Health Outcomes

A new way
of defining
and
managing
health

Dr Eddie Price
M.B.B.S., D.H.A., F.R.A.C.M.A.

Health Outcomes

A new way
of defining
and
managing
health

Dr Eddie Price
M.B.B.S., D.H.A., F.R.A.C.M.A.

Health Outcomes

A new way of defining and managing health

Health Outcomes

**A new way of
defining and
managing health**

Dr Eddie Price

This book was first published in 1985 under the title "Is Medicine Really Necessary?" It is republished in 1994 under this new title.

TULLY
PRESS
Sydney
Australia

Publishing Details

Ebook Version

3rd Edition 2015, ePub and Mobi eISBN: 9781925271348

Ebook creation: Converted from digital source file Ebook files created and distributed by: *Australian eBook Publisher* www.AustralianEbookPublisher.com.au

Print Version

Typeset, printed & bound by Southwood Press Pty Limited 80-92 Chapel Street. Marrickville, NSW

For the publisher Tully Press
Sydney, Australia

First published 1985.

National Library of Australia Catalogue Card no. and ISBN 0 86806 192 1 (casebound) ISBN 0 86806 193 X (paperbound) National Library of Australia Cataloguing-in-Publication entry

Creator:	Price, Eddie, 1946- author.
Title:	Health outcomes : a new way of defining and managing health / Dr Eddie Price.
ISBN:	9781925271348 (ebook)
Subjects:	Primary care (Medicine) Physician and patient. Medical care.
Dewey Number:	610

Contents

Acknowledgments

I would like to express my gratitude to all my teachers in management theory and in particular to Mr Ron Beer, who was the driving force behind the introduction of Management by Objectives programme at Sydney Hospital. It was here that I first was able to see the conversion of management theory into practice, with optimal results in the health services. I would like to thank my teachers at the School of Health Administration, the University of New South Wales, in particular Professor George Palmer. I would also like to thank Dr Roderick McEwan, former Chairman of the Health Commission of New South Wales, who had early faith that such theories could be applied to a community as a whole. Thanks are also due to Family Medicine Programme and the Royal Australian College of General Practitioners, who pointed out that health was best maintained in the family and in the community. I would like to pay gratitude to my many patients who make up the humane part of this work.

In addition, I wish to express my special thanks to those who contributed to the creation of this book — Joan Clarke and Warren Osmond, who helped with the editing; Glenda Stewart and Stuart Ferguson, who made various suggestions as to the format; Beverly Elith and Susan Noonan, who assisted with the typing of the manuscript and to my father, Henry Price, whose example gave me the motivation and courage to set out my ideas on paper; to

Mia Price who suggested the title; and finally, Carole Goldsmith and others whose enthusiasm was appreciated.

Introduction

I come from a long line of doctors — my father, my grandfather, my father's sister, were all doctors. My only brother had decided to become a computer engineer, so there was little doubt that I would become a doctor. However, I found myself ill at ease with sick people, being too emotional for their good and my own. When as a medical student I listened through my father's stethoscope I heard nothing, and as I looked through his microscope, I saw nothing. Predictably, at my first operation, I fainted. I wondered about my future in medicine and was advised that medicine is such a large field, there would be a speciality that suited me, so I completed my examinations at the University of Sydney.

In order not to be drawn into the rat race to become the best specialist, I decided to avoid teaching hospitals and do my internship and residencies overseas. I interned in Israel, worked in an Arab refugee area in El Arish, then as a kibbutz doctor, before I went on to London to work as a hospital doctor and general practitioner under their nationalised health scheme. I became interested in studying different health systems and decided to specialise in health administration.

When I returned to Australia, I enrolled in the School of Health Administration full time at the University of New South Wales, working as an emergency doctor in the evenings, I soon found a true administrative position with a true administrative title, Assistant Superintendent, in

charge of medical management development at a large Sydney hospital. After that I worked for the health department for a year. Following a further holiday overseas with my wife, who worked for an international airline, we decided to start a family.

Circumstances had changed a little and soon I found myself working in my own private general practice. Fortunately most of my patients were not seriously sick, and as I had matured a little, I was now able to cope. However, my interest in health administration has remained. Feeling I had some experiences and some ideas worth sharing, I was compelled to write this book, in the hope that it will stimulate action and help create The New Doctor who will practise the New Medicine.

I have written this book from the perspective of a general practitioner, however with an eye to faults in the health system. Much of the book is concerned with anecdotes taken from the doctor-patient relationship and from those personal encounters, conclusions are made regarding the need for the doctor to change his role. I should mention that the general practitioner here is taken not only as a representative of all doctors, but also of all health professionals, and conclusions reached regarding changes necessary in the GP's orientation can be seen to be applicable to the health system as a whole.

I have presented these case studies in order to highlight the humane side of medicine, which I feel has been somewhat neglected. This is particularly important for many of the solutions I present are based on the belief that the modern doctor must also be aware of the need for management skills, and this might be seen to be impersonal: the opposite is the case. The modern doctor must become more caring, and the modern health service more humane. Paradoxically I feel this *can* be achieved by understanding and applying modern concepts. Modern management is based on the recent advances in the

knowledge about people and their behaviour and administrative thought can, and is, becoming personal and humane particularly in relation to health care.

Another reason why I concentrate on the role of the doctor in medicine is the management principle known as the Pareto principle. This fascinatingly simple observation suggests that there are key interest groups in each industry, and if *real change* is to be achieved these key interest groups must be involved. In the health field these key interest groups in my opinion are doctors and hospitals.

Some will argue that doctors' esteem and hence their power has fallen in recent times, a point with which I agree but in spite of this, they remain one of the key determinants not only of their role but also of the role of medicine. I am not suggesting that doctors are a group which is other than conservative; what I am saying is that if the doctors and the large hospitals do not change their roles, the system will not have changed visibly. It is therefore the function of the administrator to understand the needs of these key interest groups, and to convince them that *their* own personal needs and objectives will continue to be met after they implement the changes in their roles with the health system.

Of course some members of the general population will alter their lifestyles to a more healthy way of living, but their numbers will remain small if those who are the experts of health do not advocate and practise these principles. As such I address this call to two audiences, the doctors and the general public who are, I feel, interdependent on each other and who share the common goal of improving the community's health.

While the doctor in this book is representative of all the health professionals, the relationship between the various health professionals should be mentioned. It is my firm belief that the resources required to deliver comprehensive

health care today, are such that it can be provided only by a health team. The introduction of team concepts leaves much detail to be hammered out in practice, which is not discussed here. I do feel that it is necessary for the doaor to become part of that team and thereby accept more responsibility for caring whilst at the same time the other members of the team take more responsibility for curing from the doctor. The exact nature of the team will emerge through discussion and evolution.

I would like to now look briefly at medicine today from the perspective of the medical administrator, as well as as a member of the general public. One can quickly see that the 1980s is a time of confusion in the health care services. On the one hand some nations are cutting back drastically on funds for scientific medical research. At the same time the same nations are introducing new technologies, such as CAT scanners, multi-basic screening machines, etc. There appear to be sharp conflicts on whether to increase or decrease current health services.[1] The health services are of increasing concern to both governments and individuals.[2]

Health remains such a valued entity, that Lalonde, a Canadian parliamentarian stated: 'The good health of Canadians is an objective that shines brightly above the thicket of jurisdictions and special interest groups.'[3]

An almost universal view is that if a person is sick, he has a right to health care independent of his ability to pay. Some countries have suggested that they provide a health system to look after citizens from 'womb to tomb'. Others immediately expanded this to read, 'from erection to resurrection.'

As it is obvious that the issues involved in health are of interest to many people, it is the purpose of this book to confront these issues not through clinical or statistical analyses, but through parables and case studies illustrating

the problems in human terms, and seeking practical solutions. As I asked myself in my own medical practice, is what I am doing really helpful? Others have asked, are health services helpful?

The question of whether screening tests should be encouraged or not is one of the hotly-debated subjects. There are those who have reached the conclusion that today the truly healthy person has not had enough investigations. They claim that if you do enough tests you will find something wrong with everyone. Yet many practising doctors and their satisfied patients will place great importance on the bi-annual screening tests.

This is one of the issues, there are many others. Some who take the opposite view state that throughout life one will suffer from minor diseases and that these should be accepted as part of normal life, for they feel imperfect health is the best health. Others take the issue even further and state that in certain circumstances ‘dying is healthy’. Many are talking about ‘positive health’. Health used to be defined as ‘well-being’ but ‘being’ is no longer enough for the positive health lobby; they see good health as more than ‘being’, rather as ‘doing’ or ‘health on roller skates’.

Health administrators, individual doctors and nurses must grapple with a myriad of issues. Each must decide which direction is correct. Often two new proposals will be contradictory yet both seem sensible. This book deals with this welter of confusion facing medicine today: confusion which has reached the extent of us asking ‘is medicine really necessary?’ The answer is of course yes, but not in the way it is presently practised.

There is an urgent need to put some order and direction into the health industry. Also, it must be pointed out that the health care services are rapidly becoming one of the world’s largest employers. Therefore, they ought to be managed with the same dynamism and vigour as are the large organisations of big businesses. The purpose of this

book is to demonstrate that the solutions to both these problems will follow the application of modern business and management techniques to the health care services. One of these techniques is known as management by objectives or management by *desired health outcome* and this is the cornerstone of this work.

Further advances in the health of individuals will *not* come from scientific breakthroughs. The great advances in the health of *peoples* will come from the reorganisation of the health care system, based on *'health outcomes'*. We already know how to prevent a great many illnesses. The health care system which ensures that its health professional gives the lead in this direction will bring the greatest advancement in medicine in the immediate future.

How to create such a system is described in this book, and the salient premises are:

1. Modern business and business school techniques and yardsticks should be applied to the management of modern health services. If this is done, we discover that the goals of medical services, as they exist today, are hazy and ill-defined. They must be clearly re-defined to take advantage of the many advances in the social sciences in recent decades.
2. Medical efforts and goals, by and large, are fifty years out of date. In a word, rather than being absorbed with the race to a 700 year life-span, we should be more concerned with *how* we keep people alive, the degree of true health we can offer our patients.
3. A related theme or goal with which I am much concerned, is the significance of the concept of the doctor as comforter and healer. As a leading authority, Mechanic has observed, 'There is a *symbolic* relationship between the doctor and the distressed

person.'[4] This symbolic relationship must no longer be neglected.

4. In sum, the goal of health administrators in the 1980s should be nothing less than a 'new definition of health.' We must re-define health to mean far more than an absence of illness: we must aim for our patients to experience a sense of well-being, of enjoyment of life. It is simply no longer enough for us to be satisfied if our patients are merely hanging on, skirting the pitfalls of disease and infirmity.

When all the above points are taken into account, we find we have redefined health as: a complete (positive) sense of physical, psychological and social well-being, an ability to function in the community without undue pain or anxiety, with confidence that comfort will be available in times of distress for a natural life-span.

Having re-defined the goals of health care, it is argued use of health outcomes, particularly health status measurements is the only valid way to evaluate as to whether they are being achieved. This application automatically leads us to a bold new set of solutions. Chief of these is the doctor as a teacher - or educator. The new doctor will not only treat patients on an individual basis, but will conduct classes in health promotion and prevention.

This, like the other recommendations in this book, follows logically from the application of such management techniques to health services. The tone and style of the book has been kept informal and conversational, as much as possible, and filled with case histories to illustrate my various premises and arguments as we go along. The patient anecdotes have all been taken from my personal experiences as a doctor and medical administrator.

Although I handle some complicated concepts, I aim to bring these issues not only to the widest range of health professionals, but also to all health conscious citizens, for my real wish is to induce changes in health care delivery, and this can only be achieved with the support of the concerned community.

I have divided the book into eight chapters. In the first half of the book, I closely analyse different aspects of health services so that I might determine what are desired health outcomes, the real *aims* of health care. This seems to be the first step if we wish to provide the appropriate health services to meet these aims The establishment of such goals is the first step in health planning Like the well known health administrator, Donabedian, I find four separately identifiable goals. Each of the first four chapters deals with one goal.

Having decided what we are aiming to achieve, it makes sense that we should have a method to assess whether and when we have reached our objectives. Accordingly in chapter 5, I deal with the various methods used to compare the actual outcomes of health services in practice to the original aims. Health administrators call this procedure management control.

In chapters 6 and 7 I discuss the organisation, the methods, and the financial arrangements used today to provide health services. I highlight the shortcomings and misdirection of such organisation and methods and I make suggestions relying heavily on my personal experiences and modern management the cry as to how I feel the system should be reorganised in order to reach our shared goal of a healthier society.

In this way I have systematically carried out three different management functions: planning, organising and controlling the direction of health services. These activities make up the task of any manager. Therefore by using basic management theory and applying it to health services I

have been able to make recommendations for the direction future health services should take. Chapter 8 summarises the solutions which follow the business-like application of management theory to health care. In the final chapter, I emphasise the purpose of the book, that is to bring about constructive, effective changes in the role of medicine. As such the final chapter has a somewhat different tone, so that the ‘call to arms’ might be heeded and given the serious attention that it deserves.

1 Is keeping people alive the main goal of health care?

Medicine today is obsessed with the idea that health care is chiefly concerned with saving lives and heroic medical procedures. This idea is shared by the health workers, the general public and by many health evaluators. Modern medical opinion holds that the more high-powered and scientific the technology, the better the medicine. Wrong. This is a delusion. Emphasis on lifespan is important of course but is overrated. It leads to a gross misconception of what true health care is all about or should be all about. It is easy for people to say ‘I want to live forever’, while knowing that they, like everyone else, will die. Individuals can live happily with such inconsistencies, but to run health services and health education on such a basis leads to gross misdirections, wastage and lesser standards of health care.

We should be much more concerned with how well we all live, all that is summed up in that overworked phrase ‘the quality of life’. But we will get to that in the next chapter. First we will examine the hallowed medical concept of saving lives.

When John Lennon was tragically assassinated in 1980 he was dead on arrival at the New York hospital and yet a top-notch team of surgeons worked over the body for more than half an hour. Pure ritual? Yes. Does it serve any useful

function? Well, yes. It proves to the bereaved family, to the world, that every effort has been made. It is a kind of an emotional catharsis, really. It is a nice way to comfort the family. It is *not* a realistic attempt to save a person's life, and it must not be identified as such.

I have had many similar experiences in my own practice when observing this ritual, despite its futility, was of the highest emotional importance to the bereaved family. Nevertheless, I received accolades, not only from them but from fellow doctors and health workers. They all saw it as high-powered medical technology, performed by a well-trained physicican. In truth, I was merely acting out a very important role in the doctor-patient relationship: the doctor as comforter.

This display of modern medicine is an expensive, time-consuming procedure — perhaps a necessary one, but not because it is likely to cure.

My most vivid case of this sort took place in Sydney. I was rushing dinner, the waiting room was empty and I was starving. Mia had manoeuvred the meal from the kitchen, through the second surgery — this evening there were no patients in it for a change — and up the stairs to where we lived.

Lee, the surgery receptionist, called up. 'There is a group of three or four men here asking for a house call.' There went my longed-for supper.

'Is it urgent?' I called.

There was some babbled conversation as Lee tried to make the question understood by this group of Lebanese men, each of whom gave their own opinion.

'No', came the reply. Not a very convincing 'no'.

The men were talking loudly and I could see a pair of legs at the bottom of the stairs moving anxiously from side to side. I think it was their number and their movement which

made me decide it was serious. Four people, even Lebanese, don't usually turn up to ask the doctor for a home visit.

One more mouthful, and I went.

We all piled in one car and drove to the house of the sick man for whom I had been sent. As I entered the living room, I called 'Who is sick?' to the group of friends who were sitting about sipping coffee. They pointed to Mr El Omar*, who was sitting up. I looked. He was 'blue'. Clinically dead. Hurriedly I asked, 'Has he said anything?'

'Not for five to seven minutes'.

I laid him down, he flopped, falling to one side. I fought him into a horizontal position and started mouth to mouth resuscitation and cardiac massage.

'Eeeeh! Eieek!' Screeches and screams rang out. 'No, oh no!' It seemed everyone was weeping or crying.

I yelled above the noise for assistance. I tried to instruct one of my young chauffeurs in external cardiac massage.

'Five of these' I demonstrated pumping his chest wall, 'Then stop while I will give a breath 'pheeww' of mouth to mouth resuscitation.

'Call for the coronary ambulance', I snapped.

'We don't have a telephone', someone said. 'I'll drive you to the hospital, doctor, it will be quicker'.

No time for arguing. The patient was not responding. No pulse, no movement. His weight surprised us, as together with three or four of the men we carried his prone body to the car. In the midst of all this I attempted to continue mouth to mouth respiration. No one continued the cardiac massage for those few minutes.

'To Royal Temple of Science Hospital', I ordered.

'Where is it?' said the driver. 'Rundown Local Hospital is closer.'

R.T.S.H. would be better in an emergency like this, at least they would have competent trained staff, but I

couldn’t give directions and continue with supportive external cardiac massage and mouth to mouth.

‘O.K. Let’s go to Rundown Local’.

We arrived. The night casualty door was locked but a nurse was there.

‘Call the doctor — we have a cardiac arrest.’

She looked incredulous, as if to ask how I knew.

‘I am a doctor, believe me. Get us a bed. Have you some Isuprel and Bicarbonate injections?’ I yelled, giving some authenticity to my claim that I really was a doctor. ‘Do you have an ECG monitor and defibrillator? Is there a medical registrar on duty?’

Everything seemed to move slowly. Nothing could be accessed easily — not the injections, they were locked away. The ECG monitor wasn’t working, we must use the ECG machine, but it has just run out of paper.

‘I don’t know how to put in the new ECG paper’ said the bewildered nurse.

It was as I had expected. The hospital doctors arrived after ten minutes. A further five minutes went by before the ECG had been attached and an ECG performed.

‘Nothing’.

One doctor attempted to do a venous cutdown.

‘No luck’. I examined his pupils — they were fully dilated.

‘Let’s give the Isuprel intracardiacly’, someone suggested. No long needle could be found.

‘Use the short needle, use the short needle’.

By this time the defibrillator was attached — half an hour since arrival. But what do all these knobs do? It was some time since I had seen one being used. I had never used one. Fortunately the hospital medical registrar figured it out. Now forty minutes had elapsed.

One shock with the defibrillator, check the ECG, nothing. Increase the voltage, one further shock, nothing. Stop resuscitation attempts.

‘Ring R.T.S.H. and get me the cardiology registrar’, I ordered the nurse.

After five minutes I spoke to the budding cardiologist by phone. I explained the story. ‘Is there anything else you can suggest?’

‘Perhaps Calcium Gluconate, however, it appears to me things are too late’.

‘But he is only thirty one and has a one month old son. He was healthy until today. Thanks.’ I hung up.

My heart was heavy. I had to go and tell the family he was dead. This is a task every doctor dreads, no matter how often he has gone through with it. I asked to speak to *two only* of his relatives who were waiting outside. Explaining he had died I said we had done all we could, even spoken to the cardiologist at R.T.S.H. and they could not offer anything further. It took some fifteen minutes. I prescribed some sedative drugs for his wife and suggested that the hospital be allowed to perform a post-mortem. I will see the relatives again tomorrow.

The relatives arrive. I relate my phone call re post-mortem results.

He had a dissecting thoracic aortic aneurysm. I explain with aid of books, photos and diagrams that I draw, and talk mainly to his uncle who is the eldest and appears to be the head of this small community.

‘We could not have helped, all our efforts would not have helped him. I’m sorry I cannot give you a specific cause for his aneurysm’. I notice I am speaking only to the men. This is their role in Lebanese culture.

‘How is the wife?’ I ask. ‘If she has any questions please ask her to call me’.

They couldn’t thank me enough. I was a hero in their eyes. Thoughts darted through my mind — all that effort to save his life. Yet as soon as I saw him sitting up, unconscious, blue, I knew he was dead. I really had no hope of reviving him or at the very most very, very little. If I

knew that, then why did I do it? It was all a charade, perhaps I should have immediately told the family he was dead. Or should I? I really knew that a cold callous declaration like that was wrong, even traumatic. But my point is that it was done for humane reasons and *now* most importantly, I recognised it as such. Many doctors like myself do the same, mistakenly convinced that they are zealously attempting to save a life.

I remembered the emergency call I did five years earlier whilst working for the after hours medical service. I was just out of medical school, all of twenty four years and I looked it.

On that occasion it took me twenty minutes to arrive. The patient, a man of sixty five years, was dead, probably from a heart attack. I immediately informed the family. They reacted aggressively. 'What would you know? Where's a real doctor?' I spent at least half an hour explaining the situation to them, hoping they would calm down. Maybe that experience influenced me. Could we have cured Mr. El Omar? No, not even at the best hospital.

Well if medicine is all about saving lives, then the time I spent talking to the family about a dead man should be considered time wasted, as here I was not trying to heal, just to console.

Really, the whole exercise might be viewed as a more appropriate way of telling the family he had died, than by immediately giving them no hope. The family expressed no aggression. On the other hand, they remained forever grateful, even though I had failed to keep him alive. Such a young tall man. He should have lived to eighty or ninety years of age.

Now let's look at another Sacred Cow of present day medicine — keeping people alive as long as possible, despite their infirmities, despite much loss of dignity.

I have seen hundreds of old ladies, living out their days in retirement homes and church nursing homes, and here are two of my favourites. Mrs Ruby Denity, age ninety two, and Mrs Patience Havagon, a mere seventy nine.

The reader is urged to keep the following questions in mind as he reads their histories. At what point in old age is it natural to die? Who is going to decide whether the time and effort are justified despite the cost and the minimal effectiveness of the procedures. Who decides this today: the doctor or the patient? Should we recognise that there is such a thing as an ultimate life span, beyond which point death could be considered even a healthy event? Shouldn't we show more concern rather for the quality of life we offer the aged?

Mrs Havagon was a real pleasure, I enjoyed her visits. Very short, less than five feet tall, bent over and dependent on crutches, a legacy from the severe rheumatoid arthritis she had suffered, she necessarily moved very slowly.

Always laughing. 'I'm coming, doctor'. She excused her slow walk. 'Caught a cab down, foreign chappy — I gave him a dollar but he refused — gawd I must really look a wreck if a cabbie won't take me dough. Nice of him though, better than the last bloke who charged me sixty cents for the time it took me to get out and for helping me across the road. The b----- matron up there at the nursing home steals all me tablets. Can you give me some more? Oh, doctor, can you please loosen this open for me', and out of her bag comes a small brandy flask. 'I had to smuggle this out as well — Bootlegger Havagon the others call me'. I loosen the top for her. She recounts how she used to sing in the country pubs as a young girl. 'I know 'em all, all the pubs'.

She complains how her 'bloody daughter' doesn't visit her enough. Actually she is probably getting a little high on some of the sleeping tablets, as she only weighs three stone eleven pounds and her dose is for an eight stone patient.

We chat, chat and laugh. I suggest she has to eat more protein.

'Yes, but I can't chew and I can't swallow. Have you ever eaten pureed steak doc? Besides, the food up there is lousy'.

Should I give her sleeping tablets, I debate with myself. The nursing staff will probably go through her bag and confiscate them, yet this remains one of her greatest pleasures — to try to put one over the staff.

I give her a script. On the way out she calls back, 'I'm going round the corner for a nip — are you coming?'

'Don't have too much', I answer. 'Remember you are in training for the Olympics'.

The patients in the waiting room all laugh and enjoy the vigour of this feeble but lively lady. She continues her visits once a month for a year. Then she is immobilised in a wheelchair and no longer comes. She doesn't really remember me when I visit her, although I remember the cheeky look which remains on her face. Still she eats the nursing home food; one of her only activities is when she is wheeled out of her room for her meal, to get washed or to get dressed.

I pass her room, another lady, another lady, hardly any men.

So many old ladies, many more than men. I wonder are they lucky or unlucky that they live longer. No, not all are in nursing homes, there must be an equivalent number of relatively healthy elderly ladies in the community. There are definitely fewer old men than women. I don't feel that I would rather be a woman and have a better chance of living longer, I don't even feel disadvantaged in this regard.

Somewhat amused I joke to myself that we, the doctors or health workers, would have far more success if all the people were women. Mean life expectancy at birth would increase by five years. It really isn't a man's world, after all.

The point is that longevity isn't as important as it seems. If it were, men would be jealous of women.

Mrs Ruby Denity now walks in, her posture perfect despite her ninety two years and belying the walking stick she carries.

She, too, complains about the nursing home matron, as well as the lady in the next room who tried to attack her.

'She must have been drunk, doctor, terrible thing that alcohol. I received such a fright I can no longer sleep and I have pain on the left side of my chest where she struck me.'

She is a gaunt lady, with paper thin skin. I once made the mistake of calling her by her first name, Ruby.

'I like you doctor, but I shan't if you continue to speak to me like that'. One can feel that she is certainly a lady, a very self-sufficient person.

Her hearing is somewhat reduced and I have to repeat myself often.

She is rather alone in this world, her husband having died many years earlier. She is fortunate to be able to live on, but it really takes a lot of courage for her to live in a manner she doesn't find dignified. We set up a firm relationship.

I get called to the nursing home from time to time to treat her coughs and colds. I listen with interest as she relates her story, how her son embezzled what money she had and then died in an accident, leaving her without money. Like Mrs Havagon, Mrs Denity wishes to take her own tablets and keep them by her bedside, but the nurse says 'no', the staff will administer them. The nurse tells me 'She's a stubborn old dear', as I find myself acting as an umpire in the continuing battle of words as Mrs Denity insists the matron and her offsiders are tyrants. Mrs Havagon, who happens to pass, adds, 'I saw the coppers

matron has up here. I know why they are always visiting. We know what goes on, don't we, Mrs Denity?'

I am Mrs Denity's only outside visitor on Christmas Day and Mothers Day, and then on one visit I find that she is really short of breath. Examining her I find that her lung fields are bubbling — full of fluid. A diagnosis of congestive cardiac failure is made and I arrange for her admission to Royal Temple of Science Hospital, where I feel she will get the best medical care. Rundown Local Hospital is closer, but although they ring me from time to time asking me to refer my patients, when I do they are usually too full, or won't take a non-emergency. She might be classified as a 'non-urgent', so I'd rather send her to R.T.S.H.

Her first hospitalisation in her entire ninety two years! Doctors at the hospital diagnosed bronchopneumonia and congestive cardiac failure, and when she came out she was full of praise for the hospital, but could not exactly remember who was the doctor, or if I was the doctor or how long she had been hospitalised. She was now very confused. She was already on stemetil tablets for her dizziness, and other tablets for her poor circulation and leg cramps, still others for pain. Now of course her mild heart failure had to be controlled and this meant a further two tablets.

Another tablet for her confusion — no, that would probably add to her confusion. She had been jolted out of an environment she knew, and let's face it, as a medical student I too always got lost in the hospital.

Three months later a call came in from the nursing home to visit Mrs Denity again. The matron rang. Lee, my receptionist, a sunny person who was wonderfully adept at dealing with people and running the surgery, had been particularly busy that evening and had forgotten to pass on the call. She knew from past experience that nursing home visits were in general non-urgent and many were done the next day. When I did receive the message the next morning,

that Mrs Denity had had a fall, and the call had been left from the previous day, I was furious.

‘Why didn’t I receive this call yesterday?’ I blasted my secretary. ‘It was only a fall . . .’

‘A fall in an elderly person is often a serious matter, it is often a fractured hip rendering the patient immobile. Besides, I must keep a good reputation at the nursing home. If matron called personally there is communication in that, she must have thought it to be serious.’ I was very angry.

When I arrived at the nursing home, I said that I had come to see Mrs Denity. I walked down the ward with my doctorly smile, nodding both to nurses and patients.

‘Hello, good morning. Hello, hello, good morning’.

Matron had a smug smile, as if to say, I’ve won.

‘You’re a bit late doctor. We waited a while but eventually I called the ambulance which took her to Redherring South Hospital. She has a fractured left hip and they are keeping her there’.

I rang the hospital. The surgeon did not think it was wise to operate, and although it was not in good position, it was impacted and firm and she might get to walk on it again.

Mrs Denity came back to the nursing home in a wheelchair. ‘You know doctor, I always thought they overpolished the floors in here’.

She was pleased to see me again and recognised me but she had lost more weight and was in the hospital section of the nursing home which further confused her. She wasn’t eating or drinking and had a sadness in her eyes. Her body was mainly skin and bones.

‘Give her some egg flips and some high protein and fluid like sustagen. Let her have some stimulation. She loves that serial on television, “The Sullivans”. Allow her to watch it, OK?’

‘But, doctor, she becomes more confused as soon as we wheel her out of her room’. So not only couldn’t she walk,

dress or wash herself, she also couldn't watch television.

There were other old ladies, Mrs Kinnard, Mrs Woodhouse, Mrs Paten, etc. Some of them managed to live alone, all had their lives restricted by their age, but none of them was as old as Mrs Denity, and she was growing weaker every day. I called in her only niece and told her I didn't think she would have long to live. She was in pain, losing control over her bladder and bowels and developing bedsores as she was now bedfast. The weather would affect her daily as she had little resistance to withstand the oppressive heat of the summer months. She lingered on in bed for two months when finally I was called to certify her death. I had discussed death with her beforehand. She had said she would be happy to die.

I went back to my books and read about life before death. Over fifty per cent of all deaths are *expected* in the one year before the actual death; a higher percentage amongst older people, especially those who live alone.[1] Many are in hospital when they die. Do they go to hospital to die or for treatment, I wondered.

Well, let's say I or some doctors found a method of keeping people alive, the long awaited breakthrough. How would the world be? My mind conjured up all the wonderful fantasies.

Let's imagine a meeting of the state cabinet. All the ministers range in age from 550 years — Mr Spritely the youngest to 703 years — Mr Wornout the eldest. They are faced with their usual agenda items:

1. The motion that the age of a driver receiving his driving licence should be dropped from 170 years to 150 years. The youth, it is argued, are now leaving school at the age of 140 years as they are fed up with learning. It is held that they are responsible citizens and should be allowed the freedom a driving licence would give them.

2. Financing Medical Research. People are dying from diseases the causes of which we don't fully understand, such as cancer, ischaemic heart disease, cerebrovascular disease. Finance is urgently required to find out more about the causes and treatment of the diseases. Should the research help us understand the causes and mechanism of these illnesses, we would be able to remove the spectre of premature death at about 650 years, which looms large over many families and disrupts the progress of our society.
3. Telegrams. Special congratulatory telegrams from the Queen are to be dispatched to those people reaching the age of 800 years. There are 101 in our state this year and none of them is expected to die within the next twelve months.
4. Housing, food, petrol and other shortages. These shortages are thought to be due at least in part to the increased life expectancy of the community. The average age is now 650 years but solutions have to be found to the shortages. One member has even queried whether we weren't better off when life expectancy was much less than it is today.

This anecdote, by taking things to the extreme, makes the point that if medicine were really successful in keeping people alive, the world would really be in a mess. Nevertheless medicine today is still oriented as if this were its ultimate goal.

My thoughts return to Mrs Denity and I feel uncertain whether medical practice is really aimed at keeping people alive longer. It sure would cause a few problems if we really did succeed. Perhaps 1 should have saved her life. I guess I did make the decision not to. I could have put in a nasogastric tube down into her stomach and fed her that way, or perhaps I could have fed her intravenously, that would have kept her alive at least a few days or even a few months. De facto, I let her die.

Now let us turn to the other end of the age spectrum. For although I make the point that saving lives is not what medicine is *all* about, it is still an important part. At most ages dying is not acceptable, and this is most obvious when we look at children and babies. But here it is necessary to stress that it is not scientific medicine which saves these lives, but rather higher living standards.

It was a bright sunny day. Mrs Pawley is the first patient with her baby, Gerald, named after her husband. She had had another son, also called Gerald, but three years ago when he was four months old she awoke to find him asleep and 'blue'. She had rushed him to hospital, only to hear the doctors there tell her he had died a 'cot death'. Now she is pregnant again for the sixth time in six years and not feeling well, but her major concern is for her fourth living child, Gerald, who was now four months old.

'He has had some diarrhoea this morning, doctor'.

'How many times?'

'Twice'.

'Has he vomited?'

'No'.

I examined his skin. When pinched, it did not remain taut (standing up), he had continued to have wet nappies and appeared well fed to say the least.

The mother apologised for being over-anxious, due to her past bad experience.

'You're kidding. You did the right thing, gastroenteritis is a dangerous illness in babies and must be taken seriously'. I reassured her whilst giving her a fluid diet for Gerald and instructing her to return should any of the signs of dehydration begin.

Five years earlier, I did my internship at Tel Hashomer Hospital in Israel as an idealistic volunteer. We had a field station in the Gaza Strip where thousands of Arab refugees huddled in camps.

I remembered the many babies who arrived at the El Arish Hospital in the Arab refugee area of the Gaza Strip. Those babies were totally emaciated, totally dehydrated and almost lifeless when they arrived. The diagnosis was the same in nearly every case. Gastroenteritis. Many of the babies died despite all our attempts to give appropriate fluid replacement. The philosophy of the treatment was essentially the same — give fluid replacement — to avoid, stop or reverse dehydration. The difference was the time of presentation. In Gerald Pawley's case, with the correct advice, we could avoid dehydration. Why had Mrs Pawley come so early? Was it the accessibility of the general practitioner or her education level? Even if she hadn't come she would probably have admininstered the same treatment, having had similar episodes with her older children. It would seem that the significant factor was her *higher* education level as compared to the El Arish mothers in their black bedouin-like dresses who lived in mud huts. They did not have the education to know when to take action and they often arrived too late. The baby had to be really sick before they came and they didn't have the knowledge to give the baby the correct fluid replacement therapy. As a consequence we had to treat the illness at hospital and often because the babies were so dehydrated, having arrived too late, they died. We could have 'saved their lives' if only the mothers would have known to stop heavy foods and give fluid replacement early.

After Mrs Pawley, Mr Smith came in. Mr Smith is an excellent example of how some patients are willing to make their own decision that the quantity of life is not of paramount importance. Although he took the decision, perhaps, in ignorance, patients often accept radical medical interventions without the necessary knowledge of the likely benefits. Statistics in Mr Smith's situation might

even confirm that he made the correct decision. Such a decision may have allowed him to maintain what was important to him: his integrity of character.

He smoked heavily and now had a lesion on his chest X-ray which was probably cancer of the lung. It is fairly likely that this had developed as a consequence to his cigarette smoking. I couldn't help but see in my mind at least, the similarities between his lack of knowledge of the harmful effects of cigarette smoking and the El Arish mother's lack of knowledge of the importance of early treatment of diarrhoea or gastroenteritis in their babies.

Mr Smith's lung lesion was large and round and very advanced.

Had he come too late, like the El Arish mothers? Unfortunately statistics tell us that even if he had come earlier there would be little chance for a cure. The five-year survival rate of eight-nine per cent has remained unchanged in the USA between 1950 and 1970 despite all the medical advances which occurred during that twenty-year period. There is usually evidence that the cancer has spread at the time of initial evaluation, and accordingly an attempted surgical cure is ruled out. Still, among the few who are suitable for surgery, the five-year survival is around twenty-thirty per cent mark.[2]

I spoke to him and suggested that the best bet would be hospitalisation to diagnose what this lesion was, as that was the only way we could be 100 per cent certain. He was not interested, he had never been to hospital and in fact only came to the doctor because a routine chest X-ray was taken by a mobile X-ray unit which happened to pass, and they in turn sent him a card suggesting he should see his doctor. As he did not usually have or need a doctor, he came to me because I was handy.

I knew I would have great difficulties convincing or persuading him that something must be done, as it was

obvious he was not going to go to hospital. Cleverly, I thought, I shifted the conversation to his social situation, where he lived and with whom, so that I might have found a relative or friend who may have been more able to convince him of the need for hospitalisation. He definitely was not going to listen to a doctor.

'I live alone,' he said, 'in a small room. I have no family'. 'Do you have any brothers and sisters?' I asked, whilst assessing to myself that he looked well over sixty years old, but his age as he stated on his file was fifty two years. He was a thin, frail man. Perhaps the cancer was already taking its toll although he denied any major loss of weight in the past few months.

He eventually volunteered the name and address of one brother. I tried other strategies to stress the importance of medical intervention, but he was resistant to further medical arguments. He left, his only commitment being that he would return to see me again in one week. I contacted his brother, who, despite living within five miles, had not seen Peter for fifteen years.

'He is a bit of a loner, you know, and me with my family, well we don't have that much in common'. Mr Smith's brother apologised over the phone.

I explained the problem. He said he would certainly speak to his brother, Peter, and appreciated my concern. He would try to convince him to consent to further treatment but I should understand that the brothers weren't what one would call close.

A few days later Mr Smith's brother came to see me. Peter, he said, had remained resolute; he was definitely not going to hospital nor coming back to see me, nor going to any other doctor.

I wondered what I could do next to convince him to change his mind and then I thought, well, how much difference would treatment really make? I went back to those statistics — surgery hadn't proved all that effective

with a maximum five year survival rate of thirty per cent for the patients with the most treatable cancers.

The other alternatives modern medicine had to offer did not seem particularly enticing: radiation therapy and drugs that kill cells. Although they may have some beneficial effects on the cancer, the patient often feels very sick, vomits frequently, loses hair and may go bald. He may also develop assorted infections, mild and serious, which in turn may require further painful treatment. These are only some of the side effects, there are others. Finally, a US study has been unable to demonstrate any advantage in this treatment regime in terms of survival for those with inoperable lung cancer.[3]

Perhaps he made a wise decision. He certainly would at least avoid that horrific treatment.

Some years earlier another of my patients, John Brown, had similarly refused to go to hospital. Like Mr Smith he was able to make his own decision as to how he would spend his last days.

‘That’s where people go to die’, he had said. He had other reasons as well. ‘You can’t get a beer in there, doctor, nor a smoke. I’d rather die than lock myself in a place like that’.

He was a robust, stocky man — barrel chested as a result of his long term lung disease, his rosy features indicating that his lung disease fell into the category of being a ‘pink puffer’ rather than the alternative ‘blue blower’. He wore a hat and his clothes were dirty.

He stank a stink reflecting the mixture of rum, urine and dirt ingrained in his only set of clothes. He complained of shortness of breath, but when he was examined, it was found that his dyspnoea was only the most visible of his problems. He seemed to have everything wrong. With John Brown it seemed everything that could go wrong, had gone wrong.

He had respiratory failure, heart failure, kidney failure. His urine contained particles or ‘casts’ the size of which I had never seen before. His heart beat was very, very fast; he had what is known as (atrial) heart flutter.

When he point blank refused to go to hospital, I was so flabbergasted I could almost have been admitted myself. His disabilities were beyond my competence. I thought he required immediate kidney dialysis. I told him, but he still wouldn’t go, arguing that at sixty five years it wasn’t much use. He even refused to stay in bed in his own small room in a large dirty divided up terrace house and allow the doctor to make home visits.

I told him I expected him to die in the next few days if he did not have treatment.

‘I better get in a few drinking days then, doctor’, he retorted.

We started treatment — arranged for a young specialist physician to see him. He would neither have visited nor been very welcome at a specialist’s rooms in Macquarie Street. Other patients would not have enjoyed sitting next to him. We did offer to wash his clothes and allow him to bathe at our surgery, but again he refused. He did, however, agree to attend the surgery daily.

He kept his appointments. All the surgery staff knew when he arrived — the stench was unbelievable. It was not only his outfit but also his debilitated condition. His illness was contributing more and more to that smell.

‘John’s here’, our nursing sister would call out with that special understood tone in her voice, as he could not be allowed to be kept waiting if we wished to keep our other patients.

For eleven days, amazingly, he kept his appointments. I was always pleased when he left for I was afraid he would drop dead in the surgery.

One day he did not turn up. Two hours had passed since his appointment and it was now six o’clock in the evening.

It was twilight, and I was worried something had happened. I decided that I'd visit him at his home.

I drove around to Pleasant Street, and found the terrace house in which he lived. It was one of a line of ten houses all the same, all dilapidated, all divided into rooms which were let separately as residential accommodation. The scent was familiar even in the hallway and was supplemented by the smell of dampness absorbed into the walls, the plaster and the floors. The hallway was very dull, even dark, there was no lighting.

I knocked on one door, no answer. I pushed it open and there on the floor, sitting leaning with his head drooped over the plastic bucket he had been using as a toilet and which contained his last excreta, was John Brown. He was dead.

The smell was horrendous. I noted a small teapot on the sideboard. This scanty unhygienic room had served him as his bedroom, kitchen, dining room and toilet. It would do so no longer. I almost vomited, and quickly left the room. I was the first to discover he had died. I called the police, informing them that I would write a death certificate, and asked them to take charge of the removal of his body.

Had he gone to hospital some twelve days earlier, I wondered, would they have made any significant difference to his life span? I doubt it. He was beyond care. He hadn't taken good care of himself for a long time.

At hospital he would most certainly have been classified as a 'PF' (a patient who pisses and farts only), or a slough. At least here in this most undignified of places, paradoxically, he had maintained some dignity.

Summary

I have suggested in this chapter that the medical community and the general public, with some exceptions, see the major goal of health care as the prevention of death. So universal is this cultural norm that it is adopted by most health workers, myself included, subconsciously. Only when one attempts to ask what should be the objectives of health care does one see how death and the extension of the life-span are misused in assessing medical care.

First I thought about the El Arish babies. I did feel guilty that they had died, after all, gastroenteritis is an acute illness. If only they had come one day, or even several hours earlier we might have saved their lives. That feeling can easily be applied to other patients whose lives we are trying to save, too.

Secondly, however, in Mr El Omar's case, the minute I had seen him, I had known he was dead, had realised there was nothing I could do to help him. I had really only found a mode of breaking his death to the family in a more acceptable manner. I had been able to show them that we cared and had tried to help. I felt certain that this had enabled his family to accept his death more readily.

Thirdly, Mrs Denity. No, I did not feel I had failed her; she had lived a good long life. I could not deceive myself into believing that the extra year or so which we may have been able to offer her would have really been what she wanted.

Now, lastly, John Brown. He had died in a manner he preferred. His death was easier for me to accept, perhaps, because it had been easy for him.

I still felt guilty, or responsible, when one of my patients died, and I found it difficult to come to terms with my conflicting feelings. So why did I feel that medical work should be assessed by one's ability to prevent death?

Whether doctor, health worker or patient, our emotional needs in dealing with death are seldom confronted. Death is certainly a threatening prospect, whose complicated emotional and psychological overtones have been inappropriately handled by the health services. Once we can handle death more maturely we can look at the issue of the quantity of life and readjust health indicators and health care aims accordingly.

Medical school and training are heavily oriented toward scientific medicine. In truth, large teaching hospitals are often temples of science, where the devotees worship 'the prevention of death'. Naturally the medical and nursing students, products of such institutions, accept these as the goals of their work in health care.

I was confused by the use of the quantity of life and mortality rates in statistical form as indicators of health and health care. How important is the *quantity* of life? The death of the babies in El Arish and similar situations have perhaps been wrongly represented as attempts at preventing death, when really it was preventing premature death.

In fact, death is so likely in old age, that above a certain age the most significant cause of death is not the disease from which the patient suffered but rather the patient's age. It therefore would be more correct to mark their death certificates with the correct or primary cause of death as 'old age'.

Some people who are aware they will die will choose a course that may pre-empt their death (e.g. John Brown, above) and the doctors will derogate them by saying it is not in their best medical interests. Often these people are making a choice between their own idea of a useful or useless life. Sometimes it is the doctors who will make the choice (e.g. Mrs Denity), although their definition of a non-useful is very tough. This inability to include an acceptance of death within one's criteria of health leads to further

problems, as Fabrega has outlined in his excellent chapter on Disease and Illness from a Biocultural Standpoint. He points out that any sickness episode is a discontinuity in one's normal life. As such, it raises the issue of the 'meaning' of death and the meaning of this discontinuity. To grasp the meaning of death and therefore illness, *people* in various cultures hold beliefs which will in part be derived from their medical vocabularies, statistics and diagnoses. If these do not include natural or mature death, and they only find death from illness, then not only will death be more difficult to accept in such cultures, illness will often be interpreted as life-threatening. Consequently, all illness is seen as life-threatening and all health care imbued with life-saving notions, even though in the majority of cases this perception is an exaggeration.[4]

These are some of the reasons why, without embarking on an historical analysis, 'quantity of life' remains an overrated goal in the health services.

This is no longer acceptable. It leads to medicine pretending to avoid the unavoidable. Very large quantities of health resources, time and money are misdirected in this endeavour. This time and effort might have been more appropriately spent discussing 'the death' or impending death with the patient and his family.

Often in medical circles people glibly speak of 'premature death'. This is actually as important as it is unacceptable.

In England in 1969, for instance, the proportions of people dying before sixty five years of age were thirty three per cent of men and twenty per cent of women. On the other hand, over fifty six per cent of women who died in England were aged seventy five years or more. If we say that premature death is unacceptable, then what is understood but not stated is that mature death is acceptable.

So perhaps the realistic aim of health care would be to slightly increase the life expectancy of the community, but also to increase the percentage of the community dying after the age of eighty years or some similar standard age.

We might conclude by saying to keep people alive, is of course, essential, but in order to effectively manage health services, we should recognise that there is such a thing as mature death, natural death, independent of health care.

* *All names of patients in this book are fictional. The cases, however, are real.*

2 A better quality of life —modern medicine's new goal

What are the major goals and functions of health services today? The reply most would give is to save lives and prevent death; and would think of drugs, operations, blood and laboratory tests, or all those factors which make up what is known as the biomedical model of health.

By using the discipline of modern management which insists that we define the objectives of health services and forces us to analyse what actually happens in our health establishment, however, we find a different picture. Other important goals are readily identified.

Much of health care is directed toward improving the quality of the patient's life. General practitioners, specialist psychiatrists, ophthalmologists, otolarynologists, plastic surgeons, obstetricians, physicians in rehabilitative medicine, etc. and many of the other health providers such as podiatrists and physiotherapists spend *most* of their time attempting to improve the *quality* of their patient's lives. This endeavour *can* and *must* be stated specifically if we are to effectively manage the delivery of health care. Quality of life must be defined as a goal or objective of health care, and given its appropriate amount of importance compared with the other major goals of the health care system: not to do so encourages the belief that health services have to do solely with living longer and life-

saving procedures. Should that be our only concern, there would be a mass exodus to the Andes where people tend to live to ages well over the hundred year mark. Since no such emigration has taken place nor is likely to, we can reasonably conclude that one's ability to function in the community is of major importance as a goal of health care. Let me return to some case studies which illustrate this point.

Some years ago my practice was located in an inner city suburb of Sydney. A century ago, 'lords and nobility' built their stately terrace houses here within 'horse' power of the city business centre. But over the years it had sadly deteriorated and today it is the suburb in which you are ashamed to live. Many residents give a neighbouring suburb as their address. Terrace houses are rented out, not as a whole, but as individual rooms, each tenant with one small room only. Kitchen and bathroom facilities are shared; one kitchen/bathroom would cater for eight tenants. However, not all tenants use these facilities frequently. One such tenant is George Drinkaway.

George illustrates what actually happens in medical practices today. He is concerned primarily with his ability to carry out his daily functions. He shows little concern for the major cause of his disease. His doctor in turn concentrates on enabling him to recover his lost abilities.

He was sitting in the waiting room this morning and he was cantankerous. As much as I tried I could not ignore his presence. 'Come on, Ed,' he called out. 'I'm in a lot of pain — have a look at me hand.'

His hand was very swollen.

'Your turn in a few minutes, George. I need you in the waiting room to entertain the others.'

The other patients let Lee, the receptionist, know they would not be offended if he took their place in the queue. I

think it was the strong smell of alcohol that overwhelmed the waiting room every time he spoke, rather than altruism, that convinced the other patients to let George go first.

‘Look, doc, I wouldn’t be worrying you if I could still manage to hold a glass of beer — but I can’t drink.’

His right hand was very swollen. ‘I did it hitting this other fellow two days ago. Boy, is it sore.’

X-rays revealed a complete dislocation of his wrist joint.

‘George I’ll have to send you to the orthopaedic specialist who may have to operate.’

The orthopaedic surgeon hospitalised George for the night to dry him out of alcohol and to give the swelling a chance to settle down — so a closed reduction (a manipulation of the misplaced bone back into position without requiring an incision) could be done in the morning under anaesthetic. If that failed then an open reduction (operation with incision) would be done to place the dislocated bone back in the correct position.

In the morning we received a phone call to let us know that George had left the hospital of his own accord prior to the operation. Three weeks later he reappeared at the surgery.

‘I still can’t use my right hand properly, doctor.’ I laughed with him about his disappearance and pointed out that he would now most definitely require an operation to get his hand functioning further and he would be required to attend physiotherapy after the operation for at least two to three weeks.

‘They are all beautiful girls at physiotherapy. You’ll enjoy it.’

‘Easy, doc. I’ve got one bird, that’s enough for me’.

George had the operation but predictably didn’t reappear for physiotherapy and this time returned complaining that his hand, though less painful, was still stiff. Eventually he attended physiotherapy irregularly. I was able to assess that he had reasonable function in the right hand only

when he returned complaining of pain and stiffness in the right knee following yet another injury.

‘Looks like you’ve done it again, George. The X-ray shows you’ve fractured your knee-cap. We’ll have to put your leg in plaster for three weeks.’

‘I couldn’t cop that,’ said George and again refused any of the treatment alternatives I offered except he was willing to take pain-killing tablets when necessary.

George drops in unpredictably, sometimes happy, sometimes aggressive, always drunk. Over the next six weeks George proved that he could walk fairly well and although his knee-cap was extremely tender to touch, he was quite happy with the results of his own lack of treatment regime. The broken fragments of his right knee-cap did not rejoin, they remained in ‘non-union’ and it was explained that if he developed some significant arthritis his knee-cap may need to be removed in the future.

George’s cirrhosis continued to progress relentlessly, but he became most aggressive when I tried to suggest he would not have these injuries if he drank less.

‘If I wanted a sermon, doc, I’d go to church.’

I guess I enjoyed his visits. He was a character and strangely enough functioned fairly well. He could now lift a glass of beer in his right hand and he was able to walk without pain.

To George, ability to drink alcohol was central to his day to day life. His social life also was concentrated around his drinking pals. He was not concerned that his cirrhosis would eventually kill him as it did not interfere with his daily roles. In turn, the doctors were able to improve the usefulness of his hand.

Other patients do not have self-inflicted problems like George, but still they seek medical attention, so they might enjoy a more fulfilling life. Sometimes, they are willing to take risks in the pursuit of a better level of health. We can

see this in any surgery any day. A good set of examples could be seen among my patients in Sydney:

‘Come on in, Mrs Poorsythe — have a seat.’

Mrs Poorsythe is a fit eighty one year old lady. She is stocky, slightly overweight and wears glasses.

‘I’ve come to see about my vision, doctor. I can’t read the papers, not even the headlines most days.’

She is diagnosed as suffering from severe bilateral cataracts.

‘An operation will probably help improve your vision, but you are not a youngster and although you are otherwise well, there is some risk at your age.’

Mrs Poorsythe has no doubts whatsoever. ‘I need to see as well as possible. It is intolerable not being able to read the newspaper. That is an important part of my daily life.’

Immediate arrangements are made for her admission to hospital and an operation.

Mr and Mrs Harmon bring in Tariq, their five year old son, with a note from the school medical service.

> Dear Local Medical Officer,
>
> Tariq’s hearing was tested at school today. He was found to have a hearing loss of forty decibels on both sides. Would you please investigate and refer to an ear, nose and throat specialist if necessary.
>
> Yours faithfully,
> School Medical Officer

I examine Tariq’s ears and find both are not filled with wax as I had expected but rather with a glue-like

substance. There can be little doubt he has bilateral glue ears.

I explain to the worried parents that the mucousy secretions in Tariq's ears are unable to drain away properly. He will be required to see an E.N.T. specialist who in all probability will put him in hospital to perform a small operation — he will insert little tubes in his ears. I reassure them that the operation is only a ten minute procedure, and it should cure him.

'Then you won't have to repeat yourself so often, and he will stop saying "what" to everything.'

The parents smile, indicating that this indeed has been going on lately.

He really is very lucky this was discovered for if he doesn't hear properly, it could cause learning difficulties and can retard his mental development.

The next patient is Paul Black, a twenty two year old man.

'You've got to help me, doctor. I'm itchy all over, I can't stop scratching and last night I couldn't sleep at all because of it.'

'Is anybody else itchy?'

When he volunteered that his girlfriend was a little itchy there was little doubt that he had scabies. This was substantiated by examination. He was given treatment for himself and his girlfriend and reassured that he would be better within two days.

I haven't really saved any lives today, I thought, as my mind pondered the last group of patients. No really life-saving work in that group. Really I had only offered some assistance with specific disabilities — none of which were life-threatening, but problems with hearing, seeing and holding a beer glass. Hardly heroic medicine!

This made me recall my non-heroic medicine days as assistant medical superintendent at Royal Temple of Science Hospital, where part of my job was to interview the relatives of deceased patients. Another was to hear patient's complaints.

This administrative role was regarded by the clinicians as 'handing out white coats and preparing rosters.' Nevertheless it was my role. I carried it out with enthusiasm. I remember in particular being called to Ward 3 at the request of a patient.

Ward 3 was a Florence Nightingale Ward. It was a large, rectangular shaped room, completely open — that is, no obstacles between the beds, which were arranged in two parallel lines of fifteen beds on each side with the nurses' station being two desks in the centre.

The previous patients illustrated that much of health care improved peoples' functioning by assisting them to retrieve lost *physical* abilities. In those patients scientific medicine was able to assist in improving the quality of life. At times, however, the requirements of scientific treatment aimed at lengthening life-span are so harsh, and so degrading that they detract from the dignity of living.

Here we are concerned primarily with a person's overall view of himself or herself, as a happy, respected individual, to whom self respect and dignity are of paramount importance.

Mrs Taylor was hidden behind the curtains drawn about her bed. Her bed was close to the nurses' station, which meant (as she well knew) that the staff were very worried about her condition. A group of medical students, each having listened to her chest, was just finishing off a discussion on their findings.

They were debating the probabilities that she was suffering from an episode of acute pulmonary oedema, and

the statistical mortality rate therefrom. One student suggested that the mortality rate was as high as fifty per cent, to which the consultant physician replied that the student didn't have a high opinion of modern medicine. Mrs Taylor looked as if she might like to ask a question, but the students and consultant respectively were engrossed in learning and teaching and she didn't manage to catch their eye. Finally they left and I entered.

Introducing myself to Mrs Taylor, I explained that I was the assistant medical superintendent and asked how I could help her. She was an elderly gaunt lady. An oxygen mask covered her nose and mouth, the tubing from the mask wound its way outside her left shoulder to a large black oxygen cylinder which stood next to her bedhead, looking more like it belonged in industry than in a hospital. A stainless steel stand supported a plastic bag containing a transparent solution, which dripped through another set to tubing into the veins of her left arm. A cardiac monitor with its inevitable maze of green and red wiring bleeped her every pulse from its position on the right side of her bed, whilst a yellow streak of lightening flickered across its screen, and finally the foleys catheter and associated tubing, drained away the very same liquid the other tubing was pouring in, but now it had an amber tinge.

From somewhere within this conglomeration of technology came Mrs Taylor's small slightly aged voice.

'Please, doctor, I don't want you to be insulted. I do know I am getting the best medical care here, but you will understand I grew up in Double Bay, where I have always lived in a large house. The last fifteen years I have lived there alone. During this time I always have managed to look after myself. I am aware the doctors here mean well, but I would much rather be transferred to a place where I have a room of my own. I don't mind if I'm not getting the best scientific care medicine has to offer. I would really prefer not to have all these necessary tubes running in and

out of me. I have some money and am quite willing to pay — you see I've always lived my life with dignity. The noise here yesterday was terrible! I think they must have had an emergency in the next bed. The poor lady was taken to intensive care. The lady on the other side of me, I think she must have had a stroke. She just keeps on and on singing out 'Ooiyy aawuu ooiyy' all day and all night, 'ooiyy aawuu ooiyy'. I cannot tell you the number of doctors or medical students who have prodded and poked me. My own doctor says I should rest. Now, if you add in daily blood tests plus blood pressure and temperature checks at regular intervals, really how can I rest in this atmosphere?'

Browsing through her charts, and emphasising that I am not a clinician, I explain, 'Look, I have only had a brief look at your charts, Mrs Taylor, but it would appear to me that you ought to have a good chance of improvement.'

'I don't want to improve if I am forced to stay in this situation.' she snaps, and simmering down, adds, 'look, I always try to follow instructions to the best of my ability, but please, doctor, I know a private guest house that will accept me.' And now in tears, 'please, please, doctor, help me.'

'OK, Mrs Taylor, I will see what I can arrange for you and I will come back to you and let you know what is happening. Don't worry, I will do all I can to find more appropriate accommodation for you.'

My mind flashed back to when, with a student friend, I had gone on a camping trip up the north coast of Australia and had managed to get myself admitted to Rockhampton Hospital. All that had been wrong with me was tonsillitis, but as I was camping in a tent, and because I was a medical student, the intern on duty felt he ought to admit me for the night. Without realising it I was soon dressed in hospital pyjamas, which I hated, and looking around I found

myself in an old men's ward. People carrying around their own half-filled urine bags, someone vomiting, others on crutches, others limping. The noise, the smell, the food — it was unbearable and I was only there one night.

Even without that experience behind me, I should have been able to see that there was a lot of truth in what Mrs Taylor was saying, even here in our large city teaching hospital.

I managed to organise a private room in a small nearby hospital, where she would get good care without the gadgetry and I hoped it would be better for her.

She explained that she wasn't worried about dying but what did concern her was to be able to maintain some dignity, some privacy and self-respect. She was truly thankful when the ambulance arrived to transport her.

So much for not saving lives. Why, in Mrs Taylor's case I'd almost done the opposite! Perhaps the doctor's role was not primarily one of saving lives; it may be more concerned, as Mrs Taylor had so clearly indicated, not with the quantity but the quality of life, for this is what was important to her. If I could do something to assist someone improve the quality of life, surely that was good health care.

It becomes more difficult to determine what health workers should do when one is in a trade-off situation between quantity and quality as was the situation with Mrs Taylor. In other instances, as with George Drinkaway, all the medical effort was intended to keep him functioning in the community. Similarly, to help improve someone's hearing or someone's eyesight or even to reduce their itchiness. All those efforts were directed at improving the quality of life and have little to do with saving lives. Some people like Mrs Poorsythe are willing to risk their lives, in her case quite a substantial risk, in the hope that their quality of life might be improved.

On returning to my work, we find a further two patients whose problems are neither life-threatening nor are they problems that require improvement in purely physical abilities. The desired improvement is in a physical-social function. To assist patients achieve fulfillment in social roles, the doctor often requires skills not only in physical medicine, but also in the behavioural sciences.

My next patient is Wendy Morgan, aged eighteen. She complains of a sore throat. I examine it and find nothing. I reassure her and then ask is there anything else I can do for her?

There is a little silence, then suddenly she blurts out. ‘Can I have a prescription for the pill, please?’

I explain the use of the pill, how she must take one at approximately the same time each night for three weeks of the month. I sense she needs some reassurance as she feels a little guilty about asking for a pill prescription. So I relate the story of the three sixteen year old girls who found a packet of the pill and divided it up so each would have seven tablets. That, I explain, is definitely the wrong way to take the pill and after some discussion she leaves, and I remain pleased that she worked up enough courage to ask me for the script.

Mr and Mrs Tri are having the opposite problem. They have left their families in Vietnam and are keen to have their own children, but so far they haven’t had any luck.

I organise a number of investigations as we nervously try to clarify the need to abstain from sex for five days. Then Mr San Tri will have to produce some semen for analysis, and he must either bring it in to the pathologist within one hour of production, or produce it at the pathology laboratory. Language difficulties and the subject itself bring us all to a nervous laughter.

We disappear for lunch. Lunch today consists of beautiful fresh bread direct from the local bakery. I know I need something to prepare myself for the afternoon surgery. This afternoon I will be seeing those patients to whom I offer supportive psychotherapy. My first patient this afternoon is a new patient. He, as with the group of patients that follow, demonstrates the importance of psychological and social functioning. Here the aim of the doctor is to allow such patients to return to or maintain their social roles. There is no requirement for scientific methodologies or life-preserving techniques.

'Mr Smetana! Good day! How are you? Eddie Price is my name. Can I help you?'

'Mr Doctor, I smell. I have this terrible body odour, and you must help me get rid of it.'

Now, working in this deprived area which was home for many of the skid-rowers of Sydney had made me quite an expert on smells. As a medical student I never realised that I would become so proficient at using my olefactory apparatus. I could distinguish urine smells from wine and dirt, methylated spirits (a common local beverage) from plonk and plonk from beer. I always made certain that in my surgery there was a can of spray-fresh or some other sweet smelling agent nearby.

Laurie Smetana, however, smelt wonderful. He was, without doubt, the best smelling patient my practice had seen. He must have been covered from head to toe with three different and expensive perfumes and aftershaves. All the perfumes of Arabia could not have smelt sweeter.

'But you smell terrific, like a bunch of roses, the botanical gardens!'

Laurie became irate. 'I know I have terrible body odour.' he said unbuttoning his shirt and then leaning his nose

towards his armpit and taking a whiff. ‘Have you smelt this, doctor?’

I declined as courteously as I could, for his tone of voice and his manner made me realise he was seriously concerned.

‘People are always looking at me in funny ways, yes, staring at me because of this odour and they won’t come near me.’

He was obviously suffering from an obsession and was somewhat paranoid, I diagnosed, trying to remember the snippets of psychiatry I had been able to get between trips to the beach during the summer of ‘68.

‘Are you working, Laurie?’ I asked.

‘Sure, doctor, at the railways.’

I was amazed he was able to keep down a job. Thank goodness for the public service, I thought. Private enterprise would not have kept this man in a job and then his condition would have been much worse. Then again, I thought, some people can suffer from very clearly defined obsessions or paranoias and these might not interfere with their outside life.

Thinking of the public service I thought of the government community mental health centre which had just been established around the corner. They would be able to help him. I referred him to the psychiatrist at the centre. When I next saw Laurie two months later I did not notice any special fragrance. No longer was he using truckloads of perfumes to get rid of his imaginary smells, nor was he worried about his body odour. He spoke about his illness reasonably and sensibly. Obviously he was not going to be the *most well adjusted* person but he was well, he had kept his job and was coping.

It was now Mr Loose’s turn. I had seen him once before. At that time I was having car trouble, my car was garaged for

repairs and I had to pick it up from the repair shop. Since there was no one else waiting, I asked Lee, my receptionist, and Mr Loose to join me in my wife's car.

Mr Loose, as with most people who require psychotherapy, was interested only in improving his quality of life, improving his social abilities and enjoyment of his daily undertakings. The solutions to many health problems is found in psychology and sociology.

'We will go and pick up my car. We'll have a travelling consultation, Mr Loose, and continue it in the surgery when we return.'

Mr Loose was a tall skinny man who looked like he never washed. He had deep brown greasy cracked skin, dotted with more than the usual number of blackheads, and dirty nails. He too worked for the railways as a cleaner.

He had a number of idiosyncrasies that made him unique. Whilst waiting for the doctor he would always adopt the position which could best be described as that recommended for plane passengers during an emergency landing. As well as this, his hands and feet were continually moving, but his most distinguishing characteristic was his deep, almost baritone drawl.

'Goo-od, doccttor, thaannk yoou.'

On the car trip I asked if there was anything I could do to help him.

'Aahh — docc-ttorr. Aahh, I waass jusstt wonndderring. Aaahhh, is there annyythinng nneww foorr schizzzophrenia?'

We delved into his long psychiatric history, with admissions to all types of centres, multiple drugs (which may have explained some of his involuntary movements) and now psychiatric out-patients.

I suggested some new clothes, joining some social groups and just being able to talk about his problems may offer more of a chance of help than any drug treatment, and

perhaps he should shift from a pill remedy and from continually changing his drug regime.

We arrived at the garage, changed cars and returned to the surgery where we held the ‘real’ consultation.

He became a regular patient, each month returning for a chat. It became obvious that having ridden in the doctor’s car, thus being more like a friend than a patient, had by chance communicated to him a caring that was beyond what he had expected. Our verbal exchange on the relative benefits of a new drug, however did not make such an impact, because each time he attended he would start by asking:

‘Aahh — doccttorr, aahh, I waass wonndderring is therre . . anny nneeww drugg outt foorr — schizzzophrenia?’

He kept his job and did not change all the time I knew him.

During that afternoon session, as at other times while working in my practice, there were many others with emotional problems. There was the boy who kept on soiling his pants at school, and his mother, both of whom were treated. There was Mr Beer, who drank too much, but when I managed to wean him off alcohol he became so nervous that he could hardly cope with the problems of everyday living. I wondered if we had done him a favour or not. And there were the very many patients who drank too much alcohol and didn’t eat enough protein and vitamins. Often they neither wanted treatment nor could they be persuaded to have treatment for their alcoholism and associated emotional problems. I was left to treat their deficiency states, whilst the significant cause of their disabilities was ignored by them and, I guess, by me.

Innumerable patients presented with disharmonies in their marital situations, while many single people suffered from loneliness and depression. I was often amused by how

many times the married patients seemed anxious or depressed because they were married, and the single ones because they weren't.

Occasionally the emotional situations were much more bizarre and interesting.

Julia Goodman was very unhappy in her marriage and finding comfort in a lesbian relationship. She was an extremely attractive blonde. She was a dental nurse, and as she had become more and more depressed about her marriage, she had taken refuge in the nitrous oxide available in the dental surgery. Consequently she developed a mysterious loss of sensation of her left great toe. It was only after a most thorough search of the recent medical literature that we discovered it was a newly found complication of nitrous oxide addiction. (A physician friend found a recent article in the 'Lancet' which described the very same condition in a group of patients, all of whom were dentists or dental assistants.) She was referred to a psychiatrist who wrote back that he was pleased she had overcome her nitrous oxide addiction, but he felt her seeking solace in a lesbian relationship represented regression to happier times as an adolescent when she had mixed mainly with girls. I felt this was a paradoxical assessment for a psychiatrist and I disagreed. To my mind Julia was a homosexual forced by societal values into an unwanted heterosexual marriage. Possibly it was the sight of her tough scar-faced girlfriend sitting next to her and opposite me which made me wary of thinking anything else.

I pondered my daily task. I had developed an interest in communication skills, but this was hardly heroic medicine. It seemed so far removed from keeping people alive and achieving rapid life-saving cures, which medical school led

me to believe were the aims of medicine. It did, however, have something to do with increasing these people's enjoyment of life by allowing them to live life to the full.

Each day at work I saw many people with influenza, coughs and colds, headaches, rheumatic and muscular pains, sprains, etc. or minor illnesses with no risk of life or permanent disability which made up over fifty per cent of my work.

The benefits these people obtained were simply that their temperature or pain was reduced when they took paracetamol or some similar analgesic or antipyretic, or that their noses stopped running or their itches were reduced by taking antihistamines and this allowed them to feel better.

Anyone who has had scabies or pediculosis ('crabs') and hasn't had it diagnosed for a week can tell you how distressing an itch can be. Many medical students have become better doctors by benefiting from such experiences. They weren't mentioned in medical school.

Although many patients suffering from major illnesses had their daily lives improved by drugs and physical medicine, there is another group of patients who can have their functional ability improved by use of non-biological techniques. Being trained in bio-medicine, the modern doctor often lacks insight into social functioning. He may tend to overlook solutions which do not fall into his domain. Mrs Sareman is a good example of a person needing such insight.

It was late one evening when I was called to the home of Sheila Sareman. She had decided to return to me as her local doctor, from the GP around the corner, for the same reason she had left me one year earlier. The other general practitioner had written something in the letter to the

hospital physiotherapist and Sheila, as was her custom, had read the letter and taken exception to its contents:

'I won't be going back to him, doctor. No, sir! He won't see me again.'

Although her hands, knees and back were deformed by longstanding arthritis, she remains at eighty years, spritely and spirited. Fortunately I had no further patients that evening and I was not in a hurry. She spoke mainly of medical problems, pain and the inability to sleep. It was only when she couldn't open the cupboard to prepare the cup of tea she had offered me, that she started to speak, cursing a little, about the functional disabilities which were really depressing her. She started to remember them.

'First, I can't open the cupboards; second, I can't properly stir, for instance, scrambled eggs; thirdly, I can't undo my bra; fourthly, I have difficulty getting dressed; fifthly, it is a great ordeal to get in and out of the bath . . .' etc.

Notwithstanding the fact that she had had long term physiotherapy and rehabilitation at Rundown Local Hospital, she had never been visited by the rehabilitation team. This hospital, was under pressure to close its wards, had created an excellent rehabilitation centre with a mobile rehabilitation team which, with one phone call, could come into Sheila's life.

I arranged for several visits by the team occupational therapist who erected a number of strategically placed bars in her home. Together with some clever levers on her cupboards, and bra straps (which were really so simple and obvious in their design), Sheila was given a whole new freedom. Now she was able to function so much better than previously, her self-sufficiency was no longer threatened and she became less depressed as she realised she would be able to continue to live at home. Often a person's desire to improve the quality of their life involves taking risks which, statistics tell us, will sometimes result in early death

yet the demand for such ‘trivial’ benefits as those offered by cosmetic surgery increases despite the risks which are clearly demonstrated by my next patient.

Joanne was a quiet, plump seventeen year old. She was a nice girl whose grandparents and parents were all patients of this practice. She was not an Einstein but she also was not as wayward as the tattoo on her arm seemed to suggest. Most times she wore long sleeves to cover the blemish and whilst it worried her, she never had enough confidence to mention it until one day she worked up the courage and told the nurse that she would like to have it removed.

She was quickly referred to a specialist dermatologist and from there to a young plastic surgeon at the Royal Temple of Science Hospital. She elected to have the tattoo removed under general anaesthetic.

The operation went smoothly, but suddenly in the recovery ward she stopped breathing. For no obvious reason and without any previous history of allergy, she had had a reaction to the anaesthetic (most probably) and despite all of modern medicine’s best technology she never recovered. When the operating surgeon rang me and explained that she had died, I asked him to repeat what he had said. I could not believe it. Again I felt guilty. Why had I referred her to the dermatologist? What would I say to the family?

Strangely, I thought, members of her family, particularly her mother and grandmother, continued to come to me regularly. Joanne’s mother was very depressed, but not angry at me, the hospital or the surgeon. To make matters worse, one week later I diagnosed Joanne’s grandfather as suffering from a suspected cancer and I was forced to have him admitted to the Palace of Medical Students Hospital

(P.M.S.H.) A carcinoma of the pancreas was diagnosed and he was given a prognosis of two months to live.

Naturally the grandmother had difficulty coping and required a lot of support. In particular she relied on me for such psychotherapy. They were taxing consultations on both of us, and I am still surprised that in no way did she blame me for Joanne's death.

There were many requests for other cosmetic operations. Girls with small busts wanting larger busts, girls with large busts wanting smaller busts, even a girl with a large bust wanting an even larger one. We even had boys with no busts wanting big busts as they slowly moved towards their sex change. All these operations went smoothly and all the patients were pleased.

But was I pleased? Was this what medicine and health care was all about? Again it was necessary to take some time off and rethink the whole situation. None, but none, of this work was actually designed to save lives. In reality it was doing the opposite. I had contributed to the death of one young healthy girl, and had failed to give all the possible treatment to one elderly lady, which may have resulted in her early death. Rather than aiming towards increasing longevity or the quantity of life, all my work on this group of patients described above was directed at *improving the quality of life*.

Summary

How does such medical work fit in with our idea of health care and our concept of health? I have tried to show in this chapter that much medical effort is directed to improving the quality of life. I have briefly indicated the many types of procedures are directed primarily at improving a patient's functioning, whether in a physical, psychological, or social capacity. These will be summarised here, while we seek to determine why the health worker is so unaware of the major part played by our health services in improving the quality of life. Then some solutions aimed at correcting the situation will be mentioned.

A different way of viewing health is to see it as being primarily concerned with a patient's ability to function in the community without undue suffering and limitations. This incorporates not only the absence of disease but the more positive view that patients must perform their social roles at work, in the family and in the community. Reviewing some of the patients such as George Drinkaway, it was clearly inability to function that concerned him. He would not have been concerned about his illness had he been able to remain in the community doing what he enjoyed and what he did best. Mrs Poorsythe's daily pleasures and her ability to move around in the community were being limited by her failing eyesight, as were Tariq Harmon's possibilities of fulfilling his potential by his inability to hear properly.

As a physician, I was in all these cases weighing my basis for intervention partly on the human problems they might alleviate, and not only on their bodily effects. In Mrs Taylor's case, the effects of the treatments were so degrading that she could not maintain her own self-esteem and she was pleased when most of the high technology treatment was dispensed with and she was able to regain her tranquility.

The doctor must realise that a lot, probably most, of his treatments are aimed at increasing the ability to function. Although the intended effect on the body is often beneficial, it must be weighed in the balance with the patient's ability to perform his job or to maintain his status in the family.

In that large group of patients which psychiatrists care for, such as Laurie Smetana, Mr Loose, etc., those with emotional problems, their lives are usually not threatened, nor is their problem primarily physical. Again with this group of patients it is even more obvious that the aim of health care is to allow them to continue functioning in the community and increase their enjoyment of life.

A further group of patients were those suffering from minor illnesses. Here we were aiming to reduce the number of dribbly noses or the number of coughs per day, or to reduce the discomfort of some of those poor malaise-sufferers. ('I feel terrible, doc!') All treatments aimed at enabling them to enjoy life more and to function better.

We might gain a better insight into the problem if we pretended there was no cure for these minor illnesses. I know I would not like to itch all over. If I did I might take a bath or cover myself with powder. Already I am treating myself, but if the itch continued I would be happy to stop pretending that no cure exists and find a doctor.

It is obvious therefore that a lot of health services are directed toward improving functional abilities. Why, then, are we so unaware of this fact? Why, like myself, do so many health professionals have the impression that medical care is mainly concerned with life expectancies? Perhaps it is a consequence of the use of death rates and life expectancies as measures of the effectiveness of health care. These measures must to a large extent be inappropriate, because the bulk of effort is not directed toward altering the death rate at all. It may be that measurement of functional ability or quality of life is difficult. Another contributing factor is the attitude of

doctors; that they are concerned mainly with bodily well-being and will often overlook the patient's functional capacities with respect to his work or family.

The problems may be solved by first strongly stating that a goal of health care is to enable the patient to function in the community without undue limitation and suffering. This includes his ability to work, or fulfil his social roles in the family and the community.

Secondly, measures of functional ability must be devised and used. What we really need to know is, was Mr Loose better or worse following his long treatment? Perhaps his 'schizophrenic' label had allowed him to remove himself further from the community and reduced his life satisfaction. Mr Smetana was obviously happier and better, whilst Julia Goodman was happier, but was she better? To what extent did those patients with minor illnesses benefit by having their temperature and pain reduced?

Sometimes, as with patients like Sheila Sareman, who suffer from chronic disabilities, the benefits are much more obvious. In all cases we must attempt to measure the benefits.

Finally, we must overcome the obstacle of the attitude of doctors that certain things are not 'medicine'. Medicine to the well-trained medical student has to do with blood tests and operations *on* the patient.

At the moment, placing a few bars and knobs in a patient's home to alter the patient's physical environment just doesn't seem to fit in with many physicians' concept of medicine or the role of the doctor.

Much improvement in a patient's functional capacity can be achieved by doing work on the patient's physical and social environment. The doctor must realise that if he is willing to alter his attitudes and widen his goals, he can do even more to improve patients' quality of life.

3 Reassurance needs — the neglected art of comforting

No aspect of the doctor's function has been more neglected in our technological society than his ancient and vital role of comforter. This role is as longstanding as that of the tribal witch-doctor, who shrewdly understood that his job entailed not only curing a sick man of his illness, but also what I term treating his reassurance needs.

Although it seems self-evident, this term should be explained. A sick man is suddenly overwhelmed by a whole gamut of fears and apprehensions — Will I live? Will I really get better? Who is looking after my family? Will I be able to carry on my line of work again when I get out of hospital? All of these sudden and very grave new problems are swirling about in the patient's mind, affecting his health, his mental state, his equilibrium — precisely at a time when he should have peace of mind while his body combats his illness.

Naturally, the person to whom the patient turns to obtain gratification of his reassurance needs is his doctor. The sick man is desperate for care and comfort, for physical and emotional support, and he craves the doctor's presence, he hangs on the doctor's every word and above all, he craves to feel that he can place his trust in the hands of this particular doctor at his bedside with full confidence.

Now let us look for a moment at this omnigod, the doctor, at whom the patient is gazing so confidently, and to whom he is turning for emotional support. Today's doctor is, above all, worrying if he can cure his patient's disease, or mend his fractured leg properly, or kill -the bacteria of pneumonia — and indeed he should be doing all this. What the doctor has neglected, while deep in his scientific thoughts, is the patient as a person.

The doctor is a very busy person. On his coat he probably has a beeper which calls him incessantly, with grave advice of other patients about whose illnesses he is worried. The doctor has, in all probability, never been trained to deal with the reassurance needs of the ill — and may scoff at the notion that this is a vital part of his job. He will no doubt be firmly convinced that a few soothing, unctuous words on his part are all that is expected of him. The rest — talking to the family, consulting with the social worker, etc. — well, he really has no time for all that. And even if he does have time, he may secretly feel that such a comforting role is beneath the dignity of his high profession — and his high fees.

The doctor rarely understands that emotional support is now expected of him by the dependent patient. He does not understand how important it is that he restore *feelings of health* to those who are ill, that he gives meaning and comprehension to sickness in a manner that the patient can grasp. A stricken man, suddenly jolted from his social equilibrium by his disease, is severely distressed. Physically and mentally, he desperately needs the doctor's support to supplement or to replace his usual network of emotional support.

All health service personnel must grasp the true importance of care and comfort, to understand their true role as *comforters*. After all, making a sick man better — not merely curing his disease — is the ultimate goal in medicine. To truly accomplish this, demands of us a new

perspective of the doctor's role, a wider view that elevates comforting to a much higher place as a goal of health care in its own right.

This goal is most vividly seen in hospitals for the dying. It is a service that neither aims to heal nor to improve a patient's ability to function in society.

All the above may seem self-evident, but I assure you that it is not. To illustrate my thesis, here are a number of patient-doctor episodes that illustrate the importance of reassurance needs in various situations.

Mrs Cherry had consulted me as she was concerned about her granddaughter's ever increasing weight. We had a relaxed casual conversation.

My attention was diverted from the grand-daughter's problem by a muffled commotion in the waiting room. There was a quick knock on the surgery door, which swung open before I could say 'come in.'

'A postman has collapsed outside the town hall up the road,' gushed my receptionist. Moving from side to side behind her, trying to look over her shoulder, stood a panting, uniformed, plump man.

'Can you come quickly, doctor?' he asked anxiously.

Grabbing my doctor's bag, I excused myself to Mrs Cherry and ran past the waiting room patients who were all babbling with excitement or anger, and followed my messenger up the street. We ran a hundred yards until we saw a group of people crowded around a prostrate body.

I was thinking to myself 'Bang ABCD. Bang the patient on the chest, A — airway — make sure it's open and extended, B — breathing — initiate mouth-to-mouth respiration, C — cardiac or heart massage, D — drugs.' This was my student days' aide memoire for the treatment of cardiac arrest. The crowd moved aside to let me in.

Bang! I thumped him on the chest, then I realised he was breathing. Quickly I took his pulse — it was perfect. His blood pressure was also perfect.

Well, what was the diagnosis? He had collapsed. I thought, what is his level of consciousness now? I pinched his right breast — he responded to pain, I called out his name and he more or less answered — there was also some response to vocal commands. His eyes did not give me added information. He had, however, wet himself— maybe he had had an epileptic seizure, a stroke or had bled into his skull? Perhaps he had just fainted?

The crowd expected me to do something. The pressure I felt was enormous, but what? There was nothing to do. Someone had called for an ambulance and fortunately it arrived, rescuing the patient — and myself— from an embarrassing situation.

I found it difficult to concentrate on my morning's work. The collapsed Mr Postman flashed through my mind. They had called me urgently. A fat man had exerted himself more than he probably had for many years by running all the way down to my surgery. He and I had run all the way up the street and my only contribution was to do nothing! I recalled the lecture I had heard on American health care, where in some of the major cities it was not uncommon for people to walk past others collapsed on the street. With the possibility of a malpractice lawsuit threatening him, no doctor would stop. He reasons that the patient would not do well in all probability if it were a cardiac or similar emergency, and the doctor would be blamed, because he did not properly carry out all the aspects of 'Bang ABCD' or whatever other emergency procedure was required. The patient might do better without the well-meaning crowd of friends and without the well-meaning doctor. And yet, we all abhor the idea of not running to the aid of the prostrate

victim. We all feel that the acutely ill or collapsed person deserves our concern and our immediate attention.

The question is, what service does the sufferer require, and is it a medical or health service? Is it because he is so disabled that he requires other people's physical resources? Is it that he requires their emotional resources to reassure him, to share his pain and his grief? Or is it that normally he is functioning effectively and now that is disrupted, the only way that he can restore equilibrium is for others around him to make greater efforts on his behalf?

When I was skiing in Australia not long ago, the skier in front of me fell down in severe pain. I did not know him.

'I've broken my ankle,' he shouted. Another skier who saw what happened said he would call the ski patrol. I took my skis off and assisted him by gathering together his poles and his skis which had come off in the fall.

I sat with him. Although I told him I was a doctor, I did nothing 'medical' for him except to suggest that he should not eat snow which he was doing to relieve his pain, lest he may require a general anaesthetic. I waited, sitting by his side as he let out occasional sighs of pain. We discussed the snow, the chairlift girls, etc. and when finally the ski patrol arrived and splinted his leg, I left. He thanked me most sincerely for all I had done.

Again I asked myself, had I been delivering medical or health care to the injured skier, as was the case with the collapsed postman? Actually, all I did was to gather his skis together, and emotionally reassure him simply by being with him.

Just how important is this role for the doctor or other health professional to undertake? Think of the role of nurses, who make up by far the largest group of health professionals.

In hospitals, a large part of the nurses' role is to assist the patient with basic biological needs — eating, drinking, toilet and to accompany him to various tests, etc., and to gradually enable him to regain his temporarily lost physical abilities. Nurses offer reassurance in both mental and physical ways.

Nursing has long been called the caring profession, and it has a history of great importance. It seems that the advancement of science and technology has made the goal of nursing care more difficult to identify.

Eric Cassell in his excellent book *The Healer's Art* clearly describes the changes that take place in the world of the sick.

He points out that the sick person becomes (i) disconnected from the world; (ii) experiences a loss of the sense of omnipotence; (iii) a failure of reason; and (iv) loss of control over his own existence.

In health, he points out, we are connected to the world by numerous physical phenomena, touch, sight, balance, smell, taste, hearing, and also by our interest in things and in others, by our feelings for people, by what we do and how necessary we are to other people and things.

In illness, however, some of these contacts are lost. Even a bad cold may make it difficult to maintain normal enthusiasm. As illness deepens, connections are increasingly broken by the symptoms of sickness, and by the withdrawal from society caused by sickness.[1]

Secondly, Cassell points out that the sick person suffers a loss of his sense of indestructibility. This sense of omnipotence and its loss is easily demonstrated by those who have been involved in automobile accidents. Even though their injuries may be minor, they are shaken for days and the process of rebuilding their shattered sense of omnipotence may be slow indeed.

Thirdly, Cassell demonstrates that the sick 'lose their ability to reason'. It is important for the health professional to understand that thought-patterns change during illness. Cassell was able to illustrate this by performing Piaget's test on some of his very sick patients, including a doctor and a lawyer. He took two cups with the same amount of water and a much taller, narrower test-tube which was empty to the patient's bedside. He said to his patient, 'These two cups contain the same amount of water.' The patient acknowledged and watched as he poured the contents of one of the cups into the test-tube. Pointing to the filled test-tube and the remaining cup of water, he asked which one had more water? To his astonishment the patient pointed to the test-tube. He repeated his test often, always with the same result. The result of this test was that on the conservation of volume the sick person's reasoning was the same as that of a child of under six years old.

Finally, according to Cassell, the sick suffer a loss of control over the world. They are unable to run their business, are confined to bed and are dependent on factors over which they have no say. The sick person perceives he is no longer in control.[2] All of these changes in the patient require treatment and make up what I call the patient's reassurance needs.

Mechanic has written:

> From the earliest times, persons in distress have sought the aid of practitioners who offered the possibility of relief of pain and hope of recovery. Thus healing as a social role is a product of man's dependency in times of trouble, and the healer in offering sustenance and amelioration of distress to the sick has proceeded on the basis of trial and error, religion and magic. Medicine as a social role is not dependent on its scientific basis or its

> practical efficacy, but rather on its *sustaining potentialities* for people in distress. Throughout most of history, healers in pursuing their calling have done much that in retrospect was harmful to the patient and often contributed to his early demise, but the significance of the healer lies not so much in what he did and what he accomplished in practice but in his symbolic relationship to the distressed.[3]

Other characteristics I have included under the term reassurance needs, are most easily clarified by studying what happens in practice.

Susan Wailalot was eighty three years of age and lived in a nursing home. She suffered from senile dementia and was well on the way to being what Shem, in his realistic novel *House of God*, calls a GOMER (Get Out of My Emergency Room): an old human being who has lost what goes into being a human being. At the nursing home, she made no secret of the fact that she hated the nurses. The nurses, sad to say, hated her.

Her dementia (cerebroatherosclerosis) had made her cantankerous in a most needling and biting manner. She was nastiest of all to her son and nicest of all, albeit with elements of nastiness, to me, her local doctor.

Other than the dementia, she seemed to be doing well when suddenly she developed a cerebral haemorrhage and died. The Matron of the nursing home informed the son, and I felt uneasy when a very angry son said over the phone that he wanted to talk to me. Fortunately by the time he arrived at the practice he had cooled down a little.

'I know my mother has been sick and not herself for over ten years. I am aware she was weird and even nasty, but

she was *there* and now she's not.'

He was, no doubt about it, accusing me of inadequately caring for her. I did not try to defend myself as I felt his anger was motivated more by the loss of his mother. I spent a lot of time discussing his mother with him, the way she died, his feelings at the time, etc.

All his life Mr Wailalot junior had felt some protection, some reassurance just by the knowledge that his mother was alive. It was not altered by the fact that she was demented; she was still there. Now suddenly he had lost that support and he felt that loss of someone caring although in reality his mother could not have been effectively caring in the last ten years. Nevertheless, her presence symbolised to him that care and comfort was available.

I was now temporarily filling this role. I was reassuring him, comforting him in his time of distress. I may have been a temporary replacement for his mother until he was able to accept her death. My mind flashed back to Royal Temple of Science Hospital when part of my daily work was reassuring relatives of deceased patients. All these interviews, and there were plenty, were only to reasssure distressed people; at least that was how I saw the role. There was an underlying hospital motive: to gain permission for the post-mortem. Perhaps that was the only reason the hospital encouraged such interviews. But I saw it as a health care service, as further evidence that to comfort people was a health care goal on its own.

In this case no one could argue that any amount of comfort would assist the patient, for the patient was already dead. It seemed to me a strange tradition that only *after* death was I officially expected to talk to the families of patients. Sure, the clinicians had their two-minutes-on-the-way-out

talk to the relatives, but really, shouldn't some time be set aside to reassure the family *during* the patient's life?

If we now accept that much health care is directed toward reassuring or comforting patients, we must ask is it an appropriate role for the highly trained and busy doctors? The next few patients demonstrate that this role derives automatically from being an *expert* in health and involves the ability to restore feelings of health as well as giving 'meaning' to illness.

It is a role which doctors cannot avoid. Perhaps if we first look at the relationship between a specialist doctor and a general practitioner, it may make it easier to see that a similar expert-client relationship exists between the GP and his patient.

Specialists or consultants are doctors who have concentrated their learning and skills in particular fields of medicine. The family practitioner turns to this expert in order to obtain his highly specialised knowledge and advice. In illnesses where he does not believe he knows enough, the family doctor seeks more expert knowledge of the consultant. Often this advice will not alter the family doctor's treatment, but only reassure the GP himself that the treatment he is giving is correct. The GP has a similar consultant relationship to his patient.

Mrs Liban, a pretty young Lebanese mother, came in with her two year old boy. He was suffering from acute gastro-enteritis. I advised her to put him on a fluid diet, but did not prescribe any medication.

'Aren't you going to give him some medicine?' the father, who had now joined the family in my room, shouted at me. Maybe I had not spent enough time with them, I thought. He was very angry. 'What do we come to the doctor for?'

I explained again that I felt no medication was the best treatment, but this time I suggested that they bring him

back in twenty four hours and I would recheck to make sure he wasn't dehydrated. Not satisfied at all, they left.

It would have been difficult for them to understand that just as the consultant is an expert to the family doctor, the family doctor is an expert advisor to the patient and his family. Accordingly, a large part of the role of the GP or any health professional is to act as a consultant, to reassure the patient and his family that the illness is indeed minor, they need not worry and, furthermore, the appropriate treatment may be to do nothing and allow the body to heal itself. This may involve pointing out to the patient the possible seriousness of symptoms and signs. For instance, if the baby with the gastroenteritis continues to have non-stop diarrhoea, they must look to see if the baby is still passing urine. Further, if the family can understand, one might teach the parent how and where to pinch up a piece of skin, and should it stand taut in the pinched position, and not elastically return to its previous position, that too is a sign of dehydration and they must then return for medical care. If the parents do not feel confident or communicate some anxiety, then it may be worthwhile to 'observe' the baby to ensure that there is a return to normal function rather than a deterioration. So in the case of baby Liban, and perhaps in consequence of his position as an expert, the major function of the doctor is to sustain the family during a time of trouble or increased dependency. The doctor's knowledge of medicine may make him forget that patients interpret symptoms differently. This message was brought home to me by the following experience.

I attended a pre-enrolment workshop for new first year medical students. The workshop's aim was to introduce communication skills to the new students and part of the programme was to participate in role-plays involving health personnel, after which all players and observers would

make comments about the various roles. A doctor played the role of the patient while a potential medical student was the doctor.

The ‘patient’ described his symptoms. ‘Doctor, I’ve felt for some two hours now as if I have had an elephant sitting on my chest and the same feeling down my left arm. I wasn’t hot but, boy, was I sweating, and I felt a bit nauseous.’

After a few more trivial questions and answers, the ‘doctor’, with a good deal of confidence, dismissed the patient as a hypochondriac, much to the amazement of the spectator doctors. To him, a novice medical student, that funny unrelated conglomeration of symptoms, that peculiar description of pain, could only be the result of the imagination of an ‘and-here’ patient. (An ‘and-here’ patient is one who says it hurts here, and here and here — that is, a hypochondriac.) To the experienced clinicians it was a typical description of a heart attack. Very often doctors or other expert health professionals will see a group of symptoms quite differently from patients and, although some complaints may seem trivial to the doctor, they are very worrying (they may be indicative to the patient of a heart attack, for example) to the patients. The converse also holds true. Such presentations by patients to doctors for what may turn out to be a minor illness, just to have it *confirmed* as such by the doctor, may be a very appropriate use of the doctor’s service.

I remember the jogger who had fractured a bone in his foot from continual jogging — a so-called stress fracture. He continued to jog on it for three weeks as he considered the pain as trivial and it was only when Mrs Jogger insisted that his foot was swollen did he attend. There was also a boy who for three years had some numbness in his fingers which he ignored, only mentioning it by the way when he

attended for an ear ache. It turned out he had severed a nerve. Also, there was the lady who had been menopausal for three years. When she began to bleed vaginally again she considered it to be her periods starting again and was not in the least bit concerned, whilst I had always been taught to treat post-menopausal bleeding seriously.

Naturally, I saw many patients who were suffering from sprains and strains, coughs and colds, etc. whose owners felt the need to present themselves to the doctor and who perhaps could have been self-treated. They were reassured that the symptoms they had were not due to any serious illness and further, in many cases, that no special treatment was necessary.

What I have been arguing through these cases is that perhaps the role of the doctor as a comforter is appropriate as, being the expert, he can reassure people that what they complain of is not serious. Such reassurance by the doctor is both supportive and therapeutic. On the other hand the doctor may be required to tell patients that the illness *is* serious, in which case the patient will require more reassurance and comforting.

We have seen how the jogger was sick, he had a broken bone, but he did not see himself as ill. We might be able to imagine the opposite, as someone feeling ill, nausea, pain, etc. in the absence of organic or biomedical evidence of being ill. Here we are talking about a patient's feelings, and it would definitely seem appropriate that the doctor should aim to restore *feelings* of health, even in the absence of organic disease.

Perhaps this is the service the doctor is offering when reassuring the patient. In the case of the seriously ill, it is probably impossible to restore feelings of health and it may be appropriate to explain the 'meaning' of illness to the patient in a coherent manner.

The jogger, for instance, placed a great deal of importance on being fit, as did his fellow joggers. Sickness was a sign of weakness, and so strong were these psychological and cultural influences on him, that he would deny anything was wrong. The attending doctor would treat not only his fractured foot therefore, but also point out that this did not denote any failure or 'weakness' on his part.

By now it should be clear that the sick do have needs that can be distinguished from the desire to be cured of their physical illness.

Mechanic has written: 'The objective limitations of health care, however, should alert us to the probability that medicine as an institution is valued, in part because it meets *needs* other than those necessarily defined as important by doctors and other providers. Sickness is a matter of alarm and not logic, and people behave according to a psychological rationality which departs significantly from administrative concepts of what is rational. The significance of the healer lies not so much in what he does and what he has accomplished in practice, but in his symbolic relationship to the distressed.

The hospital has always served two roles: to heal and to comfort. In the past the doctors have concentrated on the role of healers whilst the nurses were the comforters. Often patients will express a confidence in a particular hospital which is based on its role as a symbol of help and comfort to the ill, rather than on its therapeutic merits. Despite the many examples I have given, doctors being men of science will not be so readily convinced that such needs do exist without a scientific explanation. A scientific approach that might assist us to accept this concept is the hypothesis on psychological rationality developed by the famous psychologist, the late Abraham Maslow. Maslow hypothesised that human needs were arranged in a hierarchy. He described five basic needs of a relative

prepotency when trying to elucidate a theory of human motivation. These needs are:

1. Physiological needs
2. Safety needs
3. Belongingness and love needs
4. Esteem needs
5. Need for self actualisation

The physiological needs are biological or bodily, and are the most important motivators. The safety needs include the need for security and maternal care. Belongingness needs include the need for affection, to belong to a group, or social needs. Esteem needs include both self esteem and recognition from others, while self actualisation needs include the need to continue to develop and to fulfill one's potential.

Now if we apply Maslow's human needs to human health, it can be seen that health as conceived in the biomedical model is roughly equivalent to Maslow's physiological needs. However, what I have called an individual's reassurance needs can be seen to have some similarities with both Maslow's safety needs as well as his love and belongingness needs.

Just as the infant has a whole body reaction to vomiting, pain, etc., so does the adult, and just as the infant requires the caring mother, so does the adult require comfort and security, particularly in times of distress.

The situation is even more obvious when we talk of health services — we often describe them as health *care* services. If we accept that these needs exist, what is the advantage of recognising them as a separate goal of health care? The advantage is that doctors and other health providers will be aware of this, they will confidently be able to reassure the patient where appropriate, to comfort or explain the meaning of illness. Most importantly, they will more

confidently refrain from offering a cure where one is not required, avoid over-investigation and doctor-caused illness and consequent sociological problems, as the following patients and anecdotes illustrate.

First, an example where the doctors, myself included, did not recognise the need for reassurance and irreparable harm resulted.

Mrs Moan was an obvious hypochondriac. She had a host of symptoms. Each time she presented, and there were many times, I would ask, ‘How are you today, Mrs Moan?’ She would retort, ‘Oh, I’ve been just terrible, just terrible! You wouldn’t want to know.’ I didn’t want to know, but I knew I was going to hear it all again. ‘My headaches, dizzy spells, backache, and I had another of those attacks, doctor, pains in my stomach and it seems so swollen and that pain in my right arm has come back.’

She had gathered a formidable group of consultants to look after her.’ a neurologist, a gastroenterologist, three arthritic specialists, a general physician, a cardiologist, a physiotherapist, a dermatologist and a psychiatrist and she hadn’t stopped looking. Each time she attended any one of them, further tests — pathology, radiology, brain scans, endoscopy, etc., were necessary. All this, of course, was to her further proof of the reality of illness.

Mrs Moan was a household name in Macquarie Street. She had a doctor in each building. It would have probably been in her health’s best interest if she had never been introduced to her rounds of Macquarie Street, and had instead been adequately reassured early in the piece. All her life Mrs Moan had lived in well-to-do areas but after the death of her husband she had lost income, was placed on an old-age pension, and had to live in a government-subsidised unit in a working-class suburb. She could not accept these changes. She lost her self-esteem, did not

wish to meet old friends because she felt unworthy, and she overemphasised some of her medical problems as a release. Finally, although she moved to a better area, her illness pattern had been confirmed, and her improvement was marginal.

In the US, some judges have made decisions in the case of doctors attending at an emergency on the assumption that the doctor was only a healer. The doctors have in consequence been found liable for malpractice when the methods they followed weren't standard and the patient failed to respond. Following such court decisions, US doctors now do not risk attending an emergency. This intolerable result, I feel, would not necessarily have ensued if the judges had also seen the doctors' role in emergencies as that of a comforter. There is, however, an appropriate demand by the patient for reassurance, and accordingly there is an appropriate response by the health providers to meet these reassurance needs. In the same way as the hypochondriac patient has excessive symptoms, the over-enthusiastic provider has excessive treatments. Just as there is inappropriate demand, there is also inappropriate response.

The next two patients illustrate the above point:

Mary El Haddad, a twenty year old Lebanese girl, looked a little nervous, even a little sceptical, and very scared.

'Can I help you, Mary?' I asked.

'Well there's nothing actually the matter, but I was wondering how one can tell if someone is a virgin?'

'Are you getting married, and is that why you are worried?'

‘Yes. I’m engaged and hope to be married in three months time.’

During the discussion that followed, Mary seemed particularly concerned about one possible instance when she may have had intercourse but she wasn’t quite sure. I explained that loss of virginity probably involved some pain and some bleeding, but one can never be a hundred per cent sure.

We talked for half an hour. There really was no question of illness. I reassured her that she probably felt guilty about that incident, and that it was very unlikely that she had lost her virginity.

‘Many girls, particularly those from cultures which place a strong taboo on pre-marital sex, worry about the same problem, the worry being created more out of their feelings of guilt about a small instance, where in reality there was nothing of substance to cause concern’ I continued.

The reassurance was important to her and I felt it was also important that she had had confidence enough to approach me with such a question. I hoped I had not gone on too long and that the discussion would make her feel that she had a friend and thereby increase her confidence that reassurance needs could be met.

Another patient whom I enjoyed seeing was Janice Viceroy, a loquacious, pretty, single mother. She had had her breasts enlarged by plastic surgery.

Laughingly, she said to me, ‘You’ll probably think I’m stupid, but it is two years since I had the operation and I think my boobs are going a bit hard. Could you give your opinion?’

Having examined her, I reassured her that they were pretty good. If she felt unhappy and wanted some improvement, she could have a minor further operation

called a capsulotomy, but it wouldn’t improve the situation very much.

She laughed and left happily reassured.

Summary

I have suggested that the need for reassurance (caring and comforting) exists and it must be defined as a separate goal of health care. For the mere fact that we call nursing the caring profession, in reality we talk of health *care* services, all of these points are evidence that there is a distinct goal of caring and comforting that is part-and-parcel of the health system. Patients such as the collapsed postman exemplify this point by demonstrating that although no curative service was offered whilst he remained collapsed on the street, an element of care and comfort did exist, that there was a professional person on the spot who had the expertise and confidence to reassure his fellow work-mates and the crowd that surrounded him, as well as the collapsed patient himself, that he was receiving the emotional support and comforting at this time of distress.

The extreme gratefulness of the skier with the broken ankle, that someone was willing to sit by his side whilst he was in distress, was further evidence that comforting was an important role. I then went on to note that Eric Cassell, in his book *The Healer's Art* had identified and given excellent reasons that there was a need for such care and comfort, whilst we also were able to extrapolate from the work of Maslow. He has hypothesised a hierachy of human needs — the basic *one* being the physiological need. This is the area medicine has dealt with up to date, however, what he calls safety needs and belongingness needs also are part of the needs of the whole person. The doctor must treat the whole person and, accordingly, caring and comfort become a goal of health care.

Cases, such as Mrs Moan's, suggested that by ignoring that what the person is seeking is really care and comfort, the health professional can mismanage the patient — further proof that caring and comfort, or reassurance needs, must be identified as a separate goal of health care.

If we are to properly use modern management techniques to manage health services, then we must not only define our goal, but must be able to *measure* the extent of the need as well as the effectiveness of the health services in meeting the need. This is best achieved by realising that each person in his own community must acquire or be given *a degree of confidence* that, when required, their need for reassurance or comfort can be appropriately met.

What we will measure then is each individual's extent of confidence that caring and comfort will be available when necessary.

This can be measured by a questionnaire, which would be both subjective and objective. A person's *confidence* will be influenced by his past experiences in contacts with doctors and hospitals. It will also be related to his own particular circumstances.

For example, a married person or a person with a family or close relatives feels a little safer (a little more confident that caring would be available if needed) than a person with no family.

A person who lives in a community which cares for its elderly in nursing homes, feels less confident or less safe than a person who lives in a community in which their own families care for their elderly at home.

This measure, together with a measure of physiological well-being, will become an important indicator of the individual's, and thereby the community's, health. It will, as I attempt to show in the next chapters, become an important tool in the management of future health services.

4 Positive health

There is one further goal of health care which warrants separate identification and discussion. I will call it positive health. The next two patient tales illustrate this concept.

I had been seeing Mrs Wendy Wonder for some weeks. She was in her mid-thirties, married and had four children. Slowly, over a number of years, she had told me of the problems in her marriage. Lately these had become more difficult for her to handle. She was a little nervous, and it was only that she had lost her appetite, and consequently a lot of weight, that made me realise how poorly she was coping, for she did not give me the impression of being depressed. At the end of a consultation she timidly requested some Valium tablets. Slowly she came to the decision to leave her husband, and she gingerly asked for an extra Valium script as that day was approaching.

More than ten days had passed and I was concerned about how she was doing. I personally doubted that she would leave him, or if she did, expected she would return to live with him within a few days. When she turned up early on the morning of the eleventh day, I was pleased that she looked the same.

'Well, are you surviving or have you returned home, or did you ever leave?' 'Oh, no, Eddie. I haven't returned home. I walk down the street in the morning and it's as if I had a spring underneath my shoe. When I awake in the

mornings, the sun is shining, even if it isn't shining. I look forward to each day.'

I wondered to myself, shouldn't I aim to make all my patients feel so well.

'I actually don't need to see you, Eddie, but I took yesterday off work to rearrange the kids' schools, etc. and I was hoping you could help me out with a certificate.'

Once before I had seen a reaction as enthusiastic as that in a patient, when Mr Ian Down had returned to the gastroenterology outpatient department at the Royal Temple of Science Hospital.

Unbeknown to him, he had suffered from a mild form of ulcerative colitis for some ten years. It was his wife who kept on objecting to the smell in the toilet, implying that it was not normal. Finally and reluctantly, more to shut her up, than from any belief that he was sick, he went to the doctor and the diagnosis was made.

He had received some three months of treatment and was returning to the clinic for follow-up to see how he had responded.

'I'm pleased to see you,' said Dr Cohen, the gastroenterologist. 'How are you feeling?'

'Doctor, you won't believe this but I feel fantastic, like jumping up and down. I have never worried about my health, just kept on working and I thought everybody felt like I have felt these last few years. That feeling was what I considered as being in good condition or feeling well. But now, this sensation of well-being is colossal. Yahoo! I feel like yelling that out all the time. If this is what it feels like to feel normal, I love it.'

'You see, Mr Down, you have probably kept on losing a small amount of blood from the bowel daily, and it would seem that eventually you achieved an equilibrium position with blood level, that is a haemoglobin level, a few grams

below normal. Nevertheless you pushed on regardless and this must have taken a lot of energy. Now you are back to normal blood levels.'

Mr Down left a marked impression on me, he was radiant, he was enthusiastic, he was full of 'go'. Mrs Wonder felt wonderful and was full of the joys of living, but in both these people, this feeling of 'positive health' was obtained relative to lesser states of health. Perhaps it was their ability to express their feelings so clearly, most definitely their presence and enthusiasm could not be ignored. I thought it would be great if my patients could *all* be made to feel good, good, good. I reasoned that this was to be part of my task, trying to enable people to acquire this very positive feeling and attitude.

We are all conditioned to think of health in a purely negative sense as an absence of illness or a lack of awareness of the body; that is, we do not notice our health until we have lost it. Health can be viewed in any or all of the three dimensions as an absence of biological disorders, psychological disorders (feelings of illness) or sociological disorders. To define health in this way, even if we include the psychological and sociological dimensions, by default, places all the attention on the diagnosis and treatment of malfunctioning.

Health may also be thought of in a *positive* sense. It is to feel in good form, to be happy, content, with a good appetite, sleeping well, wanting to be up and doing; it is to feel well and strong. This, in turn, may involve two notions; one of perfect functioning, the other of biologically normal functioning.

Perfect functioning conceptualises health biologically, as a state in which every cell and every organ is functioning at

optimum capacity and in perfect harmony with the rest of the body; psychologically, as a state in which the individual feels a sense of perfect well-being and of mastery over the environment; and socially, as a state in which the individual's capacities for participation in the social system are optimal.

The second notion views health as a biologically 'normal' state, i.e. statistically average. Here I will include in this definition the concept of actually doing something about one's health to make illness less likely.

This latter notion incorporates the idea of health maintainance or preventive health, and this might be extended to include perfect functioning if we assume that the presence of perfect functioning makes illness less likely. So now the reader has a concept of what I mean by positive health. It will be clarified by some further examples. Let's return to my practice to illustrate these notions.

Mrs Mater has arrived again. She is the matriarch and grandmother of a large aboriginal family living in this neighbourhood. I have never been able to figure out the number of children and grandchildren they have living in their terrace house. Whenever I make a home visit there seem to be children everywhere, so it couldn't be that they were hiding from me. Finally I learnt that the children are mobile tenants, some living in the traditional lands in the country, others in the city, but swapping homes often and to no definite pattern.

This time Mrs Mater presents me with her two and a half year old grandson, Aaron. He has severe pus discharging from both ears. His earlobes are also both infected and covered in a mixture of dried pus and blood. I don't have to examine him too closely as the extent of the suppuration is visible from a distance.

Only one week previously he was discharged from the Children's Hospital and that was his third admission in the last four months. Accordingly I was disappointed but not surprised. I started to compare myself to the doctor on the river bank, who notices a body floating past. The doctor dives into the river and finding some life in the person, he resuscitates him and then unties the rope binding his arms and legs together. A few minutes later a second, then a third and a fourth body floats past down the river. Each time he dives in, resuscitates each one, and then unties the inevitable rope around their limbs. He works flat out. More and more bodies float past, he works harder and harder, always the same story. He continues to do this, but some day he or someone else is going to realise that something very strange or unusual is happening upstream.

I gather that really the point of intervention in Aaron's case should have been somewhat earlier, and the place should have been the home rather than the surgery. Aaron is not the only one in the family with this story of recurrent hospital admissions, some of his brothers and sisters have been admitted two or three times during the last year. Although the problem today is one of recurrent infections, I suspect there is a good chance that later emotional and behavioural problems might develop in these kids.

I decide this time I will not hospitalise him. I will treat him at home, which will give me an excuse to enter their home daily, and get a closer look at what is happening. It will not be an easy situation to handle as there will be cultural and social problems and obstacles to overcome. Questions about hygiene, washing, etc. will have to be asked, and basic principles of city dwelling taught. In order to undertake this comprehensive family education programme I will require assistance. I immediately ring up the community sister and social worker to see if they can move into the home to begin the long task.

Mrs Mater exemplifies the requirement that health workers ought to see in their role the need to undertake tasks to prevent illness. Here again, it should be noted, what is required is not procedural medicine but education.

The nurse brings in my next patient, Mrs Whaleway. She enters in a single pile, and more than adequately represents her group — the obese. My mind boggles when I recall what a petite man her husband is. Fortunately she has a keen sense of humour and laughs when she tells me that another doctor asked her 'Does he wear a crash helmet?'

In my downstairs surgery, I only have bathroom scales. 'You'll have to get more than one,' suggests Mrs Whaleway. So, a little tongue in cheek, we use two bathroom scales. She stands with a foot on each. Thirty-one stone. A surgery record.

It is not the first time that she has consulted a doctor about her weight. She has tried everything — diets, exercise, Weight Watchers, hospitalisation, psychiatrists. Now she is inquiring about a gastric bypass operation. Obesity in itself may not be an illness, but the risks of developing an illness such as a heart attack, high blood pressure, etc. are greatly increased.

So far I have had only very limited success at changing the long term eating habits of most of my obese patients. Certainly most lose weight for one or two months, but then they usually revert to their previous weight.

'I am at a loss with what I can do to help you,' I tell her, whilst thinking to myself what she really needs is a similar educative programme and in-house counselling as I initiated for Mrs Mater's family. Should I suggest this to her, I felt sure, it would be rejected as an intrusion of her privacy.

Mrs Whaleway also illustrates the need to undertake activities that will prevent potential illnesses. Her anecdote also points out the singular lack of success achieved when attempting to solve her problem with a biomedical approach.

The practice has a similar lack of success with the smokers, the drinkers and the drug addicts. They represent a very large group of people attending. Commonly I treat the consequence of their habits, ulcers, bronchitis, etc. whilst the major cause of their problem continues relentlessly.

On this topic, Mechanic has written:

> If we think of health as well-being in its largest sense, then it is clear that health is dependent on social values and social definitions and men are unlikely to agree on priorities in weighing one dimension against another. Moreover, health in the sense of overall well-being is dependent on quality of living and the environment generally, and any contribution from the medical sector will be relatively small in comparison to other factors amenable to political and social control. Thus while overall well-being is a goal and an aspiration for doctors to have in mind, the realities of their intervention potential do not make this a very useful concept on which to devise strategies for care.

Here I disagree with Mechanic. It is difficult to include the above concept of health within the role presently practised by doctors, but if we think of Aaron Mater or the doctor downstream, it is even more difficult to leave this concept

of health out of the doctor's ambit. How doctors act does constitute an important part of social and political control.

The next patient demonstrates more clearly the connection between doing something active to prevent an illness and the achievement of positive health. Here the undertaking which was initiated in order to prevent an illness, in fact, enabled the patient to develop abilities which would serve to assist him in many activities in his future, allowing him to avoid unnecessary conflicts.

He was one of the groups of patients I mentioned above, the drug addicts, and like most doctors I saw plenty. Either they were 'passing through' on their way to Darwin or they claimed to be insomniacs, often shift workers who could not adjust to daytime sleeping. Often the more experienced would openly admit their addiction but say they were on a methadone programme and just needed a few drugs to stop the unnecessary withdrawal.

They were all excellent communicators, choosing the story most likely to achieve results in their terms — a script for the addictive drug. The addicts were also sensitive to the doctor's reactions and were very capable of manipulating the situation; they could turn a conversation, pick on a doctor's emotional weakness and thereby obtain the drug. To obtain such awareness of their needs and behaviour was part of a successful treatment.

Of all the drug addicts with whom I was involved I had only one success. Len Buzz had been mainlining for ten years. As he owed money, the boys were after him. Being a reasonably bright young man of twenty eight years of age, he was able to detach himself enough to see the futility of his existence. He had a two year old child, and as is often the case, the child would be the disciplinary influence on the father. It was his sense of responsibility to his child which was the greatest motivating force in his desire to

beat the habit. His girlfriend was also a drug user. She had been caught passing bogus cheques and was to spend the next nine months in prison.

Len was motivated to give up. Besides his son, he had a job which he enjoyed and wanted to keep. From my first consultation with him and his parents, I contracted with him that we would attempt to break down his habit on an outpatient basis, but if this failed, as I suspected it might, he would go into Odyssey House's residential rehabilitation programme which would mean losing his job.

Although he was able to successfully withdraw from the drug, he soon broke out. After nine weeks, to my surprise, he admitted himself to the Odyssey House programme.

I did not see him for ten months, but when! did I found a new man. Len now understood the dynamics of an interpersonal relationship, the emotional exchanges in a conversation, the body language and other communications he could now sense. He was aware when his own anxiety level was rising and accordingly could take a mature response to his anxieties.

'I left the programme early,' he told me 'and I knew when I came home my father would be mad at me and would tell me off. When I came home that was exactly what happened, so I allowed him to let off steam, and when he was all blown out, I was able to speak to him reasonably. Previously I would have reacted to his telling off, probably in a way destructive to myself.'

Len had predicted what would happen, was able to ride out the emotional conflict, fully aware of what was happening and now he was confident that he could handle future conflicts. He was aware of his emotions and was looking to the future with added confidence. He had grown, he had developed.

It was a pity more of my patients weren't like the new Len. Surely many of them could develop in the way Len had

developed. I should offer this opportunity to all of my patients.

Most people have little awareness of what motivates them and what worries them. They have little insight into the emotions that occur in everyday conversations and communications. Unfortunately much of what eventually occurs has more to do with the emotional interchanges in a conversation than the logic interchanges. It is possible to increase one's sensitivities to these forces, for everyone has the potential for this understanding. If I could help my patients increase their self-awareness, they would then be able to avoid conflict-creating discussions themselves at work and at home. It should make them realise that they were handling emotional problems by escape in alcohol, eating and so on. In this way stress and psychiatric problems could be reduced and consequences of alcoholism could often be avoided.

Sensitivity training similar to that Len Buzz undertook improves the patient's general feeling of adequacy and mastery over his own emotions and his environment, as well as his feeling of well-being, and brings about an increase in positive health.

My mind flashed back to my studies in health administration. Strangely, it was in those studies that I learnt much more about human behaviour than I did in my whole medical course.

In determining what motivates people in the work situation, Herzberg theorised, there were two different concepts. First, he identified what he called *job dissatisfiers*, such as job security and working conditions. If they were inadequate, the employees would be dissatisfied, but if they were pleasant and adequate, the employees become NOT DISSATISFIED (but they did not become satisfied).

Secondly, there were factors he called *job satisfiers*, such as the work itself and the opportunity for development. If the work was challenging and there was an opportunity to learn, the employees were satisfied; if the work was boring, etc., the employees were not satisfied (but they did not become dissatisfied).

Now it is simple to draw an analogy between Herzberg's theory and the health field. There are similarities between Herzberg's dissatisfiers and the negative view of health (as an absence of disease) and Herzberg's satisfiers and the positive view of health, of fulfilment and satisfaction with living and development.

Here the 'work' is life itself, and if disease is absent, the person becomes not dissatisfied with his health. But unless we offer people the opportunity to have a satisfying and self-developing life, they will not be satisfied with their health status. Increasing patients' self-awareness will afford them this opportunity for growth and development.

So with Len Buzz we have moved gradually from the notion of preventing illness to the concept of achieving a feeling of well-being over and above the absence of illness. Now we will concentrate on understanding the second part of this concept.

Dr John Diamond encompasses the notion of positive health, in what he calls 'your body life energy.' When I notice many patients coming into my surgery with their heads bowed, shoulders round, and chest collapsed, I know immediately that they haven't got the spring in their step, rhythm in their movements, or the alertness in their faces of a Mrs Wonder, for example.

Diamond states: 'When we see an animal that does not walk proud and erect and full of life, we immediately think, that there is something wrong with it. What we consider an unhealthy condition in animals we call normal in human beings. It is not normal, it is average.'

To increase one's life energy is to move from 'normal biological functioning' toward 'perfect functioning' or to positive health. Diamond sees six factors as important in determining one's life energy. These are stress, emotional attitudes, physical environment, social environment, food and posture. Let us take the last of these factors first, posture.

It was a Tasmanian, F. M. Alexander, who first described kinesiology or an awareness of the functioning of the muscles of the body.[2] If we have or develop an increased awareness of which muscles we are using when we talk, eat, sit, stand, swallow, etc. we can determine if we are using these muscles correctly. If we discover we are not using them properly we can take corrective action.

Should we have poor posture, not only do we look bad, but we expend a great deal more energy than we have to, whether we are standing, sitting, walking or performing some task. Our human upright posture is a genuine poise and balance, by which all muscular effort is practically eliminated. If each main section of our bodies is properly supported by the part below, gravity will actually help us to remain upright.

In any of the doing functions — looking, sitting, standing, etc. — there is a correct way to perform these tasks which uses the muscles in the most appropriate way.

Often patients present with headaches, the cause of which might be attributed to poor vision and for which glasses are prescribed. The headache is caused by the constant contraction of the eye muscle attempting to compensate for the poor vision.

Using our muscles incorrectly will also result in unnecessary muscular contractions and thereby reduce our energy and preclude our achievement of 'perfect functioning'. To maintain good posture, an activity we are doing all the time, will conserve otherwise wasted energies

and allow us to feel better. The correct use of our muscles may also protect us from sprains and strains and help prevent many of our rheumatic ailments.

Ergonomics, the science of designing work environments to minimise physical and other forms of stress encompasses kinaesology, and by its achievement of a reduction in work errors, absenteeism and inefficiency attests to its value.

One can be taught how to improve posture by using the F.M. Alexander technique. It was Alexander who said, 'The great phase in man's advancement is that in which he passes from subconscious control of his own mind and body.'

Diamond goes on to demonstrate how certain foods, certain physical environments and certain social environments diminish one's life energy, and he asserts that people who have taken corrective action and have a high life energy are more able to resist such negative stresses. Therefore he claims to demonstrate that the acquisition of better functioning, that is, positive health, will make people less likely to develop illnesses.

Other external stimuli — certain nominated foods, physical environments and social environments — increase one's life energy, thereby increasing one's sense of well-being. We have all experienced how therapeutic trees and parks can be, and Diamond demonstrates the value of life-energy enhancing music, symbols, etc.

I recall when I was working with the government health department and the State was divided into thirteen health regions, each region with authority to control itself. This decentralisation required many city dwellers, if they wanted to maintain their public service jobs and seniority, to move to the country. Reluctantly they moved. As my job meant I had to confer with them and move around the country districts, time and time again I was surprised to hear them all say, 'It is wonderful out here in the country. I

can’t see why I didn’t make the move a long time ago.’ Their faces and attitudes reflected their joy.

So besides trees, parks and countryside, other positive influences that increase this positive feeling of well-being or life energy, Diamond nominates certain voices, certain paintings, some physical symbols, organic foodstuffs, as well as classical music whilst rock music, processed and refined foods may have a detrimental effect on your life energy. In order to increase one’s feeling of well-being, one must reach out for these positive stimuli, the natural foods, the trees, the sun, the fresh air, and the sounds of nature. An appropriate attempt to encourage people to be exposed to such stimuli was the Australian ‘Life Be In It’ campaign.

Positive health has elements not only of being but also of doing, of being active, or participating. Zorba the Greek says, ‘Life is trouble. Only death is not. To be alive is to undo your belt and look for trouble.’ Life is health, to be alive is to be healthy, and to be healthy is to be full of life.

Australia’s former Prime Minister, Malcolm Fraser, trying to echo a similar sentiment, said that life wasn’t meant to be easy. What he was trying to convey was that the stimulation of challenges gave life its interest and people their feeling of well-being. The concept, however, is not merely in the mind, it is not merely a feeling as can be seen from the next examples taken from my practice.

Sitting in the surgery on one occasion were two good-looking dark men, whose faces seemed to radiate that contentedness with life, that enjoyment of living we have mentioned above.

‘You don’t look sick, what are you doing here?’ I inquired.

‘No doctor, we don’t feel sick either. We are wrestlers and the Amateur Wrestling Association requires a doctor to certify our fitness for wrestling.’

There was no doubt that they were fit and I could not discover any illnesses or disabilities despite, much to their amusement, a thorough examination.

Here again in the notion of fitness was something positive. It was not merely an absence of disease, but was in fact an ability and an agility to perform without hardship any of the normal day to day tasks.

Fitness seems of itself to give to the person a psychological feeling of well-being. In the manner that it is commonly used, being fit seems to mean ensuring your voluntary muscles are able to carry out any physical activity to the best of their abilities, whilst the other organs of the body are able to offer their support so that you function as an integrated human entity.

This notion of positive health, fitness of body and mind, underlies such Eastern-derived practices as yoga, zen, tumo and chi. Chi is the name given to the increased feeling of well-being achieved through the practice of certain breathing techniques, called tissue breathing. It claims to have breathing exercises for most of the individual organs of the body which, when exercised that way, will reach towards ideal organ functioning.

All these techniques are directed toward achieving a state of physical and mental fitness. All the different teachers recommend that the body has to be given an opportunity to develop slowly so that it can gradually build up to a situation where it can fulfil its potential. It is often stated: healthy body, healthy mind. To achieve and maintain this status, the various parts of the body must be used and used regularly — so exercises should be undertaken or stimuli received which encourage such use.

Fitness does not allow one to do everything — one cannot fly for instance. Each person remains in an equilibrium in his environment. The fitter we are, the quicker we can

react to different pressures and restore this *happy* balance with our surroundings. Some people overdo it (for example, body-building) for they have gone past the position where the body functions best. To be fit means we have the agility to move to undertake other tasks and to most easily reject stresses imposed on ourselves.

In order to achieve this state of positive health, we can work on our environment to add things which increase our feeling of well-being, or we can do things which ensure we use our minds and our bodies so we can participate in society.

Alternatively we can reduce the noxious substances we know will be harmful to our health or the health of specific organs. Thus we can alter our diets, change our breathing patterns, reduce our cigarette and alcohol consumption, as we know that these will have a negative effect on our health. It can be readily seen then that the maintenance of good health or the acquisition of positive health depends primarily on the way we live.

Having defined the concept of this ideal of positive health, we must ask what is the role of the health professionals, particularly the doctors, in the acheivement of this idea? The *easiest* role which the doctor could play, is not so much on the positive health side, or even not quite in the prevention of disease, but rather in the early detection of disease or precursors of disease in the body.

The doctor could initiate a range of screening tests which might reassure the patient that all his organs are functioning well as far as modern technology can tell. Such information will only let the patient know that he is not ill, or be similar to Hertzberg's dissatisfiers; the patient will not be dissatisfied with his health, but he won't have gained positive health or greater satisfaction.

I recall a colleague of mine, an elegant mature woman psychiatrist, who had decided she was at the age when a group of screening tests would be worthwhile. When she

returned to her doctor to receive her tests, there was some real embarrasment. With great difficulty her doctor, also a friend, finally explained to her that although nearly all her tests were normal and it seemed everything was OK, one test had come back positive, a test for syphilis, a veneral disease.

There was an uneasy silence. Then she suggested it might have been a laboratory error. The next day she rang the computerised health screening service, and was greatly relieved to find out hers was the twentieth call about a positive 'WR' result, the test for syphilis.

She later jokingly told me the story, her shock and feelings of discomfort until she was told that all the 'WR' performed that day had been positive. It was obviously a laboratory or computer error. There were also seventy nine other worried citizens besides her. Although she was reassured that it was a laboratory error, she never could quite accept it and felt a little uneasy until she had her' WR' tested again. This time it was negative.

On this issue, McKeown has stated, 'In carrying out such screening there is a presumptive undertaking that not only the abnormality will be identified if present, but those affected will derive benefit from subsequent treatment and care.'

A few screening programmes have gained universal acceptance — PKU (Phenylketonuria) pregnancy and the prevention of RH disease — but the general screening tests have often produced fallacious results and the patients have experienced unnecessary anxiety with detrimental effects on their health. Accordingly, the World Health Organisation has produced a list of requirements that screening tests should meet. Only if and in those cases where these requirements are met, would the doctor have a role in initiating such screening.

Some have called these patients who have gone in for screening 'the worried sick' as they have experienced in

varying degrees a sickening, incapacitating dread with loss of zest and purpose often associated with apathy, depression and insomnia, and with physical symptoms such as loss of appetite and weight, heaviness in the chest and abdomen.

So rather than having helped people obtain positive health, there is a risk that doctors may have contributed to the increased numbers of weary and dejected, lacking-in-life-energy people.

Summary

An extraordinay feeling of well-being can exist. This I call positive health. It includes two notions: first, that of perfect functioning, to want to be up and doing, etc.; and secondly, that of biologically normal functioning, not necessarily feeling better than normal, but actually doing something to make illness less likely. Some patients' stories illustrate the need to take such action. If the action is successful, as with Len Buzz, the benefit to the patient may enhance his feeling of well-being and his confidence to move toward a more positive health.

The notion of ideal functioning was then discussed, pointing out a variety of factors which were positive stimuli and which would enable one to experience this wonderful feeling of spring-like well-being. It was deduced that from such a position, not only did one feel better, but one was more able to resist and avoid illnesses.

Then I discussed the doctor's task: he need not necessarily see himself only in scientific terms as treating the sick patient. This view of his role led him to screening tests as his involvement in preventive medicine. He has an alternative. The doctor may have to change his role and become not the doctor but the teacher. The educator-doctor could conduct classes, teaching groups of from six to thirty patients, in self-awareness, sensitivity training, how the body works, disease and disease processes, with particular emphasis on prevention. Together with health teams of social workers and health educators, (sociologists, nurses, occupational therapists, etc.) the doctor could enter the houses of patients like Mrs Moan and Mrs Whaleway to undertake social and family retraining programmes.

A large number of illnesses and potential problems are not the result of individual wrongdoing but rather the consequence of socially and culturally sanctioned actions. Another role the doctor should adopt, therefore, is that of

adviser or counsellor to his local practice community. His advice would include suggestions for increasing the number of positive health stimuli and reducing the number of negative health stimuli in the local community, encouraging participation in appropriate social groups, and so forth.

The notion of positive health acquires further significance from a selling point of view. Critics of health promotion activities claim that one of the reasons it will not be successful is that one cannot sell somebody something they already have. That is, you cannot sell health to the healthy. Obviously these commentators have assumed a negative view of health, and as such they would be correct. Selling positive health is promoting well-being and doctors, together with other health professionals, are ideally located to fill such a role.

The new practitioner will have his patients' respect as a doctor and as a teacher. He will be able to endeavour not only to restore health to the ill, but also to improve the well-being of the healthy. The new-found positive health will enable people to avoid illness and disability to a certain extent, and also to more fully develop their potential and derive greater satisfaction from life.

Doctors have traditionally held a particularly high social standing in the community and consequently they possess a degree of power. If cultural values are important in causing unwise living habits and consequent illness, then doctors as a group, each acting as an educator to his own patients and community, have the collective power to influence cultural values.

5 Faulty assessment criteria

Our new definition may be stated as: health is a complete (positive) sense of physical, psychological and social well-being, an ability to function in the community without undue pain or anxiety and with confidence that comfort will be available in times of distress for a natural life span.

This definition of health has evolved from our application of management techniques in order to determine the goals of health care. Four dimensions were found to be important and these are reflected in our definition:

1. Quantity of life.
2. Quality of life — or the ability to function in the community free from pain and anxiety.
3. Reassurance needs — the confidence that in time of distress, help, comfort and caring will be available.
4. Positive health — self-fulfilment, fulfilling one's physical and enjoyment of life potential, participating in activities to avoid disease and illness.

It is my view that any definition of health ought to take all four factors into account.

With this concept of health in mind we can see how the present evaluative criteria such as mortality rates, life expectancies, and hospital admissions can be misleading. Some recent statistics show only a marginal improvement in life expectancies of one to two years in the Western

world over the last fifty years, and have led some health evaluators to zealously argue that ‘modern medicine has contributed little to the health of the world.’ Medical statistics unfortunately, do not attempt to measure improvements in either the quality of life or positive health and therefore they lead to wrong conclusions.

In 1966 Donabedian wrote that health care can be evaluated in three ways, namely, ‘structure, process and outcomes’.[1] Modern management theory indicates that medical organization should be measured in terms of its effect on health status, or the outcome of the treatment. This is the only way to evaluate the quality or effectiveness of health care. In this chapter it will be shown that prevailing medical evaluation has used only structure and process measures, and outcomes have been assessed largely by death rates. These have limited value and can be quite misleading.

Structure measures are the number of physical structures available to serve the community’s health needs. For instance the number of doctors or nurses available per 1,000 population. Structure ‘standards’ have been set and where these standards are met it is assumed that good medical care is being rendered. Some examples are the recommendation of, say, one G.P for every 1,500 people, or five general hospital beds per 1,000 population. Structure measures refer to resource provision, physical resources, personnel resources (type and qualifications) organisational make up, etc. Still, they do not tell us if we are making the community any better by providing these facilities at the community or ‘macro level’. In fact, with the emergence of iatrogenic (doctor-caused) diseases and increasing incidence of non-disease,[2] some have claimed that it is the existence of such resources that makes the community more unhealthy. It has often been said that ‘the truly healthy person hasn’t been investigated properly’, or

that ‘if you look hard enough you will find something wrong with everybody.’

Process measures compare what was done in a particular case to a standard set of accepted procedures. Some of the situations that follow, demonstrate the deficiencies of these measures of the effectiveness of health care.

An interesting example occurred in my practice, when I returned from a home visit to find my nurse busy. I stuck my head around the door and found the nurse completing an electrocardiograph on a pretty sick, greyish-looking woman.

‘This is Mrs Good, Eddie,’ said my nurse. ‘She didn’t look too well when she came in. She had some chest pain, so I immediately took her in here to lie down. I think she might be having a heart attack. I have some Pethidine and Stemetil drawn up in an injection ready to give whenever you say.’

The memory of Dr Old then flashed through my mind. He was the consultant physician with whom our student group was lumbered, our tutor. No other medical students wanted him. He would never give you crisp summaries of, say, the twenty signs of megaloblastic anaemia. ‘Basic medicine’ was what he taught. It was his teaching that I now remembered. A heart attack? ‘Only look for three symptoms: chest pain, sweating and vomiting or nausea.’

‘Did you sweat, Mrs Good?’

‘Yes, doctor, and how!’

‘Did you vomit?’

‘Twice, doctor, and I feel like vomiting again.’

On examination she had a fast heart rate and a gallop rhythm (a third heart sound), but no friction rub (Dr Old’s three signs of a heart attack) and her ECG contained Dr Old’s three changes. This confirmed the diagnosis. She was given the injection, an ambulance came and she was

admitted to Royal Temple of Science Hospital (R.T.S.H.) Coronary Care Unit (CCU).

In the CCU she was monitored on an ECG screen, received intravenous fluids and anticoagulants, and had blood tests at least once each day. She spent five days in CCU, two weeks in the general ward, and then came home.

I was pleased. Everything was done according to the textbook and Dr Old's rules. Three weeks in hospital, three weeks at home resting, three weeks pottering in the garden. Every step in the procedure had been perfectly executed. She was monitored, her heart attack was confirmed by the enzyme levels in her blood. Her ECG changed as predicted, she was gradually allowed more physical activity so her weakened heart muscle would not be strained. She had recovered and she had received the best medical care.

The next patient also recovered but his story was different. Joe Cooler was a sales representative working the inner-suburban area. This day he had been feeling some chest pain which had lasted two hours and as he was passing the surgery, he decided to drop in. He did not feel at all well.

'Did you sweat, Joe?'

'Yes, doctor, I'm sweating now, I'm wet through.'

'Did you vomit?'

'No, but I feel like it.'

The ECG confirmed it. He too had had a heart attack.

'Looks like you'll have to go to hospital, Joe.'

'Oh, no, doctor. I don't want to go, no way.'

'Your ECG shows quite a large myocardial infarct.'

'I'm not going to any hospital.'

I could not convince him, and we decided he would rest in bed at home, have blood tests and ECG at home once a week, and take pain-killing tablets. His ECG returned to the predicted pattern within one week. He felt so well that he

decided he would have no more blood tests and no more ECG's. After ten days he had returned to work, apparently quite well.

He had, not, however, followed most of the recommended procedures.

He had hardly taken any tablets. This was bad medical care, or was it? He had done so well and yet had I suggested to my old teachers that he follow his chosen regime, I would have been regarded as a negligent student.

This standard procedure, or accepted treatment regime, has been termed the medical care 'process'. To assess or evaluate medical care by comparing what was done to a standard set of accepted procedures is called measurement based on 'process' objectives. Much of health care has been evaluated in this way.

I remember working in El Arish in the Gaza strip amongst the Arab refugees. We were based at the El Arish General Hospital and three doctors ran outpatient clinics. When the local people knew that the clinics were open, they used to line up in large numbers. We worked with interpreters and issued many prescriptions. The drugs would be dispensed from the hospital pharmacy run by a local salaried pharmacist. We discovered by accident, after some two months, that the pharmacist only dispensed half of the number of tablets we had written for each patient; the other half he kept aside for himself, for he owned and ran a small pharmacy shop in town. He would thus obtain the bulk of his supplies free of charge.

It amazed me to find that at least most of the patients seemed to get better. I definitely don't remember many coming back complaining that they weren't better. When I reflect on patient compliance with taking the tablets I prescribe in my own Sydney practice, I am certain that very few of them, too, actually take the medication as ordered.

Here again we have another group of patients who were not following the recommended procedures, some due to the pharmacist's enterprise and others at their own discretion. Many were like Joe Cooler, only his non-compliance was more obvious. Like Mr Cooler, they all did very well.

It is then not difficult to see that when the conventional medical process goals are breached, many people nevertheless still improve.

Often when the general practitioner hasn't enough knowledge to be sure of the best treatment regime for a patient, he refers the client to a specialist physician.

One such patient was Mrs Cominoff. She was experiencing some indefinite, atypical chest pain. The specialist tentatively diagnosed angina, and in turn sent her to a superspecialist, a cardiologist. He performed a cardiac angiography examination, a rigorous procedure which confirmed that her mild degree of angina was due to some narrowing of her coronary arteries. It was quite an ordeal for her. To the doctors the proper process had been carried out, and it was a great technical success. But whether it was of equal human benefit is dubious. Mrs Cominoff was given more of the same tablets she had already been taking. There was never any question of serious disease. The tests confirmed that her mild disease was indeed mild, and the exact extent of the mildness was ascertained. No one would argue, however, that the procedures followed were not the correct, proper, standard procedures, as dictated by current medical practice.

Thus, when trying to assess health services on an individual basis, often the correct process is not followed and the patient does well, or when it *is* followed, it may not make

any difference; by imposing harsh investigative regimes, it may increase the risk, the pain and the anxiety.

As there are problems evaluating care of individuals by the use of ‘process measures’, so are there problems assessing health services in a particular region using the same measures. Much use has been made of so called morbidity figures or statistics to determine the amount of ill-health present. These morbidity figures or statistics include the number of medically certified days off work, the number of hospital admissions, length of stay in hospitals, etc. Now, one would tend to think that the more hospital admissions the sicker the community, and with some justification. But, if we think of operations like vasectomies, terminations of pregnancies, hospital rehabilitation programmes, and many cosmetic and other services, the more admissions may indicate a *better* quality of life and a *healthier* community. It has been discovered and often reaffirmed that the greater the supply of doctors, the greater the number of consultants and the greater the number of hospital beds, then the greater the number of hospital admissions. This phenomenon is known as Roemer’s law after Professor Roemer who first described it:

> In the hospital bed situation supply and demand increase together, rather than the supply meeting the demand. It may be that as more new medical technologies become available, either investigative or therapeutic, which it is claimed may improve the quality of life, hospital admissions and even length of stay may increase.

Here, as with the assessment of individual health services, the use of process measures discloses obvious inconsistencies. Statistics of morbidity are ‘process measures’ because they measure the number of people

going through a particular procedure, e.g. a hospital admission, regardless of whether the procedure is needed or not. The measure is based on persons processed, rather than overall service to the community. All process measures make the assumption that the process is beneficial, and their emphasis is on the input, what goes in, and not on the output of the process.

Outcome measures refer to the actual health status of the patient after treatment; it is the output or health result of the patient's treatment. The most common outcome measure used as an evaluative tool is the death rate. Although death is a particular form of outcome of the health care process, its use as an assessment tool is limited by its unavoid-ability, and this limitation has been compounded by health administrators' failure to define when death is acceptable. It is for these reasons that death and death rates can be very misleading. The first experience which highlighted this for me occurred early in my career as a family physician.

Having completed my residency, I was interested in working under the socialised medical system which is responsible for most of the medical care in Israel. I was developing an interest in health administration, and was keen to see how this particular socialised system worked. On a personal level, I also wanted to experience kibbutz life. Accordingly I combined my interests and obtained a short-term job with the Kupat Holim (the sickness fund) in the Galilee in the north of Israel. I was to be stationed at Kibbutz Yiftah as the doctor responsible for four kibbutzim and have control of a clinic in the local town, Kiryat Shemona.

I was made more than welcome. The kibbutz was delighted to have a doctor living on site. The previous doctor had lived on another kibbutz and the members seemed reassured that a doctor would be readily available.

I immediately felt part of the kibbutz family and was anxious to make a good impression.

I had been there only two days when I received a call from the hefty kibbutz nurse to visit one of the boys in the dormitory. This particular dormitory housed disadvantaged city youths who had come to share the living quarters in return for two years' work.

Moshe was sixteen years old, a tall strapping boy. He had developed a temperature and was feeling quite unwell. Although I examined him thoroughly, I could find nothing beyond the high temperature and his complaints of generalised malaise.

I told him and the nurse of my findings, a PUO, a fever of unknown origin, probably a viral disease. With great fortitude (I thought) I resisted the temptation to give him antibiotics and treated him with aspirin and bed rest, and told him I would be back to see him in the morning. 'Nurse,' I asked, 'can you please collect a specimen of his water?'

Next day, when I was walking along the winding path through the gum trees toward his room, the nurse excitedly joined me, saying 'He's a little yellow in colour, especially around his eyes. I think he has hepatitis.'

He was definitely yellow when I examined him. Now there was no doubt. Hepatitis was diagnosed and I sent him downtown for some blood and other tests. I did not hospitalise him, but arranged for his isolation in a separate part of the dormitory.

That night some of the kids from the dormitory went running to the nurse, who in turn came running to me. Moshe had suddenly convulsed and was lying next to his bed semi-conscious. It did not take long to examine him. I was very worried, and immediately called for an ambulance to take him to the local hospital.

As soon as we were alone, I confided to the nurse, ‘This is terrible. I think Moshe has acute yellow atrophy — an unusual sensitivity of the liver to the hepatitis virus, nearly all the patients who have this die. I am sure Moshe will die. I must go and see Amon, the kibbutz secretary.’ I had seen Amon earlier that day and had assured him that Moshe had infective hepatitis and he would get better with bed rest. Now I was to see him about twelve hours later to tell him Moshe would die. I felt for the boy. His parents or guardians had to be contacted. It was terrible.

The kibbutz secretary heard me out. What would he think of this hopeless young doctor? I had been on the kibbutz only four days and a young, previously healthy, boy was going to die. I had done something wrong. Yes, I should have put him into hospital straight away. I shouldn’t have let him go to the toilet over and over. Inside I was kicking myself. I felt it was my fault.

Moshe was unconscious when I visited him in hospital. Despite the array of tubing, drips and high doses of intravenous steroids, he remained unconscious for four days before, as I had feared, he died.

I had to write three different reports on his death; one to the coroner, one to the health department, one to the Kupat Holim. Each echoed over and over: it was your fault; why didn’t you hospitalise him immediately? why did you take on too much responsibility?

The kibbutzniks (as the members are known) must think I’m a bad doctor, I thought. Luckily, I didn’t give him antibiotics. I would then have worried that it was an allergic reaction. I discussed the matter with a senior doctor from the Kupat Holim who reassured me (with the warmth of a father to a son, and did I need that reassurance!) that it was medicine, not me, which was unable to keep him alive.

That was not my last professional experience with death. Back in Australia, within the first year three of my patients died. Two were older, both above eighty. One died from a stroke, the other from a heart condition. I felt guilty again. Again the questions: what did I do wrong? what had I failed to do which could have helped? The third death was Mr El Omar, the young man who died of a dissecting aortic aneurysm.

In each case I felt I was a little to blame. I could not sleep at night, my mind ticking through the night like a frenzied watch.

Well, is the inability to avoid death really the way I should assess my medical practice? My mind goes back to a patient's medical record in Royal Temple of Science Hospital on Mr A Estate.

He had had several heart attacks and was suffering from cerebral atherosclerosis — that is, dementia. The only words he could say were 'Yes OK, yes OK, yes OK', continuously. On his patient notes was written in bold print 'NOT TO BE RESUSCITATED'. If this man looked like he was going to die, they would let him. 'LET HIM DIE' written in bold letters, and in one of the best hospitals in Sydney! Who had decided? Should I let some of my old patients die? I had always joked with my patients that they would die twice, we would save them the first time.

Three deaths in one year. Was that too high a mortality rate for my practice, or was that an appropriate way to assess my practice? People used mortality rates to assess the health and health services of the whole state, but were these statistics applicable to my small patient community? In England I recalled they had a higher crude mortality rate than in Australia, but rather than being indicative of

an inferior level of health services, it was explained simply by England's older population. If people are expected to die when they get old, then this is certainly the major cause or factor in their death. So why don't they certify them as dying from old age? This would tend to put less blame on the doctors for not avoiding the unavoidable.

Perhaps age-specific death rates would be more accurate in assessing medical care, but would they be a proper assessment of young Moshe's or Mr El Omar's deaths? It could be that because death certificates are registered by law, death statistics become available for easy use. It is more their availability than their appropriateness that ensures their use in evaluating the effectiveness of health services. That is a little like losing some money in a dark part of the street, and, because there is more light elsewhere, looking for it under the light one hundred metres away.

My questions remain unsolved except that I felt a little less guilty about my practice's mortality rate and a little more worried about the misleading reliance by the state on mortality rates as a primary means to assess health services.

So far I have argued that death, mortality rates, etc., process and structure measures, have great drawbacks as tools by which health care is evaluated. I will now argue that the only appropriate tools are 'outcome' measures.

The following series of patients, especially Mrs Pullen and Mrs Roma, demonstrates some immediately-seen benefits in terms of quality of life. In others the improvement takes a little longer, as Mrs Everage and Frank demonstrate. Sometimes the improvement is only in functional abilities. At other times it can be quite tangible and physical.

All the benefits are 'outcomes' or the results of particular treatments. It should be noted that these results, although

easily seen to be beneficial, are not easily measured, a point I will return to later.

Mrs Pullen came in very worried about her one and a half year old son, Jamie. Jamie, who was left handed, had not moved his left arm all afternoon. It hung down by his side as if it was paralysed. Mrs Pullen was in tears fearing he had polio or something terrible. As she used up my tissues, which were one of the most frequently used ‘aids’ in my surgery she gave me her story of pulling Jamie up onto the bus to get home. It was then clear Jamie had a dislocated or ‘pulled elbow’, not uncommon in children.

A small manoeuvre of the elbow and, click! — back into position went the radial head.

‘Here, Jamie, have a jelly bean,’ I said, offering him one near the left side of his body, and he reached and took it with his left hand. Mrs Pullen cried again, but there was a smile underneath. There was no doubt this was a happy outcome.

Mrs Roma presented with her two year old, Angelo. ‘Doctor, it’s terrible! Look at Angelo. He stinks so badly I can’t go near him and it’s getting worse these last three days. What can I do, I can’t bear this’.

Cutting her short, I said, ‘I’d just like to look in his nose,’ for I remembered being taught that if a kid smells so badly, that people can’t go near him, the most usual cause is a foreign object in his nose. I looked, then with a pair of tweezers I removed a piece of rubber sponge that is used for packing fragile objects. Mrs Romer told me they had been packing for a week and young Angelo had obviously stuffed this spongy material right up his nose. I told her to wash him and help him blow his nose and he shouldn’t smell any more. This too was a happy outcome.

Beryl Everage was sixty seven years old and she suffered from very severe abdominal pain which woke her each night at 2.00 a.m., a pretty typical description of ulcer pain. She was treating herself with antacids and anticholinergics but without improvement.

'Last night was shocking! You've got to help me, doc. I can't survive too many more nights like that.'

'Yeah doc, do something,' said Reg, her husband. 'I couldn't stand another night like that. I didn't sleep a wink.'

Her barium meal had only hinted at the presence of an ulcer, so I advised her that it was about time she saw a gastroenterologist and let someone take some photos and have a look at her tummy from the inside. She was soon out of hospital. Gastroscopy had revealed two ulcers. She was treated with Tagamet and large doses of antacids and she improved rapidly. There was no further night pain, Reg was able to sleep soundly as well. Gradually some of the medications were withdrawn and finally a repeat gastroscopy showed that the ulcers had healed. Now Beryl is pain-free and feels much better, but she continues to take her medication. Her present health status is much better than prior to treatment and all three of us, Beryl, Reg and I, are happy with the outcome.

Other patients come, also wanting to restore their health. It was not pain that was worrying Frank.

'Come on in, Frank. You look terrible.'

'I feel it. I'm so short of breath, doc', Frank panted.

A quick examination of his chest reveals fluid on the lungs, identified as congestive cardiac failure and a pleural effusion. His story often or twelve beers a day and almost no food makes a diagnosis of alcoholic cardiomyopathy as the most likely underlying cause. The existence of gout, also brought on by his heavy alcoholic intake, completes his

present story. His shortness of breath is corrected by drugs for heart failure — digoxin and fluid tablets. He is given vitamin B tablets to overcome his malnourishment, with the hope it will have a long-term beneficial effect on the heart, as well as other tablets to prevent his gout. In two days Frank's shortness of breath disappears. His abstention from beer lasts just a few days longer.

'There is no way I'm going to give it up. It's better to be honest with you, doc. I could kid you but that would be crazy. So his breathing and gout are controlled by regular tablets.

The daily list of patients who have improved, albeit in minor ways, continues. Many girls, mainly suffering from cystitis or urninary tract infections complain of running to the toilet every five to ten minutes. 'I feel like I'm bursting, and when I get there I can't pass enough to fill a teaspoon. It's hardly worth the trip.' Young children with severe asthma, unable to get their breath, relieved after an injection or the inhalation of salbutamol. All these patients were in much better health after treatment. Others require hair transplants, some have infected ears, others epilepsy. In all cases the outcome of their treatment, whether a better head of hair, no further ear pain, or a reduction in the number of fits, is obvious and easily recognised as an improvement.

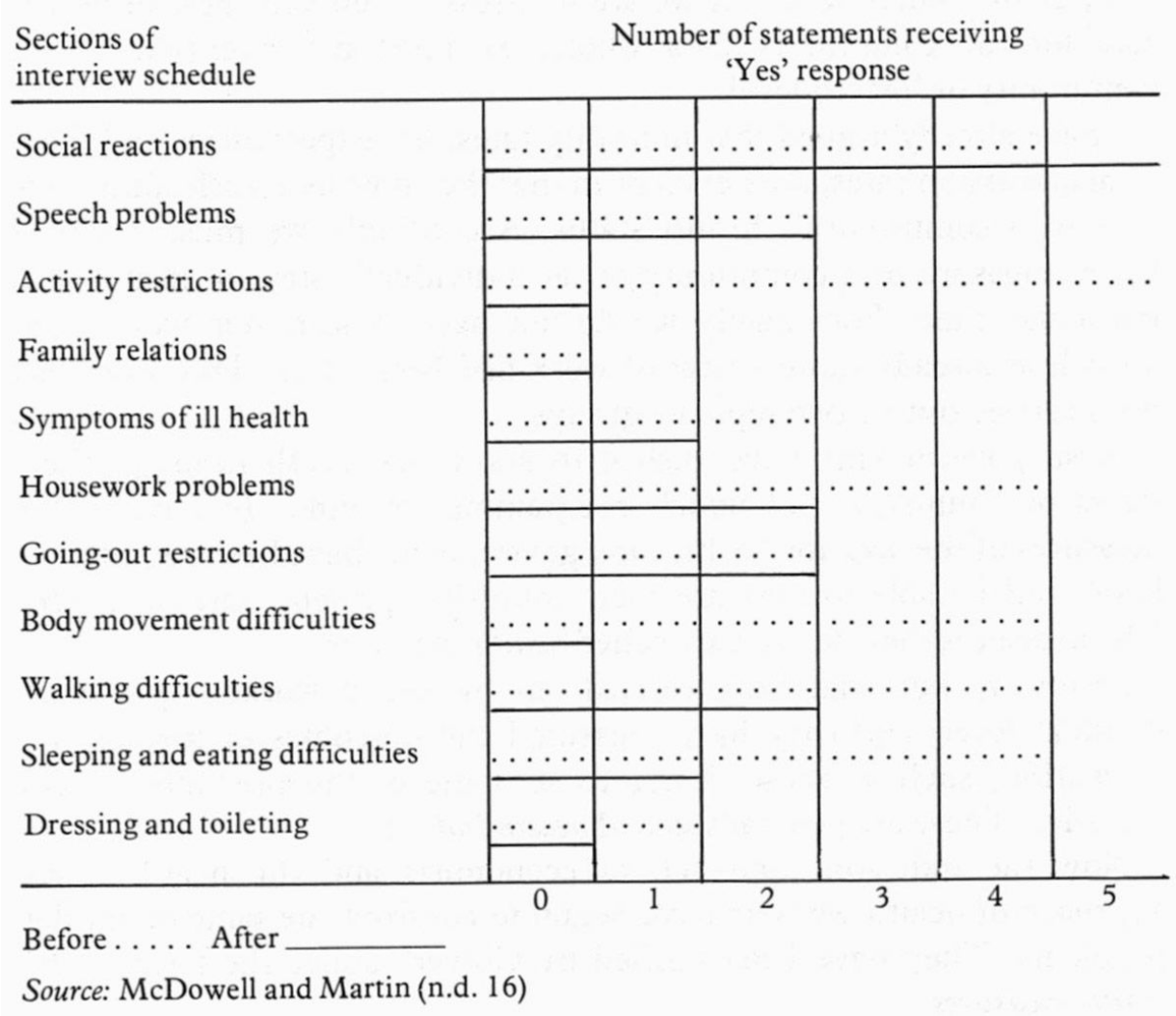
All of these patients seem to have an improvement in health status, that is, after treatment, the outcome is better than their health status before treatment input. But if we are to compare relative benefits and be able to evaluate the effectiveness of our health services, we ought to be able to assess these benefits more accurately.

Here again modern management principles dictate that if we are to manage health services properly, we should be able to *measure* the results of health care by using

numbers or quantities, only then can we initiate management control. We need the greatest possible accuracy, but it should be remembered that these measurements are only an aid or tool to help us make the right decision. An attempt to evaluate more accurately the outcome of a particular form of medical care is described below.

McDowell and Martini' published the results of interviews before and after steroid treatment of patients suffering from Crohn's disease. The patients were presented with a set of statements describing deviations from 'normal' behaviour and asked which of the statements described their current situations. The questionnaire covered twelve aspects of everyday living (excluding work, since the patients were working neither before nor after) with sleeping and eating combined in the same category.

FIGURE (1)
CASE OF CROHN'S DISEASE BEFORE AND AFTER ALTERATION OF MEDICATION



Source: McDowell and Martin (n.d. 16)

As figure (1) reveals, the number of'yes' responses had increased in one dimension, not changed in two, and had fallen in the remainder. Whether or not steroid treatment is regarded as generally beneficial (ignoring longer term benefits and the persistence of the post-treatment health status) clearly depends upon the *relative weighting* given to the deterioration in social reactions relative to the improvements in activity.

This type of assessment, after the relative weightings have been imposed, can be used as one measurement of health status. Similar measures could be derived for the altered, hopefully improved, health status of the boy with

the pulled elbow, the lad with the foreign object in his nose, Mrs Everage and her ulcer problem, Frank and his heart failure, etc.

At the moment I am not suggesting that the measure or health index given in the above example is a particularly accurate one. I am certain it contains many errors and will require definition and upgrading. The important thing to note is that it is an ‘outcome’ measure; it measures the product of medical care. It is not a structure or a process measure.

To date we have been looking mainly at the individual level of health care, or the ‘micro-level’. If we are to assess the effectiveness of health care for the community as a whole, we must pay attention to the community or ‘macro-level’.

I have already argued that mortality rates, life expectancies and, hospital admission rates, are deficient in that they give us a misleading concept of a community’s health status. Accordingly we must devise a better measure of a community or an individual’s state of health at a particular time. Fortunately we do not have to start our work from scratch as already quite a deal of work had been done. This work has been carried out by two separate groups.

First, governments have wished to know the health needs of their states or countries, and which programmes to fund. In looking for measures of the *need* for health care, governments have been required to know and be able to measure their countries’ present state of health. The measures they devised are called *health indicators*.

Secondly, work has been carried out by health workers at the individual level, and they have measured the outcomes of medical intervention, such as those described in some of the previous patient histories. These are generally called *health indexes*.

Now the indicator approach of economists and the health index approach of health workers have begun to confront the same or similar problems. They have been unified by Culyer[3] under the term *health status measures*.

Although a good deal of work has been done, the efforts have concentrated only on some of the dimensions of health I have nominated as important, and others have ignored.

Health status measurement must take into account the four characteristics we have considered important:

1. An individual's complete feeling of well-being.
2. An individual's ability to function in society independently and without undue pain and anxiety.
3. An individual's confidence that he will be comforted in times of distress.
4. An individual's natural life span.

The relative importance we ascribe to each of these factors, in order to produce a comprehensive HSM (health status measure) will involve value judgements.

Value judgements must be made in terms of whether equal weights should be given to each dimension or if in fact we should include all four dimensions. Other value judgements must be made with respect to the mathematical relationship of the dimensions, which Culyer[4] discussed in more detail. An example: if we give certain weights or measurements to each of our dimensions, should they be added together to make a single measure, or kept as multiple measures?

These value judgements, one might argue, detract from the worthiness of the HSM. But this is not correct, for such value judgements are unavoidable.

Assume we have a reasonable HSM: the health of an individual or community can then be defined in terms of

health status. Further we can now define health need as the existence of:

(a) the potential for avoidance of reductions in health status; or
(b) the potential for improvements in health status above the level it would otherwise be

These definitions of ‘health need’ have some special characteristics:

(1) The need for a service is related to what the service may accomplish in terms of the well-being of the patient;
(2) The need is not absolute, and the fact that a potential exists does not imply it must be realised; and
(3) The notion of health status is very heavily endowed with value judgements.

The concept of health need is very important to governments who are looking for measures of the need for health or health care.

It should be noted that governments are already reacting to health needs and their priorities are socially decided and involve value judgements made by government medical officials.

To clarify this discussion let us take an example of some programmes designed to help the elderly. The objectives of such programmes may be defined as social integration (to reduce isolation of the elderly in the community), self-dependence (to preserve identity and dependence of the elderly) and physical well-being.[5]

Which of these three emphases is considered most important will involve value judgements. At present we might say that social integration, self-dependence and

physical well-being of the elderly are all important. This really means we consider they are all of *equal* importance and all three should be the objectives of policy. This decision too emanates from some general community-held beliefs or value judgements. Other dimensions may have been chosen, and whatever the choice, it must be realised that to a certain extent they involve somebody's value judgement.

Let us return to the patient with Crohn's disease in the example of McDowell and Martini. Whether or not the steroid treatment is regarded as beneficial depends upon the relative weights given to the deterioration in social reactions relative to improvements in activity.

It is not the purpose of this book to study in depth these mathematical aids, but the above outline demonstrates that at the moment there does exist expertise in measuring dimensions of health, understood as an individual's ability to function and discussed in depth in Culyer's *Measuring Health*. An example of an outcome HSM questionnaire can be found in the appendix on p. 133.

Summary

This chapter has highlighted the fact that the methods usually used to evaluate the effectiveness of health care have been faulty and misleading. Structure and process statistics and measures, whilst they do have some limited usefulness, are not satisfactory substitutes for outcome measures, the real product and the real test of health care. Neither are mortality statistics self-explanatory, for although death is an outcome, it is always unavoidable and its avoidance is not necessarily the prime objective of health care. The use of mortality figures in isolation has, arbitrarily, given other dimensions of health status the weight of zero in measuring the health of a community. If mortality figures have been used because they are available, then immediate steps should be taken to obtain the other more relevant information, as is already being done in the English Household Survey or the National Health Survey of the United States.

The proper focus of evaluations of health care is its effect on the individual's or community's health status, or a measurement of outcomes. The real tests of any health care system must be the extent to which it improves health status over and above what it would otherwise have been.

Much has been done and much achieved already in devising health status measurements. It remains to successfully *apply* such measurements so we might be able to see the real benefits of health care and continue to use these to help decide the direction of future health policy.

6 The health care process

The manufacture of any item involves a sequence of procedures being performed in order to make the final product. This series of procedures is termed a process and, in this case, a manufacturing process.

Although it is somewhat removed from manufacturing, the health care system aims to produce a final product, which is the highest level of health of the community. Here, as well, a series of procedures or activities is carried out by the health workers in order to create this final product. When viewed by the health administrator as a whole, this sequence of activities, or procedures or services can be grouped together as a process. Here these activities will be called the *health care process*. If the aim is to make the best final product, that is to achieve the highest standard of health, then it is argued that the methods or activities currently being used in the health services are, in terms of achieving the best results, wrongly headed.

Health services are commonly grouped by three different classification criteria. Note that the *same* services are here classified by different methods.

First, health services can be classified according to the type of provider which delivers such services, such as hospital services, health centres, private doctors, and government health departments' services. Often these are divided into two major groups 'individual providers' and 'government health departments'.

Secondly, health services can be classified according to the recipient of the service. Thus we have personal health services which are delivered to the individual person and environment health services which aim to alter or control the environment.

Thirdly, health services can be classified according to the *activities* undertaken by health workers. These also fall into two large groups. Those which have to do with the management of ill health (e.g. diagnostic, curative and supportive activities) and those called health maintenance and improvement activities, (e.g. preventive, protective and pro-motive activities).

Probably because of the way health services have developed, today we find that individual health providers, doctors and hospitals (by provider) offer only personal health services (by recipient) and these services are almost exclusively concerned with the management of ill health (by activity).

Government health departments (provider) deliver mainly environmental health services (recipient) and these are, in the main, health promotion and prevention services (by activity). More simply stated, doctors today only treat individual patients, and the activities they perform are concerned with the management of illness, whilst the opposite is true for government health departments. This is where the problem lies. The wrong providers are offering the wrong services. Most of what the doctor does today is managing ill-health and only a very small part could be considered preventive medicine, and this always to individual patients. He should be doing a very much greater amount of preventive medicine and health promotion activities, often to *groups* of patients. He should also be involved in delivering environmental health services but he is so involved with individual patients that he regards environmental health services as not his concern.

This is my basic hypothesis. I shall examine the methods used today, the sum of these methods being the health care process. It is interesting to note that health services, in terms of the methods used are remarkably similar in advanced capitalist, socialist and communist countries. There are some minor differences, (e.g. polyclinic vs private doctor) but the similarities in *methods* are striking. The method of payment for health services does not have as much influence on the *type* of service offered as some would have us believe. It does however influence the quantities of services delivered but this is the subject of the next chapter.

This chapter is more interested in the *types* of services. Using the type of health provider as our unit of classification, let us analyse the various methods or health activities as they exist today, through a few more patient tales.

Mrs Preston was pregnant for the third time. She was an Aboriginal woman and had decided to come to me, mainly because I was closest to her present home. She came with her mother, Mrs Mater.

'What is the matter?' I asked.

'I don't feel well, doctor.'

'In which way don't you feel well?' I was trying not to lead her into any answers.

'I haven't been feeling too good.'

By this time I had noticed her legs were very swollen, so I desisted from asking questions, and ordered rather than requested her to lie down on the surgery couch. Immediately I examined her legs and put pressure on her lower leg around the knee, my finger left a large deep imprint. She had massive peripheral oedema. On examination I discovered that she was seven months

pregnant and had some heart failure and severe toxaemia of pregnancy.

‘Which hospital are you booked in for delivery?’

‘The Royal Wrongliplaced Womens Hospital.’

‘Don’t you go there for regular antenatal check-ups each month?’

‘Yes, doctor, I should but it is a fair way away and I haven’t been feeling well so I didn’t go for my check-up this month.’

‘You were too sick to see the doctor?’

‘Yes’.

‘Well, really, if you are feeling sick, that is more reason why you should go for your check-up. That is why we get you to go to the outpatient department each month, so they will be able to detect earlier than you yourself, feeling unwell, that something is wrong. If you feel sick then you must go’.

‘Look, sweetheart, at the moment you are not at all well. You have quite a severe toxaemia of pregnancy and I’ll have to send you to hospital immediately.’

‘Look — I can’t go now, doctor. Can I leave it for tomorrow?’

‘No, certainly not. Your require immediate attention if we are to help you and the baby’.

Her mother was able to persuade her to go to hospital immediately and she accompanied her.

I did not hear anything for three weeks until one evening Mrs Mater was standing in the surgery hallway obviously very agitated. She asked me if she could have a word with me.

‘The police contacted me, doctor, and they gave me this telegram’.

I read the telegram: ‘Please contact the Royal Temple of Science Hospital urgently re Mrs Preston.’

‘Didn’t I send her to R.W.W.H.?’ I queried.

‘Yes, doctor, and she had a baby there three days ago by caesarian operation.’

I told Mrs Mater to come in and sit down. She had not rung R.T.S.H. and it was clear that she was not fully understanding everything that was going on. I rang the hospital and spoke to the resident doctor who was responsible for Mrs Preston. She had required an early caesarian section due to the toxaemia of pregnancy which was threatening the baby and herself. After the operation she went into shock, required peritoneal dialysis and had since developed abdominal abscesses. Earlier this day she had been critically ill and had accordingly been transferred by ambulance from the women’s hospital to the intensive care unit of R.T.S.H. which was better equipped and more appropriately staffed to render the specialised medical care her conditions required.

Since she had been in the intensive care ward, her condition had improved a little but the hospital particularly wanted to talk to her mother to find out if she had a past history of allergies and also to inform Mrs Mater of her daughter’s critical condition.

Mrs Mater visited her daughter in hospital and reported back to me two days later. ‘She had tubes going everywhere when I saw her, but the doctors at the hospital said she was a little better and in two days she will be referred back to R.W.W.H. to be with her baby.’

So back again went Mrs Preston. She was discharged some six weeks later, after she had another small operation, a tubal ligation. The doctors had informed her that it was too risky to have further pregnancies, and recommended that she have her tubes tied, to which she had consented.

I did not see Mrs Preston for almost a year as she returned to Brewarrina in the country where most of her people lived. It was only when she came back to the city at

the same time the next year, as was her and her family's habit, that we met again.

'You look well, Mrs Preston.' She was quite a big well-rounded woman. 'A lot better than when I saw you last. What can I do for you today?'

'I want to have another baby, doctor, and at the hospital they told me I would first have to get the operation undone.'

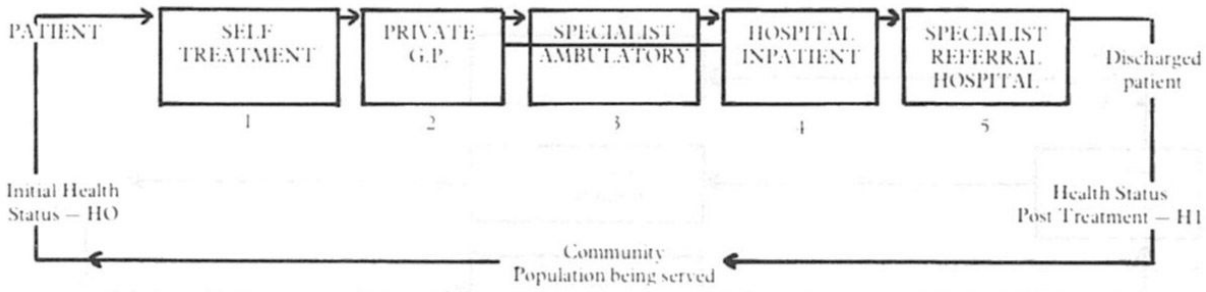
Stunned as I was and try as I did, I could not persuade her to change her mind, I informed her of the risks, the chances of success and asked her to think about it but she was insistent; she wanted a referral to a gynaecologist. She saw the gynaecologist in his private rooms, but I still don't know if she had the operation or fell pregnant again as she has never been back.

I never did involve a social worker or a community nurse to assist in the management of her problems. Her physiological or medical problems were too pressing when she first came, and I did not think of it on her last consultation. I feel certain, however that she would have refused the help of a social worker unless the situation was handled particularly well.

Let us review the 'process' in Mrs Preston's case, to see the way the system worked or how we went about meeting the objective of alleviating her disease and suffering.

First, she decided that she was sick, and thought *rest* would help (1. see diagram — self treatment — in this case wrong treatment, she rested instead of attending her monthly antenatal check). As she became more ill she decided to attend the private doctor of first contact (2. see diagram). She chose her doctor on the basis that he was closest, his surgery was open, and she was a pensioner, he would not charge; in short because I was accessible. On the one occasion when she was very sick she was referred

directly to the hospital (4. see diagram). On the other occasion she was referred directly to a specialist whilst still ambulatory (3. see diagram). She was admitted to hospital (4) but when she required more specialised intensive care she was referred to a larger more specialised hospital (5). This method may be viewed as follows — P1, figure (i)



Had Mrs Preston chosen to attend an aboriginal oracle in her community in the country, the process may have been somewhat different. He may have administered some herbs, she would not have been sent to hospital. The outcome is uncertain, she may have not developed those abdominal abscesses but she might have become sicker from her toxaemia of pregnancy.

This method, P2 would have been:

Figure (ii)

A third method of handling Mrs Preston's illness becomes obvious from looking at her situation after discharge from hospital. She is returning to overcrowded and primitive housing arrangements, her education in health, hygiene and related matters is not particularly high. Everyone, all

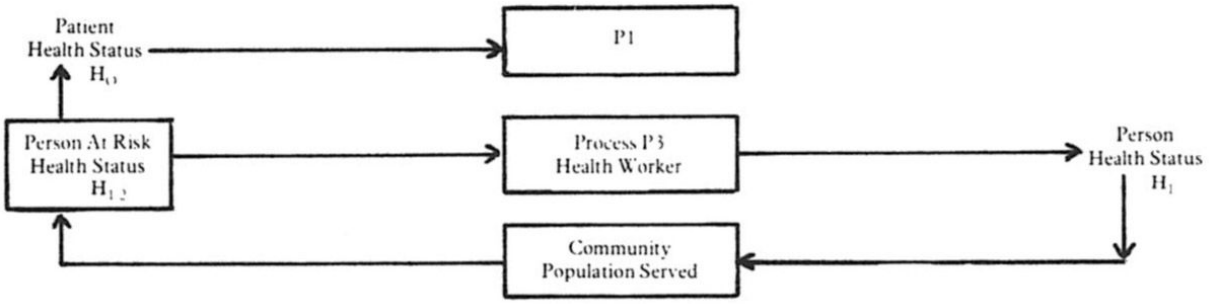
the doctors in the hospital and myself, knows she is very likely to present later with health problems. She is at risk.

We could assign a community social worker or health educator or both to assist her recovery in the home and gently lead into an education and home help programme which would, if effective, reduce the chance of recurrent illnesses. After all, that was one of the major reasons why she had her tubes tied. We may have taken the opportunity of her illness to do some family counselling, educating the family on how to take care of her, at the same time teaching them.

Just as we knew after her discharge that she faced a high risk of illness, so we and those who had seen her in the antenatal clinic knew the same before her admission, for that was not her first hospital admission and it would doubtless not be her last. Realising she was at risk, it would perhaps have been most effective if we had undertaken such a programme before her illness.

In that case, the method P3 would appear:

Figure (iv)



Which of these methods is the best should really be determined by its ability to offer all the patients being processed the highest total health status after having received the services offered.

If in the second method (P2) we substituted a naturopath, now a common type of healer in most Western cultures, for

the oracle and perhaps a different patient, e.g. one with back pain, P2 becomes a much more acceptable alternative process.

Of these three alternatives, the one most likely to be in use, hopefully would be that which has proven the most effective and efficient. However, this is not necessarily so, for the existing system has been hammered out more as a result of tradition, societal needs and the pressures of various interest groups.

Changes in technology, knowledge, and the period when they occurred, as well as society's belief in the value of such technologies, all are more important factors than the criteria of maximal efficacy in determining the organisation of medical structures.

Let us take a further case study from my work as a primary care physician employed by the voluntary health insurance organisation in Israel, situated in a small health centre in Kiryat Shemona. The process there was a little different. I did not have to go to the door to call my next patient into my consulting rooms. There were many patients waiting, sometimes I would have an appointment at the kibbutz clinic in one hour, so I would have to be quick. This is how I managed.

'What is the problem, Mrs Goldman?'

'I've had these terrible headaches now for three weeks.'

A quick check. Her blood pressure was all right and I could find no signs of abnormality. I wrote out three notes: one to have her skull x-rayed; the second a prescription; and the third a note to the social worker to see if she could uncover any social problems. All these notes were addressed to other personnel in the same building, for I worked in a health centre which had a radiographer and visiting radiologist, a pharmacist on site and a social worker, all of whom worked for the same organisation. Whether we could call the group a health team, however, is debatable. The potential was physically there, but attitudes

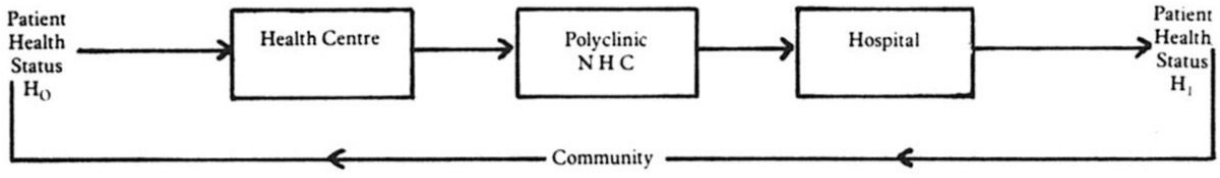
and habits were such that communication and co-ordination were only marginally better than would have been the case if each had been separately located.

Our small health centre with two or three doctors had a close liaison with what could best be described as a neighbourhood health centre serving the whole town and some peripheral centres. The neighbourhood health centre included other diagnostic staff and diagnostic services, such as pathology, and a small laboratory, nursing staff, domiciliary welfare staff, paramedical services, physiotherapy, dietetics, specialised services such as family planning, anti-smoking, school health service, maternal and child welfare, environmental control, health education, ambulance and a transport courier system to a central laboratory, and finally a computer service.

Specialist doctors would visit this neighbourhood health centre on different days of the week. My health centre had a specified population of about 6,000 people whom it was expected to serve, whilst the neighbourhood health service, or polyclinic, served about 40,000 people.

Whether this alternative way of administering primary medical care, of doing so in a more co-ordinated team effort than was the case in my health centre, is better or more appropriate than the single G.P., can only be gauged when the relative improvements in health status of both methods are considered. This method, P4, is similar to PI and is depicted as:

Figure (v)



To repeat, health status is a measure which embodies a person's feeling of well-being, his or her ability to function in the community free of pain and anxiety, and the patient's confidence that comfort and caring will be available in times of distress.

Which of the methods (PI or P4) of primary health care delivery is more effective will depend on the patient's perception of comfort and reassurance being available in each of the two situations, and which proved more effective in increasing the patient's ability to function in the community. Then these two dimensions must be respectively weighted as to their relative importance.

It would seem that the health centre-polyclinic situation might offer a more comprehensive service and accordingly mitigate the need for a patient to be hospitalised, thus increase the patient's ability to function in the community. It may also offer more comfort through social workers and other staff.

Further, it may have more integration and co-operation between different services, with improved accessibility to some services and the advantage of continuity between one service and the next. However, it may have disadvantages in that patients may be shunted from one service to another. It may open the door to government intervention and control and result in a less personalised service.

This issue of a depersonalised service is very important not only in its own right but also because it can result in patient non-compliance in important treatment regimes. This became vividly clear to me when my father, himself a doctor, became seriously ill. He was suffering from lymphosarcoma, a cancer of the lymphatic system, a terminal disease, and he was fully aware of the problems and the limited prognosis. The specialist looking after my father was the leading professor of haematology at the large R.T.S.H., Royal Temple of Science Hospital, where he had his rooms. It was most convenient for him to see my

father at his rooms in R.T.S.H., outpatient department. Always my father had to wait (and how he hated to wait!) in that large cold room devoid of atmosphere. Although he felt confident in the specialist he almost left his care as he felt so ill at ease having to wait in the hospital outpatient department. Health centres have a tendency towards that cold uncaring atmosphere. It is regrettable if they develop such coldness. The greater the bureaucracy, the greater the risk of a more impersonal environment and resultant loss of reassurance for the patient.

Although there are important differences between the health centre and the private GP, it should be noted that in both cases doctors were performing the task of managing ill-health in *individual* patients.

To date, we have discussed four different ways that are used today to reach our goal. There are many other methods in use, so allow me to take you back again to my practice for some further case studies which illustrate two other methods of health care.

As you might have realised, my practice was situated in an area of Sydney where alcoholism was a common problem. Strangely, whenever I think back on some of these patients, it is often with warmth and very positive feelings, as some of them were colourful characters. Two of these patients I would like to discuss here.

One was Mabel Babblon. She had lived in the area for a long time, and although she was about fifty years old, she had found a boyfriend in a suburb ten miles away and moved there to live with him. Her drinking pals nevertheless were in her old suburb, as was her doctor. Mabel had a problem sleeping in, so on many mornings she would catch the earliest train back to my district. As it was fairly cold at that time of morning, and too early even for the early opener, she would knock on the surgery door,

yelling out in her broad Australian accent, ‘Com’ on, Ed, gitup wilya’.

At that stage we were living above the surgery and Mia, my wife, could not believe that it was not our baby who woke her, but ‘Mabel the mouth’. Once in the waiting room, Mabel was still unable to control her bellicose voice. She harassed me from bedroom to bathroom, from shave to shower, and when I finally appeared at 7.00 a.m., she would holler, ‘Gee, Ed, it tookya so long I’d expect ya to look better than that.’

Mabel’s stomach ulcer (caused by excessive drinking) had healed for the third time, this time with excessive scarring narrowing the end of her stomach into a pyloric stenosis, which would not allow the passage of anything but liquid food. She had refused hospital admission several times, but finally when she became so sick that she vomited everything, she had the necessary operation and then improved for a little while. Her drinking continued unabated. Soon Mabel and her defacto, who was an equally capable drinker, found themselves evicted from their place in the suburbs and resettled in a damp, cold residential room in the inner city area.

One evening, while quite drunk in her room at home, she fell onto her kerosene heater and was unable to get up. She suffered severe burns to thirty to thirty five per cent of her body. Again she refused hospital admission. ‘This time there ain’t no way you gonna get me in’.

Her burns required daily dressings. Her room was putrid, the stench was horrific, and Mabel even more aggressive than usual. The social worker, community nurse and home help all said she required hospital admission and it would be irresponsible to look after her in her present environment. It was only a very dedicated order of nuns — the Brown Sisters — who were willing to attend her.

Everyday they came, despite the smell, the filth, the empty wine and beer bottles, the damp carpet. They

disinfected the communal bath so she could wash, they listened to her abuse and swearing for three hours each day for four weeks, they undressed and washed and dressed her burns until they had healed sufficiently to allow her to look after herself.

Her lifestyle, however, did not change. The next time she fell, some six months later, drunk on the street, she had an intracranial haemorrhage and was dead on arrival at hospital. She had always said, presciently, that ‘the only way you’ll get me into hospital again will be if I die first’.

Roman Plonka was a seventy two year old Polish man. He shared a small room, a backyard fibreglass addition to a house near my surgery. He had multiple problems, all caused by alcoholism: cirrhosis of the liver, peripheral neuropathy, alcoholic myopathy, hypertriglyceridemaia, etc. He was the type of patient who gets invited to attend hospital for medical students’ examination. He had all the complications of excessive alcohol consumption. However, he was suffering from a bout of bronchitis when I first called at his home, and found him entertaining four to five guests. Lying directly on the bare table was a large whole stale fish, which was to be prepared for their meal. I was never partial to stale fish smells, and this was no exception, but my hesitancy was overcome by Roman’s warm-hearted welcome.

‘Sit down, sit down. Pleased to see you’.

He was a poor, old man, but he had charisma, reminding me of one of my favourite fictional characters, Zorba the Greek. He always had at least four guests in his small room and they each usually brought with them a flagon of wine, and they would sit, chat and laugh, enjoying his company. His popularity was taking its toll, for unlike most people on social security benefits, he had friends who would keep his

stocks of alcohol full. He now required urgent drying out, but he too refused hospitalisation.

Finally I managed to place him in a nursing home. His friends were not told his whereabouts so they were unable to bring him wine. After two months he looked physically much better; the lack of alcohol and the proper diet had facilitated an enormous improvement. I was pleased.

'How are you, Roman?' I asked cheerfully.

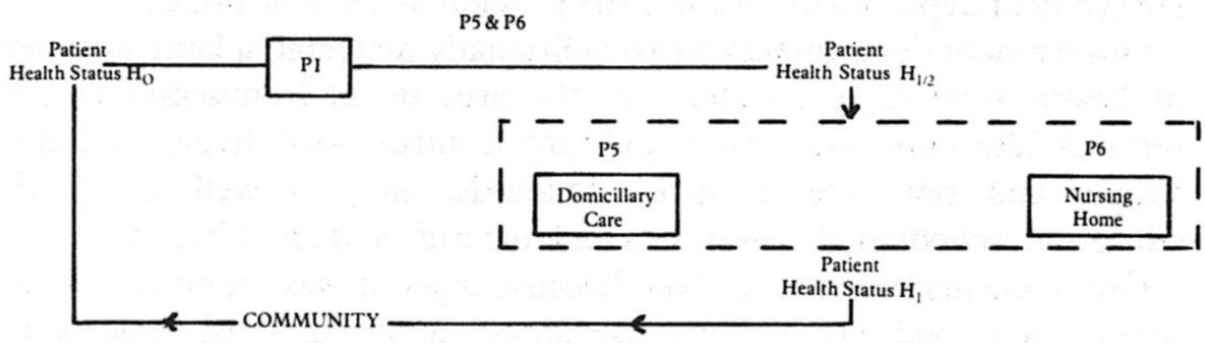
'Miserable, doctor. I hate it here. Please let me go home'.

I prolonged his stay one further week, after which he returned home to his old habits, happy and unhealthy.

I have discussed these two patients to introduce two other provider facilities of the health care process, domiciliary care and nursing homes, as examples of other (more peripheral) parts of the health care system. Further examples would be rehabilitation units, physiotherapy clinics, etc.

So, P5 and P6, method 5 and method 6, may look like this:

Figure (vi)



Some form of domiciliary health care is available in most systems. It serves to keep the patient closer to the community and that ought to increase their health status according to our definition, for our aim is to keep people

functioning in the community. From this point of view domiciliary care is a desirable method as it is in line with our objective.

The nursing home is a facility that offers some basic support to those unable properly to care for themselves. Unlike Roman, most patients stay for a number of years. Like Roman, most are miserable, for although physical and nutritional support is available, there is little caring and reasssurance compared to the reassurance of a family home and surrounding friends and family. These nursing homes are less prevalent in some Mediterranean societies. Such societies tend to care for their aged in the family home. The prevalence of nursing homes in 'advanced' countries reflects the underlying assumption that health is achieved when all the blood tests are normal. So these people are kept physiologically healthy. However, if we apply our newer, broader definition of health as the ability to function within the community, it is clear that to remain in and around the bed all day could not be considered functioning. Moreover, removal from roles as mothers, grandmothers, cooks, fathers, grandfathers and so on, shows that to be in a nursing home is to be effectively taken out of the community.

If it is felt that this present-day method of caring for the aged lowers the health status of the community, then it ought to be changed. To achieve such a change requires the alteration of social and cultural values and attitudes. Today, only a limited number of health professionals have the skills to achieve this, and therefore more providers must learn these techniques so this part of the health care process can be redirected.

Another important provider of health care services in almost all countries is the government health department.

In Australia and a good deal of the Western world, the health care process has grown from the traditional basis of a private independent doctor. Where the private system

cannot properly fill the role, government departments become the provider of such health care.

Government departments have traditionally delivered a large number of health services, particularly in the area of environmental health services like noise and other pollution control, food hygiene, water supply and sewerage, housing standards, etc., as well as health education, school medical services and maternal and child health.

Governments became involved because when it was found that dirty water, dirty food, etc. could cause illness, as it was most sensible to ensure the water, food or environment as a whole was safe. Since this required large resources, the government was the obvious body to provide these necessary services.

So food hygiene would be the responsibility of a health inspector or health surveyor employed by the State Health Department. He would make routine inspections of food manufacturers' and food retailers' premises, or he might respond to complaints and inspect premises which were the subject of the complaints.

The health department or government saw a need for supplying information to the public on particular topics, such as potential epidemics, etc. and these requirements developed into departments of health education. Now they will respond to give information on health matters to those who seek it, as well as provide resource personnel to deliver lectures, provide films, booklets and leaflets on certain topics. They will also conduct health advertising campaigns in the mass media from time to time.

As part of the health care process, therefore, we have another body or facility acting as a provider. It has little relationship to the doctors and is only loosely connected to the other providers of health care.

Thus the activities provided by government health departments include various environmental services which aim to identify and screen groups at risk. Services include

the school health services, maternal and child health, as well as health education activities to the public.

Here, unlike in the previous methods depicted in figures P1-P4, the provider does not try to change the individual patient's health status, but the attention is directed toward the community in which that patient lives. The community is made up by, amongst other factors, the physical environment, the social environment, the social and cultural values which exist. These factors have an impact on the patient and can be seen as factors in determining the individual patient's health status. Accordingly by altering the social environment, the physical environment (e.g. killing mosquitos), purifying food, supervising factories, the government health department has in turn altered the health status of the individual members of this community.

The effectiveness of these methods of health care process can only be gauged from the overall improvement of the community's health status. In its role in the health care field, government undertook new roles at times when the need developed. For example, it was realised that one particular group at risk and which could be helped by government was new mothers and their babies. Accordingly, a special department of maternal and child health with clinics throughout the state was set up by government to deal specifically with their education and the preventive aspects of that specific health problem. As progress was made in that area, the dissociation of maternal and child health from other family illness itself became a problem. At that time it was more important to co-ordinate all the services that one patient or one family was receiving. So responsibility for maternal and child health was reintegrated with other health services into a more comprehensive health service.

At this stage it is worth noting that in method P3 above, the GP had identified an at risk group, while in maternal

and child health the government also identified an at risk group. Both were to provide or initiate some form of service for these particular groups. If we redepict all the different processes we have mentioned as examples of the health care system it can be seen how some of the different methods are directed at the same members of the community. So we have some overlap. It can also be seen that health needs and requirements for health services will depend on the amount of unhealthy behaviour, or unhealthy social values, or the number of people at risk in the community. That is, the demographic and social characteristics of the community need to be known in order to correctly determine what sort of health services (methods) should be provided.

The existence of this close relationship between the information required from the community and the provision of health services further emphasised the need to integrate and co-ordinate all of a community's health services. Again, the appropriate bodies to assist in such co-ordination were the government health departments. In order to achieve maximum co-ordination and integration in any one community, the health departments became organised on a regional or community basis. Thus all the different providers we have spoken about, and the others which make up the health care system, were loosely co-ordinated by the government. In Australia, the government's agent for co-ordinating such activities for a particular region is the regional health office under the guidance of a regional director.

However, in Australia, many of the providers were private doctors, chemists, hospitals, etc., and at best these could only be loosely coordinated by government. The need to further integrate all health services resulted in attempts in various countries to introduce a national health service. The best example of such a service is England.

In the British national health scheme, almost all health services are provided by the government in order to achieve co-ordination and continuity of health care. The present situation in England is that the government is responsible for the national health service through the Department of Health & Social Security. The country is then divided into fourteen regional health authorities, which in turn are subdivided into ninety area health authorities which are coterminus with the local government authorities. Both the regional and area health authorities have professional advisory committees which allow the professions, particularly doctors, to offer advice. The large area health authorities are broken down into about 200 comprehensive health districts which are advised by a district medical committee (mainly doctors) and a community health council (mainly consumers). Since 1973 these authorities have exercised responsibility for all health services, including doctors, and hospitals which had been separately accountable to the government between 1948 and 1973. It is argued that such organisation facilitates greater co-ordination and integration of health services, especially when compared to the Australian situation, where doctors' services in particular are only very loosely integrated with the regional health authority, if at all.

Although this system does offer some advantages in co-ordination, it has failed to date to rectify the real problem. The real problem is that the main providers are performing the wrong services. So doctors and hospitals continue to provide personal health services, mainly the management of ill-health, and governments continue to provide environmental health services and health maintenance services. That these providers use such methods is not because this is the ideal pattern of health care delivery, but rather because the system has evolved through historical development and cultural traditions. As new knowledge and new technologies were discovered, new roles

developed and the organisation of health care followed suit. The way in which such reorganisation took place also took into account the perspectives of key interest groups, such as doctors. Doctors have adapted to changing conditions and new technology in terms of their own needs and professional sub-culture. The doctors' perspective is to deliver the highest standard of medical care in his role, which to date has been primarily concerned with human biology, and the maximisation of his personal and professional satisfaction.

Technology and knowledge continue to change. The importance of the community in determining a patient's health, and the realisation that the aim of health care is to enable the patient to continue to function in the community, have recently led to a shift from hospital care towards community health services. In general, most of the services being offered have been personal health services with emphasis on the supportive and restorative services. They have remained services to *individual* patients, and have maintained the emphasis on the management of ill-health.

It has only recently been clearly pointed out that the reduction in the incidence of disease has been achieved by better living conditions and public health measures, rather than the traditional forms of management of ill-health. If this is the case, then that part of the process known as *environmental control* ought to be more systematically encouraged.

If we are to really improve the world's health, we must encourage the methods which will increase each community's health status. The astute health administrator will be aware that the type of health service will ultimately be determined by the groups which control the organisation and structure of medical work. These powerful groups must be given an interest in furthering these new activities. Two of the most powerful groups are hospitals

and doctors, and they must be given a bigger role in environmental and preventive health care.

Although well co-ordinated, the English national health service has not, so far, vastly changed the activities performed by doctors and hospitals. Failure to do this has resulted in a well-integrated system having less impact than had been expected on general community health status levels.

It is well understood that doctors are an important interest group, and this is as it should be. Any change in the process of health care delivery, to be effective, must involve doctors. It is suggested here, in line with the earlier part of this chapter, that some of the activities carried out by government health departments would be more appropriately carried out by doctors, particularly GPs.

The first and most important change in the role of the doctor would be his transformation into a teacher. No longer should his practice merely consist in working in a one-to-one relationship. The new doctor will conduct classes in various types of health education activities. Initially the classes would be of small groups, probably taken from his practice. Topics to be discussed would include, for example, what occurs during a heart attack, its causes and limitations of its treatment, common causes of death in thirty year olds, home accidents, increasing self-awareness, sexual relations, etc. The list is endless and the patients would achieve health through understanding the mechanisms of their bodies, and eventually improve their health habits. Naturally the doctors should be paid for such services under whatever scheme exists for payment.

Some may argue that there remains no proof that health education actually works. This extreme argument could equally apply to any form of education, and must be rejected. The doctors would employ the latest in educational techniques, experiential learning, audio-visual

aids, resource personnel, etc. and future medical education would necessarily include some teaching skills.

If we look at our model of the health care process, or think of Mrs Preston, we can see the importance and appropriateness of the family doctor becoming a teacher. In this way he will be able to have some impact on sick behaviour, unhealthy social values, and on illness-inducing cultural norms.

Secondly, the doctor should become the counsellor to the family of a patient, a relationship which already exists to some degree. Often the illness affects the family, and its support assists the patient. What I am suggesting is that such counselling should be recognised as a separate service and the doctor remunerated accordingly.

Thirdly, the doctor would have to pay a role as an adviser, inspector, etc. of living standards, hygiene, factories and work sites in the area of his practice. He should voluntarily, but not without payment, sit on committees responsible for local government decisions, local councils, welfare agencies of other local committees with environmental responsibilities affecting health. Many hospitals, particularly large public or health department hospitals, now pay doctors on a sessional basis for hospital medical services. It would seem reasonable that the same or similar government authority could pay doctors for similar public duties on a sessional basis.

Summary

I have looked at what I call the health care process. This is a series of activities that is performed in order to make the individual patient, or the community, more healthy. I suggested that there were two principal ways of classifying the providers of such health services. One was the individual providers (doctors and hospitals) and the second, government health departments. We then looked at the activities performed by the individual providers today and took, as case studies, the case of Mrs Preston, and saw the series of activities that were performed by the individual providers; this was compared to a slightly different series of activities that were performed in the case of Mrs Goldman in the health services of Israel. These were slightly different in format, one service provided more by a private individual doctor — which had more emphasis on privacy and comfort needs, whilst the other polyclinic style of care seemed to place more emphasis on providing the right clinical service in order to achieve the best physical result in terms of the patient's ability to function within the community. Although these differences of emphases existed, the point I was making was that essentially, both were providing the same treatment of ill patients and this service was delivered to individual patients. We looked at other activities of individual providers, such as the community home services and the nursing home services and again made the point that although one of these activities did place more emphasis on keeping the person functioning in the community, the other, in fact, withdrew the patient from the community. But again, our point was that these were services delivered to ill patients on an individual basis. I then turned my attention to the services provided by government health departments and here, by first looking at the Australian model, one could see that these government departments tended to provide more

preventive and promotive health services and they were usually directed at groups of patients or to the environment itself. That there was some degree of overlap between the work done by the government health departments and the individual providers, led administrators in England to realise that the system should be integrated and they set up the national health service, which I have briefly described. The point was made here, however, that although this may have allowed for greater co-ordination and co-operation, essentially the government departments continue to provide the preventive and promotional health services to the environment or to groups of patients, whilst the individual providers continue to provide the services involved in managing ill health, to individual patients. This is the basic error in the health care process and the point of the chapter has been to demonstrate that for real change to be achieved and real improvement in health status to result, it is the individual providers who must begin to provide more, if not most, of the preventive and promotive health services and not to individual patients only, but to groups of patients and to the environment.

Thereafter, I briefly mentioned some ways in which these changes could, and should, be implemented.

Changes to the health care process in the past have been restricted by the assumption that the family doctor’s role is to deliver health services to individual patients, and these primarily in the category of the management of ill-health. It has been demonstrated clearly that these services can be classified in three different ways. A multitude of reasons exists for why the family doctor should deliver health services directly to the environment, both social and physical, as well as being keenly involved in health promotion, protection and prevention, such as health education, community health standards, occupational health, etc.

Such activities, arrangements and organisation would start to give meaning to that emerging organisation called the Health Maintenance Organization, or HMO, as within the scope of his new role the doctor and the health team would be able to help people maintain and improve their health. Such a change in role will also permit other health professionals to change their roles, giving nurses, for example more scope to manage some areas of ill-health, and it should also create a better informed consumer, more able to practise appropriate self-treatment and more likely to understandingly comply with prescribed treatment regimes.

To criticise doctors, to accuse them of 'patientisation of the population',[1] is not helpful if their role is restricted only to the management of ill-health. I acknowledge that such a dramatic change in the role of the doctor will cause many ethical and legal problems. These problems must be diligently faced, especially the unforeseen consequences of such changes, and they must be introduced slowly having respect for all parties with vested interests.

The methods of health care delivery have been dealt with here without consideration of the financing of the health care system. This omission is purposeful for the next chapter will deal with that question. Costs have also been omitted in order to highlight the fact that all modern societies, communist, capitalist, socialist, have processes which consist in the main of similar technologies, structures, etc. independent of their differing modes of finance. To achieve changes in health status, it is the methods that must be changed and the mode of finance is only a tool in such changes.

The changes in methods mentioned here are appropriate for today, but newer and different methods may be required in ten or twenty years time. Accordingly, we must continue to measure improvement in health status, so that we can

constantly improve our health care system and constantly introduce the more effective and efficient methods of health care.

7 *Financing health care and its problems*

In the previous chapter I examined various methods which might be introduced with great benefit to the health care system. An important factor in deciding which method is employed in a particular situation is the method by which health care is financed. The providers of health services, after all, are people. They are encouraged to work by many personal motives other than the impersonal goal of improving the health of the nation.

We must therefore press the right button, so to speak, to get the providers of health care to support the right campaign. We must also guard against another problem: the way they are paid for their services can cause the wrong services to be supplied.

A good general rule is that the chosen method of financing health care should be the one which encourages the maximum health status for the entire community. The key decision which has to be made when setting up a health system, however, is: how shall the health providers be *paid* for the services rendered? Many politicians and health administrators wrongly believe that the key decision is whether the *patient* should pay from his own pocket or not. Although I can understand their concern in this regard, and conceive it is important that no one should be faced with financial barriers to health care in times of need, this issue remains peripheral for in all the Western countries, it

is accepted that either insurance or the government will pay for most of the patients' health costs.

Basically, there are two different systems of payment to providers of health service:

1 *Fee for service* In this system, the provider receives a payment for each service or for a group of services. The payment may be effected by an insurance agency (government or private) on behalf of the patient, or directly by the patient to the doctor, hospital or pharmacy, as the case may be.

2 *Salaried or capitation system* (Sometimes referred to as prepaid health system) In this scheme, payments are made at fixed rates to the provider, and the payment is calculated by 'population base'; that is, per capita or by weekly salary. The provider thus receives an income regardless of whether or not he provides a service.

There are several variations in both systems. For example, in System 1, there may be no health insurer, or the government itself might be the insurer or, a private insurer might pay the provider.

In System 2, the government might see fit to pay salaries to the providers. The best example of this is of course the British national health service. Or another example of a salaried or capitation system, is the Health Maintenance Organisation. In such private insurance organisations such as the Kaiser Permanente Medical Foundation, the organisation guarantees its clients to provide services, but the doctors are paid fixed weekly salaries.

A country may employ a mixed system. However, it is important to ascertain whether a system is *primarily* System 1, (Fee for Service) or System 2, (Salaried/Capitation).

Before we examine more closely the two types of systems in operation, it must be pointed out that in economic terms, health is a most unusual product. Health incorporates economic characteristics which distinguish it from other

products. The special characteristics of health should be surveyed closely before we determine which is the best method to pay the providers of health care, and thus decide how health care should be financed.

Special characteristics of health as an economic product:

1 Any individual may fall sick unpredictably. Further, he may not be able to work, and thereby loses his income and ability to pay for the health care he needs. *Note* It is possible to predict rates of illnesses for whole communities from past experiences, but for an individual the chances of illness cannot be so readily predicted.

2 If a person immunises himself, he not only benefits himself, but immediately also enhances the community's protection. Economists explain that through a private purchase of health care the community will benefit. They call this a spillover effect.

3 The sick person is regarded as having a need and most people feel it is a person's basic right to receive medical care regardless of whether he can pay for it or not.

4 Most patients or consumers of health services know very little about medicine and rely on the supplier even more so then they do when compared to other items they are likely to buy.

5 Economists point out that medicine is unusual as a product for it has a mixture of what they call consumption and investment elements (most products are either one or the other).

6 Health workers belong to the helping profession and they are supposed to work for non-profit motives to some degree.

7 A patient often unknowingly is buying a joint product of medical and educational services. (For example, he may help to pay for the education of medical students if admitted to a teaching hospital).

8 Many people feel that if they leave the doctor without a prescription, they have been deprived or even cheated of

the modern medical care they deserve. They do not see this as a different (and perhaps better) form of treatment.

As a result of these characteristics, governments and health insurers have intervened to assist the patient. A large part, usually at least seventy per cent, of health care costs is paid by government or insurers. The consequence is a most unusual demand-supply exchange. Because the patient does not understand medicine, the demand for x-rays, blood tests, etc. is in the hands of the physician, and as the price barrier does not exist, the doctor has full freedom to determine the extent of the demand, and then often supplies the service he himself has demanded.

Consequently, we can see that health care purchases do not fit into the normal economic theory of supply and demand: that the sick person is willing to spend *unlimited* sums of money in the hope that health care might help, and does not apply rational economic criteria, exacerbates this anomalous economic situation.

Bearing in mind that health is such an unusual product, let us review the method of paying the doctor operative in Australia in the early 1980s before the introduction of Medicare in February 1984; and a little later we will look at the changes in the system after the introduction of Medicare as illustrated by the following examples again taken from my own patients.

‘This is your first time here, Mr Highton. What can I do for you?’

‘I’m just down from Brisbance, doctor. I’m on a ship and I’m having trouble sleeping. My doctor back home gives me seconal capsules. I take one capsule and I sleep like a baby.’

‘I would like to help you, Mr High ton, but seconal is a barbiturate, an addictive drug, and I wouldn’t be willing to prescribe an addictive drug for you’.

‘My own doctor prescribes it for me. It’s only for while I’m down here, just this one occasion. I truly can’t sleep.’

‘Look, Mr Highton I believe you have a drug habit and I feel it would be more honest of you to face it. I’m not necessarily saying it’s a problem. That’s your decision. But I feel you should be honest with yourself and with me.’

The conversation continues for some five minutes along similar lines. Finally Mr Highton says, ‘OK, if I say I’ve got a drug habit will you give me the seconal?’

‘No’.

‘Well, what will you give me to help me sleep?’

‘Nothing addictive, so I’ll be surprised if you accept it’.

Mr Highton became belligerent. ‘Then, if you won’t give me the capsules I want, can I have the $ 13.60 back that I paid to your girl?’

‘No, you paid for my professional advice, and I have given you what I consider is my best professional advice. I understand you’re angry but I’m not willing to change my mind’.

‘So I paid $13.60 to you and you don’t believe what I say! You treat me as if I can’t make my own decisions, and then you won’t refund me my money’.

‘You will be able to claim some of that, or all of that money back from your health insurance fund’.

‘Thanks for nothing’, yells Mr Highton, and as he passes the waiting room, he adds, ‘I won’t be going back to that doctor! He ought to refund me my money’.

I quickly move on to see other patients.

‘Mr Verten, tell me, how is your back today?’

‘It’s still painful, doctor, and I have trouble sleeping. Can I have some more of those pink tablets?’

‘They are very strong. You must not take them every day’.

‘I won’t doctor, only for very severe pain. Maybe once or twice a month’.

‘They are not on the ‘free list’ of government subsidised tablets and as such are very expensive’.

‘I know doctor, but the insurance company pays all my medical bills. They are obliged to, that is what the workers compensation court judge said’.

‘On that subject, Mr Verten, we have been sending your bills to the workers compensation insurance company with repeated reminder statements each month. Finally we rang them and they said you were responsible for payment of this outstanding amount of $71.20’.

‘No, doctor, they must pay all my bills’.

‘Yes, but these were incurred *before* the court case and you are responsible for these ones. I am forced to give them to you and you can argue with the company. I’m sorry, but someone will eventually have to pay and I don’t mind who it is. By the way, these are over one year old. Anyway, let us return to your back problem. I’ll give you these tablets but please use them with care’.

‘OK. Goodbye’.

‘Lorraine Good,’ I called out her name in the waiting room, having picked up the twenty three year old girl’s file. Sitting down I said, ‘Hi, you look well. What’s this I see crossed out on your file? You’ve stopped your health insurance? Don’t you belong to any health fund at the moment?’

‘No, it was getting so expensive at five dollars or more a week. I’m only twenty three and pretty healthy and I haven’t had to come for six months up till now so it’s been worth it’.

‘What brings you here today?’

‘It’s my foot, doctor. It *is* painful. I don’t remember injuring it, but it’s very painful to walk on’.

‘Have you been doing a lot of walking lately?’

‘I sure have. We just bought our new house and we’ve been moving our stuff from my sister’s place up the road.’

Her left foot was swollen over the dorsum, and extremely tender over the fourth metatarsal bone. ‘You may have what we call a ‘stress fracture’, Lorraine. It is common in the army amongst soldiers marching. One can fracture a bone just by a lot of marching. Some poor soldiers were called malingerers and given detentions and other disciplinary actions as the officers forced them to march on. I’m afraid you are going to require an x-ray, and that will cost you, unless you are happy to be classified as socially disadvantaged and the radiologist will bill it directly to the federal health department.

‘That doesn’t worry me.’

‘OK, here’s a script for some cream and an elastic bandage sister will apply for you. Give me a ring in the morning about the x-ray results.’

A few days later it was Mrs Blackett who came in. ‘I’ve been up north for two years, but now I’m back here to stay so you’re stuck with me. I am a little concerned that while I was away I let my health insurance go, so at the moment I’m not insured. I’ve just started to work down here again. What do you think I should do, doctor?’

‘Well, Mrs Blackett, that depends on your problem. How is your daughter by the way?’

‘You still prefer the young ones, hey doctor? To tell you the truth, she isn’t terrific. She is having trouble with her periods but I can’t get her up here to see you. My problem is, you see, this lump that comes up in my stomach after I had the operation on my ulcer. You know, you saw it before,

said it was some form of hernia. Well, it's bigger and it hurts from time to time and I want to get rid of it.'

'That's right, I remember. Let me have a look. Yes, it's an incisional hernia. Now, you could have it operated as a public patient in a government hospital but you'd have to wait quite a while, for try as I might, I won't be able to convince anybody that this is an emergency. Should you want it operated earlier, you will have to join a health fund to cover your hospitalisation costs which will be about seventy five dollars a day minimum, plus operating theatre fees, and then there will also be the surgeon and the anaesthetist's fees. There is a two month waiting period before you can have the operation and be covered by insurance, and then you can have the operation in a private part of a public hospital or in a private hospital. Alternatively, if you elect not to insure and go into a public hospital, you may have your own surgeon or your surgeon may be in the operating theatre supervising the surgical registrar (trainee surgeon) who also is a competent surgeon doing the operation.

'I'll join up immediately, doctor. Can I see the surgeon straight away?'

'OK, I'll give you a referral and, although I can suggest to him that you are not well ofFand have not worked for two years, it is his decision to classify you as disadvantaged and thereby accept direct payment from the health department. He may not be willing to do that and you may be required to pay his consultation fee. You may require some tests before they operate, because you're almost fifty years of age. They may want to have a chest x-ray, cardiograph, blood group and blood level before they operate. These also cost, so it might be best to wait two months before you have the tests so that the health insurance will cover the cost of most of them. By the way, Dr Smith is the specialist surgeon I'll send you to, unless you had someone else in

mind. He is not such an easy man to talk to but he is an excellent surgeon.'

After these patients, there were quite a few pensioner patients, people receiving social security, who in Australia are also covered by the government health department for the costs of medical services, hospital services and a large range of pharmaceuticals.

The Australian government gives the doctor the option of billing the government direct or of giving the pensioner patient a bill, based on a list or schedule of common fees for specified items of service. The patient will then receive eighty five per cent of that back from the government via the agency of health insurance fund offices. Most doctors happily accept the eighty five per cent fee as full payment. In the alternative the doctor has the pensioner patient sign a voucher form, then sends this form with all relevant details in to the health department. Forms are sent in batches of fifty and the doctor is paid directly by the department in bulk for fifty patients.

There are problems and many inequities in the system.

In February 1984, the Australian government introduced its universal health insurance system, Medicare. Some of the changes, in the above patient tales that have taken place since Medicare would include:

First, Lorraine Good, could no longer elect *not* to have health insurance, she would be compulsorily insured, nor could Mrs Blackett have let her insurance lapse. Each patient, now like Mr Highton could only get eighty five per cent back of the $13.60 he paid from his health insurance, as insurance for 100 per cent of the common fee would no longer be possible. The doctor could now decide if he wished to bill the patient for the medical services, or allow

each patient to sign a voucher form that signifies he has received the service and the doctor could bill the government or Medicare directly for a batch of fifty such services, independent of whether the patient was a pensioner, or a wealthy citizen, without requiring a decision to be made by anyone that the patient was disadvantaged or not. Now *all* of the *medical* services would be insured by one only government health insurance fund. The patient would still have the right to take extra health insurance cover which would allow him private hospital, physiotherapy, dental and other insurance, so in the case of Mrs Blackett in order to get her non-urgent operation performed quickly in a private hospital, she would still require extra private health insurance as was the case before the introduction of Medicare.

It can be seen that the introduction of Medicare, did make the health insurance system a little simpler, it did overcome some of the inequities of the earlier system but the system remains to be a ‘fee for service’ system or System 1.

By allowing for the providers to directly bill the government for all services, and by levying *all* patients, the system moves further away from the supply and demand laws totally negating the ‘price’ factor in the demand for health services, yet it is these very basic economic laws on which a fee for service system must be based.

The Australian system raises many questions which may involve value judgements. Without getting too involved in the value judgements, we might describe the system as one of private practice, essentially based on the theory of supply and demand, with some modifications to ensure that, where necessary, financial barriers need not interfere with the delivery of health services (despite this being a breach of the theory of supply and demand) as everyone would have the payments for basic health services

guaranteed by the government. But it is clearly a System 1 fee for service system.

The advantages of such a private system of health care finance include its efficiency. People work hard and well on an incentive basis, and it relieves government from having to provide such services. In general it stimulates a more humanistic and personal approach, as the doctor or the hospital are dependent for their income on the good will of each and every patient. It offers freedom of choice and would be more responsive than government to changes in demand.

It has disadvantages as well. There is duplication of overheads, the service is neither co-ordinated nor controlled, and it tends to concentrate in high profit areas. It is often *anti-therapeutic*, as when unnecessary services cause ill-health, the opposite of its original aim. It also tends to be costly. It does not take into consideration the unique characteristics of health as a product in its application of supply and demand. Although providers, particularly doctors and hospitals, may be imbued with the non-profit motive initially, they are repeatedly rewarded for supplying services and the system encourages them to do so more and more. Furthermore, as doctors' incomes grow and they seek capital investments the obvious areas of investment are in the health industry. So private hospitals, laboratories and other medical care institutes become the property of doctors or their agents. Again these facilities must be used, and the number of excessive services increases rapidly.

Let us look at the other system of payment for health services, System 2, of which the British national health service is a famous example. I was fortunate to have worked for some time as a general practitioner in a picturesque country hamlet in the county of Surrey. Let's have a look at my work and some patients who appeared in my diary notes from those days.

One morning, on a day when consultation time at the surgery was to be two hours, I asked the receptionist, who was also the doctor's wife, 'How many patients do we have today, Mrs Purvis?'

'Fifteen, doctor, I do hope you're energetic.'

The first patient then arrived. 'Mrs McCosker, I'm Dr Price, your new doctor for a few weeks while Dr Purvis is away on a course. I hope I can help you.'

'Pleased to see you, doctor. It's my sore throat that's worrying me.'

'Let me have a look,' I said. There wasn't any time to ask questions about a running nose, headache, etc. 'Yes, your throat is red. I'll give you a prescription for some antibiotics, just to protect you against a possible bacterial infection and some analgesics. It is only a mild infection and nothing to worry about.'

Mrs James, Mr Graham, Felix Hordman, a little boy, all followed in quick succession, all suffering from minor illnesses.

'Admiral Jobson, come in.'

'As you can see, doctor, I had a stroke, hemiplegia on the left side. I have been attending the local hospital for physiotherapy. I have regained some movement in the left leg. I'm very keen to have some further physiotherapy, but I require a further referral or request form from your good self

We chatted for a while for I was curious to know how he found his treatment under the national health scheme as he had been quite sick and had been hospitalised for long periods.

‘They were excellent, doctor. I can’t complain and it has cost me almost nothing. My wife, however, is waiting to have her varicose veins operated. She has been waiting ten months already but I guess that isn’t a serious problem like mine was.’

‘You didn’t have to pay anything today to see me, did you?’

‘Oh no, doctor, not today, but they certainly took large sums out of my salary to pay for the national health service and that covers your fee. I think you get paid by having our names on your list, for I was worried, when I retired, that Dr Purvis would not want to keep me on his list as we’d moved three miles out of town. He reassured me. He said, “Old chap, you’re more valuable to me the older you get. I receive more money for having you on my list now. I wouldn’t let you go if you moved fifty miles!” ’

I completed the morning’s work on time. I was happy to leave the surgery premises, they were a little cold and lacked atmosphere. The carpet was threading, the walls drab, it was beginning to look like a suburban post office. The patients and premises, I reflected, weren’t getting the personalised attention they might. Still, time was spent with those who were sick and I felt I had given an adequate service.

My programme for the rest of the day was: early afternoon to attend the local hospital orthopaedic-outpatients department and to fill Dr Purvis’s role as a clinical assistant; and then to return to the practice for the evening consultations.

The weekend was coming and Dr Purvis would return home from his course. I would get paid and I would be able to ask him those questions that were accumulating in my mind about the national health scheme.

Evening surgery was not very busy, I could spend more time with the patients.

Mr Kennedy was forty five years of age and complained of severe pain in his upper stomach which would awaken him at 2.00 a.m. most nights.

'How have your motions been, have they changed at all, Mr Kennedy?' I asked.

'I have noticed that they have been a little darker in the last day or two.'

'How severe is the pain?'

'Well, it is severe enough to wake me up at night, although I guess it is bearable.'

'I think you may have a peptic ulcer which is bleeding a little, Mr Kennedy. You will require a barium meal x-ray and some blood tests at the hospital on Monday morning. I'll arrange for you to see a consultant at the hospital, a gastroenterologist, and I'll let him order the x-rays and other tests.'

'Look, doctor, I am willing to pay. I'd much rather have something done this evening.'

'I doubt if we can. I'll ring the consultant and make the appointment. I will have to be pretty convincing to make it for Monday and it's best if he orders the test. He may order some extra tests and you will have all the tests together. He will receive the results, it will be much simpler that way. Here are some antacids and antispasmodics I'd like you to take in the meantime. I think it's important that you relax and take it easy this weekend. Try to forget about your business, if that is possible.'

'Thank you doctor, I'll let you know how I get on.'

That evening, since Dr Purvis had paid me, he started to explain how he received the money with which to pay me.

‘Most of my salary comes by way of a capitation fee, that is, for each patient registered on my books I receive a set yearly fee. If the patient is elderly the fee is higher, as it is for each person after the first one thousand on my list. I also receive a basic practice allowance to cover my overheads and a seniority allowance since I have been here sixteen years. This area is considered a needy area so I receive a further extra lump sum amount for practising in the country or at least not in the city. Mind you, some of the areas in which I might have liked to practise were full, and the NHS wouldn’t let me work in those areas. I could have gone on a waiting list for them, or alternatively I had a choice of anywhere else.

‘As you know, I’m at a medical conference at the moment, which is considered to be vocational training, and I get an allowance for that as well. On top of all that, it really is fairly complicated for a salaried system, but that’s typical for the NHS. There are certain services for which I receive a fee for service, such as vaccination, immunisation, cervial cytology tests, full maternity services, night visits (11 p.m. — 7 a.m.) and as well for some contraceptive services, for example, insertion of IUDs.’

‘Quite a complicated system — how do you find it?’ I asked.

‘We certainly don’t get paid enough and many doctors have emigrated, but I can’t complain too much otherwise.’

‘I gather,’ I said, ‘that most of the specialists or consultants are employed by the hospitals and are salaried? By the way, I referred Mr Kennedy there today. I would have organised his tests myself, but it seemed simpler to send him to the consultant and let the consultant handle such organisation.’

‘Yes, I find that’s often the case. It really is a waste of your time to investigate, for the consultant often repeats the tests. Perhaps you could handle the patient yourself but

as he has to go to the hospital for the tests anyway, he may as well see the consultants.'

'Consultants, by the way, are paid on a salary basis. If their college of specialists feel that a certain consultant's work is particularly meritorious, they can allocate a distinction award, either class A, B, or C. If the award is A, it may double the consultant's salary and about one in three consultants have such an award. Some consultants supplement their salaries by private practice, particularly surgeons, as there are many people who are willing to pay so that they need not wait for one to two years for their non-urgent operation.'

'I see that there is some variance in the payment systems and it certainly isn't a pure capitation or salary,' I said.

We spent several hours in animated discussion on the merits and demerits of each system or method of payment.

Under the national health scheme, the doctor may see too many patients too quickly; he may refer them to a specialist or consultant or just to the hospital with little endeavour to perform the diagnostic tests himself. The hospitals also have little financial incentive for efficiency in use of their resources. The scheme tends to suffer from some of the problems of government bureaucracy being impersonal and slow to react.

The English national health service has the advantage of being 'one service only' which avoids duplication and is an integrated and well coordinated system. It does take into account the unusual economic nature of the health product, and does not try to apply the laws of supply and demand in a situation where they do not apply. As there is no financial gain, unnecessary treatment is deterred and it thus observes the Hippocratian principle of 'first do no harm.' It lends itself to preventive and health maintenance services which are inexpensive to provide and now thought to be more effective in maintaining the health of people than curative services. It is also population based which means

that statistics used for determining salary levels (capitation and ages of population) have much in common with the statistics required to evaluate the quality of care, and this will greatly assist future evaluation.

A variant on this model of the national health service, which is based on a salary system, entered our discussion. This was an emerging organisation in the United States called a Health Maintenance Organisation ('HMO'). The HMO or pre-paid health plan is an organisation that provides comprehensive health services (doctors, hospitals, ancillary services, etc.) The insured patient prepays his premiums and does not pay for any service. The doctors and other providers receive a salary, but also a share of any annual profits. It is based on the principle whereby the fewer services performed, the greater the profit. The cost structure is such that there is no financial incentive to operate unnecessarily or to over-service. The proponents claim that because the HMOs claim to promote the prompt recovery of their sick members through using the least costly services consistent with maintaining quality, the financial incentives do encourage the least utilisation of high cost forms of care.

Such a system seems to tackle the problem of doctor-caused illness (iatrogenesis) so far as it is a by-product of the financial arrangements. Hippocrates said, 'first do no harm' and the HMO, like the English NHS, would also seem to support this notion.

The argument that HMOs encourage the prevention of illness seems a little far-fetched, for to date they do not offer any services such as health education or physical fitness classes aimed at preventing illness. They do not seem to do anything active to maintain health and to this extent, tend to belie their name.

Overall, the HMO attempts to combine the advantages of a salaried system within a private organisation. As the organisation as a whole still has a profit motive and a

strong motive for efficiency, it can more readily reject or dismiss staff than a government health service (which should accept any licensed provider and can only dismiss them if they are non-law-abiding), and as such it has some advantages. Its disadvantage is that it may avoid accepting the very sick and elderly, and it may duplicate some services offered by other private organisations.

As health is a unique product in economic terms, the financial arrangements must be backed up by full understanding of the nature of the health product.

An important point to be understood here is that although people feel that when someone is sick no expense should be too great and all available resources should be used, in everyday medicine this does not occur. For instance, the real reason people are put into a hospital and not treated at home is that hospitalisation is cheaper. Let me explain. The patient can remain at home when sick, employ a twenty four hour a day nurse (or several if necessary), a twenty four hour doctor, a kidney machine, blood testing machines and so on. Eventually, even the wealthiest would see it as a waste of money to hire or build expensive equipment for perhaps one use only. At hospital these resources can be shared and used repeatedly and thereby one achieves ‘economies of scale’. To have all treatment and facilities available at home for everyone would be the highest level of care. Even the richest individuals would not aim for that. Any system which aims to provide maximum resources to everyone will go broke. However, because of the strong emotions associated with illness, there is a view that everyone should have every possible resource used in each case, even if the probabilities of benefit are very slight. The desirable aim is to provide a *minimum package of benefits* to everyone. That is, there is a minimal level of care which ought to be available to everybody, but it is wrong to attempt to provide everyone with their own twenty four hour nurse, doctor, etc. or a maximum level of care.

Any financial scheme will have imperfections. Often the excesses in one area (e.g. in a private system) help fund the need in another, and although the excesses may be marginally harmful, they may fund some other purposeful measure. A case in point may be income from excessive tests in a public hospital funding a nonprofitable rehabilitation unit. Thus in any system or any situation, one must take into account the underlying values, the incentives and disincentives for good medical care.

The effect of the type of society on health care must also be considered. Because a capitalist society values the profit motive, this will influence the decisions and attitudes of the health providers in that direction. One must therefore guard against over-servicing. In a socialised state one must guard against under-servicing.

Not only should there be an understanding of the health product, a series of non-financial incentives should be part and parcel of the health payment system. These would include job-enrichment, peer review, continuing education and student teaching. Disincentives must also be found. The whole area of ethics requires close examination. The ethics of under-servicing (NHS) or over-servicing (fee for service) must be reviewed. The paradox of an assumed non-profit motive, together with a fee for service system, as well as the ethics of the distortion of the trust relationship, is seldom explored. Ethical considerations when fully elucidated can be backed by legislation.

A vital ingredient of any health care financial system is the added requirement of a good and tight management system. This requires a management information system, and data processing facilities, particularly in areas rewarded by the financial system, for example, unnecessary care (fee for service) or inadequate care (HMOs or NHS or salaried systems).

Maximum use must be made of modern management tools, such as budgets with upper limits on expenditures,

and various types of measuring rods, particularly changes in health status relative to costs involved or cost effectiveness measures. Different methods of payment will result in different profiles as measured by other measuring standards, for example (i) treatment patterns, (ii) hours of work, (iii) treatment costs, all of these statistical aids should be part of management’s armoury and all the management tools should complement the financial system.

Summary

I have mentioned earlier that the need for health care exists and can be expressed as health need or

(a) the potential for avoidance of reductions in health status
(b) the potential for improvements in health status.

The factors which make up health status and its measurement were discussed earlier. Societies will hold certain values as to the importance of these various dimensions and these values should be reflected in the weights given to each of the components that make up the health status. Thus, it can be argued that the system used to finance health care should be the one that meets the greatest health need or alternatively, that which encourages the maximisation of health status. Health has been shown to be a unique product and no system of financial arrangement is adequate by itself. It requires integration with non-financial incentives and disincentives, together with tight management control. It is my opinion that a mixed system is the best system, if the major component of the system is based on the Hippocrates principle, 'first do no harm'. Therefore, it could be either a capitation, salaried or HMO type of system.

Since illness care or health care cannot, in the long term, be profitable, as the chronically ill cannot work, a capitation or government-subsidised HMO system is preferable.

The government-subsidised HMO system has most advantages, as it is basically a capitation system, but also being a HMO, it has some of the elements of a private organisation, and will strive to be efficient as well as effective. In my opinion at least ninety per cent of each country's population should belong to such a HMO. The

remainder of the population must be insured under compulsory health insurance, but should be serviced by a fee for service system. In this way there would be competition and the HMO would continuously be on its guard to maintain its share of the market. There are other reasons why such a fee for service system should exist. For instance, to cover areas in which productivity measured as

$$\frac{\textit{improvement in health status}}{\textit{costs}}$$

may be trivial from a community point of view but important to the individual, for example, some plastic surgery. The minor component of the system should exist to compete against the alternative systems as well as being a source of research and development in the delivery of health care.

The ideal system, however, is not necessarily the best and most practicable at any given time for any particular nation. A good, though unusual, example of this fact is the state of Israel. After its formation in 1948, the government felt it had too much to undertake — setting up defence forces, taxation, administrative systems, department of justice, etc. — so it wisely let voluntary health funds take care of health insurance.

Other countries with long traditions of private practice or fee for service systems, which have appropriate financial and non-financial incentives, might find it better to gradually adjust the balance in their systems. Provided there is good management, these systems can also be effective in financing health care delivery.

8 The emperor’s new clothes — solutions

The preceding chapters illustrated some of the issues confronting all those interested in health. In this final chapter we survey the previous material and summarise the solutions we have proposed for our current health care problems. Here we can identify with the little boy in the ‘Emperor’s New Clothes’ and point out that the recommended solutions are simple so long as we can visualise the problem.

This chapter is written with full awareness that further problems will arise, and new solutions will have to be found. The recommendations here are only a few of the enormous number of possible solutions. If we do manage to solve the present problems, we will have other, perhaps unforeseen problems to solve.

The solutions suggested here are based on a highly personal view, arising from my combination of administrative and clinical experiences. That my argument lacks a scientific basis or detailed documentation is not disputed. Solutions followed the personal experience of listening to the shrieks and chants of the many patients in many nursing homes I visited, or the continual failure of traditional medical practice to alter drinking or eating habits despite full knowledge of the damage already caused by them, and the almost certain future illnesses that would inevitably follow. To a medical administrator, these patients’ episodes made one ask: What is health and health

care all about? It is precisely this question that I have attempted to answer in the first four chapters of this book. The same question must be asked by all those responsible for health care, because they are the *managers* of the health of a community or of individuals.

Solution 1 — the institution of effective management and management techniques. Management is about converting intentions into results. A manager starts by making up his mind what he wants to do (with an intention); he wishes to end with a result. The intention is often called the *objective* and management may be defined as using available resources to achieve an objective. It consists in the following activities: (i) planning, (ii) taking action (sometimes divided into organising and directing), and (iii) controlling.

The solutions which follow all derive from these phases of management: *solutions 2* through 5 from planning; *solutions 6 to 8* from controlling; and *solutions 9* to *19* from taking action or reorganising. Each year the competent health manager will plan anew; he may define new objectives and consequently new methods or activities to achieve these aims. The formalisation of intentions into objectives is part of the planning function, and if we are to be effective health care managers, we must ask and ask again, annually, what are the *objectives* of health care? McKeown[1] wrote some twenty years ago that the prevention of disease and the avoidance of premature death were the objectives of health care. I have endeavoured to point out that the objectives of health care should today be classified into four broad groups, namely: (i) the quantity of life; (ii) the quality of life; (iii) reassurance needs; and (iv) positive health.

Solution 2 — the redefinition of the objectives of health. The four points above are, at best, rather ill-defined objectives. If they are to become useful management tools, these objectives must be further defined and refined. It should be emphasised at this stage that this is only a tool to encourage good management. For example, point (i), the quantity of life, may be defined as: the aim of health care is to enable people to live a natural life span of the mean life expectancy at birth, plus ten years or plus ten per cent of the mean life expectancy at birth.

All death, other than perhaps traumatic deaths, above this age could be considered as natural deaths, or death due to old age.

Solution 3 — natural death or death due to old age. The certification-of-death regulations should be altered so that deaths above the age of the defined natural life span be recorded as primarily caused by old age or natural causes, with the specific disease process being recorded as the secondary cause of death.

A definition of natural life span based on the mean life expectancy has the advantage that it allows for improvement in the length of natural life span as health and medical technologies advance. For example, if mean life expectancy was. at birth, seventy five years, ten per cent of this would be seven and a half years, and natural life span would be eighty two and a half years. Ten years later, due to improvement in health care, mean life expectancy at birth might be eighty years, then the natural life span would have improved to be eighty eight years. It should be pointed out that this definition is only a management tool to assist in managing health services. It is not a guide to treatment and has no implications as to the availability of treatment. If people feel that it may be misused, to deny treatment to the older members of the

community, then there would be no alternative other than to define natural life span as 120 years, or above the age of the oldest surviving member of the community.

It is important to include natural death in one's medical taxonomy for, as explained by Fabrega,[2] any illness is seen as a discontinuity and raises questions of death. As societies or cultures seek to find the meaning of illness or purpose of living, they find answers in their medical taxonomy, which without such a definition will incorporate the non-acceptability of death at any age into cultural norms. (See Fabrega for further discussion on this point.)

Cultural norms or values are very important influences on health status. Health workers must be aware of such values, as well as how they can influence the unhealthy cultural norms, and what effect all activities that they as health providers undertake, will have on cultural beliefs in the health care system.

Solution 4 — the inclusion of reassurance needs within the definition of health. Although there have been many definitions of health previously, they have tended to concentrate on the healing functions.

It has been shown here that a most important role of the health worker is to act as a 'comforter' to patients in times of distress. This characteristic in an individual can be expressed as his confidence that care and comfort will be available in times of distress. The extent of his confidence can be determined from subjective questions as well as objective findings. For instance, a married person is more likely to have caring and comfort available than an unmarried person.

If health workers had been able to define care and comfort as an important part of their role, it is possible that one would not have those ludicrous malpractice judgements in the USA which result in medicos not

stopping to assist a person collapsed on the street for fear of a malpractice suit. Often a person who collapses will be seriously ill and have little chance of recovery. A doctor or health worker who attends may not follow established procedures perfectly in order to achieve a cure. His mere presence, however, will offer reassurance and support, and if judges were aware that such reassurance is good medical care, then the present situation probably would not have occurred.

Solution 5 — the inclusion of positive health within the definition of health. The aim of preventive measures is not to create a group of people like the 'worried well' or the 'worried sick,' who spend all their time avoiding noxious stimuli and thereby withdraw from participation in society. To be healthy is to seek out positive stimuli, to do and to participate. Positive health, therefore, must be included in any definition of health.

Here one is selling a commodity or a feeling of well-being which the person does not presently possess, and accordingly he will be motivated to purchase. One thereby overcomes the problem of trying to sell him something he already has, whilst at the same time hoping he will receive the benefits of the joy of health.

Once we have stated an objective, we have to know whether the objective is being achieved, and to be able to compare the results with the objective. If the results are not being achieved, corrective action must be taken. This comparison and taking corrective action is known in management terms as the control process. The next three solutions are required so that this control function can be properly implemented.

A simple example of a control process in operation is a thermostat. The objective is to keep the temperature at a specified level. The thermostat measures the temperature

(results achieved) and compares it to the objective level. If, for example, the temperature has fallen, corrective action is taken and the heater turned on, till it reaches the objective level when it is turned off again.

So in order to achieve meaningful control in health care management, it is helpful to be able to *measure* the results of health care and then compare them to the objectives. To do this one has to measure or to quantify the objectives of health care. This conversion of vague, ill-defined aims to specific numerical objectives is essential if we are to institute proper management control. There are means of quantifying the objectives of health care now available, and although a lot of work and refinement is still required in this field, the time to apply health status measurements or health indicators and indices has now come.

It would be nice to have one all-embracing measurement of the health status of an individual or a community, but it should be appreciated, that just as a room might be described as twenty metres by five metres width and two metres height, and this is a meaningful measurement, to describe the room as 200 cubic metres volume might be misleading.

Solution 6 — the immediate development of health status measurements (HSM), and their application. Health Status Measurements are the means by which health objectives can be quantified and management control instituted. Once developed, one of the applications for HSM is to be used to more accurately define the need for health care as:

(a) the potential for avoidance of reductions in health status (prevention and some care)
(b) the potential for improvements in health status above the level it would otherwise be.

The objectives of health care can then be stated in terms of the *extent* to which health status can be improved *within a given time period.*

Health status would in turn comprise the following measurements: A quantity of life defined as above should be the first aim. The quality of life — defined as the ability to function in the community free of pain and anxiety — can also be measured using such techniques as the questionnaire, e.g. the McDowell and Martini chart (chapter 5),[3] or the Kupat Holim's Sharon region questionnaire (Appendix 1). The confidence of people that care and comfort will be available during illness or distress can also be quantified using subjective and objective questionnaires or other techniques mentioned above. Finally, positive health measures, such as posture, participation in sport, athletic prowess, etc. can also be devised.

The relative importance of each one of these factors would be reflected in the relative weights ascribed to each factor within the health index. If we felt some of these objectives were unimportant, then a weight of zero may be given. Ignoring an objective altogether, such as reassurance needs, effectively gives it a weight of zero. Should this be done knowingly and intentionally, that would be quite acceptable. But to ignore it and concentrate too much on the quantity of life, as is the case at present, unwittingly attributes too much weight and importance to the quantity of life relative to the other objectives. As a consequence, health care will be misdirected to the same extent.

The significance or importance attached to any particular dimension of health as described above is a value judgement. In fact this whole area of endeavour is concerned with value judgements, but this should not

impede our progress and these judgements should be made, for to do nothing is also a value judgement.

One of the reasons for the exaggerated importance placed on mortality data, life expectancy, etc. is simply that such data are readily available. Not only are they available but they are measurable. Data on functional ability and the other criteria mentioned are not so readily available. But the issues are so important that such data must be sought, collected and evaluated, and used as the basis from which a more appropriate assessment of the results of health care can be made. Some countries have already started to collect more meaningful data, through the use of regular (every five years) surveys. Examples are the English Household Survey, The American Health Interview Survey and The American Health Examination Survey.

Solution 7 — that each nation conduct a regular health interview and examination survey, based on or similar to the American Health Survey, with the intention of providing the information so that the results of health care can be measured against the predetermined objectives for that time period.

Solution 8 — evaluating outcomes of the health care process. It should be pointed out here that both the HSMs and data collected from" the survey should relate particularly to the *outcomes* of the health care process.

The outcomes of the medical care process for an individual would be his health status after treatment, for example, a person's ability to walk free of limps and pain after treatment as compared to his ability to walk before treatment.

Let me just say again that structure and process measures can be useful management tools, but they can

also be very misleading. They may be used in as far as they contribute to outcome measures, or occasionally as management tools. However, we are only assuming that the process, (for example hospitalisation for the mentally ill) is beneficial in the absence of confirmatory outcome measures.

Up to now we have suggested only that the straightforward management techniques of setting objectives and evaluating the results, or controlling should be implemented. Other management tools such as budgets, cost-benefit, cost-effectiveness, performance index, and notions such as accountability, responsibility and the Pareto principle should be understood and used.

It is worth looking at some of these in more detail. The performance index is really the ratio of what comes out to what goes in. Input is often money and the output is a health benefit. However, if we do not get the benefit we expect in return for the cost we had to outlay, we are not happy.

Productivity, input-output, value for money, cost-benefit or cost-effectiveness are various ways of expressing performance. The manager uses resources to achieve objectives, resources are limited and costly. Accordingly, we in health management are not only concerned with achieving the objectives but also our performance or efficiency in so doing. Once used up, resources cannot be used for a higher performance or for a more highly profitable task. Therefore the health manager must look at the benefits in terms of improvement in health status as well as the costs when choosing *which* health care process is the most beneficial.

The Pareto principle basically is the 20:80 rule which states that in any situation twenty per cent of the items are responsible for eighty per cent of the effects. For example, in a given holding of company stocks, twenty per cent of the items (the expensive ones) will carry eighty percent of

the total stock valuation. In any country, twenty per cent of the people will have eighty percent of the power.

In simple terms, the 20:80 rule means that in any situation there are key people or key interest groups and to implement effective management one must pay greatest attention to such groups. Within the health care field one key interest group is the doctors. The second key interest group is the large hospitals. Friedson[4] noted that the key to medical authority is the doctor's control not only of his own work but over the work of other related occupations as well. The physician's perspective must therefore be considered. It is one that defines medical work in terms of responsibility to individual patients. Most doctors wish to provide optimal care without suffering infringements on their personal autonomy. Another element is his concern with technology and scientific practice. He sees his role essentially in human biological terms, as treating and curing a sick person.

Now we can apply these techniques to the health care system. It can be seen that different methods must be used (different *action* must be taken) to achieve the newly defined health objectives. The Pareto principle says that we should concentrate on key interest groups. Applying that principle, hospitals and doctors are used as my examples. Therefore in the paragraphs below I will concentrate on the changes that must take place in the services rendered by doctors and hospitals. If we are correct in our belief that they are the Pareto groups, we can only change the overall health service if we change the activities they perform. If we concentrated on non-Pareto groups, which make up eighty per cent of the health workers even if we were totally successful we would have achieved only a twenty per cent change in the nature of the health services.

However we aim to effect a noticeable change in the activities and services offered. At the moment the health

care process performed by health workers is mainly the management of ill-health. Performance index techniques imply that we must implement those activities which are both more effective and efficient. Earlier we have shown that other health activities such as health education, physical environmental control at home and at work and social environmental change possess these qualities of long-term effectiveness and efficiency.

Solution 9 — the doctor as teacher. A large part of recent criticism of the medical profession claims that doctors have done little to improve the health status of nations. Examples of only minor increases in life expectancies over the last thirty to forty years are cited. It is further claimed that most advances in life expectancies and improvements in mortality have been due to changes in the environment such as sanitation, clean water, improved housing and changes in education and lifestyles. If this is the case then it would seem stupid to blame the doctor for the lack of improvement in health status (as measured by life expectancies and mortality rates) as it would to blame a company's office cleaners for the lack of company profits. The implication of such criticism would be that the cleaners clean harder and wax the floor until somebody slips and hurts themselves. The doctor likewise reacts by offering more investigative and curative treatments.

The mistake made by the critics is to separate accountability from responsibility. The doctor is being made accountable for something over which he has no responsibility. Criticism which offers no constructive alternative will only widen the division between the public and the medical profession.

The solution is to give the doctor responsibility for health promotion. The doctor must become an educator or teacher. No longer should he be forced to work strictly in a

one-to-one setting. The doctor will have a class of his patients, preferably a small group of six to eight patients, whom he will instruct in health and disease.

He will be able to aim his teachings so as to promote healthy lifestyles as well as an understanding of human behaviour and functioning. His teachings should enable people not only to avoid disease, but also to acquire good posture and physical fitness, to seek out physical and mental stimuli so that they may fulfil their potential. He will better equip them to handle their emotions in times of stress. The doctor will and should be paid for such services.

If a fee for service system operates, an ‘item number’ for group teaching should exist in the fee schedule. If the doctor is working under a salary system, appropriate provision in time or money should be made for his work in this new role. I have been conducting such health education classes for my patients over the last few months without charge. The class consists of five women, Mrs Ball, Mrs Coughin, Ms Groan, Mrs Jolly and Mrs Talken.

‘Today, ladies, you are all ‘honorary medical students’ and we are going to talk about heart attacks. Imagine someone has a very severe heart attack, and their pulse stops. They have a cardiac arrest. What would you, and what would the doctor, do?’

Discussion followed, including instruction in how to take a pulse and cardiac resuscitation (first aid skills).

‘What do you think the doctor’s chances of curing the patient are? Would you like to start from that position?’

Discussion again, with agreement that curative medicine was very limited in this regard, and the group agreed it was not the best position from which to start treatment.

‘So we ask, what are the causes of a heart attack, and how can we avoid them from our better position now?’

Discussion concluded that smoking, nutrition, obesity, cholesterol, high blood pressure, lack of exercise, etc. were important causal factors, and that to obtain maximum chances of successful treatment, the time to start was now.

This is but a brief example of the possible syllabus or topics of education and how they might be handled. I have held similar sessions on other body organ systems and other topics.

Certainly there will be problems that must be tackled, such as advertising and self-referral to increase the treatment side of the doctor's practice. Lack of teaching skills is another. Resource personnel including dietitians and teachers can be used to assist in teaching. Problems that might arise can be tested in pilot studies in HMOs or community health centres or under the auspices of various doctors' colleges, College of General Practitioners, AMA, etc.

People may object that such classes would be a waste of highly trained and expensive medical staff. These charges would be meaningless if the cost-benefit ratio of such processes is greater, as it has been alleged, than the benefits obtained from curative practice. Furthermore, if the productivity of health education is greater than non-health education and a regime of only curative medicine, my proposal will be a more appropriate use of an expensive resource.

If health education is to be implemented, then the involvement of key interest groups is essential. Doctors are one of the most important, and their participation is required because they have a large share of control over the future directions of health care. Not to involve doctors will be to deny them responsibility for important determinants of health status. They could not be held

accountable for those determinants of health for which they are not responsible.

Solution 10 — the doctor as a community advisor. Allied to his role as a health educator, the doctor must also be given back some responsibility for environmental standards in the community in which he works, a role which has been largely usurped by various levels of government. The community doctor should be in a position to advise local government authorities on the environmental health needs of his patients. He should be able to assist his patients whose housing is overcrowded, unhygienic, dusty or dangerous. He could report on any inadequate work conditions of his patients and offer suggestions towards a positive health milieu such as yoga, posture classes, sport and hobby activities, safe working conditions and so on.

Again he could be paid for such activity either on a sessional basis from a local health authority or by the patient, or his insurance company on a fee for service basis.

I fully understand that doctors already work in industry in — occupational and environmental health, and that health surveyors and other health professionals play similar roles. Just as there are specialist surgeons and other medical consultants, so too should there be a similar relationship between the local family doctor and his consultants in occupational and environmental health. Should the doctor work in a health centre or polyclinic, then the work in this field could be distributed amongst the members in a manner determined by the health team. But it must be done in such a manner that the doctor is given responsibility so that he may be held accountable for the health status of his community.

Solution 11 — the doctor as family/work consultant. Doctors have traditionally dealt with individual patients and may have short discussions with the family, mainly to inform them of what is happening. What is being proposed now, however, is that a special service called family consultation, or work consultation, be included in the list of services performed by the doctors. In these situations the doctor, with the patient's consent, will consult with the family, employer, workmates, or significant others in the patient's life, explaining the meaning of the illness; changes in roles that may be required; potential emotional reactions of the patient; and how to perform a supportive social network.

Solution 12 — the health school. The hospital, like the doctor, must also change. Its role should be expanded into a public health school. Although the hospitals are somewhat more distant from the community than the family doctor, and do not possess the necessary knowledge of the patient's family housing, etc., the hospital is particularly well endowed with staffand facilities which should be partly redirected.

Classes and tutorial groups should be started in hospitals, not only to serve inpatients, but to reach out to the community generally. Doctors, particularly interns and residents, should accept a leading role as teachers. All the health professionals working in the hospitals would contribute and take part in the educative process.

In order to overcome resistance by its clients and staff, the hospital might be able to advertise as well as charge a fee for such services. Such advertisements, however, will draw some clients away from their local doctor to the health school and may result in the health scholar using the hospital, in which he now has added confidence, as the source of his curative medicine on those occasions when he

falls ill. Naturally this would be an unsatisfactory situation which must be guarded against.

The syllabus might include topics such as the appropriate use of health facilities, causes, treatments and prevention of respiratory diseases, parent effectiveness training, and so on.

One of the large teaching hospitals may decide to become a university of health. Courses catering to those patients with particular chronic illnesses would teach them about their disease, how to live with it and avoid complications. One could well imagine the first such university of health, producing a variety of health educative courses, and gaining a speciality reputation — like the Mayo Clinic or Cleveland Cardiac Surgery Unit. It might soon attract overseas patients as well as academics as its success in health maintenance becomes renowned.

Solution 13 — the institute of health. The hospital would not only serve as a health school, but would provide the facilities, often already available, including closed wards devoted to positive health activities.

An ex-ward could easily become a gymnasium and offer floor exercise classes, weightlifting and other fitness related activities. Music therapy, encounter groups, yoga, chi, and posture classes could all be appropriately and conveniently conducted within the hospital network. Again, fees could and should be charged for such classes.

The move by the Hospital Contribution Fund of NSW in early 1984 to offer client rebates for participation in approved fitness classes as well as rebates for approved ‘stress reduction’ courses is a step in the right direction.

However to really change the system this approved course should be offered by hospitals. Hospitals are seen as one of the main authorities on what is healthy and good medical practice. Further, referrals to further investigative

and curative services (which are extremely expensive) might be reduced if the alternative was available from the same institute.

Finally many hospital staff members would otherwise have their jobs threatened, by reduced bed-days, etc. By introducing these new services resistance of the hospital staff to reductions in the curative services would decrease.

At Sydney Hospital in mid-1983 an anti-smoking programme was begun, called ‘Quit for Life.’ The venue, a large teaching hospital, added authenticity and prestige to the campaign. Each hospital should run similar preventive programmes and classes for this is a good example of the New Medicine.

Other examples of classes would be nutritious-cooking classes, as well as environmental experimentation classes simulating various environments and their effects on the health status of individuals. The list can be continued. The challenge exists if the health professions are willing to accept it.

Solution 14 — the ‘non-pharmaceutical’ pharmaceutical. Hand in hand with the above role changes, there should be a new form of prescription. The doctor should not only prescribe drugs, liniments, etc. but also self-education aids. An easily understood example of the new prescription would be a set of tapes with relaxation therapy and instructions. Similar cassette tapes could be made available on a whole host of subjects: sexual problems, nerves, respiratory disease, coping with cancer, and so on. It is not suggested that such tapes should be didactic; a variety of methods such as discussion tapes or patient interviews could be used. Many developments have taken place in educational technology, and these new teaching aids offer new prescribing opportunities for doctors: audio-visual programmes, slides, films, videotapes, cable television

programmes, can now be offered to assist patients. Old methods can also be used, small booklets on a variety of ailments could be prescribed, not as give-aways to enhance the sale of a drug (which is also possible) but as medication in itself, sometimes even replacing a drug. The physician could prescribe in the normal fashion, and the patient could purchase the item or have the prescription filled at the chemist. Certain health education material, having established its effectiveness in improving health status, might also qualify for subsidy or benefits from the government so that there is no cost to the patient.

It is clear that there are advantages and disadvantages in using the established processes of doctor prescribing and chemist dispensing. It is not argued that these are necessarily the ideal ways of handling the problem. However, since such facilities presently exist and the mechanism is available, it ought to be utilised.

Solution 15 — health productivity maximisation through health care finance. Financing health services can be viewed in management terms from the perspective of a reward for achieving an objective. Alternatively, since most people are aware that money is limited, the financial system is a handy way to demonstrate that there is only a limited number of resources available for utilisation in health care. The objectives of health care have been defined, and accordingly the financial system which is used should be the one which is most effective and efficient in achieving this goal.

Health productivity equals the improvement in health status divided by the cost. It is the measure required to compare which of the two major financing systems, whether NHS (salary or capitation), HMO or fee for service (private), is the best. On the basis of current health indicators or health status measurements, neither system

shows a significant advantage in the improvement of health status. The lower cost of the salaried system, however, makes it the more health productive and therefore the preferable alternative.

The best solution, however, would be a mixed system with the majority (ninety per cent) financed on a capitation or salary system and only a small residual element of private practice accounting for ten per cent of the health care costs.

Where this is not the current situation, the move toward a ninety per cent NHS, HMO, scheme should be gradual, increasing the number and variety of salaried positions so that seventy to eighty per cent of key personnel and facilities, particularly doctors and hospitals, work under a capitation or salary payment scheme.

There are advantages in a mixed system. If two health care finance systems operated and competed against one another, not only would they have the advantage of competition, but similar statistics from each type could be compared. These might highlight differences in treatment patterns that could be directly attributed to the method of finance, and could then be used as an instrument to help redirect medical care. The fee for service system has the advantage of flexibility. Now let us assume that the financial incentive or payment does result in the provision of a service, which *does* result in an improvement of health status as defined in our objective. Because the financial rewards are tangible, the provider quickly realises when his financial gain is increased and accordingly the health status of the community is increased. He is encouraged by these incentives to pursue these objectives more rigorously. Therefore, when a change in the process improves results of health status by offering financial rewards for undertaking these new functions, one can quickly redirect the energies and facilities of the health services. So it is

always an advantage to retain a small fee for service system.

If these functions are not part of the services provided by doctors, for example, then no change in fees or method of payment will force their provision without prior changes in the health services offered. There are a host of health promotion activities that could be undertaken by hospitals and doctors, such as inspecting and promoting the standard of living in the community, or health education activities which have been outlined in previous recommendations. The decision must first be made that these functions ought to be added to their role, and these must then be included in the job description or list of duties in a salaried system, or the service added to the schedule provided in a fee for service system. There is no reason why doctors and hospitals could not provide such services and these services will not significantly change without their co-operation.

The financial system should be used to encourage such practices, so that the doctor is paid by the local community council or another nominated agency for his work in supervising and contributing to the standards of living in his area of practice. Hospitals too should charge for such new services. Then the fee for service system will be the incentive it should be, in encouraging providers to offer services which are remunerative to them. At the same time, the opportunity might be taken to remove certain items from the schedule of services which are considered to be of dubious therapeutic benefit, such as tonsillectomy or screening, or at least modify some of the existing services or fees. Should a hospital see another source of income, they need not concentrate on maintaining needlessly high occupancy rates.

This again raises the question of who should pay for these health education services. Here in general the beneficiaries of these services will quite often *not* be people

in distress and the health need may not necessarily be accepted by society (i.e. society's values), in contrast with illness, where the right to receive care independent of one's ability to pay has been established. Health insurance companies or governments might be willing to finance such health education activities, if they could be shown to increase health status, and therefore financial benefits for the insurers, by a larger reduction in a treatment cost or an increase in self-treatment that outweighs the cost of providing such services.

The separation of the health promotion role from the curative role, as it presently exists, results in those employed in curative medicine (such as doctors and hospitals) trying to protect their incomes and jobs by extending the curative role to those who do not need such services. If the financial system encouraged truly health-promoting activities, these providers would have an alternative source of income, and they would turn their attention to such work.

It is with all these points in mind that I have recommended such financial incentives for the doctor as a teacher, community adviser and family/work counsellor; for the hospital as a health school and institute of health; and for the prescribing of non-pharmaceutical pharmaceuticals.

Solution 16 — changes in education and retraining of health providers. As the role-configuration of the health workforce changes, so too will educational and retraining requirements. I will take the medical student as the example here, but as the doctor's role changes, so too will the roles of nurses, physicians' assistants, social workers, etc. and their training needs.

To date, most of the studies of the medical student have concentrated on human biology. Little teaching has concerned itself with the development of behavioural and

communication skills, although in the last few years there has been some movement in this direction. Further training in the sustaining and supporting skills is still required when the doctor's objective of being not only a healer but also a comforter is more fully accepted.

As the future doctor will be more concerned with his environment and community, training must include community development and planning, with greater emphasis on standards of living and safety in the home. He will learn more of environmental control, air and noise pollution, food hygiene, with an extension into positive health effects of certain foods, certain lighting, etc., as well as learning to disseminate yoga, chi, acupuncture, music therapy activities, and to create groups offering mentally stimulating activities. It should be noted that in many of these areas there are already a number of health or paramedical workers. The newly trained doctor will ably complement the community health team and play a more constructive role than his present colleagues.

The doctor's in-depth knowledge of medicine does not necessarily make him a good teacher. This notion has not particularly worried university medical schools or so-called teaching hospitals. Over the years, medical students have been taught by doctors who have had no teaching training whatsoever. (I recently asked a classmate of mine who is now a consultant and consequently a teacher at a large teaching hospital, if he remembered much of what the consultants had taught him. He replied, 'You'd have to be kidding. I remember nothing those consultants tried to teach. They really did not have a clue.' Yet he continues to teach with the same background and probably in the same fashion as his mentors.) Although this situation may have sufficed for teaching medical students, it certainly would not be acceptable for the doctor-teacher who aims to teach his patients, and to lead experimental learning groups which, hopefully, would elicit changes in lifestyles. He will

be required to learn teaching skills and acquire a knowledge of available teaching aids, resource personnel availability as well as having an insight into new teaching methods. Furthermore, he will be required to learn which methods best apply to a large class, a small group or a one-to-one situation, as well as teach-yourself aids.

Finally, the future medico should acquire some managerial skills. Important steps (although they are not seen as such) have been taken in this direction by Lawrence Weed and his concept of problem-oriented medical records.[5] The student will learn the fundamentals of management. Defining the problem and devising plans in management jargon, as outlined by Weed, can be seen as setting objectives. Monitoring the problem, as suggested by Weed, means devising a measuring rod or health status measure and comparing the results achieved to the desired (often normal) results.

Doctors already speak of ‘managing’ their patients. If doctors routinely learned basic management they would be able to devise health status measures for their own patients. They would also be able to become more involved with and more accurately advise government health workers to develop health indicators or health status measures for the whole community.

Some may argue that my proposals would deprive other health professionals of their jobs. This is not so, for the doctor will not have indepth training in all these new skills, and other health professionals will remain the experts in their various fields. The doctor will complement their work and in so doing, will be able to discontinue some of the treatment services which he presently performs. These will be handled by other health professionals, nurses, physicians’ assistants, etc. It is important, however, that the local doctor be given responsibility for the essential

determinants of an individual patient's health and well-being if he is to be legally accountable for that patient.

Solution 17 — the informed consumer. A by-product of greater health education activities will be a more informed public. The new health consumer will be able to use health care facilities more wisely, be more aware of the risks and values of diagnostic and therapeutic procedures, and be able to select more wisely which form of treatment he prefers. Accordingly, the health provider will have less control over demand and the supply-demand curve for health services will be shifted back slightly toward a more traditional economic model.

Solution 18 — self-treatment. At present the largest amount of health care is probably self-treatment.

Following the health education delivered by their own doctor, the consumer should be in a better position to appropriately treat himself for minor ailments. Not only should the amount of self-treatment increase, but the appropriateness of such treatment should improve. The doctor, now busy with his health education classes, will be happy that people are more able to care for themselves. Literature in easy-to-read format should be available to assist people in self-treatment, advising also the limits of such treatment and when to consult the doctor.

Solution 19 — the consumer health lobby. The health school and the doctor-teacher, together with their now more informed consumer, should advise and encourage health consumers in their community to form community health groups of non-expert consumers. These health lobbies are formed with the knowledge that there will exist within each community, groups and industries, etc. whose perspectives

necessarily will place health at the lower priority than the health consumer lobby. Often these industries for example, breweries, motor vehicle manufacturers, chemical companies and pharmaceutical companies will have a great deal of power and influence. Accordingly, health becomes a political issue, and if consumers wish to achieve their health goals, they too will have to exert political pressures.

Summary

It is hoped that this book serves as a stimulus for action in the health care field. Much has been written by others on the requirement to shift health care towards a biocultural, or biosocial model. Changes recommended here should assist in redirecting health care towards consideration of environment, physical and social, psychological and cultural determinants of health and illness. Some would describe my system as a bio-educational model of health, others would call it a managerial model. The label matters little if my suggestions stimulate thought and then action. Solutions offered here are not a panacea for all time, but merely some desirable guidelines for the immediate future.

There have been many great medical discoveries which have contributed towards the eradication of diseases and the prevention of premature death. The greatest advances in the health of the world's people today will come not from another biochemical discovery, but from the way health services are organised and managed. This is the challenge facing all health professionals.

Appendix 1

An example of an ‘Outcome HSM’ is presented here. It is an interview-assisted questionnaire to individual community members. It consists of weighted questions which necessarily involved value judgements which were made by the regional research team. It covers the four areas considered important in our definition of health.

HEALTH STATUS MEASUREMENT

Interview-assisted Questionnaire

The health of the individual is defined here as being made up of four sections as follows:

1. Quantity of life.
2. Quality of life.
3. The individual’s degree of confidence that he will receive care and comfort in times of need.
4. Positive health.

This questionnaire is based on and divided into, four sections as above. The questionnaire is also an outcome measure and questions have relative weighting based on the value judgements of those who have prepared the questionnaire. The maximum possible score that one can achieve on this questionnaire is 200 marks.

The first section — quantity of life — allows the individual to receive a maximum of 20 marks. The second section — the quality of life — in this section it is possible to get a

maximum of 80 marks. The third section — the degree of confidence that care and comforting will be available in times of stress — allows the possibility to get a maximum of 60 marks. The fourth section — postitive health — allows the possibility to receive a maximum of 40 marks.

NAME AND ADDRESS

HEALTH REGION

DATE OF BIRTH

Section A — the quantity of life

Question (1) Which of the following multiple choice answers is the most correct? The mortality rate in your district for your age group is:

	score
(a) The mortality rate is 20% or more below the national average age specific mortality rate.	8
(b) The mortality rate is between 10-20% below the national average age specific mortality rate.	6
(c) The mortality rate is between 0-10% below the national average age specific mortality rate.	4
(d) The mortality rate is between 0-10% above the national average age specific mortality rate.	2
(e) The mortality rate is more than 10% above the national average age specific mortality rate.	0

Question (2) What is the overall mortality rate (standardised for age and sex) in your region compared to the national average mortality rate?

	score
(a) The mortality rate is more than 20% below the national average mortality rate.	8
(b) The mortality rate is between 10-20% below the national average mortality rate.	6
(c) The mortality rate is between 0-10% below the national average mortality rate.	4
(d) The mortality rate is 0-10% above the national average mortality rate.	2
(e) The mortality rate is greater than 10% above the national average mortality rate.	0

Question (3) Have there been any deaths amongst your close relatives, include grandparents, parents, brothers and sisters? Record their age at death, calculate the average age at time of death of these relatives.

	score
(a) If the average age at time of death was greater than	4

75 years (or no death amongst these relatives).

(b) If the average age at the time of death is between 65 to 74 years of age. 3

(c) If the average age at time of death is between 55 and 64 years. 2

(d) If the average at time of death is between 45 and 54 years. 1

(e) If the average age at time of death is less than 45 and 54 years. **0**

_____

_____

This is the end of section A. Total marks received from section A. The maximum possible mark was 20 from which the score was total score **section A.**

_____ _____

Section B — the quality of life

This section in the questionnaire proper also includes a documentation of the health problems which will not be listed here. This serves as a tool of analysis and each interviewee has a register of health problems listed at the back of the questionnaire and each problem is coded according to the international classification of diseases and is associated with the particular question to which it refers. The questionnaire proper also records some other pertinent facts of particular interest, it records the number of days during the last 12 months that the interviewee was bedfast because of illness, the number of visits to the doctor because of illness and number of days of hospitalisation because of illness. After these details are recorded the questionnaire with it's weighted markings continue as follows.

Question (1) During the last fortnight did you remain in bed because of any illness?

	score
(a) Yes.	0
(b) No.	1

Question (2) In the fortnight mentioned above how many days did you remain in bed for the major part of the day?

(a) More than 7 days.	0
(b) More than 4 days but less than 7 days.	1
(c) More than 2 days up to and inluding 4 days.	2
(d) 1 day only.	3
(e) No days at all.	4

Question (3) During that particular fortnight, how many days did you not go to work or to school because of illness or injury?

(a) More than 2 days.	0
(b) Between 1 to 2 days.	1

(c) No days. 2

Question (4) During those same days that you were absent from work or school did you remain in bed for most of the day?

	score
(a) More than 2 days.	0
(b) 1 to 2 days.	1
(c) No days.	2

Question (5) Without including the days that you remained in bed or the days that you were absent from work or school, were there other days during the particular fortnight that you cut down on the activities that you would normally carry out because of injury or sickness?

	score
(a) Yes.	0
(b) No.	1

Question (6) Without including the days that you remained in bed or the days that you were absent from work or school, how many other days were there that you cut down on your normal activity for the better part of the day?

	score
(a) More than 3 days.	0
(b) 1 to 2 days.	1
(c) No days.	2

Question (7) Following the accident or injury, did you consult the doctor or reduce your regular activity?

	score
(a) Yes.	0
(b) No.	1

Question (8) During this two week period how many times did you consult a doctor because of illness or injury? (**Do** *not* count the doctors you saw during hospitalisation.)

	score
) More than 3 consultations.	0
) 1—2 consultations.	1
) No consultations.	2

Question (9) Outside the above consultation did you visit the doctor’s rooms or clinic during the two week period to receive vaccinations, tests or other medical treatment not from the doctor?

	score
(a) Yes.	0
(b) No.	2

Question (10) During this two week period did you receive medical advice from the doctor concerning illness or injury by telephone consultation?

	score
(a) Yes.	0
(b) No.	1

Question (11) How many telephone conversations did you hold in order to receive medical advice during the two week period?

	score
(a) Two or more conversations.	0
(b) None to one conversation.	1

Question (12) During the last 12 months (from today’s date one year ago) how many times did you visit or speak with the doctor because of a health problem? Do not count the doctors that you saw during a hospitalisation, but uo include the consultations that you have already indicated in the previous questions.

	score
(a) More than eight visits.	0
(b) Four to seven visits.	1
(c) One to three visits.	2
(d) No visits.	3

Question 13 Approximately how much time has elapsed since you visited or spoke with a doctor because of a health problem?

Include those doctors that you saw during hospitalisation.

	score
(a) Within the last six months.	0
(b) Between half a year or two years.	1
(c) More than two years.	3

Question (14) How did you occupy yourself for most of the time during the past 12 months?

	score
(a) Work, home duties, school, retirement, (do not include in retirement an early pension because of a health problem) and other normal tasks.	2
(b) You were in early retirement because of a health problem.	1
(c) Did not carry out any special functions for any reason whatsoever.	0

Question (15) Are you limited in any way because of a health problem or disability?

	score
(a) Yes.	0
(b) No.	2

Question (16) Did your health cause you to miss work, miss school or prevent you from carrying out household work?

	score
(a) Yes.	0
(b) No.	1

Question (17) Are you restricted in the type of work or home duties or school work that you are able to do because of your state of health?

	score
(a) Yes.	0
(b) No.	1

Question (18) Are you restricted in the amount of work, home duties, school work that you are able to do because of your health status?

	score
(a) Yes.	0
(b) No.	1

Question (19) Are you restricted in the type or amounts of other activities that you are able to do because of your health status?

	score
(a) Yes.	0
(b) No.	1

Question (20) How long were you restricted, or were you unable to function, or were you forced to go to a special or remedial school because of your state of health?

	score
(a) No restriction whatsoever.	4
(b) Less than 1 month.	3
(c) Less than 6 months.	2
(d) From 6 months to 2 years.	1
(e) More than 2 years.	0

Question (21) Did you have a stay in a hospital or a nursing or convalescent home during the last 12 months, (from a year ago today)?

	score
(a) Yes.	0
(b) No.	1

Question (22) How many times were you hospitalised in a hospital or nursing home during the last 12 months from a year ago today? (do not include hospitalisation due to a normal obstetric delivery.)

	score
(a) More than 3 times.	0
(b) 2 to 3 times.	1

(c) 0 to 1 times. 2

Question (23) How many nights altogether were you hospitalised because of illness during the last year? (from a year ago today).

	score
(a) No nights.	3
(b) 1 to 6 nights.	2
(c) 6 to 12 nights.	1
(d) More than 12 nights.	0

Question (24) By comparing yourself to other people in your age group would you say that your state of health is?

	score
(a) Excellent.	4
(b) Good.	3
(c) Intermediate.	2
(d) Bad.	1

Question (25) During the last 12 months from one year ago today how many days altogether were you confined to bed for the most part of the day? Please include the days that you were hospitalised.

	score
(a) No days.	6
(b) 1 to 7 days.	4
(c) 7 to 30 days.	2
(d) 30 days to half a year.	1
(e) More than half a year.	0

Question (26) How frequently are you bothered by one or more of your health problems?

	score
(a) Never.	6
(b) Occasionally.	4
(c) Often.	2
(d) All the time.	1

Should none of the above answers be correct please indicate in words the correct answer.

Question (27) At the times you have an outbreak or an attack of your particular health problem does it bother you?

	score
(a) Not at all.	3
(b) Very little.	2
(c) A fair amount.	1
(d) Very much.	0

Should none of the above answers be correct please indicate on words the correct answer.

Question (28) Are you continuing to suffer from this particular health problem?

	score
(a) Yes.	0
(b) No.	1

Question (29) Has your health problem been completely cured or is it under control?

	score
(a) Completely cured (or never suffered from a health problem).	3
(b) Well controlled.	2
(c) Partially controlled.	1
(d) Not controlled.	0

Question (30) For what time period did you suffer from this particular health problem until it was overcome?

	score
(a) More than 2 years.	0
(b) 6 months to 2 years.	1
(c) 1 month to 6 months.	2
(d) Less than 1 month.	3

Question (31) A question to the family physician. Do you consider the treatment that the patient has received had an effect on his health status in the area of his

ability to function in the community? Do you consider the effectiveness of it was?

	score
(a) Excellent.	3
(b) Good.	2
(c) Fair.	1
(d) Negative.	0

Question (32) A question to the family physician. In comparison with other people of the same age group, as the interviewee do you consider his health status to be?

	score
(a) Excellent.	3
(b) Good.	2
(c) Fair.	1
(d) Bad.	0

_____
_____

This is the end of section B. Total marks received from **section B.** The maximum possible mark was 80 from which the score was total score **section B.**

_____ _____

Section C

This section relates to the person's degree of confidence that he will find care and comfort in times of distress.

Question (1) Do you live alone or with your family who have the ability to reassure and comfort you in times of distress?

	score
(a) Alone.	0
(b) Together with a family of limited capabilities.	2
(c) Together with a reassuring and capable family.	4

Question (2) To what extent are nursing homes used to care for the aged and the infirm in the region where you live?

	score
(a) A great extent.	0
(b) Average.	2
(c) Little.	4

Question (3) What do you consider is the likelihood that your family would care for you at home during old age?

	score
(a) Very unlikely.	0
(b) Reasonably likely.	2
(c) Very likely.	4

Question (4) If you collapsed ill on the street in the city where you live, do you feel confident that qualified health personnel will come to assist you?

	score
(a) No.	0
(b) Perhaps.	2
(c) Yes.	4

Question (5) Are you confident that you will get warmth and understanding from your family doctor?

	score
(a) No.	0

(b) Maybe. 2
(c) Yes. 4

Question (6) Do you have a permanent family doctor?

score
(a) No. 0
(b) More or less. 2
(c) Yes. 4

Question (7) Do you feel that your health service treats you humanely and with respect?

score
(a) No. 0
(b) More or less. 2
(c) Yes. 4

Question (8) Does your family doctor or health care team explain your problems and illness clearly?

score
(a) No. 0
(b) Intermediate. 2
(c) Yes. 4

Question (9) Do you know and understand clearly how to care for yourself after consultation with your treating doctor?

score
(a) No. 0
(b) Fairly. 2
(c) Yes. 4

Question (10) Do you receive privacy during your consultation with your doctor and other medical staff?

score
(a) No. 0
(b) Intermediate. 2
(c) Yes. 4

Question (11) Should a member of your family be ill, do the relatives receive an explanation from the treating

medical staff that enables them to know how to competently care for the patient at home?

	score
(a) No.	0
(b) Intermediate.	2
(c) Yes.	4

Question (12) Should you require a visit to your treating doctor what length of time are you kept waiting?

	score
(a) More than 1 hour.	0
(b) Approximately 1/2 an hour.	2
(c) Approximately *1/4 of an hour.*	4

Question (13) When you attend a doctor's office, medical centre or hospital are you happy with the treatment and help you receive from the ancillary staff, including clerical and administrative staff and other paramedical staff?

	score
(a) No.	0
(b) Intermediate.	2
(c) Yes.	4

Question (14) Do you feel that the surrounds and atmosphere at your primary health care centre (family practitioner) and the system of receiving patients is comforting and reassuring?

	score
(a) No.	0
(b) Intermediate.	2
(c) Yes.	4

Question (15) Do you feel that the clinic that you are attending is organised in your best interest and do you have confidence in it?

	score
(a) No.	0
(b) Intermediate.	**2**

(c) Yes. **4**

This is the end of section C. Total marks received from section C. The maximum possible mark was 60 from which the score was total score section C.

Section D — positive health

Question (1) Would you question a physician who prescribes a drug or medicine as to whether it is really necessary? If not persuaded that it is essential, would you ask for nonmedical alternatives, seek another doctor, or simply disregard his advice and not buy the drug?

	score
(a) No.	0
(b) In between.	2
(c) Yes.	4

Question (2) Is your life working? Are you satisfied and often fulfilled by your work, mate(s), leisure activities, and general sense of purpose?

	score
(a) No.	0
(b) In between.	2
(c) Yes.	4

Question (3) Can people really choose to live well? Or are personal choices (e.g., to smoke, drink, etc.) dictated by environmental factors, peer pressures, ingrained habit, or the 'rewards' of negative behaviours? (Check yes if you believe choices can be made.)

	score
(a) No.	0
(b) In between.	2
(c) Yes.	4

High-risk behaviours

Question (4) 1. Do you smoke cigarettes, cigars, or pipes?

	score
(a) Yes.	0
(b) In between.	1
(c) No.	2

2. Is it frequently difficult for you to fall asleep at night?

	score
(a) Yes.	0
(b) Intermediate.	1
(c) No.	2

3. When you have a headache, do you take aspirin?

	score
(a) Yes.	0
(b) Intermediate.	1
(c) No.	2

4. Do you take any medications on a regular basis?

	score
(a) Yes.	0
(b) Intermediate.	1
(c) No.	2

Question (5) Would you drive when angry or depressed, do you keep loaded firearms in your home, or do you generally think of yourself as an aggressive person capable of physically assaulting someone other than in self-defence?

	score
(a) Yes.	0
(b) In between.	1
(c) No.	2

Environmental sensitivity

Question (6) Are you aware of, sympathetic to, and/or in any way involved in efforts (e.g., consumer boycotts) to reduce water pollution, air pollution, etc?

	score
(a) No.	0
(b) In between.	1
(c) Yes.	2

Nutritional awareness

Question (7) Do you conscientiously attempt to reduce your sugar, cholesterol and salt intake?

score

(a) No. 0
(b) In between. 1
(c) Yes. 2

Question (8) Do you have any idea of your optimum daily caloric, protein, fat, vitamin, and/or mineral intake?

score
(a) No. 0
(b) In between. 1
(c) Yes. 2

Physical fitness

Question (9) Are you comfortable with and proud of your body?

score
(a) No. 0
(b) In between. 1
(c) Yes. 2

Question (10) Do you regularly cycle, play handball, basketball, or soccer, or do you engage in swimming, rowing, running long distances, or other sustained vigorous activity?

score
(a) No. 0
(b) In between. 1
(c) Yes. 2

Stress management

Question (11) Do you meditate or otherwise try to centre balance, or quiet your mind on a regular basis?

score
(a) No. 0
(b) In between. 2
(c) Yes. 4

Question (12) Did you know that insomnia, general fatigue, stiffness of muscles, back pain, headaches, ulcers, colitis, gastritis, heart disease are all highly correlated with stress?

	score
(a) No.	0
(b) In between.	**2**
(c) Yes.	**4**

This is the end of section D. Total marks received from D. The maximum possible mark was 60 from which the score was total score section D.

Once such health status measurements are available, these can be used in many of the health fields, e.g., inter-regional comparisons, determining public health priorities, monitoring performance and quality care, utilisation and distributional effects, and cost-effectiveness studies, etc.

Endnotes and Further reading

Introduction

1. Taylor, R., *Medicine Out of Control,* Sun Books, Melbourne, 1979, Introduction, p. 4.
2. Commonwealth Bureau of Census and Statistics, Canberra, *Demography 1969-1970,* Introduction, p. 5.
3. Lalonde, M., *A New Perspective on the Health of Canadians,* Ottowa, 1974, Introduction, p. 1.
4. Mechanic, D., *Public Expectations and Health Care,* John Wiley & Son Inc., New York, 1972. Essays on the changing organisation of health services, ‘Goals in Health Care’, p. 9.

Chapter 1

1. Cartwright, A., Hockey, L., Anderson, J. L., *Life Before Death,* Routledge & Kegan Paul Ltd, London, 1973, p. 34.
2. Taylor, R., *Medicine Out of Control,* Sun Books, Melbourne, 1979, p. 26.
3. *ibid.*
4. Ahmed & Coello, *Toward a New Definition of Health,* Plenum Press, New York, 1979, Chapter 2, 'Disease and Illness from a Biocultural Standpoint', p. 23.
5. Hetzel, S. B., 'The Improvement of Health' in W. Holland & Gilderdale, *Epidemiology & Health,* Henry Kimpler, London, 1977, p. 37.

Chapter 3

1. Cassel,E., *The Healers Art,* Pelican Books, New York, 1978,p.9.
2. Cassel, *op. cit.,* p. 11.
3. Mechanic, D., *op. cit.,* p. 9
4. *ibid,* p.4

Chapter 4

1. *ibid,* p. 12
2. Alexander, F. M., in Michael Gelb, *Body Learning — An Introduction to the Alexander Technique,* Delilah, New York, 1981, p. 13.

Chapter 5

1. Donabedian, A., 'Evaluating the Quality of Medical Care,' *Milbank Memorial Fund Quarterly,* 1966,44, Supplement 166-207.
2. Meador, 'The Art and Science of Non-Disease', *New England Journal of Medicine,* 272:92, 1965.
3. McDowell & Martini, in Culyer, A. J., *Measuring Health Lessons for Ontario,* Ontario Economic Council, p.71
4. Culyer, A. J., *Measuring Health Lessons for Ontario,* Ontario Economic Council, 1978, p. 25.
5. Algie, S., 1972, 'Evaluation and Social Service Departments', in Laing, W.A. (ed.), *Evaluation in the Health Services,* London, Office of Health Economics 1972, p. 47.

Chapter 6

1. Taylor, R., *Medicine Out of Control,* Sun Books, Melbourne, 1979, p. 173.

Chapter 8

1. McKeown, T., *Medicine in Modern Society,* Allen & Unwin, London, 1965, p. 8.
2. Fabrega, H., Jnr, 'The Biological Significance of Taxonomies of Disease,' *Journal of Theoretical Biology,* 1976, pp.63, 191-2,(166).
3. Culyer, A. J., *Measuring Health Lessons for Ontario,* Ontario Economic Council, 1978, p. 71.
4. Friedson, E., *Profession of Medicine; A study of the Sociology of Applied Knowledge,* Dodd Mead, New York, 1970, Introduction, p. xviii.
5. Weed, L., *Medical Records, Medical Education and Patient Care,* Press of Case Western Reserve University, Cleveland, 1960, pp. 25, 61.

Further reading

Ahmed, P. I. & Coelho, G. V. (eds), *Toward a New Definition of Health,* Plenum Press, New York & London, 1979.

Barnard, K. & Lee, K., *Conflicts in the National Health Service,* Croom Helm, London, 1977.

Culyer, A. J., *Measuring Health Lessons for Ontario,* Ontario Economic Council, 1978.

David, H. P., 'Healthy Family Functioning: Cross Cultural Perspectives', in Ahmed & Coelho (eds), *Toward a New Definition of Health,* Plenum Press, New York, 1979.

Diamond, J., *Your Body Doesn't Lie,* Harper & Row, Sydney, 1979.

Donabedion, A., 'Evaluating the Quality of Medical Care', *Milbank Memorial Fund Quarterly* 44 Supplement, 1966.

Fabrega, H., Jnr, 'The Biological Significance of Taxonomies, of Disease', *Journal of Theoretical Biology,* 1976.

Friedson, E., *Profession of Medicine: A Study of the Sociology of Applied Knowledge,* Dodd Mead, New York, 1970.

Fry, J., *Medicine in Three Societies,* MTP Aylssbury Bucks, 1969.

Heller, T., *Restructuring the Health Service,* Croom Helm, London, 1978.

Herzberg, F., *Work and the Nature of Man,* Staples Press, London, 1968.

Herzlich, C, *Health & Illness A Social Psychological Analysis,* Academic Press, London & New York, 1973.

Holland, W. & Gilderdale, S., *Epidemiology and Health,* Henry Kimpton, London, 1977.

King Edward's Hospital Fund for London, *Management of Minor Illness,* Kings Fund Publishing Office, 1979.

Klarman, H. E., *The Economics of Health,* Columbia University Press, New York, & London, 1975.
Levin, I.., Katz, A., Hoist, K., *Self Care,* Croom Helm, London. 1977.
Levitt, R., *The Reorganised National Health Service,* Croom Helm, London, 1976.
Maslow, A. H., *Motivation & Personality,* Harper, New York, 1954.
McKeown, T., *Medicine in Modern Society,* Allen & Unwin, London, 1965.
Mechanic, D., *Approaches to Controlling Costs of Medical Care: Short Range & Long Range Alternatives,* 1976.
——, *Medical Sociology: A Selective View,* Free Press, New York, 1968.
——, *Public Expectations and Health Care,* John Wiley & Son Inc., New York & London, 1972.
Miller, J., *The Body in Question,* Jonathan Cape, London, 1978.
Parsons, T., *The Social System,* Free Press, New York, 1951.
Pike, G., *The Power of Chi,* Bay Books, London & Sydney, 1980.
Roemer, M., *Bed Supply and Hospital Utilisation,* A Natural Experiment, Hospitals 35, 1961.
Schweitzer, S., *Policies for the Containment of Health Care Costs and Expenditures,* DHEW, 176.
Sheldon, A., Baker, F. & McLaughlin, C. (eds) *Systems and Medical Care,* MIT Press, Massachusetts, 1970.
Singer, C. & Underwood, E.A., *A Short History of Medicine,* Oxford University Press, London, 1962.