and Whalen of Durham reported that "the present studies suggest that a properly timed atrial systole plays an important role in determining stroke volume which is most apparent in clinically ill patients. This response indicates that despite the presence of heart failure, the heart was not on the flat portion of the Starling curve." Again, it would appear that when a patient needs a greater cardiac output, bifocal atrioventricular demand pacing may serve as a mechanism by which he can achieve it.

The development of the bifocal demand pacemaker double circuitry in a power pack size comparable to existing pacemakers makes their appropriate use possible. The development of "J" shaped atrial electrode to supplement the conventional bipolar right ventricular electrode renders insertion by the simple transvenous route feasible. Substantial experience, such as that reported by Castillo, Berkovits, Castellanos, Lemberg, Callard and Jude in this issue (see page 360) offers considerable clinical and physiologic understanding of this new addition to the therapeutic armamentarium of cardiac pacing. Their work has had added support through the experience of Matloff, Zuckerman, Bozorgi, Sykosch, Marea, Pieretty, Zaroff and Personnet, to name a few. This equipment should be available commercially in the near future.

While saluting this clinical study on bifocal demand pacing and particularly the engineering achievement of Berkovits, attention must be called to the encyclopedic three-part report on artificial pacemakers by Lown and Kosowsky in late October and early November, 1970 issues of The New England Journal of Medicine.

Work such as this calls our attention to the gargantuan strides that have been made in the field of pacemakers. We are often tempted to think of the device problems rather than the prizes. Problems are often disproportionately conspicuous over the contributions in health and lives saved. One should marvel at what we have and correct what we have not. One cannot but be concerned over imminent legislation that could restrict innovation and prevent just such developments as this. Perhaps the legislation can be properly directed by such salutary studies as those of the Inter-Society Commission for Heart Disease Resources, those of the Association for the Advancement of Medical Instrumentation and similar safeguarding groups who are concerned both with protecting the patient against dangers of commission and perhaps even more dangerous delays in development and treatment that spell tragedies of omission.

Apparently, just as with bifocal pacemakers, American engineering and clinical ingenuity can deliver health services to the public as we physicians come to know what we want.

"We see what we look for and we look for what we know."

Dwight Emary Harken, M.D., F.C.C.P.*

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The Patient Can Learn While He Waits

I t is good that today's patient is a more sophisticated "consumer" than his predecessors. Properly channeled, this medical inquisitiveness can be a major asset to the clinician in his efforts to obtain an accurate history and in the implementation of therapeutic recommendations. Accurate source material prepared by the medical profession for the layman can save the practitioner an enormous amount of time, which he must now spend in explaining fundamental aspects of disease processes. Indeed, such material anticipates the questions most frequently asked by patients, and thus permits the clinician to direct his responses to the individual aspects of each case rather than the broad generalities common to each disorder. The wisdom of such an approach is particularly evident in such diseases as diabetes and hypertension, in which successful treatment is related to the patient's awareness of basic processes and prognostic implications.

How can this information be brought to the attention of the appropriate readership? By the nature of their specialties, the chest physician and surgeon are privileged to utilize with special effectiveness the potential in this approach. The patient with pulmonary or cardiovascular symptoms is particularly motivated to achieve understanding of how his mode of life can affect his disease. Why not make available to these individuals such pamphlets and signs as, "If You Want to Give Up Cigarettes (A Helpful Booklet for the Patients Who Want to Quit Smoking)" and "No Smoking; Cancer Control in Progress;" these booklets are provided by the American Cancer Society without charge to the physician. Other voluntary health organizations and professional societies have prepared pamphlets on coronary heart disease, tuberculosis, and related subjects. These materials may, of course, be mailed directly to the layman, but there is profound value in placing such information in hospital reception rooms and in the practitioner's office reception room.

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If the supply is limited, sample copies of pamphlets may be displayed and the patient instructed where he may obtain his own copy. There is evident benefit in stimulating the patient's interest in modifying his habits when this motivation can be immediately reinforced by conversing with his own physician.

Dr. J. Willis Hurst, Professor and Chairman, Department of Medicine, Emory University School of Medicine, has recently authored a superb book entitled *Four Hats* (Chicago, Yearbook Medical Publishers, Inc., 1970, used by permission). One of the essays in this volume dramatizes the importance of teaching machines in these environments. This essay, "The Waiting Room as an Educational Center," states:

"Members of the public—now called consumers of health services—deserve the best efforts of the medical profession. The education of the consumer should be a major concern of the profession because it will not be possible to deliver health services to an uninformed public. The consumer must be taught the value of preventive medicine. The consumer must also be taught the harm of excessive medicine. The consumer must learn that it is possible to underdo and also to overdos health services.

Someday there will be a health education system to assist in the execution of the concept mentioned above. What can we do while waiting for such a system to emerge? Where and how can the consumers have an opportunity to learn about health? There are many places where and many methods by which such is possible, but there is one neglected place in which one neglected method should be used. The place is the boring waiting room. The waiting room of every hospital and every doctor's office throughout the nation should be utilized as an educational center. This is where prevention of heart disease, the danger signals of cancer and the abuse of drugs should be taught. The method entails the proper use of teaching machines, thus sparing the time of teachers.

To dream of what might be achieved in such an educational center staggers the imagination."

*Alfred Soffer, M.D., F.C.C.P.
Chicago*

**Aggressive Therapy for Hodgkin's Disease**

It has been said that determinate survival of some neoplasms, such as breast cancer, has stood unchanged throughout the 20th century. Park and Lees,1 "those deft but dour wizards of biometry,"2 have sought to prove that ultimate survival in breast cancer is uninfluenced by treatment. One need not go this far to be concerned with our inability to cope with cancer.

The traditional attitude toward Hodgkin's disease has been one of pessimism because of the low survival and youthfulness of many victims. Recent years have seen a significant change in reported results and consequently in physicians' attitudes. At least two factors have produced this change. First is a reappraisal of gross and histologic patterns of the disease.3 This culminated in the staging plan suggested at a symposium held in Rye, New York, in 1965. Staging has given the therapist a solid base from which to work. The second major change is concerned with radiotherapy. The fact that the massive adenopathy of Hodgkin's disease melted away with small doses of low kilovoltage treatment (often used as a diagnostic measure—the "test of therapy") understandably misled therapists into suboptimal treatment patterns. Improved knowledge of clinical variations has led to greater confidence in the use of larger doses of megavolt irradiation. Currently this consists of 3,500 to 4,000 rads of wide field megavolt therapy over a three-week to six-week period. This has been espoused with great force and clarity by Kaplan4 and by others. Kaplan4 has found that 50 percent of patients with previously untreated disease classified as stage 1 have survived five years. The actuarial likelihood of recurrence after this time is considered to be under 5 percent.

It was inevitable that this changing philosophy would attract the attention of surgeons. The persistent notion that mediastinal Hodgkin's disease is relatively favorable has been shown to have some truth. In Lukes'5 World War II series, 59 percent of patients with intrathoracic disease had nodular sclerosis—a less anaplastic histologic variety. Burke et al6 reported a similar incidence in resected specimens. These authors are responsible for current interest in surgical treatment of this disease, although a kindred philosophy has been championed by Slaughter7 for many years.

In this issue of CHEST we find evidence that surgery, like radiotherapy, is being extended in Hodgkin's disease (page 446). This involves bilateral thoracotomy performed a few weeks apart for stage 2 cases. We have occasionally accomplished excision in bilateral hilar disease using median sternotomy, thus obviating a second major procedure. We have been deterred from radical surgery in patients with systemic symptoms, since this has appeared to us and to others5 to be an unfavorable omen. The