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Emotional Problems In Chronic Illness

R. J. Weil, M.D.
Halifax, N. S.

IN viewing chronic illness from a physical standpoint only, we are taking a lopsided view of a problem which today is growing in scope and seriousness. Can we afford to overlook factors which indicate that in chronic illness there lies both the fruit and the seed of emotional unbalance?

Western civilization's rapid industrial progress, combined with the tremendous speed of medical progress, has brought chronic illnesses more and more into focus in the public eye and there is a strong indication that such illnesses are on the increase. It is a problem concerning not only the Public Health Departments but felt by industry and the community in general. It puts great strain on both individual and communal budgets. It affects the morale of the families involved as well as the community - and poor morale affects all.

At this point we may ask - "What is chronic illness?" Chronic illness is usually an incapacitating disease which lasts for a prolonged period, or is recurring. It is an illness which frequently decreases or even eliminates the effectiveness of the individual. It may be due to delayed recovery from an injury, an operation, an infection, a childbirth, or from some other acute condition. It may also be due to the patient's over-emphasis on the minimum chronic disease from which he suffers. Chronicity may be inherent in the natural history of the disease itself, as in osteo-arthritis, pulmonary tuberculosis, and other chronic afflictions. Social conditions may aggravate the case by demanding a greater efficiency than the illness permits the patient to muster.

Chronic illness per se brings about many changes in the psychological equilibrium of the patient, in his social position, his work status and his family life. A disease which requires bed rest or absence from work (or from other activities to which the patient has become adjusted in the past) changes his life pattern and reduces the scope of his world. His environment is constricted to the circle of his family, or the four walls of a hospital ward. Absence from work and social activities loosens his tie with reality. He becomes more egocentric and pays more attention to those stimuli which come from within himself than to those which come from outside. If he is forced to inactivity, his fantasies gain control over him and either lead him to depressive self-accusatory ideas or carry him away with grandiose, over-optimistic plans and delusions of self-importance. He becomes jealous of those around him who are healthier. He grows to feel that life has denied him pleasures and begins to demand tribute from those luckier beings around him. He will attempt to dominate them through his weakness. And their first feelings for their impulse not to comply to the patient's wishes are apt to allow this dominance, at least for a time. Aggressive tendencies, drained away in the past by activity are now either turned towards the people around him or towards himself. If it is the latter, this mental mechanism may lead him to despair, thoughts of suicide, or even to actual self-destruction.

In our society, "being sick" means to be excused from work and from living up to the responsibilities of mature adult life. The patient feels guilty for being sick and dependent upon others, he feels he must be *very* sick in order

to persuade others to accept his illness. This psychological mechanism thus leads him into a vicious circle. Previously he was independent, free to move where he wished - now he is dependent, tied to his bed, forced to passivity. Previously, he was able to go out and mix and reach into the world of reality, choosing his activities and his interests. Now he is dependent on others and the "dependency-independency" conflict (which most mature adults have solved years ago) is again reactivated. Adolescent feelings and fantasies creep back into the patient's mind. The regressive process does not stop at this level. He returns to behaviour patterns characteristic of earlier stages in his development. He becomes dominating, intolerant and selfish as a small child or he withdraws in a sulking manner. Weakness and helplessness are utilized by the sick person to exploit others. Rebellious moods develop very quickly if the patient's desires are not at once gratified. Because he has so much time and so little stimulation from outside, he begins to think more and more about himself. He becomes the centre of his own attention and as he watches with absorption his own body and the functions of his different organ-systems, he will respond swiftly to proprioceptive stimuli with hypochondriacal complaints.

The word "complaints" is significant, because in its popular usage it signifies or implies an accusation - and that is exactly what many patients are doing when they communicate to us their discomfort ("Can't you do anything about my pains?" "Why don't you help me?"). Forced into long periods of passivity, paralyzed by incapacitating illness and the hopelessness of cure, the patient's ambivalence towards those who look after him increases. He becomes fearful of his own aggressiveness and makes few constructive moves to assist his therapists and by therapists I mean all those people who have anything to do with his treatment or care. If the illness lasts for months, or even years, he loses more and more contact with his friends and with reality. He remains outside the occurrences in his community and his motivation to get well decreases rapidly with the passage of time. His relationships with those around him also becomes progressively worse, not only because of his own aggression but also because of their lack of response to his demands. A vicious circle of mutual hostility, distrust, suspicious resentment is induced by poor communication between patients afflicted by chronic illness and their families and medical attendants.

As stated in the beginning, there are strong indications that chronic disease is on the increase. If this is so, we have to ask ourselves these questions. What factors lead to, and maintain, chronic illness? Are chronically-ill people different from the "average personality" within our culture? J. Ruesch and his collaborators are quite convinced that they *are* different. Psychological investigations, clinical impressions and the detailed study of chronically-ill people appear to indicate that such persons even before they became chronically ill have a specific personality pattern. They are often hypochondriacal. Depressive trends are frequent. They are dependent, conformant and ambivalent in many areas. They seem to oscillate continuously between two poles - between masculinity and femininity, between dependency and independency, between passivity and aggression. Their backgrounds, too, appear to be of some significance. Unfavourable economic circumstances in childhood, physical cruelty, over-protection, lack of affection and security - one, or more

than one, of these factors seem to stand out in the histories of chronically-ill persons more frequently than in those of the general population.

From a medical standpoint, these patients very often complain of pains in various locations. Especially gastro-intestinal symptomatology is not uncommon. Symptoms of anxiety appear long before the onset of the chronic illness. Many of those patients have gone to doctors repeatedly, to be diagnosed for anaemia or bronchitis or to be labelled with one of the psychosomatic affections such as peptic ulcer, arthritis, etc. They have changed doctors many times and some "never acquire a diagnosis." It has also been noted that in the lives of these people physical symptoms appear at times of psychological stress. The medical history of a chronically-ill person, more frequently than others, show more than one disease, perhaps several operations in succession, or recurrent attacks of the same disease.

The beginning of chronic illness often coincides with significant external occurrences such as situational conflicts - changes in interpersonal relationships such as marriage, divorce, separation. etc. A shift in status and mobility in the class structure of society seems to predispose an individual to chronic illness. (J. Ruesch).

Chronic illness is more frequent in the lower middle class than in other social strata. Financial problems, which usually occur in prolonged illness, may be a very significant factor in maintaining the illness itself.

Therapeutic management for the chronically-ill patient may, with the best of intentions, lead to detrimental consequences. Modern medical diagnostic methods concentrate on administrative and technical efficiency. It also emphasizes specialization in the different fields of medicine. This "speciality" attitude leads to impersonality of the treatment relationship between the therapist and the patient. The medical man who is called in for a diagnosis seldom gets an opportunity to know the patient. Under these circumstances, communication between patient and doctor becomes almost impossible. Also, if at the onset or at any time during the illness, the patient is examined, re-examined, and subjected to the routine of physical and laboratory investigation, his attention may be unduly directed towards the organ system which to his physician is the apparent source of his symptoms.

A patient frequently expresses emotional discomfort by a physical symptom. The basic information he may intend to convey to his therapist may be "I cannot get along with my wife," or "We are having continuous friction and I am anxious and would like you to do something about it." This unconscious communication falls on unfertile ground. The physical examination fixates his symptoms and although treatment gives the patient relief for his present set of symptoms, the solution of his real problem has been removed further than ever. "The risk of fixing the symptoms is increased whenever therapy becomes very intensive, very elaborate, very impersonal and today, when ever-growing facilities are available for treatment to this kind, there is a danger, where the significance of much chronic and recurring illness remains unrecognized, of manufacturing invalidism on a scale hitherto unknown."

In his desire for a "cure" this patient will often seek help from more than one doctor and each of them will of course go over the same examination routine, thus fixing the patient's symptoms still more firmly in his mind without

alleviating the complaints. Eventually, he will leave the medical profession and seek help from other non-medical therapists and quacks.

Absence of physical findings in itself should not give rise to over-optimism in our minds and short advice as "There is nothing wrong with you - forget it" will not only fail to reduce or eliminate the patients symptoms but make him angry. Much talk is equally ineffective and harmful and leads to distrust of medical personnel in general. Reassurance and simple advice is just as ineffective as over-optimism. Some medical men feel they can discharge their duty by telling their patients "Everything will be all right" hoping that time will help the patient to forget his troubles. Others find it easier to talk to patients than to listen to them.

Reassurance and over-optimism is always a two-edged sword and so is advice. If advice is helpful, then the patient becomes dependent upon his physicians continuous help. If it is not helpful, then the patient becomes discouraged and unwilling to believe any statement made by any medical man.

For many years, it has been held that the safest treatment for any ill person is a period of rest, either at home or far from his every-day environment, depending on the financial resources of the patient. Often a patient will himself suggest to the physician that he is over-worked and "All he needs is a rest." Unfortunately, prolonged rest following an injury, a child birth or an operation are often initiating factors for chronic illness.

Rest, in the mind of the layman, is the treatment par excellence for illness in general and is usually obeyed. Prolonged rest, however, keeps the patient from healthy, normal activity and bring about physiological and psychological changes described before. Over-protective mothers, especially, exaggerate the need for rest by restraining children to an unnecessary degree. For instance, mention of a heart-murmur by a physician may very well lead a mother to keep her child in bed for months.

Rest gives the patient a good excuse for his tendency to dominate through his helplessness, as I have said above, but the reverse may also be true. "Overworked" women may seek refuge in bed during menstruation to escape the pressure of their daily responsibilities. It is not the contention of this writer that rest has no place in the treatment of many diseases but in recommending rest to a patient more attention should be paid to his personality makeup.

Diet comes in for its share of abuse. Confused and confusing advertising in widely distributed journals makes our population extremely diet-conscious. Self-imposed dieting and self-starvation are more common than usually admitted. To weigh more than the "norm" prescribed today is a terrific blow to some peoples self-esteem.

Some people try to alleviate their anxiety by eating and thus diet will not of course reduce their anxiety. Actually dieting may produce an increase in tension and anxiety by frustrating the emotional gratification of eating. They eat, feel guilty, starve, feel frustrated and eat again repeating the vicious circle over and over again. This, in extreme form, is the psychological mechanism in some cases of anorexia nervosa. Diet, especially in the case of chronically-ill persons, should not be prescribed without an evaluation of the personality of the patient.

Many patients come to a doctor hoping to receive a prescription which will bring about a "magic cure." We are all so eager and anxious to gratify our patient that our desire to do something for him inclines us to submit to his wishes. One hears every day "I have a headache, give me a pill," or "I cannot sleep, give me a sedative," or "Could you give me something to quiet my nerves." Under pressure from the patient, we feel almost compelled to give him medication - after all, this is the "magic" function of our profession, and while we are involved in the illusion of omnipotence, the patient keeps on taking drugs and holds on to his medication as a symbol, a proof of his illness.

Many people are unable to permit their bodily functions to go on automatically as they should. They are obsessed by the preoccupation about their "misfunctioning organs" and in a compulsive way they are continually taking medicines such as laxatives, sedatives and antalgics. There are people who feel they cannot have a regular bowel movement without "some help". nurses too, are over-ready to administer the little pill which "after all, is not harmful".

Drug Companies would not be so prosperous were it not for the number of people who try to satisfy their emotional needs by taking drugs. Very often the abuse of medicine occurs primarily in dependent, receptive, infantile individuals with very low frustration and anxiety tolerance. Medicine, received on the prescription of a doctor, satisfied their need for dependence, for guidance and succour. They are sure that something is being done for them. For the obsessive and neurotic in general, the taking of medicine is almost a ritual which they feel cannot be omitted without risk of causing some harm. Some patients have their own private drugstore to be ready for any eventuality. To run out of drugs or to forget to take them may throw them into a state of panic. Taking medicine can actually deter patients from facing their problems realistically because some of the symptoms are unconscious smoke screens to cover the real conflictual issues within the patient or within the realm of his interpersonal relations.

Operations too can be and are being abused. The problem may lie within the personality of the surgeon, but more often unnecessary surgical procedures are the result of pressure exerted on the surgeon by the patient himself. The surgeon tries to err on the safe side by looking into the patient's abdomen rather than risk a diagnostic mistake. Frigidity in women appears to be related to operation-proneness and very often is a precursor of chronic illness.

Dr. Karl Menninger in his book "Man Against Himself" devotes an entire chapter to "Polysurgery" in which he points out the self-destructive tendencies of patients submitting to multiple operations. Another motive of the patient for choosing surgical procedure may be the avoidance of something he fears more than surgery - his internal conflicts. The confusion of the frequently-referred patient prolongs his vaguely-defined and multi-labelled condition.

I have not gone into some social institutions such as Mothers' Allowance, Workmens Compensation Boards, etc., which, under certain circumstances, can produce chronic conditions or delay recovery from illness or accidents.

I have merely endeavoured to show that in our approach to the serious problem of Chronic Illness, the physical aspect should not be divorced from the mental one, and that treatment and rehabilitation of the chronically-ill ought,

at the very least, to include investigation into the emotional background of the patient.

In conclusion, I should like to mention a very important factor which I feel may contribute to the enhancement of the problem of chronic illness and that is our complacency and self-satisfaction with regard to modern administrative and technical efficiency in medical treatment. Dr. P. D. McKinlay sounds an appropriate warning on this subject when he says "The efficiency of a medical service must ultimately be judged by the standard of health of the people, rather than by the nature and amount of the facilities available for its preservation."

Cortisone and Related Substances as Therapeutic Agents*

W. I. Morse, M.D.

CORTISONE is a potent steroid hormone (Fig. 1) present in the human body as a result of adrenal secretory activity and—along with its analog, hydrocortisone—vital to the maintenance of homeostatis. It gives rise to a number of striking biological effects some of which have been effectively harnessed for therapeutic purposes. The discussion to follow will emphasize the principles underlying therapy with this agent. For greater detail two references dealing with many aspects of the topic are recommended.[1,2]

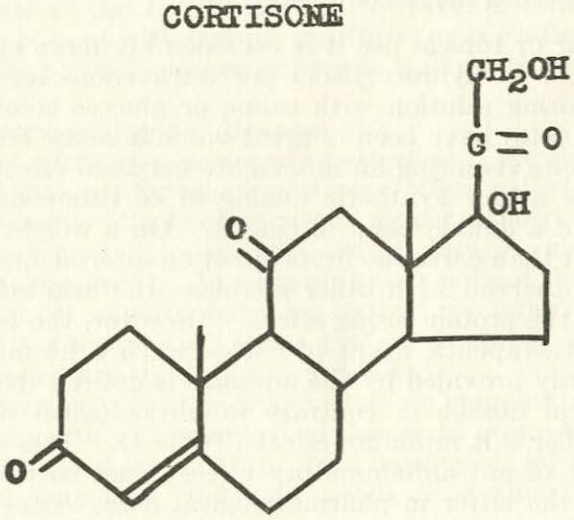

Fig. 1

The oral route is very satisfactory for administration of cortisone acetate providing the daily requirement is divided into multiple doses—two or three depending on the need for a steady therapeutic effect. The micro-crystalline suspension for intramuscular use is released over a period greater than twenty four hours.

Three useful analogs of cortisone should be mentioned, and also the routes by which one may administer them. *Hydrocortisone* differs from cortisone chemically only in having an OH group where the latter has an oxygen atom on ring C (third ring from the left in Fig. 1). Using the same route of administration, a slightly greater biological effect is obtained than with an identical dose of cortisone (Table I).

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*Presented in part at the Dalhousie University Faculty of Medicine Refresher Course, Oct. 24, 1955.

TABLE I

COMPARISON OF RELATIVE BIOLOGICAL ACTIVITIES OF CORTISONE CORTISONE ACETATE AND THREE ANALOGS.

(Same Dosage by Weight).

	Electrolyte* Metabolism.	Intermediary** Metabolism.
Cortisone	0.8	0.8
Cortisone Acetate	0.65	0.65
Hydrocortisone	1.0	1.0
Prednisone	1.0	4.0
Fluorohydrocortisone	100.0	25.0

*E.g. sodium retention and potassium depletion.
** E.g. glucose production and loss of body protein.

For intra-articular or topical use it is considerably more effective than cortisone. Preparations of hydrocortisone for intravenous infusion (dissolved in ethanol and requiring dilution with saline or glucose solution, or the water soluble hemisuccinate) have been of great value in acute adrenal insufficiency or other emergencies requiring an immediate maximal effect.

Prednisone is a new synthetic analog of cortisone differing chemically by the addition of a double bond in ring A. On a weight basis it is several times more potent than cortisone in its effect on intermediary metabolism and —as previously observed with other steroids—the anti-inflammatory action seems to parallel the protein losing effect. However, the feature that recommends it as the therapeutic agent of choice when a hormonal effect greater than that ordinarily provided by the adrenals is desired (hereafter referred to as pharmacological dosage in contrast to physiological dosage) is its proportionately smaller salt retaining effect (Table I). This steroid is more expensive (per unit of anti-inflammatory effect) than cortisone. The salt retaining effect of the latter in pharmacological dosage can be controlled adequately in many, but not all, patients by moderate salt restriction combined with supplementary oral potassium.

Fluorohydrocortisone is another interesting analog, but is not as yet available for purchase. It differs chemically from hydrocortisone only in the substitution of a fluorine atom at the junction of rings B and C. This remarkably potent synthetic steroid has a relatively greater effect on electrolyte metabolism than on intermediary metabolism (Table I), and, like those previously described, is active when taken orally. It has been used by Thorn and others as an alternative to monthly injections of desoxycorticosterone trimethyl acetate in Addison's disease with the object of defining the best agent to be combined with cortisone in order to prevent undue salt loss. Tests of adrenal function involving measurement of steroid excretion products are readily performed while administering this steroid because the small dosage required for a desired biological effect renders its contribution to the pool of steroid for excretion negligible.

Pituitary *adrenocorticotrophic hormone* (ACTH) injection will stimulate normally responsive adrenal glands to secrete hydrocortisone with a therapeutic

effect comparable to that following exogenous administration of the latter. The associated increment in androgen excretion resulting from stimulation of normal adrenals does not seem to modify this tissue response appreciably. Single intramuscular injections of ACTH preparations now available will in many instances provide maximal stimulation for one or more days. Judging from measurements of steroid excretion, hydrocortisone secretion may increase up to levels approximating 100 to 200 mg. daily.

It is clear that a number of therapeutically useful alternatives to cortisone are available. Let us now consider very briefly the conditions which may be helped by this group of pharmacological agents, of which cortisone is the prototype.

Cortisone in physiological dosage. Conditions requiring adrenal cortical replacement therapy fall into this group, the dosage ordinarily ranging from 12.5 up to 37.5 mg. daily. Severe pituitary insufficiency (most commonly due to post-partum necrosis or tumour) and chronic adrenal insufficiency show a gratifying response at this dosage level. However, in acute adrenal insufficiency or when the patient with chronic insufficiency is challenged by a variety of major stresses the physiological requirement is likely to be increased several fold.

Cortisone in pharmacological dosage.

A. *Peripheral effects of systemic administration.* We shall now deal with a large number of diseases for which cortisone offers palliation but not cure. Furthermore undesirable effects of cortisone render it necessary whenever its prolonged use is anticipated to seek the lowest dosage which will provide a satisfactory therapeutic result. In managing each patient the unwanted manifestations of the disease must be balanced against the unwanted effects of the steroid. If the latter alternative seems preferable the precautionary observations to be discussed are strongly recommended.

Perhaps greater clarity will be achieved as we enumerate some conditions responsive to cortisone in pharmacological dosage to group them with respect to the particular biological action of the drug responsible for the desired result. The same grouping may best serve our needs in dealing with undesirable effects.

1. *Anti-inflammatory effect.* Use for this effect may be found in rheumatoid arthritis, disseminated lupus erythematosis, periarteritis nodosa and other "collagen" diseases. Rheumatic fever may be benefitted where the symptoms have not responded to salicylates. Other examples are acute gouty arthritis, ulcerative colitis, regional enteritis, psoriasis, pemphigus, non-bacterial pulmonary granulomatous lesions, sub-acute thyroiditis, mumps orchitis, non-granulomatous choroiditis and that due to severe sarcoidosis of the uveal tract or sympathetic ophthalmia. It may be given a trial in optic or retrobulbar neuritis and has been used to prevent adhesions following manipulation of a "frozen shoulder."

An undesirable aspect of the same effect is the propensity toward spread of infection. Consequently bacterial infection—with emphasis on tuberculosis—is a contraindication to cortisone in pharmacological dosage unless covered by an antimocrobial agent which is known to be effective.* Roentgen

*The degree of protection provided by antimocrobial agents in tuberculous meningitis is illustrated by Dr. S. Shane's recent report of improved results when cortisone and antimicrobial agents were used concurrently.

examination of the chest is recommended before initiating therapy, at three months and then every three to six months while the steroid is exhibited.

2. *Anti-allergic Effect*: This may be a result of failure of the tissues to respond to products of antigen-antibody union. If so, it might be considered a subdivision of the anti-inflammatory effect. Use for this effect may be found in intractable bronchial asthma or vasomotor rhinitis, drug sensitivity reactions and certain forms of acquired hemolytic anemia.

3. *Glucose Forming—Protein Destroying Effect*: This effect is useful for the control of functional hypoglycemia and as a temporary measure in patients with islet cell tumors.

The aggravation of latent or overt diabetes mellitus is an undesirable aspect of the same effect. Protein destruction is manifested by osteoporosis, muscular wasting, and deterioration of the skin and blood vessels (cutaneous striae, ecchymoses).

4. *Salt Retaining—Potassium Losing Effect*: This effect has no therapeutic uses in the presence of adequate adrenal function, but is responsible for the following undesirable effects; edema, heart failure and hypertension. These can usually be controlled by supplementary oral potassium (3 to 9 grams potassium chloride daily if renal function is adequate) and dietary salt restriction.

5. *Digestive Gland Stimulating Effect*: This may perhaps explain the benefit observed in idiopathic steatorrhea. An undesirable result is the predisposition to development of peptic ulcer. History of ulcer is a contra-indication to the use of cortisone except in urgent circumstances. An antacid should be prescribed for use at frequent intervals if abdominal pain suggestive of ulcer occurs during exhibition of the steroid.

6. *Psychological Effect*: The euphoric effect observed in many patients may be used effectively to lessen the suffering and anguish of terminal carcinomatosis.

Insomnia is a common undesirable effect which can be lessened, if discontinuous oral therapy is justified, by administering the total daily requirement between the hour of rising and 4 p.m. Development of psychosis is a possibility which should be borne in mind by all persons attending the patient. A history of psychic instability is a relative contra-indication to the use of cortisone.

7. *Uses of Other* (?) *Effects of Cortisone*: Many patients with the nephrotic syndrome have been benefitted but the mechanism underlying this effect is controversial. A recent report claiming striking early benefit in cerebral thrombosis is of interest,[3] but requires confirmation.

Patients with meningococcemia or those desperately ill from infections responsive to anti-microbial agents (if given sufficient time), may be sustained through the critical initial phase of anti-microbial therapy by large doses of hydrocortisone intravenously and cortisone intramuscularly. If the underlying cause is surgical, definite surgery should be carried out at the earliest moment the patient becomes a good operative risk. Patients with shock unresponsive to transfusions and vasopressors during or following surgery have also been greatly improved by intravenous hydrocortisone. Thyrotoxic crisis is another indication for this agent. Acute leukemia and idiopathic

thrombocytopenia are other diseases for which cortisone may provide temporary control.

B. *Uses for Topical and Intra-articular Hydrocortisone*: Topical hydrocortisone is recommended in atopic and contact dermatitis, nummular eczema, anogenital pruritis, and a number of other dermatoses. Its cost is a drawback in the treatment of extensive chronic skin disease. Topical (and subconjunctival) ophthalmic preparations are very useful for some anterior segment and external eye diseases, e.g. anterior non-granulomatous uveitis, corneal abrasions, certain forms of keratitis and conjunctivitis, and following corneal surgery. The symptoms of vaso-motor rhinitis have been relieved by topical hydrocortisone.

Intra-articular hydrocortisone has been a significant aid in about fifty per cent of patients with rheumatoid arthritis predominantly affecting one or few joints. Repeated injections are usually required. This route has been used for "frozen shoulder" and other joint affections.

C. *ACTH Supressing Effect of Systemic Administration*: The hypothalamic centre responsible for pituitary ACTH release is partially controlled by the concentration of circulating hydrocortisone and cortisone (See Fig. 2.)

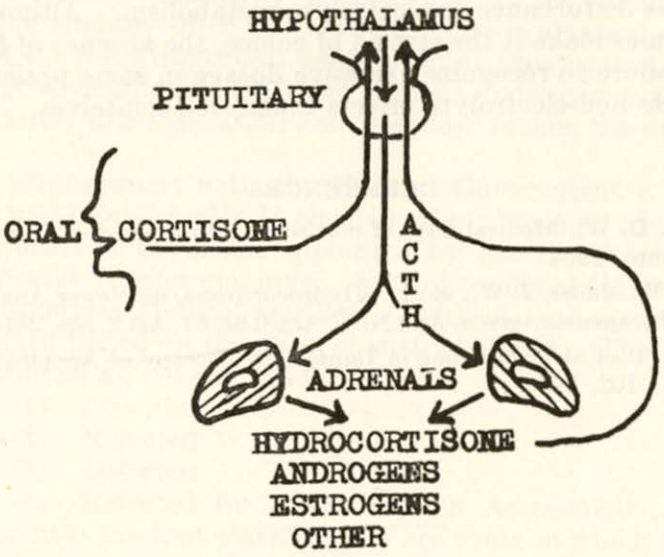

Fig. 2

Oral cortisone and several related steroids, operating through this mechanism, can effectively decrease ACTH release. As a consequence the secretion, not only of hydrocortisone, but also of adrenal androgens and other hormones (with the probable exception of aldosterone) is suppressed.

This ACTH suppressing effect may underlie the temporary objective benefit observed occasionally when these agents are used in gonadectomized patient with sex hormone dependent metastatic carcinoma of the breast or prostate. Temporary subjective improvement occurs rather commonly in this group. Cortisone is also finding a place in the management of adrenal androgenic hyperfunction associated with adrenal cortical hyperplasia in women and children. Unfortunately, suppression of the normal steroid output by exogenous cortisone also inhibits the otherwise large and vital contribution of the adrenal cortex during severe stress. It is important to simulate the normal response by increasing the dosage at such times, e.g. during and following surgery. Another critical period of deficiency will occur if cortisone is suddenly—rather than gradually—withdrawn after exhibition in pharmacological dosage because the induced adrenal hypofunction persists for several days.

Summary. Therapeutics has utilized several of the potent biological effects of cortisone with varying degrees of success. For most of the conditions mentioned pharmacological dosage is necessary, and the benefits are palliative rather than curative. A plea is made for careful case selection and frequent observation of those under treatment because undesirable effects are a frequent accompaniment and some of these may be life threatening.

The analog, prednisone, provides the same therapeutic potency at a dosage which causes less disturbance to electrolyte metabolism. Although this property will sometimes make it the steroid of choice, the absence of fluid retention may result in failure to recognize excessive dosage in some patients until even more undesirable non-electrolyte effects manifest themselves.

REFERENCES

1. Lukens, F. D. W., Medical Uses of cortisone, The Blakeston Company, inc. New York-Toronto, 1954.
2. Miner, R. W., Jailer, J. W., et al. Hydrocortisone, its Newer Analogs and Aldosterone as Therapeutic Agents, Ann N. Y. Acad. Sc. 61, Art 2, pgs. 281-635.
3. Russek, H. I. et al. Cortisone in Immediate Therapy of Apoplectic Stroke. J.A. M.A. 159: 102, 1955.

ERRATUM

In the last issue of the Bulletin there appeared a report from Maritime Medical Care Incorporated over the name of the President, Doctor A. G. MacLeod.

It should have been noted that this report was presented to the Annual Meeting of The Medical Society of Nova Scotia held in Amherst, September, 1955.

The Present Status of the Disabled Person's Allowance*

H. S. Farquhar
Director of Old Age Assistance and Disability Pensions, Halifax

ALLOWANCES to totally and permanently disabled persons are paid under a joint Federal Provincial scheme, which came into effect on January 1, 1955. The necessary legislation was passed by the Parliament of Canada and by the Nova Scotia Legislature. The scheme is administered by Provincial Authority and the Federal Government reimburses the Province to the extent of 50 per cent of the cost of allowances paid.

In order to qualify for an allowance a person must have reached the age of 18 years, must have resided in Canada for at least ten years and in the case of a single person, the yearly income inclusive of the allowance cannot be greater than $720. and in the case of a married person, cannot be greater than $1200.

The primary purpose of the legislation is to provide a measure of income maintenance for those permanently disabled persons for whom rehabilitation or other forms of therapy offer no solution. The evaluation of disability is therefore one of the most important aspects of the programme.

The Old Age Assistance Board is the legally constituted authority in Nova Scotia to administer this legislation and therefore makes the decision in each case.

Under an arrangement with the Federal Government a joint Medical Review Board was established. It consists of a physician appointed by the Federal Government, a physician appointed by the Provincial Government and a Medical Social Worker employed by the Provincial Government. This Review Board examines Medical and Social evidence and recommends to the Old Age Assistance Board on the basis of such evidence. The Review Board may then recommend any one of the following:

(1) Accepted
(2) Rejected
(3) Deferred
(4) Referred for Rehabilitation Assessment

Cases falling into the first classification are those in which they are satisfied the person is permanently disabled as defined in the regulations. They recommend rejection when in their opinion the disability is not permanent and total. Cases deferred are those where the condition causing disability is still active or the applicant is convalescent and the extent of the functional impairment is not yet clear. The Review Board recommends referral for rehabilitation assessment in cases which appear to be likely cases for such procedure. If an unfavourable rehabilitation prognosis is obtained as a result of the referral, the case will be reviewed again and either accepted or rejected. If the Medical Review Board deems it advisable they may recommend examinations

*Presented at the Annual Meeting of the Canadian Public Health Association, Atlantic Branch, at Kentville, N. S., November 9th and 10th, 1955.

by medical specialists, X-rays, laboratory tests and other diagnostic procedures before arriving at a recommendation to the Old Age Assistance Board.

Some difficulty was encountered at arriving at a satisfactory definition of permanent and total disability and eventually Federal and Provincial authorities agreed on the following:

(2) For the purpose of the Act and these Regulations, a person shall, subject to subsection (3), be deemed to be totally and permanently disabled only when

(a) such person is suffering from a major physiological, anatomical or psychological impairment, verified by objective medical findings, and

(*b*) such impairment is likely to continue without substantial improvement during the lifetime of the individual and is one to which the concept of cure cannot be applied; and

(c) as a result of such impairment, such person is severely limited in activities pertaining to self-care normal living such as being

(1) bedridden or chairfast.

(2) unable to leave home without being accompanied by another person.

(3) normally in need of care and supervision for one or more of such self-care activities as dressing, body hygiene or eating.

(4) unable to perform such routine activities as climbing a short stairway or walking a limited distance on a level surface, or

(5) certified by a qualified physician to be under medical instructions to forbear from activities such as are mentioned in (4) above.

(3) Notwithstanding subsection (2), a person shall be deemed not to be totally and permanently disabled where, in respect of such person, a favourable rehabilitation prognosis is obtained, or approved therapeutic measures are recommended, by the provincial authority, and the requisite rehabilitation or therapeutic measures are available.

The Procedure followed by the Old Age Assistance Board is that an Application Form is provided upon request and a Medical Report Form is furnished to be completed by the family physician. A Social Investigation is carried out by one of our Welfare Officers and the Medical Report and Social Report are studied by the Medical Review Board.

In some cases the Medical evidence alone will be sufficient to show whether the disability imposes such functional impairment as to severely limit the individual. In other cases however, the extent of functional impairment is not clear from the medical evidence alone. Our social investigation shows among other things the manner in which the applicant functions in his home environment. How he looks after his personal needs, the assistance he requires from others, the extent to which he can get around and other similar facts which can only be obtained through personal observation. It will be noted therefore, that the Medical Review Board must rely on the social investigation as well as the Medical evidence for an adequate evaluation.

We began to receive applications late in December 1954, and in the few months following we received a very large number. During the past two or four months the number of new applications has been small.

To the end of October 1955 we had received 2902. Of this number 1128 were found eligible, 1185 failed to meet the medical test, 290 were rejected for other reasons, 64 were referred for Rehabilitation assessment and 47 were deferred for varying periods. 186 remained to be dealt with.

I may say that we found this legislation difficult to administer, partly because of a great deal of misunderstanding on the part of the general public and partly because many perplexing problems have arisen.

The Act and regulations provide for an annual review of cases which have been granted to determine whether recipients continue to be eligible.

The rapid progress in medical research means a changing of opinion in the concept of cure. A few years hence we may see certain forms of treatment or therapy coming into use that are not in effect to-day and it is not beyond the realm of possibility that some persons considered permanently and totally disabled now, may not be considered so at some future time.

We have received splendid co-operation from the members of the Medical Profession and others, in the tremendous task we have performed in processing nearly 3,000 applications in the past 10 months.

Obituary

Dr. Peter Olding Hebb of Dartmouth, age forty-eight, died suddenly at the Victoria General Hospital on December 1, following a short illness.

Dr. Peter Hebb was born in Chester in 1909. He graduated from Dalhousie Medical College in 1934. Two years later he went to London, England, to pursue post-graduate studies. Dr. Hebb returned to Dartmouth in 1937 and formed a partnership with Dr. M. D. Brennan. This partnership was later enlarged to include Dr. C. H. Young, and to become the Dartmouth Medical Centre.

Dr. Hebb was past-president of the Halifax Medical Society, the Brightwood Golf and Country Club and the Dartmouth Curling Club.

He is survived by his widow, two sons and two daughters.

Schedule "R"*

J. D. Milligan
Supervisor of Vocational Rehabilitation
Department of Education, Province of Nova Scotia

SCHEDULE "R" is a project designed to provide for the vocational, technical or professional training or retraining of any disabled person, who, because of a continuing or remaining disability, requires training to fit him for continuing employment in a suitable occupation.

All cases for training must be approved by a Selection Committee, consisting of at least three members:

The first and usually the Chairman of the Committee represents the Provincial Government. Generally this person also represents and is a member of the staff of the Department concerned with administering training under the Schedule. In Nova Scotia, Mr. E. K. Ford, Director of Vocational Education, represents the Provincial Department of Education and acts as Chairman of the Committee.

The Federal Government representative on the Committee is Mr. Alex Ross, Supervisor of Special Placement, Unemployment Commission, Moncton.

Mr. Roy MacCuish, Regional Director of Training, Canadian Vocational Training, is the third member of the Committee.

The other members of the Selection Committee are Mr. Frank Wellard, Provincial Rehabilitation Co-ordinator and myself. As Supervisor of Vocational Rehabilitation, it is part of my job to act as Secretary to the Committee and with the Co-ordinator, to prepare cases for submission.

It is important to call to your attention the fact that the Committee depends upon the information contained in the rehabilitant's file for a basis upon which they can render a decision as to whether training should be initiated. Lack of pertinent information concerning ability, and limitations regarding physical condition and personality can only result in rejection of cases. The regulations specifically state that the Selection Committee must have suitable medical evidence or opinion regarding the trainee's ability and limitations to assure that training and resultant employment conditions will not be detrimental to the trainee.

Training may be provided in part-time or full time classes for periods not in excess of two years, unless prior approval is given by the Federal Director of Training.

Specialized training techniques may be employed where required because of disability, e.g., individual tutoring or home instruction - but we must remember that such tutoring or instruction is limited with but one exception, which I will speak of later, to training which is vocational in nature.

Training on-the-job may also be arranged. This must be with an employer with whom the trainee will be employed on completion of such training. I call your attention to the fact that the rehabilitant must be assured of a job on completion of training with the employer who trains him. For your infor-

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*Paper read at conference of Rehabilitation Supervisors, Nova Scotia Sanatorium, Kentville, N. S., November 8, 1955.

mation it has also been agreed by the Selection Committee that the contribution towards wages paid shall not in the first instance exceed 80 per cent and during the whole period of training shall not exceed 50 per cent. This is achieved by means of a schedule of wage payments by which a decreasing percentage is paid to the employer as the trainee progresses and becomes more valuable to him. Such training requires continuous supervision, and the right to regular visits to the employer's place of business is contained in all training on-the-job agreements. Training on-the-job agreements are limited to one year in duration and each case must be reported to the Federal Director of Training within 30 days of its authorization by the Selection Committee.

Provision has been made for professional training because it is realized that such training will be the most suitable type for a limited number of trainees with outstanding ability along specific lines. It is not provided simply because a disabled person desires such training for its own sake. To quote the specific example given in the memorandum to Schedule "R": "A course leading to an arts degree in a university could not be approved as part of a training program under Schedule "R" to fit a disabled person for teaching, medicine or law."

No provision has been made for continuation or completion of general education or for the approval of academic courses at any level of schooling.

However, and again I quote: "Where inadequate or incomplete academic qualifications can be overcome by short intensive training in specific subjects, such as mathematics or science, such short courses may be regarded as part of the vocational training program."

Finally, special training centres may be established by the Province—in effect this applies particularly to the establishment of special classes in specific subjects where existing facilities have been found to be inadequate.

As to allowances, the following schedule of living allowances for trainees in educational institutions has been approved by the Minister of Education and agreed to by the Federal Director of Training:

Single person living at home:	$10
Single person living away from home:	17
Married person living at home:	20
Married person living away from home:	25

It is to be understood that these allowances are to be considered the maximum in each case and the measure of need will determine what proportion will be paid to the individual trainee.

From this point we pass on to the question of eligibility. The memorandum states that: "The measure of eligibility is determined in the first place by the extent to which the permanent or continuing disability prevents the applicant from engaging in suitable available employment and secondly, the extent to which the proposed training program will fit the applicant for suitable continuing employment." Elsewhere, suitable employment is described as employment in an occupation which is suited to the capacities, aptitudes and interests of the trainee. To this has been added the Resolution of the Interdepartmental Committee at its meeting of May 12, 1955, which states: "It was agreed that the broad policy is that selection for vocational training should be based on the extent to which disability affects the individual's ability

to earn his livelihood at his previous occupation, and not merely on the fact that he has a disability." It was acknowledged however, that each case must be considered as an individual with an individual problem and all the medical, social and vocational factors must be taken into consideration. Motivation is particularly important.

Mr. Wellard has probably explained to you the various channels through which cases eventually reach the selection committee. In order to facilitate the flow of cases to the Selection Committee, that committee has cleared the way to include "Recommendations emanating or proceeding from the office of the Rehabilitation Co-ordinator which indicate that the vocational goal is appropriate, and contain medical evidence as to physical ability to undertake the training requested."

Vocational Counselling: The memorandum stresses the need for counselling immediately before the case goes before the selection committee. Where there is doubt regarding eligibility of the applicant or suitability of the desired training program, the reasons for recommending the particular type of training should be clearly set out."

Breakdown of Cases:

3 meetings have been held to consider cases.

23 cases have been submitted so far; of these 2 have been returned for further evaluation.

1 has been returned with a recommendation that the individual be returned to employment of which he was still capable, there being some indication that his unemployment following release from treatment was due to his attitude toward his former employers and the type of work he had been trained for.

1 would not appear for training interview and this case is coming up for reconsideration.

1 – a deaf lad of 16 was returned for consultation with parents for admission through the regular channels to Halifax County Vocational High School. However, at the suggestion of the Rehabilitation Co-ordinator, this lad applied and was accepted by Cossor-Canada for a period of trial employment and it is highly likely that eventually an agreement for training-on-the-job will be approved for him.

With respect to the remaining 18 cases, the following results have been recorded:

10 of these, of whom 8 are ex-tuberculous patients, are engaged in institutional training. 5 of the ex-tuberculous patients are taking commercial training in one form or another, 1 is engaged in training as a Movie Projectionist, 1 in Radio-Servicing, and 1 as a Radio-Electronics Operator.

3 are engaged in training on the job - 2 ex-tuberculous in show repair and 1 post-polio case in radio-TV servicing.

1 ex-tuberculous patient is working in a drug store and preparing for pharmacy examinations on his Certified Drug Clerk's course.

1 spina bifida case has been provided with employment as a taxidermist's helper in place of training on-the-job in taxidermy.

Two cases which have not been resolved are post-polio cases, one who had been

guided into radio and TV repair, but who proved physically incapable of handling the work, and a second, who required an artificial leg to enter show repair has been referred to the Polio Foundation.

The final case is that of an ex-tuberculous patient for whom training was arranged and who gave up because the school was located on the third floor of a building.

As to future training possibilities, it is probable that on the basis of a survey now being completed, a school for barbers will be set up in the Province. At least that is the recommendation which will be contained in the survey. We hope, as a result of the recommendation made to the National Committee on Rehabilitation, that an interchange of information concerning the possibilities of training opportunities in other provinces will soon be made.

In conclusion, I would like to pay tribute to Mr. Barrett for the co-operation he has provided in supplying any additional information necessary in these cases and to you, the Supervisors, for your excellent work in preparing the cases for submission. We who are engaged in rehabilitation work must learn to place principles above temporal considerations, when we weigh our reasons for assisting others. I was away from rehabilitation work for nearly four years. I missed the rewards this work brought me. Before I left this work the first time, the description of rehabilitation had become hackneyed. Whenever now this work begins to pall, I re-read the definition: The restoration of the disabled to the fullest possible physical, mental, social, vocational and economic adjustment and usefulness of which they are capable, and I recognize that such a profound ideal requires the best efforts of which one is capable.

Obituary

Dr. Charles Elmer Stuart, age forty-nine, a physician of New Glasgow, died from a heart attack, at the Aberdeen Hospital on December 15. He had been ill but a short time and his sudden passing was a shock to us all.

Dr. Stuart was born in Springton, P.E.I. He attended Prince of Wales College at Charlottetown, and Dalhousie University, graduating in 1935 with his M.D. After doing post-graduate work on this continent he practised in Parrsboro for five years before moving to New Glasgow. Dr. Stuart gave a great deal of his thought and energy towards the building of the new Aberdeen Hospital of which he was justly proud.

Dr. Stuart was a member of the Gyro Club, Albion Lodge, A.F. and A.M., and the Curling Club.

He is survived by his widow, two sons and a daughter.

National Health Service*

Dr. John Hunter
Secretary for Australia

THE National Health Service in Australia has now been in operation sufficiently long to permit of the obtaining of reliable statistics and also of making some conclusions as to its efficacy, the problems the Service creates, and its effects on medical practice.

The Service which is provided by the Federal (Commonwealth) Government under a specific head of power in the Commonwealth Constitution, consists of the following parts:

A. National Tuberculosis Campaign
B. Provision of free milk for school children
C. Pharmaceutical Benefits
D. Pensioner Medical Service
E. Hospital Benefits
F. Medical Benefits

A. National Tuberculosis Campaign.

The Tuberculosis Act of 1948 provided the original charter for the Tuberculosis Campaign but is was not until 1949 that a start was made in giving effect to the object of the Campaign, viz., the eradication of Tuberculosis from Australia or at least control of the disease to such a degree as to reduce its prevalence to negligible proportions.

Since 1949 the Commonwealth Government has expended £28,238,446 on the Tuberculosis Campaign, this amount being made up as follows:

1. Maintenance - £13,925,771.
   In 1947-48 the amount spent by the six States of the Commonwealth on Tuberculosis was £746,036, whereas in 1954-55 the amount spent was £4,546,614, of which the State Government contributed the same amount as in 1947-48, while the Commonwealth Government contributed £3,800,578.
2. Capital Works.
   The contribution of the Commonwealth for capital works has increased from £236,179 in 1949-50 to £1,710,812 in 1954-55.
   Commonwealth assistance has resulted in 1,000 additional beds being provided for Tuberculosis patients, and additional beds are in the course of construction.
   The total capital expenditure since 1949 has been £5,455,637.
3. Allowances.
   Sufferers and their dependents have been granted the most generous allowance in the world, thus enabling sufferers to cease work and

*Reprinted from the World Medical Journal with the kind permission of the Executive Editor and the author.

receive proper treatment. A sufferer with dependent wife receives £9.2.6. a week, with an additional 10/- for each child.

There is a means test for allowance purposes which has regard, however, only to income and not to money in the bank or property. A married sufferer and his wife may have between them £7. a week before there is any reduction in allowance. The total contribution for allowances since 1949 has been £8,857,038.

The results of the Campaign may be summarised as follows:

1. Since 1949 total annual deaths have fallen from 1,964 to 974 and the death rate per 100,000 population from 24.3 to 10.9.
2. At least 3,000 concealed cases have been brought to light as the result of the generous allowances, whilst X-ray surveys and other diagnostic methods have revealed many more.
3. An additional 1,000 hospital beds have been provided.
4. The percentage of the disease arrested amongst sufferers receiving Tuberculosis allowances increased from 12 per cent in 1951 to 36 per cent in 1954.

The assault on Tuberculosis has been assisted by the other services provided - free pharmaceutical benefits, free medical benefits for pensioners, and free milk for school children.

B. Provision of Free Milk for Children

More than a million Australian school children are now provided with free milk on each school day under the scheme 1 launched as part of the National Health Service in 1950. The Free Milk Scheme seeks to strengthen the health of growing children and so make them healthier adults. Being a long term project it is too early to attempt any assessment of its ultimate value in improving the health to the community.

The cost to the Commonwealth since the introduction of the Scheme in 1950 has been £6,595,177.

C. Pharmaceutical Benefits (Life-Saving and Disease Preventing Drugs)

This Section of the National Health Service was based on the provision, free to every member of the community, of drugs classifiable as either life-saving or disease-preventing or both. The machinery necessary for the Scheme is simple and consists of:

1. An official list of items numbering 186, all single substances, compounds not being included, originally compiled and amended by a Statutory Committee, the Pharmaceutical Benefits Advisory Committee, the majority of whose members are British Medical Association nominees appointed by the Minister for Health.
2. A contract between the Government and registered pharmacists for the supply, at a fixed price to the Government, free of charge to patients, of all items on the official list.
3. Prescription forms supplied by doctors themselves and bearing their name and address and the heading N.H.S. (i.e. National Health Service).

There are no penalties for doctors in respect of breeches of the Regulations, the only offence for which a doctor could be charged being either a crime or misdemeanour, e.g. fraud. Form of prescriptions (size and shape), quantities prescribable and number of repeats are defined in the Regulations.

There is no doubt that the consideration of the professional view point by the authorities has resulted in the close co-operation and support of the profession in the working of the Pharmaceutical Benefits Section of the Health Service - a comment which applies equally well to other Sections of the Service.

There is no doubt that the Pharmaceutical Benefits Scheme has given much satisfaction to the public though it is doubtful if the individual member of the community appreciates the saving to his pocket when he is ill.

The only real ground for criticism of the Scheme relates to the indiscriminate prescribing of antibiotics by a small percentage of the profession. Indeed, when first introduced, largely because of lack of knowledge of the therapeutic value of the antibiotics and of the importance of not rendering organisms resistant to antibiotics, the prescribing of antibiotics threatened to raise the cost of the Service inordinately. However, as elsewhere, willing co-operation between the profession and the Government produced a solution in the construction of a work-sheet of specific diseases for which antibiotics should be prescribed, and which doctors are now required by Regulation to observe.

From the profession's point of view the main criticism lies in the increased amount of clerical work resulting from basic requirements of the Service. Thus separate prescriptions, all in duplicate, must be written for General Pharmaceutical Benefits (available to every person), Pensioner Pharmaceutical Benefits (available only to pensioners) and drugs listed under the Dangerous Drugs Act (e.g. morphia, cocaine, etc.), and this means extra time spent in clerical work as well as extra cost for stationery. Yet when all criticisms are made it may well be that this Service is the most rational in existence from both the patient's and Government's point of view, while it preserves the doctor's freedom and discretion in prescribing and the pharmacist's freedom and economic status.

The percentage expenditure on major drug items is as follows:

	%	%
Penicillin	19	
Other antibiotics	28	47
Sulphonamides		14
All other items		39
		100

The number of scripts, the average cost of each script and the cost to the Government since 1951 are as follows:

	Number of Scripts	Average Price s.d	Amount £
1951-52	6,518,283	20/6	6,712,147
1952-53	6,855,708	18/1	6,199,786
1953-54	7,044,613	20/4	7,160,186
1954-55	9,268,369	17/4	8,048,612

Total Commonwealth expenditure on all phases of the Pharmaceutical Benefits Service since its introduction in 1950 has been £34,353,074, of which £30,793,090 represents payment to chemists, including a few doctors who do their own dispensing.

D. Free Medical Service and Medicines to Pensioners

The Pensioner Medical Service, which came into being in 1951, was designed to provide general practitioner services, free of charge, to all persons in receipt of an age, invalid, widow's or service pension, or a tuberculosis allowance, and the dependent wives and children of such persons.

Later the Service was extended to cover the provision of special pharmaceutical benefits.

Medical treatment of a general practitioner nature, such as is usually given in the doctor's surgery or in the patient's home is provided for pensioners and their dependents - to be eligible the pensioner must possess an entitlement card issued by the Department of Social Services. This card is the authority for the doctor to provide free medical attention and must be presented to the doctor on each occasion that medical treatment is rendered. The doctor initials and dates the card at the time of each consultation or visit. The patient, or other responsible person, signs a voucher at the time and this provides the basis of the doctor's claim for payment from the Commonwealth for the services rendered. The voucher also contains a statement by the patient authorizing payment for the service rendered to be made directly to the medical practitioner concerned. This was done at the specific request of the profession in order that the contract for service would be between patient and doctor and not the Government and doctor.

Any registered medical practitioner may participate in the service which is free to all eligible persons. But a medical practitioner may charge a pensioner patient a small fee for after hours service or for travelling beyond a certain distance - three miles - from his surgery.

Since the scheme was inaugurated there has been a progressive increase in the number of services given by participating doctors and there has also been a steady increase in the number of pensioners and dependents entitled to the service. The following table illustrates the growth of the service since its introduction in 1951.

Date	No. of Enrolled Persons (Pensioners & Dependents)	Percentage of Eligible Persons Enrolled
30/ 6/51	432,196	79.1
31/12/51	468,000	85.8
31/12/52	535,200	94.0
31/12/53	575,800	96.5
31/12/54	620,125	97.5
30/ 6/55	640,229	97.3

The number of enrolled persons including pensioners and dependents has increased from 432,196 (79.1 per cent of eligible persons) at 30th June, 1951 to 640,229 (97.3 per cent) at 30th June, 1955.

The number of participating doctors and the average payment per doctor per year, including mileage, are as follows:

Date	No. of Participating Doctors	Average Payment (£)
30/6/51	2,980	75
30/6/52	3,502	344
30/6/53	3,898	452
30/6/54	4,239	520
30/6/55	4,567	552

The Commonwealth contribution to pensioners under the Scheme has increased from £1,034,902 in 1951-52 to £2,516,077 in 1954-55, the grand total being £7,481,928.

Medical practitioners are paid at the rate of Ten Shillings (10/-) per consultation at the surgery and Twelve Shillings (12/-) per visit. These rates represent a concession of 33-1/3 per cent on ordinary private charges.

In addition to the benefits under the General Pharmaceutical Benefits Service, which is available to every member of the community, pensioners and their dependents are provided, free of charge, with all medicines contained in the British Pharmacopoeia, together with other specified drugs. These benefits are made available on the prescription of a medical practitioner in accordance with Regulations defining the procedure.

The number of prescriptions written for pensioners and their dependents are as follows:

Year	Number	Average Cost s.d.
1951-52	1,578,640	4/4
1952-53	2,662,424	5/4
1953-54	3,477,041	5/10
1954-55	4,418,661	5/11

That there has been abuse of the Pensioner Medical Service cannot be denied. This abuse has been caused by excessive calls on the doctor by the patient and excessive calls on the patient by the doctor. The extent of this abuse can be gauged to some extent by the number of services per individual member which has risen from 4.16 per person per annum in the first year to 8.4 in the third year, though it has now dropped to 7.

Excessive servicing by doctors is illustrated by great disparities in income from the Pensioner Medical Service. As has been pointed out the average income to doctors is at present £552 per annum but in a few cases it has amounted to £3,500.

Abuse on the part of the profession is limited to a very small section, about 2 per cent; for this section the remainder of the profession are demanding the severest punishment.

To deal with charges of abuse the Government has constituted Committees of Inquiry composed entirely of doctors appointed by the Minister of Health from a panel recommended by the Council of the British Medical Association in each State. These Committees hear complaints against doctors referred

by the Department of Health and they may recommend to the Minister for Health that a doctor be compelled to refund amounts received for excessive visiting, and/or that he be warned, or that he be suspended from the Pensioner Medical Service for periods up to a year.

The profession is demanding that the widest publicity be given to action taken against members of the profession as it is believed that such publicity will be an effective deterrent against abuse of the Scheme.

As with all schemes which provide free services abuse by the patient is bound to occur and difficult to control.

E. Hospital Benefits

The Hospital Benefits Section of the National Health Service introduced in 1952, as with the Medical Benefit Section, is based on the principle of subsidisation of benefits received by way of contributions to voluntary insurance organisations.

The Commonwealth makes a grant of eight shillings (8/-) per occupied bed per day to hospitals in all States and in addition subsidises the benefit which a contributor receives from a voluntary organisation by four shillings (4/-) per day. In effect the Commonwealth's subsidy is twelve shillings (12/-) per day in respect of all persons in hospitals who are members of voluntary insurance organisations.

Rates of contribution vary from sixpence (6d.) a week for a benefit of forty-two shillings (£2:2:0) to three shillings (3/-) for a benefit of twelve pounds twelve shillings (£12:12:0) per week.

There is no doubt that the Hospital Benefits Scheme has placed public hospitals on a sound basis. Prior to its introduction all public hospitals, including teaching hospitals, were in debt and working on large overdrafts. Indeed not infrequently trades people supplying goods to hospitals had to wait months for payment. Now the situation is changed and public hospitals are actually ending the financial year with a surplus.

The following statistics are evidence of the rapid growth of voluntary hospital insurance.

Date	Members	Total Coverage	Population	% of Population Covered
31.12.51	945,000	1,977,000	8,528,129	23.2
30.6.55	2,111,315	5,121,277	9,149,477	56.0

Further evidence of the growth is shown by the fact that whereas in 1952-53 the amount paid to hospitals through the medium of Commonwealth Hospital Benefits Scheme totalled £7,993,333 in 1954-55 the amount was £11,921,579.

F. Medical Benefits

The Medical Benefits Scheme came into operation on 1st July, 1953, and as with the Hospital Benefits Scheme the basic principle is the payment of a benefit to a person who has voluntarily insured himself.

As with the Hospitals Benefits Scheme the administrative costs of the Medical Benefits Scheme are borne in the main by the voluntary organisations, no allowance whatever being made by the Commonwealth for administrative costs.

The National Health Act provides for two Schedules of Benefits: Schedule 1 including in the main those services normally rendered by a general practitioner and Schedule 2, a schedule of specialist services, including radiological, pathological, urological, neurosurgical, etc.

The Commonwealth benefit ranges from six shillings (6/-) for a consultation to eleven pounds five shillings (£11:5:0) for an operation and the voluntary organisation, which must be non-profit making and approved, is required to at least match the Commonwealth benefit. It will be seen then that the contributor to a voluntary insurance organisation will receive at least twelve shillings (12/-), usually a little more, towards the cost of a consultation (generally fifteen shillings (15/-) and up to twenty-two pounds ten shillings (£22:10:0) towards the cost of a major operation.

If referred by a general practitioner to a specialist the benefit payable by the Commonwealth for a consultation is £1:0:0, the voluntary organisation paying at least an equivalent amount.

Schedule 1, apart from consultations and visits, contains 120 items of service, whilst Schedule 2 contains 288 items. As the Schedules are part of the National Health Act no provision exists for varying the Schedules except by amendment to the Act which is politically not always desirable. However, the Government is giving consideration to devising a method whereby the Schedule may be amended either by additions or deletions.

There are several hundred voluntary insurance organisations, the largest being the Medical Benefits Fund of Australia, which was established by the medical profession in 1947, when it was threatened with nationalisation. Its membership is over 600,000 and its coverage approximately 1,300,000.

The main criticism of the Medical Benefits Scheme has been its failure to cover pre-existing disease. As voluntary insurance is the basic principle it is clear that pre-existing illness could not be permitted to attract a benefit from the date of joining as otherwise the incentive to insure would be destroyed. However, to meet the case of persons with pre-existing disease the insurance organisations have now agreed to pay benefits in respect of the particular disease after two years membership.

Another criticism has been the failure of the voluntary organisations to pay benefits reasonably promptly. In the early days there was certainly considerable delay due primarily to the rapid growth of the organisations. However, now that the growth is not so rapid and staffs have been trained, payment is more prompt and indeed in many instances payment is made over the counter.

Still another criticism is that whereas with some services, e.g., consultations and visits, the total benefit, i.e. Government and voluntary insurance organisation, payable, approaches 90 per cent of the doctor's charge - a fundamental principle of the Scheme being that the total benefit must not exceed 90 per cent - with a considerable number of services the benefit does not exceed 60 per cent, and in some cases 40%. Frequent requests to the Government to

remove some of the anomalies have not been acceded to, but it is anticipated that once the organisations have established themselves on a sound actuarial basis with adequate reserves, it will be possible to increase the benefits payable in respect of a number of services.

With the removal of grounds for criticism the Medical Benefits Scheme has grown in popularity and that this is so is evidenced by the following statistics:

Membership of Registered Organisations and Total Coverage

DATE	Membership	Coverage	Population	% of Population Covered
30.6.53	537,800	1,425,170	8,815,660	16.17
30.6.54	1,358,337	3,502,071	8,986,873	38.97
30.6.55	1,665,524	4,154,103	9,149,477	45.4

The cost of services and how met are shown in the following statistics:

DATE	COST OF SERVICES	MET BY		
		Fund Benefit	Commonwealth Benefit	Insured Member
30.6.54	4,489,825	1,424,504	1,408,354	1,656,968
30.6.55	13,443,952	4,562,320	4,155,086	4,726,546

The average number of services per insured member and per person covered are as follows:

Date	No. of Services	No. of G.P. Services	% G.P. to Total	AVERAGE NUMBER OF SERVICES					
				Per Member			Per person covered		
				G.P.	Other	Total	G.P.	Other	Total
30.6.54	3,148,407	2,319,923	73.7	2.45	.87	3.32	0.94	0.34	1.88
30.6.55	9,226,396	6,435,492	69.7	4.26	1.84	6.10	1.68	0.73	2.41

The medical profession is very happy with the Scheme for it conserves all the principles for which the profession has fought over the years - professional freedom and no alteration in the doctor-patient relationship, and at the same time lays down an economic foundation such as the profession never before possessed.

It may be truly said that it is the Golden Age of Medicine in Australia.

Cancer Treatment In Nova Scotia
The Nova Scotia Tumour Clinic

N. H. Gosse, M.D.
Halifax, N. S.

The following statement has been requested for publication.

Nova Scotia Tumour Clinic

ONE fully integrated clinic especially designed for the treatment of cancer has been established in this province. It is the Nova Scotia Tumour Clinic, operated in association with the Victoria General Hospital at Halifax.

This clinic opened three years ago and has developed rapidly. It is estimated that for the year 1955 more than 2,000 patients will have been seen and more than 3,500 visits made. Only those patients who are referred by qualified doctors are admitted.

Staffing

It is believed to be unique in Canada in its type of organization and for the degree of specialization that it enjoys. In addition to the specialties usually recognized as such in major hospitals, that of General Surgery has been divided for Tumour Clinic purposes into five regional specialties; and there is one additional one for the Leukaemias and related "Medical Malignancies."

For the most part each specialty is staffed with from two to four men and the Radiotherapist is a necessary attendant at all clinics where that specialty has an interest. The system then is one of group consultations in diagnosis and treatment by Clinicians and Radiotherapist in common discussion groups.

In addition, regular Tumour Conferences, open to the whole Clinic staff and to the medical public, take up the problem cases in addition to Clinic matters of major moment.

The close integration of Clinic and Hospital staffs has also furnished the basis for the development of the endocrinological aspects of cancer therapy, which at this point has included a series of hypophysectomy operations for advanced cases of cancer of the breast.

Doctors Services Contributed

Professional Services in the out-patient service of the Clinic and in the public wards of the Hospital are given by the attending doctors without recompense.

Facilities

As to less animate things:

X-ray facilities of the hospital with treatment machines varying from 140 to 440 K.V. are quite adequate in their field.

In radium there is an adequate supply of element tubes and needles, and for gold seed work there is a satisfactory arrangement for their supply by air (The hospital dismantled its own emanation plant some time ago).

In isotopes, a Cobalt 60 Unit is on order and a building is planned to house it. More portable R.A. isotopes are employed as occasion requires.

Utilization

Of course much cancer work is still done at points in Nova Scotia outside of the V.G. Centre. Surgery and X-ray therapy are done on a private basis at the Halifax Infirmary, and to a degree in Sydney, while surgery alone is done in other places. One of the outstanding weaknesses in the care of cancer patients is the mis-use of the biopsy. This will disappear as its significance becomes more widely understood. The proportion of advanced cases coming to the Clinic remains high.

A check of the cancer deaths in Nova Scotia shows that a very considerable proportion of those deaths is of people who had not had treatment in this Centre. The proportion of those that have had, however, is increasing yearly. Total use is indicated in para. 2.

The problem of transportation to the Clinic for follow-up has not yet been solved but is being considered.

The Tumour Registry

One of the most important of the Clinic's activities is its Tumour Registry which for its proper functioning requires to keep contact regularly and for their life time, with all patients that have been in this institution, whether as in-patients or as out-patients.

In the case of ward patients and most out-patients, contact for the most part is direct, and only when difficulty is experienced is the help of the doctor sought. Unfortunately, that is quite frequent. In the case of private hospital patients, unless otherwise specifically requested by the attending doctor, contact is only through him.

In this most important phase of tumour work the co-operation of our profession is a prime necessity and it is a pleasure to record with what prompt generosity that is being given. In the occasional case in which it is not forthcoming that patient is lost to the centre for experience purposes.

Reports to Doctors

On the part of the Clinic the effort is to give the referring doctor the most satisfactory service possible. To this end an objective was set of not more than forty-eight hours to have reports of patients in the mail. This has been bettered. Except in the cases of those that have to be held for an X-ray report or a laboratory report, reports are in the mail inside twenty-four hours. This refers to patients seen in out-patient Tumour Clinic. Patients who enter hospital come under the hospital's system of reporting which is not quite as rapid. Methods for the speeding up of this are under consideration.

Clinic Days:

Clinics are held only on their own special days, e.g., Head and Neck Wednesdays, Breast Thursdays etc. No patient should be sent without prior appointment nor on days other than the appropriate days. It is not fair to patients to have them arrive on days when no clinic for their condition is being held.

Metropolitan Life Information Service

Wallace Troup, M.D.*
Ottawa, Ontario.

OTTAWA, Ont.—"Canada's health record for 1955 is the best in the history of the country with births reaching a new high of close to 450,000 for the year," according to the Honourable Brooke Claxton, Vice-President and General Manager for the Metropolitan Life Insurance Company in Canada. He said that the Company statisticians anticipated that the death rate for the year would be somewhat under the previous low of 8.2 per 1,000 of population registered in 1954. This represents a reduction of 12 per cent from the average of 1946 to 1950.

Despite the great increase in the child population in recent years the death rate from communicable diseases of childhood is unusually low in 1955. Of special interest is the country's poliomyelitis record for the year, in view of the active and well organized program of vaccination against the disease. The total number of cases in 1955 is approximately 1,000, or less than half the 1954 figure and barely one fourth of the average of the five preceding years. The death rate from the disease in 1955 is less than one third of that in 1954, but it must be kept in mind that there is normally great variability in the annual incidence of the disease.

"It is gratifying in view of the high birth rate that both infant mortality and maternal mortality were at a favourably low level in 1955," said Mr. Claxton. The infant mortality rate will again fall below 35 per 1,000 live births. The maternal mortality rate is likely to set a new low - appreciably less than 1 per 1,000 live births.

The recent great gains against tuberculosis in Canada have been maintained in 1955. For the second successive year the death rate from the disease is only about 10 per 100,000. Just one decade ago, the death rate from the disease was 46 per 100,000, or four and a half times as high.

Another noteworthy feature of Canada's health record for 1955 is a small decline in the death rate from diseases of the heart and circulatory system. With the steady increase in the proportion of older persons, even a small decline in this rate is encouraging, and especially so in 1955 in view of the increased prevalence of respiratory disease. The death rate from cancer also appears to have registered a small decline in 1955. However, the mortality from diabetes increased slightly.

The record for accident fatalities compares favourably with that of recent years. Indications are that the death rate from accidents will be about the same as in 1954, but better than in 1953. It also appears likely that motor vehicle accident fatalities will be fewer than two years ago although there is no substantial change from 1954. Canadians are aroused as never before to the needlessly high toll of death and disability from motor vehicle accidents. The prospect for reducing the present toll of nearly 3,000 fatalities a year appears brighter with the establishment of a permanent organization known as the Canadian Highway Safety Conference and the wide measure of public support

*Associate Medical Director, Metropolitan Life Insurance Company.

already being given to the efforts of the new organization and to the provincial and local campaigns.

"The remarkably good health record of the Canadian people has been made possible by the development of the medical and allied sciences, the spread of medical services, the growth and extension of public health activities, and the marked rise in their standard of living," Mr. Claxton commented.

Society Meetings

THE PICTOU COUNTY MEDICAL SOCIETY

The Annual Meeting of The Pictou County Medical Society was held in the Board Room of the New Aberdeen Hospital on January 18th with President S. D.Dunn and sixteen members present. After discussion of new and old business the nominating committee brought in the slate of officers for the year 1956. These were as follows: President, G. Ritchie Douglas, M.D., New Glasgow, N. S.; Vice-President, J. B. MacDonald, M.D., Stellarton, N. S.; Secretary-Treasurer, H. A. Locke, M.D., New Glasgow, N. S.; Representative to the Executive of The Medical Society of Nova Scotia, C. G. Harries, M.D., New Glasgow, N. S. Following the meeting the Society adjourned to the Norfolk Hotel for a steak dinner, and an address by C. A. Manning, LL.B. on "The Unsatisfied Judgment Fund." After a vote of thanks and appreciation the meeting ended.

H. A. LOCKE, M.D.,
Secretary-treasurer.

CAPE BRETON MEDICAL SOCIETY

The January meeting of the Cape Breton County Medical Society was held at St. Rita Hospital on the 12th.

Doctor A. W. Gyorfi, pathologist to some of the local hospitals, was guest speaker and gave an interesting lecture on Medical Photography, illustrated by several coloured lantern slides.

Doctor B. C. Archibald was presented with a brief case on the occasion of his departure for Ottawa where he will assume a new position with the Department of Indian Affairs.

Doctor F. B. Webber is now located in New Waterford and Doctor Geharity has moved to Ontario.

H. R. CORBETT, M.D.,
Secretary-Treasurer.

SHORT COURSE IN ANAESTHESIA
FEBRUARY 27th to MARCH 1st, 1956

* * * * *

The mornings will be spent in the Operating Rooms of the Victoria General Hospital for practical work. Doctors wishing to administer certain Anaesthetic agents, under supervision, are asked to forward their requests before the start of the course.

The afternoon sessions will be held in the Fourth Floor Clinic Room, Victoria General Hospital.

* * *

Monday Afternoon, February 27th, 1956.

2.30-3.15 "Anaesthesia for Tonsillectomy in Children—Dr. A. S. Wenning.

3.15-3.45 "Anaesthetic Emergencies"—Dr. R. W. M. Ballem.

3.45-5.00 Round Table—"Spinal Anaesthesia vs. General Anaesthesia."

Moderator: Dr. H. Little.
Dr. C. H. L. Baker, Dr. D. V. Graham, Dr. C. G. MacKinnon, Dr. J. H. Charman, Dr. C. L. Gosse.

Tuesday Afternoon, February 28th, 1956.

2.30-3.00 "Resuscitation and Oxygen Therapy."—Dr. R. W. M. Ballem.

3.00-3.30 "What's New in Anaesthesia."—Dr. A. F. Pasquet.

3.30-4.00 "Muscle Relaxants."—Dr. R. A. P. Fleming.

4.15-5.00 "Therapeutic and Diagnostic Nerve Blocks."—Dr. C. C. Stoddard.

Wednesday Afternoon, February 29th, 1956.

2.30-3.15 "Care and Handling of Patient Before, During and After Anaesthesia."—Dr. C. M. Kincaide.

3.15-4.15 "Shock and Blood Substitutes."—Dr. C. C. Stoddard.

4.15-5.00 "Mechanics of the Gas Machine."—Dr. A. S. MacIntosh.

Thursday Afternoon, March 1st, 1956.

2.30-3.30 "Interesting Case Reports."—Dr. A. S. MacIntosh.

3.30-4.15 "Anaesthesia for the Poor Risk Patient."—Dr. C. M. Kincaide.

4.15-5.00 "The Role of Pharmacology in Anaesthesia."—Dr. J. G. Aldous.

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Twenty-two hours formal study credit will be allowed by the College of General Practice for attendance at all sessions of this course.

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Your enquiries or applications may be addressed to the Executive Officer, Post-Graduate Committee, Victoria General Hospital, Halifax, N. S.

Registration fee of twenty dollars is payable on your arrival in Halifax.

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