DOCUMENT RESUME

ED 290 962 CE 049 711

AUTHOR Yeo, Gwen; Tully, Donna
TITLE Model Geriatric Clerkship for Physician Assistant Students: The Continuum of Elder Care. Manual for Physician Assistant Programs.
INSTITUTION Stanford Univ., Calif. School of Medicine.
SPONS AGENCY Health Resources and Services Administration (DHHS/PHS), Rockville, MD. Bureau of Health Professions.
PUB DATE 87
CONTRACT 240-85-0056
NOTE 216p.
AVAILABLE FROM Stanford Geriatric Education Center, 703 Welch Road, Suite H-1, Stanford, CA 94305-0151 ($15.00).
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC09 Plus Postage.
DESCRIPTORS *Allied Health Occupations Education; Behavioral Objectives; Clinical Experience; Communication Skills; Counseling Services; Diseases; Family Counseling; Federal Legislation; *Geriatrics; Health Programs; Health Services; *Internship Programs; Learning Activities; Lesson Plans; *Medical Services; Models; *Older Adults; *Physicians Assistants; Postsecondary Education; Pretests Posttests; Preventive Medicine; Residential Care
IDENTIFIERS *Continuum Models

ABSTRACT

This manual is intended to acquaint the faculty of physician assistant (PA) training programs with a model geriatric clerkship and to assist them in the process in implementing a similar clerkship. A detailed outline of the curriculum goals of a geriatric clerkship is included. The next section contains curriculum units on the following topics: communication skills, evaluation of health status, management of common health problems in noninstitutional elderly persons, health promotion/disease prevention, family and elder counseling, and long-term care issues. Suggested criteria for establishing a clerkship are enumerated. The following implementation steps are discussed: obtaining administrative support; adapting the model clerkship to the individual clerkship structure of a given program; implementing a preclerkship geriatric curriculum; generating faculty support for the clerkship plan; locating, selecting, and negotiating with appropriate training sites; selecting clinic preceptors and providing faculty development as necessary; selecting or developing written and audiovisual training materials and evaluation forms; developing a learning experience schedule; recruiting and scheduling individual students; following students and evaluating their progress; and evaluating the clerkship program. (Ten appendixes include an annotated bibliography on the role of PAs in geriatric medicine, an abstract of Medicare provisions for reimbursement of PAs, lists of geriatric care centers, bibliographies of materials of geriatrics, lists of facilities providing geriatric care, and answers to the postassessment test.) (MN)

ERIC

ED290962

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS:

The Continuum of Elder Care

Manual for Physician Assistant Programs

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
G Yeo
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Gwen Yeo, Ph.D., and Donna Tully, PA-C, B.A.
Division of Family Medicine
Stanford University School of Medicine

Supported by contract number 240-85-0056
Division of Medicine, Bureau of Health Professions,
Health Resources and Services Administration,
United States Department of Health and Human Services

E049711

BEST COPY AVAILABLE

TABLE OF CONTENTS

PREFACE iii

INTRODUCTION 1-6

CURRICULUM GOALS 7-18

CURRICULUM UNITS 19-78

1. Communication Skills 23-26

2. Evaluation of Health Status 27-54

3. Management of Common Health Problems in Non-Institutional Elders 55-60

4. Health Promotion/Disease Prevention 61-66

5. Family and Elder Counseling 67-70

6. Long Term Care Issues 71-78

SUGGESTIONS FOR IMPLEMENTATION 81

Suggested Criteria to Establish Clerkship 81

Steps in the Process of Implementation 82-148

1. Obtaining Administrative Support 83-84

2. Adapting the Model Clerkship to the Individual Clerkship Structure of the Program 84-85

3. Implementing Pre-Clerkship Geriatric Curriculum 85

4. Generating Faculty Support for the Clerkship Plans and Obtaining Appropriate Institutional Curriculum Review 86

5. Locating, Selecting, and Negotiating with Appropriate Training Sites 86-96

Checklist for Selection of Clinical Sites 93

6. Selecting Clinic Preceptors and Providing Faculty Development as Necessary 96

7. Selecting or Developing Written and Audio-Visual Teaching Material and Evaluation Forms 96-98

Sample Evaluation Instruments 99-130

8. Developing Schedule of Learning Experiences 131

Sample Schedule 132-146

9. Recruiting and Scheduling Individual Students 147

10. Following Students and Evaluating Their Progress 147

11. Evaluating Clerkship, Revising as Needed 147-148

APPENDICES 149-246

A. PAs in Geriatric Medicine: An Annotated Bibliography 153-162

B. Abstract of Medicare Legislation Allowing Reimbursement for PA Services 163-166

C. List of Geriatric Education Centers (GECS) 167-176

D. Graduates of Geriatric Education for PA Faculty (GEPAF) Program 177-182

E. Bibliographies of Geriatric Textbooks, Journals, and Articles 183-220

Article Evaluating Textbooks 217-220

F. Order Blank for Geriatric Curriculum Resource Package 221-224

G. List of Geriatric Research, Educational and Clinical Centers (GRECCs) in VA Medical Centers 225-232

H. List of Area Health Education Centers (AHECs) 233-236

I. List of Hospital Based Home Care (HBHC) Programs in Va Medical Centers 237-242

J. Answers to Post-Assessment Test 243-246

GLOSSARY 247-250

INDEX 251-256

PREFACE AND ACKNOWLEDGEMENTS

The contents of this manual were developed to assist Physician Assistant training programs in implementing a geriatric clerkship. With the assistance of a Working Committee, consultants, field test coordinators, and a staff rich in expertise in geriatric education, the Division of Family Medicine at Stanford University School of Medicine developed the Model Geriatric Clerkship for PA students as part of a contract with the Bureau of Health Professions.

We are particularly indebted to the following highly skilled contributors to the Model for their interest, support, time and talents:

Project Officer Don Buysse; Members of the Working Committee Walter Bortz, M.D.; Bill Kent, PA-C, M.A.; Carol McMorrow, PA-C, B.H.S.; Kathy Orchen, PA-C, M.P.H.; Correne Treguboff, F.N.P., M.H.S.; John Walsh, M.D.; and Antonette Zeiss, Ph.D.; Consultants Rein Tideiksaar, Ph.D.; Mary Goldstein, M.D., and Ron Garcia, Ph.D.; Field Site Coordinators Kathy Kundert, of MEDEX Northwest PA Program at the University of Washington, Seattle, Marc Dicker, of Wichita State University PA Program, and Ron Dobrzynski, of Mercy College of Detroit PA Program; the preceptors and other clinical supervisors in the field test training settings; and most of all -- the ten PA students who gave a month of their lives to field test the Model for the students who will follow.

After the materials describing the Model were drafted in 1986, they were field-tested in three PA training programs representing varied types of organizational affiliations and structures and varied geographical areas. Those programs were: MEDEX Northwest at the University of Washington, Seattle; Mercy College in Detroit, Michigan; and Wichita State University in Wichita, Kansas. In addition, the Stanford-Foothill Primary Care Associate Program conducted an unofficial field test of the Model. This manual represents the Model and its revisions made as a result of the cumulative experience of those field trials.

It is our sincere wish that Directors and faculty members in PA training programs across the country will find this manual helpful enough that it will not be left on the shelf long enough to become another dusty reminder of a planning project. We would like very much to hear from you as you consider the appropriateness of the Model for your program and ponder the type of modifications that would make it most usable. If we can help by listening, problem-solving, or sharing the experiences of other programs, please write or call us at the Stanford Geriatric Education Center, 703 Welch Road, Suite H-1, Stanford University School of Medicine, Stanford, CA 94305, (415) 725-4489.

Gwen Yeo

Donna Tully

ERIC

Introduction

ERIC
Full Text Provided by ERIC

INTRODUCTION

Need and Philosophy for Unique Geriatric Clerkship Using Multiple Levels of Care

Leaders in the growing field of clinical geriatric education express a unanimous opinion that teaching the medical skills involved in caring for older patients is best accomplished by exposing students to elders in a variety of health care settings. Because ambulatory, inpatient, long term care, and community experiences are all necessary for students to see the range of problems and interventions involved in care for the rapidly increasing, heterogeneous population of older adults, the traditional clinical rotation in which students are sent to learn with preceptors or supervising practitioners in one hospital unit or nursing home is not an adequate model.

It was this conviction that a new kind of model for a geriatric clerkship was needed for Physician Assistant (PA) students that led the Division of Medicine of the Bureau of Health Professions to develop the initiative and funding for the Model Geriatric Clerkship for PA Students in 1985. Based on a thorough review of the literature, the experience and expertise of an extremely knowledgeable Working Committee, and insights gained from field tests, Stanford University's Division of Family Medicine has completed the new model based on the following concepts.

1. Although each PA training program has its own unique structure and set of resources, the availability of a comprehensive, well-grounded geriatric clerkship model will allow each program to develop its own offering in an informed manner.

2. PA's will be needed to fill multiple roles in the care of the 20% of the population aged 65 and over expected in the 21st century, including: health education and health maintenance; counseling elders and their families; comprehensive functionally oriented health assessment; diagnosis and management of routine acute conditions and multiple chronic conditions for independent elders as well as nursing home residents; preadmission and posthospitalization care; and coordinating home, community, and institution-based long term care.

3. A major determinant of the quality of geriatric care is the attitude of the health care provider toward aging and elders. PA's are particularly at risk for developing negative attitudes if they are exposed exclusively or primarily to very frail elders or nursing home residents and have no opportunity to observe the majority of older adults who are independent and functioning well.

4. The utilization of the multidisciplinary team is essential for good geriatric care.

5. There are insights and skills important for adequate health care of older adults that are different from those found in traditional adult medicine. Chief among those are: the ability to avoid the mistaken attribution of treatable illnesses to normal aging, and thereby miss the opportunity to intervene; the ability to adjust pharmacological therapy appropriately for the unique physiological changes that may occur with age and the dangers inherent in polypharmacy; diagnostic and treatment skills for those chronic conditions that occur frequently among older adults, especially in view of common atypical presentation and multiple pathology.

Requirements of the Model Based on Contract Specifications

The Model Geriatric Clerkship was required by the contract from the Bureau of Health Professions to have the characteristics listed below.

1. It must be a 4-6 week block clerkship.

2. It must focus on care of the elderly in a variety of clinical settings.

3. It must include the following components:

   a) Clerkship goals that are stated as competencies and attributes PA's should have in giving care to well and ill elders;

   b) Clerkship units, each of which must contain goals, behavioral objectives, learning experiences, teaching strategies, and approaches for evaluation; and

   c) A proposed format or schedule for the learning experiences.

4. It must be field tested in three PA programs with different organizational configurations.

5. Guidelines for implementation must be included.

Suggestions for Using this Manual

The material that is included in this manual is designed to acquaint the faculty of PA Programs with the Model Geriatric Clerkship and to assist them in the process of its implementations. The usefulness of the Model nd the manual will depend completely on the degree to which they are considered tools for development of a geriatric clerkship rather than a final plan that should be used intact or not at all. It is crucial that each program adapt the Model to its own resources and structure.

In beginning the consideration of the Model and its fit for your program, it is suggested that the Curriculum Goals and Curriculum Units be reviewed briefly for their basic approach, then the section on Suggestions for Implementation be read carefully to structure the process of making decisions and assigning tasks that will need to be addressed to assure the best possible outcome. It should be emphasized that the recommended Steps in the Process of Implementation found in the Suggestions for Implementation section are meant to be very rough guidelines for tasks that need to be addressed for a successful clerkship, but the order and details of those tasks will vary considerably among the programs.

The person who is assigned the responsibility of coordinating the implementation of the Model Geriatric Clerkship will need to study the Curriculum Units in detail and make recommendations on the revisions needed to make the Model fit most effectively into the program's structure. Working closely with the Director, other faculty members in the program and the school, and members of the network of geriatric services in the community, the coordinator can devise the best possible version of the Model that meets the needs of all involved.

ERIC

Curriculum Goals

ERIC
Full Text Provided by ERIC

INTRODUCTION TO CURRICULUM GOALS

In order to develop a sound curriculum for the Model Geriatric Clerkship, the first task required by the contract was identification of the Curriculum Goals. They were to specify the competencies and attributes the learners should possess based on what program graduates would be required to do as practitioners in geriatric care. The following pages contain those Curriculum Goals which formed the basic structure and direction on which the Model was built.

Although the Curriculum Goals are targeted to the outcomes of learning in a clerkship, they are comprehensive enough to be considered goals for the entire geriatric track of a physician Assistant training program if the geriatric curriculum is integrated throughout the preclinical and clinical years.

ERIC

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS

CURRICULUM GOALS

Competencies:

In addition to competencies expected in general clinical care, the special performance responsibilities of physician assistant (PA) practitioners caring for older adults include those listed below. In each case the PA would be working under the supervision of a practicing physician.

I. Communicate in an understanding and clear manner with elders with an awareness of the following issues.

   A. Realize that elders may have an increased response time and high probability of hearing and/or vision losses.

      1. Maintain respectful tone and language .

      2. Recognize and respond to culturally diverse needs and communication styles among elders from various ethnic backgrounds.

      3. Use compensatory techniques effectively when communicating with elders with sensory deficits.

II. Evaluate the health status of older patients using an approach that: recognizes the importance of biological, social, and psychological factors; and emphasizes functional assessment in addition to diagnosis of disease entities.

   A. Take history from patient and/or family members with attention to the following areas.

      1. Allow extended time for elder to describe functional problems, symptoms, and past health incidents.

         Pace history-taking to allow adequate time within the constraints of cost-effective clinical care. Use more than one session or use caregiver as resource, if needed, to compensate for elder's fatigue or confusion.

      2. Be aware of potential underreporting of symptoms.

         Recognize and compensate for causes of underreporting: ageism that leads elders to discount symptoms; embarrassment (e.g. incontinence); confusion; depression; age-related decrease in pain sensation.

3. Obtain social history that includes facts about the patients' place of residency, living arrangements and transportation; important relationships with family and friends; sexual history; health insurance; income status and sources; ac . and/or occupation.

4. Obtain past medical history with special emphasis on: accidents or falls; medications and their effects; other health care providers; immunizations; presence of "living will" or other instructions concerning life-sustaining treatment.

   Follow-up with family or other providers to complete information, if needed.

5. Evaluate complaints and symptoms related to each organ system, using knowledge of common geriatric problems.**

6. Explore current and past nutritional status. Inquire about: eating alone, need for assistance in shopping and preparing meals, financial constraints.

7. Record current prescription and over-the-counter medications. Have elder bring in all medications.

   Inquire about elder's usage and understanding of his/her medications.

   - Include health behaviors: smoking, alcohol, exercise.

B. Perform a physical examination of elders with no mobility impairment as well as those who are bedbound, in wheel chairs, or confused. Using gentle techniques, treat elders with dignity, and avoid unnecessary embarrassment. In addition to the standard review of systems, special attention is given to the variations needed for older patients, reflecting unique geriatric problems.** The examination may be conducted in an office, hospital, home, or nursing home setting. Adapt exam as necessary for elders with disabilities.

C. Perform (or arrange for and interpret) additional evaluations in following areas.

   1. Activities of daily living (ADL)

      Observe functional level when appropriate

   2. Instrumental activities of daily living (IADL)

      Ask elder to demonstrate function

** Details will be provided in behavioral objectives.

ERIC

3. Psychological screening

   a. Mental status: Folstein Mir' Mental Status Exam (cognition)

   b. Depression

   c. Stress and coping

   d. Sensory deprivation

   e. Refer for evaluation of psychological distress such as anxiety, panic, paranoia (especially with sensory loss), agoraphobia, if suspected

4. Incontinence screening

5. Evaluation for safety of home environment by home visit

6. Specific dementia assessment if indicated by mental status exam or history

7. Screens:

   a. Stool guaiac for colorectal cancer

   b. Tonometry for glaucoma

   c. Pap smear for cervical cancer

   d. Mammography for breast cancer

8. Laboratory tests,** as indicated, with attention when interpreting results to normal differences in the parameters that can occur with age.

   Minimize unnecessary problems with transportation, mobility, or cost when ordering tests.

D. Develop a problem list focused on geriatrics reflecting functional issues related to both chronic and acute conditions.

E. Prioritize problems listed and de ..op management plan.

III. Manage common health problems in non-institutionalized elders.

A. Diagnose and manage routine care of major types of chronic and acute illnesses affecting elders.** Evaluate medications and other treatments, functional level, and presence of new symptoms in periodic follow-up contacts, with special attention to the following common situations:

** Details will be provided in behavioral objectives.

1. Multiple pathologies

2. Iatrogenic conditions

3. Atypical presentation of disease

B. Utilize consultations and make referrals to clinical specialists, home health agencies, rehabilitation specialists, hospice support groups, and other community agencies when needed to maximize function of elder patient.

Case manage elder's health care. Maintain complete file of geriatric resources and specialists in community.

C. Work with other health care providers as team or health care member in giving geriatric care in various settings, including outpatient, inpatient, home-health, geriatric assessment, rehabilitation, and skilled nursing facilities. Coordinate care with other health care professionals, such as: physician specialist, social worker, nurse, physical therapist, occupational therapist, nutritionist, podiatrist, psychologist/ psychiatrist, dentist, pharmacist, religious counselor.

D. Assist with admission and discharge from acute care hospitals: perform preoperative evaluation and post operative follow-up as needed.

IV. Perform health promotion/disease prevention services as designated below.

A. Administer recommended immunization.

B. Give health education to elders, their families or groups of elders for the purpose of health promotion, health maintenance, and disease prevention. Important areas for elders include:

1. Nutrition

2. Exercise

3. Risks of smoking and alcohol abuse

4. Fall and accident prevention

5. Breast self-examination

6. Use of medications, signs and dangers of iatrogenic complications

7. Temperature regulation

8. Oral hygiene

9. Self-management strategies for chronic diseases

10. Health insurance

11. Prevention of complications of immobility: contractures, pressure sores, osteoporosis, pneumonia

12. Crime prevention

13. Resources to maintain maximum independence

14. Emergency resources

C. Maintain records of regular check-ups. Administer screening protocols.

D. Administer routine health maintenance, such as:

1. Foot care

2. Removal of impacted cerumen

V. Counsel with elders and their family members.

A. Listen empathetically and provide information on options for dealing with common stresses and problems encountered by older adults with special emphasis on support for dementia patients and their families.

B. Give consultation and follow-up in decision-making and health maintenance issues, including the following:

1. Housing resources and relocation decisions

2. Community resources for health and social support including respite care for families, family support groups, and psychotherapy

3. Admission and discharge planning to hospitals, rehabilitation units, intermediate care and skilled nursing facilities

4. Medi-Care/Medicaid, including resources for assistance with forms

5. Hospice care for dying patients

C. Support family members and provide information on options for treatment or assistance in cases of:

1. Family conflict regarding care of an elder

2. Decisions for treatment when elders cannot make decisions for themselves; keep on file elder's current instructions for life-sustaining or "code" care

3. Bereavement

ERIC

D. Give support, counsel, and assistance to elders in cases of elder abuse. Report to legal agency. Refer to protective services.

E. Give special assistance - including coordination of resources - to elders without family support

VI. Perform special competencies needed in long term care settings

A. Perform pre-admission assessments in residential settings

B. For patients with mobility impairments, help reduce complications of immobility by:

1. Recommending and supporting utilization of programs by physical therapists or caregivers to maintain activity levels at highest possible functioning; monitoring indices of function (e.g. range of motion)

2. Monitoring signs of contractures and pressure sores

3. Monitoring signs of constipation and dehydration

C. Support staff or caregivers' efforts towards:

1. Decreasing and/or preventing depression by increasing elder's autonomy as much as possible

2. Providing sensory and intellectual stimulation in activity programs

3. Helping the elder with life review or reminiscence

4. Establishing support groups for family members of residents

5. Providing bowel and bladder training

D. Utilize the following procedures when necessary

1. Debridement of pressure sores

2. Insertion of

a. Urinary catheters

b. Nasogastric tubes

3. Treatment for

a. Pneumonia

b. Urinary tract infection

4. Removal of fecal impaction

ERIC

5. Assistance with and education of caregivers in the management of gastrostomy tubes

F. Monitor use of medications, especially those prescribed on a PRN basis; monitor changes in mental status and behavior as a correlate of medication use

Attributes:

The Physician Assistant Practitioner caring for older adults should possess the following attributes:

1. Appreciation of the role of other interdisciplinary team members in providing effective health care for older adults.

2. Recognition of the diversity within the older adult population.

3. Sensitivity to the consequences of negative ageist stereotypes of older people.

4. Recognition of the danger of attributing merely to old age the treatable disabilities among older adults.

5. Support for the value of autonomy and independence of older adults as appropriate for the well-being of older adults, with special sensitivity to the danger of "infantilization" of older patients, and to the need for dignified and respectful treatment.

6. Appreciation of the need for patience in interacting with older adults, due to slower response times.

7. Belief in the capacity of elders to improve physically and psychologically, and to profit from rehabilitation strategies.

8. Concern for the self-esteem of older adults in view of frequent threats to feelings of self-confidence.

9. Empathy for older adults undergoing losses in social roles, and/or sensory and functional abilities.

10. Respect for sexual needs and behavior among elders.

11. Respect for role of the family caregivers and other family members of older patients, support for them as the major source of health care and recognition of their own health care and respite needs.

12. Commitment to cost-containment strategies consistent with effective and humane geriatric care.

13. Concern for the constant danger of iatrogenesis from medical treatments of elders' conditions.

14. Sensitivity to the difficult ethical issues involved in geriatric care.

ERIC

15. Support for value of death with dignity, as exemplified in pain-free, conscious, terminal illness, including clear communication with intimates and minimal technological intervention.

16. Sensitivity to cultural variations in health beliefs and health behaviors among minority elders.

17. Commitment to the value of life-long learning by the PA for continued increase of knowledge in the field of geriatrics and aging.

ERIC

Curriculum Units

ERIC

INTRODUCTION TO CURRICULUM UNITS

Although many programs begin planning clerkships by identifying clinical training sites and making schedules of where to send students on what days, it is helpful to first consider what knowledge, skills, and attitudes students are expected to learn and how they are expected to learn them during their participation in the clerkship. Since in geriatrics the content areas, as well as the settings, are varied if students are to see the full range of care for older adults, the Model's six Curriculum Units on the following pages are developed to emphasize different aspects of that care. They are not necessarily in chronological order; in fact, contents of most of the Units will probably be taught concurrently. For example, the skills involved in good communication with elders covered in Unit One will most likely be taught continually throughout the clerkship in outpatient, long term care, and health promotion settings, along with the skills emphasized in the later Units.

Each of the Curriculum Units contains sections on the goal, characteristics of the learners, learning objectives (based on the Curriculum Goals in the previous section), content, learning experiences, support services needed, and methods of evaluation for the subject to be taught. Format for the units were based on the Kemp Model of Instructional Design.[1] Of course, the units will need to be adapted to the type of resources, schedule, and students in each program. As mentioned elsewhere in this Manual, the coordinator planning the geriatric clerkship will need to consider especially the wisdom of including the seminars and readings that are included in the Units in this Model, given the traditional method of clinical training and teaching personnel available in that particular program.

One particular organizational strategy for the Curriculum Units should be noted, and that is the placement of the material on dementia. Although the evaluation and management of confusion and impaired cognitive status could logically be included in several of the Units, the readings and emphasis for that topic was placed in Unit Five: Family and Elder Counseling since dementia is so frequently the focus of interaction with caregivers of frail elders and other family members. It does, of course, need to be considered as an integral part of both outpatient and long term care as well as in the functionally oriented evaluation of health status.

REFERENCE

1. Kemp, J Instructional Design: A Plan for Unit and Course Development (2nd ed.), Belmont, CA: David S. Lake, 1977.

ERIC

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS

CURRICULUM UNIT ONE

COMMUNICATION SKILLS

I. Goal

This unit is designed to introduce students to age-related changes that affect communication and to increase students' skills in communicating with elders.

II. Learner Characteristics

Students are in physician assistant training programs taking a clerkship in geriatrics. Prior training in clinical primary care, and some didactic training in geriatrics/gerontology are assumed.

III. Learning Objectives

A. After completion, students should be able to:

1. Maintain respectful tone and language.

2. Communicate in an understanding and clear manner in view of elders' increased response time and high probability of hearing and/or vision losses.

   Use compensatory techniques effectively when communicating with elders with known sensory deficits.

3. Recognize and respond to culturally-diverse needs and communication styles among elders from various ethnic backgrounds.

B. The following attributes should be exhibited:

1. Sensitivity to cultural variations in health beliefs and health behaviors among minority elders.

2. Appreciation of the need for patience in interacting with older adults in recognition of slower response times.

3. Recognition of the diversity within the older adult population.

4. Sensitivity to the consequences of negative ageist stereotypes of older people.

5. Recognition of the danger of attributing to merely old age the treatable disabilties of older adults.

ERIC

6. Belief in the capacity of elders to improve physically and psychologically, and to profit from rehabilitation strategies.

7. Concern for the self-esteem of older adults in view of frequent threats to feelings of self-confidence and value.

8. Empathy for older adults undergoing losses in social roles, and/or sensory and functional abilities.

IV. Subject Content

A. Common sensory and response-rate changes among older adults, their influence on communication and elders' adaptive strategies for each.

1. Vision

a) Lens opacity/cataracts

b) Macular degeneration

c) Glaucoma

d) Diabetic retinopathy

2. Hearing

a) Presbycusis/sensorineural loss

b) Conductive hearing loss/cerumen impaction

3. Speed of Response

B. Social and psychological issues in communication.

1. Wide diversity on most variables

a) Ethnic diversity

1) Language

2) Role of elders

3) Health beliefs and behaviors

b) Cognitive and social skills

2. Ageism among both health care providers and patients.

3. Commonly-encountered characteristics affecting communication.

a) Need for social interaction and confirmation of personal worth.

b) Anxiety and/or depression

c) Confusion

V. Pre-Assessment

If resources are available students' communication skills can be assessed before the unit by an observed or videotaped interaction with an older patient.

VI. Learning Experiences

A. Reading assignments:

1. Pfeiffer E: Some Basic Principles of Working With Older Patients. J Am Geriatric Soc 33:44, 1985

2. Butler R: The Doctor and the Aged Patient. Hosp Practice 13:99, 1978

3. Libow L & Sherman F (eds.): The Core of Geriatric Medicine. St. Louis, CV Mosby, 1981

   a) Chapter 3, Interviewing and history taking, pages 38-45

   b) Chapter 9, Hearing disorders

   c) Chapter 10, Visual disorders

4. Kim S: Ethnic Elders and American Health Care--A Physician's Perspective. Western J Med 139:885, 1983

B. Seminar Activities

1. View videotape: "Age Related Sensory Loss: An Empathic Approach".

2. Participate in discussion session on communication, including cultural variations and ageism.

3. Act out a simulated communication with an elder who has hearing loss.

C. Communication with Older Patients *

1. Take a health history.

2. Conduct a problem-oriented patient encounter.

3. Participate in patient encounter with elder who immigrated from a country where English is not spoken, if possible.

* Note: Remainder of learning activities in Unit One are also listed in following units.

D. Patient Education/Counseling

1. Give individual health education/maintenance instruction on chronic condition.

2. Give a group presentation to a group of seniors.

3. Conduct a patient encounter on a problem involving emotional or psycho-social issues.

E. Family Consultation/Counseling

1. Conduct a consultation with family caregiver or other family member on caregiver or elder's problem.

VII. Support Services

In addition to the clinical training sites that would provide the opportunity for individual, group, and family interaction, resources for a seminar session should also be available. These would include: 1) a small space for reading, videotape viewing, and discussion; 2) video equipment to view a 3/4" tape; and 3) a seminar coordinator to spend 30 minutes with the student to discuss ageism, and ethnic issues and to participate in role play of elder with hearing loss.

VIII. Evaluation

A. Competency Skills Rating

1. Performance ratings on student's communication skills by:

a) Site or clerkship coordinator

b) Student

c) Elders and families

B. Attitude assessment

1. Ratings of attitude toward elders completed by:

a) Site coordinators

b) Elders and families

2. Journal records of interviews and emotional reactions

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS

CURRICULUM UNIT TWO

EVALUATION OF HEALTH STATUS

I. Goals

In this unit, techniques of assessing an older patient's health status using a functional approach will be introduced.

II. Learner Characteristics

Students are in physician assistant training programs taking a clerkship in geriatrics. Prior training in clinical primary care, and some didactic training in geriatrics/gerontology are assumed.

III. Learning Objectives

After completion the student should be able to do the following:

A. Evaluate the health status of older patients using an approach that: recognizes the importance of biological, social, and psychological factors; and emphasizes funtional assessment in addition to diagnosis of disease entities. (Form that can be used for assessment can be found at end of Curriculum Unit Two.)

1. Take history from patient and/or family members with attention to the following areas:

a) Allow extended time for elder to describe functional problems, symptoms, and past health incidents. Use more than one session or use caregiver as resource, if needed, to compensate for elder's fatigue or confusion.

b) Be aware of potential underrreporting of symptoms. Recognize and compensate for causes of underreporting: ageism that leads elders to discount symptoms; embarrassment (e.g. incontinence); confusion, depression; age-related decrease in pain sensations.

c) Obtain social history that includes transportation, and living arrangements; important relationships with family and friends, especially the presence of a confidante; sexual history; health insurance; income status and sources; activities and/or occupation.

d) Obtain past medical history with special emphasis on: accidents for falls; medications and their effects; other health care providers, immunizations, presence of "living will" or other instructions for life sustaining treatment decisions.

e) Explore current and past nutritional status. Inquire about: frequency of eating alone, need for assistance in shopping and preparing meals, financial contraints on food purchases, typical daily diet.

f) Record current prescription and over-the-counter medications. Have elder bring in all medications. Inquire about elder's usage and understanding of his/her medications.

g) Inquire about health behaviors: smoking, alcohol, exercise.

h) Inquire about complaints and symptoms related to each organ system, reflecting knowledge of common geriatric problems. (See section on attached assessment form for specific topics.)

2. Perform a physical examination of elders with no mobility impairment as well as those who are bedbound, in wheel chairs, or confused, using adaptive techniques for elders with disability. Treat elders with gentleness and dignity, avoiding unnecessary embarrassment. The examination may be conducted in an office, hospital, home, or nursing home setting. In addition to the standard review of systems, give special attention to the variations needed for older patients, reflecting unique geriatric problems as follows:

   a. Vital signs

      1) attend to repeated blood pressure measurements, postural changes in blood pressure suggestive of orthostatic hypertension, the risk of systolic hypertension, relation of current medication to blood pressure

      2) be aware of the need for baseline data on respiration to help assess possible future complaints such as dyspnea or conditions such as pneumonia

      3) recognize variations within the normal ranges common to older adults in pulse irregularities and weight changes

   b. General appearance and behavior

      1) poor personal grooming and hygiene as a possible sign of poor overall functioning and/or depression

   c. Skin

      1) watch for possible basal cell carcinomas and actinic keratoses

2) watch for ulcerations or infections in lower extremities that could signal vascular or neuropathic problems, especially among diabetics

3) watch carefully for pressure sores in immobilized patients

4) watch for excessive dryness

d. Ears

1) use tuning fork to screen for high-frequency hearing loss; note functional conversational problems

2) evaluate the effectiveness of patient's hearing aid

3) check for cerumen plug

e. Eyes

1) test visual acuity, and observe functional performance (e.g. have patient read a newspaper or phone book)

2) do a special screening for treatable early-stage primary open-angle glaucoma

3) do a confrontational testing for hemianopsia

4) observe eyelids for entropion or ectropion

f. Mouth

1) remove dentures to observe fit and evidence of pathology on gums or tongue

2) observe oral hygiene

g. Chest

1) do a breast examination (important)

2) observe for kyphosis and/or new or active compression fractures

3) recogninize fact that rales are commonly heard in elders in absence of pulmonary or heart complications

h. Cardiovascular

1) differentiate among commonly-occurring benign and pathological systolic murmurs and bruits

2) record absence or presence of base-line distal pulse for use in future diagnoses

3) observe carefully for edema in extremities

4) examine carotid and vertebrobasilar arterial system

i. Abdomen

1) examine liver and bladder (important)

2) palpate for aortic aneurysms

3) do a rectal exam

j. Genitourinary

1) examine for treatable and symptomatic atrophic vaginal problems

k. Musculoskeletal

1) evaluate each area of periarticular pain

2) examine range of motion, tenderness, or swelling in each joint; observe functional abilities (e.g. dressing, reaching, opening jars)

3) observe walking pattern and strength

l. Neurological

1) do a mental status exam (important) including a standard screening tool (30-item Folstein mini-mental exam is recommended)

2) evaluate gait (important) for potential instability and falls

3) evaluate proximal muscle weakness

4) distinguish common benign abnormalities in sensation and reflexes from pathological abnormalities

5) evaluate speech and language problems such as dysarthria or aphasia

3. Perform or arrange for additional evaluations in the following areas:

A. Activities of Daily Living (ADL's)

B. Instrumental Activities of Daily Living (IADL's)

C. Psychological screening, using cultural or language variations with elders from ethnic minorities

1) depression

ERIC

2) symptoms of psychological distress (e.g. anxiety, panic, agitation, paranoia with sensory loss, agoraphobia) can be explored for possible referral for further evaluation. Global Assessment scale can be used for overall screening.

D. Incontinence evaluation, if symptoms are reported

E. Environmental assessment by a home visit, if possible

F. Specific dementia assessment, if indicated by mental status exam or history

G. Assessment of falls, if indicated by history

4. Order laboratory tests as indicated by history and physical exam. Minimize unnecessary problems with transportation, mobility, or cost when ordering tests. Give attention to differences in the following lab parameters with age when interpreting results:

    a) sedimentation rate

    b) glucose

    c) creatinine

    d) albumin

    e) alkaline phosphatase

    f) serum iron

    g) urinalysis

    h) chest X-rays

    i) electrocardiogram

5. Develop a problem list focused on geriatrics reflecting functional issues related to both chronic and acute conditions.

6. Prioritize problems listed and develop management plan.

IV. Subject Content

A. Philosophy and use of functionally-oriented comprehensive health assessment.

1) Multidisciplinary assessment (or evaluation)

2) Single-provider assessment

3) In multiple settings

B. Unique components and techniques for functionally-oriented assessment with elders.

1. History

   a) Include functionally-oriented questions concerning complaint, history of present illness, past medical history, social history

   b) Ask for patient to bring in medications (prescriptions and over-the-counter) and explain their use

2. Screens needed for specific assessments

   a) Cognitive status

   b) Depression

   c) Incontinence, if indicated

3. Functional status

   a) Activities of Daily Living

   b) Instrumental Activities of Daily Living

4. Physical Examination

   a) Review of systems: include functional consequence of any disability found

5. Laboratory tests

   a) evaluate results in light of altered parameters with age

6. Environmental Assessment

7. Develop problem list and management plan using functional perspective and goals

C. Variations in techniques of assessment for wheelchair or bedbound elders.

V. <u>Pre-Assessment</u>

Before the clerkship, students will be given a short written inventory of their familiarity with some of the information to be presented during the clerkship. Included will be some information on long-term care issues.

VI. Learning Activities

A. Reading assignments

1. Review: Kane RL, Ouslander JG and Abrass IB: Essentials of Clinical Geriatrics. New York, McGraw-Hill, 1984. Chapter 3 and forms in appendix

2. Libow L, Sherman F: The Care of Geriatric Medicine. St. Louis, C.V. Mosby, 1981, pp 45-54

B. Seminar Session

1. View videotape on functional assessment

2. Review forms and processes used in functionally-oriented evaluation

C. Perform comprehensive functionally-oriented health evaluation on ambulatory community-dwelling older patients and wheelchair-bound or bedbound elder.

1. Perform histories and physical examinations and additional evaluations using functional evaluation forms.

2. Order needed laboratory tests and record results.

3. Develop problem lists including functional and medical problems based on the results of lab tests.

4. Present cases to clinical instructor and make recommendations for management plan.

D. Attend Multidisciplinary Geriatric Assessment (or Evaluation) Unit Team Meeting, if resource is available.

E. Perform home visit for purpose of evaluating home environment.

VII. Support Services

To accomplish this unit, a clinical setting with older patients available for comprehensive, functionally oriented assessments is required. Ideally this should be an outpatient setting, but a home health or day care center could be utilized. This unit should not be set exclusively set in the nursing home. Clinical supervisors competent in functional evaluation are also needed.

VIII. Evaluation

Students' skills in functionally-oriented health assessment will be evaluated by: 1) ratings based on observations by a clinical supervisor or preceptor; and 2) written records from the assessments, problem lists, and management plans.

ERIC

FUNCTIONALLY ORIENTED COMPREHENSIVE HEALTH ASSESSMENT

Source of information: ____________________

I. Geriatric History

cc: (Write patient's own words, and ask if there's been a change in function or abilities, when appropriate to problem.)

HPI: (Include questions about impairment of function related to symptoms.)

PMH: (Ask about any associated impairment of function after each surgery and hospitalization.)

Medical Problems:

Surgeries:

Hospitalizations: (Date, dx, hospital, if known)

Allergies: (Foods, meds, contact, seasonal)

Meds: (Include OTC's, vitamins and Rx drugs with names, dose, reason taking)

Habits: (Now or in past)

Smoking hx (cigarettes, cigars, pipes):

Alcohol consumption:

Caffeine use:

Regular exercise:

Family Hx: (Less relevant in geriatric patients than in younger patients.)

Social History:

Life Work, jobs: (include years for each)

Year retired:

Marital status:

Children: (names, addresses, phone numbers if available)

R.O.S.:

General: (Include appetite, sleep pattern, and problems.)

Skin:

HEENT: (Include visual acuity and any impairments to functions - same questions with auditory function/acuity.)

Neck:

Breasts:

Heart:

Lungs:

GI:

M/Skel:

ERIC

Neuro: (Include dizziness, unsteadiness, falls and history about each; also ask about memory changes, forgetfulness, wandering at night, disruptive behavior.)

GERIATRIC DERESSION SCALE (SHORT FORM)

CHOOSE THE BEST ANSWER FOR HOW YOU FELT OVER THE PAST WEEK

1. Are you basically satisfied with your life? .... yes / no
2. Have you dropped many of your activities and interests? .... yes / no
3. Do you feel that your life is empty? .... yes / no
4. Do you often get bored? .... yes / no
5. Are you in good spirits most of the time? .... yes / no
6. Are you afraid that something bad is going to happen to you?. yes / no
7. Do you feel happy most of the time? .... yes / no
8. Do you often feel helpless? .... yes / no
9. Do you prefer to stay at home rather than going out and doing new things? .... yes / no
10. Do you feel you have more problems with memory than most? ... yes / no
11. Do you think it is wonderful to be alive now? .... yes / no
12. Do you feel pretty worthless the way you are now? .... yes / no
13. Do you feel full of energy? .... yes / no
14. Do you feel that your situation is hopeless? .... yes / no
15. Do you think that most people are better off than you are? .. yes / no

The following answers count one point; Scores ¶ 5 indicate probable depression:

1. NO	6. YES	11. NO
2. YES	7. NO	12. YES
3. YES	8. YES	13. NO
4. YES	9. YES	14. YES
5. NO	10. YES	15. YES

ERIC

Gyn:

GU: (Be sure to ask about sexual history. Include questions about incontinence, if (+), add "Incontinence Assessment;" see below.)

If (-) for incontinence, continue on Page 8.

- * - * - * - * - * - * - * - * - * - * - * - * - * - * - * - * - * - * - * - *

INCONTINENCE ASSESSMENT

(From: Kane et al, Essentials of Clinical Geriatrics, pages 345 - 347.)

I. Assessment of Acute Incontinence

If incontinence is of recent onset (within a few days) and/or associated with an acute illness, check for any of the following:

_____ Acute urinary tract infection
_____ Fecal impaction
_____ Acute confusion (delirium)*
_____ Immobility*
_____ Drug effects (i.e., excessive sedation, polyuria caused by diuretics, urinary retention, other autonomic effects)
_____ Metabolic abnormality with polyuria (i.e., hyperglycemia, hypercalcemia)

* Such that ability to get to a toilet (or toilet substitute) is impaired.

If incontinence persists despite management of any of these conditions and/or resolution of an acute illness, further assessment (as shown in Part II) should be pursued.

II. Assessment of Established Incontinence

1. Do you ever leak urine when you don't want to?
   _____No, never _____Yes

2. Do you ever have trouble getting to the toilet on time or have accidents getting your clothes or bed wet?

   _____No, never _____Yes

3. How long have you had a problem with urinary leakage?

   _____ Less than 1 week
   _____ 1 to 4 weeks
   _____ 1-3 months
   _____ 4 to 12 months
   _____ 1 to 5 years
   _____ Longer than 5 years

ERIC

4. How often do you leak urine?

_____ Less than once per week
_____ More than once per week, but less than once per day
_____ More than once per day
_____ Continual leakage
_____ Variable

5. Does the leakage occur

_____ Mainly during the day
_____ Mainly at night
_____ Both night and day

6. When you leak urine, how much leaks?

_____ Just a few drops
_____ More than a few drops, but less than a cupful
_____ More than a cupful
_____ Variable
_____ Unknown

7. Do any of the following cause you to leak urine?

_____ Coughing
_____ Laughing
_____ Exercise or other forms of straining
_____ Inability to get to the toilet on time

8. How often do you normally urinate?

_____ Every 6-8 hours or less often
_____ About every 3-5 hours
_____ About every 1-2 hours
_____ At least every hour or more often
_____ Frequency varies
_____ Unknown

9. Do you wake up at night to urinate?

_____ Never or rarely
_____ Yes, usually between one and three times
_____ Yes, four or more times per night
_____ Yes, but frequency varies

10. Once your bladder feels full, how long can you hold your urine?

_____ As long as you want (several minutes at least)
_____ Just a few minutes
_____ Less than a minute or two
_____ Cannot tell when bladder is full

11. Do you have any of the following when you urinate?

_____ Difficulty in getting the urine started
_____ Very slow stream or dribbling
_____ Discomfort or pain
_____ Burning
_____ Blood in the urine

12. Are you using any of the following to help with the urninary leakage?

_____ Bed or furniture pads
_____ Sanitary napkins
_____ Other types of pads in your underwear
_____ Special undergarments
_____ Medication
_____ Bedside commode
_____ Urinal
_____ Other (Describe): ______________________________

13. Is the urinary leakage enough of a problem that you would like further evaluation and treatment?

_____ Yes _____ No

14. Do you ever have uncontrolled loss of stool?

_____ No, never _____ Yes

15. Relevant medical history

_____ Stroke
_____ Dementia
_____ Parkinson's disease
_____ Prior CNS trauma/surgery
_____ Other neurological disorder
_____ Diabetes
_____ Congestive heart failure
_____ Other (Specify: ______________________________)

16. Prior genitourinary history

_____ Multiple vaginal deliveries
_____ Cesarean section(s)
_____ Abdominal hysterectomy
_____ Bladder suspension
_____ TURP
_____ Suprapublic prostatectomy
_____ Urethral stricture/dilatation
_____ Bladder tumor
_____ Pelvic irradiation
_____ Recurrent urinary tract infections

ERIC

17. Medications

Diuretic ______________________________
____
____

Antihypertensive ______________________________
____
____

Psychotropic ______________________________

Other drugs that affect the autonomic nervous system ______________________________
____
____

B. **Physical Examination for Incontinence Work-up**

1. Mental status

_____ Normal
_____ Mild/moderate cognitive impairment
_____ Severe cognitive impairment (unaware of tolieting needs)

2. Mobility

_____ Ambulates independently with adequate speed
_____ Ambulates independently, but slowly (so that ability to get to a toilet is impaired)
_____ Not independently ambulatory, but able to transfer to toilet independently
_____ Chair- or bed-bound, but able to use urinal or bedpan independently
_____ Dependent on others for toileting

3. Abdominal examination

_____ Bladder enlarged and palpable
_____ Bladder not palpable

4. Neurological examination of lower extremities

_____ Normal
_____ Evidence of upper motor neuron lesion
_____ Evidence of lower motor neuron lesion
_____ Peripheral neuropathy

5. Rectal examination

_____ Decreased rectal sphincter tone
_____ Decreased perianal sensation
_____ Absent bulbocavernosus reflex
_____ Peripheral neuropathy

6. External genitalia

_____ Skin irritation
_____ Diminished sensation
_____ Abnormal (Describe: ______________________________)

7. Vaginal examination

_____ Atrophic vaginitis
_____ Mild prolapse
_____ Moderate/severe prolapse
_____ Rectocele
_____ Adenexal or uterine mass

ERIC

Functional Status:

(From: Kane et al, Essentials of Clinical Geriatrics, page 325, #9.)

	Fully Indep.	Uses Mech. Aid	Needs Some Human Assist.	Who Assists	Totally Depend.
ADL's (Activities of Daily Living)					
Bathing	_____	_____	_____	_____	_____
Dressing	_____	_____	_____	_____	_____
Going to Toilet	_____	_____	_____	_____	_____
Transfer	_____	_____	_____	_____	_____
Eating	_____	_____	_____	_____	_____
Ambulation	_____	_____	_____	_____	_____
Grooming	_____	_____	_____	_____	_____
Continence					
Bladder	Yes _____	No _____			
Bowel	Yes _____	No _____			
IADL's (Instrumental Activities of Daily Living)					
Writing	_____	_____	_____	_____	_____
Reading	_____	_____	_____	_____	_____
Laundry	_____	_____	_____	_____	_____
Shopping	_____	_____	_____	_____	_____
Using telephone	_____	_____	_____	_____	_____
Managing money	_____	_____	_____	_____	_____
Preparing meals	_____	_____	_____	_____	_____
Housekeeping light / heavy	_____	_____	_____	_____	_____

Social History

(From: Kane et al, Essentials of Clinical Geriatrics, pages 331 and 332.)

SOCIAL ASSESSMENT

1. How often in past week did patient leave the house (other than this visit)?

   At least daily_____ Several times_____ Once_____ Never_____

2. What floor does patient live on? _____

3. Is there an elevator? Yes_____ No_____

4. Does patient have a telephone?

Yes____ No____ Telephone number:(_____)_______-_____ _____

If not, is there easy access to a telephone? Yes____ No____.

5. Does patient live alone? Yes____ No____

If no, who lives with patient?

Name Relationship

1.________________________________ ______________________

2.____

3.________________________ ______________________________

6. How often do visitors come to patient's house?

Daily____ Weekly____ Less often____ Never____

7. Whom would patient call in an emergency (nonprofessional)?

____

8. Is patient's care covered by

Medicaid____

Supplemental private insurance (beyond Medicare)____

9. Does the patient receive

Social Security ____
Supplemental Security income (SSI) ____
Private pension ____
Other income ____

10. Does income permit purchase of needed

Food ____
Clothing ____
Housing ____
Heating ____
Transportation ____
Drugs ____

11. What did patient eat yesterday?

	Breakfast	Lunch	Dinner
1.			
2.			
3.			

12. Does patient receive services from any social agency?

Yes_____ No_____

Name of agency____

ERIC

* = Abbreviated form of physical exam

II. Physical Examination

Date of last examination: ________________________________

Vital Signs:

Weight today: _______

Weight last exam: _______

Height:

BP (supine)	Left: __________	Right: __________
BP (sitting)	Left: __________	Right: __________
BP (standing)	Left: __________	Right: __________

Pulse (per minute) __________

Respirations (per minute) __________

General appearance: (Include observation of ptient's neatness, grooming, gait and abilities to dress, undress and transfer.)

Skin:

Hea

* Ears:

Acuity:

_____ Hear normal voice

_____ Impaired

_____ Uses hearing aid

_____ Cerumen present

* Eyes:

Vision:

Able to read newsprint

_____ with corrective lenses

_____ without corrective lenses

Acuity:

_____ Right eye

_____ Left eye

ERIC

Opthalmoscopic (Include lens):

* Fundi:

Nose/Throat:

* Mouth:

Dentures

_____ None _____ Good fit _____ Poor fit _____ Sores present

Neck:

Breasts:

* Lungs:

* CV:

* Pulses:

Abd:

Pelvic/Male GU:

Rectal:

* M/Skel: (ROM, inspection)

Back:

Extremities:

* Neuro:

I. Mental status (Do short portable questionnaire)

II. Cranial nerves

ERIC

III. Motor/Sensory/Observe gait:

IV. Equilibrium/Romberg Test

V. Deep tendon reflexes:

*** Short Portable Mental Status Questionnaire**

(From: Kane et al, Essentials of Clinical Geriatrics, pages 328 and 329.)

Right	Wrong	
_____	_____	What is the date today (month/day/year)?
_____	_____	What day of the week is it?
_____	_____	What is the name of this place?
_____	_____	What is your telephone number? (If no telephone, what is your street address?)
_____	_____	How old are you?
_____	_____	When were you born (month/day/year)?
_____	_____	Who is the current president of the United States?
_____	_____	Who was the president just before him?
_____	_____	What was your mother's maiden name?
_____	_____	Subtract 3 from 20 and keep subtracting each new number you get, all the way down.

Number of errors:_____

0-2 errors = intact
3-4 errors = mild intellectual impairment
5-7 errors = moderate intellectual impairment
8-10 errors= severe intellectual impairment

ERIC

TABLE 2. MINI-MENTAL STATE EXAMINATION[12]

I. Orientation (Maximum score 10)

Ask "What is today's date?" Then ask specifically for parts omitted; eg, "Can you also tell me what season it is?"

- Date (eg, January 21) .. 1 ___
- Year .... 2 ___
- Month .... 3 ___
- Day (eg, Monday) ...... 4 ___
- Season .... 5 ___

Ask "Can you tell me the name of this hospital?" — Hospital .... 6 ___

"What floor are we on?" — Floor .... 7 ___

"What town (or city) are we in?" — Town/City .... 8 ___

"What county are we in?" — County .... 9 ___

"What state are we in?" — State .... 10 ___

II. Registration (Maximum score 3)

Ask the subject if you may test his/her memory. Then say "ball," "flag," "tree" clearly and slowly, about one second for each. After you have said all 3 words, ask subject to repeat them. This first repetition determines the score (0–3) but keep saying them (up to 6 trials) until the subject can repeat all 3 words. If (s)he does not eventually learn all three, recall cannot be meaningfully tested

- "ball" .... 11 ___
- "flag" .... 12 ___
- "tree" .... 13 ___

Record number of trials: ___

III. Attention and calculation (Maximum score 5)

Ask the subject to begin at 100 and count backward by 7. Stop after 5 subtractions (93, 86, 79, 72, 65). Score one point for each correct number.

- "93" .... 14 ___
- "86" .... 15 ___
- "79" .... 16 ___
- "72" .... 17 ___
- "65" .... 18 ___

OR

If the subject cannot or will not perform this task, ask him/her to spell the word "world" backwards (D, L, R, O, W). The score is one point for each correctly placed letter, eg, DLROW = 5, DLORW = 3. Record how the subject spelled "world" backwards: ___________
D L R O W

Number of correctly-placed letters ...... 19 ___

IV. Recall (Maximum score 3)

Ask the subject to recall the three words you previously asked him/her to remember (learned in Registration)

- "ball" .... 20 ___
- "flag" .... 21 ___
- "tree" .... 22 ___

V. Language (Maximum score 9)

Naming: Show the subject a wrist watch and ask "What is this?" Repeat for pencil. Score one point for each item named correctly

- Watch .... 23 ___
- Pencil .... 24 ___

Repetition: Ask the subject to repeat, "No ifs, ands, or buts." Score one point for correct repetition

- Repetition .... 25 ___

3-Stage Command: Give the subject a piece of blank paper and say, "Take the paper in your right hand, fold it in half and put it on the floor." Score one point for each action performed correctly

- Takes in right hand .. 26 ___
- Folds in half .... 27 ___
- Puts on floor .... 28 ___

Reading: On a blank piece of paper, print the sentence "Close your eyes." in letters large enough for the subject to see clearly. Ask subject to read it and do what it says. Score correct only if (s)he actually closes his/her eyes

- Closes eyes .... 29 ___

Writing: Give the subject a blank piece of paper and ask him/her to write a sentence. It is to be written spontaneously. It must contain a subject and verb and make sense. Correct grammar and punctuation are not necessary

- Writes sentence .... 30 ___

Copying: On a clean piece of paper, draw intersecting pentagons, each side about 1 inch, and ask subject to copy it exactly as it is. All 10 angles must be present and two must intersect to score 1 point. Tremor and rotation are ignored

Eg,

- Draws pentagons .... 31 ___

Score: Add number of correct responses. In section III include items 14–18 or item 19, not both. (Maximum total score 30)

Total score ___

Rate subject's level of consciousness: ___________ (a) coma, (b) stupor, (c) drowsy, (d) alert

Reprinted with permission from Folstein MF, et al: Mini-mental state: A practical method of grading the cognitive state of the patient for the physician. J Psychiatr Rev 12:189, 1975

ERIC

(If dementia is suspected, do Dementia Assessment, below)

Dementia Assessment

(From Kane et al, Essentials of Clinical Geriatrics, page 339.)

A. History (By whom: ______________________________)

1. Active medical conditions

____
____
____

2. Medications

____
____
____

3. History of

_____Hypertension
_____Stroke
_____Transient ischemic attack
_____Depression
_____Other psychiatric disorder

4. Current symptoms

_____Memory loss
_____Forgets recent events
_____Forgets things just said
_____Forgets names of people
_____Forgets words
_____Gets lost
_____Asks questions or tells stories repeatedly
_____Confused about date or place
_____Can't do simple calculations
_____Can't understand what is read or said
_____Impairment of other cognitive functions
_____Anxiety/agitation
_____Paranoia
_____Delusions/hallucination
_____Wandering
_____Disruptive behavior
_____Incontinence

5. Onset of symptoms

_____Recent (days to few weeks)
_____Longer duration (months)
_____Uncertain

6. Progression of symptoms

_____Rapid
_____Gradual
_____Stepwise (irregular, stuttering deteriorations)
_____Uncertain

7. Activities of daily living (ADL)

Does the impairment of cognitive function interfere with
Instrumental ADL? _____Yes _____No
If yes, which ones? ______________________________
Basic ADL? _____Yes _____No
If yes, which ones? ______________________________

ERIC

PROBLEM LIST: CURRENT MAJOR AND CHRONIC PROBLEMS

PROBLEM NUMBER OR LETTER	DATE OF RECOGNITION	DESCRIPTION	ICDA CODE	DATE RESOLVED	FLOW CHART ✓

PROBLEM LIST: INACTIVE MAJOR OR CHRONIC PROBLEMS (Including Major Surgery)

III. ASSESSMENT

IV. PLAN (Write a separate "plan" for each assessment above using corresponding numerals in each plan.)

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS

CURRICULUM UNIT THREE

MANAGEMENT OF COMMON HEALTH PROBLEMS IN NON-INSTITUTIONALIZED ELDERS

I. Goal

Skills to assess, manage, and coordinate the care of common acute and chronic conditions among non-institutionalized elders are introduced in this unit. (Note: The area of dementia is included in Unit Five)

II. Learner Characteristics

Students are in physician assistant training programs taking a clerkship in geriatrics. Prior training in clinical primary care, and some didactic training in geriatrics/gerontology are assumed.

III. Learning Objectives

A. After completion, the student should be able to do the following, under the supervision of a physician:

1. Diagnose and treat/manage common acute and chronic medical problems affecting elders (see problems listed below in IV.B) with special attention to the following common situations:

   a) Multiple pathologies

   b) Iatrogenic conditions, especially in relation to medications

   c) Atypical and non-specific presentation of disease

2. Maintain geriatric resource file. Utilize consultations and make referrals to clinical specialists, home health agencies, rehabilitation specialists, hospice support groups, senior centers, daycare centers, and other community agencies when needed to maximize function of elder patient.

3. Work with other health care providers as team or health care member in giving geriatric care in various settings, including outpatient, inpatient, home-health, geriatric assessment, rehabilitation, and skilled nursing facilities. Coordinate care with the following health care professionals: physician specialist, social worker, nurse, physical therapist, occupational therapist, nutritionist, podiatrist, psychologist/psychiatrist, dentist, pharmacist, religious counselor.

4. Assist with admission and discharge from acute care hospitals: perform preoperative evaluation and postoperative

ERIC

follow-up as needed.

B. Students should exhibit the following attributes:

   1. Appreciation of the role of other interdisciplinary team members in providing effective health care for older adults.

   2. Concern for the constant danger of iatrogenesis from medical treatments of elders' conditions.

IV. Subject Content

A. Review of basic clinical principles for geriatric care.

   1. Frequency of chronic conditions

   2. Common atypical or non-specific presentation of disease, especially frequency of confusion as presenting symptom for variety of pathologies

   3. Frequency of multiple coexisting conditions

   4. Danger of iatrogenic conditions, especially as a result of medications

   5. Need for coordinated multidisciplinary management of chronic illness

B. Techniques of assessment, management, and coordination of care for common geriatric conditions, such as the following:

   1. Chronic conditions

      a) Osteoarthritis

      b) Hypertension

      c) Diabetes

      d) Congestive heart failure and other cardiac disease

      e) Osteoporosis

      f) Vision and hearing disorders

      g) Depression

      j) Incontinence

   2. Acute Conditions

      a) Infections (e.g. urinary tract)

      b) Accidents/Falls (in the absence of the need for surgery)

      c) Pneumonia

ERIC

C. Community resources for support of elder and family.

V. Pre-Assessment

Before the clerkship, students will be given a short written inventory of their familiarity with some of the information to be presented during the clerkship. Included will be some information on management of common, chronic and acute conditions among elders.

VI. Learning Activities

A. Reading assignments

1. Review: Kane RL, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. New York, McGraw-Hill, 1984. Chapters 5-7, 9-11, 13-14

   Walshe, T (ed.): Manual of Clinical Problems in Geriatric Medicine. Boston, Little Brown, 1985, Chapters 7, 25, 26, 30, 31, 36, 38, 41-43, 67, 68, 79. Note: drug tables in Appendix. Use other chapters as reference as needed in clerkship activities

B. Outpatient Care

1. Interview elders with specific complaints, take focused history, and perform problem-oriented physical exams. Use consultation or referral, as needed. Recommend management plan to supervisor and record SOAP notes for each, including both functional and medical problems.

2. Order lab tests and/or arrange for additional evaluations as needed for suspected common diagnoses (e.g. urinary tract infection, diabetes mellitus, anemia, digoxin toxicity.)

3. Attend or conduct follow-up patient encounter for chronic conditions such as:

   a) Osteoarthritis

   b) Hypertension

   c) Type II diabetes mellitus (NIDDM)

   d) Chronic obstructive pulmonary disease

   e) Angina pectoris

4. Record: Change in functional and medical parameters since last visit; evaluation of medication regimen; and any recommended changes in treatment.

C. Multidisciplinary and Community Supports

ERIC

1. Attend (and participate in as a member, if possible) meeting of multidisciplinary team involved in health care of elders. Record observations and reactions to team functioning. (If not available, assist physician or other professional in developing multidisciplinary geriatric team, if possible.)

2. Develop list of community resources for health care support for elders, including Area Agency on Aging, resources for information and referral, senior centers, nutrition sites, transportation resources, and housing resources as well as specific health care services and support groups.

3. Visit community agencies serving elders. Interview a staff person on services provided and an elder client on her perception of services. Record information from interviews and reactions to experience.

D. Inpatient Care

1. Make rounds on older patients hospitalized for one of the following conditions:

   a) Surgery (e.g. hip replacement, transurethral resection for benign prostatic hypertrophy).

   b) Acute episode of a chronic condition (e.g. heart disease, COPD)

   c) Acute injury or illness (e.g. hip fracture, stroke, pneumonia)

Consult with discharge planner on post-hospital plans. Interview patient while in the hospital on reactions to being in hospital and plans after discharge. Note any evidence of change in mental status. Visit patient after discharge. Record notes on each visit.

VII. <u>Support Services</u>

The most important clinical setting needed to accomplish this unit is a good outpatient primary care practice. It could be in any of the following: Community geriatric clinic; clinic in retirement housing; or a family practice, general medical, or health maintenance organization with a high proportion of older patients. An outpatient or inpatient geriatric evaluation would be desirable for the team learning experience. If not available, other multidisciplinary teams could be utilized. Older patients in a hosp[illegible] setting can be accessed through: geriatric ward, geriatric consu[illegible] service, or older patients hospitalized for surgery or acute episodes. In all settings, but especially in the outpatient setting, a clinician skilled in geriatric care willing to teach a PA student is essential and should be designated as site supervisor or preceptor

VIII. Evaluation

A. Competency skills ratings

1. Habitual or observed performance rating, to be completed by:

a) Site supervisor/preceptor

b) Student

2. Rating by patient(s) can be included when appropriate

3. Observation of skills by geriatric clerkship coordinator

B. SOAP notes

C. Record of encounters

D. Observation and reaction to multidisciplinary team meeting

E. List of community resources

F. Record of visit and interviews at community agency

G. Notes from hospital and follow-up visit

ERIC

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS

CURRICULUM UNIT FOUR

HEALTH PROMOTION/DISEASE PREVENTION

I. Goal

This unit introduces the student to the basic skills needed to perform the major functions involved in: 1) primary disease prevention for elders; 2) screening for early detection of asymptomatic disease; 3) health education and counseling for behavioral change among elders to decrease their risk of disease and functional disability; 4) maintainence of elders' highest level of function possible in the presence of chronic disease through clinical procedure and education of self-management strategies.

II. Learner Characteristics

Students are in physician assistant training programs taking a clerkship in geriatrics. Prior training in clinical primary care, and some didactic training in geriatrics/gerontology are assumed.

III. Learning Objectives

After completion, students should be able to demonstrate the following skills in health promotion/disease prevention:

A. List, monitor, and administer recommended immunizations for people 65 and over.

B. Give individual education to elders and their families for the purpose of health promotion, health maintenance, and disease prevention. Give talks for elders, staff, and/or families at senior centers, nutrition sites, senior clubs, retirement complexes or support groups, on health education for elders. Important areas for elders include those listed below.

1. Nutrition: especially in the areas of 1) intake of adequate nutrients; 2) calcium levels needed for prevention of osteoporosis; 3) control of saturated fats to decrease risk of heart disease, stroke, and multi-infarct dementia.

2. Exercise: weight-bearing to lower the risk of osteoporosis; aerobics to reduce risk of cardiovascular disease and diabetes; joint flexibility to reduce arthritis disability, tension release and relaxation for sleep disorders and stress-related disability; exercises to maintain or increase strength, range-of-motion, balance, and coordination for fall prevention; exercises for post-stroke, post-fracture, and post-hospitalization rehabilitation to reduce complication of immobility.

3. Use of medications: keeping track of proper ingestion of prescription or over-the-counter drugs; keeping the health provider informed of adverse reactions; informing any new health provider of all the drugs one is currently using; informing the patient of dangers of trading drugs; discovering overreliance on drugs such as tranquilizers or sleeping pills; recognizing signs of and dangers of iatrogenic complications, especially confusion.

4. Temperature regulation: danger and signs of hypothermia and hyperthermia· techniques of prevention.

5. Breast cancer: techniques of early detection

6. Accident and fall prevention: seat belts; environmental safety; balance and gait exercises

7. Oral Hygiene: importance of gum care.

8. Risks of smoking and alcohol abuse.

9. Self-management techniques for chronic conditions (e.g. arthritis, diabetes): materials and classes available.

10. Health insurance: sources of counseling and assistance.

IV. Subject Content

A. Primary prevention strategies

1. Immunizations appropriate for elders

2. Other direct interventions to reduce risk of disease or disability

B. Screening and early detection of asymptomatic diseases and decreased function

1. Recommended guidelines for screening for elders

2. Techniques of major types of screening

3. Sources of screening commonly available through community resources

C. Health education and counseling

1. For disease and disability prevention

a) Major health-promoting behaviors recommended for elders

b) Sources of health education material

c) Community resources commonly available to promote healthy behaviors for seniors

d) Techniques of individual, family, and group education

2. For maintenance of maximum function for elders with chronic diseases

a) Self-management strategies for major chronic diseases affecting elders

b) Sources of self-management education

1) Materials

2) Community classes

D. Clinical procedures commonly used for health maintenance with elders, especially those with decreased mobility.

VI. Pre-Assessment

Before the clerkship, students will be given a short written inventory of their familiarity with some of the information to be presented during the clerkship. Included will be some information on health promotion/disease prevention for elders.

V. Learning Activities

A. Reading assignments

1. Review: Kane RL, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. New York, McGraw-Hill, 1984, pp 293-301
2. Berk S and Alvarez S: Vaccinating the Elderly: Recommendations and Rationale. Geriatrics 4[illegible] 79-87, January 1986

B. Read guidelines for immunization for elders and give immunization to an elder, if appropriate.

C. Perform routine health screening for an elder in the following areas:

1. Blood pressure, in two positions

2. Colorectal cancer

3. Visual acuity and glaucoma

4. Hearing acuity

5. Mental status

6. Cervical/uterine cancer

7. Infections

8. Diabetes

D. Health education

1. Locate written health education materials especially for elders on topics listed below.

2. Prepare and give a health education talk to a group of seniors on one of the topics listed below.

3. Give individual health education consultation or counseling to elders with or without family members present, on topic listed below. (Use referral to community resources where appropriate and available.)

   a) Nutrition

   b) Exercise

   c) Risks of smoking

   d) Risk of alcohol abuse

   e) Fall and accident prevention

   f) Breast self-examination

   g) Use of medications: signs and dangers of complications from medications

   h) Temperature regulation

   i) Oral Hygiene

   j) Self-management strategies for chronic diseases

   k) Health insurance

   l) Prevention of complications of immobility: contractures, pressure sores, osteoporosis, pneumonia

4. Observe one exercise class for seniors and one meal site program. Interview participants, record observations, and feelings.

E. Perform health maintenance functions for an elder such as:

1. Removal of cerumen plug

2. Foot care (nail, corn, and callus)

VII. Support Services

Outpatient clinical settings such as those described in Unit Three will be needed to accomplish this unit. In addition, a senior center health promotion program will be needed for the group health education activity.

VIII. Evaluation

A. A multiple-choice written evaluation for specific cognitive assessment.

B. Students' records of patient encounters.

C. Notes and reports from health education group presentation. Health education materials collected.

D. Record of observation and interviews of exercise class and nutrition site.

ERIC

MODEL GERIATRIC CLERKSHIP FOR PHYSCIAN ASSISTANT STUDENTS

CURRICULUM UNIT FIVE

FAMILY AND ELDER COUNSELING

I. Goal

The goals of this unit are to: 1) sensitize students to the needs of elders' family members; 2) increase students' skills in assisting elders and their family in decision-making; 3) increase students knowledge of resources in the community available for assisting family caregivers of elders with disabilities, and 4) increase students' knowledge of assessment and management issues for an elder with suspected dementia.

II. Learner Characteristics

Students are in physician assistant training programs taking a clerkship in geriatrics. Prior training in clinical primary care, and some didactic training in geriatrics/gerontology are assumed.

III. Learning Objectives

After completion, students should be able to:

A. Counsel with elders and their family members.

1. Listen empathetically and provide information on options for dealing with common stresses and problems encountered by elder adults with special emphasis on support for dementia patients and their families.

2. Give consultation in decision-making and health maintenance issues including the following:

a) Housing resources and relocation decisions

b) Community resources for health and social support including respite care for families and family support groups

c) Admission and discharge planning to hospitals, rehabilitation units, intermediate care and skilled nursing facilities

d) Medi-Care/Medicaid

e) Hospice care for dying patients

f) Special assessment and management strategies for elders with dementia

ERIC

3. Support family members and provide information on options for treatment or assistance in cases of:

   a) Family conflict regarding care of an elder

   b) Ethical treatment decisions when elders cannot make decisions for themselves (Keep on file elders' latest instructions in relation to life sustaining or code care)

   c) Bereavement, especially in relation to bereavement support groups

4. Give support, counsel, and assistance to elders in cases of elder abuse. Report to legal agency. Refer to protective services.

B. Respect the role of the family caregivers and other family members of older patients, support them as the major source of health care and recognize their health care and respite needs.

C. Respect sexual needs and behavior among elders

D. Show commitment to cost containment strategies consistent with effective and humane geriatric care.

IV. Subject Content

A. Major issues confronting elders and their family caregivers

1. Problems associated with dementing illnesses

   a) Helping elders and their families obtain comprehensive evaluations, realistic prognoses, and appropriate medical management

   b) Helping family caregivers obtain support services

      1) Respite care

      2) Support groups

      3) Assistance with legal and financial decisions

      4) Planning for increased level of care, if needed

2. Assistance to elders and families in adapting to elders' current or predicted dependency

   a) Helping elders' maintain their autonomy as long as possible

   b) Dealing with stress of caregivers and potential for elder abuse

c) Knowing major sources of in-home support for elders and families

V. Pre-Assessment

Before the clerkship, students will be given a short written inventory of their familiarity with some of the information to be presented during the clerkship. Included will be some information on family issues and dementia.

VI. Learning Activities

A. Reading Assignments

1. Review: Kane RL, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. New York, McGraw-Hill, 1984, Chapter 4

2. Silverstone B & Hyman K: You and Your Aging Parents, 2nd Edition. New York, Pantheon, 1982, Chapters 2, 3, 5, 6, and 7

3. Mace N & Rabins P: The 36-Hour Day: A Family Guide to Caring for Persons with Alzheimer's Disease, Related Dementing Illnesses, and Memory Loss in Later Life. Baltimore, John Hopkins University Press, 1981, Chapters 2, 3, 4, 5, 6, 8, 12, and 13

4. Winograd C & Jarvik L: Physician Management of the Demented Patient. J Am Geriatric Soc 34:295, 1986

5. Katzman R: Early Detection of Senile Dementia. Hospital Practice, pp 61-76, June 1986

6. Kosberg, JI: Understanding Elder Abuse: An Overview for Primary Care Physicians, in Ham RJ (ed): Geriatric Medicine Annual 1986. Ordell, New Jersey, Medical Economics Books, 1986.

B. Seminar Session

1. View videotape on dementia

2. Discuss family issues (including elders with no family support) in care of elders with social worker from home health agency or other settings where he/she works with families of elders (if available)

C. Attend or conduct session with elder and/or family member concerned about elder's memory problem

D. Develop specific referral resources for:

1. Comprehensive evaluations of confused patient.

2. Day care for respite for family caregiver of dementia patient or frail elder. Visit Day Care Center; interview staff member, participant, and family member of dementia patient, record observations and emotional reactions.

3. Family support group for family with dementia patients. Attend support group meeting. Record observations and feelings.

4. Elder abuse.

5. Frail elder without family support.

VII. Support Services

Clinical resources needed to accomplish this unit include:

A. Outpatient services including dependent elders and their family members/caregivers

B. Social worker or other counselor of family caregivers

C. Day care or day health care center

D. Family support group community agency serving dependent elder (e.g. Alzheimer's Disease and Related Disorders Association)

E. Information and referral services for older adults

VIII. Evaluation

A. Cognitive assessment of the knowledge base will be included in the objective test given (before and) after the clerkship

B. List of local referral sources for specific services

C. Journal records of observations and feelings from the following experiences:

1. Day care

2. Family support group

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS

UNIT SIX

LONG TERM CARE

I. Goal

The purpose of this unit is to introduce the basic clinical skills and understanding needed for effective clinical management of older long-term care patients, including those still residing at home and in residential care as well as those in nursing homes.

II. Learner Characteristics

Students are in physician assistant training programs taking a clerkship in geriatrics. Prior training in clinical primary care, and some didactic training in geriatrics/gerontology are assumed.

III. Learning Objectives

After completion, students should be able to:

A. Recognize characteristics of elders that make them appropriate candidates for different types of long-term care settings, assuming commitment to the model of the least restrictive setting possible to maximize function.

B. Perform pre-admission assessments in residential settings.

C. Describe the array of services available through home health agencies.

D. Help reduce complications of immobi for patients with mobility impairments by

1. Recommending and supporting utilization of programs by physical therapists, activity coordinators, or care-givers to maintain activity levels at highest possible functioning.

2. Preventing and monitoring signs of contractures, atrophy, and pressure sores.

3. Preventing and monitoring signs of constipation and dehydration.

ERIC

4. Preventing and monitoring signs of pneumonia

E. Support staff or caregivers' efforts and programs for:

1. Decreasing depression by increasing elder's autonomy and maximum independence possible

2. Providing sensory, intellectual, and social stimulation

3. Encouraging life review or reminiscence

4. Establishing support groups for family members, including residents of nursing homes

5. Doing bowel and bladder training

6. Helping elders orient to time and place

7. Reducing negative effects of patients' disruptive behavior and wandering in a humane way.

F. Demonstrate basic techniques for:

1. Transferring patients from bed to chair and vice-versa

2. Providing bowel and bladder training to incontinent patients

3. Feeding patients who have chewing or swallowing impairments

G. Utilize the following procedures when necessary:

1. Debridement of pressure sores

2. Insertion of

   a) Urinary catheters

   b) Nasogastric tubes

3. Treatment for

   a) Pneumonia

   b) Urinary tract infection, especially in patients with urinary catheters.

4. Removal of fecal impaction.

H. Monitor use and effects of medications, especially those prescribed on a PRN basis.

I. Recognize administrative problems and special stresses common among staff members working in nursing home settings.

J. Support the value of death with dignity, as expressed through pain-free conscious, terminal illness, including clear communication with intimates and minimal technological intervention.

K. Describe the basic clinical procedures used in hospice care.

L. Support the use of multidisciplinary health teams in geriatric long term care.

M. Support the value of autonomy and independence of older adults in long term care, with special sensitivity to the danger of "infantilization" of older patients, and the need for dignified and respectful treatment.

N. Recognize and exhibit sensitivity to major ethical decision-making issues that arise with severely-impaired elders; describe useful guidelines to assist clinicians in those situations.

IV. Subject Content

A. Continuum of Long Term Care (LTC) Services

In each of the following types of care: services and support available, appropriate characteristics of patients, financial implications, social, psychological, and medical problems, and staff roles and problems.

1. Home Health Services

2. Residential Care (or Board and Care)

3. Nursing Home: Intermediate and Skilled

4. Hospice

B. Special clinical problems in LTC: their prevention and treatment

1. Potential complications of immobility

   a) Contractures and Atrophy

   b) Skin Breakdown

   c) Pneumonia

   d) Depression

2. Gastro-intestinal and genito-urinary problems

   a) Hydration and nutrition

   b) Eating, chewing, and swallowing disabilities

   c) Fecal impaction/constipation

   d) Incontinence: bowel and bladder

      1) Urinary catheter care and potential problems

      2) Urinary tract infections.

C. Critical issues in prescribing . LTC

D. Ethical decision-making in care of severely disabled patients.

E. Philosophy and clinical protocols used in hospice approach to dying patients.

V. Pre-Assessment

Before the clerkship, students will be given a short written inventory of their familiarity with some of the information to be presented during the clerkship. Included will be some information on long-term care issues.

VI. Learning Experiences

A. Reading assignments:

   1. Kane RL, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. New York, McGraw-Hill, 1984, Chapters 8 and 16

   2. From Cassel, CK & Walsh JR. (Eds). Geriatric Medicine, Vol. II. Fundamentals of Geriatric Care. New York, Springer-Verlag, 1984

      a. Chapter 22: Lynn DJ. Deciding about life-sustaining therapy

b. Chapter 23: Lynn DJ. Care near the end of life

c. Chapter 28: Kayser-Jones JS. Physicians and the care of nursing home residents

B. Go on one home visit with a staff member in a home health agency. Record pertinent data on health history, home and social environment, occupational therapy adaptations being utilized, current health status, treatments, type of caregiver being utilized, caregiver strain, and emotional reaction to visit.

C. For potential residential care home resident, assist with a functionally-oriented preadmission history and physical assessment. Record findings.

D. Observe a physical therapy session with a patient in rehabilitation unit, day health care center, or nursing home; record instructions for patient follow-up; assist patient with prescribed activities at a later time.

E. Attend a meeting of a Hospice team. Record observations and emotional reactions.

F. In a skilled or intermediate-level nursing unit, complete the following activities:

1. Make rounds with primary care practitioner or nurse to observe signs of the following conditions. Discuss and observe methods of prevention.

   a) Contracture

   b) Pressure sores

   c) Constipation

   d) Dehydration

   e) Pneumonia

   f) Foley Catheter complications

   g) Over-medication

2. Assist with the feeding of a resident who needs special attention due to impairment in chewing and/or swallowing.

ERIC

3. Observe and assist with at least one of the following:

   a) Debridement of pressure sore

   b) Insertion of urinary catheter

   c) Insertion of nasogastric tube

4. Attend at least three of the following activities:

   a) Residents' council meeting

   b) Class on current events, or reality orientation (or activity with verbal interaction)

   c) Exercise program

   d) Bowel and bladder training session

   e) Bathing procedure

   f) In-service program for nursing aides

   Record observations and feelings.

5. Receive training in transfer techniques from nursing staff or physical therapist and assist with transfer of patient from bed to chair and vice-versa.

6. Make rounds on patients and observe routines at least once on each of the three daily shifts. Record differences observed.

7. Interview skilled nursing patient about her life, prior living arrangement, family, length of time in nursing home, and adjustment to it. Record significant parts. Describe her room and its furnishings, types of interaction you observe her having with visitors, other residents, or staff. Go with her to her favorite activity listed on the facility's activity schedule.

8. Perform comprehensive functionally-oriented history and physical exam on nursing home patient. Develop updated problem list and recommended management plan. Prepare appropriate chart records of findings.

VII. Support Services

A. Ideally, all the following types of clinical training settings should be available to accomplish this clerkship unit. (In the case of non-availability of some settings, the minimum needed are marked with asterisks(*).' In each setting, a knowledgeable clinician willing to teach a PA student should be designated as clinical site supervisor or preceptor.

Long Term Care Settings

Community-Based

*Home Health Services
Day Health or Day Care Center
Hospice

Institution-Based

Hospital-Based Home Care
Rehabilitation Unit
*Residential Care Home
Nursing Home
Intermediate Care Facility
*Skilled Nursing Facility

B. A Geriatric Clerkship Coordinator should be available from the PA program faculty to assist with scheduling, seminar sessions, evaluation, and problem-solving.

VIII. Evaluation

A. Competency Skills Ratings

1. Habitual performance ratings to be completed by:

a) Site supervisor/preceptor

b) Students

2. Evaluation by patients, when appropriate

B. Observation of basic skills by Geriatric Clerkship Coordinator

C. Chart record audit of FOHPE** activities

D. Journal records of interviews, and emotional reaction to experiences as indicated for following:

1. Home visit with home health agency

** FOHPE = Funtionally-Oriented History and Physical Examination

2. Residential Care Pre-admission FOHPE**

3. Physical therapy observation and assistance

4. Attendance at nursing home activity programs

5. Rounds on three different shifts

6. Interview with nursing home resident

E. Attitude Rating Forms to be completed by site Coordinator(s) and patient, when appropriate.

F. Written measures of knowledge. Comparison with pre-assessment scores.

ERIC

Suggestions for Implementation

ERIC
Full Text Provided by ERIC

SUGGESTIONS FOR IMPLEMENTATION

General guidelines will be found in the pages that follow to assist PA Program Directors and faculty members in working through the process of establishing the most appropriate version of the Model Geriatric Clerkship for their own programs.

Suggested Criteria to Establish Clerkship

1. Commitment of the administration and faculty. Because an effective clinical experience in geriatrics may take more time and creativity to arrange than clerkships in more traditional medical services, it is important that deans, program directors,and faculty all realize its importance and be willing to support its development. This usually involves their appreciation of the potential role PA's can play in the care of this major segment of the population and the unique skills the care requires. (If some members of the faculty or administrative hierarchy need to be convinced, some suggestions for a rationale to use are found in the following section in the first step in the process of implementation.)

2. Reasonable expectation of the interest of students in selecting a geriatric clerkship, if it is to be offered as an elective. Because of the bias against management of chronic illness in medical education in general, students may need some enthusiastic role models in the faculty to appreciate the challenges and rewards that come in the complex care of elders. Most programs have found, however, that if a varied experience is offered, including ambulatory and long term care settings with positive, involved providers as preceptors, a portion of each class of students develops an interest in geriatrics.

3. Feasibility of including the four-week clerkship in the schedule.

4. Willingness of faculty to locate appropriate clinical settings and to assist the health care providers in implementing the learning experiences.

ERIC

Steps in the Process of Implementation

The following are recommended steps in the process of implementing the model geriatric clerkship. Although the steps are in normal chronological order, in actuality they will probably overlap, and their relative timing will vary with the unique characteristics of each PA program. Descriptions of each step are included on the following pages.

1. Obtaining administrative support.
2. Adapting the model clerkship design to the individual clerkship structure of the PA program.
3. Implementing pre-clerkship geriatric curriculum.
4. Generating faculty support for the clerkship plans and obtaining appropriate institutional curriculum review.
5. Locating, selecting and negotiating with appropriate training sites.
6. Selecting clinic preceptors and providing faculty development as necessary.
7. Selecting or developing written and audio-visual teaching material and evaluation forms to be used in the clerkship.
8. Developing schedule of learning experiences.
9. Recruiting and scheduling individual students into clerkship.
10. Following clerkship students, evaluating their progress.
11. Evaluating clerkship, revising as needed.

It should be noted that in cases in which PA programs place students in clerkship locations considerable distance from the program and do not have the staff resources to develop the needed geriatric training sites and arrangements for students, it may require special student initiative to make the arrangements themselves. In those cases, a faculty member should be appointed to adapt the steps in the process as needed and give assistance and support to the students' efforts.

ERIC

Description of the Steps in the Process of Implementation

1. Obtaining administrative support.

   If key administrators in the PA program or the school need to be convinced of the need for clinical geriatric training, a strong case can be made for its importance by using some of the following points.

   a. Growth of the Older Patient Population.

      Although most people know that "America is graying", precise points that can be made are: older (65+) Americans have grown from 4% of the population in 1900 to over 12% in 1987 and are expected to comprise 20% or more by 2030; in actual numbers they are expected to double in the next 40 years; the fastest growing segment of the older population, the 85+ group, is expected to be four times its current size in 50 years, has the largest number of chronic illnesses, and needs the most intensive level of care; people 65+ account for a third of the country's total personal health care expenditures, are hospitalized twice as often as younger people, stay twice as long and use twice as many prescription drugs; utilization of physician services increases with age, and the number of physician visits by elders is expected to increase by 47% by the year 2000.

   b. Government Initiatives in Geriatric Training.

      The past few years have seen a dramatic increase in the mandated and optional programs in geriatric training for PA's, as well as other health care professionals, sponsored by various federal and state agencies. Currently, a geriatric component is required for eligibility for federal support for PA programs, and many other training initiatives offer supplementary funding for geriatric curriculum development.

   c. Need for Balance in PA Curriculum.

      Past emphases in training for care for other patient groups, such as maternal and child health, now need to be balanced with training for the growing older population.

   d. New Roles for PAs in Geriatrics.

      Three articles listed in the bibliography of PA's in Geriatrics in Appendix A contain good background information on the present and future role of PAs in health care for older adults. They are those by Romeis et al., Tideiksaa , and Yturri-Byrd and Glazer-Waldman.

In addition, the report Physician Assistants: Providing Geriatric Care by Schafft and Rolling listed in the Appendix A contains specific descriptions of jobs PAs are currently filling in geriatric care as well as data from prior studies of needs for geriatric training. With the recent passage of Medicare legislation allowing reimbursement for PA's in some settings, even more opportunities for jobs for graduates in geriatric care are available. (An abstract of the relevant parts of the legislation is included in Appendix B.) One method of sensitizing potential employers to PA's skills, is to allow clerkship students to demonstrate their usefulness in settings such as geriatric outpatient care, home care, residential care, nursing homes, and research units.

·. Unique Approaches Needed for Geriatric Training.

The critical elements of the rationale for this argument are made in Sections 2 through 5 of the Introduction section of the manual.

2. Adapting the model clerkship design to the individual clerkship structure of the PA program.

After administrative support for the development of the geriatric clerkship has been received, a faculty member should be designated to coordinate the clerkship. Ideally, this should be someone with an educational or clinical background in geriatrics, but the most important qualities the coordinator should possess are an enthusiasm about geriatric care, a positive view of aging, and familiarity with the program's resources. If the coordinator would like to develop greater expertise in the field, special faculty development activities in geriatrics are frequently available through regional Geriatric Education Centers (GECs) (See Appendix C for a listing of GECs.) Other sources might be: a Center on Aging in a university in the area; Continuing Medical Education conferences on geriatric topics, especially those sponsored by the American Geriatrics Society; summer short courses or workshops offered through gerontology centers or gerontology/geriatric organizations. Graduates of the Geriatric Education for PA Faculty (GEPAF) program at Stanford University (listed in Appendix D) or members of the Geriatric Interest Group in the Association of PA Programs (APAP) can also be helpful in orienting new members in the geriatric network to resources.

The first tasks of the coordinator in the process of implementation are to become familiar with the Model and draft a proposal for ways it could be adapted to the structure and resources of the program. For example, the length of the clerkship periods and the potential availability of clinical settings will influence the feasibility of using the learning experiences in each Curriculum Unit. In programs using the preceptor, as opposed to the clerkship, structure for clinical training, the coordinator will need to carve out special times, such as three days a week for six weeks to make the Model fit.

Based on experiences in field-testing the Model, it is strongly recommended that:

a. No less than four weeks be used for the geriatric clerkship; and

b. It not be combined with another clerkship such as internal medicine or family medicine.

3. Implementing pre-clerkship geriatric curriculum.

It is recommeded that all students have a minimum of 20 hours of geriatric instruction before they begin their clerkships, so that the clinical training can build on a solid understanding of the important issues in health and illness among elders. Reading assignments are recommended using Kane, Ouslander, and Abrass, Essentials of Clinical Geriatrics as a textbook. (For a bibliography of geriatric textbooks and an article evaluating Kane and other possible textbooks, see Appendix E.) Another useful resource in planning a preclinical class in geriatrics is the Geriatric Curriculm Resource Guide by Yeo et al. developed for the Geriatric Education for PA Faculty Project at Stanford University. This collection of resources includes a model geriatric curriculum for PA programs and is available through the Division of Family and Community Medicine, Stanford University School of Medicine, Stanford, CA 94305, for $18. (See Appendix F for order blank.)

It is recommended that the geriatric coordinator encourage faculty members responsible for other courses in the curriculum to integrate material about aging wherever appropriate. The pharmacology curriculum, for example, needs to stress special adaptation of drug regimens for elders. It is frequently helpful to acquire some good reference material for faculty members to use in the integration of topics in their classes, such as a subscription to The Journal of the American Geriatric Society or purchase of some of the leading comprehensive texts listed in Appendix E (see especially, Cassel and Walsh).

In some cases, it might be appropriate to include all or part of the readings and seminar sessions in the Model in the preclinical rather than the clinical curriculum, especially if the personnel is not available to lead seminars for students during their clerkships.

4. Generating faculty support for the clerkship plans and obtaining appropriate institutional curriculum review.

   It is important to share the plans for the new clerkship with other faculty members and receive their feedback periodically during the planning phase so that their support can be maintained. Other PA faculty to be involved with the geriatric clerkship should be identified so that they can become familiar with the clerkship model and can be prepared for roles they will play.

   If approval for a new clerkship is required by an institutional or departmental curriculum committee, the appropriate review should be initiated well in advance of the target date of implementation so that any delay in the committee process would not interfere with plans to begin the clerkship.

5. Locating, selecting and negotiating with appropriate training sites.

   Since the selection of the settings in which the learning experiences are to occur is the most crucial step in the process of the Model's implementation it is extremely important to give adequate attention to this task. The following are recommended guidelines for that search and negotiation process.

   a. There should be experiences for the clerkship students in all of the four major categories of settings: Health Promotion Resources (unless students have participated in screening and health education activities in community-based senior centers in their preclinical geriatric programs); Outpatient; Acute Care; and Long Term Care, in both community and institution-based settings. (See Table on page 88 for possible types of settings in the four major categories, in addition to the classroom for seminar activities.)

   b. Locating potential settings can be a challenge for clerkship coordinators not familiar with the network of health care services for older adults, so listed below are some hints for identifying clinical resources. Terms identifying types of settings are also defined in the Glossary at the end of the Manual.

(1) Notes on Using Veterans Administration (VA) Medical Centers and Area Health Education Centers (AHECs).
Reliance on VA facilities for clinical training sites in geriatrics has been very common because of their rich resources and history of cooperativeness. One caution should be expressed in this area, however. Because of the very small proportion of females among VA patients, training exclusively with that population does not prepare a student to work with most non-VA older patient groups who are predominantly female. Programs are advised, then, to take advantage of VA strengths in clinical geriatric programs available to them (e.g. Hospital Based Home Care, Geriatric Evaluation Units), but to supplement those experiences with more representative clinical sites for the students, especially in the area of outpatient and nursing home care. VAs with Geriatric Research Education and Clinical Centers (GRECCs) can be an especially valuable resource since they frequently have special educational and clinical programs in geriatrics for a variety of disciplines. (See Appendix G for listing of GRECCs).

Another resource that could be helpful to coordinators if it is available in the region is an Area Health Education Center (AHEC) with a special program in geriatrics as an educational priority for their region, it would be wise to explore the possiblility of joint training if an AHEC exists in your area.

(2) Health Promotion Resources.
It is very important for students to be exposed to healthy, independent elders in the course of their geriatric training, so that they will resist the tendency to assume that aging inevitably involves illness. Community-based multipurpose senior centers are an excellent resource in which to have students interact with a large number of active elders and participate in health promotion activities, such as screening and health education, with well elders. (It is not recommended that adult day care or day health centers for frail elders be used for this purpose.) Senior centers can be located through Senior Information and Referral (I&R) services, which are required for every area through the local Area Agency on Aging. (Telephone books frequently list the I&R service under "Seniors" in the front of the government services section.) Meal site or nutrition programs are frequently in senior centers but can also be found in churches, lodge halls, or other non-profit facilities. They are frequently pleased to have students give a presentation on a health promotion topic since they need educational activities and typically have little or no budget to provide them.

SETTINGS FOR LEARNING EXPERIENCES

<u>Key</u>

Sr. Ctr. I. Health Promotion Resources

Options: Senior centers
Meal sites
Health screening programs
Elder Day Care Center
Family support programs

Clin. II. Outpatient Settings

Options: Community geriatric clinics
Clinics in retirement housing
Older patients in Family Practice, General Medicine, or Health Maintenance Organization
Geriatric evaluation units
Religious geriatric centers

Hosp. III. Acute Care Settings

Options: Geriatric ward
Geriatric consult service
Older patients hospitalized for surgery or acute episodes

LTC IV. Long Term Care Settings

LTC A Options: <u>Community-Based</u>

Home Health Services
Day health or Day care center
Hospice

LTC B <u>Institution-Based</u>

Hospital Based Home Care
Rehabilitation unit
Continuing Care Retirement Centers
Intermediate Care Facility
Skilled Nursing Facility

Sem. V. Seminar Series: Classroom

ERIC

Since health promotion activities are frequently provided for family caregivers and frail elders through day care centers and family support programs, they are also included in this category, but they should be used in addition to, not instead of exposure to healthy elders. Senior I&R services can usually be helpful in identifying elder (or "adult" or "senior") day care or day health care centers and family support groups for caregivers. Support groups can be associated with the respite services of a day care center or organizations dealing with specific disabilities; for example, Alzheimer's Disease and Related Disorders (ADRDA) chapters frequently have caregiver support groups.

(3) Outpatient Settings.
Some communities have primary care clinics especially for older adults, and some Health Maintenance Organizations (HMOs) or general ambulatory care clinics have special units or special days designated for geriatrics. There are frequently outpatient clinics that operate on certain days in larger retirement housing facilities (not nursing homes) or continuing care retirement communities (CCRCs). (CCRCs provide multiple levels of care, usually from independent living to skilled nursing care and may also be called "life care communities" or "continuum-of-care facilities".) Any of those options would be likely to include clinicians with experience and interests in geriatrics.

If special geriatric outpatient settings cannot be located through health care networks or Senior I&R, it would be necessary to locate a primary care physician and/or PA who is interested in geriatric medicine and who has a large number of older patients. Some suggestions would be asking one or more of the following sources for referrals to appropriate providers: the county medical society or local chapter of American Academy of Family Practice, local clinic or hospital administrators, nursing home administrators, Gray Panther or American Association of Retired Persons chapters, staff members at senior centers or the Area Agency on Aging. One would want to confirm the physician's interest and expertise in geriatrics by asking about membership in the Geriatric Society or similar professional activities. It should be noted that a certifying exam for competency in geriatrics will be given for both internists and family physicians with geriatric training and/or experience beginning in 1988; this will provide a helpful guide for locating potential preceptors.

Multidisciplinary Geriatric Evaluation Units (GEUs) are usually located in a VA or university-affiliated medical center.

ERIC

(4) Acute Care Settings.
If possible, locate a hospital with a geriatric consult service, in-patient GEU, or geriatric ward, since the staff in those units would probably have more relevant training.

(5) Long Term Care Settings.
Home Health service experiences for PA students can sometimes be found with community based homecare services e.g., Visiting Nurses Associations), but if a physician or PA is not part of the team, the training may be more observational than experiential. One particularly valuable resource is a Hospital Based Home Care (HBHC) program with a physician on staff. These are available in some VA and other geriatrically-oriented hospitals. (See Appendix I for list of VA HBHCs.)

Day Health Care Centers (or sometimes Day Hospitals), combining care for very frail elders at risk of institutionalization by a multidisciplinary team with respite for caregivers, are found in an increasing number of urban areas. Hospice services are important sources of support to terminally ill elders and their families, especially those with cancer. Either of these may include a physician or mid-level practitioner on the staff and can usually be located through the Senior I&R service.

If there is an established "Teaching Nursing Home" affiliated with the university that has made a commitment to training health care students, it would be the best institutional long term care setting. If not, community-based nursing homes (skilled nursing or intermediate care facilities) can be cultivated. Large not-for-profit facilities, or proprietary chains with a commitment to training have been utilized successfully.

Rehabilitation Units are often affiliated with acute care hospitals and provide valuable training opportunities involving multidisciplinary teams.

A particularly positive experience has been reported by some programs in CCRCs with multiple levels of care where students can see nursing home residents in the context of a large number of healthier elders. Although residential care facilities do not usually provide nursing or medical care for their residents, physicians and mid-level practitioners are frequently involved in giving physical examinations for admission. The same level of care may go by a variety of names, such as "community care" or "board and care" or "personal care" and usually involves meals and some supervision and assistance with dressing or bathing. This type of care is frequently one of the levels of care given in CCRCs.

c. The final choice of the clinical training sites depends on a number of factors, including the receptiveness of the staff in the site, of course. The following guidelines are provided to help the coordinator evaluate potential sites in those cases in which there is more than one choice in the different categories of settings.

Choices should be made keeping in mind the traditional criteria used by PA programs for positive learning experiences including: adequate space for students; adequate time for supervision and teaching by clinical instructors; positive attitudes toward teaching; training and/or experience in clinical teaching by clinical instructors; sufficient opportunity for patient encounters; positive attitudes toward patients by clinicians; well-organized record-keeping practices; and ability of the clinical instructor to provide a supportive teaching relationship with the student, including an ability to communicate with, observe, and evaluate the student in an effective manner.

In addition to those criteria, ideal characteristics for the clinical sites for the Model Geriatiric Clerkship include:

1. The ability to provide clinical role models with positive (non-ageist) attitudes toward older patients;

2. Clinical practitioners who have geriatric training or, at the least, considerable geriatric experience;

3. Utilization of a functional approach to geriatric health care;

4. Utilization of multidisciplinary health care for elders, preferably in a team setting;

5. Sufficient older patients with a majority female and a variety of ethnic/racial backgrounds;

6. If possible, inclusion of elders as participants in policy-making roles, such as members of an Advisory Board.

These criteria are listed on the checklist on the following page to help coordinators evaluate potential sites.

ERIC

MODEL GERIATRIC CLERKSHIP: THE CONTINUUM OF ELDER CARE

Checklist for Assistance in Selection of Clinical Settings *

Category	Criteria Role Models w/Positive Attitudes	Clinicians w/Geriatric Background	Functional Approach	Multi-disciplinary	Older Patients	Elders in Policy Roles	Other	Total
I. Health Promotion Potential Settings								
II. Outpatient Care Potential Settings								
II. Acute Care Potential Settings								
IV. Long Term Care A. Community Potential Settings								
B. Institution Potential Settings								

* Rate each criteria for each potential setting on a scale of 0 = Not present to 3 = Fulfills criteria well

d. Negotiations with staff members or administrators in potential training sites may include those in which nurses are the traditional administrators (e.g. home health agencies or nursing homes). In those cases there may be a particular sensitivity to training PAs if they are viewed as potential competitors. It has been possible in some sites, however, to overcome an initial resistance by careful education of the nurses and other staff members about the role of PA's. In a nursing home, it is recommended that a preliminary meeting be held with the director of nursing, as well as the medical director and administrator, to assure their full understanding and cooperation with the use of the site for training PA students.

To help orient the staff of potential sites handouts can be provided describing the PA program, the clinical background of prospective students, and ways in which PA graduates are being utilized especially in the field of geriatrics. (See articles listed in Appendix A for examples.)

In negotiating with the staff of potential sites, coordinators should be aware of the burden that training activities may place on potential preceptors and clinical supervisors. One recommendation tactic is to offer a "Quid Pro Quo" to the sites in return for training activities, such as geriatric reference materials or audiovisual equipment the program could buy for the site. The program might formally recognize those who supervise students, or designate the site as "an Official Clinical Geriatric Site" for the academic institution. Continuing education for the staff by the student or faculty could be offered, or the student could develop a resource list or other products needed by the site.

If other training programs in your university (e.g. nursing or medicine) utilize the same sites for geriatrics that you are developing, training schedules should be coordinated with the site personnel and with faculty in the other programs to minimize negative competition or burden for the sites.

When arrangements are finalized to use a clinical site for training students in the geriatric clerkship, the appropriate written documents should be completed. Programs handle these agreements in a variety of ways; they can be informal letters or affiliation agreements or formal contracts. They frequently contain specific information on liability coverage for the students who are seeing patients, which may be different in institutional training sites and private practice settings.

ERIC

Faculty coordinators who are not familiar with the process of negotiating the affiliation agreements should be aware that it can take up to six months in some cases if several levels of approval or legal issue are involved.

6. Selecting clinic preceptors and providing faculty devopment as necessary.

A particularly important part of the site selection process is finding physician and/or PA preceptors who are interested in teaching students, who are familiar with the role and skills of PAs, and who are knowledgeable about geriatrics. It is important to assess the preceptors' formal medical training in geriatrics as well as their continuing education through geriatric conferences, journal reading, and membership in various geriatric organizations. For preceptors with a family medicine or internal medicine background but no specific geriatric training, offering them a copy of <u>Essentials of Clinical Geriatrics</u> by Kane, Ouslander, and Abrass is helpful. Also sending the geriatric PA curriculum outline and journal articles which will be required reading for students is a non-threatening way to augment the preceptors' geriatric knowledge. The same process can be used with other team members who are being asked to supervise training.

One particular problem that arises is in the area of teaching comprehensive functional assessments. Since the concept of a functionally oriented history and physical exam is relatively unique to geriatrics. potential preceptors without geriatric training are frequently not familiar with the skills and procedures involved. In those cases, it is particularly important that "staff development" be given to those who will be teaching Unit II of the clerkship curriculum. The materials for the seminar on functionally oriented comprehensive health assessments should be made available to the potential preceptor early in the planning stage.

7. Selecting or developing written and audio-visual teaching material and evaluation forms to be used in the clerkship.

Although it is not common in some programs to include reading assignments or audio-visual materials in a clerkship, they are included in the Model for use if it is deemed appropriate. Especially if students have not acquired a good basic text or reference in geriatrics in their preclinical training, it is extremely important that they have one available to them in their clerkship. Readings also serve the functions of supplementing the background of preceptors or faculty members when they may be new to the field of geriatrics.

It is recognized that the logistics of having students view videotapes during a clerkship may be difficult and may not be practical. Coordinators who would like to include the audiovisual learning experiences in the Model (or others of their choice) can obtain a guide, Audiovisual Resources for Geriatric Education, with information on sources and prices through the Pacific Geriatric Education Center at the University of Southern California listed in Appendix C. No specific title is given for the videotape on functionally oriented comprehensive health assesment in Unit II because none could be located that was deemed appropriate. Plans are to develop one through the Stanford Geriatric Education Center during the 1987-88 academic year, however, and should be available by 1989.

Since the geriatric clerkship involves multiple sites and is usually more complex than other clinical rotations, it is helpful to have written instructions prepared for students explaining their responsibilities and specific information for reporting to each site.

It is wise to plan the type of evaluation that is to be used for the clerkship well in advance of scheduling the first student. Three tools that could be used for evaluatation are included on the following pages. They could be used as supplements to the programs's standard evaluation forms for clerkships. The knowledge section should be modified to fit the individual settings and learning experiences used from the Model. The three tools are:

a. A post-test designed to measure student progress toward cognitive (knowledge) and affective (attitude) objectives of the clerkship. Part I includes code, matching, and multiple choice questions; Part II is composed of modified patient management problems. Part III and IV measure attitudes toward aging and multidisciplinary teams. Correct answers for Parts I and II are found in Appendix J.

b. A sample rating form for evaluation of clinical encounters to measure student's progress toward behavioral objectives. It can be used by a faculty site visitor or for the student's performance in an actual clinical situation, in a videotaped encounter or a role playing situation. Unless absolutely necessary, it is not recommended that the form be used to rate the student's habitual performance on a global basis after the end of the clerkship, since that type of evaluation is subject to considerable bias.

The form includes rating for skills in communication, functional evaluation of ealth status, and patient management/problem solving. Programs that prefere to use a standard site visit form used in all clerkship evaluations may want to incorporate some of the items from this form for a focused rating of geriatric skills.

c. Checklist and rating form for each of the learning experiences to measure degree to which the assignments were completed and how they were evaluated by the student.

Any or all of the forms may be useful as a basis of a summary conference evaluating the geriatric clerkship from the student, preceptor, and faculty perspective.

SAMPLE EVALUATION INSTRUMENTS

ERIC Full Text Provided by ERIC

Post-Assessment for

Model Geriatric Clerkship for PA Students

Part I

A. Use the following code chart for questions in this section.

A = 1,2,3 are correct
B = 1 and 3 are correct
C = 2 and 4 are correct
D = 4 only is correct
E = All are correct

____ 1. True statements about presbycusis include which of the following?

1. The onset of hearing loss is usually gradual

2. Poor speech discrimination, especially in the presence of background noise, is very common

3. It affects more than half of individuals over 65 in the U.S

4. Total deafness is rare

(Libow & Sherman, Chapter 9)

____ 2. A patient is referred to you with bone conduction thresholds indicating impaired hearing. He may have:

1. Paget's disease

2. A scarred tympanic membrane

3. Impacted cerumen

4. Presbycusis

(Libow & Sherman, Chapter 9)

ERIC

_____ 3. Important parts of the basic evaluation for elders who fall include which of the following:

1. Sitting and standing blood pressure and pulse

2. Test for conductive hearing loss

3. Romberg test

4. CT scan

(Kane, et al., Chapter 7)

_____ 4. Principles of working with older adults include which of the following:

1. Intervention in the life of an older person should always be preceded by a comprehensive assessment of the patient's functioning, except in emergencies

2. Multidisciplinary teams of professionals are recommended in the care of older adults

3. Care of older adults requires a new type of service: case management

4. Older adults are treatable

(Pfeiffer article)

_____ 5. Common causes of underreporting of symptoms by elders include:

1. Fear

2. Impairment of memory and other cognitive functions

3. Non-specific or atypical presentation of disease, compared to middle-aged or younger patients

4. Patients' anticipation of illness as a normal result of aging

(Kane et.al, page 37)

_____ 6. Commonly abnormal laboratory parameters among elders include which of the following:

1. Electrolytes

2. Sedimentation rate

3. Liver function tests

4. Albumin

(Kane, et.al, page 47)

_____ 7. IADL's include

1. Shopping

2. Continence

3. Reading

4. Dressing

(Kane, et.al, page 50)

_____ 8. Which statements are true of incontinence?

1. Urinary incontinence is more prevalent in males than females

2. Most patients with urinary incontinence also have fecal incontinence

3. A residual urine volume of more than 50 ml indicates urinary retention

4. Atrophic vaginitis can lead to transient, reversible urinary incontinence

(Kane, et.al., pp. 123-124)

_____ 9. Health screening or immunizations recommended for elders every two years or less include which of the following:

1. Influenza immunization

2. Blood pressure measurement

3. Test for occult blood in stool

4. Chest X-ray

(Kane, et. al., page 297)

____10. Which of the following are potentially reversible causes of dementia:

1. Metabolic disorders

2. Nutritional deficiencies

3. Tumors

4. Acute myocardial infarction

(Kane, et al, page 69)

____11. True statements concerning decisions about life-sustaining therapy for incompetent patients include which of the following:

1. The decision of a surrogate is considered as binding for the provider as the decision of a competent patient

2. Living wills are used in some states for elders to give directions to providers before the elders become incompetent, but these have been found to be vague and probably unenforceable

3. Durable powers of attorney cannot, by law, be used for health care in most states

4. Resuscitation decisions should be documented on a patient's chart, and orders not to resuscitate should be written along with the therapeutic orders so that their existence and authority are not misunderstood

(Lynn, Chapter 22, pp. 327-329)

____12. Women who benefit most from estrogen treatment to prevent osteoporosis include women from which of the following groups?

1. Women without uteruses

2. Black women

3. Perimenopausal women

4. Obese women

(Kane, et.al., page 167)

_____13. Techniques of management recommended for elders identified as being in the early stages of dementia include which of the following:

1. A trial administration of flurazepam to reduce the risk of night wandering

2. Recommendation to the caregiver of a regular program of new experiences and environments to provide maximum intellectual stimulation

3. Prophylactic doses of amitriptyline to reduce the risk of depression

4. Administration of the Mini-Mental State Examination at six-month intervals

(Winograd & Jarvik article)

_____14. Guidelines for building good relationships with older patients include:

1. Getting to know the patient well using a comprehensive (or life) history

2. Being frank with the patient

3. Including patient as full participant in decisions about treatment

4. Recognizing negative prejudice against elders (ageism) and avoiding write-off of patients due to supposed "senility" or old age

(Butler article)

_____15. Recommended interview techniques for older patients include:

1. Including a family member or friend in the initial interview to verify information

2. Scheduling the interview in early morning slots to reduce the fatigue

3. Keeping the interview directed to the medical information needed so as to reduce the patient's tendency to ramble

4. Touching -- this may be important in establishing meaningful relationships

(Libow & Sherman, page 41)

ERIC

____16. Which of the factors below are frequent contributors to the development of pressure sores?

1. Friction
2. Moisture
3. Shearing forces
4. Malnutrition

(Kane, et. al, page 173)

____17. Which of the following statements is/are true about serum creatinine?

1. Many elders have normal serum creatinine levels
2. Lean muscle mass and creatinine production both affect serum creatinine levels
3. Serum creatinine in elders may be normal at a time when renal function is actually reduced
4. Serum creatinine is a better indicator of renal function in elders than in younger patients

(Kane, et. al., pages 6, 26)

____18. Antidepressants having a negligible level of sedative effect in the elderly include:

1. Amitriptyline (Elavil(R))
2. Doxepin (Sinequan(R))
3. Trazodone (Desyrel(R))
4. Desipramine (Norpramin(R))

(Kane, et. al., page 102)

ERIC

B. **For questions in this section, choose the one best answer.**

_____19. The most common reaction of elders to abuse is:

a. anger

b. denial

c. reporting to autho ies

d. reporting to social worker

e. telling a riend

_____20. The leading cause of irreversible blindness in the elderly is:

a. Cataracts

b. Diabetic ret nopathy

c. Ischemic optic atrophy

d. Senile macular degeneration

_____21. The most common form of glaucoma in the older population is:

a. Primary open-angle glaucoma

b. Secondary open-angle glaucoma

c. Primary angle-closure glaucoma

d. Secondary angle-closure glaucoma

_____22. The most common functional psychiatric disorder in elderly people is:

a. Hypochondriasis

b. Anxiety

c. Depression

d. Paranoia

e. Schizophrenia

ERIC

_____23. An elder diabetic faces the risk of which of the following, (not found among younger diabetics)?

a. Diabetic nephropathy

b. Autonomic neuropathy causing impotence in males

c. Hyperosmolar nonketotic coma

d. Diabetic ketoacidosis

C. For the following statements indicate:

a. If it is true of Medicaid
b. If it is true of Medicare
c. If it is true of Medicaid and Medicare
d. If it is true of neither Medicaid or Medicare

_____24. It covers a limited number of skilled nursing home days

_____25. It covers the cost of prescription drugs

_____26. Middle-and-upper income elders are not eligible

_____27. State and federal governments both contribute to the support of the program

D. Mark letter for best answer in space before description below:

a. Alzheimer's Disease
b. Pseudodementia
c Delirium
d. Multi Infarct Disease

_____28. Pathology includes neuronal plaques and neurofibrillary tangles

_____29. Patients experience a stepwise progression of symptoms

_____30. Patients commonly complain of cognitive and memory loss

_____31. Clouded consciousness is frequent

_____32. A history of hypertension is common

(Katz article)

Part II

Based on case descriptions, answer the following questions for cases A, B and C.

A. Mr. T., a 70-year-old former television star, comes to your office complaining that, although he has been athletic all his life, his body is "treating me wrong." He has tried to ignore many of his complaints for a long time, but he is chronically fatigued; food doesn't taste the same and is bitter-tasting; his legs and feet feel numb a lot; and he wonders if he is getting old.

_____ 1. The MOST LIKELY reason for changes in how food tastes to Mr. T. is:

a. Liver disease
b. Diminished sense of smell
c. Decreased ability to masticate
d. Mild depression

_____ 2. Loss of sensation in the lower extremities of the elderly can be attributed to:

a. 1 and 3
b. 2 and 4
c. 1, 2 and 3
d. 4 only
e. All are correct

1. Decreased vibratory sense in the soft tissues of the thighs, legs, and plantar surfaces of the toes.
2. Decreased circulation to the lower extremities.
3. Denervation and muscle atrophy in the extremities.
4. Thickening of the stratum corneum of the skin.

_____ 3. The symptoms of chronic fatigue can involve an extensive work-up. All of the following are possible reasons related to normal aging changes EXCEPT:

a. Chronic, mild respiratory acidosis with normal activity
b. Tissue changes in the central nervous system, spinal cord, and peripheral nerves
c. Simple "old age"
d. Subclinical, therefore undiagnosed, infections

ERIC

____ 4. Your history of Mr. T. should include:

	1 and 3	1.	History of presenting complaints
i	2 and 4	2.	Pertinent ROS, particularly neurological
c.	1, 2, and 3	3.	Previous hospitalizations and outcomes
d.	4 only	4.	Medication history, including allergies
e.	All are correct		

____ 5. For an adequate medical evaluation of Mr. T. (above), necessary baseline measurements would include:

a.	1 and 3	1.	EKG and CXR (PA and left lateral)
b.	2 and 4	2.	Hgb, Hct
c.	1, 2, and 3	3.	Fasting glucose, electrolytes, liver function tests
d.	4 only	4.	Clean-catch urinalysis, serum creatinine
e.	All are correct		

____ 6. When the life history, physical exam, and baseline lab data prove to be negative for Mr. T. (above), you then pursue which of the following options for his holistic health care:

a. Reassure him that his symptoms are part of growing older and that he'll just have to accept them.
b. Explain to him that although his symptoms are common to the normal aging process, you'd like to hear more about his concerns about growing old.
c. Educate him on the extensive changes that occur with aging and ask him to come in again if he has any unusual symptoms.
d. Provide him with a list of vitamins and minerals to slow down the aging process.

B. Mr. B is a 66-year-old white male who comes to the clinic with his wife. She called to request an evaluation of his progressive memory loss and increasing confusion.

____ 1. With the above information as the chief complaint, which of the following questions would be necessary to ask:

a.	1 and 3	1.	List all current prescriptions and over-the-counter medications
b.	2 and 4	2.	Describe your sleep habits
c.	1, 2, and 3	3.	What is today's day and date
d.	4 only	4.	Do you have trouble getting to the bathroom on time
e.	All are correct		

____ 2. In gathering Mr. B's history, which of the following needs to be considered:

a. 1 and 3
b. 2 and 4
c. 1, 2, and 3
d. 4 only
e. All are correct

1. His reliability as a historian
2. His use of words, simple and complex sentences
3. His facial gestures, body movement, and posture in relation to his speech
4. His educational background

(Kane, Chapter 4)

____ 3. Adequate evaluation of a dementia (Alzheimer's) patient includes which of the following:

a. 1 and 3
b. 2 and 4
c. 1, 2, and 3
d. 4 only
e. All are correct

1. IADLs and ADLs
2. Patient's financial status
3. Quality of life for caregiver
4. The children's financial status

(Kane, et. al., Chapter 4)

____ 4. During the interview, you learn that Mr. B. is aware of his memory loss, becomes frustrated and upset at times because of it, has been writing himself notes for 1-2 years but this doesn't always help anymore, and is frightened about the possibility of having Alzheimer's disease. If you were to address his concern following a certain ethical stance, you would:

a. Include Mr. B in the explanation of his diagnosis and treatment plan
b. Exclude Mr. B from knowledge of his diagnosis and establish a treatment plan for him to follow
c. Both "a" and "b" can be justified by a particular ethical position
d. Neither "a" nor "b" is justified by an ethical stance

ERIC Full Text Provided by ERIC

____ 5. With a diagnosis of Alzheimer's disease, Mrs. B. chooses to care for her husband at home as long as possible. To assist her, you would do which of the following:

a. 1 and 3
b. 2 and 4
c. 1, 2, and 3
d. 4 only
e. All are correct

1. Advise her to change her mind and consider a SNF as soom as Mr. B begins to require constant supervision
2. Give her the name of the local Alzheimer's Disease and Related Disorders Association chapter
3. Begin instructing her on incontinent care, and prepare her for Mr. B's death
4. Provide her with ideas to help Mr. B stay oriented and manage for himself as much as possible; keep in touch by phone to monitor Mr. B's progression

____ 6. During the course of Mr. B's disease, Mrs. B will need:

a. 1 and 3
b. 2 and 4
c. 1, 2, and 3
d. 4 only
e. All are correct

1. Instruction in simple nursing care such as skin care, suctioning for choking episodes, etc.
2. Referrals to respite, and, if necessary, home health agencies
3. Someone to listen sympathetically to her difficulties and to assist her in making objective decisions
4. To institutionalize her husband

____ 7. With the awareness that Alzheimer's is a progressive degeneration of the cerebrum, preparation for the patient's death will include:

a. 1 and 3
b. 2 and 4
c. 1, 2, and 3
d. 4 only
e. All are correct

1. Examination of the health care provider's own feelings about death
2. Insistence that the family allow an autopsy
3. Discussion of the probable causes of death and the family's wishes for use of extraordinary life-saving/life-preserving measures
4. Assistance with funeral arrangements

ERIC

C. Mrs. Andrews, an 87-year-old woman, is brought to your office by a worried daughter. She has been a patient at the clinic for many years, but you have not seen her before. The presenting complaint is: "I don't feel well, I'm tired and don't want to eat." Her vital signs are: BP 164/88, P 96, R 24, T 98.6°.

1. Without any further information, what data will you want from her record:

a. 1 and 3	1. Baseline temps
b. 2 and 4	2. Hypertension history
c. 1, 2, and 3	3. Previous weight
d. 4 only	4. Previous height

2. Important information to gain from her PMH would be:

a. 1 and 3	1. Medications
b. 2 and 4	2. Family history
c. 1, 2, and 3	3. Hospitalizations
d. 4 only	4. Childhood diseases
e. All are correct	

3. Lab work you would do FIRST that would help with this diagnosis would be:

a. 1 and 3	1. Sed rate
b. 2 and 4	2. CBC
c. 1, 2, and 3	3. LFTs
d. 4 only	4. Urinalysis

4. Your <u>focused</u> physical exam for this woman (above) would <u>exclude</u> which system at this visit:

   a. Lungs
   b. Heart
   c. Abdomen
   d. Skin

ERIC

Part III

Feelings About Aging

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

For each of the following phrases place the number from the scale above that best describes your feelings about growing older yourself.

_______ 1. joyful

_______ 2. confused

_______ 3. worried

_______ 4. unconcerned

_______ 5. curious

_______ 6. excited

_______ 7. interested

_______ 8. frightened

_______ 9. resigned

_______ 10. looking forward to it

_______ 11. depressed

_______ 12. dreading it

_______ 13. don't want to think about it

For the following phrases place the number from the scale above which best describes your conception of what it will feel like when you are old yourself.

_______ 14. powerful

_______ 15. tired

_______ 16. having many options in life

_______ 17. unloved

_______ 18. sick

_______ 19. ugly

ERIC

________ 20. wise

________ 21. useless

________ 22. loved

________ 23. content

________ 24. disappointed

________ 25. healthy

________ 26. having few options in life

________ 27. afraid of death

________ 28. involved

________ 29. alone

________ 30. attractive

________ 31. dependent

Mark the place on the scale that best describes your expectation of how your own aging will compare to the experiences of most people.

1	2	3	4	5
My experience will be much more positive than that of most older people	Somewhat more positive than most	About the same as most	Somewhat more negative than most	Much More negative than most

To what age would you like to live? ________________

ERIC

PART IV

Based on the following scales, please indicate the number that best describes your career preferences (what you would like to do) and career expectations (what you expect that your will do, given the job market, your ta[illegible] training, etc.) for the situations described below.

Preferences

1	2	3	4	5
I definitely do not want to do this.		I'm undecided or don't care.		I definitely do want to do this.

Expectations

1	2	3	4	5
I definitely do not expect to do this.		I'm unsure		I definitely expect to do this.

	Career Preference	Career Expectations
Work with Older Patients	________	________
Work on an Interdisciplinary Team	________	________

ERIC Full Text Provided by ERIC

Rating Form For Evaluation Of Geriatric Clinical Encounter

Student's name: ______________________

Rater's name/role: ______________________

Date of encounter/rating: ______________________

On a scale of 1 = excellent to 5 = poor, please rate the following aspects of the patient encounter as it was performed by the clerkship student. If there was no opportunity to observe, please indicate by circling NA. Include any comments below the appropriate categories.

A. Communications

	Excel-lent				Poor	No Observation
1. Maintained respectful tone and language toward elder.	1	2	3	4	5	NA
2. Communicated in an understanding and clear manner in view of elders' high probability of hearing and/or vision losses. Used compensatory techniques effectively when communicating with elders with know sensory deficits.	1	2	3	4	5	NA
3. Recognized and responded to culturally diverse needs and communication styles among elders from various ethnic backgrounds. Exhibited sensitivity to cultural variations in health beliefs and health behaviors among minority elders.	1	2	3	4	5	NA
4. Demonstrated the need for patience in interacting with older adults in recognition of slower response times.	1	2	3	4	5	NA
5. Exhibited recognition of diversity among elders and sensitivity to danger of ageist stereotype.	1	2	3	4	5	NA
6. Avoided attributing to old age potentially treatable disabilities.	1	2	3	4	5	NA
7. Exhibited belief in the capacity of elders to improve physically and/or psychologically.	1	2	3	4	5	NA
8. Demonstrated concern for the self-esteem of older adults.	1	2	3	4	5	NA
9. Exhibited empathy for older adults undergoing losses in social roles, and/or sensory and functional abilities.	1	2	3	4	5	NA

	Excel-lent				Poor	No Observation
10. Demonstrated awareness of and compensation for potential underreporting of symptoms.	1	2	3	4	5	NA
11. Listened empathetically to elder's family members' concerns.	1	2	3	4	5	NA

Comments:

___

___

___

___

B. Evaluation/Management of Health Status

	Excel-lent				Poor	No Observation
1. Elicited information from elder (or other informant) on the history of common concerns affecting functional status (e.g. incontinence, falls, depression).	1	2	3	4	5	NA
2. Health problem(s) was(were) assessed and plan was developed reflecting the following:						
a. Knowledge of common geriatric problems	1	2	3	4	5	NA
b. Recognition of interaction of multiple pathologies	1	2	3	4	5	NA
c. Possible atypical or nonspecific presentation of disease	1	2	3	4	5	NA
d. Danger of iatrogenic consequences of treatment	1	2	3	4	5	NA
e. Appreciation of role of family and community resources in support of older adults	1	2	3	4	5	NA
f. Appreciation of role of family and community resources in support of older adults	1	2	3	4	5	NA
g. Attention to need for cost containment strategies in suggesting management alternatives	1	2	3	4	5	NA

	Excel-lent				Poor	No Observation
h. Judicious use of lab tests relevant to differential diagnosis	1	2	3	4	5	NA
3. Included functionally oriented evaluation of the following:						
a. Hearing and vision	1	2	3	4	5	NA
b. Walking/ambulation/mobility	1	2	3	4	5	NA
c. Range of motion	1	2	3	4	5	NA
d. Mental Status	1	2	3	4	5	NA
e. Activities of daily living	1	2	3	4	5	NA
f. Instrumental activities of daily living	1	2	3	4	5	NA
g. Family social support	1	2	3	4	5	NA
h. Mood or affect	1	2	3	4	5	NA
4. Problem list reflected an understanding of the importance of the elder's functional level as opposed to focusing only on medical diagnoses.	1	2	3	4	5	NA
5. The plan reflected utilization of services by other providers where appropriate to maximize the elder's function.	1	2	3	4	5	NA
6. Overall, how would you rate the quality of the evaluation of health presented by the trainee.	1	2	3	4	5	NA
7. Overall, how would you rate the student's evaluation in geriatric problem solving skills as seen in this encounter	1	2	3	4	5	NA

Comments:

___

___

___

___

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS

Sample Checklist and Rating Sheet for Learning Experiences

Student: ______________________________

Coordinator or Preceptor: ______________ _______ Date: ______________________

	Completed (Yes=Y, No=N)	Evaluation (1=exc. to 5-poor)
I. Communication		
A. Readings		
1. Pfeiffer E: Some Basic Principles of Working With Older Patients.	____	____
2. Butler R: The Doctor and the Aged Patient.	____	____
3. Libow L & Sherman F (eds.): The Core of Geriatric Medicine	____	____
a) Chapter 3, Interviewing and history taking, pages 38-45	____	____
b) Chapter 9, Hearing disorders	____	____
c) Chapter 10, Visual disorders	____	____
4. Kim S: Ethnic Elders and American Health Care—A Physician's Perspective.	____	____

ERIC

	Completed	Evaluation
B. Seminar Activities	____	____
1. View videotape: "Age-Related Sensory Loss: An Empathic Approach".	____	____
2. Participate in discussion session on communications, including cultural variations and ageism.	____	____
3. Act out a simulated communication with an elder who has hearing loss.	____	____
II. Evaluation of Health Status		
A. Reading assignments		
1. Review: Kane RL, Ouslander J and Abrass I: Essentials of Clinical Geriatrics. Chapter 3 and forms in appendix	____	____
2. Libow L, Sherman F: The Core of Geriatric Medicine. pp 45-54	____	____
B. Seminar Session		
1. View videotape on functional assessment.	____	____
2. Review forms and process used in functionally-oriented evaluation.	____	____
C. Perform a complete functionally-oriented evaluation on ambulatory community-dwelling older patient.		
1. Perform histories and physical examinations and additional evaluations using functional evaluation forms.	____	____
2. Order needed laboratory tests and record results.	____	____
3. Develop problem lists based on the results of lab tests, physical exam, etc.	____	____
4. Present cases to clinical instructor and make recommendations for management plan.	____	____

ERIC

	Completed	Evaluation
D. Attend Multidisciplinary Geriatric Assessment (or Evaluation) Unit Team Meeting, if resource is available.	____	____
E. Perform home visit for purpose of evaluating home environment.	____	____

III. Management of Common Health Problems

A. Reading assignments

	Completed	Evaluation
1. Review: Kane RL, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. Chapters 5-7, 9-11, 13-14	____	____
2. Walshe, T (ed.): Manual of Clinical Problems in Geriatric Medicine. Boston, Little Brown, 1985. Chapters 7, 25, 26, 30, 31, 36, 38, 41-43, 67, 68, 79	____	____

B. Outpatient Care

	Completed	Evaluation
1. Interview elders with specific complaints, take focused history, and perform problem oriented physical exams. Use consultation or referral, as needed, and recommend management plan to supervisor. Record SOAP notes for each.	____	____
2. Order lab tests and/or arrange for additional evaluations as needed for suspected common diagnoses.	____	____
3. Attend or conduct follow-up patient encounters for chronic conditions:		
a) Osteoarthritis	____	____
b) Hypertension	____	____
c) Type II diabetes mellitus (NIDDM)	____	____
d) Chronic obstructive pulmonary disease	____	____
e) Angina pectoris	____	____
f) other (specify) ______________	____	____

	Completed	Evaluation
C. Multidisciplinary and Community Supports		
1. Attend (and participate in as a member, if possible) meeting of multidisciplinary team involved in health care of elders.	____	____
2. Develop list of community resources for health care support for elders.	____	____
3. Visit community agency serving elders.	____	____
D. Make rounds on older hospitalized patient. Interview patient in hospital and visit patient after discharge.	____	____
IV. Health Promotion/Disease Prevention		
A. Reading assignments		
1. Review: Kane RL, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. pp 293-301	____	____
B. Read guidelines for immunization for elders and give immunization to an elder, if appropriate.	____	____
C. Perform routine health screening for an elder in the following areas:		
1. Blood pressure, in two positions	____	____
2. Colorectal cancer	____	____
3. Visual acuity and glaucoma	____	____
4. Hearing acuity	____	____
5. Mental status	____	____
6. Cervical/uterine cancer	____	____
7. Infections	____	____
8. Diabetes	____	____
D. Health Education		
1. Locate written health education materials especially for elders.	____	____
2. Prepare and give a health education talk to a group of seniors. (Topic: ____________________)	____	____

ERIC

	Completed	Evaluation
3. Give individual health education consultation or counseling to elders. (Topic: ____________)		
4. Observe and interview participants in:		
a) exercise class for seniors	____	____
b) meal site program	____	____
E. Perform health maintenance for elders		
1. Removal of cerumen	____	____
2. Foot care	____	____
3. Other: (specify) ____________	____	____
V. Family and Elder Counseling		
A. Reading Assignments		
1. Review: Kane RL, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. Chapter 4	____	____
2. Silverstone B & Hyman K: You and Your Aging Parents. Chapters 2, 3, 5, 6, & 7	____	____
3. Mace N & Rabins P: The 36-hour Day: A Family Guide to Caring for Persons with Alzheimer's Disease, Related Dementing Illnesses, and Memory Loss in Later Life. Chapters 2-6, 8, 12, & 13	____	____
4. Winograd C. & Jarvik L: Physicians' Management of the Demented Patient	____	____
5. Katzman R: Early Detection of Senile Dementia.	____	____
6. Kosberg, JI: Understanding Elder Abuse: An Overview for Primary Care Physicians.	____	____
B. Seminar Session		
1. View videotape on dementia	____	____
2. Discuss family issues in care of elders with social worker from home health agency or other settings where he/she works with families of elders (if available)	____	____

	Completed	Evaluation
C. Attend or conduct session with elder and/or family member concerned about elder's memory problem	___	___
D. Develop specific referral resources for:		
1. Comprehensive evaluations of confused patient.	___	___
2. Day care for respite for family care-giver of dementia patient. Visit Day Care Center; interview staff member, and family member.	___	___
3. Family support group for family with dementia patients. Attend support group meeting.	___	___
4. Elder abuse.	___	___

VI. Long Term Care

Review:

	Completed	Evaluation
1. Kane RL, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. Chapters 8 & 16	___	___
2. From Cassel CK & Walshe JR (eds.): Geriatric Medicine. Vol II: Fundamentals of Geriatric Care.		
a. Chapter 22: Lynn DJ: Deciding about life-sustaining therapy	___	___
b. Chapter 23: Lynn DJ: Care near the end of life	___	___
c. Chapter 28: Kayser-Jones JS: Physicians and the care of nursing home residents	___	___
B. Go on home visit with a staff member in a home health agency.	___	___
C. For potential residential care home resident, assist with a functionally-oriented preadmission history and physical assessment	___	___

	Completed	Evaluation
D. Observe a physical therapy session with a patient in rehabilitation unit, day health care center, or nursing home; assist patient with prescribed activities at a later time.	____	____
E. In a skilled or immediate-level nursing unit, complete the following activities:		
1. Make rounds with primary care practitioner or nurse to observe signs of the following conditions. Discuss and observe methods of prevention.		
a) Contracture	____	____
b) Pressure sores	____	____
c) Constipation	____	____
d) Dehydration	____	____
e) Pneumonia	____	____
f) Foley Catheter complications	____	____
g) Over medication	____	____
2. Assist with the feeding of a resident who needs special attention due to impairment in chewing and/or swallowing	____	____
3. Observe and assist with at least one of the following:		
a) Debridement of pressure sore	____	____
b) Insertion of urinary catheter	____	____
c) Insertion of nasogastric tube	____	____
4. Attend at least three of the following activities:		
a) Residents' council meeting	____	____
b) Class on current events, or reality orientation (or activity with verbal interaction)	____	____
c) Exercise program	____	____
d) Bowel and bladder training session	____	____
e) Bathing procedure	____	____
f) In-service program for nursing aides	____	____
5. Receive training in transfer techniques from nursing staff or physical therapist and assist with transfer of patient from bed to chair and vice-versa.	____	____

	Completed	Evaluation
6. **Make rounds on patients and observe routines at least once on each of the three daily shifts.**	___	___
7. **Interview skilled nursing patient about her life, prior living arrangement, family, length of time in nursing home, and adjustment to it. Go with her to her favorite activity listed on the facility's activity schedule.**	___	___
8. Perform comprehensive functionally-oriented history and physical exam on nursing home patient. Develop updated problem list and recommended management plan. Prepare appropriate chart records of findings.	___	___

Comments on completion or evaluation of any of the learning experiences. Please indicate item number or name, then your comment or explanation. Use additonal pages if necessary.

8. Developing the Schedule of Learning Experiences.

Below are listed some of the major recommendations for arranging the schedule for a student's clerkship activities.

a. Ideally, one setting should be considered the primary training site or "home base" for each student in Clerkship, with one preceptor in that setting having responsibility as the major clerkship supervisor. However, if that is not possible, having one primary setting for outpatient and one for long-term experiences is very highly recommended. In any case, either a faculty member from the PA program or a clinician from the clinical setting should be assigned the responsibility of coordinating the student's schedule, including seminars if they are used.

b. The largest blocks of time need to be spent in outpatient care and long-term care settings, since those are the major sources of geriatric health care. No less than one-third of the student's time should be used in geriatric outpatient experiences.

c. Exposure of students to relatively healthy, independent elders in community-based settings should precede the exposure to severely impaired elders in nursing homes, for the following reasons:

   (1) A positive attitude toward elders is an extremely important part of good geriatric care. First exposing a student training in geriatrics to nursing home residents has been found to reinforce the student's negative ageist attitudes toward elders.

   (2) Most older adults are independent and relatively healthy. Only about 5% reside in nursing homes or other institutional settings. The "norm" for healthy aging should be established clearly before exposure to the small proportion of the frailest and most dependent elders.

d. Record-keeping time should be allowed for students during or after the clinical blocks in relation to written requirements (e.g., SOAP notes) used for evaluation.

e. Since seminar time is not a traditional part of clinical training, some programs may choose not to use the seminar experiences. Scheduling faculty for seminars has been found to be problematic in some cases. They are included in the Model especially for programs that have minimal pre-clinical training in geriatrics. If the seminars are used, they should be scheduled at relatively regular times (e.g., weekly) throughout the clerkship.

SAMPLE SCHEDULE

The sample schedule is presented on the following pages for a four-week Model Geriatric Clerkship, with the knowledge that it would be very rare if any program could implement it in its entirety without modification. It is based on the assumption of a 35-hour week. The approximate number of hours for each activity are geared to the Curriculum Units. A chart of the setting for four weeks is followed by a more complete description including Learning Experiences from the Curriculum Units.

If programs have 5- or 6- week clerkships, the additional number of hours are proposed as indicated in the optional 5th and 6th week supplement.

The specific days on which activities are scheduled will obviously need to be geared to the schedules of all those involved from the PA program or from the chosen setting. When the clerkship schedule calls for participation in regularly scheduled events (e.g. Geriatric Assessment (or Evaluation) Unit Case Conference, or fitness classes in the senior center) those events need to be scheduled first, with the remainder of the schedule built around them.

This sample schedule is based on the major training site being the outpatient clinic, with the nursing home being a major focus for the last two weeks. Neither of the two settings, however, are ever used for an entire day; this is to reduce burn-out for the student and to reduce the burden of supervision for the clinical faculty. This arrangement, however, would obviously be difficult if the settings were widely separated geographically. In that case, the schedule would need to be arranged in block formats to allow entire days at one setting, thereby reducing transportation time.

Sample Schedule of Geriatric Clerkship Settings

	Day 1	Day 2	Day 3	Day 4	Day 5
Week 1	AM: Orientation Pretest Communication seminar/readings	AM: Senior center	AM: Inpatient Rounds	AM: Seminar on functionally-oriented health assessment	AM: Attend multidisciplinary geriatric assessment team meeting
	PM: Outpatient clinic Orientation/ observation	PM: Outpatient clinic	PM: Outpatient clinic	PM: Outpatient clinic	PM: Outpatient clinic
Week 2	AM: Community resources: list and visits	AM: Senior center presentation	AM: Home visit-post hospitalized patient	AM: Seminar on dementia: video-tapes, readings	AM: Attend Alzheimer's family support group
	PM: Outpatient clinic	PM: Outpatient clinic	PM: Outpatient clinic	PM: Outpatient clinic	PM: Outpatient clinic
Week 3	AM: Visit senior day health care center	AM: Residential care center/FOHPE	AM: SNF rounds	AM: Seminar on long-term care issues	AM: Rehabilitation unit observation
	PM: SNF - orientation/ observation	PM: SNF rounds/ activities	PM: Home health agency/home visits	PM: SNF activities	PM: Outpatient clinic/SNF night shift rounds
Week 4	AM: Home health agency case conference	AM: Rehabilitation unit observation Outpatient clinic	AM: Hospice staff meeting	AM: Outpatient clinic SNF	AM: Outpatient clinic
	PM: SNF rounds/ activities	PM: SNF rounds/ activities	PM: SNF	PM: Outpatient clinic	PM: Final exam (post test)

ERIC

MODEL GERIATRIC CLERKSHIP FOR PHYSICIAN ASSISTANT STUDENTS

PROPOSED SAMPLE SCHEDULE FOR FOUR-WEEK CLERKSHIP

Week 1	Unit	Setting*	Hours
Day 1			
Seminar Session Orientation to Clerkship Pretest (if given) Communication Skills Video, readings, role-play, discussion Discussion of reading assignments on communication and functional assessments	I	Sem	3.5
Outpatient Clinic Orientation to Practice Types of patients, procedures, record-keeping, Observation of provider/patient encounter, ordering of lab test, and writing up charts.	III	Clin	3.5
Day 2			
Visit Senior Center Observe exercise class, arrange for health education presentation, attend meal site, interview participants. Record reaction.	IV	Sr.Ctr.	3.5
Outpatient Clinic Observe and/or participate in problem-oriented patient encounters (POPE), observe health education, and/or observe family counseling sessions.	III,IV	Clin.	3.5

* See Table 1 on page for key for Settings

Week 1	Unit	Setting	Hours
Day 3			
In-patient Services Attend rounds on older patients hospitalized for surgery trauma, or acute episodes in chronic conditions. Interview hospitalized patients and family. Visit geriatric wards and geriatric consult services.	III	Hosp.	3.5
Out-patient Clinic Participate in patient encounters. Begin developing list of community resources for health care support of elders.	III	Clin.	3.5
Day 4			
Seminar Sessions: Functionally-oriented Health Assessment View video and/or watch demonstration by clinician of history-taking and physical examination of an elder using a functional approach. Become familiar with types of forms and screening devices used. Play out different role parts, if possible. Discuss readings on multi-disciplinary functional assessment. Discuss reading assignments on dementia.	II	Sem.	3.5
Outpatient Clinic Observe functionally-oriented history and physical exam (FOHPE) on an older patient undergoing an initial evaluation.	II	Clin	3.5

Week 1	Unit	Setting	Hours
Day 5			
Attend a Multidisciplinary Geriatric Assessment (or Evaluation) Unit Team Meeting or Case Conference, if possible.	II	Clin.	2
Outpatient Clinic See older patients for POPEs or FOHPEs for chronic conditions. Participate in health education sessions. Read immunization guidelines for elders. Recommend and administer immunization as suggested in guidelines for disease prevention.	II, III, IV	Clin.	5

ERIC

Week 2

	Unit	Setting	Hours
Day 6			
Community Resources			
Finalize list of community resources. Visit two community agencies serving elders. Interview staff and clients.	III	Sr. Ctr.	3.5
Out-patient Clinic*	III	Clin.	3.5

*Note:
During weeks 2, 3 and 4, time in the outpatient geriatric clinic will be spent doing the following:

Performing or participating in at least two PCPEs, using consultants or referral as needed, developing management plans and writing SOAP notes for each; ordering additional lab tests or other evaluations as needed.

Conducting or participating in at least two follow-up patient encounters for patients with chronic conditions; recording changes in medical or functional parameters; evaluating medication regimen; and recommending changes in management, if needed.

Performing at least one comprehensive FOHPE for initial evaluation; ordering lab tests, developing problem lists; presenting case to supervisor and nursing staff with recommendation for management plan.

Giving health education to at least two elders. Giving immunizations as needed.

Performing health screening and health maintenance activities.

Counseling with elders and/or their families on management of chronic diseases, referral to community resources, decisions about housing or institutionalization.

Day 7	Unit	Setting	Hour
Senior Center Presentation	IV	Sr.Ctr.	3.5
Give presentation to Senior Center group on health education topic. Record reaction to experience.			
Outpatient Clinic	I,II, III,IV,V	Clin.	3.5
Day 8			
Post hospital home visit	I,III,V		3.5
Visit patient seen last week in hospital at home (or post acute setting). Observe problems, interview patient and caregiver on hospital and post-hospital experience. Record findings and any in-home (or rehabilitation) support needed or being received.			
Outpatient Clinic	I,II, III,IV,V	Clin.	3.5
Day 9			
Seminar Session: Dementia View videotapes Discuss reading assignments and videotapes Assign readings on long-term care	V	Sem.	3.5
Outpatient Clinic	I,II,III, IV,V	Clin.	3.5
Day 10			
Family Support Group Attend meeting of Alzheimer's Disease and Related Disorders Association (ADRDA) or other family support group for caregivers of dementia patients. Record on issues family discussions and emotions, as well as own emotional reaction.	V	Sr.Ctr.	2

Outpatient Clinic	Unit	Setting	Hours
	I, II III, IV, V	Clin.	5

Day 11

Day Care/Day Health Care Center	I, V, VI	LTCA	3.5

Visit either Senior Day Care or Day Health Care Center. Observe services for family respite, health education, and chronic care management, if available. Attend team case conference, if possible. Interview a patient with dementia, and a family member. Discuss with one of the staff members his/her role in the center. Record findings, observations, and own emotional reactions.

Nursing Home	VI	LTCB	3.5

Attend orientation to services. Observe the roles of various staff members, types of patients, and record keeping procedures.

Observe the nursing care and feeding procedures. Attend a nursing staff meeting.

Day 12

Residential Care/Outpatient Clinic	VI	LTCB	3.5

Visit residential-care (may be called community-care, board-and-care or domiciliary) facility. Observe and record functional level of residents. If possible, perform a FOHPE evaluation for residential care placement through health care provider in residential care home or outpatient clinic.

Week 3	Unit	Setting	Hours
Nursing Home Assist with bringing patients to class or other activity. Attend and observe activity. Assist with feeding patients who need assistance.	VI	LTCB	3.5
Day 13			
Nursing Home Make rounds with primary care provider or Director of Nursing to observe major health problems, their prevention and treatment. Observe bathing procedures.	VI	LTCB	3.5
Home Health Accompany staff member from home health agency on home visits. Record health history, needs of patients and caregivers and treatment/management strategies.	I,VI	LTCA	3.5
Day 14			
Seminar Session: Long-Term Care Discussion Session Long-Term Care Policy and Financing Ethical Decisions in LTC Administrative Issues in Nursing Home Medicare/Medicaid	VI	Sem.	3.5
Nursing Home Observe bowel and/or bladder training session for elder residents with incontinence problem. Receive training in transfer techniques from nursing staff or physical therapist. Assist with patient transfer.	VI	LTCB	3.5

ERIC

Week 3

	Unit	Setting	Hours
Interview nursing home patient about her prior lifestyle, family, adjustment to nursing home. Attend activity with her. Record findings and emotional reaction.	I,VI	LTCB	3.5

Day 15

	Unit	Setting	Hours
Rehabilitation Unit or Program Attend physical therapy session with older patient. Observe and record instructions for patient's therapy.	VI	LTCA	2
Outpatient Clinic	I,II, III,IV,V	Clin	3
Nursing Home Make rounds with night shift nurse. Observe "sundowning" cases, and record nurse's approach to sundowning behavior. Select two patients in need of updated FOHPE, begin getting acquainted with their charts.	VI	LTCB	3

ERIC

Week 4	Unit	Setting	Hours
Day 16			
Home Health Attend case conference or team meeting of home health agency team. Record reaction to multidisciplinary team function.	VI	LTCA	3.5
Nursing Home	I,V,VI	LTCB	3.5

Note: During week 4, time in Nursing Home will be spent doing the following activities:

Updating FOHPEs, problem lists and management plans for two residents.

Assisting with prevention and treatment procedures for: complications of immobility (e.g. pressure sores, contractures), constipation, catheter complications, dehydration, pneumonia.

Observing and/or assisting with debridement of pressure sores, insertion of urinary catheter and nasogastric tubes, if possible.

Making rounds with primary care provider.

Attending Resident's Council Meeting.

Attending or assisting with planning for staff development program counseling with family members.

Attending staff meetings.

ERIC

Week 4	Unit	Setting	Hours
Day 17			
Rehabilitation Unit or Program	I,VI	LTCA	1
Assist or observe patient from day 12 session with her therapy exercises from Physical Therapy session. Note progress.			
Outpatient Clinic	I,II, III,IV,V	Clin.	3
Nursing Home	VI	LTCB	3
Day 18			
Attend Hospice Unit staff meeting with physician or primary care provider. Make home visits to terminally-ill patients with staff member or volunteer, if possible. Record emotional reactions.	I,V,VI	LTCA	3.5
Nursing Home	I,V,VI	LTCB	3.5
Day 19			
Prepare Final Clerkship reports		Sem.	3.5
Nursing Home	I,V,VI	LTCB	3.5
Day 20			
Outpatient Clinic	I,II III,IV,V	Clin.	5
Take Final Exam		Sem.	2

ERIC

RECOMMENDATIONS FOR SUPPLEMENT FOR
FIVE AND SIX WEEK CLERKSHIP

Activity		Additional Hours 5 week	Additional Hours 6 week
A.	Outpatient Clinic		
	1. Do additional FOHPEs, lab tests, problem lists, and recommended management plans.	7	14
	2. Evaluate home environment and present to primary supervisor.	3	6
	3. Do additional POPE and follow-up encounters for chronic conditions.	3	6
	4. Do additional patient education.	2	4
	5. Do health screening.	2	4
B.	Geriatric Evaluation Unit/Team	3	6
	Attend second team or case conference (or other multidisciplinary team case conference).		
C.	In-patient setting	3	6
	Make additional rounds on elders hospitalized for injury, surgery, or acute episodes of chronic conditions.		
D.	Home Health	3	6
	Make additional home visits with agency staff.		
E.	Nursing Home	7	14
	Attend additional activities. Interview other nursing home resident(s) in-depth Attend rounds with primary care providers.		
G.	Hospice	2	4
	Make additional visits to terminally-ill elders.		
	TOTAL	35	70

ERIC

9. Recruiting and scheduling individual students into clerkship.

Although a few PA programs have been able to arrange required geriatric clerkships for their students, the more common pattern is to affer the clinical rotation in geriatrics as an elective. As an elective, one of the major challenges in the process of implementation is interesting students in enrolling given the general bias in medical education against chronic illness in favor of the more immediate rewards of acute care. Some programs have found that enrollment for elective clerkships rise dramatically when an enthusiastic faculty member presents geriatric material in preclinical classes, emphasizing the interesting challenges and the important role PA's can play in the care of older adults. Another strategy that has worked well is to identify students potentially interested in geriatrics early in their first year, reinforce them for their interest with special attention, and encourage them to save room in their clinical year for the geriatric clerkship. In many cases, some type of special "marketing" is required to interest students initially, but once a positive experience is completed by one or two students the informal student rumor network increases the potential subscribers significantly.

It is strongly recommended that students be scheduled for the geriatric clerkship <u>after</u> they have completed some of the more basic clinical experiences, such as family practice or internal medicine rotations. Of course, this is difficult to accomplish for all students when the geriatric clerkship is very popular or required, since some students will need to be in the geriatric rotation early in the clinical year. For those students, some special assistance with basic clinical skills before the complexities of geriatric care might be helpful.

10. Following clerkship students and evaluating their progress.

While students are involved in the clerkship, it is helpful for the coordinator to stay in close contact so that any potential problem can be addressed before it becomes a major impediment to a successful experience. For example, sometimes schedules need to be adjusted during the rotation for changes in staff or patient availability in one of the sites.

Arrangements should be made for administration of tests or other types of evaluation planned by coordinator.

11. Evaluating clerkship, revising as needed.

After formal and informal evaluation by students and preceptors, revisions should be made as indicated to adapt the Model in a more effective manner for the goals of the program and the geriatric clerkship.

ERIC

Appendices

ERIC

APPENDICES

A. PAs in Geriatric Medicine: An Annotated Bibliography

B. Abstract of Medicare Legislation Allowing Reimbursement for PA Services

C. List of Geriatric Education Centers (GECs)

D. Graduates of Geriatric Education for PA Faculty (GEPAF) Program

E. Bibliographies of Geriatric Textbooks, Journals, and Articles

F. Order Blank for Geriatric Curriculum Resource Package

G. List of Geriatric Research Educational and Clinical Centers (GRECCs) in VA Medical Centers

H. List of Area Health Education Centers (AHECs)

I. List of Hospital Based Home Care (HBHC) Programs in VA Medical Centers

ERIC

APPENDIX A

PAs IN GERIATRIC MEDICINE:
AN ANNOTATED BIBLIOGRAPHY

ERIC Full Text Provided by ERIC

PAs IN GERIATRIC MEDICINE
AN ANNOTATED BIBLIOGRAPHY
Edited by Donna Tully, PA

Becker, R., The physician assistant in geriatric long-term care, The Gerontologist, 16:318, 1976.

The Physician Assistant (PA) is a new health-care professional who is trained to function as a "physician extender." The need for improving the medical care rendered in geriatric facilities has been documented, and PAs appear to be a natural resource to help fill this gap. Experience with 71 PA students and graduate PAs at the Jewish Institute for Geriatric Care supports this possibility. The challenge is for gerontologists and geriatricians to take the initiative and introduce the PA to their respective institutions where they can study further their role and their effect on patient care as well as on improved physician involvement in long-term institutions.

Cawley, J.F. and Golden, A.S.: Nonphysicians in the U.S.: manpower policy in primary care, Journal Public Health Policy, 4: 69, 1983.

This inquiry reviews several of the more prominent examples of the utilization of nonphysicians in other countries, touching specifically on their roles and organizational relationships. Next, the policy of using nonphysicians in the provision of primary care is considered, noting the contrast between developing and industrialized countries. Lastly, the adoption of PAs and NPs in the United States is discussed, focusing on the current and future roles for these providers in primary care.

Cawley, J., Ott, J., DeAtley, C., The future for physician assistants, Annals of Internal Medicine, 98: 993, 1983.

Physician Assistants were intended to be assistants to primary care physicians. Physician in private practice have only moderately responded to the availability of these professionals. Cutbacks in numbers of foreign medical graduates entering American schools for graduate medical education, concern for overcrowding in some specialties, and the economic and clinical capabilities of physician assistants have lead to new uses of these persons. Physician assistants are employed in surgery and surgical sub-specialties; in practice settings in instutions such as medical, pediatric, and surgical house staff; and in geriatric facilities, occupational medicine clinics, emergency rooms, and prison health systems.

Fox, J.G. Storms, D.M., New health professionals and older persons, Journal of Community Health, 5: 254, Summer 1980.

Journal abstract: Because the number of aged persons in the population is increasing and localized maldistributions of health care manpower persist, it has been suggested that new health professionals

ERIC

might provide health services for older persons who would otherwise face problems in obtaining health care. In this study, the authors tested the degree to which older persons know about and are accepting of care by new health professions. They found that older persons know less about and accept less NHP care than do younger persons, although they are still mostly accepting of such care. In addition, older persons are more satisfied with their current care providers. Taken together, these findings indicate that older persons do not currently provide a source of expressed demand for NHP services.

Gambert, S.R., Rosenkranz, W.E., Basu, S.N., Jewell, K.E., Winga, E.R., Role of the physician extender in the long term setting, Wisconsin Medical Journal, 82:30, September 1983.

Prepared by a Subcommittee of the State Medical Society of Wisconsin's Committee on Aging and Extended Care Facilities to answer questions about quality of care, supervision and reimbursement for PAs in a long-term care setting.

Isiadinso, O., Physician's assistant in geriatric medicine, New York State Journal of Medicine, 79: 1069, June 1979.

Journal summary: A PA can be very effective in patient management and care in a geriatric facility, contributing to quality care by allowing the physician to see more patients under optimal conditions and by relieving the physician of distracting unnecessary minutiae... Relieved of less pressing problems, the physician can spend more teaching time with the PA and can also attend local continuing medical education courses, thus upgrading and updating the physician's own knowledge.

Kane, R., Solomon, D. Beck, J., Keeler, E., Kane, R., The future need for geriatric manpower in the United States, The New England Journal of Medicine, 302:1327, June 12, 1980.

Journal abstract: This paper provides estimates of the needs for medical geriatric manpower under four different models: continuation of the status quo; academic geriatricians only; provision of care by academic and consultant geriatricians; and provision of care by academic, consultant, and primary care geriatric practitioners. Each option is further analyzed in terms of three levels of delegation to nonphysician clinicians. The recommendation states "We think that geriatricians should provide improved care, including both consultant and primary care, to people aged 75 years and older, and that they should delegate a moderate amount of responsibility to nurse practitioners, physician assistants, and social workers. On the basis of these assumptions, and allowing for an academic role as well, we estimate that the United States will require between 7,000 and 10,300 geriatricians by the year 1990; the best intermediate figure is about 8,000."

Kane, R.L., et al, Geriatrics in the United States: Manpower Projections and Training Considerations, Rand Corp., 1980.

This study was designed to provide quantitative estimates of the geriatric manpower that might be required over the next 50 years in the United States. This report is intended to be used by policymakers, educators and others interested in the training and deployment of geriatric personnel.

Kraak, W., Institutional elderly--more than a success in geriatrics, Physician Assistant & Health Practitioner, 3:70, October 1979.

The quality of communications and relationships established with geriatric patients is of utmost importance. The PA's ability to spend more time with a patient and a preventive viewpoint of medicine potentially makes for a very satisfying PA/patient interaction. Psychological, sexual and social needs of the geriatric patient are briefly discussed.

Lowenthal, G., and Breitenbucher, R., The geriatric nurse practitioner's value in a nursing home, Geriatrics, 30:87, 1975.

Nursing home patients are underserved by physicians and thus may benefit from services provided by ancillary medical personnel. This study has shown that by identifying medical problems, a geriatric nurse practitioner can increase the effectiveness of physician caring for nursing home patients.

Margolis, E., Changing disease patterns, changing values--problems of geriatric care in the U.S.A.: an outsider's view, Medical Care, 17:1119, November 1979.

Journal summary: Changing disease patterns coupled with recent shift in societal values bring into focus ... the problems of geriatric care, with their medical and social aspects. Medicare and Medicaid were meant to respond to the needs of geriatric care. However, there is almost a general consensus that in spite of being valuable ... Medicare and Medicaid have failed to generate considerable changes in the overall care for the elderly. The basic characteristics of the American Health care system are not conducive to an approach which envisages geriatric care as a comprehensive primary care level, within a system of health care, combining medical with social activities in a team led by a competent physician... An attitude on the part of the medical profession which concentrates on the medical aspects only and neglects the entire complex of problems, substantial and organizational, associated with geriatric care, may lack utility... However, certain specific difficulties seem to result from the fact that some components of the health care system insist on solving problems generated by changing disease patterns and changing societal values, with no change in their own structure and their own value system.

Moore, J., Bobula, J., A conceptual framework for teaching geriatrics in a family medicine residency, Journal of Medical Education, 55:339, April, 1980.

There is an increasing recognition of the need for educational programs in geriatric medicine, a previously neglected area of medical

ERIC

education. Such training is particularly important in family medicine residencies because primary care physicians have provided the bulk of health care to the elderly and probably will continue to do so. There are many advantages to using a competency-based curriculum model in developing such an educational program in geriatric medicine. The competency-based model clearly states educational objectives and identifies pertinent instructional resources and evaluation methods. A competency-based curriculum model is described which divides competencies under four major goals: understanding principles of geriatric medicine, obtaining and interpreting data, managing geriatric patients, and working as a member of a health care team. Sample objectives for each goal are described, and experience using this model in a family medicine residency is reviewed.

Nechasek, J., Carboni, D., The impact of a gerontology curriculum in a college of health sciences, Journal of Allied Health, 9:95, May 1980.

Journal abstract: This article describes the development of a gerontology curriculum in a college of health sciences and the interaction of gerontological concepts with the health professions curricula of the college ... The article also provides a series of examples of how health science disciplines have expanded their instructional resources by focusing on the application of their discipline to the aged. This unique setting for a gerontology curriculum has allowed a greater diffusion of concepts of aging and services to the college's health professions curricula.

Olson, J.H., Geriatric medicine: a new horizon for the physician's assistant, Journal of the American Geriatric Society, 31:236, April 1983.

The increase in the geriatric population and the growing medical needs of this population point to the need for specially trained health care practitioners to provide care. One PA's experience in a geriatric setting is described. The PA's duties included clinical evaluations, therapeutic and diagnostic procedures and counseling.

Romeis, J., Schey, H.M., Marion, G.S., and Keith, J.F., Jr., Extending the extenders: compromise for the geriatric specialization - manpower debate, Journal of the American Geriatrics Society, 33:559, August, 1985.

Journal abstract: This pilot study reports on issues germane to the geriatric specialization-manpower debate. The study found that a large amount of the functional responsibility required by older adults in an urban clinic setting could be delegated to physician extenders. Other findings included shorter hospitalizations, increased feelings of well being, and high patient satisfaction with physician extended care. The implications are that rather than develop a new physician specialty, more geriatric manpower needs could be met by delegating responsibility to appropriately trained and supervised physician extenders.

Schafft, G., Fasser, C.E. and Cyr, A.B. The Assessment and Improvement of Knowledge and Skills in Geriatrics for Physician Assistants: Final Report. Grant #OHDS 90-AT-0094, from AoA, USDHHS. American Academy of Physician Assistants, 1985.

A survey of the PA educators revealed a five-fold increase in the number of required and elective experiences in geriatrics within PA programs between 1980 and 1985, which appeared related to federal funding initiatives for PA training. A survey of PA practitioners demonstrated a significant level of interaction with a broad spectrum of problems common to the elderly, and a pattern of perceived needs for specific topic and skill areas in geriatric training that mirrored closely that expressed by PA educators. A review of DHHS supported geriatric curriculum development projects form the basis of behavioral objectives for new curriculum modules in geriatrics. Health promotion, biological aging, psychological aging, sociological aging, disease processes in the aged health status appraisal, and pharmacology were content areas included in the physician assistant curricula.

Schafft, Gretchen and Rolling, Barbara. Physician Assistants: Providing Geriatric Care. USDHHS, PHS, Health Resources and Services Administration, HRP - 0907021, January, 1987.

In this case study of the roles PAs fill in geriatric care, 46 PAs and their supervisors in nine diverse geriatric sites were interviewed. The most common duties and responsibilities reported were performing histories and physicals, performing technical/lab procedures, establishing tentative diagnosis and recommending a treatment plan, prescribing medications, and providing follow-up. Sixty-one percent of the PAs said they had no special training in geriatrics and made recommendations for geriatric topics in continuing medical education.

Sorem, K.R., Portnoi, V.A., Decreased rates of polypharmacy, hospitali- zation and mortality through geriatric medical team involvement in a nursing home, Association of Physician Assistant Programs. Proceedings of the Paper Presentation Session. Eleventh Annual Physician Assistant Conference, St. Louis, Missouri, pp. 65, May 29-June 2, 1983.

The pilot study was designed to evaluate the incidence of and influence of polypharmacy on the outcome of nursing home care and to study the possibility of modifying the effect of traditional medical practice in the nursing home which results in polypharmacy by the utilization of a geriatric medical team (geriatrician and geriatric physician's assistant) in nursing home care.

Tideiksaar, R., Geriatric medicine--the place for PAs?, Physician Assistant & Health Practitioner, 6:67, June 1982.

With the elderly accounting for an increasing proportion of the population, and so many of those in need of medical care, geriatric training for PAs has become a necessity. The question is how-- and where-- to fit it into the PA curriculum.

Tideiksaar, R., The physician's assistant, Annuals of Internal Medicine, 99:416, September 1983.

The letter responds to an article by Cawley and associates on the utilization of PAs in geriatrics. The author makes several points: 1) that the use of PAs may lower medical costs by reducing the frequency of hospital care, 2) that PA training must include geriatric curricula and 3) that further studies must develop assessment measures to evaluate the impact of PA services on patient function in geriatric care settings.

Tideiksaar, R., The role of the physician's assistant in gerodontics, Special Care in Dentistry, 3:110, May-June 1983.

A unique program in geriatric dentistry for physician assistant students is described. The overall goal is to enable the student to gain didactic and clinical exposure to oral symptomatology and its biopsychosocial consequences to the elderly. This will make it possible for the PAs to identify oral needs of the aged and suggest possible intervention by dental practitioners.

Tideiksaar, R., The role of the physician extenders in the care of the elderly patients, Geriatric Medicine Annual 1986, edited by Richard Ham, MD, 1986.

Journal abstract: Dr. Tideiksaar defines the increasing need for physician extenders (physician assistants and nurse practitioners), their present and potential roles, and the impediments to their widespread use. He gives practical guidance on setting up and financing physician extenders for the individual practitioner.

Tideiksaar, R., The PA's role in the nursing home, Physician Assistant & Health Practitioner, 8:28, November 1984.

Journal abstract: The growing elderly population and the impact of the DRG based system of payment under Medicare has focused attention on the future of patient care in nursing homes. The author encourages further examination of PA utilization which would result in economic benefits under the DRG system. Cost savings would stem from early recognition of a problem, prompt treatment, appropriate referals, fewer transfers for acute care, closer monitoring of therapeutic regimens and improved communication.

Tiger, S., PAs in geriatric medicine, Health Practitioner & Health Assistant, 2:46, September 1978.

The medical challenge of geriatric medicine to health practitioners is noted. A rotation of PA students through geriatric facilities is described.

Yturri-Byrd, K., and Glazer-Waldman, H., The physician assistant and care of the geriatric patient, Gerontology and Geriatrics Education, 5(1), 33, Fall 1984.

Journal abstract: This project was undertaken to investigate the extent of the interaction between physician assistants (PAs) and the geriatric population. The objectives of the study were to propose ways to provide better care for older patients, to broaden our understanding of the role of the PA and to delineate possible geriatric training needs for PAs. A survey instrument including questions about demographic information, educational background, medical experience, and patient population characteristics was mailed to a 5% random sample of physician assistants practicing in the United States. A sixty percent return rate was achieved. Most PAs surveyed worked in primary care settings which care for a large proportion of geriatric patients. These PAs have had little formal classroom education in geriatrics but most were exposed to the management of geriatric patients during their clinical training. The primary implications for the utilization of these results include geriatric curriculum development in physician assistant training programs and postgraduate training programs.

ERIC

APPENDIX B

ABSTRACT OF MEDICARE LEGISLATION ALLOWING REIMBURSEMENT FOR PA SERVICES

ERIC

New Medi-Care Legislation for Physician Assistants Reimbursement

HR5300, Section 4523

Omnibus Budget Reconciliation Act of 1986 was passed by Congress October 17, 1986 and signed by President Reagan, October 21, 1986

The committee bill has authorized coverage of the services of physician assistants furnished under the supervision of a physician in a hospital, skilled nursing facility (SNF), intermediate care facility (ICF), or as an assistant at surgery. Payment would be made on a reasonable charge basis under Part B of Medicare. Physician assistant services would be reimbursed subject to a prevailing charge screen equal to 85% of the prevailing charge for comparable physician services performed by nonspecialists when such services are performed in a skilled nursing facility or intermediate care facility. The prevailing charge screen would be equal to 75% of the nonspecific physicians prevailing charge level when such services are performed in a hospital, and 65% of the reasonable charge for a physician when acting as an assistant at surgery. Physician assistants would be required to accept assignment on all claims. This provision is effective with services furnished on or after January 1, 1987.

APPENDIX C

LIST OF GERIATRIC EDUCATION CENTERS (GECs)

ERIC

Fiscal Year 1987

GERIATRIC EDUCATION CENTER GRANTS

Division of Associated and Dental Health Professions
BHPr, HRSA, PHS, DHHS

Budget Period: 10/01/87 - 09/30/88

Center Name	Grantee	Program Director/ Address/Phone
PHS Region I		
University of Connecticut Geriatric Education Center	University of Connecticut Farmington, Connecticut	Richard W. Besdine, M.D. Travelers Center on Aging University of Connecticut 263 Farmington Avenue Farmington, CT 06032 (203) 674-3959
Harvard Geriatric Education Center	Harvard Medical School Boston, Massachusetts	Benjamin Liptzin, M.D. Division on Aging 643 Huntington Avenue Boston, MA 02115 (617) 732-1463
PHS Region II		
Western New York Geriatric Education Center	State University of New York at Buffalo Buffalo, New York	Evan Calkins, M.D. State Univ. of NY at Buffalo Beck Hall 3435 Main Street Buffalo, NY 14214 (716) 831-3176

C. Gleich:pl1:07/10/87

ERIC

Geriatric Education Center of University of Puerto Rico	University of Puerto Rico San Juan, Puerto Rico	Elizabeth Sanchez, Ph.D. University of Puerto Ric Sciences and Graduate School of Public Health G.P.O. Box 5067 San Juan, PR 00936 (809) 751-2478, or 6634
Hunter/Mt. Sinai Geriatric Education Center	Hunter College Jointly with Research Foundation of CUNY New York City, New York	Rose Dobrof, D.S.W. Brookdale Center on Aging of Hunter College, CUNY 425 East 25th Street New York, NY 10010 (212) 481-5142

PHS Region III

Geriatric Education Center of Pennsylvania	Temple University Philadelphia, Pennsylvania	Bernice A. Parlak, M.S.W. Temple University Institute on Aging University Services Building Room 206 1601 North Broad Street Philadelphia, PA 19122 (215) 787-6831
Delaware Valley Geriatric Education Center	University of Pennsylvania Philadelphia, Pennsylvania	Laurence H. Beck, M.D. University of Pennsylvania Center for the Study of Aging 3906 Spruce Street/H1 Philadelphia, PA 19104 (215) 898-3163
Geriatric Education Center at Virginia Commonwealth University	Virginia Commonwealth University Richmond, Virginia	Iris A. Parham, Ph.D. Virginia Commonwealth Univ. Medical College of Virginia Gerontology Department P.O. Box 568 - MCV Station Richmond, VA 23298-0001 (804) 786-1565

ERIC

Geriatric Education Center at University of Alabama at Birmingham	University of Alabama at Birmingham Birmingham, Alabama	Glenn H. Hughes, Ph.D. U.A.P., Center for Aging Medical Towers Building, 731 1717 11th Avenue, S Birmingham, AL 35205 (205) 934-5619
University of North Carolina Geriatric Education Center	University of North Carolina Chapel Hill, North Carolina	William G. Weissert, Ph.D. School of Public Health 144 Kron Building - 514A UNC-CH Chapel Hill, NC 27514 (919) 966-5601
Mississippi Geriatric Education Center	University of Mississippi Medical Center Jackson, Mississippi	Norman C. Nelson, M.D. Vice Chancellor for Health Affairs & Dean of School of Medicine University of Mississippi Medical Center Alumni House, 3rd Floor, Rm. 3321 Jackson, MS 39216-4505 (601) 987-4795
Ohio Valley/Appalachia Regional Geriatric Education Center	University of Kentucky Research Foundation Lexington, Kentucky	James K. Cooper, M.D. University of Kentucky Chandler Medical Center - Annex 3 Lexington, KY 40536 (606) 233-5156
University of Florida Geriatric Education Center	University of Florida Gainesville, Florida	George Caranosos, M.D. Department of Medicine JHMC Box J-277 University of Florida Gainesville, FL 32610 (904) 392-3197

ERIC Full Text Provided by ERIC

University of South Florida Geriatric Education Center	University of South Florida Tampa, Florida	Eric Pfeiffer, M.D. Suncoast Gerontology Center University of South Florida Medical Center Box 50 112901 N. 30th Street Tampa, FL 33612 (813) 974-4355

PHS Region V

Western Reserve Geriatric Education Center	Case Western Reserve University Cleveland, Ohio	Jerome Kowal, M.D. Department of Medicine CWRU School of Medicine Cleveland, OH 44106 (216) 368-5433
Midwest Geriatric Education Center	Marquette University Milwaukee, Wisconsin	Jesley Ruff, D.D.S. Marquette University School of Dentistry 604 North 16th Street Milwaukee, WI 53233 (414) 224-3712
Great Lakes Geriatric Education Center	Chicago College of Osteopathic Medicine Chicago, Illinois	Jerry Rodos, D.O. Chicago College of Osteopathic Medicine 5200 South Ellis Avenue Chicago, IL 60615 (312) 947-4393
Michigan Geriatric Education Center	Michigan State University East Lansing, Michigan	James O'Brien, M.D. Family Practice B100 Clinical Center Michigan State University East Lansing, MI 48824 (517) 3[illegible]3-0770

PHS Region VI

Texas Consortium of Geriatric Education Centers	Baylor College of Medicine Houston, Texas	Robert E. Roush, Ed.D., M.P.H. Baylor College of Medicine One Baylor Plaza, Room 134-A Houston, TX 77030 (713) 799-6470

South Texas Geriatric Education Center	University of Texas Health Science Center San Antonio, Texas	Michele Saunders, D.M.D. UTHSC at San Antonio Department of Dental Diagnostic Science 7703 Floyd Curl Drive San Antonio, TX 78284-7919 (512) 691-6961
New Mexico Geriatric Education Center	University of New Mexico Albuquerque, New Mexico	Mark Stratton, Pharm.D. College of Pharmacy University of New Mexico Albuquerque, NM 87131 (5[illegible]) 277-2461

PHS Region VII

Missouri Geriatric Education Center	Curators of the University of Missouri Columbia, Missouri	Richardson K. Noback, M.D. UMKC School of Medicine 2411 Holmes, Rm. M5-303 Kansas City, MO 64108 (816) 474-4100
Iowa Geriatric Education Center	University of Iowa Iowa City, Iowa	Ian M. Smith, M.D. Department of Internal Med. University of Iowa Hospitals Iowa City, IA 5224[illegible] (319) 356-2727
Creighton Regional Geriatric Education Center	Creighton University School of Medicine Omaha, Nebraska	Eugene Barone, M.D. Department of Family Practice Creighton University School of Medicine 601 North 30th Street Omaha, NE 68131 (402) 2[illegible]0-4175

PHS Region VIII

Intermountain Geriatric Education Center	University of Utah Salt Lake City, Utah	Margaret Dimond, R.N., Ph.D. University of Utah College of Nursing 25 South Medical Drive Salt Lake City, UT 84112 (801) 581-8198

ERIC Full Text Provided by ERIC

Dakota Plains Geriatric Education Center	University of North Dakota Grank Forks, North Dakota	Clayton E. Jensen, M.D. UND School of Medicine Department of Family Medicine 221 South Fourth Street Grand Forks, ND 58201 (701) 780-3200

PHS Region IX

Pacific Geriatric Education Center	University of Southern California Los Angeles, California	R. Bruce Sloane, M.D. LAC/USC Medical Center University of Southern Calif. KAM 300-C 1975 Zonal Avenue Los Angeles, CA 90033 (213) 224-7994
Stanford Geriatric Education Center	Stanford University Stanford, California	William Fowkes, M.D. Division of Family Medicine Stanford University School of Medicine HRP Bldg., Ste 107 Stanford, CA 94305-5092 (415) 723-7284
Pacific Islands Geriatric Education Center	University of Hawaii at Manoa Honolulu, Hawaii	Madeleine Goodman, Ph.D. Assistant Vice-President for Academic Affairs University of Hawaii Bachman Hall 105 Honolulu, HI 96822 (808) 948-8445
California Geriatric Education Center	Regents of the University of California Los Angeles, California	John Beck, M.D. University of California Department of Medicine Division of Geriatrics 32-144 CHS 10833 Le Conte Avenue Los Angeles, CA 90024 (213) 825-8[illegible]55

ERIC

PHS Region

Northwest Geriatric Education Center	University of Washington Seattle, Washington	Itamar B. Abrass, M.D. Institute on Aging 3953 Univ. Way, N.E., JM-20 University of Washington Seattle, WA 98195 (206) 545-7478

ERIC Full Text Provided by ERIC

APPENDIX D

GRADUATES OF GERIATRIC EDUCATION FOR PA FACULTY (GEPAF) PROGRAM

ERIC

GERIATRIC EDUCATION FOR PHYSICIAN ASSISTANT FACULTY

GRADUATE ADDRESS LIST

PILOT SESSION GRADUATES

GRADUATE	WORK ADDRESS
Vicki Scott 5420 Centennial Drive Durham, North Carolina 27712 (919) 477-9368	Duke University PA Program Box CFM 291. Durham, North Carolina 27712 (919) 684-6134
Carmelita Smith 1910 Marvin Avenue Los Angeles, California 90016 (213) 931-9343	University of Southern Calif. 2025 Zonal Avenue Los Angeles, California 90033 (213) 224-7101
Donna Tully 5847 Van Fleet Avenue Richmond, California 94804 (415) 5?7-5720	Stanford University Primary Care Associate Program Health Research & Policy Bldg. Suite No. 107 Stanford, California 94305 (41 . 725-4486

SESSION I GRADUATES

GRADUATE	WORK ADDRESS
Marc Dicker 15001 E. Pawnee Wichita, Kansas 67232 (316) 733-4705	Wichita State University Physician Assistant Program Box #43 College of Health Professions Wichita, Kansas 67208 (316) 689-3011
Patricia King 10755 Bargman Huntington Woods, Michigan 48070 (313) 398-8975	Mercy College 8200 West Outer Drive Detroit, Michigan 48219 (313) 927-7098/592-6057
Kathryn Kundert 3515 South Mount Baker Blvd. Seattle, Washington 98144 (206) 725-4440	MEDEX Northwest 301 Clifford Apartments 3731 University Way, NE Seattle, Washington 98105 (206) 543-6483
Patricia McKelvey 624 12th Avenue Apartment 6 Coralville, Iowa 52241 (319) 351-8235	(Formerly at The University of Iowa) Physician Assistant Program 2333 Steindler Building Iowa City, Iowa 52242 (319) 353-5711/356-2247

(Currently at Duke University)
5420 Centennial Drive
Durham, North Carolina 27712
(919) 477-9368

Dean Minton
209 Shenandoah Drive
Winston-Salem, North Carolina 27103
(919) 768-4934

Physician Assistant Program
Bowman Gray School of Medicine
Wake Forest University
1990 Beach Street
Winston-Salem, North Carolina 27103
(919) 748-4356

Stacy Terrell
9620 Hefner Village Blvd.
Oklahoma City, Oklahoma 73132
(405) 721-9266

University of Oklahoma
Department of Family Medicine
Physician Assistant Division
P.O. Box 26901
Oklahoma City, Oklahoma 73190
(405 271-2047

Session II Graduates

William Case
1621 North West 70th Place
Ankeny, Iowa 50021
(515) 289-1121

Physician Assistant Program
University of Osteopathic Medicine
and Health Sciences
3200 Grand Avenue
Des Moines, Iowa 50312
(515) 271-1650

Mary Hughes College
3811 Theota Avenue
Parma, Ohio 44134
(216) 661-3434

(Formerly at Cuyahoga Community College
11000 Pleasant Valley Road
Parma, Ohio 44130
(216) 843-5363
(No longer there)

Virginia Joslin
1359 Vernon North Drive
Atlanta, Georgia 30338
(404) 396-1320

Emory University
Physician Assistant Program
Drawer XX
Atlanta, Georgia 30322
(404) 727-7825

Peter Kuemmel
77 Woodhull Landing Road
Sound Beach, New York 11789
(516) 744-6396

Department of PA Education
School of Allied Health Professions
Health Sciences Center
SUNY @ Stony Brook
Stony Brook, New York 11794
(516) 444-3193

Edward Sullivan
3209 Willow Bend
Bedford, Texas 76021
(817) 354-6858

University of exas
Health Science Center
Dallas Physician Assistant Program
5323 Harry Hines Boulevard
Dallas, Texas 75235
(214) 688-2830

Tommy Williams
1504 Pennsylvania Avenue, S.E.
Washington, D.C. 20003
(202) 546-1740

(Formerly at Howard University)
College of Allied Health
6th and Bryant Street, N.W.
Annex I
Washington, D.C. 20059
(202) 636-7536/636-7537
(No longer there)

Session III Graduates

William Duryea
R.D. #1, Box 74B
Loretto, PA 15940
(814) 472-6238

Saint Francis College
Physician Assistant Program
Sullivan Hall
Loretto, PA 15940
(814) 472-7000 Ext. 276 or 277

Linda Huss
2115 4th Avenue North
Grand Forks, North Dakota 58201
(701) 746-8676

University of North Dakota
Family Nurse Practitioner Program
221 South 4th Street
Grand Forks, North Dakota 58201
(701) 777-2344

Susan Johnston
123 E. Barnard Street
West Chester, PA 19382
(215) 696-2072

School of Allied Health Professions
Hanneman University
230 N. Broad Street
Philadelphia, PA 89102
(215) 448-7135

Frederick Raehsler (Brother
133 North Franklin Street
Wilkes-Barre, PA 18711
(717) 826-5900

King's College
Physician Assistant Program
133 North River Street
Wilkes-Barre, PA 18711
(717) 826-5853

Denise McNatt
200 Pecan Drive, #501
League City, Texas 77573
(713) 488-4422

Department of PA Studies
School of Allied Health Sciences
The University of Texas
Medical Branch
Galveston, Texas 77550
(409) 761-3046

Samuel Shorter
1515 Cambridge Drive
Kalamazoo, Michigan 49001
(616) 382-6892

Western Michigan University
Physician Assistant Program
Kalamazoo, Michigan 49008
(616) 383-1636

GEPAFGRA/sb

APPENDIX E

BIBLIOGRAPHIES OF GERIATRIC TEXTBOOKS,

JOURNALS AND ARTICLES

ARTICLE EVALUATING GERIATRIC TEXTBOOKS

ERIC

BIBLIOGRAPHY OF GERIATRIC TEXTBOOKS AND JOURNALS

BIOLOGY OF AGING TEXTS

Butler R, Bearn A: The Aging Process. Raven Press, 1984

Comfort A: The Biology of Senescence. New York, Elsevier, 1979

Finch C, Schneider E.: Handbook of the Biology of Aging. New York, Van Nostrand Reinhold Co., 1985

Rockstein M, Sussman M: Biology of Aging. Wadsworth Publishing Co., 1979

Timiras P S: Developmental Physiology and Aging. New York, MacMillan Publishing Co., 1972

GERIATRIC TEACHING TEXTBOOKS AND MODULES

Ernst N: Geriatric Curriculum Modules for Allied Health Professionals. Bureau of Health Professions, Health Resources Administration, HHS, 1984

Haas K B, Tideiksaar R: Clinical Geriatrics: A Study Guide for Physician Assistants. 1984

Ham R, Marcy M L, Smith M R: Primary Care Geriatrics: A Case-Based Learning Program. 1983

Libow L S: The Core of Geriatrics Medicine. C.V. Mosby Co., 1984

Parham I, Teitelman J, Yancey D: Modular Gerontology Curriculum for Health Professionals. 1981

GERIATRIC MEDICAL TEXTBOOKS

Adams G: Essentials of Geriatric Medicine. Oxford University Press, 1977

Anderson F, Williams B: Practical Management of the Elderly. Philadelphia, J.B. Lippincott Co., 1983

Andres, Bierman, Hazzard: Principles of Geriatric Medicine. New York, McGraw-Hill, 1985

Brocklehurst J C: Textbook of Geriatric Medicine and Gerontology. London, Churchill-Livingston, 1985

Cape, Coe, Rossman: Fundamentals of Geriatric Medicine. Raven Press, 1983

Cape R: Aging: Its Complex Management. New York, Harper & Row Publishing, 1978

Cassel C, Walsh J: Geriatric Medicine. New York, Springer Publishing Co., 1984

Covington T, Walker I: Current Geriatric Therapy. Philadelphia, W.B. Saunders, 1984

Ebaugh F: Management of Common Problems in Geriatric Medicine. New York, Addison-Wesley, 1981

Eisdorfer C: Annual Review of Gerontology and Geriatrics. New York, Springer Publishing Co., 1980-1985

Exton-Smith A N, Weksler M: Geriatrics. University Park Press, Baltimore, 1979

Exton-Smith A N, Weksler M: Practical Geriatric Medicine. London, Churchill-Livingston, 1985

Falconer M, Altamura J, Behnke H: Aging Patients: A Guide for Their Care. New York, Springer Publishing Co., 1976

Futrell, Brovender, McKinnon-Mullet, Brower: Primary Health Care of the Older Adult. Duxbury Press, 1980

Hall M R P, MacLennan W J, Lye M D W: Medical Care of the Elderly. New York, Springer Publishing Co., 1978

Ham R J: Geriatric Medicine Annual - 1986. New Jersey, Medical Economics Books, 1986

Handy R C: Geriatric Medicine: A Problem Oriented Approach. Philadelphia, Bailliere Tindall, 1984

Hodkinson H M: Common Symptoms of Disease in the Elderly. Blackwell Scientific Publications, 1980

Kallenberg G, Beck J: Care of the Geriatric Patient. UCLA, June, 1982
Kane R, Ouslander J, Abrass I: Essentials of Clinical Geriatrics. New York, McGraw-Hill, 1984

Kottoff M, Pearson L: Geriatric Clinical Protocols. J.B. Lippincott, 1979

Mezey M, Rauckhorst L, Stokes S: Health Assessment of the Older Individual. New York, Springer Publishing Co., 1980

O'Hara-Devereaux M, Andrus L H, Scott C: Eldercare. New York, Green and Stratton, 1981

Pathy M S J: Principles and Practice of Geriatric Medicine. New York, John Wiley & Sons, 1985

Pearson L B, Kotthoff M E: Geriatric Clinical Protocols. Philadelphia, J. B. Lipponcott, 1979

Pegels C: Health Care and the Edlerly. Aspen Systems Corp., 1981

Reichel W: Clinical Aspects of Aging: A Comprehensive Text. Baltimore, Williams and Wilkins, 1983

Reichel W: The Geriatric Patient. H P Publishing Co., 1978

Rossman I: Clinical Geriatrics. New York, J.B. Lippincott Co., 1979

Schrier R: Clinical Internal Medicine in the Aged. Philadelphia, W.B. Saunders, 1982

Steinberg F: Care of the Geriatric Patient. C.V. Mosby Co., 1983

Walshe T M: Manual of Clinical Problems in Geriatric Medicine. Boston, Little, Brown and Co., 1985

GERIATRIC JOURNALS

1. Journal of The American Geriatrics Society. Elsevier Science Publishing Co., Inc., 52 Vanderbilt Avenue, New York, NY 10017

2. Geriatrics. Harcourt, Brace, Jovanovich Publications, 7500 Old Oak Boulevard, Cleveland, OH 44130

3. Geriatric Medicine Today. Med Publishing, Inc., Building 1000, 666 Plainsboro Road, Plainsboro, NJ 08536

4. The Gerontologist. The Gerontological Society of America, 1411 "K" Street N.W., Suite 300, Washington, DC 20005

5. Journal of Gerontological Nursing. SLACK Inc., 6900 Grove Road, Thorofare, NJ 08086

6. Journal of Gerontology. Gerontological Society of America, 1835 "K" Street N.W., Washington, DC 20005

7. Clinics in Geriatric Medicine. W.B. Saunders Co., West Washington Square, Philadelphia, PA 19105

ERIC

Geriatrics
An Updated Bibliography

Mark J. Rosenthal, MD

This is the author's fourth revision of a geriatrics bibliography. Approximately one-third of the previous references have been replaced by more current or more detailed articles. Because the literature pertinent to geriatrics has continued to grow ever more rapidly, it has been necessary to omit many informative articles from the bibliography. Preference is given to recent publications; almost all of the references date from the past four years. Some articles were selected to highlight current controversies or changes in viewpoint. An occasional unrefereed article is cited to amplify geriatric aspects of common diseases.

Most of the references deal specifically with an elderly patient population, though few use a multidisciplinary approach. Studies of the elderly are confounded by concomitants of aging frequent but not universal in our society: inactivity, obesity, malnutrition, and psychosocial trauma. The articles cited concern primarily medical ailments of the elderly but legal, ethical, and sociologic topics are also covered.

The references are divided into categories. The first (I) set deals with some possible causes of aging; the second (II) with physiologic decline accompanying aging; the third (III) with the atypical and nonspecific characteristics of illness among geriatric patients; the fourth (IV) with the elderly and society; and the fifth (V) with care options. The remainder of the references are cited by pertinent medical specialty. Within each category, references are divided by disease process. Articles are further subgrouped by aspects of those diseases such as evaluation or therapy. J Am Geriatr Soc 35:560–586, 1987

I THEORIES OF AGING

A *General*

1. Schneider EL, Reed JD, Jr: Life extension. N Engl J Med 312:1159, 1985
2. Pashko LL, Fairman DK, Schwartz AG: Inhibition of proteinuria development in aging Sprague-Dawley rats and C57BL/6 mice by long-term treatment with dehydroepiandrosterone. J Gerontol 41:433, 1986
3. Weindruch R: Aging in rodents fed restricted diets. J Am Geriatr Soc 33:125, 1985

B *Endogenous/Molecular*

1. Van Keuren ML, Merril CR, Goldman D: Protein variations associated with in vitro aging of human fibroblasts and quantitative limits on the error catastrophe hypothesis. J Gerontol 38:645, 1983
2. Harman D: Free radical theory of aging: Consequences of mitochondrial aging. Age 6:86, 1983
3. Fleming JE, Quattrocki E, Latter G, et al: Age-dependent changes in proteins of Drosophila melanogaster. Science 231:1157, 1986
4. Lumpkin CK, Jr, McClung JK, Pereira-Smith OM, et al: Existence of high-abundance antiproliferative mRNA's in senescent human diploid fibroblasts. Science 232:393, 1986
5. Ebbesen P: No male-female difference in in vitro lifespan of skin fibroblasts from humans and mice. Exp Gerontol 18:323, 1983

C *Exogenous/Programmed*

1. Felicio LS, Nelson JF, Gosden RG, et al: Restoration of ovulatory cycles by young ovarian grafts in aging mice: Potentiation by long-term ovariectomy

© 1987 by the American Geriatrics Society

0002-8614/87/$3

decreases with age Proc Natl Acad Sci USA 80.6076, 1983
2 Blaha GC, Lamperti AA Estradiol target neurons in the hypothalamic arcuate nucleus and lateral ventromedial nucleus of young adult, rep od tively senescent, and monosodium glutamate-lesioned female golden hamsters J Gerontol 38.532, 1983
3. Sapolsky RM, Krey LC, McEwen BS The neuroendocrinology of stress and aging The glucocorticoid cascade hypothesis Endocr Rev 7 284 1986
4 Belisle S, Bellabarba D, Lehoux J-G, et al Effect of aging on the dissociation kinetics and estradiol receptor nuclear interactions in mouse uteri Correlation with biological effects Endocrinology 118 750, 1986

II WEAR AND TEAR

A *Life Expectancy*

1 Fries JF Aging, natural death and the compression of morbidity N Engl J Med 303 130 1980
2. Schneider EL, Brody JA Aging, natural death, and the compression of morbidity Another view N Engl J Med 309 854, 1983
3 Gavrilov LA, Gavrilova NS, Nosov VN Human life span stopped increasing Why? Gerontology 29 176, 1983
4 Hazzard WR, Preventive gerontology Strategies for healthy aging Postgrad Med 74(2) 279, 1983
5 Katz S, Branch LG, Branson MH, et al: Active life expectancy N Engl J Med 309 1218, 1983
6. Kohn RR, Cause of death in very old people J Am Med Assoc 247 2793, 1982
7 Miller GH, Gerstein DR The life expectancy of nonsmoking men and women Public Health Rep 98.343, 1983

B *System Decline*

1. Bowles LT, Portnoi V, Kenney R. Wear and tear Common biologic changes of aging Geriatrics 36(4) 77, 1981
2. Bortz WM II: Disuse and aging J Am Med Assoc 248.1203, 1982
3. Williams ME: Clinical implications of aging physiology Am J Med 76.1049, 1984
4. Fulop T, Jr, Worum I, Csongor J, et al: Body composition in elderly people Gerontology 31 150, 1985
5 Pearson MB Bassey EJ, Bendall MJ Muscle strength and anthropometric indices in elderly men and women Age Ageing 14 49, 1985

C *Health Maintenance*

1. Bentante R, Reed D, Brody J Biological and social predictors of health in an aging cohort J Chronic Dis 38 385, 1985
2. Palmore EB, Nowlin JB, Wang HS Predictors of function among the old-old A ten-year follow-up J Gerontol 40 244, 1985
3 Heller TA, Larson EB LoGerfo JP Quality of ambulatory care of the elderly An analysis of five conditions J Am Geriatr Soc 32 782, 1984
4 Tinetti ME, Schmidt A, Baum J Use of the erythrocyte sedimentation rate in chronically ill, elderly patients with a decline in health status Am J Med 80 844 1986
5 Wolf-Klein GP Holt T, Silverston FA, et al Efficacy of routine annual studies in the care of elderly patients J Am Geriatr Soc 33 325, 1985
6 Wylie CM Contrasts in the health of elderly men and women An analysis of recent data for whites in the United States J Am Geriatr Soc 32 670 1984
7 Regensteiner JG, Moore LG Migration of the elderly from high altitudes in Colorado J Am Med Assoc 253 3124, 1985
8 Paffenbarger RS, Jr, Hyde RT, Wing AL, et al Physical activity, all-cause mortality, and longevity of college alumni N Engl J Med 314:605, 1986
9. Branch LG, Jette AM Personal health practices and mortality among the elderly Am J Public Health 74 1126, 1984

III GERIATRIC PATIENT

A *Falls*

1 Mallison WJW, Green MF Covert muscle injury in aged patients admitted to hospital following falls Age Ageing 14 174, 1985
2. Sabin TD. Biologic aspects of falls and mobility limitations in the elderly. J Am Geriatr Soc 30 51, 1982
3 Tinetti ME, Williams TF, Mayewski R. Fall risk index for elderly patients based on number of chronic disabilities Am J Med 80.429, 1986

4. Stegman MR Falls among elderly hypertensives—are they iatrogenic? Gerontology 29.399, 1983
5. Fiesta J: Nursing liability - the patient who falls Orthop Nurs 4:59, 1985
6 Sudarsky L, Ronthal M. Gait disorders among elderly patients: A survey study of 50 patients. Arch Neurol 40.740, 1983
7. Nickens H Intrinsic factors in falling among the elderly Arch Intern Med 145.1089, 1985

B Iatrogenics
1 Etienne PE, Dastoor D, Goldapple E, et al Adverse effects of medical and psychiatric workup in six demented geriatric patients. Am J Psychiatry 138.520, 1981
2 Reuben DB Learning diagnostic restraint. N Engl J Med 310 591, 1984
3 Steel K. Iatrogenic disease on a medical service J Am Geriatr Soc 32 445, 1984
4 Jahnigen D, Hannon C, Laxson L, et al Iatrogenic disease in hospitalized elderly veterans J Am Geriatr Soc 30.387, 1982
5 Portnoi VA, Pawlson LG Abuse of diuretic therapy in nursing homes J Chronic Dis 34.363, 1981
6 Gosney M, Tallis R Prescription of contraindicated and interacting drugs in elderly patients admitted to hospital Lancet ii.564, 1984
7 Platt R, Polk BF, Murdock b, et al Mortality associated with nosocomial urinary-tract infection N Engl J Med 307 637, 1982

C Nonspecific Presentation
1 Hale WE, Stewart RB, Marks RG Haematological and laboratory values in an ambulatory elderly population An analysis of the effects of age, sex and drugs Age Ageing 12.275, 1983
2 McFadden JP, Price RC, Eastwood HD, et al Raised respiratory rate in elderly patients A valuable physical sign Br Med J 284:626, 1982
3 Puxty JA, Fox RA, Horan MA The frequency of physical signs usually attributed to meningeal irritation in elderly patients J Am Geriatr Soc 31:590, 1983
4 Gordon M Failure to thrive in the elderly Resident Staff Physician 30(1):5PC, 1984
5 Kapoor W, Snustad D, Peterson J, et al Syncope in the elderly Am J Med 80 419, 1986
6 Kierkegaard A The significance of patient's age and sex in the interpretation of signs and symptoms in clinically suspected acute deep vein thrombosis Acta Chir Scand 148 355 1982
7 Esposito AL, Gleckman RA Fever of unknown origin in the elderly J Am Geriatr Soc 26 498, 1978
8 Brody EM, Kleban MH Moles E What older people do about their day-to-day mental and physical health symptoms J Am Geriatr Soc 31 489, 1983
9 Williams ME, Hadler NM Sounding Board The illness as the focus of geriatric medicine N Engl J Med 308.1357 1983
10 Bartoshuk LM, Rifkin B, Marks LE, et al Taste and aging J Gerontol 41 51, 1986

D Temperature Regulation
1 Hart GR, Anderson RJ Crumpler CP, et al Epidemic classical heat stroke Clinical characteristics and course of 28 patients Medicine 61 189, 1982
2 Tucker LE, Stanford J, Graves B et al Classical heatstroke Clinical and laboratory assessment South Med J 78 20 1985
3 Keilson L Lambert D, Fabian D, et al Screening for hypothermia in the ambulatory elderly The Maine experience J Am Med Assoc 254 1781 1985
4 Lewin S, Brettman LR Holzman RS Infections in hypothermic patients Arch Intern Med 141 920, 1981
5 Neil HAW, Dawson JA, Baker JE Risk of hypothermia in elderly patients with diabetes Br Med J 293 416, 1986

IV ELDERLY AND SOCIETY
A Economics
1 Blumenthal D Schlesinger M Drumheller PB The future of Medicare N Engl J Med 314 722 1985
2 Catterata GL The elderly's private insurance coverage of nursing home care Am J Public Health 75:655, 1985
3 Harris RJ Recent trends in the relative economic status of older adults J Gerontol 41 401, 1986
4 Simon MM Estate planning and resource maximization for the elderly Medical considera-

tions New Hamp Bar J 25 101, 1984
5 Avorn J Benefit and cost analysis in geriatric care Turning age discrimination into health policy N Engl J Med 310 1294 1984
6 Clark PG The social allocation of health care resources Ethical dilemmas in age-group competition Gerontologist 25 119, 1985
7 McMillan A Gornick M The dually entitled elderly Medicare and Medicaid population living in the community Health Care Financing Rev 6(2) 73 1984

B Ethics
1 Cassell EJ The relief of suffering Arch Intern Med 143 522 1983
2 Braithwaite S, Thomasma DC New guidelines on foregoing life-sustaining treatment in incompetent patients An anti-cruelty policy Ann Intern Med 104 711 1986
3 Wanzer SH, Adelstein SJ, Cranford RE, et al The physician's responsibility toward hopelessly ill patients N Engl J Med 310 955, 1984
4 Robertson GS Ethical dilemmas of brain failure in the elderly Br Med J 287 1775, 1983
5 Micetich KC Steinecker PH, Thomasma DC Are intravenous fluids morally required for a dying patient? Arch Intern Med 143 975, 1983
6 Bromberg S, Cassel CK Suicide in the elderly The limits of paternalism J Am Geriatr Soc 31 698, 1983
7 Frengley JD, Mion LC Incidence of physical restraints on acute general medical wards J Am Geriatr Soc 34:565, 1986
8 Schneiderman LJ, Arras JD Counseling patients to counsel physicians on future care in the event of patient incompetence. Ann Intern Med 102 693, 1985
9 Thomasma DC. Freedom, dependency, and the care of the very old. J Am Geriatr Soc 32 906, 1984
10 Perry CB, Applegate WB Medical paternalism and patient self-determination J Am Geriatr Soc 33:353, 1985

C Social Support
1. Nydegger CN Family ties of the aged in cross-cultural perspective Gerontologist 23.26, 1986
2. Johnson CL. Dyadic family relations and social support Gerontologist 23(4) 377, 612 1983
3 Gelfand DE Ethnicity and aging. Annu Rev Gerontol Geriatr 2 91, 1981
4 Cluff CB Spiritual intervention reconsidered Topics in Geriatric Rehabil 1(2) 77 1986
5 O'Malley TA, Everitt DE, O'Malley HC et al Identifying and preventing family-mediated abuse and neglect of elderly persons Ann Intern Med 98 998 1983
6 McClusky HY Education for older adults Ann Rev Gerontol Geriatr 3 403, 1982
7 Cohen CI, Teresi J, Holmes D Social networks and adaptation Gerontologist 25 297, 1985
8 O'Bryant SL Neighbors support of older widows who live alone in their own homes Gerontologist 25 305 1985
9 Nasar JL, Farokhpay M Assessment of activity priorities and design preferences of elderly residents in public housing A case study Gerontologist 25 251 1985
10 Wade DT, Legh-Smith J, Hewer RL Effects of living with and looking after survivors of a stroke Br Med J 293 418 1986
11 Howard EF Mobilizing the elderly Health care advocacy Clearhouse Review 19 425, 1985

D Legal
1 Cohen F Old age as a criminal defense Crim Law Bull 21 5, 1985
2 Steinbrook R, Lo B Decision-making for incompetent patients by designated proxy California's New Law N Engl J Med 310 1598, 1984
3 Salend E, Kane RA, Satz M, et al Elder abuse reporting Limitations of statutes Gerontologist 24 61, 1984
4 William Law College Elder abuse The merit of mandatory reporting laws and the Minnesota response Wm Mitchell Law Rev 9:365, 1983
5 Manner WK. Decison-making in the care of terminally ill incompetent persons Concerns about the role of the courts J Am Geriatr Soc 32.739, 1984
6 Dresser RS, Boisaubin EV, Jr Ethics, law, and nutritional support Arch Intern Med 145 122, 1985
7 McDonald KM Residents' rights in a life-care retirement com-

munity The need for improved legislation J Fam Law 23:583, 1985
8. Quade V: Elderly victims Assets taken by relatives Am Bar Assoc J 71(6).20, 1985
9 Eve RA, Eve SB The effects of powerlessness, fear of social change, and social integration on fear of crime among the elderly. Victimology 9:290, 1984

V CARE OPTIONS
A General
1. Fisk AA: Comprehensive health care for the elderly J Am Med Assoc 249:230, 1983
2 Hildebrandt ED. Respite care in the home. Am J Nurs 83.1428, 1983
3. Hendriksen C. Lund E. Stromgard E Consequences of assessment and intervention among elderly people. A three year randomized controlled trial Br Med J 289.1522, 1984
4 Rubenstein LZ. Josephson KR. Wieland GD, et al Effectiveness of a geriatric evaluation unit A randomised clinical trial N Engl J Med 311 1664. 1984
5 Kane RL. Klein SJ. Bernstein L. et al Hospice role in alleviating the emotional stress of terminal patients and their families Med Care 23:189, 1985
B Acute
1 Wagner A Cardiopulmonary resuscitation in the aged A prospective survey N Engl J Med 310.1129. 1984
2 Tresch DD, Simpson WM Burton JR Relationship of long-term and acute-care facilities The problem of patient transfer and continuity of care J Am Geriatr Soc 33·819, 1985
3 Anderson GF, Steinberg EP Hospital readmissions in the Medicare population N Engl J Med 311 1349, 1984
4 Goldstein RL. Campion EW Mulley AG, et al Nursing home patients admitted to a medical intensive care unit Med Care 22:854, 1984
5 Currie CT. Lawson PM. Robertson CE, et al Elderly patients discharged from an accident and emergency department—their dependency and support Arch Emerg Med 1.205, 1984
C Chronic Care
1 Health and Public Policy Committee, American College of Physicians Long-term care of the elderly Ann Intern Med 100 760, 1984
2 Kane RA. Kane RL The feasibility of universal long-term care benefits: Ideas from Canada N Engl J Med 312.1357, 1985
3 Ballard S, McNamara R Quantifying nursing needs in home health care Nurs Res 32 236, 1983
4 Retsinas J, Garrity P Going home Analysis of nursing home discharges Gerontologist 26 431 1986
5 Urban AJ. Jr Nursing home patient abuse reporting An analysis of the Washington statutory response Gonzaga Law Rev 16.609, 1981
6 Wieland D. Rubenstein LZ. Ouslander JG. et al Organizing an academic nursing home Impacts on institutionalized elderly J Am Med Assoc 255.2622, 1986
7 Lewis MA. Kane RL, Cretin S et al The immediate and subsequent outcomes of nursing home care Am J Public Health 75 758, 1985
8 Campion EW Mahoney A, Bang A Acute-care hospitals providing elderly and long-term care services A survey of the Massachusett's experience J Am Geriatr Soc 32 727, 1984
9 Wetle T Ethical issues in long-term care of the aged J Geriatr Psychiatry 18 63, 1985
D Rehabilitation
1 Hesse KA Campion EW, Karamouz N Attitudinal stumbling blocks to geriatric rehabilitation J Am Geriatr Soc 32 747, 1984
2 Tinetti ME Performance-oriented assessment of mobility problems in elderly patients J Am Geriatr Soc 34 119, 1986
3 Fillenbaum GG Screening the elderly A brief instrumental activities of daily living measure J Am Geriatr Soc 33:698 1985
4 Kane RL, Bell R, Riegler S, et al Assessing the outcomes of nursing-home patients J Gerontol 38 385, 1983
5 Liang MH. Gall V, Partridge A et al Management of functional disability in homebound patients J Fam Pract 17 429, 1983
6 Parry F Physical rehabilitation of the old old patient J Am Geriatr Soc 31 482, 1983
7 Brattgard SO. Lindstrom I, Severinsson K, et al Wheelchair

design and quality Scand J Rehabil Med (Suppl) 9:15, 1983
8 DuBow LL, Witt PL, Kadaba MP, et al: Oxygen consumption of elderly persons with bilateral below knee amputations: Ambulation versus wheelchair propulsion. Arch Phys Med Rehabil 64:255, 1983
9 Clark CS, Blue B, Bearer JB Rehabilitation of the elderly amputee J Am Geriatr Soc 31:439, 1983
10 Communication and the elderly Topics Geriatr Rehabil 1(4) 1, 1986

VI CARDIOLOGY

A General

1 Rodeheffer RJ, Gerstenblith G, Becker LC, et al Exercise cardiac output is maintained with advancing age in healthy human subjects Cardiac dilatation and increased stroke volume compensate for a diminished heart rate Circulation 69 203, 1984
2 Luchi RJ, Snow E, Luchi JM, et al Left ventricular function in hospitalized geriatric patients J Am Geriatr Soc 30 700, 1982
3 Lakatta EG, Yin FC Myocardial aging: Functional alterations and related cellular mechanisms. Am J Physiol 242:H927, 1982
4 Waller BF, Roberts WC. Cardiovascular disease in the very elderly Analysis of 40 necropsy patients aged 90 years or over. Am J Cardiol 51:403, 1983
5 Fisch C. Electrocardiogram in the aged: An independent marker of heart disease? Am J Med 70: 4, 1981
6 Hagen PT, Scholz DG, Edwards WD incidence and size of patent foramen ovale during the first ten decades of life: An autopsy study of 965 normal hearts. Mayo Clin Proc 59:17, 1984

B *Aortic Aneurysms*

1. Treiman RL, Levine KA, Cohen JL, et al: Aneurysmectomy in the octagenarian: A study of morbidity and quality of survival. Am J Surg 144:194, 1982
2. Rantakokko V, Havia T, Inberg MV, et al: Abdominal aortic aneurysms: A clinical and autopsy study of 408 patients. Acta Chir Scand 149:151, 1983
3. Lawler M, jr: Aggressive treatment of ruptured abdominal aortic aneurysm in a community hospital. Surgery 95 38, 1984

C *Atherosclerosis*

1 Mannick JA. Current concepts in diagnostic methods Evaluation of chronic lower-extremity ischemia N Engl J Med 309:841, 1983
2 Kannel WB, McGee DL Update on some epidemiologic features of intermittent claudication The Framingham Study J Am Geriatr Soc 33 13, 1985
3 Jajich CL, Ostfeld AM, Freeman DH, Jr Smoking and coronary heart disease mortality in the elderly J Am Med Assoc 252: 2831, 1984
4 Kromhout D, Bosschieter EB de Lezenne Coulander C The inverse relation between fish consumption and 20-year mortality from coronary heart disease N Engl J Med 312 1205 1985

D *Coronary Disease*

1 Borcek RI, Romanelli R, Willis WP, Jr et al Sex differences in obstructive coronary artery disease in patients 65 years of age or older with angina pectoris Circulation 66:926, 1982
2 Gersh BJ, Kronmal RA, Schaff HV, et al. Comparison of coronary artery bypass surgery and medical therapy in patients 65 years of age or older A nonrandomized study from the Coronary Artery Surgery Study (CASS) registry N Engl J Med 313:217, 1985
3 CASS Principal Investigators and Their Associates: Myocardial infarction and mortality in the coronary artery surgery study (CASS) randomized trial. N Engl J Med 310:750, 1984
4 Bayer AJ, Chadha JS, Farag RR, et al. Changing presentation of myocardial infarction with increasing old age. J Am Geriatr Soc 34:263, 1986
5 Weintraub RM, Wei JY, Thurer RL. Surgical repair of remediable postinfarction cardiogenic shock in the elderly: Early and long-term results. J Am Geriatr Soc 34:389, 1986
6 Eggertsen SC, Berg AO: Is it good practice to treat patients with uncomplicated myocardial infarction at home? J Am Med Assoc 251:349, 1984
7 Williams MA, Maresh CM, Esterbrooks DJ, et al: Early exercise training in patients older than age 65 years compared with

that in younger patients after acute myocardial infarction or coronary artery bypass grafting. Am J Cardiol 55:263, 1985

8. Report of the Sixty Plus Reinfarction Study Research Group. A double-blind trial to assess long-term oral anticoagulant therapy in elderly patients after myocardial infarction. Lancet ii: 989, 1980
9. Jonsson A, Agnarsson BA, Hallgrimsson J. Coronary atherosclerosis and myocardial infarction in nonagenarians. A retrospective autopsy study. Age Ageing 14:109, 1985

E Dysrhythmias

1. Gann D, Tolentino A, Samet P. Electrophysiologic evaluation of elderly patients with sinus bradycardia. A long-term follow-up study. Ann Intern Med 90:24, 1979
2. Ausubel K, Furman S. The pacemaker syndrome. Ann Intern Med 103:420, 1985
3. Fleg JL, Kennedy HL. Cardiac arrhythmias in a healthy elderly population. Detection by 24-hour ambulatory electrocardiography. Chest 81:302, 1982
4. Sage JI, Van Uitert RL: Risk of recurrent stroke in patients with atrial fibrillation and nonvalvular heart disease. Stroke 14: 537, 1983

F Hypertension

1. Kobrin I, Oigman W, Kumar A, et al: Diurnal variation of blood pressure in elderly patients with essential hypertension. J Am Geriatr Soc 32:896, 1984
2. Messerli FH, Ventura HO, Amodeo C: Osler's maneuver and pseudohypertension. N Engl J Med 312:1548, 1985
3. Garland C, Barrett-Connor E, Suarez L, et al: Isolated systolic hypertension and mortality after age 60 years. A prospective population-based study. Am J Epidemiol 118:365, 1983
4. Amery A, Birkenhager W, Brixko P, et al: Mortality and morbidity results from the European Working Party on High Blood Pressure in the Elderly trial. Lancet i:1349, 1985
5. Hansen AG, Jensen H, Laugesen LP, et al: Withdrawal of antihypertensive drugs in the elderly. Acta Med Scand (Suppl) 676:178, 1983
6. Gray DR, Weber MA, Drayer JI. Effects of low-dose antihypertensive therapy in elderly patients with predominant systolic hypertension. J Gerontol 38:302, 1983
7. Moriedge JH, Ettinger B, Aranda J, et al: Isolated systolic hypertension in the elderly. A placebo-controlled, dose-response evaluation of chlorthalidone. J Am Geriatr Soc 34:199, 1986
8. Boehringer K, Weidmann P, Mordasini R, et al: Menopause-dependent plasma lipoprotein alterations in diuretic-treated women. Ann Intern Med 97:206, 1982
9. Hale WE, Stewart RB, Marks RG. Central nervous system symptoms of elderly subjects using antihypertensive drugs. J Am Geriatr Soc 32:5, 1984
10. Irvine PW. Captopril in the treatment of the elderly hypertensive patient. J Am Geriatr Soc 34:330, 1986

G Medications

1. Ware JA, Snow E, Luchi JM, et al. Effect of digoxin on ejection fraction in elderly patients with congestive heart failure. J Am Geriatr Soc 32:631, 1984
2. Boman K, Allgulander S, Skoglund M. Is maintenance digoxin necessary in geriatric patients? Acta Med Scand 210:493, 1981
3. Bowman K. Digitalis intoxication in geriatric inpatients. A prospective clinical study of the value of serum digitalis concentration measurement. Acta Med Scand 214:345, 1983
4. Satinsky JD. Chronic heart failure in the elderly. Vasodilator therapy. Angiology 34:509, 1983

H Valvular Heart Disease/Cardiomyopathy

1. Wong M, Tei C, Shah PM. Degenerative calcific valvular disease and systolic murmurs in the elderly. J Am Geriatr Soc 31:156, 1983
2. Kolibash AJ, Bush CA, Fontana MB, et al. Mitral valve prolapse syndrome: Analysis of 62 patients aged 60 years and older. Am J Cardiol 52:534, 1983
3. Murphy ES, Lawson RM, Starr A, et al. Severe aortic stenosis in patients 60 years of age or older: Left ventricular function and ten-year survival after valve replacement. Circulation 64(2 Pt 2):184, 1981
4. Cribier A, Savin T, Saoudi N, et al. Percutaneous translumi-

ERIC

nal valvuloplasty of acquired aortic stenosis in elderly patients: An alternative to valve replacement? Lancet i:63, 1986
5. Nair CK, Aronow WS, Stokke K, et al: Cardiac conduction defects in patients older than 60 years with aortic stenosis with and without mitral annular calcium. Am J Cardiol 53 169, 1984
6. Topol EJ, Traill TA, Fortuin NJ Hypertensive hypertrophic cardiomyopathy of the elderly N Engl J Med 312 277, 1985
7. Kunis R, Greenberg H, Yeoh CB, et al Coronary revascularization for recurrent pulmonary edema in elderly patients with ischemic heart disease and preserved ventricular function. N Engl J Med 313:1207, 1985
8. Cornwell GG III, Murdoch WL, Kyle RA, et al. Frequency and distribution of senile cardiovascular amyloid A clinicopathologic correlation Am J Med 75 618, 1983

VII DENTISTRY

1 Katz RV, Gustavsen F Tooth mortality in dental patients in a US urban area. Gerodontics 2 104, 1986
2 Gordon SR, Jahnigen DW Oral assessment of the edentulous elderly patient. J Am Geriatr Soc 31:797, 1983
3 Evashwick C, Conrad D, Lee F Factors related to utilization of dental services by the elderly Am J Public Health 72:1129, 1982
4. Greenlick MR, Sarvey R, Lamb S, et al. Prepaid dental care for the elderly in an HMO Medicare demonstration. Gerodontics 2:131, 1986
5. Niessen LC, Jones JA, Zocchi M, et al. Dental care for the patient with Alzheimer's disease J Am Dent Assoc 110:207, 1985
6. Laney WR, Tolman DE, Keller EE, et al. Dental implants: Tissue-integrated prosthesis utilizing the osseointegratio. concept. Mayo Clin Proc 61:91, 1986
7. Pollack RP: An analysis of periodontal therapy for the 65-year-old and older patient: A longitudinal study of 42 patients in a 13-year-old periodontal practice. Gerodontics 2:135, 1986
8. Ettinger RL, Beck JD: Medical and psychosocial risk factors in the dental treatment of the elderly. Int Dent J 33:292, 1983
9. Gordon SR, Kelley SL, Sybyl JR, et al: Relationship in very elderly veterans of nutritional status, self-perceived chewing ability, dental status, and social isolation. J Am Geriatr Soc 33: 334, 1985
10. Page RC: Oral health status in the United States Prevalence of inflammatory periodontal diseases. J Dent Educ 49 354, 1985
11 Daniell HW Postmenopausal tooth loss Contributions to edentulism by osteoporosis and cigarette smoking Arch Intern Med 143 1678, 1983
12 Baum BJ, Bodner L Aging and oral motor function Evidence for altered performance among older persons J Dent Res 62:2, 1983

VIII DERMATOLOGY

A *General*

1 Braverman IM, Fonferko E: Studies in cutaneous aging: I. The elastic fiber network J Invest Dermatol 78:434, 1982
2 De Villez RL: Topical minoxidil therapy in hereditary androgenetic alopecia. Arch Dermatol 121 197, 1985
3 Bean SF, Cox GF Bullous diseases in the elderly Geriatrics 35(6):95, 1980
4. Johnson SA: Problems of aging: Relieving itching in the geriatric patient. Postgrad Med 58(7) 105, 1975
5 Lin AN, Carter DM. Skin cancer in the elderly. Derm Clin 4:467, 1986

B *Ulcers/Decubiti*

1 Seiler WO, Stahelin HB Decubitus ulcer prevention. A new investigative method using transcutaneous oxygen tension measurement. J Am Geriatr Soc 31:786, 1983
2. Allman RM, Laprade CA, Noel LB, et al: Pressure sores among hospitalized patients Ann Intern Med 105:337, 1986
3 Sugarman B, Hawes S, Musher DM, et al: Osteomyelitis beneath pressure sores Arch Intern Med 143:683, 1983
4. Pinchcofsky-Devin GD, Kaminski MV: Correlation of pressure sores and nutritional status. J Am Geriatr Soc 34:435, 1986

C *Zoster*

Burke BL, Steele RW, Beard OW, et al. Immune responses to varicella-zoster in the aged Arch Intern Med 142:291, 1982
2. Ragozzino MW, Melton LJ III, Kurland LT, et al. Population-

based study of herpes zoster and its sequelae Medicine 61 310, 1982
3 Sklar SH, Blue WT, Alexander JT, et al: Herpes zoster The treatment and prevention of neuralgia with adenosine monophosphate J Am Med Assoc 253 1427, 1985
4 Peterslund NA, Sever-Hansen K, Ipsen J, et al Acyclovir in herpes zoster Lancet ii.827, 1981
5 Jemsek J, Greenberg SB, Taber L, et al Herpes zoster-associated encephalitis Clinicopathologic report of 12 cases and review of the literature Medicine 62 81, 1983

IX ENDOCRINOLOGY

A *General*

1 Pavlov EP, Harman SM, Merriam GR, et al Responses of growth hormone (GH) and somatomedin-C to GH-releasing hormone in healthy aging men J Clin Endocrinol Metab 62 595, 1986
2 Rudman D, Nagraj HS, Mattson DE, et al Hyposomatomedinemia in the nursing home patient J Am Geriatr Soc 34 427, 1986
3 Rowe JW, Minaker KL, Sparrow D, et al Age-related failure of volume-pressure-mediated vasopressin release J Clin Endocrinol Metab 54 661, 1982
4 Feldman RD, Limbird LE, Nadeau J, et al Alterations in leukocyte beta-receptor affinity with aging. A potential explanation for altered beta-adrenergic sensitivity in the elderly N Engl J Med 310 815, 1984
5 Hoeldtke RD, Cilmi KM Effects of aging on catecholamine metabolism J Clin Endocrinol Metab 60 479, 1985

B *Menopause*

1 Meldrum DR, Davidson BJ, Tataryn IV, et al. Changes in circulating steroids with aging in postmenopausal women Obstet Gynecol 57.624, 1981
2. Casper RF, Yen SS Menopausal flushes Effect of pituitary gonadotropin desensitization by a potent luteinizing hormone-releasing factor agonist J Clin Endocrinol Metab 53 1056, 1981
3 Quint AR, Kaiser FE Gonadotropin determinations and thyrotropin-releasing hormone and luteinizing hormone-releasing hormone testing in critically ill postmenopausal women with hypothyroxinemia J Clin Endocrinol Metab 60 464 1985

C *Menopause Management*

1 Chetkowski RJ, Meldrum DR Steingold KA et al Biologic effects of transdermal estradiol N Engl J Med 314 1615 1986
2 Martin PL, Greaney MO, Burnier MA, et al Estradiol, estrone, and gonadotropin levels after use of vaginal estradiol Obstet Gynecol 63 441, 1984
3 Wilson PWF, Garrison RJ Castelli WP Postmenopausal estrogen use, cigarette smoking and cardiovascular morbidity in women over 50 The Framingham Study N Engl J Med 313 1038, 1985
4 Bush TL, Cowan LD, Barrett-Connor E et al Estrogen use and all-cause mortality Preliminary results from the Lipid Research Clinics Program Follow-Up Study J Am Med Assoc 249 903, 1983
5 Horwitz RI, Stewart KR Effect of clinical features on the association of estrogens and breast cancer Am J Med 76 192, 1984
6 Whitehead MI, Townsend PT Pryse-Davies J, et al Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium N Engl J Med 305 1599 1981
7 Weiss NS, Szekely DR English DR, et al Endometrial cancer in relation to patterns of menopausal estrogen use J Am Med Assoc 242 261, 1979

D *Paget's Disease*

1 Waxman AD McGee D Siemsen JK, et al Gallium scanning in Paget's disease of bone Effect of calcitonin Am J Roentgenol 134 303, 1980
2 Winfield J, Stamp TC Bone and joint symptoms in Paget's disease Ann Rheum Dis 43 769 1984
3 Chen J-R, Rhee RS Wallach S et al Neurologic disturbances in Paget's disease of bone Response to calcitonin Neurology 29 448, 1979
4 Henley JW, Croxson RS Ibbertson HK The cardiovascular system in Paget's disease of bone and the response to therapy with calcitonin and diphosphonate Aust NZ J Med 9 390 1979
5 Wick MR, Siegal GP Unni KK et al Sarcomas of bone compli-

cating osteitis deformans (Paget's disease): Fifty years experience Am J Surg Pathol 5 47, 1981

6 Singer FR, Fredericks RS, Minkin C. Salmon calcitonin therapy for Paget's disease of bone The problems of acquired clinical resistance Arthritis Rheum 23 1148, 1980

7 Altman RD Long-term follow-up of therapy with intermittent etidronate disodium in Paget's disease of bone Am J Med 79 583 1985

E Parathyroid

1 Marcus R, Madvig P, Young G Age-related changes in parathyroid hormone and parathyroid hormone action in normal humans J Clin Endocrinol Metab 58 223, 1984

2 Tibblin S, Palsson N Rydberg J Hyperparathyroidism in the elderly Ann Surg 197 135, 1983

3 Selby PL Peacock M Ethinyl estradiol and norethindrone in the treatment of primary hyperparathyroidism in postmenopausal women N Engl J Med 314 1481, 1986

F Osteoporosis

1 Cummings SR Are patients with hip fractures more osteoporotic? Am J Med 78 487, 1985

2 Johnston CC, Norton J, Khairi RA, et al Heterogeneity of fracture syndromes in postmenopausal women J Clin Endocrinol Metab 61 551, 1985

3 Slovik DM, Adams JS, Neer RM, et al. Deficient production of 1,25-dihydroxyvitamin D in elderly osteoporotic patients N Engl J Med 305 372, 397, 1981

4 Wilkins WE, Chalmers A, Sanerkin NG, et al Osteomalacia in the elderly: The value of radio-isotope bone scanning in patients with equivocal biochemistry. Age Ageing 12.195, 1983

5 Jensen J, Christiansen C, Rodbro P. Cigarette smoking, serum estrogens, and bone loss during hormone-replacement therapy early after menopause. N Engl J Med 313.973, 1985

6 Richelson LS, Wahner HW, Melton LJ III, et al: Relative contributions of aging and estrogen deficiency to postmenopausal bone loss N Engl J Med 311 1273, 1984

7 Sakhaee K, Nicar MJ, Glass K, et al. Postmenopausal osteoporosis as a manifestation of renal hypercalciuria with secondary hyperparathyroidism J Clin Endocrinol Metab 61 368 1985

8 Meier DE, Orwoll ES Jones JM Marked disparity between trabecular and cortical bone loss with age in healthy men: Measurement by vertebral computed tomography and radial photon absorptiometry Ann Intern Med 101 605 1984

G Osteoporosis Management

1 Ettinger B Genant HK Cann CE Long-term estrogen replacement therapy prevents bone loss and fractures Ann Intern Med 102 319 1985

2 O'Duffy JD, Wahner HW O'Fallon WM, et al Mechanism of acute lower extremity pain syndrome in fluoride-treated osteoporotic patients Am J Med 80 561 1986

3 Nilas L, Christiansen C Rodbro P Calcium supplementation and postmenopausal bone loss Br Med J 289 1103, 1984

4 Riggs BL, Nelson KI Effect of long-term treatment with calcitriol on calcium absorption and mineral metabolism in postmenopausal osteoporosis J Clin Endocrinol Metab 61 457, 1985

5 Kanis JA Treatment of osteoporotic fracture Lancet i 27, 1984

6 Krolner B, Toft B, Pors Nielsen S, et al Physical exercise as prophylaxis against involutional vertebral bone loss A controlled trial. Clin Sci 64 541, 1983

7 Sinaki M, Mikkelsen BA Postmenopausal spinal osteoporosis Flexion versus extension exercises Arch Phys Med Rehab 65 593, 1984

8 Wasnich RD, Benfante RJ, Yano K, et al. Thiazide effect on the mineral content of bone N Engl J Med 309 344, 1983

9 Abbasi R, Hodgen GD Predicting the predisposition to osteoporosis: Gonadotropin-releasing hormone antagonist for acute estrogen deficiency test J Am Med Assoc 255.1600, 1986

H Male Sexual Function

1 Harman SM, Tsitouras PD Costa PT, et al Reproductive hormones in aging men II Basal pituitary gonadotropins and gonadotropin responses to LHRH. J Clin Endocrinol Metab 54.547, 1982

2 Neaves WB, Johnson L, Porter

JC et al: Leydig cell numbers daily sperm production, and serum gonadotropin levels in aging men. J Clin Endocrinol Metab 59:756, 1984

3 Weizman A, Weizman R, Hart J, et al The correlation of increased serum prolactin levels with decreased sexual desire and activity in elderly men. J Am Geriatr Soc 31:485, 1983

4 Niewoehner CB, Nuttall FQ Gynecomastia in a hospitalized male population Am J Med 77 633, 1984

5 Davis SS, Viosca SP, Guralnik M, et al Evaluation of impotence in older men West J Med 142 499, 1985

I *Thyroid*

1. Olsen T, Laurberg P, Weeke J Low serum T3 and high serum reverse T3 in old age An effect of disease, not age J Clin Endocrinol Metab 47 1111, 1978

2 Harman SM, Wehmann RE, Blackman MR Pituitary-thyroid hormone economy in healthy aging men Basal indices of thyroid function and thyrotropin responses to constant infusions of thyrotropin releasing hormone J Clin Endocrinol Metab 58 320, 1984

3 Samaan NA, Schultz PN, Haynie TP, et al Pulmonary metastasis of differentiated thyroid carcinoma Treatment results in 101 patients J Clin Endocrinol Metab 60 376, 1985

4 Coindre J-M, David J-P, Riviere L, et al Bone loss in hypothyroidism with hormone replacement A histomorphometric study Arch Intern Med 146.48, 1986

5 Sawin CT, Castelli WP, Hershman JM, et al The aging thyroid Thyroid deficiency in the Framingham Study Arch Intern Med 145 1386, 1985

6 Rosenbaum RL, Barzel US Levothyroxine replacement dose for primary hypothyroidism decreases with age Ann Intern Med 96:53, 1982

7 Levine HD, Compromise therapy in the patient with angina pectoris and hypothyroidism. A clinical assessment. Am J Med 69·411, 1980

8 Davis PJ, Davis FB. Hyperthyroidism in patients over the age 60 years Clinical features in 85 patients Medicine 53:161, 1974

9 Cobler JL, Williams ME, Greenland P Thyrotoxicosis in institutionalized elderly patients with atrial fibrillation Arch Intern Med 144 1758, 1984

X GASTROENTEROLOGY

A *General*

1 Foxworthy DM, Wilson JAP Crohn's disease in the elderly Prolonged delay in diagnosis J Am Geriatr Soc 33 492, 1985

2 Tchirkow G, Lavery IC, Fazio VW Crohn's disease in the elderly Dis Colon Rectum 26 177, 1983

3 Kiernan PD, Pairolero PC, Hubert JP, Jr, et al Aortic graft-enteric fistula Mayo Clin Proc 55.731, 1980

4 Booker JA Haematemesis and melaena in the elderly Age Ageing 12 49, 1983

5 Richter JE Castell DO Diffuse esophageal spasm A reappraisal Ann Intern Med 100.242 1984

6 Bennett GCJ Allen E Millard PH Clostridium difficile diarrhoea A highly infectious organism Age Ageing 13 363 1984

7 Whitehead WE, Burgio KL Engel BT Biofeedback treatment of fecal incontinence in geriatric patients J Am Geriatr Soc 33 320 1985

B *Hepatobiliary*

1 Einarsson K, Nilsell K Leijd B et al Influence of age on secretion of cholesterol and synthesis of bile acids by the liver N Engl J Med 313 277, 1985

2 Reiss R, Hoffman S Deutsch AA Cholecystectomy in patients above 70 Review of 153 cases Mt Sinai J Med 49(1), 71 1982

3 Ramanujam P, Shabeeb N Silver JM Unusual manifestations of gallstone migration into the gastrointestinal tract South Med J 76 50 1983

4 Lehmann AB, Bassendine MF James OF Is primary biliary cirrhosis a different disease in the elderly? Gerontology 31 186 1985

5 Cobden I, Lendrum R Venables CW, et al Gallstones presenting as mental and physical debility in the elderly Lancet i 1062, 1984

6 Goodson JD, Taylor PA Campion EW, et al The clinical course of acute hepatitis in the elderly patient Arch Intern Med 142 1485, 1982

7 Woodhouse KW, James OFW Alcoholic liver disease in the elderly Presentation and outcome Age Ageing 14 113, 1985

C *Colonic Disease*

1 Wolf E, Frager D, Beneventano TC Feasibility of double-contrast barium enema in the elderly Am J Roentgenol 145 47, 1985

2 Gallagher JJ, Welch JP Giant diverticular of the sigmoid colon A review of differential diagnosis and operative management Arch Surg 114:1079, 1979

3 Cooke M, Sande MA Diagnosis and outcome of bowel infarction on an acute medical service Am J Med 75 984, 1983

4 Eisenberg RL Montgomery CK, Margulis AR Colitis in the elderly Ischemic colitis mimicking ulcerative and granulomatous colitis Am J Roentgenol 133 1113, 1979

5 Margolis IB Faro RS, Howells EM, et al Megacolon in the elderly Ann Surg 190 40, 1979

6 Cappell MS, Lebwohl O. Cessation of recurrent bleeding from gastrointestinal angiodysplasias after aortic valve replacement Ann Inter Med 105 54, 1986

7 Cello JP Grendell JH Endoscopic laser treatment for gastrointestinal vascular ectasias Ann Intern Med 104 352, 1986

D *Constipation*

1 Sandman PO, Adolfsson R, Hallmans G, et al Treatment of constipation with high-bran bread in long-term care of severely demented elderly patients J Am Geriatr Soc 31.289, 1983

2 Ernstoff JJ, Howard DA, Marshall JB, et al. A randomized blinded clinical trial of a rapid colonic lavage solution (Golytely) compared with standard preparation for colonoscopy and barium enema Gastroenterol 84: 1512, 1983

3 Donald IP, Smith RG, Cruikshank JG, et al. A study of constipation in the elderly living at home. Gerontology 31.112, 1985

4 Mager-O'Connor E: How to identify and remove fecal impactions Geriatr Nurs 5 158, 1984

E. *Gastric Disorders/Ulcers*

1 Moore JG, Tweedy C, Christian PE, et al Effect of age on gastric emptying of liquid-solid meals in man Dig Dis Sci 28 340 1983

2 Permutt RP, Cello JP Duodenal ulcer disease in the hospitalized elderly patient Dig Dis Sci 27 1, 1982

3 Clinch D. Banerjee AK, Ostick G Absence of abdominal pain in elderly patients with peptic ulcer Age Ageing 13 120, 1984

4 Jenike MA Cimetidine in elderly patients Review of uses and risks J Am Geriatr Soc 30 170, 1982

5 Searcy RM, Malagelada J-R Menetrier's disease and idiopathic hypertrophic gastropathy Ann Intern Med 100 565 1984

XI GYNECOLOGY

A *General*

1 Krebs H-B Wilstrup MA, Wheelock JB Partial trachelectomy in the elderly patient with abnormal cytology Obstet Gynecol 65 579, 1985

2 Leiblum S, Bachmann G, Kemmann E, et al Vaginal atrophy in the postmenopausal woman The importance of sexual activity and hormones J Am Med Assoc 249 2195, 1983

3 Friedrich EG, Jr, Kalra PS Serum levels of sex hormones in vulvar lichen sclerosus, and the effect of topical testosterone N Engl J Med 310 488, 1984

4 Ellenbogen A, Agranat A, Grunstein S The role of vaginal hysterectomy in the aged woman J Am Geriatr Soc 29 426, 1981

5 Mandelblatt J, Gopaul I, Wistreich M. Gynecological care of elderly women. Another look at papanicolaou smear testing J Am Med Assoc 256 367, 1986

6 Tabar L, Faberberg CJG, Gad A, et al Reduction in mortality from breast cancer after mass screening with mammography Randomised trial from the Breast Cancer Screening Working Group of the Swedish National Board of Health and Welfare Lancet i:829, 1985

7 Petrek J. Postmenopausal breast abscess. South Med J 75 1198, 1982

8 Horwitz RI, Lamas AM, Peck D Mammographic parenchymal patterns and risk of breast cancer in postmenopausal women Am J Med 77 621, 1984

9 Devitt JE Benign disorders of

the breast in older women Surg Gynecol Obstet 162:340, 1986

B *Menopause (see ENDOCRINOLOGY)*

XII. HEMATOLOGY

A. *General*

1. Kenny RA, Saunders AP, Coll A, et al: A comparison of the erythrocyte sedimentation rate and serum C-reactive protein concentration in elderly patients Age Ageing 14:15, 1985
2. Herbst KD, Rapaport SI, Kenoyer DG, et al Syndrome of an acquired inhibitor of factor VIII responsive to cyclophosphamide and prednisone Ann Intern Med 95 575, 1981

B *Anemia*

1. Lipschitz DA, Udupa KB, Milton KY, et al Effect of age on hematopoiesis in man Blood 63 502, 1984
2. Carmel R, Karnaze DS The deoxyuridine suppression test identifies subtle cobalamin deficiency in patients without typical megaloblastic anemia J Am Med Assoc 253:1284, 1985
3. Schafer LW, Larson DE, Melton LJ III, et al. Risk of development of gastric carcinoma in patients with pernicious anemia: A population-based study in Rochester, Minnesota Mayo Clin Proc 60 444, 1985
4. Savage D, Lindenbaum J. Relapses after interruption of cyanocobalamin therapy in patients with pernicious anemia. Am J Med 74:765, 1983
5. Patterson C, Turpie ID, Benger AM: Assessment of iron stores in anemic geriatric patients J Am Geriatr Soc 33:764, 1985

C *Hematologic Malignancies*

1. Gale RP, Foon KA. Chronic lymphocytic leukemia Recent advances in biology and treatment. Ann Intern Med 103:101, 1985
2. Cohen HJ, Bartolucci A: Age and the treatment of multiple myeloma: Southeastern Cancer Study Group experience. Am J Med 79:316, 1985
3. Austin-Seymour MM, Hoppe RT, Cox RS, et al: Hodgkin's disease in patients over 60 years old. Ann Intern Med 100:13, 1984
4. Armitage JO, Potter JF: Aggressive chemotherapy for diffuse histiocytic lymphoma in the elderly: Increased complications with advancing age J Am Geriatr Soc 32:269, 1984
5. Tilly H, Castaigne S, Bordessoule D, et al Low-dose cytosine arabinoside treatment for acute nonlymphocytic leukemia in elderly patients Cancer 55:1633, 1985
6. Patterson C, Turpie ID, Benger AM Assessment of iron stores in anemic geriatric patients J Am Geriatr Soc 33 764 1985

XIII IMMUNOLOGY

A *General*

1. Staiano-Coico L Darzynkiewicz Z, Hefton JM et al Increased sensitivity of lymphocytes from people over 65 to cell cycle arrest and chromosomal damage Science 219 1335 1983
2. Mascart-Lemone F, Delespesse G, Servais G, et al Characterization of immunoregulatory T lymphocytes during ageing by monoclonal antibodies Clin Exp Immunol 48 148, 1982
3. Hallgren HM, Jackola DR, O'Leary JJ Unusual pattern of surface marker expression on peripheral lymphocytes from aged humans suggestive of a population of less differentiated cells J Immunol 131 191, 1983
4. Duchateau J, Delepesse G, Vrijens R, et al Beneficial effects of oral zinc supplementation on the immune responses of old people Am J Med 70:1001, 1981
5. Kennes B, Dumont I, Brohee D, et al. Effect of vitamin C supplements on cell-mediated immunity in old people Gerontology 29:305, 1983
6. Pandey JP, Fudenberg HH, Ainsworth SK, et al Autoantibodies in healthy subjects of different age groups Mech Ageing Dev 10 399, 1979

B *Gammopathy*

1. Radl J Idiopathic paraproteinemia—a consequence of an age-related deficiency in the T immune system: Three-stage development—a hypothesis Clin Immunol Immunopathol 14:251, 1979
2. Kyle RA: "Benign" monoclonal gammopathy: A misnomer? J Am Med Assoc 251 1849, 1984
3. Kyle RA, Greipp PR, Banks PM The diverse picture of gamma heavy-chain disease: Report of seven cases and review of literature Mayo Clin Proc 56 439, 1981

XIV INFECTIOUS DISEASE

A General

1. Kenny RAM, Hodkinson HM, Prendiville OF, et al Abnormalities of liver function and the predictive value of liver function tests in infection and outcome of acutely ill elderly patients Age Ageing 13 224, 1984
2. Proust J, Rosenzweig P, Debouzy C, et al Lymphopenia induced by acute bacterial infections in the elderly A sign of age-related immune dysfunction of major prognostic significance Gerontology 178, 1985
3. Garibaldi RA, Brodine S, Matsumiya S Infections among patients in nursing homes Policies, prevalence, and problems N Engl J Med 305 731, 1981
4. Robbins N, DeMaria A, Miller MH Infective endocarditis in the elderly South Med J 73 1335, 1980
5. McGuire NM, Kauffman CA Septic arthritis in the elderly J Am Geriatr Soc 33 170, 1985
6. Gleckman R, Hibert D Afebrile bacteremia A phenomenon in geriatric patients J Am Med Assoc 248 1478 1982
7. Gorse GJ, Thrupp LD, Nudleman KL, et al Bacterial meningitis in the elderly Arch Intern Med 144 1603, 1984
8. Setia U, Serventi I, Lorenz P Bacteremia in a long-term care facility Spectrum and mortality Arch Intern Med 144 1633, 1984
9. Austrian R A reassessment of pneumococcal vaccine N Engl J Med 310.651, 1984
10. Moore RD, Smith CR, Lietman PS Risk factors for the development of auditory toxicity in patients receiving aminoglycosides J Infect Dis 149 23, 1984
11. Weiss BP, Strassburg MA, Feeley JC. Tetanus and diphtheria immunity in an elderly population in Los Angeles County Am J Public Health 73.802, 1983

B Pneumonia

1. Fedullo AJ, Swinburne AJ Relationship of patient age to clinical features and outcome for inhospital treatment of pneumonia J Gerontol 40.29, 1985
2. Garb JL, Brown RB, Garb JR, et al: Differences in etiology of pneumonias in nursing home and community patients J Am Med Assoc 240·2169, 1978
3. Hook EW, Horton CA, Schaberg DR Failure of intensive care unit support to influence mortality from pneumococcal bacteremia J Am Med Assoc 249 1055, 1983
4. Finkelstein MS, Petkun WM, Freedman ML, et al Pneumococcal bacteremia in adults Age-dependent differences in presentation and in outcome J Am Geriatr Soc 31 19, 1983
5. Valenti WM, Trudell RG, Bentley DW Factors predisposing to oropharyngeal colonization with gram-negative bacilli in the aged N Engl J Med 298 1108, 1978
6. Berk SL, Holtsclaw SA, Wiener SL, et al Nontypeable Haemophilus influenzae in the elderly Arch Intern Med 142 537, 1982

C Tuberculosis

1. Nagami PH, Yoshikawa TT Tuberculosis in the geriatric patient J Am Geriatr Soc 31 356, 1983
2. Stead WW, Lofgren JP Warren E, et al Tuberculosis as an endemic and nosocomial infection among the elderly in nursing homes N Engl J Med 312 1483 1985
3. Bobrowitz ID Active tuberculosis undiagnosed until final autopsy Am J Med 72 650, 1982
4. Narain JP, Lofgren JP, Warren E, et al. Epidemic tuberculosis in a nursing home A retrospective cohort study J Am Geriatr Soc 33.258, 1985

D Urinary Tract Infections

1. Grahn D, Norman DC, White ML, et al Validity of urinary catheter specimen for diagnosis of urinary tract infection in the elderly Arch Intern Med 145 1858, 1985
2. Parsons CL, Schmidt JD Control of recurrent lower urinary tract infection in the postmenopausal woman J Urol 128 1224, 1982
3. Gleckman R, Blagg N, Hibert D, et al Acute pyelonephritis in the elderly South Med J 75 551, 1982
4. Johnson ET The condom catheter: Urinary tract infection and other complications South Med J 76:579, 1983
5. Daifuku R, Stamm WE Bacterial adherence to bladder uroepithelial cells in catheter-associated urinary tract infection N Engl J Med 314 1208, 1986
6. Thompson RL, Haley CE, Searcy MA, et al Catheter-associated

bacteriuria Failure to reduce attack rates using periodic instillations of a disinfectant into urinary drainage systems J Am Med Assoc 251:747, 1984

7. Nordenstam GR, Brandberg CA, Oden AS, et al Bacteriuria and mortality in an elderly population N Engl J Med 314 1152, 1986
8. Boscia JA, Kobasa WD, Knight RA Epidemiology of bacteriuria in an elderly ambulatory population Am J Med 80 208, 1986

E *Viral Infections*

1. National Institutes of Health Consensus Development Conference Amantadine Does it have a role in the prevention and treatment of influenza? (symposium) Ann Intern Med 92 256, 1980
2. Sorvillo FJ, Huie SF, Strassburg MA, et al An outbreak of RSV pneumonia in a nursing home for the elderly J Infect 9 252, 1984
3. Patriarca PA, Weber JA, Parker RA, et al Efficacy of influenza vaccine in nursing homes Reduction in illness and complications during an influenza A(H3N2) epidemic J Am Med Assoc 253 1136, 1985
4. Carter JW, Edson RS, Kennedy CC Infectious mononucleosis in the older patient Mayo Clin Proc 53 146, 1978

XV METABOLISM

A *General*

1. Tsunoda K, Abe K, Goto T, et al Effect of age on the renin-angiotensin-aldosterone system in normal subjects Simultaneous measurement of active and inactive renin, renin substrate, and aldosterone in plasma J Clin Endocrinol Metab 62 384, 1986
2. Goldstein CS, Braunstein S, Goldfarb S Idiopathic syndrome of inappropriate antidiuretic hormone secretion possibly related to advanced age Ann Intern Med 99 185, 1983
3. Booker JA: Severe symptomatic hyponatremia in elderly outpatients The role of thiazide therapy and stress J Am Geriatr Soc 32.108, 1984
4. Himmelstein DU, Jones AA, Woolhandler S Hypernatremic dehydration in nursing home patients An indicator of neglect J Am Geriatr Soc 31 466 1983
5. Phillips PA, Rolls BJ, Ledingham JGG et al Reduced thirst after water deprivation in healthy elderly men N Engl J Med 311 753, 1984
6. Berger EY Nutrition by hypodermoclysis J Am Geriatr Soc 32 199, 1984

B *Glucose Diabetes*

1. Chen M, Bergman RN, Pacini G, et al Pathogenesis of age-related glucose intolerance in man Insulin resistance and decreased beta-cell function J Clin Endocrinol Metab 60 13, 1985
2. Pulsinelli WA, Levy DE, Sigsbee B, et al Increased damage after ischemic stroke in patients with hyperglycemia with or without established diabetes mellitus Am J Med 74 540, 1983
3. Perlmuter LC, Hakami MK, Hodgson-Harrington C, et al Decreased cognitive function in aging noninsulin-dependent diabetic patients Am J Med 77 1043 1984
4. Reaven GM and Staff of the Palo Alto GRECC Aging and Study Unit Beneficial effect of moderate weight loss in older patients with noninsulin-dependent diabetes mellitus poorly controlled with insulin J Am Geriatr Soc 33 93 1985
5. Cahill GF, Jr Hyperglycemic hyperosmolar coma A syndrome almost unique to the elderly J Am Geriatr Soc 31 103 1983
6. Lipson LG (ed) Diabetes Mellitus in the elderly (Symposium) Am J Med 80(5A) 1, 1986
7. Seals DR, Hagberg JM, Hurley BF, et al Effects of endurance training on glucose tolerance and plasma lipid levels in older men and women J Am Med Assoc 252 645, 1984

C *Lipids*

1. Miller NE Why does plasma low density lipoprotein concentration in adults increase with age? Lancet i 263, 1984
2. Agner E, Hansen PF Fasting serum cholesterol and triglycerides in a ten-year prospective study in old age Acta Med Scand 214 33, 1983
3. Greenfield MS, Kraemer F, Tobey T, et al Effect of age on plasma triglyceride concentrations in man Metabolism 29 1095, 1980

4 Cauley JA, LaPorte RE, Kuller LH et al The epidemiology of HDL cholesterol levels in postmenopausal women J Gerontol 37 10, 1982

XVI NEUROLOGY

A *Neurophysiology*

1 Creasey H, Rapoport SI The aging human brain Ann Neurol 17 2, 1985
2 Severson JA Neurotransmitter receptors and aging J Am Geriatr Soc 32 24, 1984
3 Wong DF, Wagner HN, Jr, Dannals RF, et al Effects of age on dopamine and serotonin receptors measured by positron tomography in living human brain Science 226 1393, 1984
4 Gash DM, Collier TJ, Sladek JR Jr Neural transplantation A review of recent developments and potential applications to the aged brain Neurobiol Aging 6 131, 1985
5 Madden DJ Age-related slowing in the retrieval of information from long-term memory J Gerontol 40 208 1985
6 Impallomeni M Kenny RA, Flynn MD et al The elderly and their ankle jerks Lancet 1 670, 1984

B *General*

1 Marra TR Multiple sclerosis with onset after age 60 J Am Geriatr Soc 32 16 1984
2 Evoli A Tonali P, Scoppetta C, et al Myasthenia gravis in the elderly Report of 37 cases J Am Geriatr Soc 31 352, 1983
3 Roberts MA, Godfrey JW, Caird FI Epileptic seizures in the elderly I Aetiology and type of seizure Age Ageing 11 24, 1982
4 Overstall PW, Hazell JWP, Johnson AL Vertigo in the elderly Age Ageing 10 105, 1981
5 Koller W, Biary N, Cone S Disability in essential tremor Effect of treatment Neurology 36 1001, 1986

C *Autonomic Dysfunction/Orthostatism*

1 Weiner WJ, Nora LM, Glantz RH Elderly inpatients Postural reflex impairment Neurology 34 945, 1984
2 Hoeldtke RD, Cavanaugh ST, Hughes JD, et al Treatment of orthostatic hypotension with dihydroergotamine and caffeine Ann Intern Med 105 168, 1986
3 Khurana RK, Nelson E, Azzarelli B et al Shy-Drager syndrome Diagnosis and treatment of cholinergic dysfunction Neurology 30 805, 1980
4 Percy JP, Neill ME, Kandiah TK, et al A neurogenic factor in faecal incontinence in the elderly Age Ageing 11 175, 1982
5 Lipsitz LA, Nyquist RP, Jr, Wei JY, et al Postprandial reduction in blood pressure in the elderly N Engl J Med 309 81, 1983
6 Robinson BJ, Johnson RH, Lambie DG, et al Autonomic responses to glucose in elderly subjects with orthostatic hypotension Age Ageing 14 168, 1985

D *Cerebrovascular*

1 Posner JD, Gorman KM, Woldow A Stroke in the elderly I Epidemiology J Am Geriatr Soc 32 95, 1984
2 Wade DT, Hewer RL Why admit stroke patients to hospital? Lancet 1 807, 1983
3 Stark RJ, Wodak J Primary orthostatic cerebral ischaemia J Neurol Neurosurg Psychiatry 46 883 1983
4 Konrad MS, Coffey CE Coffey KS, et al Myocardial infarction and stroke Neurology 34 1403 1984
5 Ropper AH, Shafran B Brain edema after stroke Clinical syndrome and intracranial pressure Arch Neurol 41 26 1984
6 Whisnant JP, Phillips LH II Sundt TM, Jr, et al Aneurysmal subarachnoid hemorrhage Timing of surgery and mortality Mayo Clin Proc 57 471 1982
7 Ojemann RG, Heros RC Spontaneous brain hemorrhage Stroke 14 468, 1983
8 Cosgrove GR, Leblanc R Meagher-Villemure K et al Cerebral amyloid angiopathy Neurology 35 625 1985
9 The EC/IC Bypass Study Group Failure of extracranial-intracranial arterial bypass to reduce the risk of ischemic stroke Results of an international randomized trial N Engl J Med 313 1191, 1985
10 Fields WS Aspirin for prevention of stroke A review Am J Med 74(6A):61, 1983
11 Earnest F IV, Forbes G, Sandok BA, et al Complications of cerebral angiography Prospective assessment of risk Am J Roentgenol 142 247, 1984
12 Rogers RL, Meyer JS Judd BW et al Abstention from cigarette

smoking improves cerebral perfusion among elderly chronic smokers J Am Med Assoc 253 2970, 1985

E Stroke Rehabilitation
1 Smith DL, Akhtar AJ, Garraway WM Motor function after stroke Age Ageing 14 46, 1985
2 Wade DT, Langton-Hewer R, Wood VA Stroke The influence of age upon outcome Age Ageing 13 357, 1984
3 Kelly JF, Winograd CH A functional approach to stroke management in elderly patients J Am Geriatr Soc 33 48, 1985
4 Marshall RC, Phillips DS Prognosis for improved verbal communication in aphasic stroke patients Arch Phys Med Rehab 64 597, 1983
5 Goodstein RK Overview Cerebrovascular accident and the hospitalized elderly—a multidimensional clinical problem Am J Psychiatry 140 141, 1983
6 Lipsey JR, Robinson RG, Pearlson GD, et al Nortriptyline treatment of post-stroke depression A double-blind stud[illegible] Lancet 1 297, 1984
7 Heimlich HJ Rehabilitation of swallowing after stroke Ann Otol Rhinol Laryngol 92 357, 1983
8 Lipsey JR, Spencer WC, Rabins PV, et al Phenomenologic comparison of poststroke depression and functional depression Am J Psychiatry 143 4, 1986

F Dementia Assessment
1 Eslinger PJ, Damasio AR, Benton AL, et al Neuropsychologic detection of abnormal mental decline in older persons J Am Med Assoc 253 670, 1985
2 Hammerstrom DC, Zimmer B The role of lumbar puncture in the evaluation of dementia The University of Pittsburgh Study J Am Geriatr Soc 33 397, 1985
3 Cummings JL, Benson DF Dementia of the Alzheimer type An inventory of diagnostic clinical features J Am Geriatr Soc 34 12, 1986
4 Duara R, Grady C, Haxby J, et al Positron emission tomography in Alzheimer's disease Neurology 36 879, 1986

G Dementia Etiologies
1 Loeb C, Gandolfo C Diagnostic evaluation of degenerative and vascular dementia Stroke 14 399, 1983
2 Larson EB, Reifler BV, Featherstone HJ, et al Dementia in elderly outpatients A prospective study Ann Intern Med 100 417, 1984
3 Lipowski ZJ Transient cognitive disorders (delirium, acute confusional states) in the elderly Am J Psychiatry 140 1426 1983
4 Reding M, Haycox J, Blass J Depression in patients referred to a dementia clinic A three-year prospective study Arch Neurol 42 894, 1985
5 Harrington MG, Merril CR Asher DM, et al Abnormal proteins in the cerebrospinal fluid of patients with Creutzfeldt-Jakob disease N Engl J Med 315 279 1986
6 Rasool CG, Selkoe DJ Sharing of specific antigens by degenerating neurons in Pick's disease and Alzheimer's disease N Engl J Med 312 700 1985
7 Cummings JL, Benson DF Subcortical dementia Review of an emerging concept Arch Neurol 41 874, 1984
8 Patrick D [illegible] PC Chronic subdural hae[illegible] in the elderly Age Ageing 13 367 1984
9 Evans DL, Edelsohn GA Golden RN Organic psychosis without anemia or spinal cord symptoms in patients with vitamin B_{12} deficiency Am J Psychiatry 140 218, 1983
10 Simon RP Neurosyphilis Arch Neurol 42 606, 1985
11 Bucht G, Adolfsson R Winblad B Dementia of the Alzheimer type and multi-infarct dementia A clinical description and diagnostic problems J Am Geriatr Soc 32 491 1984

H Dementia Normal Pressure Hydrocephalus
1 Huckman MS Normal pressure hydrocephalus Evaluation of diagnostic and prognostic tests AJNR 2 [illegible] 1981
2 Rasker J, [illegible]nsen EN Haan J et al Normal-pressure hydrocephalus in rheumatic patients A diagnostic pitfall N Engl J Med 312 1239, 1985
3 Fisher CM Hydrocephalus as a cause of disturbances of gait in the elderly Neurology 32 1358 1982
4 Meyer JS, Kitagawa Y Tanahashi N et al Evaluation of

treatment of normal-pressure hydrocephalus J Neurosurg 62 513, 1985

I Dementia Alzheimer Type

1 Geddes JW, Monaghan DT, Cotman CW, et al Plasticity of hippocampal circuitry in Alzheimer's disease Science 230 1179, 1985

2 McKhann G, Drachman D, Folstein M, et al Clinical diagnosis of Alzheimer's disease Report of the NINCDS-ADRDA Work Group under the auspices of the Department of Health and Human Services Task Force on Alzheimer's Disease Neurology 34 939, 1984

3 Mash DC, Flynn DD, Potter LT Loss of M2 muscarine receptors in the cerebral cortex in Alzheimer's disease and experimental cholinergic denervation Science 228 1115, 1985

4 Wolozin BL, Pruchnicki A, Dickson DW, et al A neuronal antigen in the brains of Alzheimer patients Science 232 648, 1986

5 Whitehouse PJ, Price DL, Struble RG, et al Alzheimer's disease and senile dementia Loss of neurons in the basal forebrain Science 215 1237, 1982

6 Mayeux R, Stern Y, Spanton S Heterogeneity in dementia of the Alzheimer type Evidence of subgroups Neurology 35 453, 1985

7 Francis PT, Palmer AM, Sims NR, et al Neurochemical studies of early-onset Alzheimer's disease Possible influence on treatment N Engl J Med 313 7, 1985

8 Breitner JC, Folstein MF Familial Alzheimer Dementia A prevalent disorder with specific clinical features Psychol Med 14 63, 1984

J Dementia Therapy

1 Winograd CH, Jarvik LF Physician management of the demented patient J Am Geriatr Soc 34 295, 1986

2 Barclay LL, Zemcov A, Blass JP, et al Survival in Alzheimer's disease and vascular dementias Neurology 35 834, 1985

3 Harbaugh RE, Roberts DW, Coombs DW, et al Preliminary report Intracranial cholinergic drug infusion in patients with Alzheimer's disease Neurosurgery 15 514, 1984

4 van Loveren-Huyben CMS, Engelaar HF, Hermans MB, et al Double-blind clinical and psychologic study of ergoloid mesylates (Hydergine) in subjects with senile mental deterioration J Am Geriatr Soc 32 584, 1984

5 Cole JO, Branconnier R, Salomon M, et al Tricyclic use in the cognitively impaired elderly J Clin Psychiatry 44 14, 1983

6 Helms PM Efficacy of antipsychotics in the treatment of the behavioral complications of dementia A review of the literature J Am Geriatr Soc 33 206, 1985

7 Panella JJ Jr, Lilliston BA, Brush D, et al Day care for dementia patients An analysis of a four-year program J Am Geriatr Soc 32 883, 1984

8 Lo B, Dornbrand L Guiding the hand that feeds Caring for the demented elderly N Engl J Med 311 402, 1984

9 Chenoweth B, Spencer B Dementia The experience of family caregivers Gerontologist 26 267, 1986

10 Meier DE, Cassel CK Nursing home placement and the demented patient A case presentation and ethical analysis Ann Intern Med 104 98, 1986

K Parkinsonism

1 Zetusky WJ, Jankovic J, Pirozzolo FJ The heterogeneity of Parkinson's disease Clinical and prognostic implications Neurology 35 522, 1985

2 Langston JW, Ballard P, Tetrud JW, et al Chronic parkinsonism in humans due to a product of meperidine-analog synthesis Science 219 979, 1983

3 Goetz CG, Lutge W, Tanner CM Autonomic dysfunction in Parkinson's disease Neurology 36 73, 1986

4 Geraghty JJ, Jankovic J, Zetusky WJ Association between essential tremor and Parkinson's disease Ann Neurol 17 329, 1985

5 Stephen PJ, Williamson J Drug induced parkinsonism in the elderly Lancet ii 1082, 1984

6 Mortimer JA, Pirozzolo FJ, Hansch EC, et al Relationship of motor symptoms to intellectual deficits in Parkinson's disease Neurology 32 133, 1982

7 Quinn NP, Koller WC, Lang AE, et al Painful Parkinson's disease Lancet i 1366, 1986

L. Parkinsonism: Management

1. Maier Hoehn MM: Parkinsonism treated with levodopa: Progression and mortality. J Neural Transm (Suppl) 19:253, 1983
2. Fahn S, Bressman SB: Should levodopa therapy for parkinsonism be started early or late? Evidence against early treatment. Can J Neurol Sci 11:200, 1984
3. Nutt JG, Woodward WR, Hammerstad JP, et al: The "on-off" phenomenon in Parkinson's disease: Relation to levodopa absorption and transport. N Engl J Med 310:483,523, 1984
4. Syndulko K, Gilden ER, Hansch EC, et al: Decreased verbal memory associated with anticholinergic treatment in Parkinson's disease patients. Int J Neurosci 14:61, 1981
5. Hoehn MM, Elton JD: Low dosages of bromocriptine added to levodopa in Parkinson's disease. Neurology 35:199, 1985
6. Robertson SJ, Thomson F: Speech therapy in Parkinson's disease: A study of the efficacy and long-term effects of intensive treatment. Br J Disord Commun 19:213, 1984
7. Mayeux R, Stern Y, Mulvey K, et al: Reappraisal of temporary levodopa withdrawal ("drug holiday") in Parkinson's disease. N Engl J Med 313:724, 1985

XVII. NUTRITION

A. General

1. Mitchell CO, Lipschitz DA: Detection of protein-calorie malnutrition in the elderly. Am J Clin Nutr 35:398, 1982
2. Friedman PJ, Campbell AJ, Caradoc-Davies TH, et al: Prospective trial of a new diagnostic criterion for severe wasting malnutrition in the elderly. Age Ageing 14:149, 1985
3. Gerosvitz M, Motil K, Munro HN, et al: Human protein requirements: Assessment of the adequacy of the current recommended dietary allowance for dietary protein in elderly men and women. Am J Clin Nutr 35:6, 1982
4. Elahi VK, Elahi D, Andres R, et al: A longitudinal study of nutritional intake in men. J Gerontol 38:162, 1983
5. Linn BS: Outcomes of older and younger malnourished and well-nourished patients one year after hospitalization. Am J Clin Nutr 39:66, 1984
6. Goodwin JS, Goodwin JM, Garry PJ: Association between nutritional status and cognitive functioning in a healthy elderly population. J Am Med Assoc 249:2917, 1983
7. Davis MA, Randall E, Forthofer RN et al: Living arrangements and dietary patterns of older adults in the United States. J Gerontol 40:434, 1985

B. Minerals

1. Recker RR: Calcium absorption and achlorhydria. N Engl J Med 313:70, 1985
2. Duchateau J, Delepesse G, Vrijens R, et al: Beneficial effects of oral zinc supplementation on the immune response of old people. Am J Med 70:1001, 1981
3. Garry PJ, Goodwin JS, Hunt WC: Iron status and anemia in the elderly: New findings and a review of previous studies. J Am Geriatr Soc 31:389, 1983
4. Hadler MH: The lack of benefit of modest sodium restriction in the institutionalized elderly. J Am Geriatr Soc 32:235, 1984

C. Nutrition Support

1. Baker H, Frank O, Jaslow SP: Oral versus intramuscular vitamin supplementation for hypovitaminosis in the elderly. J Am Geriatr Soc 28:42, 1980
2. Stettee WP: Nutrition intervention in hospitalized geriatric patients. Bull NY Acad Med 56:564, 1980
3. Siebens H, Trupe E, Siebens A, et al: Correlates and consequences of eating dependency in institutionalized elderly. J Am Geriatr Soc 34:192, 1986
4. Kirby DF, Craig RM, Tsang TK, et al: Percutaneous endoscopic gastrostomies. A prospective evaluation and review of the literature. JPEN J Parenter Enteral Nutr 10:155, 1986

D. Vitamins

1. Schorah CJ, Tormey WP, Brooks GH, et al: The effect of vitamin C supplements on body weight, serum proteins, and general health of an elderly population. Am J Clin Nutr 34:871, 1981
2. Reuler JB, Broudy VC, Cooney TG: Adult scurvy. J Am Med Assoc 253:805, 1985
3. Infante-Rivard C, Krieger M, Gascon-Barre M, et al: Folate deficiency among institutional-

ERIC Full Text Provided by ERIC

ized elderly Public health impact J Am Geriatr Soc 34:211, 1986

4 Older MWJ, Dickerson JWT Thiamine and the elderly orthopedic patient. Age Ageing 11:101, 1982

5 Clemens TL, Zhou X-Y, Myles M, et al Serum vitamin D_2 and vitamin D_3 metabolite concentrations and absorption of vitamin D_2 in elderly subjects J Clin Endocrinol Metab 63:656, 1986

6 Fujisawa Y, Kida K, Matsuda H Role of change in Vitamin D metabolism with age in calcium and phosphorus metabolism in normal human subjects J Clin Endocrinol Metab 59:719, 1984

XVIII ONCOLOGY

1 Colapinto ND Is age alone a contraindication to major cancer surgery? Can J Surg 28:323 19[illegible]

2 Begg CB Carbone PP Clinical trials and drug toxicity in the elderly The experience of the Eastern Cooperative Oncology Group Cancer 52:1986 1983

3 Baranovsky A, Myers MH Cancer incidence and survival in patients 65 years of age and older CA 36:26, 1986

4 Salcman M Brain tumors and the geriatric patient J Am Geriatr Soc 30:501, 1982

5 McCarty KS Jr, Silva JS, Cox EB, et al Relationship of age and menopausal status to estrogen receptor content in primary carcinoma of the breast Ann Surg 197:123, 1983

6 Taylor SG, Gelman RS, Falkson G, et al Combination chemotherapy compared to tamoxifen as initial therapy for Stage IV breast cancer in elderly women Ann Intern Med 104:455, 1986

7 Adami H-O, Malker B Holmberg L, et al The relationship between survival and age at diagnosis in breast cancer N Engl J Med 315:559, 1986

8 Davis SJ, Karrer FW, Moor BJ, et al Characteristics of breast cancer in women over 80 years of age Am J Surg 150:655, 1985

9 Breyer RH, Zippe C, Pharr WF, et al Thoracotomy in patients over age 70 years Ten-year experience J Thorac Cardiovasc Surg 81:187, 1981

10 Ershler WB, Socinski MA, Greene CJ Bronchogenic cancer, metastases, and aging J Am Geriatr Soc 31:673, 1983

11 Saitoh H, Shiramizu T, Hida M Age changes in metastatic patterns in renal adenocarcinoma Cancer 50:1646, 1982

12 Lee T-K, Myers RT, Scharyj M, et al Multiple primary malignant tumors (MPMT) Study of 68 autopsy cases (1963–1980) J Am Geriatr Soc 30:744 1982

13 Ganz PA, Schag CC, Heinrich RL The psychosocial impact of cancer on the elderly A comparison with younger patients J Am Geriatr Soc 33:429, 1985

XIX OPHTHALMOLOGY

A General

1 Keeney AH, Keeney VT A guide to examining the aging eye Geriatrics 35(2):81 1980

2 Sekuler R, Hutman LP Owsley CJ Human aging and spatial vision Science 209:1255 1980

3 Sakamoto DK Retinal detachment Where an early DX is important Geriatrics 36(4):87 1981

4 Stetten D Jr Coping with blindness N Engl J Med 305:458 1981

5 Ghafour IM Allan D Foulds WS Common causes of blindness and visual handicap in the west of Scotland Br J Ophthalmol 67:209 1983

6 Fraunfelder FT Meyer SM Safe use of ocular drugs in the elderly Geriatrics 39(4):97 1984

B Cataracts

1 Masters PM Senile cataracts and aging changes in human protein J Am Geriatr Soc 31:426 1983

2 Foos RY Pathology of aging-related cataracts Straatsma BR moderator Aging-related cataract Laboratory investigation and clinical management Ann Intern Med 102:82 1985

3 van Heyningen R, Harding JJ Do aspirin-like analgesics protect against cataract? A case-control study Lancet i(8490):1111, 1986

4 Liesegang TJ Cataracts and cataract operations Mayo Clin Proc 59:556, 622, 1984

5 Martin NF, Kracher GP, Stark WJ, et al Extended-wear soft contact lenses for aphakic correction Arch Ophthalmol 101:39, 1983

6 Hotter KI Preoperative evaluation of the cataractous patient Surv Ophthalmol 29:55, 1984

C *Glaucoma*
1. Hart LM, Becker B The onset and evolution of glaucomatous visual field defects Ophthalmology 89 268 1982
2. Schwartz AL, Love DC, Schwartz MA. Long-term follow-up of argon laser trabeculoplasty for uncontrolled open-angle glaucoma. Arch Ophthalmol 103 1482 1985
3. LeBlanc RP, Saheb NE, Krip G Timolol Long-term Canadian multicentre study Can J Ophthalmol 20 128, 1985
4. Fazio DT, Bateman B, Christensen RE Acute angle-closure glaucoma associated with surgical anesthesia Arch Ophthalmol 103 360, 1985

D *Macular Degeneration*
1. Ferris FL III Senile macular degeneration Review of epidemiologic features Am J Epidemiol 118 132 1983
2. Macular Photocoagulation Study Group Argon laser photocoagulation for senile macular degeneration Results of a randomized clinical trial Arch Ophthalmol 100 912 1982
3. Strahlman ER, Fine SL, Hillis A The second eye of patients with senile macular degeneration Arch Ophthalmol 101 1191, 1983
4. Moorfields Macular Study Group Retinal pigment epithelial detachments in the elderly A controlled trial of argon laser photocoagulation Br J Ophthalmol 66 1, 1982
5. Fine SL Early detection of extrafoveal neovascular membranes by daily central field evaluation Ophthalmology 92 603, 1985

XX ORTHOPEDICS

A *General*
1. Lourie H Spontaneous osteoporotic fracture of the sacrum An unrecognized syndrome of the elderly J Am Med Assoc 248 715, 1982
2. Milne JS, Williamson J A longitudinal study of kyphosis in older people Age Ageing 12 225, 1983
3. Lavsky-Shulan M, Wallace RB, Kohout FJ, et al Prevalence and functional correlates of low back pain in the elderly The Iowa 65 + Rural Health Study J Am Geriatr Soc 33.23, 1985
4. Gillespy T, Gillespy T, Jr, Revak CS Progressive senile scoliosis Seven cases of increasing spinal curves in elderly patients Skeletal Radiol 13 280 1985
5. Hall S, Bartleson JD Onofrio BM, et al Lumbar spinal stenosis Clinical features, diagnostic procedures, and results of surgical treatment in 68 patients Ann Intern Med 103 271 1985
6. Collet BS, Katzew A Helfand AE Podiatry for the geriatric patient Ann Rev Gerontol Geriatr 4 221, 1984

B *Hip*
1. Wilcock GK The prevalence of osteoarthrosis of the hip requiring total hip replacement in the elderly Int J Epidemiol 8 247, 1979
2. Sautter RD, Koch EL, Myers WO, et al Aspirin-sulfinpyrazone in prophylaxis of deep venous thrombosis in total hip replacement J Am Med Assoc 250 2649, 1983
3. Versluysen M Pressure sores in elderly patients The epidemiology related to hip operations J Bone Joint Surg 67 [illegible] 1985
4. Little JW The need for antibiotic coverage for dental treatment of patients with joint replacements Oral Surg 55 20 1983
5. Inman RD, Gallegos KV Brause BD, et al Clinical and microbial features of prosthetic joint infection. Am J Med 77 47 1984
6. Lawton JO Baker MR, Dickson RA Femoral neck fractures—two populations Lancet ii 70 1983
7. Bastow MD, Rawlings J Allison SP Undernutrition hypothermia, and injury in elderly women with fractured femur An injury response to altered metabolism? Lancet i 143 1983
8. Lyon LJ, Nevins MA Management of hip fractures in nursing home patients To treat or not to treat? J Am Geriatr Soc 32 391, 1984
9. Crane JG, Kernek CB Mortality associated with hip fractures in a single geriatric hospital and residential health facility A ten-year review J Am Geriatr Soc 31 472, 1983

XXI OTORHINOLARYNGOLOGY

A *General*
1. Pruett TL Simmons RL Nosocomial gram-negative bacillary

parotitis J Am Med Assoc 251 252 1984
2. Larrabee WF, Jr, Caro I. The aging face: Why changes occur, how to correct them Postgrad Med 76(7) 37, 1984
3. McNeil BJ, Weichselbaum R, Pauker SG Speech and survival Tradeoffs between quality and quantity of life in laryngeal cancer N Engl J Med 305 982 1981
4. Doty RL Shaman P, Applebaum SL et al Smell identification ability Changes with age Science 226 1441 1984

B Hearing Problems
1 Mader S Hearing impairment in elderly persons J Am Geriatr Soc 32 548 1984
2 Thomas PD Hunt WC, Garry PJ, et al Hearing acuity in a healthy elderly population. Effects on emotional cognitive, and social status J Gerontol 38 231 1983
3 Uhlmann RF Larson EB, Koepsell TD Hearing impairment and cognitive decline in senile dementia of the Alzheimer's type J Am Geriatr Soc 34 207, 1986
4 Browning GG, Gatehouse S Lowe GDO Blood viscosity as a factor in sensorineural hearing impairment Lancet 1 121, 1986
5 Rupp RR, Vaughn GR, Lightfoot RK Nontraditional "aids" to hearing Assistive listening devices Geriatrics 39(3) 55, 1984
6 Rupp RR, Jackson PD Primary care for the hearing impaired A changing picture Geriatrics 41(3):75, 1986

XXII PHARMACOLOGY (see also pertinent disease categories)
1 Vestal RE Pharmacology and aging J Am Geriatr Soc 30 191, 1982
2 Bliss MR Prescribing for the elderly. Br Med J 283 203, 1981
3 Hasselbalch H, Jorgensen F, Wamberg T, et al Alternatives to optimal administration of tablets Acta Med Scand 217:527, 1985
4 Lamy PP Over-the-counter medication. The drug interactions we overlook J Am Geriatr Soc 30 (Suppl).69, 1982
5 Greenblatt DJ, Abernethy DR, Divoll M, et al. Antipyretic analgesic drugs as models for studies for drug disposition in old age Am J Med 75 (Suppl 5A) 127, 1983
6 Woodhouse KW Mutch E Williams FM, et al The effect of age on pathways of drug metabolism in human liver Age Ageing 13:328, 1984
7 Paulsen O, Nilsson LG Distribution of acetylator phenotype in relation to age and sex in Swedish patients Eur J Clin Pharmacol 23 311, 1985
8 Holm HA, Finnanger B Hartmann A, et al Heparin treatment of deep venous thrombosis in 280 patients Symptoms related to dosage Acta Med Scand 215 47, 1984
9 Vestal RE, Wood AJ, Shand DG. Reduced beta-adrenoceptor sensitivity in the elderly Clin Pharmacol Ther 26 181 , 79
10 Blazer DG II, Federspiel CF, Ray WA, et al The risk of anticholinergic toxicity in the elderly A study of prescribing practices in two populations J Gerontol 38 31, 1983
11 Roe DA Therapeutic effects of drug-nutrient interactions in the elderly. J Am Diet Assoc 85 174, 1985

XXIII PSYCHIATRY
A General
1 Glasser M, Rabins P Mania in the elderly Age Ageing 13 210, 1984
2 Kolman PB The value of laboratory investigations of elderly psychiatric patients J Clin Psychiatry 45 112, 1984
3 Granick S. Psychologic assessment technology for geriatric practice J Am Geriatr Soc 31 728, 1983
4 Eastwood MR, Corbin S. Hallucinations in patients admitted to a geriatric psychiatry service Review of 42 cases J Am Geriatr Soc 31.593, 1983
5 Morrant JC, Ablog JR The angry elderly patient. An approach to understanding Postgrad Med 74(6) 93, 1983
6 Silverstone B, Miller S The isolation of the community elderly from the informal social structure. Myth or reality? J Geriatr Psychiatry 13.27, 1980
7 Cohen NA. On loneliness and the aging process Int J Psychoanal 63 149, 1982
8 Howard JH, Marshall J, Rechnitzer PA, et al Adapting to retirement J Am Geriatr Soc 30 488, 1982

9. Ekerdt DJ, Baden L, Bosse R, et al The effect of retirement on physical health Am J Public Health 73 779, 1983
10. Coakley D, Woodford-Williams E Effects of burglary and vandalism on the health of old people Lancet ii 1066, 1979
11. Asnes DP Psychotherapy of the elderly The life validation approach in psychotherapy with elderly patients J Geriatr Psychiatry 16 87, 1983

B *Alcoholism*

1. Atkinson JH Schuckit MA Alcoholism and over-the-counter and prescription drug misuse in the elderly Ann Rev Gerontol Geriatr 2 255, 1981
2. Hartford JT Samorajski T Alcoholism in the geriatric population J Am Geriatr Soc 30 18, 1982
3. Barboriak JJ, Rooney CB Leitschuh TH, et al Alcohol and nutrient intake of elderly men J Am Diet Assoc 72 493, 1978

C *Bereavement Death*

1. Gallagher DE, Thompson LW, Peterson JA Psychosocial factors affecting adaptation to bereavement in the elderly Int J Aging Hum Dev 14 79, 1982
2. MacDonald AJ, Dunn G Death and the expressed wish to die in the elderly An outcome study. Age Ageing 11 189, 1982
3. Groth-Juncker A, McCusker J Where do elderly patients prefer to die? J Am Geriatr Soc 31 457, 1983
4. Schleifer SJ, Keller SE, Camerino M, et al Suppression of lymphocyte stimulation following bereavement J Am Med Assoc 250 374, 1983
5. Tolle SW, Elliot DL, Hickam DH Physician attitudes and practices at the time of patient [illegible] h Arch Intern Med 144 2389, [illegible]4
6. Sr[illegible]w RM, Atwood K Probable death Perspec[illegible]e of the elderly South Med J 78 851, 1985
7. Stewart T, Shields CR Grief in chronic illness Assessment and management Arch Phys Med Rehab 66 447, 1985

D *Depression*

1. Goff DC, Jenike MA Treatment-resistant depression in the elderly J Am Geriatr Soc 34 63, 1986
2. Lakshmanan M, Mion LC Frengley JD. Effective low-dose tricyclic antidepressant treatment for depressed geriatric rehabilitation patients A double-blind study J Am Geriatr Soc 34 421, 1986
3. Rubinow DR Post RM Savard R, et al Cortisol hypersecretion and cognitive impairment in depression Arch Gen Psychiatry 41 279, 1984
4. Gallagher DE Thompson LW Effectiveness of psychotherapy for both endogenous and nonendogenous depression in older adult outpatients J Gerontol 38 707, 1983
5. Blazer DG Bachar JR Manton KG Suicide in late life Review and commentary J Am Geriatr Soc 34 519, 1986
6. Borson S Barnes RA Kukull WA et al Symptomatic depression in elderly medical outpatients I Prevalence demography and health service utilization J Am Geriatr Soc 34 341 1986

E *Pain*

1. Harkins SW Warner MH Age and pain Annu Rev Gerontol Geriatr 1 121 1980
2. National Institutes of Health Pain in the elderly Patterns change with age J Am Med Assoc 241 2491 1979
3. Kane RL, Bernstein L Wales J et al Hospice effectiveness in controlling pain J Am Med Assoc 253 2683, 1985

F *Psychopharmacology*

1. Thompson TL II, Moran MG Nies AS Psychotropic drug use in the elderly N Engl J Med 308 134,308 194, 1983
2. Branconnier RJ, Cole JO Ghazvinian S, et al Clinical pharmacology of bupropion and imipramine in elderly depressives J Clin Psychiatry 44 5(Sec 2)130, 1983
3. Veith RC, Raskind MA Caldwell JE, et al Cardiovascular effects of tricyclic antidepressants in depressed patients with chronic heart disease N Engl J Med 306 954, 1982
4. Bayer AJ, Pathy MSJ, Ankier SI Pharmacokinetic and pharmacodynamic characteristics of trazodone in the elderly Br J Clin Pharmacol 16 371, 1983
5. Georgotas A, Friedman E McCarthy M, et al Resistant geriatric depressions and therapeutic response to monoamine oxidase inhibitors Biol Psychiatry 18 195, 1983

6. Salzman C, Shader RI, Greenblatt DJ, et al: Long versus short half-life benzodiazepines in the elderly. Arch Gen Psychiatry 40:293, 1983
7. Pinsker H, Suljaga-Petchel K: Use of benzodiazepines in primary-care geriatric patients. J Am Geriatr Soc 32:595, 1984
8. Bushey M, Rathey U, Bowers MB: Lithium treatment in a very elderly nursing home population. Compr Psychiatry 24:397, 1983
9. Steinhart MJ The use of haloperidol in geriatric patients with organic mental disorder. Curr Ther Res 33:132, 1983
10. Guze BH, Baxter LR, Jr: Current concepts Neuroleptic malignant syndrome N Engl J Med 313:163, 1985
11. Jenike MA Tardive dyskinesia Special risk in the elderly J Am Geriatr Soc 31 71, 1983

G *Sexuality*

1. Renshaw DC Geriatric sex problems J Geriatr Psychiatry 17:123, 1984
2. Masters WH, Johnson VE Sex and the aging process J Am Geriatr Soc 29:385, 1981
3. Szasz G Sexual incidents in an extended care unit for aged men J Am Geriatr Soc 31 407, 1983

H *Sleep*

1. Dement WC, Miles LE, Carskadon MA "White Paper" on sleep and aging J Am Geriatr Soc 30 25, 1982
2. Roehrs T, Zorick F, Sicklesteel J, et al Age-related sleep-wake disorders at a sleep disorder center. J Am Geriatr Soc 31:364, 1983
3. Carskadon MA, Seidel WF, Greenblatt DJ, et al Daytime carryover of triazolam and flurazepam in elderly insomniacs Sleep 5:361, 1982
4. Yesavage J, Bliwise D, Guilleminault C, et al Preliminary communication. Intellectual deficit and sleep-related respiratory disturbance in the elderly Sleep 8:30, 1985
5. Hayter J. To nap or not to nap? Geriatr Nurs 6:104, 1985

XXIV. PULMONARY

1. Konno K, Arai H, Motomiya M, et al: A biochemical study on glycosaminoglycans (Mucopolysaccharides) in emphysematous and in aged lungs Am Rev Respir Dis 126:797, 1982
2. Brandstetter RD, Kazemi H Aging and the respiratory system. Med Clin North Am 67(2) 419, 1983
3. Ziment I. Management of respiratory problems in the aged J Am Geriatr Soc 30 S36, 1982
4. Au WY, Dutt AK, DeSoyza N. Theophylline kinetics in chronic obstructive airway disease in the elderly. Clin Pharmacol Ther 37. 472, 1985
5. Mountain RD, Neff TA Oral theophylline intoxication. A serious error of patient and physician understanding Arch Intern Med 144 724, 1984
6. Landesman SH, Smith PM Schiffman G: Pneumococcal vaccine in elderly patients with COPD Chest 84 433, 1983
7. Goldhaber SZ, Hennekens CH, Evans DA, et al Factors associated with correct antemortem diagnosis of major pulmonary embolism Am J Med 73 822, 1982
8. Margolis ML, Israel HL Sarcoidosis in older patients—clinical characteristics and course Geriatrics 38(1):121,128, 1983
9. Kripke DF, Ancoli-Israel S, Okudaira N. Sleep apnea and nocturnal myoclonus in the elderly Neurobiol Aging 3:329, 1982
10. Smallwood RG, Vitiello MV, Giblin EC, et al Sleep apnea Relationship to age sex and Alzheimer's dementia Sleep 6 16, 1983

XXV RENAL

1. Neu S, Kjellstrand CM Stopping long-term dialysis An empirical study of withdrawal of life-supporting treatment N Engl J Med 314 14, 1986
2. Lindeman RD, Tobin J, Shock NW. Longitudinal studies on the rate of decline in renal function with age J Am Geriatr Soc 33 278, 1985
3. Brenner BM, Meyer TW, Hostetter TH: Dietary protein intake and the progressive nature of kidney disease The role of hemodynamically mediated glomerular injury in the pathogenesis of progressive glomerular sclerosis in aging renal ablation, and intrinsic renal disease N Engl J Med 307 652, 1982
4. Durakovic Z, Mimica M Pro-

teinuria in the elderly Gerontology 29 121, 1983
5 Kirkland JL Lye M, Levy DW, et al Patterns of urine flow and electrolyte excretion in healthy elderly people Br Med J 287 1665, 1983
6 Oliveira DBG, Winearls CG Acute renal failure in the elderly can have a good prognosis Age Ageing 13 304, 1984
7 Moorthy AV, Zimmerman SM Renal disease in the elderly Clinicopathologic analysis of renal disease in 115 elderly patients Clin Nephrol 14 223, 1980
8 Bennett WM, Luft F, Porter GA Pathogenesis of renal failure due to aminoglycosides and contrast media used in roentgenography Am J Med 69 767, 1980
9 Olin JW, Vidt DG, Gifford RW, Jr, et al Renovascular disease in the elderly An analysis of 50 patients J Am Coll Cardiol 5 1232, 1985
10 Zech P, Colon S, Pointet P, et al The nephrotic syndrome in adults aged over 60 Etiology, evolution, and treatment of 76 cases Clin Nephrol 17 232, 1982
11 Kock B, Kuhlback B, Ahonen J, et al Kidney transplantation in patients over 60 years of age Scand J Urol Nephrol 54(Suppl) 103, 1980
12 Nicholls AJ, Waldek S, Platts MM, et al Impact of continuous ambulatory peritoneal dialysis on treatment of renal failure in patients aged over 60 Br Med J 288 18, 1984
13 Fox DA, Jick H Nonsteroidal antiinflammatory drugs and renal disease J Am Med Assoc 251 1299, 1984
14 Schrier RW, Henrich WL Nonsteroidal antiinflammatory drugs Caution still indicated J Am Med Assoc 251 1301, 1984

XXVI RHEUMATOLOGY

A *General*

1 Baer AN, Pincus T Occult systemic lupus erythematosus in elderly men J Am Med Assoc 249 3350, 1983
2 Raddatz DA, Mahowald ML, Bilka PJ. Acute polyarticular gout Ann Rheum Dis 42 117, 1983
3 Wilkins E, Dieppe P, Maddison P, et al Osteoarthritis and articular chondrocalcinosis in the elderly Ann Rheum Dis 42 280, 1983
4 Forman MD, Malamet R, Kaplan D A survey of osteoarthritis of the knee in the elderly J Rheumatol 10 282, 1983
5 McCarty DJ, O'Duffy D, Pearson L, et al Remitting seronegative symmetrical synovitis with pitting edema RS3PE syndrome J Am Med Assoc 254 2763, 1985

B *Therapy*

1 Kean WF, Bellamy N, Brooks PM Gold therapy in the elderly rheumatoid arthritis patient Arthritis Rheum 26 705, 1983
2 Dykman TR, Gluck OS, Murphy WA, et al Evaluation of factors associated with glucocorticoid-induced osteopenia in patients with rheumatic diseases Arthritis Rheum 28 361 1985
3 Caradoc-Davies TH Nonsteroidal antiinflammatory drugs, arthritis, and gastrointestinal bleeding in elderly inpatients Age Ageing 13 295, 1984
4 Goodwin JS, Regan M Cognitive dysfunction associated with naproxen and ibuprofen in the elderly Arthritis Rheum 25 1013 1982
5 Blackshear JL, Davidman M, Stillman MT Identification of risk for renal insufficiency from nonsteroidal antiinflammatory drugs Arch Intern Med 143 1130, 1983

C *Polymyalgia Rheumatica*

1 Ayoub WT, Franklin CM, Torretti D Polymyalgia rheumatica Duration of therapy and long-term outcome Am J Med 79 309, 1985
2 Chuang T-Y, Hunder GG, Ilstrup DM, et al Polymyalgia rheumatica A ten-year epidemiologic and clinical study Ann Intern Med 97 672, 1982
3 Hall S Persellin S, Lie JT, et al The therapeutic impact of temporal artery biopsy Lancet 1 1217, 1983
4 Shoch D Ischemic optic neuropathy Common cause of visual loss in the elderly Postgrad Med 74(6) 74, 1983
5 Chou CT, Schumacher HR Jr Clinical and pathologic studies of synovitis and polymyalgia rheumatica Arthritis Rheum 27 1107, 1984
6 Larson TS, Hall S, Hepper NGG, et al Respiratory tract symptoms as a clue to giant cell arteritis Ann Intern Med 101 594 1984
7 Save-Soderbergh J, Malmvall BE,

Andersson R, et al Giant cell arteritis as a cause of death Report of nine cases J Am Med Assoc 255 493, 1986

XXVII SURGERY ANESTHESIA

A General

1 Burns RP Cochran JL, Russell WL, et al Appendicitis in mature patients Ann Surg 201 695, 1985
2 Adkins RB Scott HW, Jr. Surgical procedures in patients aged 90 years and older South Med J 77 1357 1984
3 Norman DC, Yoshikawa TT Intraabdominal infections in the elderly J Am Geriatr Soc 31 677, 1983
4 Bak MP Boley SJ Sigmoid volvulus in elderly patients Am J Surg 151 71, 1986
5 Greenburg AG, Salk RP, Pridham D Influence of age on mortality of colon surgery Am J Surg 150 65 1985
6 Deitch EA Clothier J Burns in the elderly An early surgical approach J Trauma 23 891, 1983
7 Stromberg BV Hand infections in the elderly South Med J 78 157 1985
8 Deitz DM Standage BA Pinson CW et al Improving the outcome in gallstone ileus Am J Surg 151 572 1986
9 Nehme AE Groin hernias in elderly patients Management and prognosis Am J Surg 146 257, 1983
10 Oreskovich MR, Howard JD, Copass MK et al Geriatric trauma Injury patterns and outcome J Trauma 24 565, 1984

B Anesthesia

1 Mohr DN Estimation of surgical risk in the elderly A correlative review J Am Geriatr Soc 31 99 1983
2 Djokovic JL, Hedley-Whyte J Prediction of outcome of surgery and anesthesia in patients over 80 J Am Med Assoc 242 2301, 1979
3 Ropper AH Wechsler LR Wilson LS Carotid bruit and the risk of stroke in elective surgery N Engl J Med 307 1388, 1982
4 Seymour DG, Pringle R Postoperative complications in the elderly surgical patient Gerontology 29 262, 1983
5 Gerson MC, Hurst JM, Hertzberg VS, et al Cardiac prognosis in noncardiac geriatric surgery Ann Intern Med 103(6 pt 1) 832, 1985
6 Rich MW, Sandza JG Kleiger RE, et al Cardiac operations in patients over 80 years of age J Thorac Cardiovasc Surg 90 56 1985

XXVIII UROLOGY

A Prostate Cancer

1 Chodak GW, Schoenberg HW Early detection of prostate cancer by routine screening J Am Med Assoc 252 3261, 1984
2 Utz DC Radical excision of adenocarcinoma of prostate with pelvic lymph node involvement Surgical gesture or curative procedure Urology 24(5 Suppl) 4, 1984
3 Slack NH, Murphy GP A decade of experience with chemotherapy for prostate cancer Urology 22 1, 1983
4 Parmar H, Phillips RH, Lightman SL, et al Randomised controlled study of orchidectomy vs long-acting D-Trp-6-LHRH microcapsules in advanced prostatic carcinoma Lancet ii 1201, 1985
5 Green N Bodner H, Broth E Prostate cancer Experience with definitive irradiation in the aged Urology 25 228, 1985
6 Schover LR von Eschenbach AC, Smith DB, et al Sexual rehabilitation of urologic cancer patients A practical approach CA 34 66, 1984
7 Viola MV Fromowitz F, Oravez S, et al Expression of ras oncogene p21 in prostate cancer N Engl J Med 314 133, 1986
8 McNeal JE, Bostwick DG Kindrachuk RA, et al Patterns of progression in prostate cancer Lancet i 60, 1986

B Prostatism

1 Klein LA, Stoff JS Prostaglandins and the prostate An hypothesis on the etiology of benign prostatic hyperplasia Prostate 4 247, 1983
2 Trachtenberg J, Bujnovszky P Walsh PC Androgen receptor content of normal and hyperplastic human prostate J Clin Endocrinol Metab 54 17, 1982
3 Glynn RJ, Campion EW, Bouchard GR, et al The development of benign prostatic hyperplasia among volunteers in the Normative Aging Study Am J Epidemiol 121 78, 1985
4 Orland SM, Hanno PM Wein

AI. Prostatitis, prostatosis, and prostatodynia Urology 25 439, 1985

C *Urinary Incontinence (Catheters—see Infectious Disease)*

1. Williams ME, Pannill FC III Urinary incontinence in the elderly. Physiology pathophysiology, diagnosis, and treatment Ann Intern Med 97 895, 1982
2. Guarino JR Auscultatory percussion of the urinary bladder Arch Intern Med 145 1823, 1985
3. Sullivan DH, Lindsay RW Urinary incontinence in the geriatric population of an acute care hospital J Am Geriatr Soc 32 646, 1984
4. Guam L, Ricciotti NA, Fair WR Endoscopic bladder neck suspension for stress urinary incontinence J Urol 132 1119 1984
5. Burgio KL, Whitehead WE, Engel BT Urinary incontinence in the elderly Bladder-sphincter biofeedback and toileting skills training Ann Intern Med 103 507, 1985
6. Furlow WL, Barrett DM The artificial urinary sphincter Experience with the AS 800 pump-control assembly for single-stage primary deactivation and activation—a preliminary report Mayo Clin Proc 60 255, 1985
7. Bennett CJ, Diokno AC Clean intermittent self-catheterization in the elderly Urology 24 43 1984
8. Hadley EC Bladder training and related therapies for urinary incontinence in older people J Am Med Assoc 256 372, 1986
9. McGrother CW, Castleden CM Duffin H, et al Provision of services for incontinent elderly people at home J Epidemiol Community Health 40(2) 134 1986

Geriatric Textbooks for Family Physicians

The STFM Task Force on Geriatric Education

Although the word "geriatrics" has been in existence for over 70 years, the specialty of geriatric medicine has only been a reality since the reorganization of the British National Health Service in 1948. The United States medical establishment has only recently shown interest in this field, with significant activity developing since the early part of this decade. Family medicine educators have certainly been involved in the development of geriatric core curricula for many of their training programs and have been visible both nationally and locally in the development of the discipline. Indeed, the conceptual framework of geriatric medicine, which crosses specialty lines, emphasizes health care teams, pays attention to family issues, and is highly consistent with the family practice movement. As geriatrics grows, family practice residents, educators, and attending physicians need to pay attention to this new discipline. They

---

Members of the task force at the time this work was written include Coordinator Robert L. Dickman, MD Mt Sinai Medical Center Kenneth Brummel-Smith MD, Rancho Los Amigos Medical Center G F Bunting, MD, Lincoln Family Practice Program, Gerald K. Goodenough MD University of Utah Medical Center Lynda McNulty, PhD Lincoln Cooperative Health Education Program Philip Sloane, MD University of North Carolina at Chapel Hill, Gregg Warshaw, MD University of Cincinnati

---

Address correspondence to Dr Dickman, Department of Family Medicine Mt Sinai Medical Center University Circle Cleveland OH 44106

must feel comfortable both about their cognitive "data base" in the area and their own skills in dealing with elderly patients in a variety of clinical settings.

One way of improving one's knowledge is to read one or more textbooks of geriatric medicine. Between 1980 and 1985 over 1,000 textbooks were published using the words "geriatric," "aged," "gerontology," and "aging" in their titles. Indeed, family physicians are bombarded almost weekly with announcements heralding new publications in the field.

The Task Force on Geriatric Education of the Society of Teachers of Family Medicine compiled this review to aid our colleagues in selecting a few appropriate texts for use in training and practice. Obviously, a decision to review but five texts cannot claim to be comprehensive but, on the other hand, can aid physicians who have little time to sort through the voluminous literature.

We selected books that are short enough to be read in their entirety by family physicians interested in the field or by all residents in a training program. We have not selected comprehensive or exhaustive texts, which may be considered more as resource books than for complete reading. Three of the texts have been written by physicians in family medicine and, therefore, are most appropriate for reading by their colleagues. Three are paperback and relatively inexpensive. As a summary we have prepared Table 1, which provides for easy comparison of all five books to assist readers in making informed choices about which books to purchase.

Table 1

GERIATRIC TEXTBOOKS FOR FAMILY PHYSICIANS: A SUMMARY

	Cape	Reichel	Ham	Kane	[illegible]
1. Presentation of the major clinical content areas peculiar to geriatric medicine (falls, incontinence, mobility problems, drug use, long-term care, etc.)	4	3	[illegible]	[illegible]	4
2. Usefulness as a reference text	4	[illegible]	[illegible]	[illegible]	[illegible]
3. Usefulness as an introductory book for medical students	3	3	[illegible]	[illegible]	[illegible]
4. Usefulness as an introductory book for family practice residents	4	4	4	[illegible]	[illegible]
5. Usefulness as an introductory book for practicing family physicians	[illegible]	[illegible]	3	[illegible]	[illegible]
6. Readability of text, tables, and figures	[illegible]	[illegible]	3	4	
7. Provides practical information for clinicians	4	[illegible]	4	[illegible]	[illegible]
8. Completeness	3	4	[illegible]	4	
9. Justifies cost	[illegible]	4	4	[illegible]	[illegible]

Rating Code: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent

Fundamentals of Geriatric Medicine. *Cape RDT, Coe RM, Rossman I, Editors. 465 pp. (paperback). New York, Raven Press, 1983, $17.50.*

Reviewed by
Kenneth Brummel-Smith, MD

Fundamentals of Geriatric Medicine is a valuable component of the family physician's geriatric library. While it doesn't provide a comprehensive review of all problems encountered in the care of the older person, it does address some aspects of geriatric care rarely seen in common textbooks on geriatrics. It is a useful book for primary care physicians interested in providing quality geriatric care.

The first section is devoted to fundamentals of geriatrics. The essence of good geriatric care, according to the authors, is the "approach" of the physician, which emphasizes the whole person. Next, the biology of aging is addressed. Descriptions that distinguish changes due to aging from those due to disease are frequent. This section is much better than similar sections in other geriatric texts.

The section on diagnosis is weaker. While the chapters covering falls and spine problems are very good, others suffer from superficiality or biased presentation. In the next section, management issues are addressed. These are basic, short, and to the point. While some academicians will find them too basic, the busy practitioner or resident will find them helpful and practical. Perhaps the most illuminating and interesting section is the last — "Controversies in Geriatric Medicine." Hypertension, estrogen therapy, nutrition, surgery, and ethical dilemmas in the elderly are discussed. A problem-solving approach that emphasizes values and the ability to cope with uncertainty are emphasized. Rarely does one see such thought-provoking writing in a textbook.

Family practice educators will find the self-assessment questions (123 multiple-choice questions) and the patient management problems (six) particularly helpful. These tools will also be beneficial to physicians studying for the boards.

Clinical Aspects of Aging. Second Edition. *Reichel W, Editor. 642 pp. Baltimore, Williams and Wilkins, 1983, $49.95*

Reviewed by
Gerald Goodenough, MD

A great deal of information has been packed into this quite portable volume (in part because of the small print), whose original purpose was to emphasize the geriatric patient and the special needs of the elderly. While the book can be used as a quick reference, it is also very readable and, as stated in the preface, assembled for the general

audience.

The book is divided into two sections. The larger first section deals with clinical evaluation, drug therapy, and chapters that are specific for different organ systems. These chapters are comprehensive, up-to-date, and practical. The chapter on drug prescribing for the elderly by Peter Lamy deserves special mention for its patient-oriented approach. Robert Lindman's chapter on fluid and electrolyte balance brings a difficult topic into sharp focus and clarifies the issues in a very concise way.

The second section, "Other Considerations," deals with biological aspects of aging, demographics, social issues, and attitudes about sexuality and death. Conspicuously absent is a chapter devoted to comprehensive functional assessment, with a discussion of some of the current assessment tools available. The book must be seen as a valuable addition to the library of busy practitioners, educators, students, and even policy-makers.

Essentials of Clinical Geriatrics.

Kane RL, Ouslander JG, Abrass IB, Editors. 369 pp. (paperback). New York, McGraw Hill, 1984. $19.95.

Reviewed by Philip Sloane, MD

This small, compact book by three physicians, members of the UCLA multicampus division of geriatric medicine, is meant to be used as an introductory text for residents, fellows, or fourth-year medical students. It is clearly written and full of charts and tables. The book is organized in three sections: geriatric assessment, differential diagnosis and management of common problems, and general management strategies, including an approach to drug therapy and the use of long-term care resources. The book also contains an appendix of recommended geriatric medical forms. Many of the charts and tables are quite helpful, although some are too long and detailed.

There is some unevenness in the quality of chapters. Some, such as the chapter on incontinence, are extremely well written and researched. Dr. Ouslander, one of the authors, is a nationally recognized authority in this area. The chapters on demography, iatrogenesis, and developing clinical patient care plans are also particularly illuminating. Other chapters, however, are more sketchy and theoretical, often presenting generalities and thus limiting the book's usefulness as a reference text for clinicians. Lack of specific therapeutic recommendations is the most significant flaw of the book, which underlines its importance as an introduction to geriatrics rather than a standard reference. It can be highly recommended as a resource for residents or fellows taking a geriatric rotation.

Primary Care Geriatrics.

Ham R, Editor. 352 pp. (paperback). Boston, Wright (PSG Inc.), 1983. $39.50, available from STFM.

Reviewed by G.F. Bunting, MD; Lynda McNulty, PhD

Primary Care Geriatrics is a large paperback teaching "manual" prepared primarily by Dr. Ham, a nationally recognized family physician and geriatrician. The text is designed to provide an overview of geriatric issues for students and residents and is most useful for these learner groups. It is unique in that it emphasizes a case-based learning approach, and deals only with multidisciplinary-type problems commonly seen in elderly people. These include confusion, accidents, genito-urinary problems, and immobilization. While Dr. Ham is the principal author of most chapters, he has elicited other contributors who are nationally recognized authorities in some of these areas. The design and organization of chapters and content material are excellent and the case problems are well prepared and appropriate for medical education. The instructional design is sound: each section includes objective pretests and posttests.

A great amount of material is in small print, making the book difficult to read for long periods of time. Some case presentations are a bit lengthy and lose their impact as teaching tools. One area, important in treating elderly, that is not covered is cost factors and the older patient's ability to pay for services.

Core of Geriatric Medicine.

Libow LS, Sherman FT, Editors. 341 pp., St. Louis, Mosby, 1980. $26.95.

Reviewed by Gregg Warshaw, MD

This book was edited closely by Drs. Libow and Sherman and includes contributions primarily from other faculty related to the Jewish Institute for Geriatric Care in New Hyde Park, New York. The book has a consistent format in which each chapter begins with attitudinal, cognitive, and skill objectives, and a pretest. At the end of each chapter, after the references, the authors include a posttest with answers. In this way, the book does serve as an excellent basis for developing a curriculum in geriatric medicine.

The book's content is at a level most appreciated by medical students, but it could also serve as an introduction for family practice residents. Some areas lack enough depth for residents or practicing physicians. The subjects covered are somewhat spotty; thus, the book is not a comprehensive review of geriatric medicine. Some sections, however, are excellent, including the chapters on stroke, fractured hip, amputation, pressure sores, and incontinence. There are also solid chapters on speech and language disorders, hearing disorders, visual disorders, and disorders of the foot. The book contains few photographs or diagrams, but there are some particularly nice pictures in the foot and rehabilitation chapters.

In summary, this is a useful book for medical students on one-month rotations. Some chapters will be of interest to family medicine residents and faculty.

APPENDIX F

ORDER BLANK FOR GERIATRIC CURRICULUM

RESOURCE PACKAGE

ERIC Full Text Provided by ERIC

Now Available:

GERIATRIC

CURRICULUM RESOURCE PACKAGE

This Geriatric Curriculum Resource Package was originally designed by Stanford University's Division of Family Medicine for the Geriatric Education for Physician Assistant Faculty Project. It contains eight curriculum units, modeling a comprehensive geriatric training curriculum for PA and other health professional students, using both didactic and clinical learning experiences. It also provides recent reference material to supplement a basic geriatric textbook, sources for development of audio-visual materials, resources for health education for elders, and specific resources in writing curricula and evaluation strategies.

The eight units are:

- Biology of Aging
- Psychosocial Dimensions in Geriatric Care
- Health Promotion, Maintenance and Rehabilitation
- Evaluating the Older Patient
- Disease Processes
- Geriatric Pharmacology
- Long-Term Care Issues
- Curriculum and Instructional Development for Geriatric Training

Edited by: Gwen Yeo, PhD, Donna Tully, PA-C,
Virginia Fowkes, FNP, MHS and Mary Goldstein, MD
Division of Family Medicine
Stanford University School of Medicine

For more information, call: Gwen Yeo, PhD
(415) 725-4489

Order Form

Price: $18.00 per curriculum package (includes postage

Quantity ordered: ________ Total amount enclosed: ________

Please make checks payable to: Division of Family Medicine

Return order form to: Joyce Ito
Division of Family Medicine
Stanford University School of Medicine
HRP Building, Suite [illegible]
Stanford, California 94305-5092

Mail to: ______________________
____
____
____

APPENDIX G

LIST OF GERIATRIC RESEARCH EDUCATIONAL

AND CLINICAL CENTERS (GRECCs) IN VA MEDICAL CENTERS

ERIC

Section I

EDUCATIONAL RESOURCE DIRECTORY
GERIATRIC RESEARCH, EDUCATION AND CLINICAL CENTERS (GRECCs)
OFFICE OF GERIATRICS AND EXTENDED CARE

Address/Office Symbol	Federal Telephone System (FTS)	Commercial Telephone Number
ARKANSAS		
Geriatric Research, Education and Clinical Center (182/IR) John L. McClellan Memorial VA Medical Center 4300 W. 7th Street Little Rock, AR 72205	735-2813	(501) 661-1202 Ext. 2813
CALIFORNIA		
Geriatric Research, Education and Clinical Center (182B) Palo Alto VA Medical Center 3801 Miranda Avenue Palo Alto, CA 94304	449-5846	(4'5) 493-5000 Ex.. 5846
Geriatric Research, Education and Clinical Center (11E) Sepulveda VA Medical Center 16111 Plummer Street Sepulveda, CA 91343	960-9484	(818) 894-2722
Geriatric Research, Education and Clinical Center (W11G) West Los Angeles (Wadsworth) VA Medical Center Wilshire & Sawtelle Blvds. West Los Angeles, CA 90073	794-6105	(213) 824-4301

Section I

EDUCATIONAL RESOURCE DIRECTORY
GERIATRIC RESEARCH, EDUCATION AND CLINICAL CENTERS (GRECCs)
OFFICE OF GERIATRICS AND EXTENDED CARE

Address/Office Symbol	Federal Telephone System (FTS)	Commercial Telephone Number
FLORIDA		
Geriatric Research, Education, and Clinical Center (182) VA Medical Center Gainesville, FL 32602	947-6077	(904) 374-6077
MASSACHUSETTS		
Geriatric Research, Education and Clinical Center (182B) Bedford VA Medical Center Bedford Division 200 Springs Road Bedford, MA 01730	840-0631	(617) 275-7500 Ext. 631
Geriatric Research, Education and Clinical Center (11A) VA Medical Center 1400 Veterans of Foreign Wars Parkway West Roxbury MA 02132	837-5990	(617) 323-7700 Ext. 5990
MINNESOTA		
Geriatric Research, Education and Clinical Center (11G) Minneapolis VA Medical Center 54th St. & 48th Ave., South Minneapolis, MN 55417	784 6313	(612) 725-6767 Ext. 6313

200

Section I

EDUCATIONAL RESOURCE DIRECTORY
GERIATRIC RESEARCH, EDUCATION AND CLINICAL CENTERS (GRECCs)
OFFICE OF GERIATRICS AND EXTENDED CARE

Address/Office Symbol	Federal Telephone System (FTS)	Commercial Telephone Number
MISSOURI		
Geriatric Research, Education and Clinical Center (111GJB) St. Louis VA Medical Center Jefferson Barracks St. Louis, MO 63125	276-7205	(314) 894-4659
NORTH CAROLINA		
Geriatric Research, Education, and Clinical Center (14A) Durham VA Medical Center 508 Fulton Street Durham, NC 27705	629-6492	(919) 286-0411 Ext. 6492
WASHINGTON		
Geriatric Research, Education and Clinical Center (182B) American Lake Division American Lake VA Medical Center Tacoma, WA 98493	396-6930	(206) 582-8440 Ext. 6930
Geriatric Research, Education and Clinical Center (182B) Seattle Division Seattle VA Medical Center 4435 Beacon Avenue, South Seattle, WA 98108	396-2308	(206) 762-1010 Ext. 2308

APPENDIX H

LIST OF AREA HEALTH EDUCATION CENTERS (AHECs)

ERIC Full Text Provided by ERIC

PROJECT DIRECTORS

ARIZONA

- Andrew W Nichols, M D., M P H
  Director
  Arizona Area Health Education Centers Program
  Rural Health Office
  University of Arizona
  3131 East Second Street
  Tucson AZ 85716
  (602) 626-7946

ARKANSAS

- Charles Cranford D D S
  AHEC Program Slot 599
  University of Arkansas for Medical Sciences
  4301 West Markham Street
  Little Rock AR 72205
  (501) 661-5260

CALIFORNIA (Statewide)

- Malcolm S M Watts M D
  Project Director
  California AHEC System
  Office of the Dean
  School of Medicine Room 224-S
  University of California
  San Francisco CA 94143
  (415) 476-8332
- Clark Jones
  Associate Project Director
  California AHEC System
  Statewide Office
  5110 East Clinton Way Suite 115
  Fresno CA 93727-2098

CALIFORNIA (College of Osteopathic Medicine)

- O J Bailes, D O
  AHEC Program Director
  College of Osteopathic Medicine of the Pacific
  College Plaza
  Pomona CA 91766-1889
  (714) 623-6116

COLORADO

- RickiAnn Saylor Ph D
  Director SEARCH/AHEC Program
  4200 East Ninth Avenue Box A096
  University of Colorado
  Health Sciences Center
  Denver CO 80262
  (303) 394-5885

FLORIDA (SCOM)

- Steven B Zucker, D M D., M Ed
  AHEC Program Director
  Southeastern College of Osteopathic Medicine
  1750 Northeast 168th Street
  North Miami Beach FL 33162
  (305) 949-4000, Ext. 327

FLORIDA (University of Miami)

- Bernard J Fogel M D
  AHEC Project Director
  University of Miami
  P O Box 016099
  Miami FL 33101
  (305) 547-6547

GEORGIA/ALABAMA

- Daniel S Blumenthal M D
  AHEC Program Director
  Chairman/Associate Professor
  Community Medicine & Family Practice
  Morehouse School of Medicine
  720 Westview Drive S W
  Atlanta GA 30310-1495
  (404) 752-1624

KANSAS

- A J Yarmat Ph D
  Director
  Center for Student Affairs & Educational Development
  University of Kansas Medical Center
  39th and Rainbow Boulevard
  Kansas City KS 66103
  (913) 588-4698

KENTUCKY

- Richard H Swigart Ph D
  AHEC Project Director
  Associate Dean for Academic Affairs
  School of Medicine
  University of Louisville
  Louisville KY 40292
  (502) 588-7159
- Michael Byrne
  Deputy Director
  (same address and telephone as above)

MAINE (Tufts)

- Morton A Madoff M D
  AHEC Project Director
  School of Medicine
  Tufts University
  Department of Community Health
  136 Harrison Avenue
  Boston MA 02111
  (617) 956-6563

MAINE (College of Osteopathic Medicine)

- Shirley A Weaver Ph D
  AHEC Project Director
  Associate Dean of Clinical Affairs
  College of Osteopathic Medicine
  University of New England
  11 Hills Beach Road
  Biddeford ME 04005
  (207) 283-0171, Ext 337

MARYLAND

- James I Hudson M D
  AHEC Project Director
  University of Maryland AHEC
  School of Medicine Room 14-021
  Frank C Bressler Research Building
  655 West Baltimore Street
  Baltimore MD 21201
  (301) 528-5485

MASSACHUSETTS

- Michael E Huppert M P H
  Director
  Statewide AHEC Program
  University of Massachusetts Medical Center
  55 Lake Avenue North
  Worcester MA 01605
  (617) 856-3255
- Alan Chuman M P H
  Associate Director
  (same address and telephone as above)

MICHIGAN

- Hugo Uhland M D
  Project Director
  Northeast-North Central Michigan AHEC
  College of Human Medicine
  Michigan State University
  Saginaw Cooperating Hospitals, Inc.
  1000 Houghton Street
  Saginaw MI 48602
  (517) 771-6876

MINNESOTA

- John W LaBree M D
  AHEC Project Director
  University of Minnesota
  A 306 Mayo Building
  P O Box 501
  Minneapolis MN 55455
  (612) 373-7615

MISSOURI

- Thomas Nicholas M D
  AHEC Project Director
  Western Missouri AHEC
  Truman Medical Center/East
  Little Blue and Lee's Summit Road
  Kansas City MO 64139
  (816) 373-4415 Ext. 483
  (816) 373-8210

NEVADA

- Caroline Ford M P H
  Acting AHEC Project Director
  University of Nevada-Reno
  Office of Rural Health - MS 201
  Reno NV 89557
  (702) 784-4841

NEW JERSEY

- Jay A Zimmer
  Acting AHEC Program Director
  Atlantic City Medical Center
  1925 Pacific Avenue
  Atlantic City NJ 08401
  (609) 441-8094

NEW MEXICO

- Leonard M Napolitano Ph D
  Dean School of Medicine
  AHEC Project Director
  University of New Mexico
  915 Stanford Drive N E
  Albuquerque NM 87131
  (505) 277-2321
- William H Wiese, M D
  AHEC Deputy Project Director
  University of New Mexico
  School of Medicine
  Department of Family Community and Emergency Medicine
  2400 Tucker Avenue N E
  Albuquerque NM 87131
  (505) 277-3253

PROJECT DIRECTORS

NORTH CAROLINA

- Eugene S Mayer M D
  Associate Dean
  AHEC Program Director
  Box 3, Wing C
  School of Medicine 221H
  University of North Carolina
  Chapel Hill NC 27514
  (919) 966-2461
- John Payne
  Deputy Director
  (same address and telephone as above)

NORTH DAKOTA

- Tom N Johnson M D
  Dean
  AHEC Project Director
  School of Medicine
  University of North Dakota
  Grand Forks, ND 58202
  (701) 777-2514

OHIO

- Kenneth Rowe Jr, M D
  AHEC Program Director
  Acting Dean College of Medicine
  University of Cincinnati
  231 Bethesda Avenue
  Cincinnati OH 45267-0555
  (513) 872-7333

OKLAHOMA

- Richard Wansley Ph D
  AHEC Project Director
  Oklahoma College of Osteopathic Medicine and Surgery
  1111 West 17th Street
  Tulsa, OK 74107
  (918) 582-2724

PENNSYLVANIA (Pittsburgh)

- George M. Bernier, Jr., M.D.
  Dean
  School of Medicine
  University of Pittsburgh
  M-240 Scaife Hall
  Pittsburgh, PA 15261
  (412) 648-8975

SOUTH CAROLINA

- Henry W Koelling, Jr, M B A
  Administrator
  South Carolina AHEC
  Medical University of South Carolina
  171 Ashley Avenue
  Charleston, SC 29425
  (803) 792-4431

SOUTH DAKOTA

-
  Assistant Dean for Support Services
  AHEC Program Director
  Area Health Education Center Program
  School of Medicine
  The University of South Dakota
  Vermillion SD 57069
  (605) 677 5403

TENNESSEE

- Edwina E.H Hamby, M.A.
  Director
  AHEC Program of Tennessee
  c/o Meharry Medical College
  School of Medicine
  1005 D B Todd Jr Boulevard, Box 7 1A
  Nashville TN 37208
  (615) 327-6834

TEXAS (South)

- A Yvonne Russell M D Ph D
  Assistant Vice President for Community Affairs and Professor of Pediatrics
  The University of Texas Medical Branch
  Suite 528 Administration Building
  Galveston TX 77550
  (409) 761-4780

TEXAS (West)

- Maria Elena A Flood
  AHEC Program Director
  School of Medicine
  Texas Tech University Health Sciences Center
  El Paso Regional Academic Health Center
  4800 Alberta Avenue
  El Paso TX 79905
  (915) 533-3020 Ext 400

VIRGINIA

- Edward G Haskell Jr, M D
  AHEC Project Director
  Eastern Virginia Medical School
  P O Box 1980
  Norfolk, VA 23501
  (804) 446-5972

WASHINGTON (WA, AK, MT, ID)

- Theodore J Phillips, M D
  Acting Dean School of Medicine
  Office of the Dean SC-64
  University of Washington
  A-300 Health Sciences Building
  Seattle WA 98195
  (206) 543-1515
- Wayne W Myers, M D
  Director WAMI Program
  Associate Dean for Regional Affairs
  School of Medicine, SC-64
  University of Washington
  Seattle WA 98195
  (206) 545-2491
- David Johnson M D
  AHEC Director
  AHEC Program Office
  School of Medicine
  University of Washington
  Health Sciences Building, E-307 SC-64
  Seattle WA 98195
  (206) 543-6020

WEST VIRGINIA

- William O McMillan Jr, M D
  AHEC Project Director and Associate Vice President for Health Sciences
  Medical Center-Charleston Division
  3110 MacCorkle Avenue, S E
  Charleston WV 25304
  (304) 347-1206

APPENDIX I

LIST OF HOSPITAL BASED HOME CARE (HBHC)

PROGRAMS IN VA MEDICAL CENTERS

ERIC

Hospital Based Home Care Program Coordinators

1. Ms. Carol Owens (11C1)
   Hospital Based Home Care
   VA Medical Center
   Albany, NY 12208
   (8) 563-9311 X208

2. Ms. Juanita Gibner (118F)
   Hospital Based Home Care
   VA Medical Center
   Albuquerque, NM 87108
   (8) 572-9541 X2339

3. Ms. Joyce Lawrence (118)
   Hospital Based Home Care
   VA Medical Center
   Allen Park, MI 4[illegible]10
   (8) 378-8387

4. Dr. Joseph Rowe (170C)
   Hospital Based Home Care
   VA Medical Center
   Atlanta, GA 30033
   (8) 243-1537

5. Ms. Marilyn Wagster (11CH)
   Hospital Based Home Care
   VA Medical Center
   Baltimore, MD 21218
   (8) 922-5515

6. Ms. Cynthia Vitters (111H)
   Hospital Based Home Care
   VA Medical Center
   Bay Pines, FL 33504

7. Dr. Veronica Scott (111B)
   Hospital Based Home Care
   VA Medical Center
   Birmingham, AL 35233
   (8) 534-6842

8. Ms. Paula Naylor (11C)
   Hospital Based Home Care
   VA Medical Center
   Boston, MA 02130
   (8) 839-0980 X3980, 3979

9. Mr. John A. Sperando (122H)
   Hospital Based Home Care
   VA Medical Center
   Brooklyn, NY 11209
   (8) 265-6459/60

10. Mr. Daniel Kovach (111B)
    Hospital Based Home Care
    VA Medical Center
    Buffalo, NY 14215
    (8) 432-2608

11. Ms. Carolyn Lowery (11H)
    Hospital Based Home Care
    VA Medical Center Westside
    Chicago, IL 60612
    (8) 388-3592

12. Ms. Carolyn Hostetler (118W)
    Hospital Based Home Care
    VA Medical Center
    Cleveland, OH 44016
    (8) 294-7403

13. Mr. Roger Langland (181)
    Hospital Based Home Care
    VA Medical Center
    Columbia, MO 65201
    (8) 276-6780

14. Dr. Joseph W. McKeever (111M)
    Hospital Based Home Care
    VA Medical Center
    Dallas, TX 75216

15. Ms. Karen Sims (11B)
    Hospital Based Home Care
    VA Medical Center
    Denver CO 80220
    (8) 322-2981

16. Mr. Robert Hunt (122A)
    Hospital Based Home Care
    VA Medical Center
    Durham, NC 27705
    (8) 629-6628

ERIC

17. Ms. Maddalena Fontein (181D)
Hospital Based Home Care
VA Medical Center
East Orange, NJ 07019
(8) 342-1575

18. Ms. June Mrazek (118G)
Hospital Based Home Care
VA Medical Center
Gainesville, FL 36202
(8) 947-6005

19. Ms. Jill Adelman (118H)
Hospital Based Home Care
VA Medical Center
Hines, IL 60141
(8) 387-3242, 3240, 3241

20. Ms. Gloria Quintanilla (1[illegible]A)
Hospital Based Home Care
VA Medical Center
Houston, TX 77211
(8) 527-5163

21. Ms. Carol Alfs (118)
Hospital Based Home Care
VA Medical Center
Indianapolis, IN 46202
(8) 332-2131

22. Ms. Marcia Emmons (111G)
Hospital Based Home Care
VA Medical Center
Iowa City, IA 52240
(8) 8633-6409

23. Ms. Jane Gockel (11C1)
Hospital Based Home Care
VA Medical Center
Kansas City, MO 64128

24. Ms. Phyllis Combs (11G)
Hospital Based Home Care
VA Medical Center
Lexington, KY 40511
(8) 352-3644

25. Ms. Judith Karklins (11C1)
Hospital Based Home Care
VA Medical Center
Little Rock, AR 72205
(8) 742-2500

26. Mr. Homer Thayer (122)
Hospital Based Home Care
VA Medical Center
Loma Linda, CA 92357
(8) 785-2281

27. Ms. Phyllis Woodruff (118)
Hospital Based Home Care
VA Medical Center
Long Beach, CA 90822
(8) 966-5470

28. Ms. Theresa Drinka (111GE)
Hospital Based Home Care
VA Medical Center
Madison, WI 53705
(8) 364-1446

29. Mr. Charles Turner (11C1)
Hospital Based Home Care
VA Medical Center
Memphis, TN 38104
(8) 222-5110 X7342

30. Ms. Marlene Barkley (11A)
Hospital Based Home Care
VA Medical Center
Miami, FL 33125
(8) 350-3111 X3032

31. Ms. Ruthann Swanson (11F)
Hospital Based Home Care
VA Medical Center
Minneapolis, MN 55417

32. Mr. Paul Rogers (181)
Hospital Based Home Care
VA Medical Center
New Orleans, LA 70146
(8) 682-5287

33. Ms. Ann Feder (11H)
Hospital Based Home Care
VA Medical Center
New York, NY 10010
(8) 660-9662/9396

34. Ms. Carolyn Wunder (111)
Hospital Based Home Care
VA Medical Center
Northport, NY 11768
(8) 663-2220

35. Ms. Meryl Rappaport (182B1-MPD)
Hospital Based Home Care
VA Medical Center
Palo Alto, CA 94304
(8) 449-2986

36. Ms. Lydia Shipley (117E)
Hospital Based Home Care
VA Medical Center
Philadelphia, PA 19104
(8) 481-6356

37. Ms. Elizabeth Florek (11C)
Hospital Based Home Care
VA Medical Center
Pittsburgh, PA 15240
(8) 726-3388

38. Vacant (11C1-P)
Hospital Based Home Care
VA Medical Center
Portland, OR 97207
(8) 424-2127

39. Mr. William Marlowe (181A)
Hospital Based Home Care
VA Medical Center
Richmond, VA 23249
(8) 982-1391/1829

40. Ms. Rebecca Burrage (111J)
Hospital Based Home Care
VA Medical Center
Salt Lake City, UT 841
(8) 588-156 X1818

41. Ms. Mary Fagan (118D-JC)
Hospital Based Home Care
Va Medical Center
St. Louis, MO 63100
(8) 276-4100 X525

42. Mr. Manual de la Garza (181B)
Hospital Based Home Care
Va Medical Center
San Antonio, TX 78284
(8) 738-5152

43. Ms. Nancy Hillyard (118)
Hospital Based Home Care
VA Medical Center
San Diego, CA 92161
(8) 897-3551/3948

44. Ms. Sharon Koski (11C10)
Hospital Based Home Care
VA Medical Center
San Francisco, CA 94121
(8) 470-2765

45. Ms. Sarah Etchinson (118)
Hospital Based Home Care
VA Medical Center
Seattle, WA 98108
(8) 396-[illegible]173

46. Ms. Ofelia Granadillo (111G)
Hospital Based Home Care
VA Medical Center
Tampa, FL 33612
(8) 826-6602

47. Ms. Judy Arnold (111H)
Hospital Based Home Care
VA Medical Center
Tucson, AZ 85723
(8) 745-8426

48. Ms. Maureen Lobb (18A)
Hospital Based Home Care
VA Medical Center
Washington, DC 20422
(8) 745-8426

49. Dr. John Wasson (11B)
Hospital Based Medical Care
VA Medical Center
White River Junction, VT 05001
(8) 834-1544

APPENDIX J

ANSWERS TO POST-ASSESSMENT TEST
FOR MODEL GERIATRIC CLERKSHIP FOR PA STUDENTS

Answers to Post-Assessment Tests
for Model Geriatric Clerkship for PA Students

Part I.

A. Code Questions

1.	E	10.	E
2.	D	11.	C
3.	B	12.	B
4.	E	13.	D
5.	E	14.	E
6.	C	15.	D
7.	B	16.	E
8.	C	17.	A
9.	A	18.	D

B. Best Answer

19.	B	22.	C
20.	D	23.	C
21.	A		

C. Matching

24.	B	26.	A
25.	A	27.	A

D. Matching

28.	A	31.	C
29.	D	32.	D
30.	B		

Part II

A. Case Histories

1.	B	4.	E
2.	C	5.	E
3.	C	6.	B

B.

1.	E	5.	B
2.	E	6.	C
3.	A	7.	A
4.	C		

C.

1.	C	3.	B
2.	E	4.	D

ERIC

GLOSSARY

ERIC

GLOSSARY

Activities of Daily Living (ADL's): basic self-care tasks which include feeding, continence, transferring, dressing, bathing and toileting.

Adult day health care: an organized day program of therapeutic, social and health activities and services, provided to elderly persons or others with physical or mental impairments for the purpose of restoring or maintaining optimal capacity for self-care.

Adult social day care: programs which provide social interaction and support services to elderly persons and functionally-impaired adults who can benefit from day care but do not require the full range of services available in adult day health care.

Ageism: prejudice toward and discrimination against people because of age.

Case management: a coordination of administrative services linking the client and the providers of long-term care. Often case management programs provide client assessment, service plan development and follow-up monitoring.

Continuing care retirement communities (CCRCs): senior residences that provide multiple levels of care ranging from independent living to skilled nursing care. CCRCs may also be called "life care communities" or "continuum-of-care facilities".

Home health care: health services provided in the home of the elderly, disabled, sick or convalescent. The types of services provided include nursing care, social services, home health aide and homemaker services and various rehabilitation therapies.

Hospice: a concept that refers to enhancing the dying person's quality of life. Hospice care can be given in the home, in a special hospice facility or a combination of both.

Instrumental activities of daily living (IADL's): tasks of daily living that are more complex than ADL's and require a combination of physical and cognitive abilities, such as reading, writing, shopping and managing money.

Intermediate care facility (ICF): provides health-related care and services to individuals who do not require the degree of care or treatment normally given by a hospital or SNF but who do require health-related institutional care above the level of room and board.

ERIC

Rehabilitation therapy: therapy aimed at restoring or maintaining the greatest possible function and independence for patients. Rehabilitation therapy is especially useful to persons who have suffered from a stroke, injury or disease that has rendered them disabled, temporarily or permanently.

Residential care facility: a residential setting for people in need of personal assistance, such as bathing, grooming, dressing, feeding, etc. and protective supervision. Nursing care is not offered on a regular basis.

Skilled nursing facility (SNF): provides the greatest degree of medical care in the longterm care continuum. Every patient is under the supervision of a physician, and the facility has a transfer agreement with a nearby hospital. Twenty-four hour nursing is provided in a physician on-call to furnish medical care in case of emergency. May be covered under MediCare (for only the first 100 days of admission) and Medicaid.

INDEX

ERIC Full Text Provided by ERIC

INDEX

activities of daily living (ADL's), 249

acute care settings, 88, 89, 93, 131

adult day health care, 249

adult social day care, 249

affiliation agreements, 95

ageism, 11, 24, 131, 249

AHEC's, 87, 235-237

attributes of PA's in geriatrics, 17, 18

caregivers, 16

case management, 249

clerkship schedule, sample, 135-145

clinical evaluation form, 97, 119-130

competencies for PA's in geriatrics, 11

curriculum resource package form, 223

dementia assessment, 50-51

evaluation tools, 97

faculty development in geriatrics, 84, 179-182

family counseling, 15

functional assessments, 96

functionally-oriented comprehensive health assessment form, 35-54

GEC's (geriatric education centers), 167-176

geriatric textbooks, 217-220

health education topics, 14, 15, 64

health promotion settings 87, 88, 89, 93

history-taking skills, 11

home health care, 73, 237-241, 249

hospice, 73, 249

instrumental activities of daily living (IADL's), 249

intermediate care facility, 73, 249

longterm care settings, 88, 90, 93, 131, 143

mini-mental state exam form, 49

outpatient settings, 88, 93, 131, 226-231

PA roles in geriatrics, 81, 84

physical examination skills, 12

physician preceptors, 96

post-test, 97, 101-117, 245

prerequisites for geriatric rotation, 147

reading assignments, clerkship, 25, 33, 57, 63, 69, 74

rehabilitation therapy, 249

residential care facility, 75, 250

resident's council meetings, 76, 91

short portable mental status questionaire (SPMSQ), 48

skilled nursing facility, 75, 250

student interest in geriatrics, 81, 147

VA hospitals, 87, 225-231

videotapes, 25, 33, 69, 96, 97

ERIC