

New York Medical College

Curriculum
for a
Managed Care
Rotation in
Primary Care

Kaiser Foundation
Health Plan of New York

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MISSION STATEMENT

The dramatic increase in the proportion of Americans receiving health care through Managed Care (MC) systems and the certainty that these numbers will rise call for physicians in training to acquire the knowledge, skills, and attitudes necessary to function effectively in a MC environment. Yet most graduate medical training programs do not provide educational offerings in this area. New York Medical College and the Kaiser Foundation Health Plan of New York have designed a curriculum for residents in Primary Care programs who have little or no exposure to MC.

The curriculum consists of a lecture series and a month-long block rotation to a group model Health Maintenance Organization (HMO). The lectures are geared to Primary Care residents in all three years and the rotation is oriented to advanced-level trainees. In combination these educational offerings will provide a thorough foundation for working in and with the MC system. Although group or staff model HMOs are not the most prevalent form of MC, they do provide the most intense exposure to MC principles and thus represent a unique setting for such educational programs.

A. INTRODUCTION

Managed Care (MC) is both a health insurance system and a mechanism for delivering care to a clearly defined population. It is playing a major role in the evolution of health care from a fragmented industry to an organized, integrated delivery system which efficiently and effectively manages the processes and systems of medical care. The goal is to provide the highest quality of care to the population it serves within the limits of available funding. Special emphasis is given to coordinated and comprehensive services, fact-based decision making, population-based planning, ambulatory and home-based care, prevention and cost containment. The Primary Care physician coordinates care by entering into a close relationship with the patient and controlling resources. The translation of these MC principles into health care programs is not always optimal. Clancy and Brody (1) went as far as evoking the images of “Jekyll” and “Hyde” to illustrate MC at its best and at its worst. Despite the controversies Weiner (2) estimated that by the year 2000, 40% to 60% of Americans will be receiving their health care through integrated MC plans.

In light of these dramatic health care changes, physicians in training must acquire the knowledge, skills and attitudes necessary to work with as well as within MC environments. The intricate relationships between academic health centers and MC agencies have been explored in numerous articles (3, 4, 5, 6, 7) as well as in a 1994 conference convened by the Association of American Medical Colleges (AAMC) and the Group Health Association of America (GHAA) (8). Commonly cited benefits for the academic centers include an increase in the number of teaching sites and

the availability of MC experienced teachers. For MC organizations this becomes a good way to prepare their future physician work force in addition to gaining community prestige for their academic affiliations. The barriers on both sides are primarily financial (e.g., possible reduction in productivity and lack of remuneration for teaching) and attitudinal (e.g., prejudices about MC and defensive postures in response to it). Beyond opportunities and problems, many educators feel that programs have a duty to expose trainees to the health care systems of the 21st century. In turn, MC organizations are being challenged to consider teaching as part of their social responsibility (6).

The impact of medical education on patients, or members as they are called in many MC settings, has been reported to be positive. Kirz and Larson (9) found from consumer surveys that medical student training resulted in increased “perceived” quality of care and improved patient satisfaction. Ott (10) stated in his description of the George Washington University Health Plan experience that although it is important to provide patients with an option to refuse contact with a trainee, the overall response has been very reassuring. Patients appreciate the extra time a student can provide and might even feel less inhibited in asking uncomfortable questions. Sheets et al. (11) noted that although obstetric HMO patients did feel more satisfied with faculty care than with the services provided by second-year residents, these differences were not significant enough to affect overall satisfaction with care. A non-MC study (12) found that the acceptance of students by obstetric patients depends on balancing the desire to contribute to a student’s education and the need for privacy. Other influential factors were past experiences with trainees and the expectation that students would have a passive role. As one of the New York Medical College Generalist Clerkship community preceptors once put it so well, “[My patients] are proud that I am teaching but they are afraid of being handed over to a student.”

Some of the most notable examples of “institutionalized exposure to MC” are: the required six-week HMO rotation for junior medical students at George Washington University (10); the Internal Medicine residency collaborations between Kaiser Foundation Health Plans, Northern California and the University of California at Davis that goes back to the 1970s (13), and between Harvard Community Health Plan and Brigham and Women’s Hospital (14); and the MC Internal Medicine fellowships at Long Island Jewish Medical Center (15). A 1990 GHAA survey of HMOs (16) indicated that 15% of the respondents were involved in graduate medical education. This percentage has undoubtedly grown in the last few years but nonetheless, the educational programs that have evolved are still showcases rather than standard. It is the aim of this project to create a curriculum that will permit MC education for residents to become a routine event.

The curriculum presented here was jointly developed by New York Medical College (NYMC) and Kaiser Permanente (KP) - New York. Due to site-specific circumstances, the emphasis here is on Internal Medicine and Pediatrics. However, with some adjustments Family Medicine should also be able to utilize it. In general this curriculum should provide the following:

- Comprehensive coverage of the subject
- Inclusion of didactic as well as hands-on learning activities
- Learner-oriented educational approaches
- Ease of implementation
- Compatibility with Residency Review Committee curriculum guidelines
- Mechanisms to permit Quality Management of the educational program
- Portability to Family Medicine and other training sites

To accomplish these goals a variety of planning methods were employed:

- A committee was established consisting of four NYMC and two KP representatives. While the former contributed the medical education perspective, the latter provided the MC expertise. The group consisted of three internists, one pediatrician, one medical education specialist and one academic administrator. The committee met in three- to six-week intervals over a ten-month period.
- A review of published and unpublished materials was performed. These documents were identified through GHAA and MEDLINE literature searches, conferences attended by committee members and personal communications with specialists in the field.
- Site visits were held to explore learning opportunities at the HMO site. After a facility tour, one committee member shadowed a pediatrician for a half-day and another committee member did the same with a general internist.
- Focus groups were organized to survey the needs of residents, HMO and non-HMO faculty as well as HMO nursing staff. In addition to defining MC, these groups identified curriculum content areas as well as opportunities for and challenges to the implementation of the training program.
- Residency program directors were interviewed to assess their needs for MC teaching as well as to gain their collaboration in the pilot and implementation phase of the project.
- Consensus building methods (e.g., Delphi-type processes) among committee members were employed to determine curriculum emphasis.
- A final draft was distributed to distinguished reviewers for comment and critique. To assess applicability to Family Medicine, a family practitioner was included in the reviewer team, and a pertinent question was incorporated in the

survey instrument. See page ii. for the reviewer list and Appendix A. (pages 64-65) for the review form. Most of the recommendations have been integrated in the document.

Curriculum Topics Important to Managed Care Education

A survey of existing MC educational efforts as well as focus groups with residents, faculty at the academic institution, HMO nurses and HMO physicians helped establish what topics should be included in the curriculum. Table 1. illustrates the coverage specific content areas received in the following seven MC documents and projects:

- The GHAA recommendations (17) detail competencies needed by Primary Care physicians to practice MC medicine.
- The “Curriculum Template” (18) was developed by a group of MC and education experts. It represents part of a project that was organized by the Center of the Health Professions at the University of California at San Francisco (UCSF) and sponsored by the Pew Memorial Trust. The curriculum focuses on decision tasks practicing physicians face as a result of their relationship with a) MC organizations, b) MC patients, c) MC physician and non-physician colleagues as well as d) their personal expectations, aspirations and values regarding the practice of medicine.
- The HMO clerkship is a requirement for juniors at George Washington University (GWU) (10).
- The three-year MC internal medicine residency program was developed by the Harvard Community Health Plan (HCHP) (19).
- The MC teaching syllabus (20) which was compiled by a task force of The Society of Teachers of Family Medicine (STFM) is tailored to provide residents with an overview of MC systems.

- “The Physician’s Guide to Managed Care” by Nash (21) is a book which has been recommended for curriculum development by the US Health Resources and Service Administration (22).
- “Essentials of Managed Health Care” by Kongstvedt (23) is a book that educates physicians about the practice of MC medicine.

Since the sources are quite varied, only a few subject areas are covered uniformly (i.e., referrals, ethics, cost containment). Clinical training programs include more practical issues while books focus on more theoretical issues. This curriculum is designed to address both components and thus care has been taken to include all extrapolated subject areas.

Table 1. Survey of Managed Care Educational Materials

Subject Areas Identified	GHAA Recommendation	UCSF Template	GWU Clerkship	HCHP Residency	STFM Syllabus	Nash Book	Kongstvedt Book
Referrals and consultations	✓	✓	✓	✓	✓	✓	✓
Ethics and legal issues	✓	✓	✓	✓	✓	✓	✓
Cost containment and resource allocation	✓	✓	✓	✓	✓	✓	✓
Quality management	✓	✓		✓	✓	✓	✓
MC and the hospital			✓	✓	✓	✓	✓
Coordination of care	✓			✓	✓	✓	✓
Team work and leadership	✓	✓	✓	✓		✓	
Evidence-based medicine	✓	✓		✓	✓		✓
Patient-physician relationship and communication	✓	✓	✓	✓			
Health promotion and disease prevention	✓	✓	✓	✓			
Management of mental health problems	✓			✓		✓	✓
Ancillary and community resources		✓		✓	✓		✓
Care guidelines and algorithms		✓		✓		✓	✓
Clinical and management information systems	✓	✓	✓				✓
MC history, types and principles		✓			✓	✓	✓
Patient satisfaction and grievance procedures		✓		✓	✓	✓	
Physician contracts with MC organizations		✓			✓	✓	✓
Psychosocial aspects of health and illness		✓	✓	✓			

Patient education		✓	✓	✓			
Participatory decision making	✓	✓		✓			
Insurance and reimbursement methods		✓			✓		✓
Patient contracts with MC organizations		✓			✓		✓
Physician satisfaction/grievance procedures		✓		✓		✓	
Physician performance evaluation, peer review	✓	✓					✓
Need for continuing medical education		✓		✓		✓	
Diagnosis and treatment of common disorders	✓		✓	✓			
PC related (sub)specialty competencies	✓			✓			
Ambulatory procedures and simple surgeries	✓			✓			
Continuity of care		✓	✓				
Time management		✓		✓			
Population-based medicine	✓			✓			
Career opportunities					✓	✓	
Health care reform						✓	✓
Occupational and environmental medicine	✓						

The NYMC/KP curriculum includes all the above content areas.

Focus groups were the second form of needs assessment. A total of eight sessions were held: two for HMO physicians and two for HMO nursing staff, two for generalist faculty in academic health centers (Internal Medicine and Pediatrics) and two for residents (one per specialty). At the outset, participants were asked to juxtapose MC with other health care delivery systems. Such distinctions helped answer questions about the essence of MC that needs to be captured in the curriculum. Table 2. (on page 7) provides a summary of the aspects of practice mentioned by the eight different groups. Type of ambulatory care model, medical decision making, financial reward and referral systems were noted most frequently. Most focus groups also addressed the wide variations among MC health care plans (e.g., HMOs, IPAs) in terms of organization as well as quality of care. These incongruities complicate the definition of MC. Interpersonal relationships, too, are viewed as different in the MC system. They include physician-patient relations, intra- and interprofessional associations as well as rapport between attendings and residents.

Tables 2 & 3. Focus Group Results

Aspects of practice with MC/indemnity care differences:	HMO Physicians		HMO Nurses		Academic Physicians		Residents	
	A.	B.	C.	D.	E.	F.	G.	H.
1. Ambulatory care model (longitudinal, comprehensive, centralized, coordinated, accessible, efficient, common charts)	✓	✓	✓	✓	✓		✓	✓
2. Control/decision making ability, practice guidelines	✓		✓		✓	✓	✓	✓
3. Financial incentives/rewards	✓	✓	✓		✓			✓
4. Referrals	✓		✓	✓		✓	✓	
5. Difference between MC services (e.g., organization, quality of care)		✓	✓		✓	✓		✓
6. Physician-patient relationship			✓			✓	✓	✓
7. Role of and attitude towards physicians (Primary Care and in general)			✓		✓		✓	✓
8. Intra- and interprofessional relationships, attending vs. resident	✓		✓	✓				✓
9. General orientation: pro-active, non-interventionist		✓		✓				✓
10. Staff qualifications, credentialing/evaluation systems		✓				✓		✓
11. Patients' misunderstanding or misuse of system (e.g., overuse)	✓			✓		✓		
12. Diagnostic testing			✓	✓				✓
13. Availability and use of ancillary services		✓		✓				
14. Relationship between cost and quality of care, cost-effectiveness				✓	✓			
15. Type of patient population and volume						✓		✓
16. Emphasis on prevention				✓			✓	
17. Empowerment of patients, patient education			✓	✓				
18. Health care reform favors MC					✓			
19. Malpractice concerns	✓							
20. Amount of administrative work						✓		
21. Hospitalization practices						✓		
22. Telephone use				✓				
23. Work conditions (e.g., physical environment, work hours)							✓	
24. No difference if physician works in both systems						✓		

Curriculum content suggestions:	HMO Physicians		HMO Nurses		Academic Physicians		Residents	
	A.	B.	C.	D.	E.	F.	G.	H.
1. Non-direct patient care (e.g., administrative, tracking and charting systems, formularies, resource utilization, continuity of care)	✓	✓	✓		✓	✓	✓	

2. Difference within MC and between MC and other health care models					✓	✓	✓	✓
3. Career options, different MD roles, contracts with MC organizations			✓			✓	✓	✓
4. Attitudinal adjustment	✓	✓				✓		
5. Non-urgent ambulatory care medicine (e.g., complete work-up, walk-in)	✓	✓		✓				
6. Use of ancillary services/personnel		✓			✓	✓		
7. Introduction to MC (e.g., definitions, history, insurance systems)				✓		✓	✓	
8. Quality management				✓		✓		✓
9. MC patient population (i.e., different from university setting)		✓					✓	
10. Broad spectrum of care provided by physicians (e.g., more procedures)		✓				✓		
11. Centralization/integration of services	✓					✓		
12. Telephone medicine			✓	✓				
13. Exposure to member relations			✓	✓				
14. Referrals	✓							
15. Prevention		✓						
16. Population- and evidence-based medicine						✓		
17. Hospitalization/case management program			✓					
18. Physician time management					✓			

Focus groups were also encouraged to offer specific suggestions for curriculum content areas. The result is listed in Table 3 (on page 7). It was generally concluded that the rotation should focus on “system issues” (e.g., record keeping, resource utilization) rather than providing another month of ambulatory care clinical training. The non-MC focus group participants further stressed that it would be crucial to avoid a sole focus on group or staff model HMOs. Although they are universally seen as the settings where MC principles are practiced most intensely, they are a less prevalent form of health care delivery. Thus it will be important to teach about other MC organizations as well. A comprehensive survey will also assist trainees with career decisions.

Beyond an introduction to the basics, participants repeatedly mentioned topics such as quality management, integration of services, utilization of ancillary personnel and member relations. Exposure to non-urgent care (e.g., how complete work-ups can be performed in an outpatient setting) and telephone medicine was also recommended. Additionally, there was some expectation that this educational intervention would lead to more informed, and possibly more positive opinions about MC.

Organization-Specific Factors Affecting the Curriculum

In order to facilitate the transfer of this curriculum to other specialties and other training sites, it is important to consider the factors that contributed to the formation of the model presented in the following pages. They are:

- Geographical considerations (e.g., distance between residency training program and HMO)
- Availability of services and faculty at the MC site (e.g., 24-hour telephone advice line, schedule and teaching interest of specialists)
- Training program requirements (e.g., New York State “Upweighting” regulations for continuity clinics, post-call release time required by New York State)
- Residency program needs for providing certain educational exposures (e.g., adolescent care, dermatology)
 - Malpractice insurance (e.g., limitation of coverage to certain clinical sites)
- Level of Primary Care and MC focus in the residency training program (e.g., what principles of Primary Care and MC are residents already exposed to in their usual rotations)
- General attitudes of residents and faculty towards MC (e.g., how interested and open are they towards a MC rotation)
- Inter-institutional relationships (e.g., past and current experience with other collaborative training endeavors, collaboration for curriculum development)
- Interest and ability of the MC system to incorporate an educational program (e.g., expend time for teaching, allocate space to provide trainees with clinical practice opportunities)
- Available incentives (e.g., financial remuneration, faculty appointments)
- Local and national health care environments in general (e.g., prevalence of certain types of health care systems, health insurance trends)

In this curriculum the limitation to Internal Medicine and Pediatrics was determined by three local circumstances: a) the NYMC Family Medicine residency is not in proximity to the HMO site, b) it already has a MC education program in

place, and c) KP currently does not have family practitioners on staff. Even if such conditions are not in effect at another institution, transferring the program to Family Medicine will necessitate serious consideration of the general training requirements. Qualifying factors stipulated by the Family Medicine Residency Review Committee demand one half-day practice session for first-year residents, three half-day sessions in the second year and five half-day sessions in the third year of training. Furthermore, family medicine programs have extensive exposure to a very integrated type of health care delivery that spans all age groups, includes OBGYN and stresses practice management. Thus many of the learning opportunities offered here may be too repetitive for third-year residents and result in boredom. Given these conditions the rotation could be more suitable for first-year graduate trainees.

Other site-specific characteristics include the emphasis on adolescent care, which was driven by the participant residency program's need to provide additional educational experiences for their trainees. Limitations in malpractice insurance coverage required a reduction of hands-on learning activities during the hospital rotation and an elimination of rotations to satellite clinics.

Although all efforts have been made to make this a thoroughly planned model for residency education in MC, it has to be viewed as a work in progress. As the program is piloted and trainee and faculty feedback is received, and as residency education and the general health care scene changes, adjustments may have to be made in order to maintain relevance, effectiveness and efficiency.

References

1. Clancy CM, Brody H. Managed care: Jekyll or Hyde? *JAMA*, 273(4):338-339, 1995.
2. Weiner JP. Forecasting the effects of health reform on US physician workforce requirement: Evidence from HMO staffing patterns. *JAMA*, 272(3):222-30, 1994.
3. Corrigan JM, Thompson LM. Involvement of health maintenance organizations in graduate medical education. *Acad Med*, 66(11):656-661, 1991.
4. Fox PD, Wasserman J. Academic medical centers and managed care: Uneasy partners. *Health Affairs*, 12(1):85-93, 1993.
5. Moore GT. Health maintenance organizations and medical education: Breaking the barriers. *Acad Med*, 65(7):427-432, 1990.
6. Haesler WK. Why we should care about medical education. *HMO Magazine*, 34(5):20-23, 1993.
7. Weitekamp MR, Ziegenfuss JT. Academic health centers and HMOs: A systems perspective on collaboration in training generalists physicians and advancing mutual interests. *Acad Med*, 70(Suppl. January):S47-S53, 1995.
8. Training the generalist: Developing partnerships between academic medicine and HMOs. Report on the Association of American Medical Colleges and the Group Health Association of America Symposium, Leesburg, VA, April 10-12, 1994.
9. Kirz H, Larsen C. Costs and benefits of medical student training to a health maintenance organization. *JAMA*, 256(6):734-739, 1986.
10. Ott JE. Medical education in a health maintenance organization: The George Washington University Health Plan experience. *HMO/PPO Trends*, 5(2):6-11, 1992.

11. Sheets K, Caruthers B, Schwenk T. Assessing patient's satisfaction with care provided by residents in an academic HMO setting. *Acad Med*, 65(7):482-483, 1990.
12. Magrane D, Gannon J, Miller CT. Obstetric patients who select and those who refuse medical students' participation in their care. *Acad Med*, 69(12):1004-1006, 1994.
13. Wolfe ES, Jones HW. Graduate medical education in an HMO: An internal medicine residency program. *J Med Educ*, 57(6):468-471, 1982.
14. Moore GT, Inui TS, Ludden JM, Schoenbaum SC. The teaching HMO - A new academic partner. *Acad Med*, 69(8):595-599, 1994.
15. Resnick J. An HMO-based internal medicine fellowship. *HMO Pract*, 2(4):139-142, 1988.
16. Corrigan J, Thompson L. Involvement of health maintenance organizations in graduate medical education. *Acad Med*, 66(11):656-661, 1991.
17. Primary Care physicians: Recommendations to reform medical education to increase the supply of physicians trained to practice in managed care. Group Health Association of America, 1993 (position statement).
18. Sommers LS, Marton KI (project directors). The curriculum template: Building curricula for clinical decision making in managed care settings. UCSF Center for the Health Professions. April, 1995 (submitted to JAMA).
19. Adult primary care residency training in managed care. Harvard Community Health Plan and Brigham and Women's Hospital. Draft 2 - 7/14/1994 (unpublished).
20. Eidus R, Warburton SW (eds). *Managed health care: A teaching syllabus*. Kansas City, MO: The Society of Teachers of Family Medicine, 1990.
21. Nash DB. *The physician's guide to managed care*. Gaithersburg, MD: Aspen Publishers, Inc, 1994.

22. Managed care: Educating medical students and residents in primary care and preventive medicine. Division of Medicine, Health Resources and Services Administration. May, 1994.
23. Kongstvedt PR. Essentials of managed health care. Gaithersburg, MD: Aspen Publishers, Inc, 1995.

B. EDUCATIONAL AIMS

This training program is meant to provide a basic understanding of MC principles for Primary Care physicians. The focus is on learning about the health care system rather than on adding an extra ambulatory patient care rotation. The following eighteen core goals are kept sufficiently generic to permit an application to Internal Medicine and Pediatric residency training programs as well as an expansion into Family Medicine. The personal learning goal (XVIII) was designed to enable residents to identify their own strengths and weaknesses and to participate in the development of a learner-centered educational plan. On subsequent pages (in Table 4.), each goal is further broken down into knowledge, skills and attitude objectives.

Educational Goals

Goals	Emphasis
<u>MC Fundamentals</u>	15%
I. To provide an overview of MC principles and types of MC organizations	
II. To enhance the understanding of population-based medicine	
III. To sensitize trainees to ethical considerations concerning MC	
IV. To strengthen the knowledge base necessary for informed career decisions	
 <u>Systems within MC</u>	 35%

- V. To provide a working knowledge of quality management
- VI. To enhance cost/utilization management knowledge and skills
- VII. To stress the benefits of continuity of care
- VIII. To highlight the role of Primary Care physicians as coordinators of care
- IX. To improve referral and consultation skills
- X. To gain a MC perspective on hospital care
- XI. To provide an understanding of performance evaluation mechanisms

Interpersonal Skills 15%

- XII. To enhance the ability to develop effective patient-physician relationships
- XIII. To strengthen the ability to work effectively in a team

Diagnosis & Treatment 30%

- XIV. To teach the MC approach to common outpatient conditions
- XV. To enhance the integration of prevention into general medical practice
- XVI. To improve residents' patient education skills
- XVII. To strengthen telephone medicine skills

Personal Learning Goal 5%

- XVIII. (to be determined jointly by resident and faculty)

Table 4.

Educational Objectives

At the end of the training program, residents should be able to ...

GOALS	KNOWLEDGE OBJECTIVES	SKILLS OBJECTIVES	ATTITUDE OBJECTIVES
Managed Care Fundamentals			
I. MC Principles	<ul style="list-style-type: none"> a. Distinguish MC from other forms of health care b. Contrast different types of MC c. Trace the history of MC in the US and elsewhere d. Explain benefits and limitations of MC e. Identify the forces driving the current health care debate and developments 	a. Use MC terminology effectively	a. Demonstrate an openness to MC principles
II. Population-based Medicine	a. Describe the principles of population-based medicine	a. Analyze the risks/needs of a patient population	<ul style="list-style-type: none"> a. Develop a community orientation for prevention and treatment b. Balance an individual (1:1)

			with a population approach (N:1)
III. Ethical Considerations	<ul style="list-style-type: none"> a. Identify ethical and legal issues related to MC b. Juxtapose ethics concerns in MC with those of other health care systems 	<ul style="list-style-type: none"> a. Apply ethical principles to MC patient situations 	<ul style="list-style-type: none"> a. Demonstrate sensitivity to ethical and legal concerns
IV. Career Decisions	<ul style="list-style-type: none"> a. Describe MC career opportunities and limitations b. List elements pertinent to work contracts with MC organizations 	<ul style="list-style-type: none"> a. Secure further information concerning MC options 	<ul style="list-style-type: none"> a. Exhibit comfort in making an informed choice concerning MC career decisions
Systems within Managed Care			
V. Quality Management	<ul style="list-style-type: none"> a. Discuss the principles of quality management b. Describe quality of care assessment methods 	<ul style="list-style-type: none"> a. Perform a QM chart review b. Assess the effectiveness of selected health care practices c. Utilize QM terminology effectively 	<ul style="list-style-type: none"> a. Reflect a commitment to continuous quality management
VI. Cost/Utilization Management	<ul style="list-style-type: none"> a. Explain the principles of cost containment and utilization management b. Compare and contrast cost 	<ul style="list-style-type: none"> a. Analyze the cost factors applicable to the care of a particular case b. Incorporate health care cost in 	<ul style="list-style-type: none"> a. Support cost conscious approaches to health care

	and benefit distributions in MC with those of other systems	clinical decision making	
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GOALS	KNOWLEDGE OBJECTIVES	SKILLS OBJECTIVES	ATTITUDE OBJECTIVES
VII. Continuity of Care	a. List the benefits of continuity of care b. Describe the mechanics involved in maintaining continuity	a. Diagnose continuity problems in a health care plan b. Design organizational measures to enhance continuity	a. Endorse a patient care approach that emphasizes continuity of care
VIII. Primary Care Physicians as Coordinators of Care	a. Delineate the tasks involved in the coordination of care b. Discuss the role of Primary Care physicians in a variety of MC settings	a. Coordinate comprehensive health care more effectively and efficiently	a. Reflect on the value of Primary Care physicians as coordinators of care and patient advocates
IX. Referral and Consultation	a. Describe methodologies for incorporating specialists into a MC system b. Discuss the trade-offs between	a. Initiate appropriate referrals b. Collaborate effectively with consultants	a. Acknowledge the importance of a careful consultant selection process b. View specialists as “true

	<p>internal and external specialists</p> <p>c. Explain what happens during a MC consultation with a specialist</p>		consultants”
X. Hospital Care	<p>a. Describe the relationship between MC agencies and hospitals</p> <p>b. Distinguish the MC approach from other health care systems</p>	<p>a. Apply quality improvement and cost containment principles to the care of hospitalized patients</p> <p>b. Consult the Milliman and Robertson Hospital Utilization Guidelines</p>	<p>a. Value MC criteria for hospitalization</p> <p>b. Acknowledge that much care can be transferred to outpatient settings</p>
XI. Performance Evaluation	<p>a. Summarize methods for assessing physician performance</p> <p>b. Explain how MC organizations utilize performance reports to change provider behaviors</p>	<p>a. Interpret performance reports accurately</p>	<p>a. Endorse the need for performance evaluation</p>
Interpersonal Skills			
XII. Patient-Physician Relationship	<p>a. Discuss the concept of membership</p> <p>b. Examine the coordinator role</p> <p>c. Explain the use of patient satisfaction</p>	<p>a. Effectively involve patients in decision making processes</p> <p>b. Utilize the patient-physician relationship for maximizing</p>	<p>a. Value the closeness of a continuous and long-term patient-Primary Care physician relationship</p>

	<p>measures</p> <p>d. Contrast relationship issues in MC to those of other health care systems</p> <p>e. Describe how patients select PCPs in MC systems</p>	<p>health care</p> <p>c. Take on an appropriate coordinator role</p>	<p>b. Strive towards improving and maintaining high quality patient-physician relationships</p>
XIII. Team Work	<p>a. Describe the contributions different health care workers can make to the care of a patient</p> <p>b. Identify the responsibilities of team leaders and team members</p>	<p>a. Collaborate more effectively with other physician and non-physician providers</p> <p>b. Engage in participatory decision making</p>	<p>a. Recognize the efficiency, added value and cost effectiveness of team collaboration</p>

GOALS	KNOWLEDGE OBJECTIVES	SKILLS OBJECTIVES	ATTITUDE OBJECTIVES
Diagnosis and Treatment			
XIV. Managed Care Approach to Common Outpatient Conditions	<p>a. Discuss the MC approach to the 10 most common disorders</p> <p>b. Contrast MC patient care models to those of other health care</p>	<p>a. Utilize outcome research for medical decision making</p> <p>b. Apply practice guidelines to individual cases</p>	<p>a. Acknowledge the benefits of the MC approach to patient care</p> <p>b. Reflect an appreciation of the value and appropriate role of</p>

	<p>systems</p> <p>c. Recognize what procedures can be safely done in a Primary Care office setting</p> <p>d. Describe practice guidelines</p>		<p>practice guidelines</p>
XV. Prevention and Health Maintenance	<p>a. Describe guidelines for primary, secondary and tertiary prevention</p> <p>b. Recall how they are developed and what their limitations are</p> <p>c. Explain the mechanics of community-based preventive efforts</p>	<p>a. Take an efficient risk factor history</p> <p>b. Counsel patients appropriately</p> <p>c. Utilize patient education materials effectively</p> <p>d. Perform appropriate screening exams</p> <p>e. Design a personalized health maintenance plan and negotiate it with a patient</p>	<p>a. Value prevention as intricate part of health care</p> <p>b. Acknowledge prevention as a cost containment measure</p>
XVI. Patient Education	<p>a. Identify the factors involved in effective patient education</p> <p>b. Select effective videos, pamphlets and other patient education aids</p> <p>c. Describe how patient education</p>	<p>a. Frame medical knowledge in layperson's terms to increase understanding</p> <p>b. Utilize patient education materials effectively</p>	<p>a. Acknowledge the importance of patient education as core element of the health care encounter</p> <p>b. Recognize the contributions patient</p>

	classes work	c. Assess patient comprehension	educators make to the provision of health care
XVII. Telephone Medicine	<ul style="list-style-type: none"> a. List problems and issues patients present during telephone consultations b. Explain guidelines for medical decision making during telephone encounters c. Identify the proper place for telephone management d. Discuss the relationship between telephone medicine and emergency room use 	<ul style="list-style-type: none"> a. Establish rapport with a patient on the telephone b. Assess patient's problems over the phone c. Utilize advice guidelines in a telephone encounter 	<ul style="list-style-type: none"> a. Reflect on the challenges and opportunities of telephone medicine

GOALS	KNOWLEDGE OBJECTIVES	SKILLS OBJECTIVES	ATTITUDE OBJECTIVES
Personal Learning Goal			
XVIII. (to be determined jointly by resident and faculty)			

PLAN

C. IMPLEMENTATION

To accomplish the aforementioned goals and objectives, the training program will consist of two parts. First, residents will attend an ongoing lecture series that will be offered to all trainees and faculty at the participating residency program sites. Second, third-year residents will attend a one-month rotation at a group-model HMO. They will experience first-hand how MC principles are put into practice and will engage in a variety of learning activities to gain competencies necessary for working in and with MC organizations. A quality management (QM) project addressing a disease of their own choice will be a major focus of the month-long rotation. The selection of a personal training goal will further underline the learner-centered approach of this educational program.

The combination of lecture program and rotation will result in a variety of benefits:

- Residents will receive a theoretical introduction to MC before beginning their rotation
- MC topics can easily be expanded to other, non-group model HMO issues
- By inviting lecturers from the HMO, residents, academic program and HMO faculty have an opportunity to get acquainted
- Residents who have completed the rotation can add an account of their experience to the lecture presentation

The Implementation Matrix in Table 5. (on page 22) identifies how educational goals relate to learning activities. It is followed by a detailed description of each learning activity, as well as elaborations on the HMO, the participating educational programs, faculty and other teaching resources. Scheduling guidelines and a discussion of implementation opportunities and challenges are also included in this chapter.

The Implementation Matrix

The matrix correlates the 13 educational goals outlined on page 13 with the 12 learning activities detailed on pages 23-42. It provides reassurance that all goals are addressed multiple times and that no activity is designed to serve only a single purpose. It also permits one to assess how the loss of one specific learning activity would affect the overall curriculum. The lecture series, QM project, syllabus and resource library as well as the supervision sessions address all or almost all goals; the orientation, patient education and telephone consult sessions will cover the fewest topic areas. Since the personal goal will vary from resident to resident, the pertinent learning activities cannot be entered in the table uniformly. It is expected that residents will customize this matrix to reflect how their personal training needs are met and how scheduling limitations affect the coverage of the educational goals.

Table 5. Implementation Matrix: Educational Goals (I-XVIII) and MC Learning Activities (**1-12**)

	1 Lec- ture s	2 Orie ntat .	3 QM Proj.	4 Pt. Care	5 Pt. Educ.	6 Tele- phone	7 Speci- altie s	8 Hosp. Round s	9 Selec t Depts .	10 Commi ttees	11 Sylla- bus	12 Super- visio n
I MC Principles	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
II Population Based Med.	✓		✓	✓	✓	✓			✓	✓	✓	✓
XII Ethics	✓	✓	✓	✓			✓	✓		✓	✓	✓
XV Career Decisions	✓										✓	✓
V Quality	✓		✓	✓				✓	✓	✓	✓	✓

Management												
VI Cost/ Utilization	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓
VII Continuity of Care	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓
VIII PCP as Coordinator	✓	✓	✓	✓			✓	✓			✓	✓
IX Referrals in MC	✓		✓	✓			✓	✓		✓	✓	✓
X Hospital Care	✓		✓	✓		✓	✓	✓		✓	✓	✓
XI Performance Evaluation	✓		✓	✓					✓	✓	✓	✓
XII Patient- MD Relationship	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
XIII Team Work	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
XIV Common Conditions	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
XV Prevention/ Health Prom.	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓
XVI Patient Education	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
XVII Telephone Medicine	✓		✓	✓	✓	✓					✓	✓
XVIII Personal Goal		✓	✓									✓

Since the Personal Goal will vary from resident to resident,
the pertinent learning activities cannot be entered in XVIII uniformly

Depts. = Departments

Abbreviations:

Orientat. = Orientation

Educ. = Education
Hosp. = Hospital
MC = Managed Care
MD = Physician
Med. = Medicine

PCP = Primary Care Physician
Proj. = Project
Prom. = Promotion
Pt. = Patient
QM = Quality Management

Learning Activities

Residents will be offered 12 different learning opportunities: a lecture series before, during as well as after their month at the HMO; an orientation to the rotation; work on a quality management (QM) project; a series of 12 patient care sessions, each focusing on a particular topic; participation in patient education and telephone consultation programs; rotations to various specialty and subspecialty services; exposure to hospital rounds; visits to selected HMO departments; attendance at several HMO committees; and a syllabus and resource library as well as regularly scheduled supervision sessions.

The coverage of educational goals was structured so densely to permit adequate flexibility concerning the amount of exposure to each activity. Partly, variations between residents will be dictated by their individual learning needs. For example, one resident may have a special interest in enhancing telephone medicine skills and will therefore attend more than the recommended number of sessions. Another resident may be specially interested in improving knowledge and skills in Dermatology and may therefore select some additional specialty exposure. Time commitments at the residency program itself, release time, vacations and holidays will further impact on the intensity of immersions into a particular topic. Naturally, all scheduling decisions will need to be made in collaboration with the rotation director and other pertinent faculty to ensure an appropriate educational balance as well as the availability of teaching resources.

All residents will have equal exposure to the orientation, the QM project, the syllabus and the associated library of resources as well as the supervision sessions. By utilizing the Implementation Matrix it will be easy to ascertain what

effect the individual choices and scheduling requirements will have on the overall achievement of the educational goals set forth by the curriculum development committee.

1 Monthly Lecture Series (Before, During and After the Rotation)

The purpose of this didactic program is to provide a consistent exposure to MC concepts and issues throughout the three years of training. All curriculum goals will be addressed and special attention will be given to an adequate coverage of knowledge objectives. Thus at the time of the rotation, residents will already be equipped with the basic concepts and terminology. The inclusion of HMO lecturers will give residents a chance to get to know some MC faculty before they actually start the rotation. Since the rotation occurs at a group model HMO, it will be important to provide an overview of other MC systems through this medium. Following is a list of 20 lecture topics which are to be offered in a two-year cycle. Below each are a few subject areas worth including in the presentation.

1. “Managed Care 101”

Definitions, historical development, key concepts, types of MC organizations, integrated health care delivery models, contrast to other health care systems

2. Introduction to Insurance Systems

Fee-for-service versus prepaid plans, benefit design variations for patients/providers/

payers, cost sharing, Medicaid and Medicare, un- and underinsured populations

3. The Structure and Function of HMOs

HMO types, open versus closed panel plans, in-house versus contracted services, working within an HMO, corporate structures, committee work, effective team work, relationship to community, member recruitment

4. The Impact of IPAs on Private Practice

Definitions and terminology, types of contracts, capitation, hospital-based IPAs, cost and benefit distributions, authorization systems, profiling, performance reviews

5. Development of MC Group Practice Models

Types of provider networks, physician ownership models, economic, psychological, and legal aspects of group developments

6. MC and Hospitals

Vertical integration of health care, contracts between MC organizations and hospitals, admission criteria, justification and authorization procedures, lengths of stay and other utilization issues, alternatives to acute care hospitalization, outcome studies, centers of excellence

7. MC Organizations that Serve Special Populations

AIDS, substance abuse, mental health, geriatrics and Medicare, Medicaid

8. MC and the Government: Moving Towards the 21st Century

Government proposals, efforts by medical organizations, changing focus of health care, Medicaid and Medicare populations

9. The Role of the Primary Care Physician (PCP) in MC

Role obligations and expectations, coordinator functions, authorization systems, ethical considerations, utilization reports, managing utilization of ancillary and emergency services, negotiating and contracting with providers and hospitals

10. The Patient-Physician Relationship in MC Systems

Overt and covert contracts between physicians and patients, effects of prepayment and entitlements, conflicts of interests, patient education efforts to improve the health care encounter, effects of mid-level providers and ancillary personnel on the patient-physician relationship

11. Patient (Member) Satisfaction

Definitions, types of measurement, factors influencing patient satisfaction, utilization of evaluation results, MC patient advocacy

12. Evidence-Based Medicine and Practice Guidelines

Critical review of the medical literature, decision analysis related to outcomes in MC, proof of therapeutic value, development of guidelines for diagnostic and therapeutic modalities, value of and adherence to guidelines, quality management, legal and ethical considerations

13. Cost-Containment and Resource Management

The calculation of health care costs, cost-effectiveness analyses, competitive cost structures, capitation, budgeting, right sizing, cutting costs by eliminating waste, ambulatory care productivity, changing processes and content of care

14. Quality and Risk Management

Principles of Continuous Quality Improvement (CQI) and Total Quality Management (TQM), methods for assessing quality of care, the relationship between process and outcome, internal versus external audits, credentialing

15. Population-Based Medicine

1:1 versus N:1 orientation, utilization of epidemiological and service-generated data, types of prevention (e.g. primary, secondary), community-responsive services, development of prevention guidelines, cost-effectiveness of prevention

16. Ethical Considerations in MC

Ethical assumptions, benefits/burdens to patients/health care providers/payers, conflicts arising from constrained or rationed resources, effect of profit motives

17. Therapeutics and MC

Formulary development and use, patient education to optimize drug effects, home care, cost containment measures

18. Performance Assessment Methods in MC

Individual versus team performance, physician profiling, peer review, compilation and utilization of performance reports, membership satisfaction, efficiency in changing behaviors, rewards and penalties

19. Continuing Medical Education to Change Behavior

CME requirements, quality management and CME, the effect of CME3 on physician behaviors

20. Careers in MC

Practice environment, lifestyle, new roles for physicians (e.g., physician executive), advancement opportunities, research opportunities, income expectations, work contracts with MC organizations

Speakers will be drawn from three sources: a) the HMO b) the residency program faculty and c) the professional community at large. Some presenters should come from the HMO to strengthen the link with the academic program and affirm their credibility as faculty. Lectures on HMOs, the role of Primary Care Physicians, patient satisfaction or performance assessment methods may be easily covered by physicians and other health care professionals working for the MC organization.

The involvement of faculty from the residency training program will indicate their interest in the subject and generally help legitimize MC as a pertinent topic for graduate medical education. Evidence-based medicine, ethical considerations and practice guidelines might be subject areas non-MC faculty already have expertise. Thus an adaptation to the MC situation would be relatively effortless.

Furthermore, it will be important to involve some external speakers who can represent the “outside world” and thus help anchor the lecture series as an important educational event for today’s health care environment. One might consider a politician to cover the MC and government lecture, hospital planning staff to address MC and hospitals, an economist to review cost-containment and resource utilization, and insurance experts to provide an overview on such matters. Some academic institutions are affiliated with schools of public health which can considerably expand the lecturer pool.

Since the lecture material is relatively generic, Internal Medicine, Pediatrics and, if pertinent, Family Medicine programs at the same institution can be combined to maximize resources. With new technologies it will be possible to teleconference presentations or at least videotape them for dissemination amongst medical school affiliates or consortia. A telephone hook-up with the lecturer after the video presentation will permit a question and answer period.