physician were asked to comment on two cases in which emergency treatment was required without explicit patient consent. In one a patient with a moderate head injury, but with potential for deterioration and complicated by alcohol intoxication, refused hospital admission and took his own discharge. Twice the police were asked to bring him back to hospital, driven by the beneficent and non-maleficent principles of the treating doctor. Eventually he was persuaded to stay.

The second patient had taken an overdose of opiate and was unconscious. An injection of naloxone, the opiate antidote, caused the patient to wake up at which time he complained about the use of naloxone, which not only pulled him back from a life threatening sedation but also reversed the recreational value of the opiate. He stated that he did not want naloxone again. However, the naloxone has a brief duration of effect and inevitably the patient became deeply sedated again. Were the treating doctors able to give another dose of the antidote, despite the patient’s prior refusal?

In both cases, the clinicians tended toward a pragmatic beneficence. The ethicist also supported treatment. Regarding the head injury patient he explained: “Occasionally the principles of beneficence (or doing good) and autonomy seem to conflict, and such situations require doctors to blend clinical wisdom and the art of negotiation...Clearly any
reasonable patient would want to be protected from the potentially fatal effects of a head injury...I would question the patient’s soundness of mind.”

Unfortunately the lawyer thought otherwise. She considered the patient’s rights to refuse treatment remained, despite a degree of intoxication in each case. She questioned the “legal basis” for the police returning the head injury patient and suggested that “laying a hand on another person without his or her consent may result in an action for battery.” (It should be noted that the BMJ discussions included Professor Grant Gillett of New Zealand, as the contributing ethicist, but the legal context was British.)

Recently, the same scenario, of the intoxicated head injured patient who wanted to go home, was presented to an emergency doctor, a lawyer and an ethicist in Christchurch, New Zealand. (Sam Bloore - personal communication). The New Zealand response was remarkably similar, despite no knowledge of the original BMJ discussions by the contributors. Again the clinician and the ethicist supported treatment to protect the patient’s safety. The clinician would use the least invasive option required to achieve patient safety, and the ethicist the least autonomy restricting, preferring negotiation and conciliation, but both would not allow the patient to leave untreated. The New Zealand lawyer concluded that the patient should not be treated against his will. She decided that the threat to his life was insufficiently high, and the impairment to his competence was minimal, leaving his refusal legally valid. She quotes the New Zealand Bill of Rights Act 1990, Section 11, which has enshrined in law the right of everyone to refuse to undergo medical treatment. Section 196 of the Crimes Act 1961 affirms the fundamental right of every autonomous individual to prevent others from touching them without their consent. The Code of Health and Disability Consumers’ Rights was discussed at the start of this chapter, and also states a right of refusal of medical care. However the code also allows “the provision of the services...consistent with the informed choice the consumer would
make if he or she were competent”, when the patient is deemed incompetent. Also, the Crimes Act 1961, Section 41 states [121]: “Everyone is justified in using such force as may be reasonably necessary in order to prevent the commission of suicide, or the commission of an offence which would be likely to cause immediate and serious injury to the person or property of anyone, or in order to prevent any act being done which he believes, on reasonable grounds, would, if committed, amount to suicide or any such offence.”

And, in section 151, it defines:

“...legal duty to supply that person with the necessities of life, and is criminally responsible for omitting without lawful excuse to perform such a duty if the death of that person is caused, or if his life is endangered or his health permanently injured by such omission.”

The Health Act 1956, Section 126B, allows blood transfusions without consent, to any person under age 20, if it is necessary to save life, and if urgency prevents obtaining consent. The Code of Ethics of the New Zealand Medical Association [122] states that a doctor should: “... render all assistance to any patient where an urgent need for medical care exists.” And so on.

I started this chapter with an element of New Zealand law, but stated that my intention was to develop moral argument, and not to consider the legal framework, which might only serve to impede such argument. However, it is apparent that there are different perspectives on the issue of consent during resuscitation of an incompetent patient. The perspectives mainly relate to firstly, the application of statute (which I have briefly discussed) and common law (which I have not discussed). Despite the legal views
presented, regarding the patients from the BMJ article, it is apparent that applications and interpretations of the law could be used to support any good moral decision.

Secondly, the perspectives relate to the interpretation of competence and the degree of threat to life or limb, (i.e. the strengths of autonomy and beneficence/non maleficence in any case). In the cases discussed the lawyers were wrong. They made a judgement of competence, for which there is some legal authority, and a judgement of threat to life, for which they have no authority, and applied the law according to this judgement.

Application of presumed consent to these patients, assuming they were not drunk and impaired by a head injury and not intoxicated with opiates, nor coming down from a drug induced high, would conclude that a reasonable person under such circumstances, would want the threat to their life removed. If a reasonable doctor standard were applied then such a doctor would accept a minor insult to the patient’s impaired autonomy, (causing the minor inconvenience of hospital admission, or transient loss of drug induced euphoria) rather than a major threat to the patient’s life. With this perspective the Crimes Act, the Code of Health and Disability Consumers’ Rights and common law could be skilfully wielded to defend such an approach.

**Summary**

In this chapter I have argued that resuscitation should be no different to other medical interventions requiring consent to proceed. Informed consent is not appropriate, due to urgency and impaired patient competence, but other forms of consent may be used. Presumed consent and proxy consent are options. Proxy consent using substituted judgement, if ideally applied, may honour the principle of respect for patient autonomy. However, the quality of the proxy, constraints applied by urgency, the emotive milieu, and pragmatic difficulties (such as unavailability of the proxy) conspire to make this form of consent an unlikely respecter of patient autonomy during resuscitation. Presumed consent is a better model for respecting beneficence and non-maleficence, but may struggle, at
times, to respect patient autonomy. The presence of an advance directive helps to respect patient autonomy by coming to know more about the patient, but may not be binding in a resuscitation. Autonomy may conflict with beneficence/non-maleficence and interpretation of the relative merits of these principles can vary.

Before developing a consent model which combines the best elements of the consent options discussed, I would like to discuss the autonomy/beneficence/non-maleficence conflict further under the heading “Paternalism”, and then concentrate on the harms (maleficence) of resuscitation.
Hippocrates wrote in his work "Epidemics"[1], "As to disease, make a habit of two things: to help, or at least to do no harm". The primacy of helping (beneficence) and doing no harm (non-maleficence) has pervaded medical practice until recent times. Beauchamp and Childress [2] expound a principled approach to biomedical ethics and specifically they promote the principle of autonomy while accommodating the traditional principles of beneficence, non-maleficence and justice. A discussion of this thinking has already occurred but in this chapter I will briefly expand the principle of respect for patient autonomy before discussing the competing concept of paternalism.

**Autonomy.**

The word “autonomy” is derived from the Greek “autos” (self) and “nomos” (rule) and refers to an individual’s moral right to self governance or to determine his or her own destiny. An autonomous choice is actual self-governance by someone who is an autonomous person. Autonomy implies a competence to be autonomous which includes
abilities to receive and understand information, to reason and deliberate based on that 
information, and to make an independent choice free from undue external influences. 
Competence is a continuum and so is autonomy. In other words, it is wrong to consider a 
person as being either autonomous or non-autonomous or competent or non-competent. 
For example, a man with impaired intellectual ability has a certain impairment of 
competence. However he is autonomous when it comes to making a decision about which 
cereal to have for breakfast but he may be considered insufficiently competent and 
therefore to have weakened autonomy when it comes to making more important decisions 
such as the refusal of the administration of adrenaline for the management of his life-
threatening anaphylactic reaction to his breakfast cereal. The individual’s level of 
competence influences the strength of his autonomy when it is balanced against 
competing principles of beneficence and non-maleficence. In the case of the anaphylactic 
reaction the benefit of administering the injection of adrenaline far outweighs the insult to 
the patient’s autonomy as a result of overriding his refusal. Similarly, patients who have 
taken an overdose in a suicide attempt are impaired in their competence due to the 
influences of their psychiatric illness. Although it can be coherently argued that 
ocasionally suicidal intent does not signify psychiatric illness and that neither suicidal 
intent nor a psychiatric illness would necessarily always impair autonomy these 
discussions are tangential to this thesis and will not be explored further. Suffice it to say 
that suicidal intent would usually be considered to signify an illness which impairs 
reasoning, deliberation and independent choice. Therefore the weakened autonomy of the 
suicidal patient allows treatment against his will as long as the principles of beneficence 
and non-maleficence outweigh the insult to his autonomy. However, if such a patient was 
to refuse gastric lavage (stomach washout) for a trivial overdose several hours earlier then 
the principles of beneficence and non-maleficence are insufficiently strong to override 
even his weakened autonomy, as the utility of gastric lavage is limited and the risk of 
overdose is minimal.

Raanan Gillon [123] describes three types of autonomy: autonomy of thought, autonomy 
of will and autonomy of action. Autonomy of thought describes thinking, deliberating,
and decision making and incorporates moral and aesthetic assessments contributing to the decision. Autonomy of will is the freedom to decide on the basis of the deliberations. It embodies the consent of “will power”, (to decide against a powerful desire, based on rational deliberation) and the assumption that there is freedom from coercion. Autonomy of action describes the ability to act, (assuming the deliberation occurs, and the will is there) and therefore includes the physical abilities to hear, gesture and to speak.

Impaired autonomy may involve impairment to thought, will or action although the degree of impairment to any or all of these, which means autonomy is no longer worthy of respect, has not been defined. Indeed impairment to autonomy of action (e.g. a physical handicap causing impaired ability to verbalise thoughts) would not generally be considered to be a significant impediment to the patient’s right to self determination. However impairment to thought (as in each of the patient’s stories) and impairment of will (due to psychiatric illness or undue coercion) may be considered sufficient to render the patient incompetent to make life or death decisions. Gillon suggests dialogue between the profession and society is required to help focus the thresholds defining competence [124].

Generally speaking, patients who are competent should not have their autonomous choices subjected to the constraints of others. If a patient who is fully competent makes an unimpaired autonomous decision then that decision should generally be honoured even if we disagree with it. There are occasional exceptions to this and I will address these below.

**Paternalism**

The Oxford English Dictionary dates the term “paternalism” from the 1880’s giving its meaning as “the principle and practice of paternal administration; government as by a
father; the claim or attempt to supply the needs or to regulate the life of a nation or community in the same way a father does those of his children”.

The analogy with the father suggests two features of paternalism; a beneficent intention and the making of decisions on behalf of another. The Oxford English Dictionary suggests the original use of the word, after Mills and Kant, was to describe a paternalistic government. More recently the term “medical paternalism” has emerged to describe the paternalistic intentions of health professionals toward their patients. Although the principle of beneficence (or non-maleficence or justice) is honoured by medical paternalism (I will qualify this shortly) the principle of autonomy is not and it is this insult against autonomy which has led paternalism into disrepute. Definitions of medical paternalism are commonly flavoured by pejorative connotations associated with this insult against autonomy. Hershey in 1985 [125] examined several definitions of paternalism from the contemporary literature but found them all to be “more or less defective” and subsequently developed his definition using two necessary conditions:

1. The paternalistic action is primarily intended to benefit the patient, and
2. the recipient’s consent or dissent is not a relevant consideration for the initiator.

The Oxford English Dictionary goes on to define paternalistic actions towards an individual as “intentional, nonacquiescence or intervention in another person’s preferences, desires or actions with the intention of either avoiding harm to or benefiting the person”. The foundation of these definitions is that beneficence and autonomy, although each a valuable guiding principle, are in conflict. Alternative definitions of paternalism might be “helping patients against their wishes” or “a balance of beneficence over autonomy”.
Paternalism within principlism.

Which way the balance tips the scales depends upon the relative strengths of beneficence (and non-maleficence and justice) and autonomy in a specific context. The relative strengths of each of these principles is influenced by the benefit or avoidance of harm afforded the recipient of the action and the extent to which his right to self-rule is impeded, but also by the way the health professional perceives the inherent merits of each of the conflicting bioethical principles. Principlism, or the use of principles in bioethical decision making, in the way expounded by Beauchamp and Childress has had its opponents and proponents, as discussed previously, with a significant proportion of the criticism arguing the relative level of merit of each of the principles in general terms. Autonomy sits on one side of the scale and beneficence and non-maleficence on the other with autonomy gaining more weight under the influence of the prevailing libertarian culture. Stanley, in his description of the Appleton Consensus [93] addressed the issue of paramountcy of principles. Delegates at the conferences observed that in every conflict between the principle of respect for autonomy and that of beneficence the consensus had sided with respect for autonomy and that they were ‘de-facto’ making respect for autonomy paramount, although claiming that no principle had paramountcy. Others argued that with effectively deliberated autonomy, beneficence would most often lose out, largely because beneficence itself entailed an obligation to respect well-informed patient autonomy. In other words a patient centred definition of beneficence (as defined in Chapter 3) is not independent of respect for autonomy. If autonomy is not respected, then beneficence is undermined.

Stanley notes that beneficence may nearly always be “trumped” by autonomy but when considering issues relating to scarcity of resources, autonomy did not so readily trump the principles of justice. However, the focus of this thesis is decision making in resuscitation,
with the focus being an individual patient in an environment where resuscitation is available. Therefore, the conflict between autonomy and beneficence (or non-maleficence) will be examined further.

As the scales have become tipped in autonomy's favour, paternalism, which promotes beneficence or non-maleficence over autonomy, has become less acceptable. In this way, general arguments in favour of principlism have led paternalism into disrepute. However, when applied to specific circumstances the principles do not stand only on their inherent merits but also on their relative value to the patient in question and consequently the pejorative connotations associated with paternalism and derived from general arguments of principlism may unfairly flavour the balance of conflicting principles in an individual case. In other words, paternalism in context should not be damned by considerations of paternalism in general.

If a young child was determined to run across a busy road and was stopped by a parent, then few would argue that this display of paternalism was a bad thing. The potential harm to the child is enormous, the child by virtue of cognitive immaturity and limited experience has impaired autonomy and the harm done the child by the paternalistic action is minimal. If the scales analogy was used in this specific context then the benefit to the child (or avoidance of harm) greatly outweighs the insult to the child's autonomy.

However, if a cognitively mature and unimpaired adult chooses to cycle without a helmet should we, as a community, paternalistically enforce helmet wearing for that individual? In other circumstances, for example, when discussing consent for surgery, we allow an autonomous person to refuse a beneficial treatment. That is, we allow a fully informed, unimpaired, adult to use his or her autonomy to override our beneficent intention. However, in the cycle helmet scenario the principle of justice is added to the scales. An individual who comes off a cycle and hits his unprotected head does so at great cost to the
community. Despite not respecting an individual’s autonomous opposition, this is outweighed by the principles of non-maleficence and justice and as a consequence most consider that the paternalism is justified.

Joel Feinberg [126] made a distinction between strong and weak paternalism which he later referred to as hard and soft paternalism. For the purpose of further discussion I have modified these two categories into three, based on the extent of the disrespect for autonomy.

1. Unopposed paternalism.
2. Weak paternalism.

Unopposed paternalism describes a relatively common situation where autonomy is essentially absent. Although one could argue the absence of any opposing autonomy means paternalism is not occurring, I will include this category for completeness and because the omission of an attempt to ascertain the patient’s likely views, even in the setting of unconsciousness, may be considered a paternalistic omission. For example, when Graham suffered his severe head injury and was brought into the Emergency Department unconscious, the emergency department staff resuscitated him in the usual way. The benefit to Graham was significant and there was unlikely to have been an insult against autonomy as consent for this intervention could be reasonably presumed. However, details may have emerged which suggested that Graham had an alternative preference, and failure to seek these details would have thwarted Graham’s autonomous wishes. That is, they would have been paternalistic. This concept will be developed further as the thesis matures.

Weak paternalism describes the situation where autonomy is compromised or impaired. This is illustrated by the case presented earlier of the habitual recreational user of opiates.
who inadvertently gave himself a life-threatening overdose of morphine and who was
resuscitated by the ambulance staff and given an injection of Naloxone. While apparently
lucid and suffering from the withdrawal of opiate receptor stimulation he stated explicitly
and forcefully that he never wanted Naloxone again. Soon after this, the Naloxone wears
off and he drifts back into a life-threatening stupor. The paternalistic action of injecting a
second dose of Naloxone despite the patient’s previous objection is justified on the basis
of the strength of beneficence and non-maleficence against the strength of his autonomy,
impaired by his opiate addiction and the process of opiate withdrawal. We can presume
that a hypothetical rational and autonomous agent would consent to such treatment under
such circumstances and indeed that the patient would consent if he was free from his
autonomy-restricting influences.

Strong paternalism describes the situation where the paternalistic action proceeds despite
the “substantially” autonomous objections of the recipient. The adjectival modification
“substantially” is important. It is reasonable to argue that no one is ever fully autonomous. All our actions are modified or limited by context (“victims of
circumstance”) and seldom can a patient be fully informed of all the possible
consequences of a medical intervention. Furthermore, the ability to comprehend and to
rationalise is impaired by the stress of ill-health and the strain of decision making and this
is particularly the case the sicker the patient and the more important or more urgent the
decision. The use of the adjective “substantial” does allow another variable into decision
making but it negates the poor justification for strong paternalism that the patient is never
fully autonomous.

Strong paternalism is difficult to justify as the insult against autonomy is massive and this
alone harms the patient independent of the harm and benefit of the disease and the
treatment. In addition, it may be considered that beneficence is significantly undermined,
as respecting the patient’s wishes is an integral consideration when attempting to bring
them benefit. Had Agnes’ resuscitation continued despite the knowledge of her
previously expressed wishes, which had direct relevance to her predicament, then this could have been classed as strong paternalism (although even the principles of beneficence and non-maleficence are not strong in Agnes’ case). However, there are occasions when substantial autonomy is insufficient to outweigh the perceived benefits of the paternalistic action. Enforcement of cycle helmets is an example of strong paternalism where non-maleficence and justice outweigh the substantial autonomy of some individuals. Withholding information for benevolent reasons is another occasionally justified example of strong paternalism.

A thirty year old man was the driver of a car involved in a head-on collision with another vehicle. His wife was killed in the crash and the man was injured and taken to the local Emergency Department. In the Emergency Department, he asks about his wife’s well-being and indicates that he doesn’t want any treatment for himself if his wife has been killed. The doctor, although aware of the wife’s death, tells the man that he doesn’t know what happened to his wife but that he would let him know once he finds out.

The principle of respect for autonomy demands that information is provided so that the recipient can make an informed decision. In this case the harm of information was perceived to outweigh its benefit. The information could be provided later under more controlled and supportive circumstances and when less likely to cause harm to the recipient. This is an example of “therapeutic privilege”, which argues a legitimate reason to withhold information based on a judgement that to divulge the information would be harmful to the recipient. Although this concept is controversial, and at best it would be justified very rarely, it may be argued on utilitarian grounds when a patient is particularly fragile and the likely harmful consequences of receiving the information are severe.

It is the disrespect for the substantial autonomy of patients (strong paternalism) which most have in mind when considering the morality of paternalism.
The Hippocratic Oath, as described in the British Medical Association Handbook of Medical Ethics [127] instructs that “I will follow that system or regimen which, according to my ability and judgement I consider for the benefit of my patients”. However it may be argued that doctors do not always have a greater ability or a better judgement than the patient to determine what system or regimen is to the patient’s benefit. Raanan Gillon argues, in his paper on this subject [128], that doctors may well be better judges of technical and medical benefit, but determination of benefit, in a moral sense, is outside most doctor’s realm of competence. To suggest, for example, that a patient will be happier with one alternative, or another, is to make an assumption which is not based on any deserved authority.

If the attending doctors were to determine the benefit of resuscitation in Graham’s case, they would have some difficulty, as previously discussed, but arguably would be best placed to predict survival (approximately a 50% chance) and survival with near normal neurological function (a slim chance). However, they would be poorly placed to predict how Graham would perceive the odds (nearly 50% likelihood of survival with impairment if resuscitation is continued) and less well placed to suppose he would be happy or unhappy surviving with neurological impairment.

If paternalism relies on a strong hand of beneficence, and this beneficence, (by virtue of its opposition to autonomy) is as the professional perceives it, then it suffers as a morally robust model because the doctor’s perception of benefit is incomplete.

Brody, in his provocative book ‘The Healer’s Power’ [129] promotes the view that the central ethical problem in medicine is the responsible use of power by physicians. He argues, using short stories to illustrate his argument, that the physician is in a position of power, and that the patient, for a variety of reasons, is in a position of relative submission.
Among other suggestions he provides to promote the ethical employment of power in the doctor-patient relationship he suggests the following inputs to beneficence: “The physician should employ all her power to try to effect a good outcome for the patient. Good outcome is determined by; (a) the patient’s life plan; (b) the patient’s definition of the presenting problem and; (c) a coherent conception of excellence and quality in the practise of medicine.”

In essence then, strong paternalism is professional beneficence overriding a patient’s autonomous wishes. However, beneficence, when taken as ‘patient-centred’, and as Gillon and Brody and others would view it, involves bringing about a good outcome as the patient sees it. As such autonomy and beneficence are not independent and beneficence will never be able to trump a well-informed, carefully deliberated and unencumbered autonomous wish. However, impaired autonomy may be trumped by beneficence. Gillon explains that when autonomy is compromised, particularly autonomy of thought or will [123], medical interventions without consent, which will benefit the patient, often seem to be justified, and indeed morally imperative [124].

Paternalism in the softest, or weakest, sense, would seem to have most relevance to this thesis, considering that most patients undergoing resuscitation have impaired competence. However, the acceptance of soft paternalism in this sense, should not be considered an excuse for avoiding ethical deliberation during resuscitation. Some aspects of the patient’s story, and some indication of what the patient would consider a good outcome, are often available during a resuscitation, if they are sought. The story of Agnes, in particular, emphasises the influence of her narrative, which contains a clearly expressed desire not to have resuscitation.

To proceed with resuscitation, based on beneficent or non-maleficient intentions, and with no access to the patient’s view, is morally appropriate. However, to proceed without
trying to access the patient’s views, when some access is available, is paternalistic in a morally pejorative sense. This observation is very relevant to the decision making model I am developing, and for this reason I will reiterate. Making decisions in resuscitation, based on a beneficent presumed consent risk being a “paternalism of ignorance”, as the doctors resuscitate with an assumption that respect for autonomy is irrelevant. They remain ignorant of the need for some form of consent, and they may make no attempt to consider the patient’s story. As such they are not overriding a substantially autonomous wish (strong paternalism) nor a wish expressed by one with impaired competence (weak paternalism) nor are they simply proceeding in the absence of autonomy (unopposed paternalism), although this is how most would perceive they are proceeding. Instead they are proceeding with no attempt to ascertain the views of the patient, when some indication of the patient’s views is achievable. This omission is the paternalism of ignorance to which I refer.

It was a growing concern that the ancient Hippocratic principles promoted a “doctor knows best” paternalistic approach that led to the embracing of the modern principle of respect for patient autonomy. Although Beauchamp and Childress and others who promote principlism, do not intend a hierarchy among the principles, it can be observed that autonomy has assumed an ascendancy when in conflict with beneficence. The mandate of the rights of the patient, affirmed in statute in New Zealand, and other countries, and the popular perception of informed consent as an absolute requirement prior to medical intervention, are evidence of this.

The current state of evolution of medical ethics has polarised the principles with the “paternalistic” principles of beneficence and non-maleficence pitted against the individualistic principle of respect for patient autonomy. The question being asked is “who decides, the doctor or the patient?” and the answer being offered is “the patient decides whenever possible” [130].
In Emergency Medicine, perhaps more than in any other medical pursuit, we observe difficulties with the current state of medical ethics. Respect for autonomy recognises that only the patient can weigh the pros and cons of a medical intervention from the patient’s context, taking into account the patient’s experience, world views, values and aspirations. However the pros and cons of a medical intervention are based on a probabilistic appreciation of a complex array of information interpreted on a background of a lengthy medical education and an in-distillable clinical experience.

Attempts to deliver this package to the patient, to fulfil the requirements for informed consent, are difficult, and made more so the more urgent and emotive the scenario. Each of these viewpoints, (the patient’s and the doctor’s), provides a unique focus on essential considerations, but each will fail to adequately see those considerations focused by the other. The solution, and the future of medical ethics is to bring the strengths of both viewpoints into the decision making milieu and let them mingle. Narrative ethics promotes this, but is not a practical option in a resuscitation. A practical option for resuscitation is needed.

**Passive paternalism.**

For completeness, the concept of passive paternalism needs a brief description. Whereas active paternalism implies doing something against the recipient’s wishes, passive paternalism describes not providing an intervention the patient requests because the provider perceives it as being futile, harmful, or unfair to others if provided. This is not an uncommon scenario in Emergency Medicine, where patients, or their proxies, request an intervention that is either not beneficial, harmful or unfair to others if provided to that patient. In other words, it contravenes principles of beneficence, non-maleficence and justice. Under these circumstances the doctor may decline to provide the treatment and, in so doing, undertakes an act of passive paternalism. Although passive paternalism seems more justifiable than active, after all it seems less harmful to stand back than it is to intervene, the same balance of principles is necessary for its justification.
Summary.

Autonomy defines the individual’s right to self-governance and this principle has grown in stature on the back of an enthusiasm for the liberty of the individual. The strength of the principle of respect for patient autonomy has led some to consider it the foremost of the four principles espoused by Beauchamp and Childress and a principle of ultimate authority, particularly when in conflict with beneficence.

Paternalism may be defined as a situation where the guiding principles are in conflict, with autonomy on one side of the scales and beneficence, non-maleficence or justice on the other. If a paternalistic action commits a significant insult against autonomy then the action will struggle for justification as the insult itself is inherently harmful to the patient, and beneficence, from a patient-centred perspective, is undermined. However the smaller the insult against autonomy and the greater the benefit accrued then the more justifiable the act of paternalism becomes.

The current decision making models in resuscitation tend to involve degrees of ‘unopposed’ or ‘weak’ paternalism based on a presumption of consent, or an attempt to avoid paternalism by seeking consent from a proxy. When the patient cannot decide then the question shifts to “who decides, the doctor or the proxy?” thinking the proxy will answer as the patient would. As previously discussed, proxy consent may not honour the patient’s autonomy and presumed consent struggles to do so. Presumed consent does honour beneficence and non-maleficence as best they can be under difficult circumstances, but with a tendency to see benefit and harm as the resuscitators would see them (that is, without being able to assume a patient centred standard of beneficence and non maleficence). As such it is paternalistic, a paternalism of ignorance as no attempt is made to seek the patient’s perspective, but if we dismiss it because of this then we would lose the valuable perspective of benefit and harm it brings to decision making.
So, who decides, the doctor, the patient, a proxy or perhaps all of them? The solution for decision making in resuscitation lies in bringing the merits of both perspectives into the decision making model by encouraging the resuscitators to see what parts of the patient’s story might be available to them. Before presenting this model the harms of resuscitation need to be delineated.
In Washington State, and presumably this applies to much of the Western world, 75% of all deaths occur in a hospital or chronic care facility [131]. These three quarters, and as a consequence of sophisticated pre-hospital care, most of the fourth quarter, are subject to resuscitation efforts as defined by the American Heart Association (AHA) and other advising bodies. In 1986 the AHA stated that CPR should be initiated on all patients found pulseless and not breathing when there existed the possibility that the brain was viable and when there was no legally or medically valid reason to withhold it [132]. Legally valid reasons included refusal by a competent patient or an advance directive. In practice, attending paramedics had neither of these or else they were unable to access the competency of the patient or the validity of the advance directive in the heat of the resuscitation. In effect this meant that CPR was commonly administered for all the dead unless they presented with decapitation, rigor mortis, tissue decomposition or dependent lividity. The 1992 AHA guidelines were modified to advise that resuscitation should not be tried when “there is documentation or another reliable reason to believe that CPR is not indicated, wanted or in the patient’s best interest” [133]. Although this advice seems more reasonable in view of the outcome figures presented earlier, there remains a reluctance not to proceed.
In the discussion of outcomes (Chapter Two) we concluded that relatively poor outcomes from resuscitation for cardiac arrest might be improved if it was not performed on those for whom it was very unlikely to have a good outcome. The outcome, or beneficence, of resuscitation has been well aired in the literature and thoroughly reviewed in this thesis.

In the discussion of consent (Chapter Five), we discussed the contribution the patient’s autonomy can make to decisions during resuscitation and in chapter six we explored the conflict between beneficence and autonomy, which may occur in resuscitation medicine. This chapter will consider the maleficence of resuscitation.

If we consider again, our three patients’ stories we are aware of the possibility of limited benefit, (in Brian’s case resuscitation was unsuccessful before the story ended) but we might also identify a number of harms, which might ensue. Brian took an overdose of medications in a misguided suicide pact. This left him unconscious and suffering seizures and abnormal rhythms of the heart. The resuscitation was difficult and protracted, with a number of invasive procedures undertaken, with no success resulting. The procedures may well have caused significant physical discomfort, as Brian was alive during them and may have been sentient. Certainly the resuscitation was demeaning, causing a loss of dignity, as he lay naked, convulsing, vomiting, urinating and defecating in the company of strangers. The resuscitation, which brought about no benefit, used doctors, nurses and equipment that may have been used helping other patients waiting for care. Similarly the financial cost of the resuscitation means that money is unavailable for more beneficial medical interventions. Finally, the resuscitators are left sad and frustrated by the lack of success and feeling guilty due to the harms inflicted and the resources consumed.

Agnes suffered a cardiac arrest at her home. No bystander CPR was performed and defibrillation was delayed as the arrest was unwitnessed, locating Agnes took some time, and calling the ambulance was slow. When she was eventually defibrillated she did not
wake up, and in the emergency department she reverted to VF. Agnes had previously explicitly stated that she did not want resuscitation and this became known to the resuscitators when they were joined by the doctor who had discussed this with her.

Like Brian, Agnes was subjected to possible discomfort, and certain indignity. In addition the resuscitation was unwanted, and could be considered a harm against her autonomy. This harm would become more tangible if the resuscitation continued after it became known to the resuscitators that they did not have the patient’s consent. Those who contributed to Agnes’ resuscitation pre-hospital would share the feelings of sadness and guilt about a poor outcome, and may be left with a perception that death must be preceded by a period of indignity. Finally, the resuscitation of Agnes in the emergency department had minimal chance of a good outcome, but did have the potential to bring about survival with severely impaired neurological function. Such an outcome would be a great harm to Agnes, to those who would care for her and to the community who would pay for her care.

Graham was the victim of major trauma, including a severe head injury. Resuscitation from major trauma, especially when complicated by severe head injury and major bony trauma such as Graham’s pelvic fracture, involves a massive and prolonged input of resources. Typically a number of teams of medical specialists are involved, multiple x-rays and CT scans, many units of blood for transfusion, a number of operations and a long stay in the Intensive Care Unit are required. Graham’s outcome after severe head injury complicated by shock (as discussed in the Outcomes chapter) is likely to be poor, and survival with a quality of life Graham would consider unacceptable is a distinct possibility. In addition to discomfort and loss of dignity, death, after a massive injection of resources, or survival with an unacceptable quality of life, are appreciable harms.

Jennett [134,135], in his discussion of the use of high technology, identifies six types of inappropriate use of these technologies, and I will adapt five of these six to describe and
categorise inappropriate or even harmful applications of resuscitation. These five categories of harm are when the resuscitation is:

1. Unnecessary;
2. Unsuccessful;
3. Unkind;
4. Unwise;
5. Unwanted.

The first harm of resuscitation, occurs if it is unnecessary because the patient's condition is insufficiently serious to justify it. Providing more treatment than is necessary for a patient is a real and appreciable harm found in the resuscitation room as well as other spheres of health care.

A common example of unnecessary care in the resuscitation room involves the aggressive management of patients primarily intoxicated by alcohol or other drugs, in case their condition is due to a more serious pathology, such as intracranial bleeding from head injury. The patient with alcohol intoxication and head injury described in Chapter Five, as presented in the British Medical Journal to clinicians, an ethicist and a lawyer, may be an example of this. The intention was to retain him in hospital, for further observation, although probability suggested he would have an uneventful recovery from his alcohol intoxication, without the development of intracranial bleeding. However, although the chance of harm befalling the patient was small, the magnitude of the harm was significant (development of an extradural haematoma would prove fatal without prompt intervention) and therefore it was considered appropriate to treat him in this way.

At times, the intoxicated patient will undergo advanced management of his airway and breathing (endotracheal intubation and artificial ventilation) and CT scanning of his head,
In anticipation of the low probability but high magnitude of harm of an extradural haematoma. In other words the patient will be resuscitated when more simple measures may have sufficed. As a consequence, the harms include pain and other discomfort for the patient, iatrogenic illnesses and the unnecessary use of limited resources, thereby depriving others in need of these resources. The iatrogenic illnesses may range from trivial trauma and infections resulting from procedures such as intravenous access and endotracheal intubation, to life threatening conditions such as anaphylactic reactions to medications and failure of endotracheal intubation resulting in an inability to manage the patient’s airway (as occurred in Brian’s resuscitation).

In resuscitation medicine the extent of over treatment may be difficult to predict, as it is impossible to know prospectively, whether the patient would survive intact without the treatment. The most promising way of minimising this harm is to have senior, experienced resuscitationists present during the resuscitation. In this way, knowledge and experience will aid identification of those who do not need treatment, and a higher level of skill will minimise the harm attributable to iatrogenesis. If appropriate skills and experience are present, and there remains a low probability of serious illness, but the magnitude of the serious illness is such that it must be pre-empted, then presumed consent using a reasonable patient or a reasonable doctor standard would have us proceed.

The second harm of resuscitation occurs if it is unsuccessful because the patient’s condition is too far advanced for the resuscitation to do any good.

In Agnes’ story we are aware that she had a number of strongly negative prognostic indicators for survival to hospital discharge. She had had a heart attack in the recent past, her arrest was unwitnessed, there was no bystander CPR, there was a delay to defibrillation, and a delay to advanced care. The exact times are not given, but it is likely to be beyond 30 minutes when the resuscitators in the emergency department are
considering whether to continue the resuscitation or not. In essence, the likelihood of survival to hospital discharge is minimal.

In Brian’s case, he was also too sick for resuscitation to reverse the process, although the astute reader might question the skills of the resuscitators in his story. However, prognostication in his case was more difficult than in Agnes’ as the cause of his condition was unknown, and prognostic indicators are not as defined for poisoning as they are for out-of-hospital cardiac arrest. However, in retrospect, not performing any resuscitation on Brian would have had the same outcome.

In Graham’s case he has multiple pathologies, which makes an assessment of outcome more difficult. However, his severe head injury, in this setting, suggests a poor outcome, although a good outcome remains a small possibility. Given the complexity of his pathologies, and the relatively poor access to prognostic indicators in his case, we are less able to be certain of his outcome, than we are of Agnes’.

When resuscitation will not produce the desired effects because the patient is too sick, there is potential for a great number of harms. Harms to the patient include physical discomfort, loss of dignity, a prolonged death and survival with an unacceptable quality of life. Both Agnes and Graham risk a prolonged death, with resuscitation restoring airway, breathing and circulation, but with so severe an injury to brain and other organs that survival independent of life support may be impossible. For Agnes this may mean days or weeks in the intensive care unit, and for Graham, a similar time in the intensive care unit, and multiple operations before each are allowed to complete their deaths. Harms to the family, when resuscitation is unsuccessful because the patient’s condition is too far advanced, include the psychological discomfort of surrogate pain and loss of dignity, unfilled hope, loss of control of a loved one’s destiny, the cost of lost earnings while at the bedside and the cost of supporting a disabled survivor.
The harms to the health workers include frustration and sadness at lack of success, guilt at inflicting harms and the cost of being unable to treat others waiting for resources. The harms to the community include the loss of resources to treat others, the deception that resuscitation offered hope and the worry that death must be preceded by a loss of dignity.

An appreciation of this harm is dependent on a lack of benefit of the resuscitation. A resuscitation tends to be considered unsuccessful in retrospect but if this lack of success is appreciated in advance then the term ‘futile’ is used. I have seldom used the word ‘futile’, in this thesis thus far, although futile resuscitations would seem an appropriate inclusion. The reason for its omission is the view that the term ‘futile’, although widely used in discussion of resuscitation ethics, serves only to muddy the waters of resuscitation decision-making. I will develop this argument in the next chapter, and with it some further discussions of this harm of resuscitation.

The third harm of resuscitation occurs if it is unkind because it prolongs a poor quality of life.

Both Agnes and Graham have suffered brain damage. Agnes, as discussed above, had a prolonged period of time without blood flow to the brain. Graham had a direct brain injury, damaging the brain itself, but also causing a rise in the pressure inside the skull, thereby limiting the blood flow to the brain. This was complicated by low blood pressure secondary to internal bleeding, further reducing blood flow to the brain. Finally, prior to Graham’s extraction from his car, while in the ditch awaiting bystanders and eventually paramedics to help him, he was deeply unconscious with a high likelihood that his airway was obstructed by his tongue, blood or vomitus. During this time his damaged brain would have been starved of oxygen, even if it were receiving good blood flow.
If Agnes or Graham survive the resuscitation and the early hospital care, they will be left with brain damage. Given the severity and duration of the insults to them the brain damage is likely to be severe, however, (and particularly in Graham’s case where there are more variables contributing), there remains a possibility that it could be minor.

Survival figures, as previously discussed, seldom represent quality of life for those who survive and should not be considered the sole outcome criteria. As presented earlier, survivors of out-of-hospital cardiac arrest have an increased death rate thereafter and the majority will have an anoxic brain injury ranging from the imperceptible (i.e. capable of living a normal life) to the totally dependent. Some quality of life assessments, of survivors of out-of-hospital cardiac arrest, have been presented. However quality of life is hard to measure, is difficult to predict (except to say that it is likely to be worse than prior to the resuscitation) and determining the value of a particular quality of life (which we cannot measure nor predict accurately) to the individual undergoing resuscitation is very difficult.

An elderly nursing home resident with chronic airways disease, ischaemic heart disease and progressive dementia, who has an un witnessed cardiac arrest and waits 10 minutes before defibrillation arrives is unlikely to leave hospital alive and any survival which might result will be of poor quality. Decision making in this lady’s case, using presumed consent criteria, would have us avoiding the harms of unsuccessful and unkind resuscitations by stopping resuscitation early, confident that we could not presume consent for such a resuscitation. However a middle aged previously well victim of cardiac arrest in the community has about a one-quarter chance of going home in good health, if his resuscitation is prompt and efficient. Decision-making in patients who fall between these prognostic extremes remains difficult, but the framework for such a process is emerging, and considering the harms of resuscitation in this process is an essential component.
If a quality of life ensues which is unacceptable to the patient or the family then the resuscitation has been unkind and a significant harm has resulted.

Professor Grant Gillett eloquently describes this harm and many of its implications (personal communication). In an essay describing the ‘Risk of Unacceptable Badness (The RUB)’ he describes a third alternative outcome after resuscitation which is appreciated less well than the other two. Life and death decisions in resuscitation are not simply a choice between life (to be valued positively) and death (to be valued negatively) but also a third alternative; life with an unacceptable quality (life to be valued negatively).

Consideration of this harm of resuscitation changes the moral balance during decision making, and this harm should be made explicit. The RUB, as a descriptor of this harm, Gillett takes from Shakespeare’s ‘Hamlet’; “To sleep perchance to dream, Aye there’s the rub.” Hamlet faces a choice which includes the unacceptably bad outcome of eternal sleep wracked by tormenting dreams. He makes his choice with this option prominent in his thoughts. However, patients and their proxies, Gillett argues, may not have their risk of an unacceptably bad outcome in their thoughts at all.

Faced with a choice of certain death if resuscitation is withdrawn, or the possibility of life if it is delivered, patients if able, proxies when consulted, and even the resuscitating staff, consider that ‘any chance is better than none’, and resuscitation is chosen.

Brody discusses the concept of the ‘rescue fantasy’ [136] which envisions the physician having the power to snatch the patient from the jaws of death. This fantasy, he suggests, is a widely held view, that when a crisis brings a state of imminent death, with slim chance of survival, a physician will heroically rescue the patient. Brody describes it as a fantasy, as he appreciates that the chance of rescue is small, and the evidence for this was presented in Chapter Two. Also presented earlier was evidence for Brody’s assertion of this widely held belief, with survey data suggesting that people believe a far better
survival from resuscitation than actually is the case, and that television drama contributes to this false perception. The rescue fantasy contributes to the mistaken belief that either the patient will die or otherwise the patient will be rescued, and everything will be all right. The risk of unacceptable badness is not considered.

Gillett illustrates:

For instance, a patient with a severe brain injury may have a 5% chance of survival but, if he survives, may have only a 10% chance of living in a state he would find acceptable and a 90% chance of living in a state he would consider unacceptably bad. The RUB takes this risk into account. It acknowledges the 5% chance of survival but then says ‘The reality is that, if he does survive there is a nine to one chance that he will not thank us for having saved his life’.

Although quantifying and accurately assessing the risk (RUB) may be difficult, as outcome (as already discussed) is variable and is difficult to predict, and quality of outcome for those who survive is even harder to predict, probabilities can still be considered. Still, however, we are left to consider how the patient would view these probabilities. Gillett provides a very tangible illustration of informing a patient, or the patient’s proxies, of the probabilities:

Imagine that you are standing in front of a pair of doors. You are told: If you choose the left hand door you will die. If you choose the right you will immediately be tipped into one of ten chutes. Nine of these will leave you demented, bedridden, with tubes in your nose and veins and bladder and unable to do anything for yourself but one will allow you to recover to something like your normal self. Which door do you choose?

Graham risks the RUB as the outcome of his resuscitation from severe head injury, but the risk is difficult to quantify. It is even more difficult to gauge how Graham would perceive this risk. Should we avoid this risk, and all the harms that accompany it by withholding treatment? How do we assess Graham’s views on these odds? Which door would Graham choose? The answers to these questions will emerge in subsequent chapters.
This harm, the third harm, the harm of an unwanted resuscitation because it brings an unacceptably bad quality of life is an important one and must feature prominently in a consideration of resuscitation outcomes.

The fourth harm of resuscitation occurs if it is unwise because it diverts resources from alternative health care activities that would bring more benefit to patients. Resuscitation is a significant user of resources. If resuscitation is unnecessary, unsuccessful or unkind, and beneficial health care activities are not proceeding due to insufficient resources then resuscitation is causing significant harm.

Attempts have been made to quantify the costs of resuscitation, and these were discussed in chapter two. Attempts have also been made to estimate the costs that would have been saved if unsuccessful resuscitations (futile) did not proceed [50, 137-142], but inevitably these costs will be vague approximations made less useful by varying definitions of futility (more on this in the next chapter). However, as well as financial concerns of inappropriate resuscitations there are more direct resource implications. In Rosemurgy’s study [50] of 138 pre-hospital traumatic cardiac arrest patients, sixty used air ambulances, one quarter had an emergency department thoracotomy, one third went to the operating theatre or intensive care unit and none survived. In Gray’s study [141] of patients who failed pre-hospital attempts at resuscitation from cardiac arrest, and who were transported to the hospital for further attempts, each patient used an average of forty-five minutes of doctor’s time and two hours of nurse’s time. Audits in Great Britain suggest that nearly one third of patients referred to intensive care units had their admissions refused or deferred due to a relative shortage of ICU beds [140].

In other words, the unnecessary, unsuccessful and unwanted resuscitations use a significant financial cost, but also attract opportunity costs, by denying others the opportunity to use doctors, nurses, operating theatres, and intensive care unit beds. The
using of resources in this way, so that others who would benefit from them are denied, is unwise, it is a moral failing when applying the principle of justice, and is a significant harm.

The fifth harm of resuscitation occurs if it is unwanted because it is against the wishes of the patient. But how do we know what the patient wants?

Agnes had told us what she wanted, and this information became available to the resuscitators. Brian and Graham did not provide any prior expression of their wishes, and so, as discussed above, presumed consent appears to be the best we can do to determine what they may have wanted. However, as we have identified, presumed consent risks seeing beneficence and non-maleficence from the resuscitators perspective and to under represent a patient centred beneficence and autonomy as a consequence. In subsequent chapters I will develop a decision making model which attempts to honour respect for patient autonomy, without lessening the contribution of beneficence and non-maleficence, but before then the concept of futility needs to be put into an appropriate perspective. In addition the concept of utility of resuscitation, considering both the benefits (as discussed in Chapter Two) and the harms (as presented in this chapter), will be discussed.

Summary

Resuscitation, in addition to bringing variable amounts of benefit, may also bring about harm. The harms of resuscitation can be considered if resuscitation is unnecessary, unsuccessful, unkind, unwise or unwanted, and the harms may befall the patient, the resuscitators, other patients requiring healthcare, and the community.

These harms must be considered if a balance of benefit and harm contributes to decision making in resuscitation medicine.
Chapter Eight

Futility.

Futility has no utility in resuscitation medicine

The word “futile” is derived from the Latin word “futilis” meaning that which easily melts or pours but its common usage stems from the Greek legend in which the daughters of Danaus, the King of Argos, murdered their husbands, and for their crime were condemned to collect water for eternity in leaking buckets [143] [144]. To arrive at the destination with an empty bucket when the intention of the journey was to bring water, suggests a definition of futile as something which is “useless” or “ineffectual” [145]. Futility then, is the nominal form which describes a uselessness or an absence of any effect. Specifically it describes the absence of any desired effect and if we assume that the desired effect of medical interventions is to benefit the patient, (according to a patient centred standard of benefit and by bringing direct benefit, avoidance of harm, or by respecting the patient’s autonomous choices), then futility describes an absence of benefit.

The word “utility” is unrelated in derivation and in meaning. It describes “usefulness” or “profitableness” [145], and in doing so it incorporates an evaluation of benefit over cost. Futility is not the antonym to utility as many might use it, as futility describes an absence of benefit without a consideration of cost.

In recent years the concept of futility has been widely and deeply discussed. In this chapter I will briefly review how the concept of futility is employed, the definitions and
interpretations of it, and I will argue that our attempts to define futility as a measure of poor utility have “muddied the waters” in ethical decision making in resuscitation medicine to such an extent that at times we are providing resuscitation interventions which bring about more harm than good.

**Futility - Its Use and Abuse**

Between 70% [146] and 90% [147] of Intensive Care Unit patients who die do so as a consequence of a decision to withhold or withdraw life support. This percentage has increased significantly over time [147] and the most common reason cited for the decision to withhold or withdraw treatment is a perception that the patient has a poor prognosis [146].

The propriety of withholding and withdrawal of life support has been supported by groups such as the Task Force on Ethics of the Society of Critical Care Medicine and in a number of legal decisions. Cardiopulmonary resuscitation is the therapy most commonly withheld and mechanical ventilation is the therapy most commonly withdrawn and most Intensive Care Unit physicians recommend withholding and withdrawal based on a perception of futility [148].

Emergency physicians resuscitating children are likely to use physiological measures of futility such as a low blood pH, and recognise indicators of poor outcome, such as co-morbidities and prolonged cardiac arrest, as factors influencing decisions to terminate resuscitative efforts [149]. Attempts to measure the futility of a resuscitation based on scoring of physiological or other prognostic features have been largely unsuccessful [150] [151] and although research continues into systems for prospectively grading the futility of a resuscitation, as yet we have no consensus definition of futility upon which such a gradation can be built.
Varying definitions of futility have been espoused including “failing to prolong life”, “failure to achieve the patient’s wishes”, “failing to achieve a physiologic effect on the body” and “failure to achieve a therapeutic benefit for the patient” [144].

Waisel and Truog [152] summarise three different conceptual definitions of futility. Physiologic futility exists when a procedure cannot bring about its physiologic objective. For example, when cardiopulmonary resuscitation produces no pulse or when transfusion produces no blood pressure, then these interventions are futile from the perspective of a physiologic futility definition. It is argued that the adoption of a physiologic futility measure minimises the risk of unilaterally imposed physician value judgements as the physiologic measure is independent of physician’s concepts of quality of life or good outcome. Schneiderman and colleagues argue that the physiologic futility concept is not a “value free” judgement but that it is in fact a “value choice” and that the choice that is made is to value the measurement of organ function rather than the value of the outcome for the patient as the patient might perceive it [153-155]. They present a “benefit-centred” definition of futility as consisting of quantitative and qualitative considerations. The quantitative estimate of futility is one in which an intervention is considered futile if it has failed in the last defined number of times attempted, and they suggest 100 successful attempts as the threshold for this definition. The qualitative component describes futility if the patient’s resulting quality of life falls well below the threshold considered minimal by general professional judgement. Specifically they list treatments which merely preserve unconsciousness or cannot end dependence on intensive medical care as qualitatively futile. Murphy and Finucane propose the definition of operationalizing futility which is defined as: “treatment that is so unlikely to succeed that many people - professional and lay persons - would consider it not worth the cost”. They argue that this operationalizes the concept of futility and precludes individual caregivers from having to make qualitative or quantitative value judgements [152].
The American Thoracic Society has adopted a more conservative but more nebulous definition claiming that an intervention is futile if it is “highly unlikely to result in meaningful survival” [156]. The American Thoracic Society have therefore adopted a mix of both quantitative (highly unlikely) and qualitative (meaningful survival) measures but without offering a practical definition of either. The American Heart Association have adopted an extreme quantitative definition suggesting that cardiopulmonary resuscitation is futile when “there have been no survivors reported under the circumstances in well designed studies” [157]. This definition allows any cardiopulmonary resuscitation intervention which has ever produced a survivor reported in a well designed study to be considered as non-futile. Superficially this definition seems extreme and it appears to support the use of resuscitation endeavours in situations where they are likely to bring more harm than good; however, it is consistent with our definition of futility - an absence of benefit.

The Critical Care Society suggests that treatments should be defined as futile only when they will not achieve their intended goal, and makes the very important additional comment; “treatments that are extremely unlikely to be beneficial, are extremely costly or are of uncertain benefit, may be considered inappropriate and hence inadvisable, but should not be labelled futile” [158]. Schneiderman and colleagues stress that futility is the absence of a benefit for the patient and not the absence of a physiological effect. Treatment which fails to provide a benefit, even when it produces an effect, should be deemed futile [153].

Physicians use perceptions of futility to guide decision making when starting or continuing life supporting endeavours yet there is no consensus definition of what futility is. Gillon discusses the complexity of attempts to define futility.

It involves assessments of outcomes in terms of value free descriptions (for example whether or not restoration of heart beat is possible); in terms of probabilities (how likely or probable are the outcomes) and in terms of values (how valuable or otherwise are the outcomes, and according to whose values...
Futility is a prospective appreciation of something which will be viewed as unsuccessful in retrospect. Futility therefore is a prediction. For the resuscitator to use the concept of futility in a specific circumstance, he or she must not only battle with the varying definitions of it but must also consider how these relate to the patient undergoing resuscitation. As previously discussed, out-of-hospital cardiac arrest is a reasonably homogenous insult in that the majority of such events are primary cardiac events due to a ventricular tachyarrhythmia. As a consequence we have been able to gather data regarding survival rates from out of hospital cardiac arrest and we have been able to determine a number of factors which influence survival from this, and this data was presented in detail in Chapter Two. On the basis of this data we can make a reasonable prediction as to the likelihood of resuscitation being successful in individual circumstances and from this our decision making can be guided. As illustrated previously, an elderly nursing home resident with chronic airways disease, ischaemic heart disease and progressive dementia who has an unwitnessed cardiac arrest and waits ten minutes before defibrillation is available will not leave hospital alive. However a middle aged previously well victim of a cardiac arrest in a community has about a one third chance of going home again if the resuscitation is prompt and efficient. However prediction of outcome from those patients who fall between these two extremes is quite difficult and even if we can predict, for example, a 10% survival rate we do not know whether this patient in front of us is one of the 10% or one of the 90%. So no matter what the quantitative definition of futility the quantitative prediction of success is difficult when considering the individual undergoing resuscitation. However the qualitative predictions are even more troublesome. Quality of life is hard to measure, it is difficult to predict (except to say that it is likely to be worse than prior to the resuscitation) and even if we could measure it accurately and predict it reasonably, determining the value of this prediction of the measure to the individual in question is likely to be impossible.
An unfortunate consequence of the inability to define futility, and to use it in the management of an individual, is that discussion has not been allowed to progress to consideration of the harms of resuscitation and, in particular, to the ratio of harm to benefit from the perspective of the individual in question. In other words, we have insufficiently considered the utility due to an obsession with futility.

The harms of resuscitation were described and discussed in the previous chapter. In addition to the harms of resuscitation, the use of futility as the driver for withholding or withdrawing life supporting treatments brings harms of its own. Gillon discusses the pejorative nature of the term futility [159]. “It carries with it a strongly negative connotation. ...staff are likely to be blamed even more if they not only deliberately withhold or withdraw such attempts before death has actually occurred, but then, as it were, rub salt in the emotional wounds by using pejorative terms such as “futile” to describe the rejected attempts to preserve life”. The concept of saving the life of a loved one described in terms taken to mean “useless”, or a “waste of time” is understandably offensive, particularly if the patient or surrogates support life saving intervention.

Schneiderman and colleagues, six years after proposing their quantitative and qualitative definitions of futility, discuss a number of criticisms of their original proposal including the criticism that “medical futility is simply an attempt to increase the power of the physician over the patient and to repeal hard gained advances in patient autonomy” [160]. Halliday describes the attempt to define futility as part of a three-way struggle for control within and around the practice of medicine [144]. Within the struggle are the patients wielding their rights to autonomy, the physicians with objectives which might be considered paternalistic, and the funders with financial incentives to limit the interventions undertaken. Futility is used as the “trump card” which “frees the physician from the obligation to provide medical treatment” [153], despite a desire, from the patient or surrogates, to have the treatments provided. After all, no patient can demand an intervention which is futile.
Swanson and McCrary in a survey of 301 physicians practising in academic medical centres in Texas concluded that some physicians, particularly those with an attitude of extreme legal defensiveness, tended to define futility in a manner that would maximise the physician’s latitude to justifiably oppose patient’s preferences, suggesting that some physicians assume an adversarial position in their consideration of medical futility issues [161].

To use futility as a “trump card”, to disregard or override the autonomous wishes of patients, even if the definition of futility is true and the prediction of it is accurate, is harmful simply by virtue of the disrespect for the patient’s autonomy. This harm, it could be argued, is outweighed by the harm of pursuing a treatment without benefit, but it must still be considered in the balance of benefit and harm which defines the utility of the treatment options. To manipulate futility, within the leeway of variable and uncertain definitions of it, in order to win against an opposition based on patient autonomy, is an immoral perception.

Summary

Futility is a word which means the absence of benefit. Attempts to define it and predict it have “muddied the waters” of decision making in resuscitation medicine to such an extent that the classification of futile has been used to separate those resuscitations not worth pursuing from those which are.

With resuscitation, as with other medical interventions we should consider the balance of benefit and harm that results. If an endeavour is futile then any harm that ensues will bring about an unfavourable benefit/harm balance, however, even if the endeavour is not
futile, by any definition, the benefit/harm balance may still be unfavourable if the harms that ensue are great.

Variations of interpretation, prediction and value judgements mean we are unlikely to ever achieve a consensus definition of futility and certainly not one which has application to every patient undergoing resuscitation. In the meantime our use of the term “futile”, in the mistaken belief that it tells us whether it is worth resuscitating or not, has no utility as it will never succeed in telling us this. Furthermore, we risk offence and harms against the patient’s autonomy by using it. The words futile and futility should be abandoned by resuscitationists for these reasons.

Instead we should consider the utility of our endeavours, for which an assessment of the harms of resuscitation should be added to our consideration of its benefit and this balance of benefit and harm should be evaluated as best it can be from the patient's perspective.
So far in this thesis I have presented the difficulties for resuscitators, in determining what they “ought to do”. I presented the data regarding resuscitation outcome, showing that a good outcome is uncommon, and far less common than is usually perceived. I discussed methods of ethical deliberation available to resuscitators, and expounded the merits and limits of principlism, and the value of the patient’s narrative. After coming to know three patients I discussed options for consent, suggesting consent should be obtained for resuscitation, just as it is for other medical interventions, and that presumed consent is a useful model, although it struggles to respect autonomy and it tends to use a professional centred beneficence.

Then I outlined the harms of resuscitation, with unsuccessful and unkind resuscitations, which bring an unacceptably bad quality of life, as perhaps the most harmful. Most recently I discussed the problem with the concept of futility. Now it is appropriate to discuss the issue of letting the patient die. If an outcome of resuscitation decision making, is not to proceed with resuscitation, and the resuscitation was necessary, then death will ensue. The discussions around ‘letting die’, ‘killing’, ‘withholding and withdrawing’ are complex, confusing and frequently confused. I will take the liberty of defining some key terms, so that discussion can be built on this base, and I will structure this chapter to aid its digestion.
Definitions

The word euthanasia is from the Greek word “thanatos” meaning death and the prefix “eu” meaning easy or good. The perception of euthanasia, and therefore the definition of the word, has evolved over time and more recently has come to imply a “mercy killing”. Definitions of “euthanasia” in most dictionaries now reflect this perception [162]. For the purposes of this discussion I will define euthanasia as incorporating a person causing, or being causally relevant in, the death of another, when there is sufficient current evidence to believe that the other is intolerably and irreversibly suffering and the death is intended to relieve the suffering [163]. However, within this, or other definitions, there are different types of euthanasia, and consequently the word may still mean different things to different people. Sub-typing euthanasia and defining these subtypes is therefore important.

Euthanasia may be sub-classified into passive or active. Passive means the patient is allowed to die, with the deliberate omission of interventions which may keep the patient alive. Active means the patient is made to die by the deliberate provision of an intervention which causes death. It is important to reiterate that euthanasia, in the way I am using it, means the allowing or the provision of a death with the objective of relieving irreversible and intolerable suffering. In this respect active euthanasia differs from homicide as the intent is markedly different, (although an act of euthanasia may be considered homicide in a court of law. I will return to legal considerations soon). Euthanasia may also be considered voluntary, when it is requested by a competent patient or non voluntary, when it is not requested. Non voluntary euthanasia implies the context of a non competent patient, who is unable to convey a desire to live or die, but with the presumption that they would prefer death to their suffering, if able to express their preference. Non voluntary euthanasia applied to a competent patient, whose view is available but not sought would struggle to be morally defensible. In addition euthanasia may be involuntary, when it is against the express wishes of the patient, but
this too, would be difficult to support, as it would be hard to argue a patient has intolerable suffering (a requirement according to the definition I have chosen) when they have explicitly denied a chance to end it with euthanasia, even if their competence is impaired.

Within the subcategory of passive euthanasia (where a patient is allowed to die by the deliberate omission of life sustaining interventions), we may further sub classify into withholding life sustaining therapy and withdrawing life sustaining therapy. Passive euthanasia, and its subcategories of withholding and withdrawing, are of particular relevance to this thesis. Active euthanasia is of less relevance to resuscitation as appropriately delivered resuscitation is indicated by imminent death, which is inevitable without intervention. A deliberate action to cause death is therefore an unnecessary consideration during resuscitation, although it may become relevant later, if resuscitation brings a life with an unacceptably bad quality. However, I will attempt to elucidate the key ethical issues in relation to euthanasia in general, before considering withholding and withdrawing specifically.

Conceptual difficulties exist with many of the terms used when discussing this subject. For example, the term “killing” tends to have a pejorative connotation suggesting malicious intent, yet some acts of passive euthanasia may be referred to (legally and morally) as killing [164]. However I will reiterate and maintain these definitions for this discussion; euthanasia is an act or omission by a doctor which results in a patient’s death, and the intention of the death is to relieve suffering which is considered worse than death and which cannot be relieved by other means. Active euthanasia is the act, and passive euthanasia is the omission. When the terms “killing” or “mercy killing” are used they refer to active euthanasia. When the terms “allowing to die” or “to let die” are used they are referring to passive euthanasia.
Active versus passive

There is clearly a practical difference between letting someone die of their disease (an omission of treatment) and causing their death (by giving, for example, a lethal injection). But is there a moral difference? If they are morally different then we, as a society, may accept one as right and one as wrong. If they are morally the same then we must either accept both as right, or reject both as wrong. Currently, we as a society, appear to explicitly accept active euthanasia as wrong, but passive euthanasia, under certain conditions, as acceptable. I will expand on this shortly, but it is important to state that in so doing, we are acting with the assumption that they are morally different. The evidence that we, as a society, have accepted passive, but rejected active euthanasia, may be considered in three societal spheres: legal views, spiritual views and an examination of current practice.

The law is a means by which society translates its morality into explicit guidelines for behaviour [165]. In spite of a number of proposals to alter legislation, active euthanasia remains forbidden by law, regardless of whether the patient has consented or not, and constitutes the crime of unlawful homicide (i.e. murder or manslaughter) in almost all major jurisdictions [166,167]. In the Netherlands however, certain processes involved in voluntary active euthanasia, have enabled the doctor to mount a defence [168], and recent law changes make it a legal act, under constrained conditions.

However, passive euthanasia has support in a long list of legal precedents, both for competent patients who request no life sustaining treatment, and for patients with impaired competence [169, 170], and it has the support of authoritative medical bodies [171, 172].

Western religions such as Judaism and Christianity take the view that illness is to be treated by human rather than by divine intervention [173] but with professionals, such
as doctors, divinely blessed with their abilities to heal and undertaking what is God’s will. Crane suggests that this “activism” towards illness brings dilemmas when it seems to be no longer working, and death is imminent, or life has been left intolerable, whereas religions which have a “fatalistic” attitude to life and death seem not to have the “problem” of euthanasia.

Life is considered a divine gift, bestowed, sustained and finally reclaimed by God. The doctrine of the ‘sanctity of life’ has its origins in theology [174] and remains important in secular morality, although it defends itself on non-theological grounds also [175]. However, those who subscribe to the sanctity of life view do not generally claim that every patient’s life that can be prolonged ought to be prolonged by all available medical means. They subscribe to what Helga Kuhse describes as the “qualified sanctity of life” view, which holds that whilst it is always absolutely prohibited to terminate life intentionally on the basis of quality of life considerations, it is sometimes permissible to refrain from preventing death and to let a patient die [176]. (Kuhse argues, from a consequentialist perspective, the moral incoherency of this view and urges that life and death decisions must be made on the basis of quality of life considerations, and not a morally inconsistent sanctity of life doctrine) [177].

Catholic Church policy, according to a “qualified sanctity of life doctrine” condemns the causing of death, including active euthanasia, but is clearly in favour of the withdrawal of treatment in hopeless cases. Anthony Fisher [178] gives a detailed account of the Catholic view, and although he questions the moral difference between active and passive euthanasia, he stresses the Church’s “sanctity of life” philosophy, rejection of killing, but acceptance that “over treatment” in “hopeless cases” is inappropriate. Statements have even extended to condoning the administration of pain relief which may hasten death in terminally ill patients [179]. Gillon discusses the Roman Catholic moral doctrines of “ordinary and extraordinary means” and “double effect”. While the provision of “extraordinary means” to sustain life may be beyond the moral duty of a doctor (particularly, Gillon adds to the Roman Catholic perception,
when those means bring no benefit or cause disproportionate harm) [180] the doctrine of double effect delineates conditions in which it is morally legitimate to cause or permit evil in the pursuit of good [181].

The doctrine of double effect, reputedly has its origins in the deliberations of Thomas Aquinas regarding killing in self defence, and now has the conditions for its moral justification detailed in catholic texts [182]. In essence it allows the justification of an act leading to death if the intention of the act was an alternative outcome which is morally good and a direct consequence of the act. An example in modern medicine is the provision of strong opiate pain killers, with the good objective of relieving pain, but with the additional consequence of a possibility of profound sedation, impaired breathing and a hastened death. Although it is a doctrine criticised by some within the Catholic Church, as well as from others, it is influential in Catholic morality. An act with double effect may be morally justifiable (after considering the intentions of the act, patient preferences, balance of benefits and harms of each of the effects) and this justification, in a specific context, would be supported by many non-secular ethicists, however the doctrine, as a moral rule, has some inconsistencies with the doctrine of the sanctity of life. However, despite these criticisms, it is the policy of the Catholic Church to reject the deliberate taking of life as the prime objective, but to allow the termination of extraordinary means maintaining life and occasionally to allow death as a secondary consequence of an act with a morally good primary intention. Orthodox Judaism is also permissive of withdrawal of treatment in situations of suffering in incurable disease, but prohibits acts which tend to hasten death. [183].

The third element of evidence that our society sanctions passive euthanasia is found in current practice. Although this measure is not independent of the first two (legal and spiritual) there is no doubt that withholding and withdrawal of interventions which prolong life, when the life is seen to be not worth living, or when death is imminent, is common practice [184, 185] [and personal observation], however acts of active euthanasia are not.
It is apparent then, that our society has accepted that passive euthanasia is, in appropriate circumstances, the right thing to do, and that active euthanasia is not. If these measures of societies' acceptance reflect the morality of these two behaviours, then they would have to be morally different.

Are Active and Passive Euthanasia Morally Different?

In December 1973 a statement by the House of Delegates of the American Medical Association (AMA) endorsed the view that passive euthanasia may be acceptable but that active is not:

The intentional termination of the life of one human being by another - mercy killing - is contrary to that for which the medical profession stands and is contrary to the policy of the American Medical Association.
The cessation of the employment of extraordinary means to prolong life of the body when there is irrefutable evidence that biological death is imminent is the decision of the patient and/or his immediate family. The advice and judgement of the physician should be freely available to the patient and/or his immediate family [186].

James Rachels published a short, but important paper opposing the statement of the AMA in the NEJM in January 1975 [186, 187]. (He expanded his argument in his book The End of Life, Oxford University Press, Oxford 1986). He argues that, once the decision is made that the patient's agony should not be prolonged, then active euthanasia (a quick, controlled death) is highly preferable to passive euthanasia, (allowing the patient to die from their disease) which is commonly slow and painful. Rachels illustrates this with a disturbing description of children with Down's syndrome, also with a congenital intestinal obstruction for whom surgery is not provided. These children are “allowed to die” from their disease and their death involves observing “dehydration and infection wither a tiny being over hours and days.”

He continues to suggest that the doctrine promoted by the AMA allows decisions concerning life and death to be made on irrelevant grounds. In the case of the babies
with Down’s syndrome, they were allowed to die not because of their intestinal
obstruction, which is treatable with relatively simple surgery, but because of their
Down’s syndrome, which is not a fatal condition and which does not meet the
defensible criteria for non-treatment (an intolerable life). Active euthanasia of a
Down’s syndrome baby would struggle for moral justification for the same reasons:
Down’s syndrome is not life threatening, and doesn’t tend to cause intolerable
suffering. A baby without Down’s syndrome with a congenital intestinal obstruction
would not be left to die, but would have surgery to reverse the suffering and the life
threat. However passive euthanasia on the basis of a coexisting disease, which is
reversible, allows the euthanasia of the Down’s syndrome baby on the basis of, what
must be considered, false pretences.

Thirdly, Rachels examines the premise that killing someone is morally worse than
letting someone die. He describes two identical scenarios, in all respects but one. In
both cases a man wishes to see his young nephew dead, to gain an inheritance. In one
he kills the nephew by drowning him in the bath. In the other he finds him drowning in
the bath, having slipped and hit his head, but he does not intervene to prevent him
drowning. One was killing and the other was letting die, but both had the same outcome
and the same intent and both, argues Rachels, have the same moral and legal
culpability.

In euthanasia the intent is, of course, not personal gain, but it is to relieve suffering,
however, argues Rachels, in both passive and active euthanasia the intent and the
outcome are the same and both, therefore, are morally the same.

Tom Beauchamp continues Rachels’ argument [188]; “The justifying reasons for the
action make the difference as to whether such an action is right, not merely the kind of
action it is (killing, letting die, sacrificing, suiciding or whatever)”. Beauchamp argues
that the cessation of treatment is justifiable in certain circumstances but that morally
this is not different to active euthanasia. In the ‘Principles of Biomedical Ethics’ [189]
Beauchamp and Childress reiterate this view. Mercy killing, at the patient’s request and to relieve intolerable suffering may be clearly more justifiable than withdrawing resuscitation from a patient who would have a good outcome if resuscitation was continued. Simply the fact that it is killing, or it is letting die, tells us little about the moral justification for it. Instead issues such as motive, the patient’s request and the consequences in terms of benefits and harms that ensue, tell us more about the morality of the act (or omission) than whether it is an act or omission.

However, this observation does not prove that passive and active euthanasia are morally the same. Instead it suggests that this classification of euthanasia on the basis of a practical difference (an act versus an omission – there are other differences too, which I will come to) does not define them morally. I will return to this point in conclusion.

In addition to society, as described above, suggesting a moral difference between active and passive euthanasia, it is common for clinicians, involved in the management of the terminally ill to disagree with those philosophers who claim no moral difference [171, 185, 190].

One of the arguments presented by clinicians, in addition to the legal and social mandate, is that active euthanasia intuitively seems wrong. Grant Gillett describes “The Pause” [191], “between thought and action”. The pause is a point of reflection, in recognition that something important is at stake, which may not have been explicitly recognized when considering the principles of medical ethics, as they relate to a case. In relation to euthanasia, he states “it may point us towards unspoken psychological features of dying that can go unrecognised.”

Earlier in this thesis, when discussing a decision making model for resuscitationists, principlism was examined. It was suggested that the doctor, while benefited by the principles, should act as a “moral agent”, exercising his or her virtuous character when considering the patient’s wellbeing. The sensitivities that give rise to the ‘pause’, in a clinician with a virtuous character, when considering an important question such as
active euthanasia, must be given value. Common practice and published opinion suggest that clinicians, during this pause, generally say “this doesn’t seem right.”

Gillett in a 1994 paper entitled Killing, Letting Die and Moral Perception [185] furthers this argument;

General and abstract arguments fail to take account of the complex and particular situations which are found in the case of those with terminal illness. When in such situations, there are perceptions and intuitions available that do not easily find propositional form but lead most of those whose practice is in the care of the dying to resist active euthanasia.

This contention is consistent with the deliberation of Chapter Three suggesting principlism may “screen out” important considerations, that perceptions and intuitions are assisted by a narrative input into medical ethics education, and that exercising a virtuous character is a significant contributor to moral behaviour.

Jim Thornton, however challenged Gillett’s assertions in a paper published 5 years after Gillett’s [190]. Although he agreed that the doctor’s “moral perception” may be important, he suggested that if it could not be backed up with rational argument then it is of little value in determining the relative moralities of active and passive euthanasia. In addition to the argument relating to “moral perception”, a number of other arguments have suggested differences between active and passive euthanasia from a variety of perspectives. I will briefly summarise these [192].

The law, when considering prosecution for a crime takes into account a potential perpetrator’s “proximity” to the crime. Active and passive euthanasia are proximally different. Although this is a legal consideration rather than moral, proximity does have importance in the minds of many who consider the “rightness” of euthanasia. If a patient is left to die, with death ultimately being left to a disease, it causes less discomfort than death directly attributable to the doctor’s actions. Like the moral perception argument the degree of discomfort afforded by the proximity to the death may be criticised for the difficulty to rationalise this discomfort. However, a moral
agent exercising his or her virtuous character and “pausing” at the moment of act or omission perceives a difference, and this difference is recognised in law by the concept of proximity. Attempts to support this difference with a rational justification will not prove or disprove its existence, but instead will attempt to elucidate its origins. In other words, the law, the spiritual view and current practice perceive a difference. An inability to explain this difference does not eliminate it.

Related to proximity is a concern about interfering with the “natural order”. By natural order I mean a belief, religious or otherwise, in the importance of nature, or fate, or God in determining the significant aspects of one’s destiny, and particularly death. In passive euthanasia death is occurring and is occurring because of natural processes, albeit with an opportunity to prevent it occurring. A decision is made not to intervene and the natural processes run their course. In active euthanasia death is not occurring, or at least not imminently. Death, therefore, is changing this natural process. Those with some religious persuasions would describe this interference as ‘playing God’ and the principle of the “sanctity of life”, discussed earlier, is a reflection of how interference with the natural order regarding death, is abhorrent to some. Of course the doctor’s permission to interfere with the natural order by treating disease and preventing death in other circumstances contradicts this viewpoint. However, as discussed above, “activism” in health is condoned by the Judaeo-Christian perspective and it is reasonable to suppose that causing death, with no future recourse should God, or nature, or fate intend to take a different direction, is different to preserving life where the options for the natural order remain open. In a society whose mores are based on aspects of spirituality, concerns regarding changing the natural order are given considerable weight.

The “Slippery Slope” argument suggests that active euthanasia will lead to the gradual erosion of any initial robust moral justification, so that little by little, more and more are killed with less and less justification. For example, demented, mentally handicapped, or other “less desirable” members of society may eventually find
themselves being disposed of by active euthanasia. Although some suggest the Netherlands’ experience already illustrates an early slip [171] the slippery slope argument, although concerning, remains supposition and the solution to the slippery slope concern, if the concern is validated, may not be the abandonment of active euthanasia but instead a more considered application in individual cases [193].

Active euthanasia may lead to an erosion of trust in health care workers. Just as modern technology and intensive care have led many patients to fear doctors will keep them alive against their wishes, it has been suggested that active euthanasia would lead many to fear that doctors might end patient’s lives without being asked to do so [194]. Finally, despite the morality of active euthanasia, moral wrong-doing may occur if active euthanasia is made legal. In particular, those who may be most pressured to take advantage of the option are the elderly, who may be perceived by others and by themselves, as a burden on caregivers and on society. Such pressure on the elderly could result purely as a consequence of active euthanasia becoming a bona fide option which the elderly or frail may feel a duty to take, to improve the lot for those who care for them [195].

Before I summarise these many arguments regarding the morality of passive and active euthanasia I will discuss withholding and withdrawing life sustaining interventions.

**Withholding and Withdrawing**

In chapter one I introduced this discussion and I will briefly reiterate. When it is considered that the next step in resuscitation (I will refer to resuscitation, although other life sustaining interventions are relevant) is not to be taken, then withholding is the term used. When an intervention is underway, but it is stopped then withdrawing is the term used. If these result in death, as would be expected if the intervention in question is resuscitation from a life threatening condition, then these are forms of passive euthanasia.
Most moral philosophers who consider withholding and withdrawing argue that there is no moral difference between the two [196, 197], and a view of the legal and moral equivalence of withholding and withdrawing treatment was expressed by Lord Goff and Lord Lowry in the Bland case, with the latter saying:

I do not believe that there is a valid distinction between the omission to treat a patient and the abandonment of treatment which has been commenced, since to recognise such a distinction could quite illogically confer on a doctor who had refrained from treatment an immunity which did not benefit a doctor who had embarked on treatment in order to see whether it might help the patient and had abandoned the treatment when it was seen not to do so [198].

Iserson [9] as quoted in Chapter One, argues strongly that a moral difference exists, and the debate, in many respects, echoes the debate regarding the morality of active and passive euthanasia. Iserson argues that withholding resuscitation is seldom achievable, as resuscitators infrequently have sufficient information prior to initiating resuscitation efforts to be comfortable that the resuscitation is hopeless. In addition he argues that the societal expectations are for attempts to be made and that doing nothing (i.e. withholding resuscitation) is emotionally difficult because of these expectations, also because of the uncertainty with which the decision is made. In addition, withholding limits future options, as the patient will die, whereas proceeding allows the option of continuing or withdrawing, on the basis of how the patient responds to resuscitation.

Like the euthanasia debate, the morality of withholding and withdrawing are related more to considerations relating to intention and consequences, and therefore are not defined by whether the treatment is withheld or withdrawn. However, Iserson’s pragmatic differences cogently suggest withholding and withdrawal are different in important ways, but they may not prove a moral difference.

Gillett elaborates an observation made by Lord Lowry [personal communication]
“There is a widespread and mistaken belief among doctors, that beginning treatment and then stopping it is worse than not beginning it at all, but… this does not bear up under rational scrutiny.”

He suggests, and I will restate this later, that very often in resuscitation a trial of treatment is required to gather information upon which a better decision can be made. Not only does a trial of treatment provide time for information to gather, but the patient’s response, or lack of response, to the trial of treatment, is very important information itself.

Summary and Conclusion

Passive euthanasia is an option taken commonly in resuscitation decision making. It is an option which has been condoned by law, by religious spokespeople, by common practice and by most deliberators of medical ethics. The question of whether passive and active euthanasia are morally similar or different has a related, although not central, relevance to this thesis. Given that society has accepted passive euthanasia, under appropriate circumstances, then if active and passive euthanasia are morally the same, society must also accept active euthanasia. Although a number of differences can be clearly observed between passive and active euthanasia, the debate about moral differences has not achieved a consensus. However, on consideration of the arguments it seems appropriate to accept that the moral justification of the act (or omission) of euthanasia is determined by the motive, the patient’s request and the consequences (in terms of the benefits and harms) rather than by the act or the omission. In other words the classification into active and passive is a pragmatic classification and not a moral one, and arguments of moral similarity or differences based on this classification will never draw a conclusion. Each act or omission will differ in its moral justification according to the motive, patient’s request and consequences. There may be moral justification for passive omissions and for active acts and both passive omissions and active acts may be morally unjustifiable, from time to time each according to the merits of the act, (or omission) in question.
However, the important oppositions to active euthanasia described above, (including society’s rejection, religious beliefs, legal views, moral perception, proximity, natural causes etc) are not morally irrelevant considerations and although they will not define the act’s morality as they form only a part of the considerations in any specific case, they will weigh against the moral justification of any instance of active euthanasia. On this basis it is reasonable to conclude that each euthanasia act, (or omission) should be judged for moral justification, on its individual moral merits, but that active euthanasia will more often struggle for moral justification than passive, because the general moral opposition described above, will be relevant and will weigh heavily against the specific act in question.

Withholding and withdrawing life sustaining interventions are sub categories of passive euthanasia. In a similar way to the passive versus active euthanasia debate, the classification of withholding and withdrawing describe important pragmatic differences but do not define moral categories. Once again each act will seek moral justification on its merits, and not according to this classification.

However, this classification does bring two important considerations to this thesis, which I have mentioned previously but must restate. Firstly, some believe that it is better at times to withhold resuscitation, because once started it must be continued. To withdraw later is a contradiction, and a loss of face. This is unable to be supported and I will expand this point later.

Secondly, as previously discussed, there is no rational justification for employing the terms “withholding” and “withdrawing”. These terms imply a need for permission to stop resuscitation, when in all other medical interventions we must seek permission to proceed. In resuscitation, despite the urgency, the life threat and the impaired patient competence, there is opportunity to pursue the patient’s consent and soon I will describe how this might occur. If we accept this perspective, then the terms
“withholding” and “withdrawing” become redundant.
Chapter Ten
Harms beyond resuscitation.
May we practise endotracheal intubation on the newly dead?

Before we leave the harms of resuscitation and formulate a method for decision making in resuscitation medicine it is worth applying the principles discussed to another harm in the resuscitation room; practising life saving procedures, such as endotracheal intubation (passing a tube through the mouth past the vocal cords and into the airway when it is otherwise impaired), on those who have died.

Although this chapter is slightly tangential to the development of a decision making method, it is an important one, as the practising of procedures on the newly dead is considered by some to be one of the greatest harms perpetrated in the resuscitation room. In addition it illustrates that perimortal events can involve serious harms to the patient, even though the patient will not survive to recount these harms. This chapter will explore this allegation and examine options for preventing this particular harm in resuscitation medicine.

Endotracheal intubation (ETI) is the placing of a tube in a patient’s trachea and it is the preferred method of managing the airway in patients with life threatening conditions [199,200]. Adequate performance of endotracheal intubation requires the acquisition of knowledge and skills and the maintenance of expertise requires regular performance of the technique after it has been learned. Failure of the technique resulting in inadvertent intubation of the oesophagus is difficult to detect in the resuscitation milieu and will result in the patient’s death if not rapidly corrected [201].
Physicians have practiced ETI on the newly dead for many years [202] and despite suggestions that it is unlawful and unethical [203] many still consider that there is no better way to maintain the necessary expertise [202, 204-208]. Surveys of Emergency Departments in the United States of America and Australia suggest that one third to one half of Emergency Departments practice ETI on cadavers [209-212].

In 1988 Orlowski and colleagues published a paper supporting the practice of ETI on the newly dead and they consider this paper to be the first salvo in this debate [213]. In 1992 the Norwegian Medical Association ruled that the practice should be abandoned [214]. The British Medical Association and the Royal College of Nursing issued a joint statement condemning the practice in the United Kingdom [215], although they suggested that practising ETI on cadavers with facial injuries is justifiable due to its educational value, so long as family consent was obtained, and that other intubation practice should occur in the anaesthetic room, on the living. In the New York Times, December 15, 1994 an article appeared under the headline “Hospitals use bodies of dead for practice”, but it failed to ignite significant debate in the public media [216].

This chapter will examine this practice under the headings; The Argument For; About the Body; and About Consent, and then some possible future directions will be presented.

The Argument For

Endotracheal intubation is an essential part of resuscitation [199, 200]. It has been suggested that techniques such as bag and mask ventilation [212] and laryngeal masks [217] would suffice in the emergency situation, however these suggestions have been legitimately refuted.

Iserson, the most vocal proponent for ETI practice on cadavers, states that “society trusts the Emergency Physician will perform lifesaving interventions with the maximum
possible proficiency” and that “to do otherwise invalidates this trust”[204, 218] and a number of other authors support Iserson’s views [219,220]. Opponents of the practice accept that both learning ETI and being proficient prior to the need are important [221]. The argument therefore is not regarding the importance of ETI but whether it should be practised on cadavers, and, if so, what consent is required.

The case for practising ETI on cadavers is backed by many influential authorities. The chairman of The Academic Affairs Committee of the American College of Emergency Physicians claims cadaver practice of ETI is necessary or we do “our entire society a disservice”. The American Heart Association’s representatives state that “this practice is ethically justifiable in that it is non-mutilating, brief, beneficial to others and an effective teaching technique” [209, 222]. Landwirth, when discussing ethical issues in paediatric and neonatal resuscitations, says “practising non-invasive or minimally invasive procedures on the newly dead is acceptable because it serves an important public and institutional need and violates no interests of the dead patient”[223].

Alternatives to practising ETI on cadavers do exist. Virtual reality techniques are not yet practical [218] and animal models have disparate anatomy [204]. Mannequins are considered by many to be too different anatomically, too constant anatomically and too rigid to be of use beyond the initial training. One study of mannequin use by paramedics suggested that those who trained on mannequins alone were as proficient as those who trained on mannequins and cadavers [224]. If mannequin training is as good as cadaver training then the debate would become unbalanced and the process of ETI practice using cadavers should cease. However, this study has been criticised [225] and two further studies support the common perception that training using cadavers is superior [226, 227].
Delaying the pronouncement of death during resuscitation in order to teach or practice procedures is said to be a common event and has been described as a “deceitful and harmful hypocrisy”[208].

Practising intubation on patients undergoing anaesthesia, as suggested by the representatives of the British Medical Association [215], raises further concerns. It is often performed without the patients’ consent and it has the potential for injury, and possibly death. Even if consent is obtained the potential for harm remains and it has been suggested that patients prior to anaesthesia would be prone to coercion when consent is sought [228].

If we accept that ETI is important and that ETI training using cadavers is better than the alternatives then we must be able to argue our right to use cadavers in this way. The arguments stated in the literature centre around altruism, communitarianism and utilitarianism.

Iserson argues the “pervasive altruism” of most people and that seeking consent from relatives contravenes the patient’s altruism [202]. Those who counter Iserson’s argument concede that many would consent but a significant minority would not [203, 228]. Although consenting might be virtuous the commendable virtue of altruism is weakened when there is no choice.

The communitarian ethic implies both a desire and an obligation to consent as a consequence of being a member of the community and of utilizing the community’s emergency services [218]. Iserson continues the communitarian argument by claiming that it represents a most egalitarian system, with any member of the community providing practice and therefore benefiting any other member of the community who may next need intubation [204, 218]. Although the communitarian argument may represent “a most
egalitarian” system it can not guarantee that some would not be intubated more than others. For example, the elderly are likely to be over-represented in unsuccessful resuscitations and therefore may provide most of the practice for the communities benefit. Also there may be those to whom this represents a greater abhorrence than the average member of the community. For example Muslims may consider post mortem ETI to be highly objectionable and will therefore suffer a greater harm from it than others in the community who object less.

The communitarian argument however expounds the individual’s responsibility to his or her community whereas the utilitarian argues for the greater good of the community, even if it is at the individual’s expense. Iserson says that “while societies should respect their dead, the living should never be sacrificed to their memory” [218].

In Willard Gaylin’s article “Harvesting the Dead” [229] he describes a future world where the dead are maintained and put to a variety of important medical uses so innovative and useful that he brings out the utilitarian in all of us. However, after describing all of the benefits of his new world he asks “how are we to reconcile our emotions? Where ... are we to weigh... the repugnance generated by the entire philanthropic endeavour?”

The arguments for ETI practice on the newly dead are persuasive and well supported. The procedure is non invasive by Iserson’s definition [208] (it leaves no mark), it should be performed only on those with a cardiorespiratory death (to avoid possible mistakes in those presumed to be brain dead in the Emergency Department) [208] and it has well argued and well-accepted benefits. However, there are two striking counter arguments. The issue of the patient’s desire, or obligation to consent has been alluded to and will be discussed further in the section; About Consent. The issue raised by Willard Gaylin, of the “repugnance generated” will be discussed in the following section: About the Body.
About the Body

Leon Kass, after interviewing medical students recently exposed to dissection of cadavers, relates that “they understood and felt that they were engaged in something fundamentally disrespectful - albeit in a good cause” [230] In 25% of departments that allow ETI on cadavers objection had been registered by the staff with concern that the procedure was disrespectful [228]. However Iserson argues that performing post mortem practice on the body is the “ultimate respect for the corpse” given the likely altruism of the erstwhile person. Furthermore, he contends, corpses are “non-persons”, and merely symbols of the former person, now deceased, and as such they have no autonomy, therefore suggesting that harm can be done to them is a “legal and ethical fiction”[218].

William F May explains the symbolic nature of the corpse and contends that elements of aversion and horror are a consequence of the symbolism, and with this comes an aversion to any and all who would interfere with the corpse [231]. Furthermore, the Christian tradition affirms a profound link and identity of the spirit with its somatic existence and would not readily allow invasion of the body, without explicit consent [231]. These sentiments are stronger in Judaism and stronger still in Islam. The Judeo-Christian view of the body and spirit offers a further explanation of the repugnance of tampering with the corpse, which I will call the “theory of the spiritual witness”. Although it may be conceded that the person has gone from the corpse, the Judeo-Christian belief suggests that the person is still there somewhere, and that furthermore, that person, or spirit of the person, may well be in a panoptic position and able to witness any indignities inflicted upon the corpse. Both the concern that the spirit might take offence, and the fear that there may be spiritual repercussions further fuel the feeling of repugnance.
Joel Feinberg cautions us in our respect for symbols; “A newly dead body is a sacred symbol of a real person,” he says “but to respect that symbol by banning autopsies and research on cadavers is to deprive living beings of the benefit of medical knowledge. What is called for,” he continues, “is a careful rational superintendency of the sentiments”[232].

It seems, therefore, that concerns of disrespect, or feeling repugnance towards procedures on the deceased are real and that their origins can be illuminated. What is argued by Feinberg and others is that those feelings should be suitably restrained when the procedures procure great benefit. What remains to be elucidated are what rights, if any, the corpse has and what rights others have to the corpse.

The so called “no property” rule has its origins in the 13th century and suggests that the dead body does not have an owner and is not the subject of property, although the person who is charged with disposal of the corpse has a right to possession of the corpse for that purpose [233]. This “quasi-property” right usually applies to the family and is the basis for suggesting the family must give consent for medical procedures on the corpse. Furthermore the coroner has a prior right to possession of the body when it is required for the purpose of coronial inquiries. The Anatomy Act of 1984 and the Human Tissue Act of 1961 define the medical research and educational activities that can be performed on cadavers in the United Kingdom however Skegg argues that performing unauthorized post mortem procedures would be unlikely to be proven as a crime under these Acts, or other statute or common law precedents [234].

Goldblatt however argues that quasi-property rights give the family fundamental rights to the body and that using a corpse without statutory authorization or proxy consent violates the common law [203]. Iserson counters that quasi-property rights apply only to ensuring an adequate burial and not to the right to refuse post mortem procedures [204]. A legal precedent has not been established for ETI of cadavers and common law outcomes
regarding unauthorized corneal graft harvesting and autopsies have been variable but at times they have come down in favour of the quasi-property rights of the family [221,235].

In summary the corpse appears to have no legal standing but the family are afforded quasi-property rights which may extend beyond ownership for burial purposes.

Given the proven and appreciated repugnance for practising ETI on cadavers and the possibility of legal liability, should we be thinking about getting consent?

About Consent

Despite the impression that usually consent is not sought the “no-consent” option is not argued in the literature but instead proponents of the procedure justify it on the basis of alternative forms of consent rather than none at all. Models of consent were discussed in Chapter Five, but will be revisited here, and applied to this question.

Implied consent describes consent that is implicit in the fact that the patient used the Emergency Services and it has been argued that therefore the patient is agreeable to all that entails, including being used for teaching. Implied consent criteria are commonly used for those who present, of their own volition for non invasive medical care. However patients who die in the Emergency Department most often do not present of their own volition but instead are brought in by others, usually ambulance staff, in a state of impaired autonomy. Furthermore implied consent confers the right to administer that treatment the patient would reasonably expect at the time of presentation. In the emergency resuscitation scenario consent is also implied by the urgency and benefit of the treatment, neither of which apply to the scenario once resuscitation has ceased. Therefore if a patient’s attendance is non-voluntary with impaired autonomy or with ignorance of the procedure and with no direct benefit to the patient then he or she cannot imply consent and we cannot infer it.
Construed consent is a modification of implied consent suggesting that if consent was obtained for a procedure then it can be construed for a related procedure [203]. If we concede that a form of consent (presumed consent - below) is obtained to intubate a patient during resuscitation, can we construe that consent also applies to ETI after death? There is an apparent logic to this as to perform the same procedure on the same patient with the same equipment one minute before and one minute after death seems a continuum of the same therapeutic relationship. However, on close analysis there is a difference sufficiently significant to render a previous consent null and void. The consent to resuscitate is based on a contract, between medical staff and patient, dedicated to helping the patient. When the objective is no longer to help the patient then the previous contract is irrelevant and a new contract must be entered. To proceed to intubate the deceased under the old contract is a violation of the trust inherent in the previously formed therapeutic relationship and an appreciation of this violation contributes to the repugnance of the procedure.

Presumed consent is appropriate when impaired autonomy renders the patient incompetent to give informed consent. Consent can be presumed, if based on a balance of beneficence over maleficence, this patient, or another reasonable person would consent in the same circumstances, if they were able to. As previously discussed, in English law a “reasonable doctor standard” rather than a “reasonable person standard” of consent is employed. That is, consent can be presumed if a reasonable doctor, considering benefit and harm, and using accepted treatments, would also manage the patient in the way intended. As presented earlier resuscitation endeavours tend to proceed on the basis of presumed consent.

Presumed consent therefore is an extraction of the arguments already outlined of altruism, communitarianism and utilitarianism. Although it is likely that most would consent (if they could) presumed consent does disadvantage the minority who would not [228].
Formal application of a presumed consent rule for ETI of the recently dead mandates that the community should be well informed so that individuals have the opportunity to explicitly decline consent if they so desire. A number of countries have presumed consent laws for organ harvesting for transplantation, meaning that all deceased are eligible for organ harvesting unless they or their family specifically decline. The relevance of this model to the question of ETI of the newly dead is significant, and will be explored later in this chapter.

Proxy consent recognises the quasi-property rights of the family. Goldblatt argues that at least in the United States of America, proxy consent authorising the medical use of a dead body is a legal and ethical necessity [203]. Precedent also supports the need for proxy consent. With the exception of coronial autopsies, which are covered by statute, permission for autopsy needs to be granted by the family. Similarly, organ harvesting requires the family’s consent, except in countries where explicit presumed consent is written in statutes. Orlowski and Iserson outline the difficulties of proxy consent [208,218]. Relatives tend to be protective of the newly dead and therefore under-represent the patient’s wishes, by the time the family are available the body is often prepared for viewing, the resuscitators have gone on to other pressing matters, and the body may have been transferred to the morgue. If the procedure is not performed within three to four hours of death, that is, before the onset of rigor mortis, then it loses its value. Furthermore, giving and receiving the news of the death is difficult and then to proceed to ask permission to practice resuscitation techniques on the body is considered by many to be extreme insensitivity. Furthermore relatives may be expected to receive the request to perform ETI less favourably than a request for organ donation as the procedure is unfamiliar to them and organ donation allows the perception that a part of their loved one “lives on”, whereas ETI offers no such incentive. Research on efforts to seek proxy consent for post mortem procedures reports a positive response from family members between half and three quarters of the time [236,237]. Iserson contends however, that “families should not be permitted to thwart what could reasonably have been expected to have been the deceased patient’s best wishes.”[202]. Furthermore, he contends that
requiring consent guarantees that the procedure will not be performed as most will not ask [204]. Perkins and colleagues who, after extensive deliberations, introduced a proxy consent policy at their hospital, noted that, the new policy “has had the unintended effect of ... significantly stifling this important training”[221].

What Should We Do?

1. Stop?

Norway and Great Britain have taken this option, although the British Medical Association has proposed that performing the procedure on cadavers with facial injuries is justified. ETI is undoubtedly a valuable skill to learn and practise and currently cadavers offer the best way of learning and practising, although lesser alternatives do exist.

2. Don’t ask, don’t tell?

The President’s Commission for the study of ethical problems in medicine and biomedical and health research states that we should make; “a reasonable effort to obtain specific consent from the next of kin when the research is beyond the normal scope of teaching and research...”[228]. Although this has been used to justify a “don’t ask, don’t tell” approach to ETI on cadavers it cannot be considered to be within “the normal scope of teaching” if the public are oblivious to it, many find it repugnant, and two countries have banned it. If we presume consent, and don’t ask, we are obliged to tell. In so doing the significant minority who would not consent are protected by an opportunity to decline. To proceed with presumed consent therefore, we must have a well-informed public and preferably statute to formalise their consent.

3. Proxy consent?
If we cannot proceed without consent, and we cannot presume consent without a well-informed public, and the patient has not already given us consent then proxy consent is the remaining option. Furthermore there is probably some weak common law precedent to suggest that the family’s quasi-property rights to the body demand their consent. However, as Iserson has rightly suggested, proxy consent is sufficient a barrier to mean this valuable procedure would not be performed.

4. Prior consent from the deceased?

Gaining prior consent from a terminally ill patient is a reasonable but impractical solution to this problem. However there are two further methods of prior consent which may offer better solutions.

According to a “Guttman scale”, which suggests that if an extreme procedure is accepted then all of the less extreme procedures on the scale will also be accepted, then consent for post-mortem ETI might be assumed if the patient has already consented to something more extreme [238]. Sanner performed a survey of public attitudes to autopsy, organ donation, and anatomic dissection and found that these procedures could be placed on a “Guttman scale” according to the procedure’s “provocation of discomfort”, with the ranking: autopsy, organ donation, anatomical dissection, in order of increasing provocation of discomfort [238].

ETI on cadavers was not discussed by Sanner, nor has it been ranked on a Guttman scale and it could be proposed to be either less or more repugnant than organ donation or autopsy on such a scale. However, if the public were well informed of its benefit and its harm it would seem reasonable to assume that it would fall on a scale below autopsy or organ donation. Thus it might be inferred that a patient who has already consented to organ donation (for example by indication on their drivers licences, as already occurs in a number of countries) would also consent to post-mortem ETI. Further research on the
position of post-mortem ETI on a Guttman scale is required to support any such inference. To date the only research done to explore this issue was undertaken by the author. Over 100 emergency nurses at a study day were asked if they were willing to undergo post-mortem organ donation, anatomic dissection, or post-mortem ETI. Although the majority consented to ETI there was no relationship between consent for ETI and consent for the other procedures, suggesting a Guttman scale may not offer a presumption of consent for ETI in those who have consented to organ donation or anatomic dissection.

Although the population surveyed could not be considered to represent the views of all, or most people, the lack of a Guttman scale hierarchy in this group is important. The use of a Guttman scale therefore, to seek a presumption of consent for ETI remains an interesting but un-validated option.

Finally, the most convincing solution to this problem is what Spital calls “Mandated Choice” [228]. Spital proposes a process whereby, as a matter of public policy, individuals must make choices on a variety of issues. Spital specifically discusses organ donation and such mandated choice occurs in a number of countries already with recording of the choice on, for example, the individuals drivers licence. This process informs and honours individual choice, it gives the significant minority the opportunity to decline and it avoids deception.

**Summary**

ETI is a valuable procedure which must be learnt and practised and performing ETI on cadavers is probably the best way to do this, although lesser alternatives do exist. After Agnes’ unsuccessful resuscitation was ceased should the junior members of the resuscitation team have been allowed to practise ETI on her recently deceased body? Would this have improved the likelihood of success in resuscitations like Brian’s, where
the doctor seemed to need more practise? Would Agnes have consented was she able to be asked?

Performing ETI on a cadaver is viewed with a real and reasonable repugnance and if it is done without proper authorisation it might be illegal. Some form of consent is required. Presumed consent would preferably be governed by statute and should only occur if the community is well informed and therefore individuals are in a position of being able to decline. Currently neither statute nor adequate informing exists. ETI on the newly dead may be justifiable according to a Guttman scale if the patient has already consented to organ donation and if further research supports the relevance of the Guttman scale to this question. A “mandated choice” with prior individual consent as a matter of public policy is the best of these solutions, however until such a solution is in place we may not practice endotracheal intubation on the newly dead.
Chapter Eleven
Resurrecting autonomy during resuscitation.
Professional substituted judgement.

In this thesis I have argued that there are two components of resuscitation medicine which conspire against the early application of the principles outlined by Beauchamp and Childress. The first of these is urgency, and the second is the impaired ability of the patient to exercise autonomy.

Urgency may be a barrier to the application of these principles. However, resuscitation may be initiated and reviewed in the light of enquiries regarding the patient’s likely wishes and consideration of the likely outcome of the resuscitation endeavours.

The impaired competence of patients undergoing resuscitation leaves the principle of respect for autonomy on difficult ground as the patient is limited in his or her ability to receive information, comprehend it, consider it in context, and make a rational decision on the basis of this consideration. The degree of this impairment will vary with the gravity of the illness or injury. A patient undergoing cardiopulmonary resuscitation (CPR) for example, will be unable to perform any of these tasks, whereas a patient with life threatening trauma after a road crash may be able to receive information, comprehend and respond in a limited capacity. Although this thesis has relevance to each of these, the focus is on the unconscious patient undergoing resuscitation, and in particular the cardiac
arrest patient. It is common practice not to seek or to ignore the wishes of the patient and instead to presume that resuscitation is the right thing to do based on arguments of beneficence and non-maleficence. Although, ideally, a beneficent act would benefit the patient maximally when it honours the patient’s wishes (a patient centred standard), and the principle of non-maleficence is employed when the patient’s wishes or preferences are not overridden. Undertaking what the patient considers less beneficial, or more harmful is likely to be less beneficial or more harmful for the patient. However it is generally perceived that consent is not required for resuscitation because resuscitation brings benefit and prevents harm and because the patient is not in a position to give or withhold consent. Although this approach to resuscitation usually does not mean that bad things are done, from an ethical perspective it is fundamentally flawed. Resuscitation can bring about a number of undesired consequences ranging from the discomforts of the resuscitation procedures to survival with an unacceptable quality of life and I have discussed these harms of resuscitation previously. As with any other medical intervention there are benefits and harms to consider and as with any other medical intervention some form of consent must be obtained for resuscitation to proceed.

Consent for resuscitation has been discussed in detail but a brief reiteration is required before I suggest an alternative model of consent. Informed consent is appropriate for planned procedures but is usually impossible during resuscitation due to the urgency of the treatment and impaired patient autonomy. Even in the absence of impaired patient competence, urgency in itself is coercive and it limits the time available for adequate informing and deliberation. More often than not patient competence is impaired by hypoxia, hypovolemia, head injury, distracting pain or other distresses, or illicit or therapeutic drugs. However if informed consent is not relevant, other forms of consent still are. The two most common forms of consent employed in resuscitation scenarios, are presumed consent and proxy consent, and occasionally a prior indication of the patient’s wishes may be recorded in an advance directive or a do-not-resuscitate order.
Resuscitators can presume consent on the basis of three possible derivations of that presumption. The first is to presume consent because, based on general professional judgement, the proposed intervention is considered the right thing to do. Alternatively consent may be presumed because a rational and autonomous agent would consent in a hypothetical circumstance of being able to consent to the proposed intervention. The third derivation is to presume consent on the basis of predicting that the individual for whom the resuscitation is proposed would consent if able to (i.e. if not impaired).

The presumed consent model for resuscitation may be criticised for its inability to adequately embrace the principle of respect for patient autonomy. The third derivation of the presumption attempts to perceive the proposed resuscitation from this particular patient’s perspective whereas the previous two, and particularly the first, are paternalistic in their motives to the extent that they are based on the principles of beneficence and non-maleficence with no or little regard for the principle of respect for autonomy.

Weak or soft paternalism, as discussed earlier, describes the situation where autonomy is compromised or impaired and where beneficence and non-maleficence override any autonomous objection to treatment. This is often argued as a justification for the resuscitation and treatment of patients who have attempted to take their own lives and who resist the treatment endeavours. In most resuscitation interventions the paternalism is of the softest sort as there is no objection to treatment but merely an absence of explicit consent. However a blanket presumption of consent does tend to give insufficient consideration to the benefit/harm balance of the resuscitation endeavour and the fact that many would decline consent, under some circumstances of resuscitation, if they had the ability to do so. Hiberman and colleagues, after applying the principles of beneficence, non-maleficence, autonomy and justice to the application of cardiopulmonary resuscitation, conclude that it should be performed when justified by the extensive outcomes literature; not performed when not desired by the patient or not indicated, and performed infrequently when relatively contraindicated [83]. They argue this on the basis
of the outcome literature, and the likely wishes of the patients. The outcome literature for cardiopulmonary resuscitation is extensive and has been reviewed. Attempts have been made to estimate the desire to receive cardiopulmonary resuscitation. Rosenfeld and colleagues found approximately two thirds of seriously ill patients preferred cardiopulmonary resuscitation in the event of cardiac arrest [239], and Bruce-Jones and colleagues found a similar proportion of acute geriatric unit patients desired it with poorer personal health and social circumstances contributing to a preference not to receive CPR [240]. However, as previously argued, the likelihood of success after CPR may be misrepresented in the public imagination [36] and the preference for CPR among those better informed may be less. Hauswald and Tanberg [39] surveyed 105 emergency physicians, nurses and medical technicians who regularly resuscitate cardiac arrest victims and asked their presumably well informed population what they would like done if they were the arrest victim. 65% wanted resuscitation to cease before the second dose of Adrenaline and 10% wanted no resuscitation at all. Only 3% were willing to undertake full resuscitation as currently practised. Similar results were obtained when New Zealand emergency nurses were surveyed (Ardagh M. unpublished research, see Appendix One). These and a variety of other studies which have sought the views of actual and potential patients [241-243] tell us that some prefer CPR and some do not, and that preferences are influenced by disease severity, life values, social circumstances and a perception of the likely outcome of CPR. However none allows an accurate prediction of the preferences of an individual undergoing CPR and most emphasise the value of allowing the prior expression of a preference in the form of an advance directive.

Proxy consent attempts to honour the principle of respect for autonomy by transferring the patient autonomy to a proxy and thereby limiting the possibility of physician-based paternalism. However, I have argued that this does not adequately raise the level of respect for patient autonomy and it may lessen the contributions of beneficence and non-maleficence in the patient’s care.
We can break down respect for patient autonomy into two general components; the first is to give the patient information and the environment necessary for adequate deliberation and the second is to respect the preference expressed by the patient on the basis of this deliberation. In a resuscitation scenario, the pressures of urgency mean that a proxy is frequently not given the time or the environment for adequate deliberation and even if they are allowed to sit and deliberate medical staff may be selective in their informing due to constraints of time. When the proxy expresses a preference obviously the preference is not that of the patient although ideally it should approximate it. Proxy consent using substituted judgement more reasonably respects the wishes of the patient by asking the proxy to give consent on the basis of what they perceive the patient would want rather than what the proxy wants for the patient. However even if informing and deliberation were ideal and the proxy was able to give a preference based on what they perceive would be the patient’s wishes there are two influences which will contribute to distorting this preference. Very rarely proxies may decline resuscitation consent because of some pecuniary advantage to them expected to result from the patient’s death. Much more commonly proxies will give consent to resuscitation procedures for fear of contributing to the patient’s death by declining resuscitation, no matter how hopeless that resuscitation might be. In order words, proxies will tend to say, “Yes” to resuscitation on occasions when the patient would have said “No”, because the patient would perceive an unfavourable balance of harm over benefit from their perspective. Furthermore, the process of achieving proxy consent is an unfair burden to place upon the patient’s relatives or loved ones. At a time which is already emotionally fraught they are then placed in the situation of making an apparent life and death decision for their relative based on limited information and understanding. There has been no evidence produced that proxy consent is a better respecter of patient autonomy than presumed consent. Instead it may be a poor reflector of patient autonomy and it may lead to resuscitation decisions which are not rationally based on perceptions of benefit and harm.
Professional substituted judgement.

If we are to honour the principles of respect for patient autonomy, beneficence and non-maleficence when starting and continuing resuscitation we must try and achieve the best balance between benefit and harm and try to see this from the patient’s perspective as best can be achieved under difficult circumstances. I will argue that the people most appropriately placed to appreciate the benefit/harm balance are the resuscitators. The reasons for this are as follows:

1. Information is limited during a resuscitation scenario and prediction of outcome is a probabilistic assessment of information arising from knowledge and experience.
2. The benefit/harm balance is continually changing as more information becomes available and as the patient responds or does not respond to various endeavours.
3. Urgency to begin and to continue resuscitation endeavours means that there is not time for adequate informing of others and for others to deliberate to any lengthy extent.
4. The rapidly changing benefit/harm balance described above means that any deliberation that might occur loses relevance as the resuscitation proceeds.
5. The disease or injury leading to the requirement of resuscitation and the patient’s response to that disease or injury are unique and therefore outcomes can never be clearly defined for an individual undergoing resuscitation. The best appreciation of the likely outcome comes from the accumulated experience of previous resuscitations and from a knowledge of discussion of outcome issues in the medical literature and other forums.

I will argue also that, although there is no ideal way of viewing this information from the patient’s perspective, the best people to view it from the patient’s perspective are the resuscitators. The reasons for this are as follows:
1. The resuscitators, as described above, have the best grasp of the benefit/harm ratio in general terms and are therefore best armed to attempt to view it from the patient’s perspective.

2. The resuscitators are less influenced by the emotive milieu surrounding the patient’s illness and from the protective or defensive attitudes which may coerce a proxy into consenting.

The weakness the resuscitators have is the ability to understand the life and views (the story) of the patient. However, if attempts can be made to ascertain this story and with a default to resuscitation when there is doubt then the resuscitators will err on the side of keeping the options open until the benefit/harm balance as perceived by the patient is more clearly in focus. The presence of an advance directive or a do-not-resuscitate order gives the resuscitator a valuable insight into the patient’s perspective and will aid this process.

The process of consent using substituted judgement by professionals involves the resuscitators gathering as much information about the patient as they possibly can, including speaking with the patient’s loved ones, caregivers, bystanders or anyone else who can assist in this process and giving due consideration to any prior record of the patient’s wishes. With their acquired professional knowledge of the likely outcome of the resuscitation based on previous experience, a knowledge of medical literature, their knowledge of the injury or disease afflicting this patient and the patient’s response so far, the resuscitators can then exercise their moral imagination by imagining themselves as the patient, with the patient’s condition and value system, and asking “would I want this treatment?” In this way, the patient’s autonomy is respected as best it can be under difficult circumstances by combining a knowledge of the harms and benefits of the resuscitation with an appreciation of this balance from the patient’s perspective as best it can be defined. If the answer to the question is, “No, I would not.” then the resuscitation should not proceed. To resuscitate without regard for the patient’s perceived wishes is a harmful disrespect for the patient’s autonomy. Often, and appropriately, a decision to
proceed will be made on the basis of a perceived balance of marginal benefit over harm that is made more appealing by the prospect of an alternative of certain death if resuscitation is not undertaken. Furthermore, the perception of the harm/benefit balance from the patient’s perspective may be unclear and under these circumstances it is appropriate to give the patient a trial of treatment. However the balance is dynamic with a clearer view of the likely benefits and harms emerging as the patient responds or does not respond to resuscitation endeavours. As soon as the answer to the question becomes, “No I would not want this resuscitation,” then the resuscitation must stop.

The concepts of withholding and withdrawing treatment are somewhat misdirected in that they imply a need for permission to stop the resuscitation whereas the precedent in medicine is to get permission to proceed. It is wrong to withhold a resuscitation endeavour because of the concern that the lifesaving treatment cannot be withdrawn at a later date if things are not going well. When resuscitation is withheld a small but significant number of patients may miss out on an opportunity for a good outcome had the resuscitation been offered to them. Similarly it is wrong to be unable to withdraw resuscitation because of the ill-conceived concept that once resuscitation has begun it must continue. A trial of treatment allows the gathering of important information to aid the process of professional substituted judgement, but it is not, in any way, morally binding. Explicit use of a trial, to allow the accumulation of information, and to keep options open during a period of uncertainty, should mean that stopping treatment when consent can no longer be presumed, is not a surprise to anyone.

By employing professional-substituted judgement the resuscitator should recognise when the balance of benefit and harm becomes unfavourable from the patient’s perspective and at this point the resuscitators have a moral obligation to withdraw resuscitation as they can no longer presume the patient’s consent. In this way the patient’s autonomy is resurrected and the principles of beneficence, non-maleficence and respect for patient autonomy are more favourably balanced than under other resuscitation decision-making processes.
A response to criticism of professional substituted judgement

The argument for professional substituted judgement, developed along the lines detailed in this thesis, was published in October 1999 in the Journal of Medical ethics [244]. In addition it has been presented in a number of forums to audiences composed of those with an interest in medical ethics, or of clinicians for whom the decision making model is intended. The response, when there has been one, has ranged from a concession of agreement to enthusiastic acceptance. However, occasional questions or criticisms have emerged and I will address these now.

Some have suggested that it has the appearance of paternalism in that it argues a model of decision making by the professionals with a disempowerment of relatives or others who might act as the patient’s proxy. This criticism is somewhat ironic, and a disturbing criticism of my ability to present my argument, as professional substituted judgement has its strength in resurrecting the autonomy of a patient with impaired competence. If we accept that the ideal option for decision making during resuscitation, is for a well informed, competent, unhurried patient to decide for themselves, from their life context, then how do we attempt to achieve this when many difficulties conspire against it? Informing is difficult as the outcomes from resuscitation are difficult to predict and variable. Even if an outcome could be accurately predicted based on the interpretation of a number of variables, the variables change regularly as the resuscitation proceeds. Decisions often cannot await deliberation as interventions in resuscitation have a narrow window of opportunity for usefulness. The patients are typically impaired in their abilities to receive information, deliberate and express an outcome. In reality we will
never achieve the ideal option for decision making, but we can get considerably closer than we have to date.

Resuscitation should not be considered different to other medical interventions, which require permission to proceed. One might argue that a coherent rule utilitarian approach would be to deliver resuscitation to all unless there are good reasons not to. If resuscitation is not delivered then the patient will die, and opportunities for different outcomes are lost. Although some may be disadvantaged by resuscitation (through the harms I have elucidated) the general rule to resuscitate will benefit most and keep options open for the individual in question. However there is a strong argument against such a rule utilitarian view. In Chapter Two we reviewed the outcome literature and discovered that outcomes from resuscitations are commonly poor, and that most people, if informed of this, and if asked, would not consent to resuscitation. In Chapter Seven I described in detail, the harms of resuscitation which might ensue. The utility of a rule to resuscitate unless there are reasons not to is questionable if outcomes are generally poor, harms are significant, and most would not want it. In addition, if professional substituted judgement promotes a trial of resuscitation until the likely views of the patient are more clearly defined, then the utility of a rule to resuscitate all is further undermined as professional substituted judgement also “keeps options open” while better respecting the decision to decline resuscitation which many would make.

A further criticism of professional substituted judgement is that it is merely an argument for the status quo, and I will address this criticism as I continue my counter to the “paternalism” criticism. The status quo is for resuscitation to proceed unless there is a clear mandate not to. In other words it is a rule utilitarian approach, as discussed already, and as already dismissed as inferior to professional substituted judgement in its ability to promote utility. Indeed, the status quo is for resuscitators to disregard the patient’s autonomy due to the mistaken assumption that resuscitation brings benefit and prevents harm and that the patient is not in a position to give or withhold consent. As a
consequence, the patient’s view is not sought, even when elements of it are accessible. Therefore, the ‘status quo’ is paternalistic (a paternalism of ignorance as described in Chapter Six) and professional substituted judgement, by seeking and respecting whatever elements of the patient’s view are present, is a means of resurrecting the patient’s autonomy.

Paternalism, the status quo and a rule to resuscitate all unless there is a mandate not to, are three criticisms of professional substituted judgement which I have addressed. A fourth is the suggestion that the flow of information regarding the patient’s view, to the resuscitators, should not be any better than the flow of information from the resuscitators to the proxies, for an informed proxy consent. Arguments already outlined serve to refute this. Outcomes are difficult to predict and variable, the perception of outcomes is changing continuously as the resuscitation proceeds, many interventions do not allow time for deliberations or the opportunity for usefulness is lost, proxies are often not present or delayed in their presentation, they are potentially coerced by the emotive milieu and they may not represent the views of the patient even if they were well informed and given the time and environment to deliberate. The professionals may also labour under uncertainty but their knowledge of outcome is greater than the proxies and remains “real-time” due to their proximity to the patient and resuscitation. They may also be emotional but intuitively this must be less than the degree of emotion coercing the proxies, and by virtue of their position as “strangers” the professionals maintain an independence the proxies are unlikely to achieve. They may have limited information regarding the patient’s views but a default to keeping the options open until the patient’s views are more clearly defined compensates for this. Most importantly, professional substituted judgement does not shift the decision making power-base to the professionals, at the expense of the patient or the relative, but encourages the professionals to seek the views of all characters in the patient’s story, and then, through their moral imagination, to ascertain the patient’s wishes.
Although this model does not achieve the ideal of an explicit and robust informed patient decision it gets closer than current models of a rule to resuscitate all, presumed consent or proxy consent. Its weakness remains the professional’s ability to perceive the patient’s view, but at least attempting to do so respects autonomy, and a default to a trial of resuscitation keeps options open thereby compensating for its weaknesses. This model, as presented in this thesis, does tend to take the perspective of a resuscitating physician and does not specifically addressed the issues of other members of the team who might contribute to a team decision, such as paramedical staff, nursing staff, junior members of the resuscitation team and other specialist staff involved in a multidisciplinary resuscitation. This model demands further research regarding the potential difficulties or conflicts that might arise from the application of the model by a team. Further research is also required regarding the accuracy of the professional’s judgement in relation to the patient’s and to the variations between professionals that might be brought about by age, experience, cultural, ethnic, religious, or other backgrounds.

Finally, criticism of this argument has concerned the issue of distributive justice. When discussing the harms of resuscitation the issue of distributive justice was included. Specifically I suggested that one harm of resuscitation is if it is unwise because it diverts resources from other health care activities which may have greater utility. It has been suggested that such a consideration should not influence life and death decision making of resuscitators regarding individuals under their resuscitation. To include thoughts about distributive justice in a decision making model for resuscitators to be used during resuscitation, is giving weight to concerns for the community at large, but in an environment which is not well suited to considering issues of distributive justice, and to individuals who have neither the qualifications nor authority to do so. Issues of distributive justice should not be influential in the deliberations of resuscitators resuscitating a specific patient. However, issues of distributive justice still remain an important harm of resuscitation, in general terms. The model of presumed consent using professional substituted judgement explicitly seeks a perspective of the pros and cons of the resuscitation from the patient’s perspective and therefore is not influenced by issues
relating to scarcity of resources, unless such issues are important to the patient. In other words, the harm of inefficient use of scarce resources is an important consideration in resuscitation medicine, but it does not influence decision making, by the model I propose, in an individual resuscitation.

**Summary**

The urgency of the resuscitation and the impaired ability of the patient to make a reasonable autonomous decision both conspire against adequate application of the principles of medical ethics. Informed consent is usually not possible for these reasons and this leads many to consider that consent is not required for resuscitation, because resuscitation brings benefit and prevents harm and because the patient is not in a position to give or withhold consent. However consent for resuscitation is required and the common models employed for this purpose are presumed consent or consent from a patient proxy. However, if we are to honour the principles of respect for patient autonomy, as well as beneficence and non-maleficence, when starting and continuing resuscitation we must try and achieve the best balance between benefit and harm from the patient’s perspective. The concept of professional substituted judgement involves the resuscitators gathering as much information about the patient as they possibly can, including any previously expressed attitudes to such a situation, and combining this with their acquired professional knowledge of the likely benefits and harms of the resuscitation endeavour and then exercising their moral imagination, imagining themselves as the patient, and asking “would I want this treatment?” By employing professional substituted judgement a resuscitator should recognise when the balance of benefit and harm becomes unfavourable from the patient’s perspective and at this point the resuscitators have a moral obligation to withdraw resuscitation as they can no longer presume the patient’s consent. In this way the patient’s autonomy is resurrected and the principles of beneficence, non-maleficence and respect for patient autonomy are favourably balanced.
Chapter Twelve

Summary.

Preventing harm in resuscitation medicine

Resuscitation Medicine is a pursuit with a tenuous history over thousands of years, but with a significant maturation in the past 3 to 4 decades. Emergency Medicine is a youthful speciality which has taken on the practise of resuscitation medicine and has applied an academic oversight to it. In so doing a number of issues have been raised in relation to resuscitation and these include concerns about limits to its benefit, harms that it might bring, issues of consent, and decision making during the performance of resuscitation.

Medical ethics has a longer and more robust history, although it has undergone a demonstrable shift of weight in recent decades. Specifically the maturation and embracing of the principle of respect for patient autonomy, in addition to the traditional principles of beneficence and maleficence, have seen us seeking the patient’s direction before undertaking medical interventions. However, resuscitation has largely avoided the enthusiasm for the principle of respect for patient autonomy, and where there has been influence it has led to counter productive concepts such as ‘withholding’, ‘withdrawing’, ‘proxy consent’ and ‘futility’.

In general terms urgency and impaired patient competence are two components of resuscitation which conspire against adequate consideration of the principles of biomedical ethics. In addition, the alternative to resuscitation, when resuscitation is indicated, is usually death. Consequently it is generally perceived that consent is not
required for resuscitation because it brings benefit, and prevents harm, and because the patient is not in a position to give or withhold consent.

The expectation is that resuscitation will proceed unless there is good reason not to. The terms ‘withholding’ and ‘withdrawing’ life saving interventions describe a decision that there is good reason not to start resuscitation (withholding) or a decision that there is good reason to stop providing it (withdrawing). They are concepts built, therefore, on the presumption that resuscitation will proceed unless there is good reason not to, because resuscitation brings benefit and prevents harm, and because the patient is not in a position to give or withhold consent. As such they are flawed concepts because the presumption upon which they are built is incorrect. Resuscitation may not bring benefit, or its benefit may be limited. Resuscitation may bring a number of harms, and the patient is indeed in a position to give or withhold consent.

If resuscitationists are to reconsider the balance of beneficence and non maleficence, in the light of the evidence of academic analysis of resuscitations in recent years, and give due consideration to the principle of respect for patient autonomy then how are they to achieve this?

This thesis explored the elements of benefit, harm and consent and developed a decision-making model for resuscitationists. In Chapter Two the benefit of resuscitation was discussed, by examining the extensive outcomes literature for out-of-hospital cardiac arrest and those variables which influence outcome for this condition, as well as other life threats requiring resuscitation. Out-of-hospital cardiac arrest is an appropriate focus for three reasons. First, it is a well-defined, relatively homogeneous medical event, where-in a victim’s heart suddenly beats in a fast inefficient rhythm (usually ventricular fibrillation or tachycardia) with consequent loss of blood flow to vital organs. The precipitant is commonly atherosclerotic disease of coronary blood vessels supplying cardiac muscle, and the afflicted are usually the middle-aged or older with a predominance of males.
Prior to the cardiac arrest the patient is typically well and the event occurs in an instant in time and is most profound immediately. In contrast, most other life threats prompting resuscitation vary in their speed of onset, and in their degree of severity of insult. Consequently published outcome figures for other life threats show an immense variation due to the variation in the speed and severity of the insults.

The second reason out-of-hospital cardiac arrest is an appropriate focus is the wealth of published data about it. Thirdly, the patient is unconscious and therefore there is no question about their ability to actively contribute to decision making during the resuscitation.

Despite the variation in insult, paucity of data, and range of competence of patients when considering other life threats prompting resuscitation, the general decision making principles derived from a focus on out-of-hospital cardiac arrest will still have application. The best reported outcome figures suggest that 15-20% of out-of-hospital cardiac arrest victims may survive to hospital discharge, but commonly 10% or fewer survive and the average may be 3% or less. Survival rates do not appear to be improving significantly despite effort and resources being put into bystander CPR, early access to ambulance assistance, prompt defibrillation and early advanced cardiac life support.

Generally, people seem to assume resuscitation from out-of-hospital cardiac arrest is more useful than the published figures suggest, with the unrepresentative survival rates of television drama resuscitations being their main source of information. However, even with inflated expectations of resuscitation, 20 to 30% of elderly patients would still decline the opportunity. In addition, medical and nursing personnel who regularly undertake resuscitation (and are therefore well informed of its usefulness) would consent infrequently to resuscitation as it is currently practiced and would prefer a considerably more limited trial of resuscitation than is usually administered.
If many do not want it, most are poorly informed, and those better informed want even less of it, then the question must be asked about the morality of the wholesale application of resuscitation to victims of cardiac arrest.

With other resuscitation scenarios, the heterogeneity of the patients suffering the life threat and the range of type and severity of disease leading to it make it difficult to define the likely outcome. Patients who suffer cardiac arrest, complicating a pre-existing serious illness, such as an acquired immunodeficiency disorder, sepsis, or severe trauma, appear to do very poorly, with survival rates of a few percent, or less, and with many survivors suffering severe disabilities.

This is not surprising. Cardiac arrest may be a sudden cardiac arrhythmia, in which case vital organs are intact until the moment of the arrhythmia, and prompt restoration of a normal rhythm will leave them unharmed. Alternatively, it may be an arrhythmia as a consequence of the heart suffering hypoxia from prolonged compromise of airway or breathing, or poor blood supply secondary to haemorrhagic or other forms of shock. If the arrhythmia is a consequence of prolonged airway, breathing or circulation compromise then vital organs such as brain and kidneys, will already be damaged, prior to the cardiac arrest, and prompt restoration of a normal rhythm will not reverse this. Cardiac arrest in children is similar as most paediatric cardiac arrests are secondary to prolonged impairment of airway, breathing or circulation.

Patients with life threatening impairment to airway breathing or circulation, but not yet in cardiac arrest have a less predictable outcome, as already discussed. Attempts to define indicators of prognosis in these patients have been of some assistance but remain very imprecise when applying them to the individual undergoing resuscitation. However the research presented does confirm what might be considered intuitive. That is, that survival relates to; the pre-morbid health of the patient, the severity of the insult, the duration of the insult, the speed of the resuscitation and the response to resuscitation. For those who
do survive, the persisting disability due to damage to vital organs, relates to the same general factors.

As the outcome of resuscitation is relatively poor, and it is applied in a wholesale fashion, as discussed early in this chapter, some have been inspired to argue, that it has poor cost effectiveness relative to other medical interventions. They have argued that resuscitation must be applied in a more selective fashion, and their proposed process for this was presented in Chapter Two. However, such a process, based on the outcomes literature and derived prognostic indicators, is imprecise when applied to an individual, and cumbersome when entertained in the midst of a resuscitation. Furthermore, while it concentrates on the benefits of resuscitation, the process takes little heed of harms other than financial costs, and fails to consider patient autonomy.

How, then, should a resuscitationist take these into account while making decisions during a resuscitation?

In Chapter Three the principles of biomedical ethics, as espoused by Beauchamp and Childress, were discussed. They offer assistance in decision making by distilling relevant aspects of moral philosophy into an applicable framework for the non-philosopher. However, the emergency physician undertaking resuscitation faces difficulties despite this assistance. The patient is usually cognitively impaired by an altered level of consciousness, is commonly frightened, and often in pain. In this context respect for patient autonomy is difficult to achieve.

The likely benefits of resuscitation are hard to define, not only because the published data for many types of resuscitation are poor and frequently have limited application to the individual in question but also because the resuscitationists are working in a relative vacuum of information regarding the patient’s background health and physiology. The harms of resuscitation are generally not considered as their discussion is all but absent in the medical literature, and they are difficult to predict in the information vacuum.
suggested above. The decisions are urgent, and consequently rushed and the milieu is emotive. Consequently resuscitationists recognise pragmatic difficulties and personal observation based on 16 years of resuscitating suggests they err towards a paternalistic consideration of beneficence, as they perceive it, or towards seeking guidance from a proxy. Neither of these options necessarily brings about the right action. The four principles approach has limitations, and particularly in its application to resuscitation medicine. How is each given due weight in this context? How is autonomy honoured? How are conflicts between principles resolved?

Narrative ethics, recognises the centrality of story, or narrative, in ethics, and in doing so promotes the honouring of principles, or whatever moral framework is used, from the patient’s context. Also, it arms the virtuous moral judge with an appreciation of human stories, and the skills of interpreting narrative in life and death predicaments. The resuscitator then is guided by the four principles framework espoused by Beauchamp and Childress, but in addition, and of great importance, he or she comes to know the patient’s story; his or her context, values, aspirations and world view, and proceeds with this knowledge.

In Chapter Four I took the indulgence of telling three short stories, which described three patients. One story (Brian’s) described a resuscitation, with insights into Brian’s story emerging only as the resuscitation progressed towards its unsuccessful end. This story helped to illustrate, in a somewhat irreverent way, the complex, uncontrolled and messy milieu of a resuscitation, and the limited and piecemeal information available to the resuscitators. We came to know Brian’s tragic decline into a delusional state, and total dependence on his erstwhile psychiatric nurse.

Although his “proxy” was never asked to consent for any interventions administered, we must question her capacity and motives should she have been given this responsibility. Agnes was the central character in story two. Her story did not describe a resuscitation but it did relate a medical encounter during which she gave a clear indication of her views
regarding her own resuscitation from cardiac arrest. The story went on to describe her context, so that we, the readers, and a doctor in the story, came to know her years of sadness waiting for her lover's return from war.

This level of insight into a patient's story is typically not available during a resuscitation, but it is clear the influence it would have. When Agnes subsequently collapsed with cardiac arrest she was resuscitated by neighbours, ambulance staff and the hospital staff, all of whom had little or no insight into her story. Each was delivering resuscitation with a presumption of beneficence, little thought for maleficence, and a feeling that respect for autonomy was irrelevant when the patient was unconscious and death was the only alternative to resuscitation. As the resuscitation progressed the resuscitators were joined by the doctor who knew Agnes' story and her stated wish regarding resuscitation. With this insight each of the principles can be given due weight. Agnes had a number of negative prognostic indicators (un-witnessed cardiac arrest, no bystander CPR, delayed defibrillation and delayed advance care) and she had responded poorly to resuscitation so far, suggesting the benefit of resuscitation was limited. The new level of insight suggests Agnes would not want ongoing resuscitation (indeed she would probably want none at all) and so to resuscitate her with this knowledge would be to disregard her (perceived) autonomous wishes.

The resuscitation is harmful, not only because of the disrespect for Agnes' wishes, but also because it is demeaning, expensive, bringing false hope, engendering a sense of failure in all those involved in her resuscitation and because it is likely to be unsuccessful, or, it is likely to bring a life with severe disability due to brain damage. Where there was some uncertainty, the knowledge of Agnes' story brings a strong mandate to stop resuscitation.

Graham was the central character in story three. There was no medical interaction in his story and his resuscitation was somewhat distant from the story as related. We were made aware of regrets regarding love and children, and we could see in the resuscitation room
that he was dishevelled and smelling of alcohol, but we had been given no indication of
his wishes regarding resuscitation. The likely benefit of his ongoing resuscitation was
unclear, as the combination of insults inflicted on him was relatively unique, and his
underlying health was not defined. However there remained the possibility of a good
outcome, but also the risk of “unacceptable badness.” His resuscitation may bring a
number of harms. He will require prolonged intensive care and repeated surgery. He is
likely to suffer infections and complications of intensive interventions, common when
administered to patients already very unwell. All of this will bring pain and other
discomforts and it will cost so much money that other patients, with other health needs,
will miss out. Furthermore, the outcome of his head injury may be severe brain damage,
and his pelvic fractures may limit his mobility. These outcomes he may consider
unacceptable.

How would Graham perceive these pros and cons? How are we to respect his autonomy?

In Chapter Five we explored consent. Perhaps the ultimate expression of respect for
patient autonomy is the utilization of informed consent in decision-making. Informed
consent demands; the preconditions of competence to understand and decide and
voluntariness in deciding; the information elements of disclosure of information,
recommendation of a plan and understanding of these, and; the consent elements of
decision in favour of a plan and authorisation of the chosen plan.

In a resuscitation, such as Graham’s, the patient does not possess the pre conditions of
competence and voluntariness, is not able to receive information or deliberate the pros
and cons of a plan, and could not express a preference even if one was derived. Even if
the preconditions were present, the uncertainty of outcome, as previously discussed, and
the urgency to intervene tend to conspire against understanding and deliberation. It is
clear, then, that informed consent is not applicable to resuscitations like Graham’s.
However, this does not mean that consent, and respect for patient autonomy, are now
redundant, as other forms of consent still remain options.
Of the alternative consent options, presumed consent and proxy consent are the two most commonly employed. Consent can be presumed if, based on a balance of beneficence over maleficence, it is perceived that this patient, or another reasonable person, would consent in the same circumstances. Presumed consent is the model used in resuscitation most often. However, although the principles of beneficence and non-maleficence are well respected, autonomy is less so, and even beneficence and non-maleficence are seen as the resuscitators see them, and not as the patient might view them. In Agnes’ case the resuscitators have clear guidance as to how she would perceive them, but in Graham’s case there is no such guidance.

Proxy consent is a model seeking the patient’s view when the patient cannot give it, by obtaining consent for resuscitation from a family member, or other person, who is perceived to be able to speak on behalf of the patient. Proxy consent avoids the criticism of medical paternalism as the decision is taken out of the physicians’ hands, and it is purported to better honour respect for autonomy. However, the views of the proxy may not reflect the views of the patient. In Brian’s story his proxy had interests which may have worked against a purely altruistic concern for the best wishes of her friend. More commonly proxies have a tendency to request more resuscitation than the patient would have wanted, for fear of becoming responsible for their death.

A modification of proxy consent employs substituted judgement, and may better honour the patient’s wishes by asking what the patient would want, rather than what the proxy wants for the patient. However, in the context of resuscitation it is difficult to inform the proxy adequately, and the time for deliberation is limited. The likely outcomes (beneficence) of our resuscitation, as discussed previously, represent a probabilistic assessment of a complex interpretation of information, partly based on experience, partly based on knowledge of the published literature, and partly based on how the individual undergoing resuscitation seems to fit the picture. How the individual fits the picture changes frequently as they do or do not respond to interventions, and as information
emerges about their pre-morbid condition. To convey this somewhat intangible probabilistic assessment of complex information gathered from different corners of the resuscitators education and experience in a hurried, emotive and ever-changing milieu, so that a proxy might use it rationally in decision-making, is impossible.

Presumed consent then, is a better respecter of beneficence and non-maleficence during resuscitation, as it assumes the strengths of these principles from the ‘somewhat intangible probabilistic assessment’ undertaken by the resuscitators. However it struggles to honour the principle of respect for autonomy as the values applied to the pros and cons identified may not be the values of the patient. How then, can respect for patient autonomy be given strength during resuscitation?

Consideration of beneficence and non-maleficence, as the medical staff perceive them, with disregard for the patient’s autonomy, is referred to as medical paternalism. In Chapter Six the concept of paternalism was discussed, and categorised into unopposed, weak and strong paternalism according to the degree of insult against autonomy. Unopposed paternalism refers to an action based on medical beneficence where patient autonomy is essentially absent, as the patient is unconscious. As such, it could be reasonably argued that this is not paternalism at all, as autonomy has not been disregarded. However, it is a category I have deliberately included as, although the patient’s wishes have not been disregarded, there has been no explicit attempt to seek them. Indeed, if aspects of the patient’s likely views are accessible, but are not sought, then it is paternalistic, and I have referred to this as a ‘paternalism of ignorance’. Weak paternalism describes actions against the wishes of a patient with impaired competence, and strong paternalism describes an action proceeding despite the substantially autonomous objections of the recipient. It is the recognition of a history of strong paternalism, based on the Hippocratic principles of beneficence and non-maleficence, that has seen us embrace the principle of respect for patient autonomy. However, the current state of medical ethics, as a consequence, has pitted the “paternalistic” principles of beneficence and non-maleficence, against the ‘individualistic’ principle of respect for
autonomy leaving us asking the question: “Who decides – the doctor or the patient?”

In Emergency Medicine, perhaps more than in any other medical pursuit, we observe difficulties with this question. Respect for autonomy recognizes that only the patient can weigh the pros and cons of a medical intervention from the patient’s context, taking into account the patient’s experience, world view, values and aspirations. However, the pros and cons of a medical intervention are based on a probabilistic appreciation of a complex array of information interpreted on a background of a lengthy medical education and an indistillable clinical experience. Attempts to deliver this package to the patient are difficult, and made more so the more urgent and emotive the scenario. Each of those viewpoints (the patient’s and the doctor’s), provides a unique focus on essential considerations, but each will fail to see adequately those considerations focussed by the other. The solution for decision making in resuscitation lies in bringing the merits of both perspectives into the decision making model.

Before deriving this model, the harms of resuscitation were delineated. In Chapter Seven the potential harms of resuscitation were emphasized, and were described under the five categories of harm which occur when the resuscitation is; 1. Unnecessary; 2. Unsuccessful; 3. Unkind; 4. Unwise; and 5. Unwanted. In addition to the degree of benefit of resuscitation (which is widely discussed) the ensuing harms (which have been largely ignored in the medical literature) also need to be considered. These harms have the potential to befall the patient, the resuscitators, other patients requiring healthcare, and the community at large. They should be given due weight if a consideration of the balance of benefit and harm contributes to decision making in resuscitation medicine.

Futility was discussed in Chapter Eight, and may be defined as an absence of benefit. Attempts to define it in other ways, in the mistaken belief that once defined it will separate those resuscitations not worth pursuing from those which are, have “muddled the waters” of resuscitation decision making. If an endeavour is futile (that is, it brings no benefit) then any harm that ensues will bring about an unfavourable benefit/harm balance.
However, even if the endeavour is not futile, by any definition, the benefit/harm balance may still be unfavourable if the harms that ensue are great.

Variations of interpretation, prediction and value judgements mean we are unlikely to achieve a consensus definition of futility, and certainly not one which has application to every patient undergoing resuscitation. In the meantime our use of futility to tell us whether it is worth resuscitating or not, has no utility as it will never succeed in telling us this. Instead we should consider the utility of our endeavours, for which an assessment of the harms of resuscitation should be added to our consideration of benefit, and this balance of benefit and harm should be evaluated, as best it can be, from the patient's perspective.

Finally, after discussing the morality of letting a patient die and then applying some of the principles elucidated, to the question of practising procedures on the newly dead, I described a decision making process for the resuscitationist.

In the journey to this decision making model I have examined the extensive literature describing the benefits of resuscitation, and I have explored and described the harms which may ensue. While considering these the concept of futility was examined and dismissed as a tool without utility in decision making. I examined autonomy and the components of informed consent, and then discussed the components of resuscitation which conspire against the use of consent in resuscitation. However, I questioned the exclusion of consent considerations during resuscitation and dismissed the concept of withdrawing and withholding resuscitation, which imply a need for permission to stop, rather than to proceed.

Alternative forms of consent were examined, and presumed consent emerged as one which best honoured principles of beneficence and non-maleficence. However, without due consideration of the patient's views presumed consent risks being paternalistic. Although paternalism in this context, is often of the weakest kind, if we proceed to
resuscitate without attempting to seek the patient’s perspective, then we do not honour the principle of respect for patient autonomy.

When considering our three patients, and particularly Agnes who gave us an indication of her perspective, then we appreciate how different decisions would be made if her views were incorporated into the decision making process. Certainly, it is apparent that a wholesale application of resuscitation to Agnes, and to other patients, would result in an array of harms, limited benefit over that achieved by more selective application of resuscitation, and would be against the wishes of many patients.

To minimise the harms of resuscitation, and to maximise the respect for the principles espoused by Beauchamp and Childress, (including respect for autonomy), then we should employ the model of presumed consent with professional substituted judgement. This involves the resuscitators gathering as much information about the patient as they can, including speaking with the patient’s loved ones, caregivers, bystanders, or anyone else who can assist in this process, and giving due consideration to any prior record of the patient’s wishes. With their acquired professional knowledge of the likely outcome of the resuscitation, based on previous experience, and a knowledge of the medical literature and based on their knowledge of the injury or disease afflicting the patient, and the patient’s responses so far, the resuscitators can then exercise their moral imagination by imagining themselves as the patient, with the patient’s condition and values system, and asking “would I want this treatment?”

In this way the patient’s autonomy is respected as best it can be under difficult circumstances by combining a knowledge of the harms and benefits of the resuscitation with the appreciation of this balance from the patient’s perspective, as best it can be defined. If the answer to the question is, “No, I would not”, then the resuscitation should not proceed. To resuscitate without regard for the patient’s perceived wishes is a harmful disrespect for the patient’s autonomy.
Often, and appropriately, a decision to proceed will be made on the basis of a perceived balance of marginal benefit over harm, that is made more appealing by the prospect of an alternative of certain death if resuscitation is not undertaken. Furthermore, the perception of the harms and benefits from the patient’s perspective may be unclear and under such circumstances it is appropriate to give the patient a trial of treatment. However, the balance is dynamic, with a clearer view of the likely benefits and harms emerging as the patient responds or does not respond to resuscitation endeavours. As soon as the answer to the question becomes, “No I would not want this resuscitation,” then the resuscitation must stop.

By employing professional substituted judgement a resuscitator should be able to recognise when the balance of benefit and harm becomes unfavourable from the patient’s perspective and at this point the resuscitators have a moral obligation to stop resuscitation as they can no longer presume the patient’s consent. In this way the patient’s autonomy is resurrected and the principles of beneficence and non-maleficence, are favourably balanced.
Post Script

The following publications by the author, relate to the deliberations of this thesis.


This chapter is an overview of issues discussed in this thesis, for an emergency medicine audience.

2  Ardagh MW. Resuscitation from out of hospital cardiac arrest: past, present and future.

A review of resuscitation history and an earlier summary of outcome figures.


This study was referred to in Chapter Two of this thesis.

4  Ardagh MW. Out of hospital cardiac arrest. (Letter)
*New Zealand Medical Journal* 1996: 109; 346

A letter as part of correspondence regarding the harms of resuscitation.
5 Ardagh MW. Preventing harm in resuscitation medicine.
New Zealand Medical Journal 1997: 100; 113-115

A discussion of the harms as described in Chapter Seven of this thesis.

6 Ardagh M. Jelinek G. Emergency Medicine and Medical Ethics. The vigour of youth and the wisdom of age.
Emergency medicine 1997: 9; 143-147

An introduction to principlism in the Australasian peer reviewed emergency medicine journal.

7 Ardagh MW. May we practise endotracheal intubation on the newly dead?
Journal of Medical Ethics 1997; 23 (5): 289-294

Relevant to Chapter Ten of this thesis.

8 Ardagh M. Paternalism to autonomy and back again.
Emergency Medicine 1998; 10: 253-257

Relevant to chapter six of this thesis.

Emergency Medicine 1999; 11: 218-20

A brief discussion of principlism and narrative ethics for an emergency medicine audience.
10 Ardagh M. Resurrecting autonomy during resuscitation— the concept of professional substituted judgement.
Journal of Medical Ethics 1999; 25(5): 375-8

A key publication in relation to this thesis, drawing conclusions described in Chapter Eleven.

11 Ardagh M. Futility has no utility in resuscitation medicine.
Journal of Medical Ethics 2000; 26:396-393

Relevant to Chapter Eight of this thesis.
I am grateful for the assistance of the following:

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Appendix One.

DO UNTO OTHERS -
OUT OF HOSPITAL RESUSCITATION
PREFERENCES OF NURSES AT AN EMERGENCY NURSES' STUDY DAY

Michael Ardagh, Yvonne Kamstra

Abstract
To report the preferences of nurses at an Emergency Nurses’ Study Day regarding their own resuscitation from out of hospital cardiac arrest.

Method
200 delegates at an Emergency Nurses’ Study Day at Christchurch Hospital were invited to complete a written survey. They were asked to imagine they were the patient in a cardiac arrest scenario and then asked to indicate yes, no or undecided in response to questions exploring their wish to proceed with each step of resuscitation.

Results
180 delegates responded. 11% wanted no resuscitation at all. 25% wished to stop resuscitation before a second series of defibrillation shocks and 61% wanted resuscitation stopped at or prior to 15 minutes after collapse. 39% were willing to have resuscitation continued for 30 minutes and 18% wished to continued until they were in asystole.

Conclusions
The majority of respondents to this survey did not want resuscitation as it is currently practised. We should consider that starting or continuing resuscitation is not always what is wanted.
Introduction

Fifty per cent of victims of out of hospital cardiac arrest in Christchurch will receive bystander CPR, 70% will be defibrillated, 20% will be transferred to hospital and 11% will leave hospital alive\(^1\). The 80% who are not transferred to hospital will be exposed to an algorithm of up to 30 minutes of resuscitation efforts including twelve defibrillation shocks and four doses of adrenalin for those in ventricular fibrillation\(^2\). Those who suffer their cardiac arrest while in hospital will be managed in a similar way.

In 1993 Hauswald and Tanberg surveyed 105 emergency physicians, nurses and medical technicians who regularly resuscitate out of hospital cardiac arrest victims and asked them what they would like done if they were the arrest victim. 65% wanted resuscitation to cease before the second dose of adrenalin and 10% wanted no resuscitation at all. Only 3% were willing to undertake full resuscitation as was currently practiced\(^3\).

This paper reports the results of a survey of nurses at an Emergency Nurses' Study Day regarding their preferences for their own resuscitation from out of hospital cardiac arrest.

Method

An Emergency Nurses' Study Day was held in March 1996 at Christchurch Hospital and attracted 200 delegates from throughout New Zealand and from a variety of emergency and acute care settings. The 200 delegates were invited to complete a written survey which began with a scenario asking them to imagine that they were in their late 50's, and otherwise well, but suddenly while shopping they suffered a cardiac arrest due to ventricular fibrillation.

They were then taken through the steps of an algorithm for resuscitation of patients in persistent ventricular fibrillation and they were asked to tick yes, no or undecided in response to a question asking whether they would like that step to proceed in their own resuscitation.
Results

180 of the 200 delegates from the study day responded. The results of the survey are tabulated below.

<table>
<thead>
<tr>
<th>Stage of resuscitation</th>
<th>Number</th>
<th>Cumulative percentage of those withdrawing from resuscitation at each step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those not wanting resuscitation at all</td>
<td>19</td>
<td>11%</td>
</tr>
<tr>
<td>Those not wanting the standard treatment of three defibrillation shocks</td>
<td>1</td>
<td>12%</td>
</tr>
<tr>
<td>Those not wanting endotracheal intubation, IV access and IV or endotracheal intubation</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>Those not wanting the second series of three defibrillation shocks</td>
<td>21</td>
<td>25%</td>
</tr>
<tr>
<td>Those not wanting a further dose of adrenalin</td>
<td>5</td>
<td>28%</td>
</tr>
<tr>
<td>Those not wanting a third series of defibrillation shocks</td>
<td>24</td>
<td>41%</td>
</tr>
<tr>
<td>Those not wanting second or third line drugs</td>
<td>4</td>
<td>43%</td>
</tr>
<tr>
<td>Those who would like resuscitation stopped at 15 minutes</td>
<td>33</td>
<td>61%</td>
</tr>
<tr>
<td>Those who would like resuscitation stopped at 30 minutes</td>
<td>38</td>
<td>82%</td>
</tr>
</tbody>
</table>

33 (18%) wished to continue resuscitation beyond the 30 minutes and until in asystole.
Discussion

Hauswald and Tanberg in their study stated that “few would willingly undergo full resuscitation as currently practised (and this) suggests that prevailing guidelines should be re-evaluated”\(^\text{3}\). Similarly in this study of nurses attending the Christchurch Emergency Nurses’ Study Day, the majority did not want the type of resuscitation they were likely to get. 11% wanted no resuscitation at all, 25% did not want a second series of defibrillation shocks and 61% wanted resuscitation stopped at or prior to 15 minutes after collapse. Only 39% were willing to have resuscitation continued for 30 minutes and only 18% wished to continue until they were in asystole.

Resuscitation is undertaken for victims of cardiac arrest because it is presumed to be the right thing to do. We have a respect for life and an abhorrence of death and in the scenario presented withholding resuscitation would have resulted in death. However 11% of respondents to this survey would have chosen no resuscitation at all had they been the patient in the scenario. Furthermore we proceed to resuscitate victims of out of hospital cardiac arrest according to a resuscitation algorithm because we presume this algorithm represents the best treatment. However the majority of respondents to this survey did not want the algorithm completed if they were the victim of cardiac arrest.

The reasons for the respondents’ choice of death rather than beginning or continuing resuscitation were not explored, however their choices suggest that either the resuscitation itself was inherently undesirable or that the outcome of resuscitation was unwanted. Inherent features of the resuscitation which may be considered undesirable include its invasive nature, the possible infliction of pain, the loss of control of one’s own destiny and the indignity incurred as a result of all of these. The outcomes of resuscitation which may be unwanted include a lingering death or survival with an unacceptable neurological disability secondary to prolonged cerebral ischaemia.

Currently we resuscitate victims of cardiac arrest on the basis of presumed consent. That is, we presume that the patient would consent if they were able to, or that a reasonable person in similar circumstances would consent to resuscitation. The nurses involved in this survey are relatively well informed about the process and outcomes of cardiac arrest resuscitation yet we can not presume their consent for cardiac arrest resuscitation as it is currently undertaken. Although this study is limited by the size and homogeneity of the sample group it suggests that we should not automatically presume that patients would consent to resuscitation in a situation where the alternative is certain death. Instead we should be cognisant of the inherent undesirability of resuscitation and its potential unwanted outcomes, and we should consider these when deciding whether to begin or whether to continue resuscitation efforts.
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