Community Oriented Primary Care (COPC): An Effective Paradigm for Preventive Care
Marc E. Babitz, M.D.
F. Marian Bishop, Ph.D., M.S.P.H.

Abstract
Community-Oriented Primary Care (COPC) can be an effective paradigm for both the inclusion of preventive care in primary care practices, especially in rural Utah, and the effective teaching of preventive medicine and primary care. This article discusses the three major elements of COPC and suggests a five-step process to incorporate COPC into a health care professional's practice that would be applicable for any Utah provider. In addition, the definition of primary care, which was approved by the Institute of Medicine and the World Health Organization, is briefly outlined.

Introduction
The purpose of this paper is to highlight the key ingredients of “Community-Oriented Primary Care” (COPC) and indicate how these can be effective in teaching preventive medicine and primary care to health care providers. Paul Frame, MD, a practicing family physician in rural New York State, has become a national leader in the area of preventive health by demonstrating his ability to fully incorporate these COPC principles into a busy primary care practice. Further, he has written how the broader principles espoused under the title COPC have positively impacted his practice, including the delivery of preventive health services (Frame, 1989). Other authors have written extensively about the importance of the COPC approach in reshaping health care delivery in this country (Garr, Rhyne, Kukulka, 1993; Wright, 1993; Smith, Anderson, Boumbulian, 1991). In a similar fashion, COPC can be an effective tool for the state of Utah, which already has a reputation as one of the more health conscious states in the nation.

Mainstream medical practice has been slow to fully incorporate well accepted preventive health strategies, such as those found in the U.S. Preventive Health Services Task Force Report (U.S. Preventive Health Services Task Force, 1989), into their day-to-day care of patients. There are many theories for this problem. These include the “disease focus” of American medicine coupled with the high percentage (approximately 70%) of physicians practicing in the sub-specialties (American Board of Medical Specialties, 1995), the focus of the public on curative medicine, the economic pressures of medical practice, and the lack of training provided to current practitioners. Dr. Frame makes the case that the principles of COPC have value in practice. However, these principles must be incorporated into the training of health care professionals, early and often throughout their education, if the volume and frequency of effective preventive services provided to our nation’s citizens is to be expanded. Ivey Boufford, M.D. and Pat A. Shonubi, B.S.N., R.N., M.S., have written a book on the value of, and techniques for, teaching COPC for urban practitioners, which includes a chapter discussing preventive education. (Boufford, Shonubi, 1986). The Task Force on Residency Curriculum for the Future, sponsored by the Society of Teachers of Family Medicine, incorporated the teaching of COPC into its curriculum noting that it “provides an excellent system for teaching community health to family practice residents” (Merenstein, Schulte, 1990). Following the Institute of Medicine’s publication of their report on COPC (Institute of Medicine, 1984), the Bureau of Primary Health Care (of the Health Resources and Services Administration, Public Health Service, DHHS) adopted these principles of practice for their grantees, including; community health centers, migrant health...
centers and health care for the homeless centers. Utah’s federally supported health centers have been incorporating these principles into their practices since that time. All practicing clinicians in Utah can also be encouraged and educated to incorporate COPC into their practices, especially those in primary care.

COPC, as elaborated upon by the Institute of Medicine report in 1984 (Institute of Medicine, 1984), has three major elements and requires a five-step process to incorporate it into practice. The three elements include: public health principles, a primary care practice, and a defined community. This COPC paradigm offers a way to include the disciplines of public health and preventive medicine with primary care practice in a way that is understandable to the “mainstream” health care provider. Each of these elements will be defined in greater detail followed by a discussion of the five steps.

**Concepts**

I. Public Health

There are four main Public Health concepts that may be presented to the average health care provider in an easily understood fashion. First is the concept of applied epidemiology. Here the discussion is on the potential value of health data, which has already been gathered (particularly vital statistics), for the provider practice. For example, the local obstetricians might benefit from knowing the teen pregnancy rate and the low birth weight rate for their community. The pediatricians might benefit from knowing the leading causes of morbidity and mortality for young children in their county and the family physicians might utilize data on the leading causes of death of adolescents in their area. Managed care organizations have long appreciated the value of data about their membership, e.g., reasons for emergency room utilization, most frequent causes of hospitalizations and drug utilization patterns (American Academy of Family Physicians, 1991).

Second, is the concept of population-based health care. The value of a different approach to health care, namely the care of population groups rather than individuals, is introduced. When teaching medical students, Dr. Marc Babitz, uses the term “room-to-room-to-room care” as a description of present medical practice and the way medical students are currently taught. This is in contrast with the population-based perspective of public health practitioners. Room-to-room-to-room care describes how providers currently work in their delivery of health care services. Essentially, a provider goes to work expecting that the examination rooms will be filled with patients to be seen, and when the exam rooms are empty the provider has completed the task. The provider rarely, if ever, asks the following questions:

- Why do certain patients actually get into the exam room while others do not? (access issue)
- Are the patients being seen reflective of the health needs of the community at large? (needs assessment issue)
- Are patients being left out of the current system of care with critical health care needs, e.g., children needing immunizations, pregnant women needing prenatal care, and untreated diabetics? (impact issue)

By asking these types of questions, the provider is adding a population-based view of community health needs to their individual patient perspective (McGinnis, Foege, 1993). Utah health professionals can easily apply this view for their community.

Third and fourth, are the concepts of prevention and patient education in health care delivery. A valuable example to illustrate this item is to ask health care providers to think back over the past century and identify those advances in medicine, which have contributed the most to improvement in the health status of Americans. Even traditional providers are quick to recognize that sanitation (adequate sewers and clean water supplies) and immunizations have had far greater impact than the much more expensive interventions such as the use of the Magnetic Resonance Imager (MRI). Despite the rapidly rising costs of health care in this country, there have been negligible improvements in overall health status (as measured by longevity or infant mortality) as a contrast to
the tremendous advances achieved by two simple preventive interventions of the past. Further, the work of Drs. McGinnis and Foege (McGinnis, Foege, 1993) illustrates that the leading causes of death (accounting for over 50% of deaths) in the United States remain behavioral issues, best approached through prevention and education.

II. Primary Care
The definition of primary care practice is very important to the concept of COPC. In this approach, primary care is not defined as first-contact care nor is it defined based upon the providers’ specialty. Some primary care providers, e.g., family physicians practicing in urgent care centers or emergency rooms, are not truly providing primary care when comprehensively defined. Consistent with the definitions of the Institute of Medicine (Institute of Medicine, 1990) and the World Health Organization, (World Health Organization, 1978) there are six ideal characteristics of primary care. This definition has applicability to the understanding of COPC in the following ways.

(1) **Accessible** refers to the ability of a practice to eliminate some of the common barriers to care facing many Americans today, such as financial, geographical, language, cultural, and the overall lack of primary care providers. The room-to-room-to-room approach to health care often does not consider these concerns as long as the rooms are full. Some health care providers are surprised to learn of the large number of working Americans and their families who presently lack access to primary care, including basic health services.

(2) **Acceptable** is a term that is not found in traditional definitions of primary care. However, its inclusion illustrates a critical principle of effective health care delivery. This point is best taught through the use of practice experience, which demonstrates that effective care must be given in an appropriate mode. This model should incorporate the patient’s social, educational, economic, psychological, and cultural realities. A favorite example involves the choice of an antibiotic for a migrant farmworker’s child who lives out of the family’s car and works with his parents in the field. This case requires that the medication’s instructions be written in Spanish, be reasonably inexpensive, and that the medicine chosen not require refrigeration. By contrast, the term non-compliant is suggested as an overused means to blame the patient when a treatment plan does not progress as the clinician desires. This is especially true when that treatment plan was “unacceptable,” given that patient’s realities.

(3) **Accountable** is a term that represents two important facets of a primary care practice. The first facet represents the quality of care provided. This includes the responsibility for monitoring and improving care over time such as improving the level of preventive health services by raising immunization rates provided to patients in a practice. The second facet refers to the provision of cost–effective care and the need to share responsibility for the expenditure of national health care dollars.

(4) **Comprehensive** is a generally well-understood concept that indicates the desire of a provider to provide a full range of primary care services to patients at one practice site, the “one-stop-shopping” approach. Examples of such practices are federally supported community and migrant health centers that expand their provision of services to include social services as well, e.g., Medicaid eligibility, W.I.C. services, and case management.

(5) **Coordinated** describes the relationship between the primary care practice and those important services (psycho-social, bio-medical, and spiritual) that are not provided on-site. Ideally there is value in a primary care practice working with the many other services that can ultimately help to improve the patients’ health.

(6) **Continuity** emphasizes how the development of a patient-provider relationship over time can improve the
quality of care provided, and enhances the opportunity to offer the patient recommended preventive services.

III. A Defined Community
A defined community consists of a target group of individuals within a defined geographic area beyond the limits of the current patient load of the practice. A “community” could be defined geographically as a county, or a city, or a group of census tracts. A “community” could also be defined as a specific group of individuals within that geographical area. For example, the homeless, migrant farmworkers and their families, a Medicaid population, or an HMO’s membership could be so defined.

It is helpful to focus on those individuals in a community who are not receiving primary health care services. These individuals are often outside of the health care system. It is important to the impact on health in the community if this population segment includes pregnant teenagers, unimmunized children, individuals with untreated, infectious diseases (e.g., hepatitis, tuberculosis, HIV), or undiagnosed and asymptomatic hypertensives and diabetics.

The other critical aspect of the community is its involvement in determining and addressing health care needs. Little can be accomplished in a community whose priorities are at odds with those of the health care provider. Equally important, a primary care practice is missing a valuable source of information about unmet health needs in its community if there is no interaction and involvement with the community. The scope of this article does not permit a more detailed discussion about community empowerment and involvement, both of which lead to a better understanding of a community’s health needs and more effective interventions of a preventive and/or therapeutic nature.

The COPC Process
It is helpful to think of the COPC process in five steps:
1. Determining our community, 2. Characterizing our community in terms of its health status, 3. Prioritizing the health needs of our community, 4. Developing specific interventions to address priority needs, and 5. Evaluating the effectiveness of the interventions.

Step 1 – Who is our Community?
The provider is encouraged to ask these questions: who does my practice serve, who could my practice serve, and who should my practice serve? This can be easy in a rural practice because the geographic boundaries are often quite clear. The questions are equally important for urban providers, albeit more challenging to answer. Providers can map the zip codes of their current patients to gain a better understanding of the area they actually serve. The point of this step is to identify the population group that the provider hopes to positively impact, including those critical individuals who are currently outside of the community’s health care system. Though not homogeneous, rural Utah is thought to be more readily divided into some geographic entities with some recognized boundaries.

Step 2 – Characterizing our Community
This is the data-gathering step, which may occur over many weeks and becomes an ongoing part of the practice. The primary care practice, in partnership with community members, needs to identify the multitude of health problems affecting the community. We recommend that these health problems be organized according to key age groups within the population. For example, the U.S. Public Health Service programs which serve medically undeserved populations gather information for five groups: pediatric, adolescent, adult, geriatric, and perinatal.

There are many Utah sources of quantitative data available, including; vital statistics derived from birth and death certificates, hospital admission and discharge data, emergency room utilization, police reports (e.g., substance abuse, domestic abuse, D.W.I.), and health department reports both local and state. There are also a number of national data sources. These sources can be extrapolated to smaller areas, including those from the National Center for Health Statistics and the Centers for Disease Control and Prevention. Finally, we must emphasize the importance of qualitative data derived from the community through techniques such as patient surveys, focus
groups, and key informant surveys of individuals from relevant organizations.

Step 3 – Prioritizing Important Health Problems
For each age group, the listing of the health problems identified needs to be prioritized in order of importance. This is a critical point for community input. The provider needs to understand the community’s perspective on health problems. From a medical standpoint, we often view importance by the volume of the problem, the impact the problem has on the community whether frequent or rare, or whether the problem results in significant morbidity or mortality. However, the most important problems are those that the community feels are their greatest concerns. These prioritized lists suggest the order in which health concerns should be approached.

Step 4 – Implementing Targeted Intervention Programs
For those problems the practice chooses to emphasize, the practice needs to develop a strategy and methodology for positively impacting the problem. As one might predict, the majority of proposed interventions clearly are preventive in nature. As practitioners study these priority health problems and consider interventions, they are exploring the breadth of preventive medicine and incorporating a variety of medical, social, and educational interventions. Obviously in the real world, the choice of interventions is affected by important concerns such as cost (dollars and personnel), likelihood for success, and the availability of community partnerships. Sometimes the intervention may be as simple as the inclusion of a preventive health flow chart in the medical record, participating in a health fair to increase awareness of major health concerns, or participation in a community campaign to raise childhood immunization levels.

Step 5 – Monitoring and Evaluation
This final step is critical to complete the COPC process. Consistent with the data gathering and monitoring efforts described in the Total Quality Management and Continuous Quality Improvement literature (Blumenthal, 1993), the practice needs to collect data to determine the effectiveness of their interventions. Not only does this evaluation process allow us to improve or eliminate interventions that are not successful, it encourages us to celebrate with our community partners, those interventions that do succeed.

Conclusion
Health professions education must look beyond the medical model to a more health oriented model (Smith et al., 1991). Community-oriented primary care is a health care delivery paradigm with proven effectiveness and application in our nation’s health care system (Institute of Medicine, 1984; Kukulka, Christianson, Moscovice, DeVries, 1994).

COPC is one approach that systematically identifies and addresses the health care needs of an individual and a defined community in an integrated fashion. COPC can provide a number of opportunities to develop more effective public health programs, such as tracking infectious diseases, developing immunization programs, setting up lead poisoning abatement programs or developing teen pregnancy prevention programs. One of the benefits of the COPC model includes the ability to change negative health behaviors with targeted interventions and preventive programs. These programs offer the opportunity to observe the impact of these interventions and document its usefulness. COPC also has the ability to empower the community to manage its own care by identifying resources and expertise (Mouton, Cash, Shore, 2001).

Equally important, the COPC model appears to offer an effective educational paradigm for health professionals to gain a greater appreciation for the importance of preventive health care in their practices. Finally, it has been our experience that, through the techniques discussed in this article, health care providers are able to comprehend this approach to health care delivery.

Our hope is that more of Utah’s providers will consider incorporating these principles into their practices for the benefit of their communities.
References


About the Authors
F. Marian Bishop, PhD, MSPH, is Professor and Chair Emerita in the Department of Family and Preventive Medicine, School of Medicine, University of Utah. Interests include health care policy, medical politics, medical organizations, and the education of health care professionals.

Marc E. Babitz, MD, Associate Professor and Director of pre-doctoral programs in the Department of Family and Preventive Medicine, School of Medicine, University of Utah. Interests include health care delivery to underserved populations, linking primary care education with practices in underserved areas, rural health care, and community-oriented primary care.