PREFACE

WHAT IS POPULATION HEALTH MANAGEMENT?

The mission of health care organizations has undergone a remarkable transformation from curing disease to caring for the well-being of populations. Population health differs from individual health because it connotes a higher level assessment of a group of people (Hacker & Walker, 2013). The group, or population, can be defined based on multiple criteria including geographic location, community membership, disease or treatment plan, or insurance claims linked to a provider (Magnan et al., 2012; McAlearney, 2002). In current health policy and management practice, the realms of population health and health services provision are converging, leading to the coining of the term "practice-based population health." This refers to the responsibility of primary care groups and networks for the health of their patient populations (Cusack, Knudson, Kronstadt, Singer, & Brown, 2010). While this responsibility has traditionally been confined to the illness-care needs of the population, in this conceptualization population health management (PHM) strategies are broader and include lifestyle management, demand management, disease management, catastrophic care management, and disability management (McAlearney, 2003).

The Health Maintenance Organizations of the 1990s are a classic example of the application of traditional population health management activities to health services provision. Current efforts to create Patient-Centered Medical Homes (PCMH) and Accountable Care Organizations (ACO) represent broader efforts to move organizational responsibilities toward population health and care management. While the traditional population management strategies are a critical element, current efforts take a broader definition of population health and incorporate new management strategies. Specifically, managers of primary care clinics, hospitals, and health systems must focus on building community partnerships with local nonprofits, health departments, and both mental and social services agencies (Hacker & Walker, 2013; Magnan et al., 2012; McLellan et al., 2012). Managers must also fully utilize current health information technologies (HIT) and registries in order to identify and track attributed patient populations (Parton & Ravi, 2012). Other new population health management

strategies include a focus on patient-centered care by incorporating the patient voice and preferences into the patient experience (Carman et al., 2013; Huerta et al., 2013), and altering the experience of patient care to address wellness and behavior changes as well as sick care (Hacker & Walker, 2013; Magnan et al., 2012).

The expansion of these population health management strategies stems from the fact that health care, the traditional purview of the health care system, accounts for only 20% of a population's health (Magnan et al., 2012). Health behaviors, increasingly a focus of the health care system, account for another 30%. Socioeconomic factors such as education, employment, social support, and community safety account for 40%, and the physical environment the remaining 10%. These factors are traditionally considered outside the purview of the health care system. However, successful population health management requires "not only medical services that are vertically integrated but also horizontally integrated health, education and social services that promote health in all policies, places, and daily activities" (Halfon & Conway, 2013). The health services sector can engage in this process through supportive community initiatives focusing on disease prevention, health and lifestyle education, healthy neighborhoods, and supportive communities (Hacker & Walker, 2013; Halfon & Conway, 2013).

From a management perspective, the new PHM is challenged by the increasing burden of chronic disease, the aging of the population, financial models that demand new types of services without payment models to support these services, and the increasing complexity of medical interventions. The PCMH and the ACO are two models of care transformation that position population health management as their central function. Implementation of a PCMH focuses on the transformation of the primary care system at the level of individual clinics, while organizing as an ACO engages entire health care systems to vertically integrate. Neither of these models of care transformation can be successful without shifting the provision of health care through the implementation of the new population health management strategies outlined earlier. Many of these transformations are underway in clinics and health systems across the country, and the successes and failures of these efforts are being carefully studied, including in the papers of this volume.

OVERVIEW OF THE PAPERS IN THIS VOLUME

Volume 16 of AHCM presents papers that explore population health management across various levels of the health care system employing multiple

research designs: case studies, theoretical pieces, secondary data analysis, survey research, and qualitative methodologies. Aspects of health care organization discussed in the volume include the PCMH, ACOs, integration with the public health and mental health systems, hospital-physician alignment, and resource planning. Population health management is presented as a factor driving these organizational changes and as a mechanism to facilitate this change.

A focus on population health management, including the new strategies detailed earlier, is transforming and integrating the process of health care provision. This integration takes many forms, vertical and horizontal, between organizations, across disciplines, or within a single office. Accordingly, the volume is divided into four sections, presenting papers addressing transformation or integration of health care services (1) within health care organizations, (2) across health care organizations, and (3) between health care organizations and other fields such as local non-profits, health departments, and mental health and social services agencies; and (4) factors in PHM beyond the management of health care organizations.

SECTION I: PHM WITHIN HEALTH CARE ORGANIZATIONS

The first three papers in this volume address issues of PHM within health care organizations. PHM activities are frequently implemented in health care organizations under the umbrella of the patient-centered medical home (PCMH). The first paper, by Tahara and Green, positions the PCMH as a transformational organizational change because health care organizations must move to a team-based model of care as a radical departure from the current hierarchical medical practice model. The authors provide a concise review of the PCMH literature, and describe the challenges of implementation. They then propose tools from change management and systems thinking that health care leaders can employ to guide their organizations through the change process.

The second paper, by Hearld, Hearld, and Hogan, is a quantitative study of the association between community characteristics and the PCMH capacity within that community. The authors conducted a longitudinal analysis of data from more than a thousand ambulatory practices in Michigan participating in a large private insurer's incentive program. Employing linear growth curve models, the authors found distributional differences in PCMH resources across communities. Specifically, having

high racial and socioeconomic diversity was associated with lower levels of PCMH capacity among primary care and specialty physician practices in that community. This study illustrates the potential influence of community factors on the population health management practices that occur within a single health care organization, in this case a private ambulatory practice. In the discussion, the authors raise questions about the ability of PCMHs to improve population health in vulnerable communities given the apparent nonrandom disparity in PCMH resources across communities.

The third chapter in this first section, by Moffatt-Bruce, McAlearney, Aldrich, Latimer, and Funai, is a case study of a health system-wide process improvement initiative. Within large health care systems, an important element of care management involves continuous monitoring and evaluation of quality of care, patient safety, and efficiency. A large Midwestern health system implemented Operations Councils in 15 units across the system; the goal was to utilize Lean process improvement techniques with frontline staff as trained Quality Improvement facilitators. The authors present results of positive changes in outcome metrics including improvements in area-specific and system-wide mortality and readmissions. The authors propose that in a large medical center, increased frontline staff engagement in patient safety initiatives improved process measures and patient outcomes, helping them to improve the health of the defined populations they serve.

SECTION II: PHM BETWEEN HEALTH CARE ORGANIZATIONS

Section II presents two case studies of PHM between health care organizations. In the paper titled "Using Teams to Implement Personalized Health Care across a Multi-Site Breast Cancer Network," Lewis, Bloom, Rice, Naeim, and Shortell explore organizational determinants of team effectiveness within the Athena Breast Health Network, a multi-site collaboration between five health systems. The authors employed a mixed methods analysis including key informant interviews and a multi-wave survey of team members at various levels across the five health systems. Their results reveal that group culture and supportive, collaborative environments are positively associated with team effectiveness, and a hierarchical culture is negatively associated with team effectiveness. When developing PHM

collaborations between organizations, such as the one studied in this paper, organizational variables should be a focus of building a positive culture of inter-professional teamwork.

In the paper titled "A Business Planning Model to Identify New Safety Net Clinic Locations," Langabeer, Helton, DelliFraine, Dotson, Watts, and Love describe a community-based collaborative alliance of health care providers tasked with guiding decisions about expanding the community's network of community health clinics. This collaborative included stakeholders from 50 area health care organizations. Participants defined key variables including demand, sustainability, and competition and developed a mathematical decision model that used publicly available community data on these key variables to arrive at clinic locations. This collaborative followed a key tenant of PHM by using local, population-level data to guide health care planning. The authors propose that other communities can replicate this collaborative process to guide community health care planning decisions.

SECTION III: PHM INTEGRATING HEALTH CARE ORGANIZATIONS AND OTHER FIELDS

Section III includes three chapters that discuss issues of PHM between health care organizations and organizations in other fields. The paper titled "Answering the Call for Integrating Population Health: Insights from Health System Executives," by Carlton, explores the issues related to integrating health care and public health organizations for PHM activities. Qualitative analysis of key informant interviews with health system, health department, and non-profit executives identified strategies leaders might use to more effectively integrate these fields. The author proposes that health care executives can use these strategies to guide interactions and direct limited resources when developing PHM initiatives with public health departments and community organizations.

Sieck, Wickizer, and Geist, in the paper titled "Population Health Management in Integrated Physical and Mental Health Care," present a case study of integrating physical and mental health care for individuals with serious mental illness in the Missouri Health Home Program. The authors use PHM as a framework for integrating that care, highlighting particular elements of PHM that facilitate and support integration. As

health care reform provides external motivation, this paper positions PHM as a guide for other states as they attempt to integrate physical and mental health care services.

The paper titled "Population, Community, and Public Health: Measuring the Benefits," by Turner and Evashwick, is a discussion of three related concepts, population health, community health, and public health. The authors define these three concepts and discuss current value metrics and measurement models for each. The proposed valuation techniques provide a framework for stakeholders to define, measure, and value initiatives under each of these concepts. Health care executives can use this paper as a guide to committing resources, assessing the potential of PHM initiatives, and determining models for evaluation of benefits.

SECTION IV: FACTORS IN PHM BEYOND THE MANAGEMENT OF HEALTH CARE ORGANIZATIONS

Section IV is a presentation of considerations in PHM beyond management strategies that leaders and scholars of health care organizations need to be aware of during the PHM implementation process. Section IV starts with an invited letter by Wexler, a practicing family physician, who calls us to consider the patient in the process of care transformation. Current policy presupposes that transformation of health care delivery will lead to patients proactively engaging in their own care, making healthy choices, and completing chronic disease self-management tasks. Wexler presents the results of a recent intervention to reduce non-urgent ED use among Medicaid patients in which a transformation of the process of care did not lead to a significant change in patient behavior. He proposes that effective PHM requires stakeholder acknowledgment of how non-health system factors affect patient behaviors and subsequently influence the success of PHM interventions.

In the final paper in this volume we outline current health care payment models and discusses the impact of each on the potential success of PHM initiatives. We then present the benefits of a multi-part model, combining visit-based fee-for-service reimbursement with a monthly "care coordination payment" and a performance-based payment system that recognizes achievement of quality and efficiency goals. This approach, however, is limited due to the current lack of standardized measurement of quality goals that are linked to payment incentives. As financial models dictated by

health system payers are inextricably linked to the organization and management of health care, they indeed deserve comment in this volume.

We hope health care scholars and practitioners will find this volume of interest. It extends, we believe, our understanding of population health management efforts within and between health care organizations. The variety of studies and methods presented in this volume highlight the breadth of efforts currently underway to transform health care, and the potential for scholarship to advance the population health management agenda. In the first three sections of this volume we highlight the role for health care organizations and management in PHM. In the final section we provide a consideration of factors that can influence the success of health care redesign initiatives, specifically the voice and actions of the patient, and physician and hospital payment models. These issues should be considered by health care managers and scholars when implementing and evaluating PHM initiatives.

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