LIFE SUSTAINING TECHNOLOGIES AND THE ELDERLY

LEGAL ISSUES

FEDERAL REPUBLIC OF GERMANY

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The Federal Republic of Germany is a federal state consisting of 10 "Laender" which have their own national status and their own legislative powers but are integrated into the Federal Republic as a whole. They also participate in Federal legislation in the "Bundesrat" in which all minister-presidents are represented. Therefore, the Laender implement not only their own laws but also Federal laws; especially the field of health and social legislation typifies this Federal state principle. At both Federal and Laender levels authority is divided among various ministries.

HEALTH AUTHORITIES

At the Federal level the Ministry of Youth, Family Affairs and Health has a strong but limited influence on health care questions. It is important to know that the Federal Republic has no general legislative power in the health field. Federal control exists on:
- control of infectious disease - public welfare
- disease of public danger - hospital finance
- health profession standards - social insurance & labor protection

The Ministry of Labour and Social Affairs as well as the Ministry of the Interior and the Ministry of Research and Technology are also involved in these control processes.

In all other areas the responsibility for legislation lies with the Laender governments with a strong network of coordination
guaranteed by several institutionalized working groups;
- conference of the health ministers
- working groups of medical administrators
- working groups of the Federal Health Board and the health boards of the Laender.

There is a basic "Right to Health Care" since the health care system is a part of the compulsory general social security system, which consists of the:

- Health Insurance System
- Accident Insurance System (including rehabilitation)
- Retirement Insurance System
- Unemployment Insurance System

Participation in each of these benefit systems is obligatory for everybody.

Only high income employees and self-employed are exempted from this compulsory insurance. The financing is guaranteed by a social security insurance and a state supported maintenance and welfare program.

Employee and employer share in the payments of health insurance, retirement insurance and unemployment insurance. Only accident insurance payments are met by the employer alone.

Wage earners are subject to compulsory insurance regardless of their income. Only salaried employees can take advantage of the exemption. Civil servants are exempted from compulsory insurance, but the regulation gives them the possibility of voluntarily joining a scheme. Pensioners are universally insured. Their contributions are met mainly by the old age insurance scheme. The 1982 pension
amendment law removed pensioners' obligation to contribute based on allowances received in addition to their pension.

The financing of the health care delivery system rests on various bodies:

- the State
- the statutory health insurance system
- the private health insurance scheme
- other systems (social assistance and welfare)

One third of the social expenditure is met from the public funds from the Federal Republic and the Land, the rest by contributions from insured persons and employees. Almost 40% of the state's social budget is spent on the care of the elderly and dependents of the insured. The statutory health insurance system covers over 90% of the population, 8% of the population has complete insurance coverage outside the statutory system -- predominantly under private insurance schemes. It consists of about 1900 semiautonomous sick funds (Krankenversicherung) under the general supervision of the Ministry of Youth, Family Affairs and Health.

The assessment of an individual's contribution to the sick fund is based neither on his physical condition nor on his age; neither on the size of his family nor on the number of family members who will be covered by the insurance. It is based solely on his income. Every insured member pays the same percentage of his gross monthly income up to a maximum income level. This percentage is determined by the health insurance funds in accordance with their own financial situation (within a framework of legal restrictions).
Thus, though the percentage is the same for everyone, people who earn more, actually pay more.

Those who are privately insured are covered by a different reimbursement policy than the statutory health insured people. They usually are billed first and then get reimbursed 100% later. The regular health insurance is guided by the principle of "payment in kind", which means that insured persons and their families receive medical services, drugs, hospital care etc. without payment or for a nominal charge (e.g. 2 DM per prescribed drug) under arrangements agreed upon between health insurance authorities and the providers of services (physicians, hospitals etc.). Dependents and senior citizens are exempt from payment.

Individuals with no personal income, insurance pension, or alimony receive health care benefits under the provisions of the federal law on social welfare. Handicapped people (e.g. those disabled at birth or incapable of earning a living) receive vocational rehabilitation under old age and accident insurance from the Department of Labor to help them reintegrate into society, in addition to health benefits from sickness, old age and accidental insurance.

The funding of the health care system is broken down as follows:

<table>
<thead>
<tr>
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<th>DM Billion</th>
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<tbody>
<tr>
<td>Government Funds</td>
<td>28.6</td>
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<tr>
<td>Statutory Health Insurance</td>
<td>87.5</td>
</tr>
<tr>
<td>Private Health Insurance</td>
<td>8.8</td>
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<tr>
<td>Pension Insurance</td>
<td>14.8</td>
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Statutory Accident Insurance 6.3
Employers 37.8
Private Funds 16.7
TOTAL 200.5 (billion Marks)

LEGAL PRINCIPLES IN LEGISLATION

Basic to current health and social security systems is the 1949 provision in the German Constitution (Grundgesetz (GG), Article 20) which emphasizes the high priority of the "Social State" concept and which commits the government to the social security and social welfare of its citizens.

In addition, health insurance is the oldest part of the social security system dating back to Bismarck's government in 1883, with the main principle still incorporated in the legislation today.

Other important laws since 1972 include:
- Law on hospital finance (1972)
- Law on the further development of health insurance (1976)
- Law on the containment of health insurance costs (1977)
- Reform of laws on medicaments and on rehabilitation (1974)
- Law on the severely disabled (1974)

SPECIAL GROUPS AND SPECIAL HEALTH PROBLEMS

No comprehensive surveys of the health status of the whole population have been conducted. Only a system of spot checks (micro census) provides data. There is no comprehensive national health plan nor are there comprehensive plans in the Laender. Special programs are drawn up according to need in individual problem areas. Among the special services and programs there is the emergency and
relief service which has a 24 hour emergency service and a health care service of the elderly. Elderly people are helped to maintain their independence for as long as possible, and residents of homes are helped to maintain their ability to take an active part in the life of the community.

In addition there has been a continuous expansion of
- nursing homes for the elderly
- nursing homes for the disabled
- old people's homes with or without nursing care
- psychiatric and neurological clinics
- geriatric hospitals
- hospitals for the chronically ill
- social service centers

The latter are promoted by local communities and
Laender and provide outpatient care for the sick and elderly. Today one social service centre is considered essential for approximately 28,000 citizens.(2)

It seems quite justified to put the elderly and the disabled together in one problem group (2).

The need for basic nursing assistance for the elderly and disabled has increased within the last 20 years. According to the report of a joint Federal/Laender working group on the "structure and financing of community and institutional care" (Aufbau und Finanzierung ambulanter und stationaerer Pflegedienste) (2) there are 5.5 million disabled persons with "identity card for the severely disabled" (Schwerbehindertenausweis); 34.9% of these are over 65
years old. The Federal Statistical Office data for the period 1974 to 1980 (Microcensus data) on chronically ill persons show 9 million or 10-15% of the total population belonging to this group; of which 85% are age 65 and older. A 1975 survey on people on domiciliary care and treatment showed that 1.5 million or approximately 3% of the total population are homebound with 75-80% over age 65 and older. 250,000 of them received care in an institution (nursing home for the elderly, old peoples home, hospitals for chronically sick, nursing homes for disabled etc.)

These facts cause a tremendous problem for the social security system:

1. Since sickness and old age insurance do not cover long term needs; the social welfare and the social assistance system has to cover all basic needs, necessary treatments and care. This "right to health care" is in addition to the articles in the constitution (Grundgesetz) backed up by the social legislation code (Sozialgesetzbuch), paragraph 10, which states that "all those suffering or likely to suffer from physical, mental or psychological disability have the right to all necessary assistance in order to prevent further deterioration and reduce its consequences" (2).

2. Of those being cared for in institutions, 90% are not able (regardless of the amount of their pension) to pay for the necessary expenses and are dependent on financial support through the social assistance and welfare system. In addition 50-80% of the cost of all long-term care patients is currently met through social assistance and welfare support, which adds
to 5.000 million DM (ca. 2 billion $US) per annum expenditure on social assistance and welfare which has to be paid mainly by the communes and Laender (2).

The Federal Government as well as several Laender have introduced different programs to mitigate these problems.

Having in mind that the proportion of the elderly will increase and in addition the proportion of disabled and people in need for long-term care, the Federal Government introduced the "First Action Program" in 1970 and a "Second Action Program in 1981 (the International Year of Disabled Persons) with the following orientation and goals:

- activities for the prevention of disability and
- activities for the care of the disabled, with a major focus on rehabilitation.

On the Laender and local level, programs followed along the same slogan: "Rehabilitation rather than pensions". Social service centers providing outpatient care for the sick and elderly have increased rapidly.

Although care requirements and the corresponding financing for institutions responsible for providing available treatment are almost always met, there are still important shortcomings, particularly with regard to nursing care for the disabled and elderly. The Federal Government therefore introduced a comprehensive "model program" under which model establishments will be created to provide general psycho-social care combined with nursing services and at the same time collaborating with doctors responsible for primary care (2).
A Federal/Laender working group which was given the task of analyzing the problem of the creation and financing of community and institutional care recommended a change in old age and sickness insurance as well as introduction of special insurance to cover long-term care based on the principle of solidarity, which should cover institutional and community care. The estimated total expenditure required is in the range 14,000 to 20,000 million DM per year.

Until now no solution has been found for the problem of finance and the problematic distinction between chronic ill patients and patients who "only" need care remains: e.g. if a patient is diagnosed as sick, sickness insurance covers 100% of the cost incurred. But if the diagnosis is only that care is required then only the cost of care would be covered, which in the case of placement in an institution would be only 25-30% of the total expenditure. The rest would have to be covered by the insured patients themselves (savings, pension etc.) or their family members (children or partner). If there is no sufficient financial sources available, social welfare assistance will cover all costs. In addition, expenses for care are tax deductible. In case of unsuitable domestic environment the social assistance gives support to improve accomodations which are ill-suited to the needs of those being cared for and to provide for nursing requirements (if patient is eligible for social welfare support.)
FOREGOING TREATMENT

Every patient has the right to forego treatment as long as he or she is considered conscious and aware of the consequences of his/her decision. Article 2/II 1 GG (Grundgesetz) of the constitution guarantees every German citizen the right for personal integrity (Selbstbestimmung) and privacy protection (Unversehrtheit der Person). Physicians are usually (except in emergency situations) not allowed to treat a person without formal consent. Otherwise it is considered as bodily injury (223 STGB) and can be prosecuted. A major limitation to forego treatment is whether the person is under age or is not considered competent and whether a guardian exists. If a patient is without a guardian and considered not competent the physician has a limited right to decide on the treatment for the patient, following the medical principle and ethics of keeping the patient alive (13 STGB). The physician has the obligation to do whatever is possible for the good of his patient. He has a "guarantee" contract as he accepts the person as a patient.

If a person refuses to eat or refuses to take a medication usually there will be no interference if he is fully aware of what he is doing. However as soon as he loses consciousness one is obliged to help in an emergency case (330 c STGB). An action would be considered suicide if the patient killed himself in an active way (e.g. poisons himself, shoots himself, strangles himself, etc.)

If suicide were attempted the physician and everybody else is usually obliged to help, otherwise, he might be accused of "withholding help" (323 c STGB). Basically there is only one
exception. Physicians can withhold treatment from a person who tried to commit suicide and is about to die when the physician discovers that the trauma to the person is irreversible and the use of intensive life support care would therefore be not justifiable with regard to the person's further life. As an example cited is the case of Dr. Wittig-Charlotte Uhrmacher (see Appendix I).

Usually, if a patient commits suicide it is necessary to report it to the police for further investigation. For a legal backup of these "suicidal actions" and for protection against the application of life sustaining technologies a document called "Patienten Testament" (living will) was introduced in 1978 by UHLENBRUCK. He is considered the pioneer in this field. Since 1980 there is also a "Deutsche Gesellschaft fuer humanes Sterben e.V." (German Society for Dying with Dignity) which demands the right to die with dignity. This society established UHLENBRUCK'S idea and distributes a brochure which is called "Menschenwuerdiges und selbstverantwortliches Sterben" (dying with dignity and self-responsibility). This brochure gives advice on how to commit suicide safely. It also provides legal support for all members electing to foregoing treatment, or to avoid unwanted treatment after loss of consciousness. It also provides declaration forms to express living wills (Patiententestament/Patientenbrief).

As some authors and medical law specialists mention there may be legal problems with regard to the power of attorneys. The living will might lose its power as soon as the patient loses consciousness. (3)
There is neither a statutory law nor a principal decision from the highest criminal court (Bundesgerichtshof) available for a final solution.

Until now there was also only one case when the "German Society for Dying with Dignity" had to interfere to prove a patient's right (4).

In other cases like when the patient tries to kill himself by not taking medication or refusing to eat, it is usually assumed, that he is not fully aware of the consequences, therefore the patient will be treated according to his medical needs. In some cases guardians with limited deciding power (only with regard to health and treatment aspects) will be provided. For that it is necessary that the physician and the court decide together on who should be the guardian (mostly a close family member). This process is called "Pflegschaft zur Heilsversorgung". In such cases the physician's treatment decision has to be approved by this guardian.

INCOMPETENCE

When a patient is not competent, meaning, that he is either under age or unconscious or is not able to judge the consequences of his decision (e.g. patient has a guardian which has to be determined by a court), the physician has the full responsibility to make decisions for the patient. Legally it is not necessary to consult family members for decision making but usually physicians do get in touch with them and discuss the situation, as long as it is not an emergency. The physician is obliged to do the best he can for the
health of his patients (813 STGB). Furthermore the physician has to
decide on the treatment procedure with regard to the "presumable
will" of the patient (5). There are provisions for living wills
(Patiententestament) but especially when the patient has lost
consciousness the statement is considered without legal power, even
though in practice it can be a helpful "hint".

Surrogate decisions are often made on the basis of the
diagnosis. GROOS and TAUBER (3) mention that the following criteria
for withholding treatment are used or should be used:

- hopeless prognosis
- final stage of disease
- inoperability
- no effective therapy known
- progressive suffering
- to the best of the physician's knowledge—death would be only
  a matter of time.

Similar criteria are suggested by the Deutsche Gesellschaft
fuer Chirurgie" (6), which developed its guideline from that of the
Swiss Academy for Medical Sciences published in 1976 (Richtlinien
fuer die Sterbehilfe/Guidelines for Dying with Dignity). The
document states that if a patient is deadly sick and incompetent to
express his will (e.g. unconscious) it is the duty of the physician
to act on behalf of the patient's presumable will
("Geschaeftsfuehrung ohne Auftrag"). In this case the physician has
to consider whether treatment may be the extension of pain and
suffering.

In case the patient has expressed his living will or has given
other written advance directives regarding the use of life sustaining
technologies, this fact can be taken as an important indicator, but the decision should ultimately be made according to his presumable present will, which can only be assessed by considering all aspects of the individual case. The guidelines mention that it can not be assumed that advance directives always express the patient's present interest.

The influence of family members and close relatives (even close friends) is only secondary with regard to treatment decisions. The final legal right and responsibility lies exclusively with the physician except if the patient is either under age or has a guardian; in this case the physician has to make his decision in agreement with the parents or the guardian.

The wish of family members, close relatives or friends can never be used as a legal base for treatment decision (7). According to the German criminal law it is highly controversial whether the withdrawal of an already started intensive therapy is considered legal. BOCKELMANN (8) argues that a withdrawal of a treatment which leads to a premature death has to be judged as a criminal act (Toetung durch Unterlassung 216 StGB, killing by withholding help). Other medical law specialists think that it is legal to withdraw a therapy if it can be recognized as an artificial life support extension of a dying person. (7) For jurisdiction purposes the condition of the patient is the deciding factor, never the wish of close family members or friends. This can lead to a situation in which the physician continues a treatment with life sustaining technologies with or without the expressed consent of family members and friends.
Whether or to what extent with regard to the condition of the patient the physician is obliged by law to continue a life support treatment depends mainly on the circumstances of the specific case and whether the therapeutic procedures are seen as "imputable" for the physician.

SCHERW (7) emphasizes the legal concept of "imputation" as the deciding measure: the German criminal law recognizes that in spite of a criminal omission there is no duty for legal action if it can be imputed that the person (in this case the physician) has acted according to his regular duties. The imputability and the limits of the physicians duty for care can be determined with regard to:

- condition of the patient
- kind and quantity of necessary treatment
- personal and technological equipment of the clinic
- balancing of priorities
- wish of close family members and friends.

These are only "legal guidelines" since neither the statutory law nor the case law (except BGH judgement 1984) provides clear statements for such situations (7). The practice follows similar guidelines (9).

The role of caregivers in decision making for the patient is very limited, since the physician carries all the responsibility for the treatment and other decisions. Usually the physician is responsible not only for his own decisions but for the consequences of any actions of a caregiver under his supervision. (611/ 278/ BGB/civil law STGB/criminal law/bodily injury and killing due to gross negligence). On the other hand all caregivers, if they are
part of a team are responsible for their own actions (principle of self responsibility; 823/840 BGB)

No evidence could be found that courts are ever involved in decision making processes with regard to incompetent elderly patients, since it is daily practice and determined legally that the physician acts on the patients behalf as soon as he is incompetent.

In Germany as well as in the United States ethics committees (Ethik-Kommitees) exist, but their functions might be different. In Germany these committees almost exclusively deal with ethical consideration of medical research but do not influence decisions on the treatment of single patients. In the hospital, the Chairmen of the Departments involved usually get together and make the final decisions for the individual case (9,10).

LIABILITY FOR DECISIONS

In addition to what is mentioned earlier there are some other important factors to look at: most authors agree that the freedom of decision making among physicians is relatively high (11,12). The main responsibility lies with the Chairman of the Department or the attendant, other caregivers do not have great influence. One major factor regarding treatment decisions is the "quality of life" of the patient, e.g. his situation before and his hypothetical situation afterwards (chance or no chance to recover). For example, in case a patient refuses to eat, the physician is allowed to take action for artificial nutritional support, but he is not obliged to do it as long as the person is conscious and responsible. In rare situations this can also include the use of physical force (11).
With regard to the use of life sustaining technologies, the physicians are the final deciding persons with a high legal protection, but the fear of being accused for malpractice is growing. This protection goes as far as assisting someone or advising someone to commit suicide without having to face legal consequences. However active euthanasia, which means killing on request or killing through active help, is considered a criminal act (216 StGB). It is not forbidden for a physician or anybody else to give advice or to provide material (e.g. poison, gun, etc.) with which the patient can commit suicide. The most striking case since the existence of the Federal Republic of Germany was the case of Mrs. Hermy Eckert and her physician Prof. J. Hackethal in 1984.

Prof. Hackethal, a well known fighter against the traditional medical practice and malpractice and the head of a private clinic in the south of Germany, was involved in a highly controversial disputed case of suicide of the 69 year old Hermy Eckert with final stage skin cancer. Hermy Eckert, a long term patient in his clinic, approached him for support to commit suicide. Despite the far advanced skin cancer and tremendous pain, neither her mind nor her basic body functions were afflicted. The cancer solely destroyed head and face. After 13 surgery sessions the physicians decided that they couldn't help her anymore. For reasons of legal backup and perhaps to revive the debate on life sustaining technologies and dying with dignity, Hackethal filmed all the stages from the decision to commit suicide to the final death and released it to the public TV stations, all with the prior consent of Hermy Eckert. He was also the one who provided the poison zyancali and who gave her instruction and advice,
he even stayed with her until her death and informed the police afterwards. For legal purposes he provided zyancali since he knew that this is one of the rare poisons where medical treatment or help even if tried is not possible. Of course the public reaction was one of controversy, but he was not prosecuted by the government. Only almost all his colleagues condemned his action as active euthanasia and as not ethical for their profession (13).

Another famous case, which happened in Switzerland, but had also strong impacts on Germany, was the case of Prof. Haemmerli from Zuerich in 1975. He was suspended from his clinic and imprisoned because he was accused of killing on purpose (vorsätzliche Tötung), because he withdrew nutritional support from incurable sick people. He only maintained hydration support. Potentially the court could have sent him to jail for between 5 and 20 years. The court found him not to be guilty because of the specific circumstances of the situation (4,14).

In Germany it looks like that courts are hesitant to judge medical practice and decisions. Some indications are the fact that in 1984 the highest criminal court (BGH) decided on one case and didn't have any comparable case for the last 20 years (13). On the other hand the German criminal statistics show only 55 sentences due to killing on request and in none of these cases a physician was involved (14). Finally, as BOCKELMANN (8) mentions, there has been no sentencing of physicians due to actions which could have been considered active or passive euthanasia in Germany. Even when there is a legal right for family members and for other persons to sue for malpractice (1), people rarely take actions against their physicians,
even though organizations for patients' rights and protections are growing and there is a trend to increased law suits (Patienten- schutzbund und Gesellschaft fuer medizinisch-chirurgisch Geschaedigte e.V. (9). A major point of legal intervention occurs when physicians either forget to ask for permission before the treatment or they do not give all necessary information to the patient to be aware of the consequences of the treatment and therefore have violated their duty to give enough information (10). Every patient has a right to see his medical records.

INFLUENCE OF RELIGION

There are two major religious groups which have a long tradition in Germany and therefore have a very strong influence on the social cultural as well as the political level. The north of Germany is predominantly influenced by the Lutheran-Protestant church while the south, particularly Bavaria and Baden-Wuerttemberg, is the domain of the Roman Catholic church. There are 26,625,000 members of the Roman Catholic church and 25,701,000 Protestants (in 1982, 62,000,000 total population). According to the constitution (article 140 GG), the church has the right to claim a tax on the income of every member (9%). Since traditionally the community life is centered around the church, it has a strong influence on the value and belief system of a large proportion of the population. Especially their ministerial workers, clergymen, pastors and priests can be seen as opinion leaders in many ways. The German Bishop Conference (Catholic), many moral theologists, and leaders of the EKD (Lutheran Church of Germany) have participated in the discussion on
life sustaining technologies and euthanasia. One major position is that human beings principally have no right to commit suicide (15). But there is a consensus that it is not the duty of a physician to extend life artificially. As the German Bishop Conference (catholic) puts it "the right to die with dignity can mean that not all medical technologies have to be applied, if they might only extend painful dying" (8).
TECHNICAL ISSUES RELATED TO THE CRITICALLY AND TERMINALLY ILL

Sources:
1. Dr. Peters, Anesthesiologist, University Hospital, Dortmund, (c/o J H M Institutions)
2. Dr. Fetter, Neurologist, University Hospital Tuebingen (c/o JHMI)
3. Dr. Knoll, psychiatrist in private practice, Marktoberdorf
4. Dr. Neeser, attendant, Dept. of Anesthesiology, Zentralklinikum Augsburg
5. Dr. Behr, internist, intensive care unit, Zentralklinikum, Augsburg
6. Dr. Mueller, surgeon in private practice, Vincentinium Hospital Augsburg
7. Dr. Reinhard, cardiologist, intensive care unit, Klinikum Grosshadern, Muenchen
8. Dr. Verhorver, neurologist, intensive care unit, Klinikum Grosshadern, Muenchen

Dialysis

Dialysis and kidney transplants are covered by the health insurance system without limitation. Dialysis machines are available to everyone who needs them; outpatient centers as well as hospitals are very well equipped (4,5). Usually dialysis centers are widespread where the people who need them commute to and often it becomes an important part of their social life and social activities (2). In addition some private organizations support patients in need of dialysis machines and kidney transplants.
Home dialysis is rare but is steadily growing. One of the deciding factor is the interest of the patient, whether he wants to use such a machine or not (5).

Kidney transplantations are not a question of financing but mainly a question of availability. A shortage leads to a waiting and priority list; but patients who have a relative as a kidney donor will be treated immediately (3). Every hospital has its own priority list and the patients are placed on these lists according to their needs; again, age is not a deciding factor, more important are the future perspectives of the patients and his immunological status (5).

If two patients have the same medical need for a kidney transplant and they only differ in age, then it might be more likely, that the younger patient will be preferred (6). In general kidney transplantations are rarely done in patients older than 60 years. Overall the numbers of kidney transplants as well as the demand increased over the last few years. (1,4,5).

Nutritional Support as well as Hydration are seen differently from other life-sustaining technologies, they are seen as the "sine qua non" (5), because once applied they are never withdrawn until the patient either dies or gets well and independent again. It is not permitted to withdraw either of them, except when the patient is brain dead. (7,8) The elderly are treated in the same way as any other patient (1,2,4,5). There is a tendency, since nutritional support is seen as a key position of intensive care, to decide in advance about the applicability of it regarding the health status of the terminally ill elderly patient; it is more likely that nutritional support will not be started at all than that it will be withdrawn (1).
Resuscitation

Do not resuscitate orders are part of the practice in the hospitals but written orders are rare. The decision is made mostly on the basis of the diagnosis of the disease and on the chance for recovery. The policy does not seem to be the same in hospitals and nursing homes. One physician reports that in his hospital there are no cases in which patients are not resuscitated even if there might be a chance of brain damage. As long as the consequences are not predictable, every patient will be resuscitated (7). However the elderly are commonly resuscitated even when they could be considered "hopeless cases" (4).

On the other hand, due to the limited availability of appropriate equipment as well as physicians on duty, it is more likely that patients in nursing homes are not resuscitated as often as those in hospitals (6).

But age never seems to play an important role in terms of treatment. In general, elderly are more often resuscitated since there are more older people in the hospital. Age might sometimes play a role with regard to chances for recovery (1,2,4) but even more important is the "quality of life" aspect which takes many factors of the patient's life into consideration (4). Resuscitation is not likely to be done with patients having brain death, severe brain damage or terminal stage metastatic carcinoma (5). For their own legal protection, physicians tend to stay away from writing DNR orders on the patient's chart.

Failure to resuscitate is very unlikely to result in civil or criminal law suits, especially since it is very hard to prove it.
There are no legal orders regarding the duration of resuscitation trials (1,2,4) and criticism from colleagues is more likely than malpractice claims (4,5). However, if an emergency physician does not resuscitate in a setting outside the hospital, he could get into trouble (4).

**Ventilation:**

Short term mechanical ventilation is available in every medium size hospital, but only a few are equipped with machines for long term ventilation (5). In nursing and private homes such machines are not available on a broad base, but some nursing homes do have such equipment (6). Mechanical ventilation machines are part of the standard equipment in intensive and emergency care units. Financial aspects never play a role in the treatment decisions. Ventilation is almost exclusively done in intensive care units and sometimes even "hopeless cases" are still ventilated (6).

Among the few long term users (more than 30 days) are primarily patients with severe pneumonia, brain damage (with reduced pulmonary functioning) (5), polytrauma with lung injuries, septic patients (4), Guillain-Barre-Syndrome (2).

**Antibiotics:**

In general infections are a common source of mortality, but usually the prescription of antibiotics to the elderly is not different compared to any other patient. On the other hand in intensive care units infections are not a common source of mortality (5). The best medication is always used, dependant on the kidney and liver functions (5).
But differences among hospitals and other settings are likely with regard to dosage. General hospitals will use higher doses, given parenteral, and for a shorter period of time, while nursing homes administer orally and with a lower dose (4).

Although hospitals may treat in higher concentrations compared to other settings, it is likely that patients in the hospitals are more severe cases (6). In general there is a high use of antibiotics in all settings which sometimes can be due to the request from the patients (2) but the decisions for prescribing antibiotics does not lead to any financial profits for the physicians (4). Most physicians agreed that the pressure from the patients' side, does not necessarily lead to a more frequent use of antibiotics (1,3,4).
APPENDIX I

Case: Dr. Wittig-Charlotte Uhrmacher

In June, 1984 the highest criminal court of the Federal Republic of Germany decided on the following case which was called the "Krefelder Fall": (after more than 20 years since the last case of Euthanasia):

Dr. Wittig was found "not guilty" by a lower court (Krefelder Landgericht) with regard to the accused being responsible for the death of the 77 year old Charlotte Uhrmacher. He was accused of "killing on request by withholding help" (216 STGB).

Charlotte Uhrmacher was his patient for several years and after her husband died she mentioned several times that she wanted to "follow him." She was under treatment because of her heart problem and arthritis. One day when Dr. Wittig wanted to visit her at home nobody opened. With a second key he opened the door and found her "heavily poisoned but still alive." In her hands she held a picture of her husband (to whom she was married for more than 50 years). Next to her Dr. Wittig saw Nosphium-Ampuls and tablets and a note which said:

To my physician!
Please no hospital! Salvation! I want to my Peterle (her husband)!

In addition he found a living will (Patienten-Testament) in which she expressed that she was fully conscious of her actions and that she did not want any treatment with life sustaining machines! Dr. Wittig accepted her expressed will and did not call the ambulance but instead he called the neighbor and both stayed with Charlotte Uhrmacher until she died a few hours later.
The highest criminal court (Bundesgerichtshof) found him also "not guilty". The opinion was as follows:

"The physician is allowed to concede that in this case there was no legal obligation to keep this dying person alive. Actions to sustain life are not necessary just because they are possible. Not the efficiency of a medical instrument, but the respect with regard to the dignity of life and of human beings determine the limits of the medical duty for treatment (13)."

But the BGH also pointed out that the decision was based on the specific circumstances of this particular case. At the time, when Dr. Wittig found her, the woman was already irreversibly damaged by the poison intake; in other cases of suicide where the person's condition can be reversed the physician has to follow his duty to protect the person's life by helping as much as possible. The BGH emphasized the applicability of its decision solely to this case so as not to establish standards for other cases or to set a general precedent.
APPENDIX II

A 60 year old physician was suffering from metastatic stomach cancer. The carcinoma was inoperable. After the 10th day of hospitalization a lung embolus caused the collapse of the circulation. An emergency surgery kept the patient alive. Being conscious again the physician requested his colleague not to take action anymore in case of a new collapse. Two weeks after the lung operation a heart attack led to a cardiac arrest. Against the patient's will he was successfully resuscitated during 4 separate efforts in one night. In the meantime, brain damage was severe enough that the patient could not recover consciousness. For 3 weeks the patient was kept alive in an intensive care unit. Respiratory paralysis occurred. Hospital staff tried to initiate mechanical ventilation which was not successful. So finally he died...due to a technical breakdown (13).

Case 2:

There are 200,000 brain and head damages per year which have to be treated in a hospital. 25,000 of them with severe brain damage. At least 170,000 of them are resuscitated but only 1/3 is successful, (13). Some physicians confess frankly that they commit active euthanasia e.g. Dr. Meyerhoff, "I think I have killed 30-40 patients with an overdose of opiates." (14).

SCHARA (14) A woman suffering from amyotropic lateral sclerosis with progressing paralysis had declared in an earlier stage of the disease that she refuses ventilation. Now, unable to move, fully conscious but unable to speak she is hooked to a ventilation machine and she is happy about it. The only fear she has is that somebody may switch off the machine.
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