T-4148

OSU
OKLAHOMA COOPERATIVE EXTENSION SERVICE

Medicare Touch: The ABCs of Medicare Managed Care

Family and Consumer Sciences

Janice M. Park, Ph.D.
Gerontology Specialist

Glennis Couchman, Ph.D.
Family and Consumer Economics Specialist

Managed Health Care: What is it?

What is managed care?

Managed care is a health care system that offers participants a wide range of quality health care services, while controlling costs and limiting unnecessary use of services.

How can managed health care reduce health care costs?

Managed care plans can reduce the cost of health care by eliminating unnecessary office visits, treatments, and expensive tests. Most plans emphasize wellness and offer preventive screenings. Some plans offer educational programs that promote good health.

Enrollees of a managed care plan have easy access to necessary health care because only a small co-payment is required for each office visit or service used. In a managed health care system, more mid-level providers — such as nurse practitioners and physician assistants, instead of doctors — work as a team to provide care, likely resulting in more personal attention from health care providers than under the traditional fee-for-service system.

How does managed care work?

Health care providers — including physicians, hospitals, nursing facilities, and other health professionals — sign-up with an insurance company and agree to provide a wide range of health care services (benefits) at a lower fee. Enrollees in managed care plans pay a monthly premium and a low co-payment each time a service is used. Some types of plans, such as health maintnance oraganizations, require members to use only providers that are affiliated with the plan. Other plans, like preferred provider organizations, are more flexible, but they may require larger out-of-pocket costs when enrollees use providers not affiliated with the plan.

What are the advantages of joining a managed care plan?

Managed care plans offer:

- low co-payments for each service used;
- a wide range of benefits, including dental and vision care, and prescription drugs;
- preventive screenings and vaccinations;
- emphases on wellness and prevention; and
- educational services for patients with chronic diseases, such as diabetes, asthma, or arthritis.

Who provides managed health care?

Several different types of managed care organizations deliver managed care, each using different incentives and strategies to manage care. Popular types of organizations include health maintenance organizations (HMOs), preferred provider organizations (PPOs), private fee-for-service (PFFS) plan, and other types of plans. The two most common are HMOs and PPOs.

What is a health maintenance organization (HMO)?

An HMO, which serves as your health insurance company, contracts with selected physicians, hospitals, nursing facilities, and other health care providers in a community to provide health care services to plan members for a reduced fee. The HMO pays the participating physicians a fixed (capitated) amount per month per enrollee (patient) and specifies a range of service to be covered.

How do HMO plans work?

Enrollees must choose a primary care physician,

sometimes called a "gatekeeper" physician, from a list of physicians participating in the HMO plan. This physician provides most of the care a plan member needs. When a specialist is needed, the primary care physician makes a referral, provides medical information, and over-sees progress. The "gatekeeper" must approve or make a referral for all health care services, including specialists, medical tests, hospital admissions, therapies, equipment or special services, or other services. Health care providers complete all the paperwork.

In other words, the primary care physician is responsible for giving and managing care for an enrollee. The HMO generally does not pay for services provided by health care professionals outside of the plan, except for emergencies. Persons choosing an HMO plan give up some choice of providers in exchange for comprehensive coverage, low out-of-pocket costs, and little or no paperwork.

What is a preferred provider organization (PPO)?

The typical PPO negotiates with a network of physicians and hospitals for discounted rates. Plan members are rewarded for using providers in the network through low co-payments, limits on out-of-pocket expenses, and little or no paperwork.

How does a PPO work?

Plan members pay a monthly premium and receive a list of participating health care providers. Enrollee's out-of-pocket costs are lower if they use providers from the list. Services by non-participating providers are covered, but the out-of-pocket costs will be higher.

PPOs do not require members to select a primary care physician nor do members need a referral to use a specialist. Prior authorization is required for certain procedures and treatments.

What is a private fee-for-service (PFFS) plan?

A PFFS plan is a health care plan offered by a private insurance company. (Original Medicare is a fee-for-service plan for older Americans offered by the federal government.) The private insurance company pays a fee for each doctor visit or service you use. If a PFFS plan allows doctors, hospitals, or other providers to bill more than the plan pays for services, you will be responsible for paying the additional amount. There may be limits to the amount health care providers may charge above that which the plan allows.

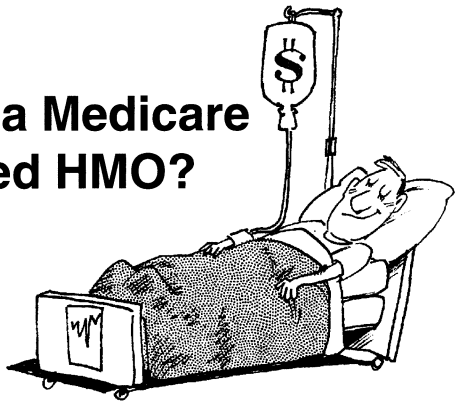
What should you do before joining a managed health care plan?

Before joining a managed health care plan, you should contact each of the managed health care organizations in your county or zip code area and request an information benefits packet. You should also read all of the materials carefully and comparison shop before you buy.

How can you find out which managed care companies serve your local area?

You can call your local Social Security Office, the Health Care Financing Agency (214)767-6401 or 1-800-638-6833, (in Oklahoma) call Senior Health Insurance Counseling Program (405)521-6628, or 1-800-763-2828, or use the Internet and log onto www.medicare.gov.

What is a Medicare Approved HMO?



Today, Medicare beneficiaries have other options for health care in addition to Original Medicare, a fee-for-service plan. One option is the Medicare HMO. Medicare beneficiaries do not need to change to the Medicare HMO; they may keep their Original Medicare plan.

What is the purpose of Medicare health maintenance organization (HMO)?

The goals of Medicare HMOs are to provide beneficiaries with a wide range of quality health care services, while controlling costs and limiting unnecessary usage. Many beneficiaries will have improved access to necessary health care, especially preventive care, because the cost of an office visit requires only a small co-payment. Under Original Medicare, the beneficiary must pay the annual deductible plus a 20 percent co-payment for each

visit. Record keeping is eliminated and out-of-pocket expenses will be lower than with Original Medicare (Medicare Part A and Part B).

Who is eligible to join the Medicare HMO?

Persons currently on Medicare have the option of joining a Medicare HMO, provided there is an HMO in the geographic area where they live. Additionally, anyone who signs up for a HMO must enroll in Medicare Part B and pay the premium. Persons receiving Medicare certified hospice care or who are determined to have end-stage renal disease cannot enroll in a Medicare HMO plan.

How does a Medicare HMO work?

Health care providers — including doctors and other health care professions, as well as hospitals and nursing facilities — contract with health insurance companies and agree to provide specified health care services (benefits) for a discounted fee. Beneficiaries who enroll in a Medicare HMO must choose a primary care physician from a list of physicians participating in the plan. This physician provides most of the care needed by a beneficiary. When a specialist is needed, the primary care physician makes a referral, provides medical information, and monitors progress. In other words, the primary care physician is responsible for providing and managing care for a beneficiary.

Primary care physicians are also known as "gatekeepers" because they must approve or make a referral for all health care services, including specialists, medical tests, hospital admissions, therapies, equipment or special services, or other accommodations.

What out-of pocket costs will a HMO enrollee be responsible for paying?

A Medicare HMO enrollee must pay:

- the Medicare Part B premium,
- a small co-payment ($5.00 to $15.00) each time a service is used, and
- an additional premium with some HMO plans.

What if I have a Medigap policy?

If you are on Medicare and have purchased a Medigap policy — and you decide to enroll in a Medicare HMO — it is advisable that you continue the Medigap policy for three to four months until you can decide whether you are satisfied with the HMO plan. If you enrolled in an HMO plan, you can always return to Original Medicare. However, you will likely be unable to obtain the same Medigap policy as before.

What benefits do HMOs offer?

All HMO plans must offer all the benefits covered by Original Medicare. Additionally, many companies offer other benefits such as dental care, vision care and eyeglasses, hearing aids, and prescription drugs. HMOs promote wellness and preventive health care. The plan may offer educational services, particularly to patients with chronic diseases such as diabetes, asthma, or arthritis.

What if I do not like the HMO?

An enrollee can disenroll from any HMO plan at anytime and return to the Original Medicare plan. The disenrollment will take effect on the first day of the month after the HMO receives the request. However, a word of caution is warranted: An enrollee returning to the Original Medicare plan likely will have a limited number of Medigap policies from which to choose with higher premiums. Pre-existing conditions may cause additional limits to your choice of Medigap plans.

Who files the health care claims with the HMO company?

The health care provider completes all paperwork.

How can I be assured of quality care?

State and federal agencies set standards and oversee patient care. Information on quality standards is available from the Oklahoma Insurance Commissioner's office at (405)521-6628 or 1-800-763-2828, the Oklahoma Foundation for Medical Quality (405)840-2891 or 1-800-522-3414, or the Health Care Financing Agency (214)767-6401 or 1-800-638-6833.

Why consider an HMO over Original Medicare?

An HMO offers these benefits:

- An enrollee's health care may be better coordinated.
- The HMO may offer more benefits or services, such as dental care, vision care and eyeglasses, hearing aids, or prescription drugs.
- The out-of-pocket expenses may be less.
- The HMO emphasizes wellness and prevention.
- A Medigap policy is not needed.
- The HMO may check the reputation and qualifications of the health care providers affiliated with the company.

Medicare Managed Care

Medicare Part C

Beginning January 1, 1999, Medicare beneficiaries in some geographic locations have additional choices for receiving health care benefits through Medicare + (Plus) Choice (Part C). All Medicare beneficiaries are eligible to select Original Medicare (Part A Hospital and Part B Medical).

Medicare + Choice offers beneficiaries a range of options for receiving health care. To be eligible to participate in Part C health care plans, an individual must be enrolled in Medicare Part A and Part B, not have end-stage renal disease, and have availability to a Medicare + Choice plan.

Medicare + Choice plans fall into three categories.

They are:

- Medicare + Choice coordinated care plans;
- Medicare + medical savings account (MSA) plans; and
- Medicare + Choice private fee-for-service (PFFS) plans.

Coordinated care plans

Coordinated health care plans include HMOs and PPOs. (These plans were described earlier.) Medicare pays a set fee to the HMO to provide beneficiaries with necessary health care. PPOs provide services to Medicare beneficiaries from a network of health care providers.

Medicare medical savings account (MSA)

A limited number of Medicare beneficiaries also have the option of choosing a Medicare medical savings account (MSA). Medicare MSA is an experimental plan restricted to 390,000 beneficiaries. Under this option, the beneficiary chooses a Medicare MSA health policy, a health insurance policy with a high deductible. Medicare pays the premium for this policy and also makes a deposit to the Medicare MSA. The beneficiary uses the money deposited in the MSA to pay for medical expenses. MSA money pays for any services covered by the Original Medicare plan plus some additional services. The MSA policy may offer benefits not covered by the original Medicare, but it does not pay for them until the deductible is met.

Unique to MSAs, Medicare does not limit the fees health care providers can charge above the amount paid by your MSA. If beneficiaries use all the money in their MSA, they are responsible for paying all medical expenses until the deductible is met. If there is money left over in the MSA at the end of the year, it can be added to the next year's deposit. Beneficiaries can withdraw money from the savings account to cover non-medical expenses but the amount becomes taxable income.

Medicare + Choice offers beneficiaries a range of options for receiving health care. To be eligible to participate in Part C health care plans, an individual must be enrolled in Medicare Part A and Part B, not have end-stage renal disease, and have availability to a Medicare + Choice plan.

Beneficiaries can only sign up for a medical savings account plan during special enrollment periods or in November of any year. Beneficiaries must enroll in Medicare Part A and Part B, and pay the MSA policy. Generally, beneficiaries may be able to use any health care provider or hospital. However, some policies require beneficiaries to select providers from a network of providers.

Medicare + Choice private fee-for-service (PFFS) plans

A Medicare + Choice private fee-for-service plan is offered by the federal government, not a private insurance company. (PFFS plans were described earlier.) Medicare pays the private insurance company a fee for each doctor visit or service you use. The insurance company, rather than Medicare, determines the amount of the fee it will cover, as well as the charges you must pay.

The plan may offer services not covered by Original Medicare, such as prescription drugs or the number of additional hospital days you can use. You must have both Part A Hospital and Part B Medical insurance. You are responsible for paying the Part B premium, and Medicare pays, toward the premium, an amount equal to that which the federal government pays to Original Medicare (Part A premium). You are responsible for paying for any additional premium. Remember that you are responsible for any charges not covered by the PFFS plan.

Advantages and Disadvantages: Is a Medicare HMO the Right Choice for You?

Choosing a health care plan that is right for you is no easy matter. First, you must decide whether to enroll in a Medicare managed care plan or stay with Original Medicare. The type of health care plan you choose will determine who will provide you care, where you may receive care, the extent of benefits covered, and the amount of out-of-pocket costs.

If you stay with Original Medicare, you can use any physician, specialist, or other health care provider wherever they are located. You can also use any Medicare approved hospital, other health care facility, or laboratory services anywhere. You will be responsible for any deductible and co-insurance fee for each service used. Also, you will have the responsibility of a considerable amount of record keeping and paperwork.

If you choose a Medicare HMO plan, you will pay only a low co-payment for each service used and have no paperwork. However, there will be some restrictions on the use of services and choices of health care providers.

HMOs are an increasingly popular type of managed care plan. Some of the most common advantages and disadvantages of a HMO health care plan are listed below.

Advantages:

- Enrollees enjoy low out-of-pocket costs for comprehensive health care.
- The primary care physician coordinates all health care.
- The primary care physician monitors all treatments and medications.
- Enrollees pay only a low co-payment for each service.
- Plans may also cover prescription drugs, hearing aids, eyeglasses, and dental care.
- Wellness and preventive medicine is emphasized.
- Pre-existing conditions are usually covered.
- Some plans have educational programs to help enrollees manage chronic diseases.

Disadvantages:

- Plan members must use physicians, hospitals, or laboratories affiliated with a plan.
- Enrollees must have a referral to see a specialist physician.
- Coverage is limited or nonexistent when enrollees travel to another geographic area.
- Disenrollment takes 30 days and offers no coverage during that time.
- Elderly enrollees using home health care may not receive the same level of treatment as those enrolled in a fee-for-service system.
- Members with chronic illnesses may not receive the same level of treatment as those enrolled in a fee-for-service system.
- A lengthy appeal process may delay essential treatments.
- Plans vary widely in the quality of providers under contract in the plans.
- Potentially, an HMO may sacrifice quality to save on costs.
- Intense competition among managed care plans may force cost-cutting strategies that undermine the quality of care.
- Merging health care organizations could lead to a monopoly of all health care.
- Managed care lacks an agreed-upon set of standards for assessing quality of care and consumer satisfaction.

In summary, joining an HMO can provide a wide range of quality health care services at an affordable cost. Benefits may include expensive items such as prescription drugs, hearing aids, dental care, or eyeglasses. Additionally, many plans cover educational programs to help enrollees understand and manage chronic diseases. To be satisfied with health care through an HMO, you should spend considerable time shopping and comparing HMO plans. Plans vary a great deal. Before buying a policy, ask for a copy of the handbook for the specific plan being considering, and read it carefully. Make sure you understand how the plan works and how to appropriately challenge health care decisions not considered in the enrollee's best interests.

Enrollment and Disenrollment Provisions

Prior to January 1, 2002, a beneficiary enrolled in a Medicare + Choice plan can disenroll and return to Original Medicare on a month-to-month basis. Or, the beneficiary can enroll in another Medicare + Choice plan during any month the plan is open for enrollment or return.

Additionally, under the following conditions Medicare + Choice, enrollees may disenroll and return to Original Medicare:

- The Health Care Finance Administration terminates the Medicare + Choice organization's contract for the beneficiary's plan.
- The organization terminates or discontinues offering the plan in the service area where the beneficiary lives.
- The beneficiary moves from the plan's service area.
- The beneficiary fails to pay the Medicare Part B premium.
- The beneficiary fails to pay the co-payment for incurred medical services.
- The beneficiary commits fraud or allows another person to use the identification card to obtain medical services.
- The beneficiary demonstrates to the Health Care Finance Administration that the organization offering the plan substantially violated a material provision of its contract. Circumstances include but are not limited to the following conditions:
  - The health care provider failed to provide covered benefits for medically necessary services on a timely basis.
  - The health care provider failed to provide medical services in accordance with applicable quality standards, or the organization — its agent, representative, or plan provider — materially misrepresented the plan's provisions in marketing the plan to the beneficiary.

To obtain additional information about disenrolling from an HMO, write to:
Medicare Office of Managed Care
7500 Security Blvd, 530201
Baltimore, MD 21244
Or you can call:
Medicare hotline for questions at 1-800-638-6833

Before enrolling in Original Medicare or any of the Medicare + Choice plans, beneficiaries should thoroughly compare the plans. A comparison chart listing the Medicare options available in the beneficiary's geographic area can be requested by calling 1-800-318-2596. For additional information, call 1-800-763-2828 (Oklahoma residents) or visit these Internet sites: www.medicare.gov or www.hcfa.gov.

How to File a Complaint or Appeal an HMO Decision

If you are not satisfied with a decision your Medicare HMO makes about payments, you can file a complaint or, eventually, make an appeal. HMOs are required to allow you to appeal if you believe you are incorrectly denied a payment for services provided or if treatments or services were denied that you believe were necessary to your health.

Your HMO should provide the instructions for filing a complaint or appeal. For instructions on how to proceed, check the complaint or appeal section of your member handbook. You should have received the handbook when you enrolled.

Whenever HMOs deny coverage for a service or treatment, they are responsible under federal law to give the reason for their decision in writing. They must also state your right to appeal. If you need additional information or help, contact the HMO's customer service department. Before going forward with the formal process of making an appeal, try making an informal complaint.

How to make a complaint?

If you are not satisfied with the care you receive under your HMO plan, stand up for your rights and file a complaint. Your insistence and persistence is required

to successfully resolve a problem or complaint. Here are tips for successfully filing a complaint.

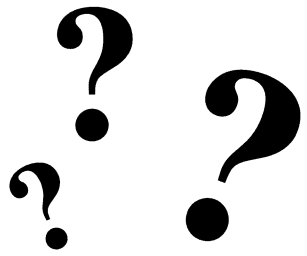
- First, go to your physician and ask for his or her help in resolving the problem.
- File a complaint with the HMO's manager, and send a copy of the complaint to your physician.
- Make photocopies of all correspondence.
- Keep detailed records of events, correspondence, and telephone conversations.
- Keep a file of information about the plan, including your plan booklet, copies of all correspondence, newsletters, and yearbooks.
- Keep all information about new services, changes in services, or instructions on accessing services.
- Keep copies of claim forms and all other correspondence; keep copies received from the plan as well as copies of those you have sent to the plan.
- Keep telephone records including dates, times, and the names of all plan representatives, including all details of telephone conversations.

If informal attempts to resolve the problem fail, you have the right to make a formal appeal.

How to file an appeal

- Write to the HMO and ask for a review.
- The HMO will hold an internal review within two months of receiving your formal appeal and notify you of the decision in writing.
- If you challenge the plan's decision within 60 days, the HMO either must rule in your favor or forward your claim to the Health Care Financing Administration (HCFA).
- A government agency, HCFA must make a decision within 30 days.
- If the HCFA rules in favor of the HMO, you have 60 days to request a hearing from an administrative law judge. It may take months or years to get a hearing.
- If after the appeal process your problem is still not resolved to your satisfaction, contact the Oklahoma Insurance Commissioner at the Oklahoma Insurance Department, P.O. Box 53408; 3814 North Sante Fe, Oklahoma City, OK 73152; or call 1-800-763-2828 or (405)521-6628.
- As a last resort to solve your health care problem, you can file a lawsuit. However, litigation against an HMO is seldom successful because federal law against liability in negligence cases shields it.

Questions to Ask When Choosing a Medicare HMO



Medicare managed health care plans are becoming popular options to Original Medicare. Before deciding to change to a managed care plan, be sure you understand how the plan works. While managed care plan may offer desirable benefits, there may also be restrictions or limitations that Original Medicare does not have.

Compare managed care plans and ask questions to clarify plan features. Listed below are questions to ask before you decide whether to choose a managed health care plan.

1. Benefits

- Does the plan cover benefits such as prescription drugs, vision and dental care, and therapy?
- Which providers and facilities are affiliated with the plan (e.g., specialists, hospitals, clinics, and skilled nursing facilities)? (Ask for a list.)
- Are your preferred physicians and health facilities affiliated with the plan?
- Can you select another physician from the plan if you are unhappy with your first physician?
- Does the plan cover alternative therapies – such as chiropractic services — that may be of interest to you?
- Does the plan cover inpatient and outpatient mental health treatment?
- How easy is it to access health care?
- Does the plan have someone available to call during evening hours or on weekends to answer questions? Is there a nurse on call?

2. Costs

- How much is the monthly premium, if there is one?
- How much are the co-payments for the services you will need?

3. Doctors

- Is your current physician affiliated with the plan you would like to join?

- How many primary care physicians are in the HMO network? What are the qualifications of physicians? Are they board-certified? How many are taking new patients?
- Where are the plan's physician services located? Which hospitals, laboratories, and pharmacies do the plan use? Are these conveniently located near you?
- Does the primary care physician have complete autonomy in referring patients to specialists? Are there any restrictions?
- Are doctors paid a set salary that is unaffected by the patient load and the amount of care provided?
- How many doctors have resigned from the plan in the last three years?

4. Enrollee satisfaction

- What do current enrollees think of the health care plan?
- How many Medicare beneficiaries have disenrolled from the plan the past three years?
- How easy is it to switch plans in case you dislike the plan you have chosen?
- Can the HMO cancel your enrollment? If so, for what reasons?

5. Emergency/urgent/out-of-area care

- If you travel a lot, what sort of coverage does the plan provide when you are away from home? Will the plans cover only emergency services? How does the plan define "emergency services"? Are emergency services consistent across plans?
- Are there any agreements with other HMOs to treat patients who travel?
- What happens if you are outside the HMO plan's service area?
- What are the procedures for filing out-of-network claims?

6. Complaints

- What is the HMO's procedure for handling complaints?
- How many complaints, grievances, or appeals were issued in the past year?
- What areas did they cover?
- How quickly were complaints resolved?

Contact your state health department or state insurance commissioner's office; they can provide you with a history of consumer complaints about plans. Contact someone who is enrolled in the plan, and ask if they have been satisfied with their health care coverage.

References:

AARP (1996). Checkpoints for Managed Care. pp 1-23.

American Council for Headache Education, (1998). Perspectives on Managed Care, *Newsletter of the American Council for Headache Education*, 1-4.

Berenson, R. A. (1998). Bringing collaboration into the market paradigm, *Health Affairs* 6, 128-138.

Davidson, S. M., Restuccia, J. D. and the Boston University Health Care Management Program Group. (1998). Competition and quality among managed care plans in the USA. *International Journal of Quality in Health Care* 10(5), 411-419.

Editorial. (1997). Managed Care: Good medicine for old people? *Journal of American Geriatrics Society* 45, 643-664.

F.Y.I. Information Worth Noting: Your Medicare HMO Rights. (1998). *The sandwich generation*, 20.

Hibbard, J. H., Jewett, J. J., Engelmann, S. & Tusler, M. (1998). Can Medicare beneficiaries make informed choices? *Health Affairs* 17(6), 181-190.

Kane, R. L. (1996). HMO'S: The scorecard is still out. *The sandwich generation*, 22-23.

Katz, M. (1997). Managed Care: Consumer primer, how to tame that unfamiliar creature managed care. *AARP Bulletin* 38(6), 1-10.

Kovach, K. A. (1998). Managed Care: What's next?, *Business and Economic Review* 45(1), 10-22.

Kurdas, C. (1998). Patchwork protection, *Business and Health* 16(11), 47-48.

McGlynn, E. A. (1998). The effect of managed care on primary care services for women. *Women's Health Issues* 8(1), 25-31.

Meyer, H. (1998). To appeal, *Hospitals and Health Networks* 5, 23-26.

Mirvis, D. M., Chang C. F. & Morreim, E. H. (1997). Protecting older people while in managed care. *Journal of American Geriatrics Society* 45(6), 645-646.

New Options for Medicare Beneficiaries (1998). *Social Security Today* 3(6).

Rowland, D, Feder, J. & Keenan, P. S. (1998). Managed care for low-income elderly people. *Journal of the American Society on Aging* 22(2), 43-50.

Scherman, F. T. (1998). Managed care and the older patient. *Geriatrics* 1(7), 57-63.

Schoen, C. A. & Davidson, P. (1996). Image and reality: Managed-care experiences by type of plan. *Bulletin of the New York Academy of Medicine* 73, 506-530.

Scutchfield, F. D., Lee, J. & Patton, D. (1997). Managed care in the United States. *Journal of Pubic Health Medicine* 19(3), 251-254.

Shoshanna, S. (1998). Satisfaction and quality in managed care for older people. *Journal of American Society on Aging* 22(2), 25-30.

Terry, K. (1996). Surprise! Capitation can be a boon. *Medical Economics*, 126-138.

The Senior Health Insurance Counseling Program. (1998). *Medicare + Choice* [Brochure]

U.S. Department of Health, and Human Services. (2000). Baltimore, Md.: Health Care Financing Administration. [Online] available: www.medicare.gov.

Wagner, D. L. & Foulest, W. E. (1997). The changing role of nonprofits in a managed care environment. *The Southwest Journal on Aging* 13(2), 43-49.

Wennberg, J.E. (1997). Medical necessity and the debate over care. *Public Health Reports*_112(17), 306-307.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Samuel E. Curl, Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of $1,013.89 for 4,000 copies. #8415 1000 PL.