The scope and responsibility of medicine in present day society is such a topic. Until this can be identified and at least somewhat defined, it is unlikely if not impossible that rational or meaningful programming for any aspect of health education or health care can take place. The problem is first to bring interested and informed opinion to bear, provide for interaction and exchange, and then identify the threads which run through the discussion, and eventually try to weave them into some sort of fabric which will receive general approval and acceptance. It is only when a problem is well defined and a clear question is asked that a correct answer can be found.

If the forum on "The Scope and Responsibility of Medicine" can achieve its purpose it will also demonstrate the usefulness of a new technique in the decision making process within a democratic human institution. This could be its greatest contribution.

Current Knowledge of Psoriasis

ANY DISEASE WHICH may affect between 200,000 and 600,000 persons in the United States is an important one. Although psoriasis is considered benign in the sense that it is not significant as a cause of death, it most certainly is not benign in the socio-economic sense. An old synonym, *lepra alphos,* apparently stems from biblical times when psoriasis probably was frequently mistaken for leprosy. In any event, psoriasis is a dread, loathsome disease which, in the words of Sulzberger, more frequently ruins the reputation of the dermatologist than any other dermatosis, with the possible exception of warts. It is quite unpredictable and capricious, and the tendency is life-long.

Elsewhere in this issue is a superlative review of current knowledge of psoriasis by Farber and McClintock. It is a testimonial to the productivity of the broadly based research program at Stanford Medical School. Such an article cannot be encyclopedic (several hundred articles and monographs are published on the subject each year), but it does contain a balanced and critical summary of the pertinent information now available concerning this important disease.

The review accurately reflects that we have no startling new facts about psoriasis. It has been known for a long time, on the basis of excellent studies in Germany, Denmark and this country, that the disease has strong genetic overtones, and it is well established that psoriasis consists of an increased epidermopoiesis. Curiously, the only noncutaneous component thus far described is psoriatic arthritis, unless one includes Reiter's syndrome as being a variant of psoriasis. It is a disease, however, in which there may be systemic repercussions, as for example the hypervolemia and increased cardiac output which may complicate generalized erythroderma and exfoliation, even leading to cardiac decompensation.

Drs. Farber and McClintock tell us of newer understanding of traditional topical treatments (including the dangers thereof) and point out that the use of topical corticosteroids is not without hazard. As for systemic treatment, the beneficial effect of inorganic arsenic has been recognized for at least a century, coupled with awareness of serious drawbacks, principally the delayed onset of malignant change. Systemic corticosteroids have a place occasionally in the treatment of severe psoriasis but must be employed with critical judgment and control. Methotrexate and other chemotherapeutic agents developed for the management of malignant disease may be of aid in highly selected cases as suppressive, non-specific therapy.

The authors point out that no explanation for the pathogenesis of psoriasis is as yet at hand. The possibility of an enzyme defect is appealing in this era of molecular diseases, but no substantial information exists in support of this. Even if the genetic pattern were more clearly delineated, there is as yet no particular metabolic pathway which can be implicated.

Farber and his colleagues have made a significant contribution in characterizing the disease more clearly and in assessing and evaluating its natural history. The etiology and pathogenesis of psoriasis still elude us. While this remains true, therapy will continue to be empirical.

Routine Chemical Screening

IN RECENT YEARS routine screening for asymptomatic disease has assumed a prominent role in the

practice of medicine. Technological developments such as the multichannel laboratory analyzer and electronic data processing have made it feasible to measure many physiological and chemical parameters routinely on large numbers of apparently healthy persons, rather than to reserve laboratory tests for persons with suspected clinical disease. At the same time, routine screening has evoked considerable discussion as to its merits.

The hope, of course, is that the serious chronic diseases are more amenable to definitive therapy if detected early, and that complications will be prevented by early diagnosis and treatment. While several studies of the long term effects of routine screenings are under way here and abroad, it remains appropriate to examine the more immediate effect of screening and to point out the problems that must be solved through further research.

Elsewhere in this issue of CALIFORNIA MEDICINE, Schoen presents a review of some of the difficulties associated with routinely measuring clinical chemical factors. The article emphasizes the great need to define the normal biochemical state—a need that existed before the advent of mass screening but has been accentuated by performing tests on large numbers of healthy persons. Since different clinics use widely different definitions of normal, comparisons of the proportions who are abnormal have little meaning, and surely "more sick" cannot be equated to more abnormal. Normal ranges must be developed that take into account age, sex, geography and other variables, such as drug usage, that affect the test, if the physician is to make intelligent decisions. It is to be hoped that the future will see other approaches to the concept of normality such as Williams',[1] which is based on a profile of tests that are integrated and compared with previous tests on the same patient.

A related problem is that many tests have only recently been done routinely, and much research is needed as to the clinical significance of abnormal results. Schoen appropriately points out that 70 percent of significant unsolicited abnormal findings are revealed by testing blood glucose and urea. This is to be expected because physicians have had enough experience with these tests to appreciate their clinical usefulness. Similar long-term experience must accumulate before the usefulness of other, newer tests can be evaluated.

The lack of specificity of screening tests results in a large number of false positives and may add to the burden on already overtaxed medical resources, as well as cause undue anxiety to the patient. It is well to reiterate that screening tests are performed on a mass basis to distinguish between persons likely to be healthy and those likely to be sick, and that, used as such, they are not diagnostic tests. One reason for lack of specificity, implied by the article but deserving of special emphasis, is poor quality control. Asserting that a 25 to 75 percent variability can occur with poorly controlled automated equipment, Williams[1] pointed out that automation imposes an even greater responsibility for the clinical pathologist. Automation does provide the opportunity, however, to establish more effective quality control programs.

The development of automated determination of clinical chemical factors has, on the other hand, provided the potential of learning a great deal about the prevention of disease. It is now possible to monitor many biochemical processes in large numbers of persons, repeatedly over time, with good accuracy and at relatively low cost. If, as Schoen suggests, additional channels do not at present provide significant information, the solution is not to abandon their use but to study how this increased power of measurement can be applied for the benefit of the patient.

[1]Williams, G. Z.: Effects of automation on laboratory diagnosis, Calif. Med., 108:43-45, Jan. 1968.

A Biologic Society in an Age of Science

THE PREMISE that scientific progress is the most significant cultural force in today's world is acceptable to almost everyone. This force finds expression in the new complicated technologies of an ever more complex technologic society which now requires more scientific education, greater specialization and increasing interdependence among those human beings who must live in, adapt to and operate this scientific and technologically complex society. It therefore seems likely, if not inevitable, that as more science is taught in schools, and as more science is required in daily living, the approach and methodology of science will gradually become the matrix or framework of cultural thought. As this occurs, whatever is unscientific dogma or doc-