

A New Look at the Consultation Continuum

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A pair of kidneys will never come to the physician for diagnosis and treatment, they will be contained within an anxious, fearful, wondering person, asking puzzled questions about an obscure future, weighed down by the responsibilities of a loved family, and with a job to be held and with bills to be paid. A biochemist or a physiologist can ignore all these secondary factors and can confine his attention to the kidneys, but the family physician must learn the facts about it all, and comprehend it all, and have a feeling for it all, and develop a plan of management for it all. Otherwise, his approach is superficial. — Paraphrased from Dr. Philip Tumulty in *The Effective Clinician*.

It has been said that over 95 percent of the problems a family doctor is confronted with during his or her professional career can be adequately and adeptly handled by a skilled and current family physician.^{2,3} These patients fit into the family physician's experience world comfortably. However, we must also consider the others and all the factors that enter into when, how, where, and to whom we send patients for consultation. There are many factors involved in a carefully planned and appropriate consultation, and it is important for us as family physicians to consider these factors whenever we refer our patients to more deeply trained specialists than ourselves.

In this modern age, highly sophisticated treatment schedules can be put on computer tapes to be printed out at the push of the proper button. Computers are being successfully employed in diagnosis, but the ways of wise management of a sick person can only come out of an understanding and sensitive, as well as perceptive and educated, mind. This prepared mind needs to include the thought processes that go into the comfortable handling of the consultation. The process is just as important as the when, how, where, and to whom mentioned above.

Consultation of a specialist for a patient's specific problem begins not with the problem but with the patient and the patient's family. This important fact is the heart of family practice, and this humanistic approach separates family medicine from the many other specialties by placing the patient and patient's family at the center of our interest. Medicine or surgical subspecialties place a disease or disease process at the center. The intent of this paper, therefore, is to work from the important center of family medicine — our patient and his/her family — and offer a detailed process by which we can facilitate and guide our patient and the patient's family through a consultation continuum.

The center focal point of the consultation is the patient and the patient's family as is illustrated in the central circle of Figure 1. The disease state may then envelop the patient and his or her family and may be the

reason that consultation will be sought. The family physician is involved in the ongoing health care of the patient and patient's disease state throughout the consultation continuum. Because of his tenured position, the family physician has a unique opportunity to be the orchestrator of health-care delivery. In this production called health care, the family physician should not be a stagehand operating the set backstage. The family physician should be a Eugene Ormandy or an Arthur Fiedler — with a baton — listening, directing, participating, so that his or her patient and family do not fall through the cracks created by the divisions of health care among subspecialties. For the purpose of this paper the actual consultation process can be broken into three phases: the preconsultation phase, the consultation phase, and the postconsultation phase.

The Preconsultation Phase

We have to know when to refer. As family physicians we must know our strengths and weaknesses and admit our limitations. Prior to any consultation we must take into consideration our patient's preexisting medical, emotional, and cultural problems. Is this consultation in our patient's best interest when we consider all the factors? Will the consultation improve the patient's and his/her family's quality of life? Once these difficult questions are answered, we must select the appropriate subspecialty to which we plan to refer our patient, and then select the appropriate specialist in that field, taking into consideration the idiosyncracies of the patient, the family, and the specialist. Once this task is accomplished, we, as family physicians, must take great care in preparing our patient and his/her family for the consultant and the consultation. We have, therefore, a unique opportunity to involve the patient and family with the consultant and prepare them for the consultation. In essence the family physician can handle the patient as an olympic runner carefully and proudly handles a torch, instead of as a disinterested, overworked doctor who casually "passes the buck." With appropriate preparation the patient

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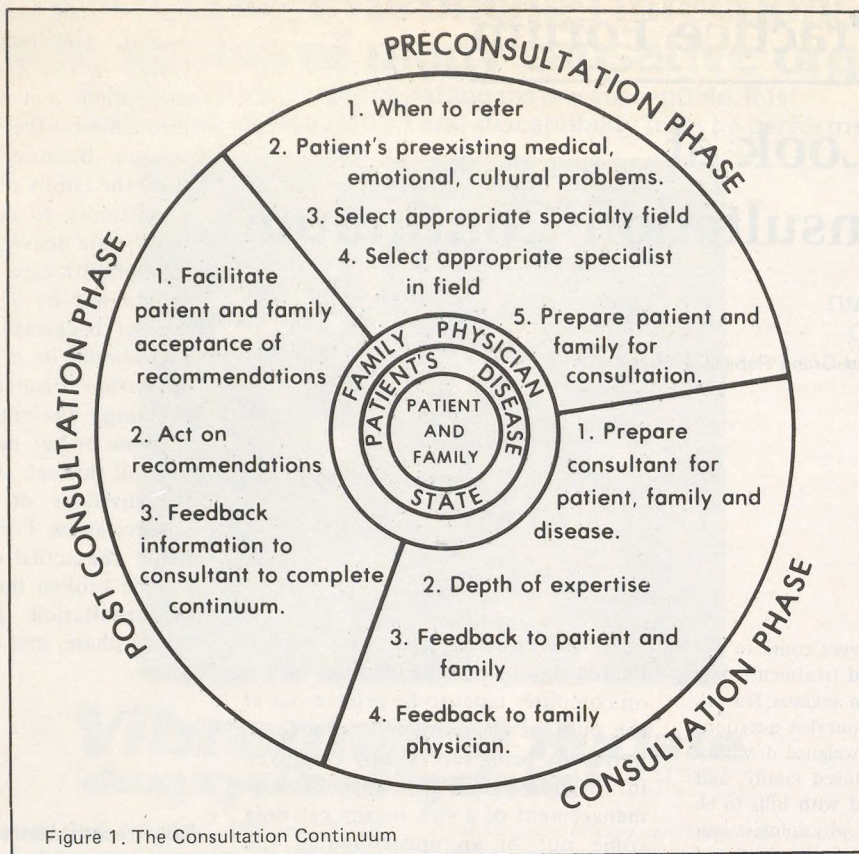


Figure 1. The Consultation Continuum

can often be on his way to recovery if the family physician shares with the patient his/her confidence in the consultant.

The Consultation Phase

The second stage of the consultation continuum is the actual consultation. It must begin with the family doctor preparing the consultant for the patient, the patient's family, and the disease process. We must give him/her enough input so that he/she understands all of the intricacies that surround the problem for our patient including family history, dynamics, and other associated (contributing) factors to the patient's dilemma. We as family physicians expect and demand feedback from our consultant, and we must guide and assist the consultant in providing the patient and family with appropriate feedback. The family physician often knows how much factual information a family can tolerate and when disclosure is appropriate. The decision of who discloses the verdict to the family might well be

determined through consultation between referring physician and specialist. In many instances, dire diagnoses can be handled better at home with friend-physician. Strange physicians in strange environments often drop psychologically potent bombs.

The Postconsultation Phase

The continuum of the consultation cannot be realized until the patient has returned to the home environment and the family physician has accepted his responsibility to interpret all of the new information. In so doing, we must facilitate our patient's and the patient's family's acceptance of the consultant's recommendations. We must then act on the recommendations in the best interest of the patient. Finally, we should feed back to the patient's consultant information pertaining to the success or failure of the treatment regimen. This final link — that of providing the consultant with pertinent feedback — is vital to an ongoing consultation continuum which can benefit all concerned.

Summary

The purpose of this paper is to bring into sharp focus the intricate and vital linkages among the active participants in the consultation process (Figure 1). For too long the profession has been locked into a ritualistic, buck-passing process frequently resulting in unorganized efforts on behalf of objects rather than subjects. The essential overriding concern then could well be represented by the center diagram (the patient and his family) and the supporting persons — communicating before, during, and after the consultation — completing a process which could bring about improvement in the quality of life for the patient, the referring physician, and the family. Through the added efforts to give feedback to the specialist we could conceivably improve the consultant's quality of life too.

References

1. Tumulty PA: *The Effective Clinician*. Philadelphia, WB Saunders, 1973, p 3
2. Geyman JP, Brown TC, Rivers K: Referrals in family practice: A comparative study by geographic region and practice setting. *J Fam Pract* 3:163, 1976
3. Metcalfe S: Patterns of referral from family practice. *J Fam Pract* 1(2):34, 1974 or *NY State J Med* June 15, 1973

in using the text as a guide to actual patient management. Study of selected articles from the bibliography would be needed in most cases. Exceptions to this observation include the ten pages on isoimmunization in the newborn and the well-written chapter on clinical genetics by Robinson.

In summary, this text would be useful to medical students in their clinical years and busy family physicians preparing for Board examinations. It provides a broad overview of the field of obstetrics and fetal medicine.

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Measuring the Quality of Patient Care: The Rationale for Outcome Audit.

Charles M. Jacobs, Tom H. Christoffel and Nancy Dixon. Ballinger Publishing Company, Cambridge, Massachusetts, 1976, 208 pp., \$15.00.

The phrase "quality of patient care" has been banded about in the recent medical literature with increasing frequency. Fueled by the heat from malpractice threats, evolving PSROs, utilization review committees, and third-party payment reviews, the phrase has moved from the health services research departments to the clinician's office vernacular at a rather accelerated rate. In spite of the deluge of writing on the topic, the phrase continues to be misunderstood and misused. Jacobs, Christoffel, and Dixon in, *Measuring the Quality of Patient Care*, have done a commendable job of presenting a concrete and pragmatic explanation of the topic. An outstanding aspect of this book is its presentation of the theoretical aspect of the various quality assessment methodologies that have evolved. This review of methodologies, although not exhaustive, is useful for the individual who has started to do his/her first quality of care audit. The authors carefully describe not only what quality of care auditing is about, but also,

quite helpfully, describe what auditing is *not* about.

The authors have devoted a good portion of the book to explaining how to assess the quality of patient care by objectively appraising the outcome of care using the Performance Evaluation Procedure (PEP). They tell the reader how to systematically develop optimal outcome criteria as well as how to incorporate them in the audit.

In reviewing this book I found myself essentially performing a type of literary quality audit. I therefore feel an obligation to present objective criteria by which to evaluate the book. (1) Achievement of stated objectives — 100 percent achieved. (2) Clarity, organization, and readability of text — 100 percent achieved. (3) Comprehensiveness — 90 percent achieved. (4) Significance of information — 90 percent achieved.

I would recommend this book for any physician who is interested in an introductory, pragmatic text on the quality of outcome auditing.

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Perspectives on Human Aging. Edited by John T. Kelly and Judith H. Weir. Craftsman Press, Minneapolis, 1976, 183 pp., price not available.

This timely edition of papers of perspectives on human aging grew out of a 1974 conference at the University of Minnesota Medical School. The book covers a wide range of topics written by experienced, well-informed authors, with a well-written "Forward" by Edward W. Ciriacy, MD. The organization of the material into psychosocial, environmental, and biological perspectives flows nicely and is quite readable. The information in the book is especially relevant to family physicians.

The content of the book varies from broad philosophical concepts to a very personalized look at the purpose and meaning of human existence and how people struggle to deal with the uncertainties surrounding aging

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and eventual death. There are, in addition, chapters with content-oriented topics quite relevant to primary care providers. Useful information regarding the diagnosis and management of chronic brain syndrome, psychoactive drugs, and drug interactions is provided, as well as a look at the whole therapeutic milieu in the treatment of older patients.

I found the chapter "Life-Stories: An Aid to Life Meanings" by Thomas Kamlinger, PhD, a highlight of the book. His sensitive yet practical way of assisting the aging and dying patient to look at his/her life in such a way that promotes self-esteem, a critical ingredient for those final days, is alone worth the purchase of this book.

The only significant deficiency in this collection of writings is the lack of information regarding current research in the aging process. There are many important areas of research which are promising, and which will, it is hoped, contribute to improved health care for the elderly.

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Medical Care of the Sick Newborn, (2nd Edition). *Sophie H. Pierog and Angelo Ferrara. C. V. Mosby Company, 1976, 368 pp., \$14.50.*

Medical Care of the Sick Newborn presents a concise and informative view of neonatology for the non-neonatologist. By limiting presentations to the essential features of their various topics, the authors have achieved a readability which will be appreciated by medical students, house officers, primary care physicians, and other health-care professionals seeking an introduction to this field. The strengths and weaknesses of the book lie in this style and format of presentation. Brevity, outline, and generalization are the methods used, and while accurate, up-to-date, and well referenced, there are sacrifices in depth, explanation, and documentation.

The several sections vary in style and method of approach to specific subjects. The organization and administration of newborn facilities is described in narrative form. This format, supplemented with outlines and tables, is also used to deal with perinatal risk factors, assessment of maturity, and management of delivery room problems.

Clinical problems are handled in two different formats. One section provides eight outlines keyed to signs and symptoms (respiratory distress, cyanosis, etc). These are rapid references, but likely to require supplementation from other informational sources. The other major clinical section deals with some specific common conditions (respiratory distress syndrome, neonatal seizures, etc) and gives a thorough, yet concise, account of basic pathophysiology, clinical manifestations, and therapy. This I found to be the strong point of the book. Finally, an appendix provides technical description of procedures, eg, umbilical catheterization, and a table of drugs, newborn laboratory values, a few selected graphs and charts (which lack accompanying explanation). A list of surgical problems and procedures is abbreviated to the point of limited usefulness.

This book can best be described as a guide to the sick newborn, which is broad in scope but introductory in nature, and best suited to the type of reader described above.

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Construction and Use of Written Simulations. *Christine H. McGuire, Lawrence M. Solomon, and Philip G. Bashook. The Psychological Corporation, New York, 1975, 1976, 328 pp., \$17.95.*

Simulations have been widely used both for testing patient management

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Brief Summary

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Indications:

K-LOR is indicated in the treatment and prevention of hypokalemia and hypochloremic alkalosis where the severity of the condition does not warrant parental therapy. Conditions or factors which may give rise to potassium deficiency include diarrhea and vomiting, decreased potassium intake, increased renal excretion of potassium which may occur in acidosis, diuresis, adrenocortical hyperactivity, or the administration of exogenous adrenocortical steroids, injection of potassium-free fluids, and increased glucose uptake such as occurs in insulin-treated diabetic acidosis.

Potassium chloride may be particularly useful to help prevent the hypokalemia which may be induced by the administration of most diuretic agents.

Contraindications

Potassium chloride is contraindicated in the presence of severe renal impairment with oliguria or azotemia, untreated Addison's disease, adynamia episodica hereditaria, acute dehydration, heat cramps, and hyperkalemia from any cause.

Potassium chloride should not be employed in patients receiving potassium-sparing agents such as aldosterone antagonists and triamterene.

Precautions

With normal kidney function, potassium intoxication from oral administration is not likely to occur, since renal excretion of the ion increases in response to a rise in the concentration of body potassium. Nevertheless, potassium supplements must be administered with caution, since the dietary or daily amount is not accurately known. Frequent checks of the patient's clinical status and periodic ECG and/or serum potassium levels should be done. High serum concentrations of potassium ion may result in death through cardiac depression, arrhythmia, or arrest. The drug should be used with caution in the presence of cardiac disease and systemic acidosis.

Adverse Reactions

Side effects include abdominal discomfort, nausea, vomiting and diarrhea.

In the presence of renal dysfunction it may be possible to induce hyperkalemia by oral administration of potassium salts. The symptoms and signs of potassium intoxication include paresthesias of the extremities, weakness and heaviness of the legs, flaccid paralysis, listlessness, mental confusion, fall in blood pressure, cardiac arrhythmias and heart block. Electrocardiographic abnormalities such as disappearance of the P wave, widening and slurring of the QRS complex, changes of the S-T segment and tall peaked T waves may be noted with hyperkalemia.

Before prescribing FASTIN® (phentermine HCl), please consult Complete Product Information, a summary of which follows:

INDICATION: FASTIN is indicated in the management of exogenous obesity as a short-term (a few weeks) adjunct in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, symptomatic cardiovascular disease, moderate-to-severe hypertension, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma.

Agitated states.
Patients with a history of drug abuse.
During or within 14 days following the administration of monoamine oxidase inhibitors (hypertensive crises may result).

WARNINGS: Tolerance to the anorectic effect usually develops within a few weeks. When this occurs, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued.

FASTIN may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly.

Drug Dependence: FASTIN is related chemically and pharmacologically to the amphetamines. Amphetamines and related stimulant drugs have been extensively abused, and the possibility of abuse of FASTIN should be kept in mind when evaluating the desirability of including a drug as part of weight-reduction program. Abuse of amphetamines and related drugs may be associated with intense psychological dependence and severe social dysfunction. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia.

Usage in Pregnancy: Safe use in pregnancy has not been established. Use of FASTIN by women who are or who may become pregnant, and those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and infant.

Usage in Children: FASTIN is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing FASTIN for patients with even mild hypertension.

Insulin requirements in diabetes mellitus may be altered in association with the use of FASTIN and the concomitant dietary regimen.

FASTIN may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure. *Central Nervous System:* Overstimulation, restlessness, dizziness, insomnia, euphoria, dysphoria, tremor, headache; rarely psychotic episodes at recommended doses. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria. *Endocrine:* Impotence, changes in libido.

DOSAGE AND ADMINISTRATION: *Exogenous Obesity:* One capsule at approximately 2 hours after breakfast for appetite control. Late evening medication should be avoided because of the possibility of resulting insomnia.

Administration of one capsule (30 mg) daily has been found to be adequate in depression of the appetite for twelve to fourteen hours. FASTIN is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage with phentermine include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension, and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management of acute phentermine intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard. Acidification of the urine increases phentermine excretion. Intravenous phentolamine (REGITINE) has been suggested for possible acute, severe hypertension, if this complicates phentermine overdose.

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problem-solving and in instruction. For testing, many educators feel that the simulation of a patient management problem enables the student to demonstrate problem-solving ability. For purpose of instruction, the simulation permits the teacher to lead the student through the problem, anticipating the blind ends and distractions which are only too common in clinical situations.

The authors have had wide experience in this field and have written previously about it. They have also conducted a number of workshops designed to teach the preparation and construction of clinical simulations and it is from this later material that the book is drawn.

The book, then, is a well-tested, clear, step-by-step, "do-it-yourself" text to help educators construct sound challenging simulations for instruction and assessment.

Although the authors have had most of their experience in preparing medical simulations, the process is equally applicable to teaching and testing in non-medical areas and this is certainly no drawback to the use of the book.

It may well be that the family physician in practice uses problem-solving techniques somewhat different from those of his/her more specialized colleague. If this is so, it should be important that simulations in family practice be designed by those who have had experience specifically in family practice. Certainly this book would be a help to anyone taking on this task.

The book itself is well written, easily readable, well organized, with very fine illustrations. It is designed for educators in any field and certainly has applicability to the education for family practice.

Constructing a valid clinical simulation is no easy task and the authors have succeeded in breaking down the steps to at least ensure that those who begin to construct such a problem will end up with a satisfactory result.

John A. Lincoln, MD
University of Washington, Seattle

Reviews of Audiovisual Materials

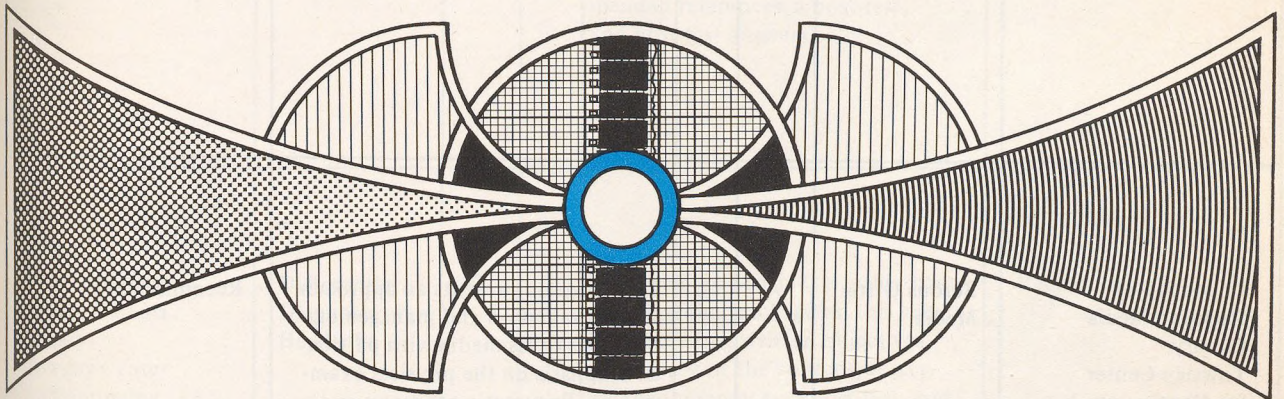
AUDIENCE

- 1 Family physician
- 2 Family practice resident
- 3 Family nurse practitioner/Medex
- 4 Medical student

MEDIA

- A 35 mm slides
- B 16 mm film
- C Video tape
- D Models

The following audiovisual materials have been reviewed by the Audiovisual Review Committee, an *ad hoc* group of the Education Committee of the *Society of Teachers of Family Medicine*. Membership: John P. Geyman, MD, Chairman (University of Washington, Seattle), Richard M. Baker, MD (University of California, San Diego), Thomas C. Brown, PhD (University of California, Davis), Thornton Bryan, MD (University of Tennessee, Memphis), Laurel G. Case, MD (University of Oregon Medical School, Portland), Wendell B. Garren, MD (Geisinger Medical Center, Danville, Pennsylvania), James L. Grobe, MD (Phoenix, Arizona), Warren A. Heffron, MD (University of New Mexico, Albuquerque), Brian K. Hennen, MD (Dalhousie University, Halifax, Nova Scotia), Thomas L. Leaman, MD (Pennsylvania State University, Hershey), I. R. McWhinney, MD (University of Western Ontario, London), Donald C. Ransom, PhD (Sonoma Community Hospital, Santa Rosa, California), Philip L. Roseberry, MD (York Hospital, York, Pennsylvania), Rafael C. Sanchez, MD (Louisiana State University, New Orleans), Robert Smith, MD (University of Cincinnati, Cincinnati, Ohio), William L. Stewart, MD (Southern Illinois University, Springfield), John Verby, MD (University of Minnesota, Minneapolis), Raymond O. West, MD (Loma Linda University, Loma Linda, California), Hiram L. Wiest, MD (Pennsylvania State University, Hershey). Reviews of each type of media were carried out by subgroups of the committee.



SOURCE	PROGRAM	MEDIA		AUDIENCE	COMMENTS	OVERALL APPRAISAL
Department of Community Health and Family Practice University of Minnesota Minneapolis, MN 55400 \$100.00 \$20.00 rental	The Psycho- logical Systems Review	C	1 2 3 4		The objectives of this program are well stated. The program presents an approach which organizes the emotional status, life situation, personality, coping skills, and support systems for individual patients. The psychological systems review is a well-organized and well-planned approach to this information. The content of the pro-	Of Some Value

This section of the Journal is designed to present clinical problems which focus on patient management, problem-solving, and other elements integral to family medicine. The intent of this section is aimed more at teaching and learning than self-assessment as an evaluation or scoring device. Reinforcement of major teaching points is therefore included through the further discussion and supplemental references which appear on the following pages. Critical comments relating to these self-assessment materials are invited and should be submitted as Letters to the Editor.

Self-Assessment in Family Practice

These materials have been prepared by members of the Self-Assessment Panel of *The Journal of Family Practice*. Membership: R. Neil Chisholm, MD, Chairman (University of Colorado, Denver), B. Lewis Barnett, MD (Medical University of South Carolina, Charleston), Leland B. Blanchard, MD (San Jose, California), Paul C. Brucker, MD (Thomas Jefferson University Hospital, Philadelphia, Pennsylvania), Laurel G. Case, MD (University of Oregon Medical School, Portland), Silas W. Grant, MD (University of Alabama, Huntsville), Ian R. Hill, MD (Plains Health Centre, Regina, Saskatchewan), Kenneth F. Kessell, MD (MacNeal Memorial Hospital, Berwyn, Illinois), John A. Lincoln, MD (University of Washington, Seattle), James G. Price, MD (Brush, Colorado), Richard C. Reynolds, MD (University of Florida, Gainesville), Gabriel Smilkstein, MD (University of Washington, Seattle), William L. Stewart, MD (Southern Illinois University, Springfield).

Question A:

In each situation, any number of answers can be correct.

1. *During one week, eight of 16 residents of a nursing home develop diarrhea. Seven of the ill residents have Shigella sonnei cultured from their stools; three of the seven are asymptomatic at the time results are available. Of eight asymptomatic residents cultured, one is positive. The organism is sensitive to ampicillin and tetracycline.*

You would do the following:

- All symptomatic residents and culture positive residents should be grouped together.
- Repeat stool cultures on only symptomatic residents.
- Treat only symptomatic residents with tetracycline.
- Treat symptomatic residents and asymptomatic carriers with ampicillin.

2. *A 38-year-old male businessman develops mild diarrhea while traveling abroad. Stool cultures are obtained from the patient, his wife, a 12-year-old son, and ten-year-old daughter on return home. The patient and the daughter harbor Shigella flexneri, resistant to ampicillin, tetracycline, cephalothin, and sulfonamides.*

You would do the following:

- Treat the patient and his daughter with chloramphenicol.
- Treat the patient and his daughter with trimethoprim-sulfamethoxazole.
- Treat the patient and his daughter with neomycin.
- Treat the patient only with one of the above.
- Do not treat either and obtain follow-up stool cultures.

3. *A 26-year-old woman, the mother of three children, complains of fever and abdominal pain. Her four-year-old son who attends a nursery school, has been at home for two days because of diarrhea. His infant sister and two-year-old sibling are both well. The stools of the mother and four-year-old are cultured. The mother's culture is positive for Shigella sonnei, resistant only to tetracycline; the son's culture is negative.*

You would do the following:

- Treat both mother and son.
- Treat mother only.
- Obtain cultures from asymptomatic children and treat if positive.
- Notify local health department of the case and circumstances.

Question B:

Concerning poison ivy, which of the following statements are true:

- There is a critical period of ten minutes wherein the offending resin can be washed from the skin.
- Poison ivy does spread by rupture of vesicle in the skin.
- The patient can be effectively desensitized with extract of the plant.
- The skin reaction is related to the degree of exposure.
- Poison ivy can be spread by the use of common wash cloths and towels.
- Systemic antihistaminic administration is helpful in controlling inflammatory response.
- The resin can be carried by pets and transmitted to humans.
- The resin continues to be active, even in the winter when the vine is dormant.
- Many of the "caine" topical medications used for poison ivy can sensitize patients.
- Corticosteroids are indicated when involvement is either diffuse and/or severe.