CHAPTER 2

The Context and Future of Geriatric Care

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CHAPTER OBJECTIVES

1. Illustrate differences between the geriatric approach to patient care and the traditional disease-based approach.
2. Describe how geriatric assessment enables patient-centered, goal-aligned clinical care for older adults.
3. Discuss strategies for dissemination of geriatric principles among the full range of healthcare providers and health systems.

KEY TERMS

Functional limitations | Geriatrics | Person-centeredness

Introduction

The rapid growth of the 65-years-and-older age group mandates a healthcare workforce that is trained and prepared to address unique clinical and psychosocial needs. Older adults may experience multiple chronic conditions, functional disability, and multifactorial geriatric syndromes (e.g., falls, delirium) that affect their ability to live independently and enjoy a good quality of life. Both health and function become more heterogeneous with increasing age. Furthermore, older adults vary in their health and healthcare priorities. The heterogeneity of healthcare needs and variability in health priorities necessitate that healthcare services be

tailored to patient-specific goals and preferences. Tailoring care to each individual's needs, goals, and preferences is the guiding premise of geriatric care.

The geriatric approach to clinical care is a departure from the traditional disease-based diagnosis and treatment paradigm that has dominated healthcare professionals' education and medical care for at least the last century. The concept of multifactorial geriatric syndromes provides the opportunity to identify modifiable contributions to those syndromes' development that can be addressed via multipronged intervention strategies. The **geriatrics** approach allows for nuance and does not force-fit "one size fits all" solutions to every patient as are encouraged by many clinical guidelines. Tailoring care to the individual is essential, as the potential benefits and harms of guideline-based care are uncertain for older adults given their many different potential vulnerabilities, including frailty, multiple chronic conditions, and functional disability (Fried, Tinetti, & Iannone, 2011). Furthermore, these patients may differ in the outcomes that they most hope to achieve from their health care. Preservation of function and relief of symptoms may be higher priorities for older patients than mortality, the "hard outcome" on which many guidelines were built (Fried, Tinetti, Iannone, O'Leary, et al., 2011).

In this context, the use of the geriatric assessment allows implementation of a structured yet tailored approach to the identification of potential patient needs and priorities. Identification of these needs and priorities then guides development of a personalized healthcare plan and supports shared decision making between health professionals and older adults. In this chapter, we explore the historical context of geriatric principles and propose future directions in improving the care of older adults. Several key geriatric principles are highlighted in **TABLE 2-1**.

TABLE 2-1 Geriatric Principles with Examples of Their Current State and Proposed Future Directions

Principle	Examples of the Current State	Examples of Future Directions
Older adults are physically, functionally, and cognitively heterogeneous, requiring clinicians to adapt individualized treatment plans within the context of each patient's unique combination of biological, psychological, and social needs.	Older adults with multiple conditions and functional limitations either receive the same disease guideline-based care as persons with single conditions, ignoring the uncertainty of benefits or harms, treatment burden, and variability in patient goals and preferences, OR they are assumed not to benefit from some treatment, so that they are denied access to potentially beneficial treatments.	*Training/Education and Clinical Care* Individualized treatment plans with focus on what matters to patients, in the context of their health conditions and health trajectory. *Health Policy* Quality metrics and payment that reflect individualized treatment plans.

Principle	Examples of the Current State	Examples of Future Directions
Older adults often experience decreased function, quality of life, and increased mortality due to multiple chronic conditions.	Patients interact with multiple siloed providers, often resulting in conflicting and burdensome recommendations. There is minimal communication among providers. Multiple health record systems, with minimal ability to cross-talk.	*Training/Education* Incorporation of education regarding management of multiple chronic conditions into a nationwide curriculum for health professionals and trainees, including discussion of trade-offs and uncertainty. *Clinical Care* Geriatrics-trained professionals are recognized by health systems and the public as specialists in multiple chronic conditions. *Technology* Through use of existing electronic records, development of strategies for improved communication and easier dissemination of health records among providers. Creation and transmission of an integrated care plan based on the patient's specific goals and preferences.
Functional status and quality of life are key outcomes in older adults.	Clinical care and research usually focus on therapies and interventions that extend life, or improve only discrete disease-specific outcomes, which may not be what all patients value (Fried, Tinetti, & Iannone, 2011).	*Training/Education* Incorporation of geriatric principles early and throughout all health professionals' training. *Clinical Care* Assessment and management (and accompanying documentation) focus on patients' goals and preferences, function, and quality of life. *Health Policy* Development and implementation of quality metrics that drive payment that reflect patients' goals and preferences, function, and quality of life, rather than disease-specific measures.

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TABLE 2-1 Geriatric Principles with Examples of Their Current State and Proposed Future Directions *(continued)*

Principle	Examples of the Current State	Examples of Future Directions
Older adults should receive care that is aligned with each patient's goals and preferences.	Much current clinical care focuses on guidelines-based therapy, which is not necessarily generalizable to older adults with multiple conditions and limited life expectancy and is not always focused on what matters most to the individual.	*Training/Education* Training modules for current health professionals and trainees on goals and preferences ascertainment, and a framework for incorporating these considerations into individualized patient care plans. Development of training for public dissemination encouraging patients to communicate with their health professionals about their goals and preferences. *Clinical Care* Development of a unified, integrated plan of care that is consistent with patient goals and preferences. Changes to documentation to include prioritization of patient goals and preferences instead of individual diseases. *Health Policy* Reimbursements tied to meeting patient goals and preferences. Alignment of financial incentives to promote care that is consistent with patient goals and not tied to procedures and management that do not result in achievement of what matters to patients.
Geriatric care is interprofessional.	Geriatric models of care often include interprofessional teams. Evidence for the benefit of interprofessional clinical care and education is growing.	*Training/Education* Incorporation of interprofessional education sessions in national curricula. *Clinical Care* Development of integrated models of care maximizing benefits of interprofessional teams.

Principle	Examples of the Current State	Examples of Future Directions
Iatrogenic illnesses are common and many are preventable.	Older adults are especially vulnerable to iatrogenic illnesses, including infection, delirium, and falls in healthcare settings. Polypharmacy is common and has been shown to have adverse events including falls, hospitalizations, increased costs, reductions in function and cognition, and mortality (Budnitz, Lovegrove, Shehab, & Richards, 2012; Fried et al., 2014).	*Training/Education* Increased education regarding the benefits and harms of interventions embedded (such as medication management) into a national curriculum for health professions trainees (Kostas et al., 2014). *Clinical Care* Growth of geriatric services across healthcare settings; geriatric expertise available in all health systems. *Technology* Reminders regarding potentially harmful medications in the medical chart; incorporation of decision algorithms based on individual patient characteristics, goals, and preferences into electronic health records to identify best treatment options (Stevens et al., 2015).
Geriatric syndromes are abnormal clinical signs and symptoms that are often the result of vulnerabilities in multiple domains in older adults.	There has been increased recognition in mainstream health care of many geriatric conditions, including falls, delirium, and dementia. Many geriatric syndromes continue to be under-recognized and under-treated. Ongoing research is seeking to define new potential geriatric syndromes.	*Training/Education* Development of educational sessions designed to change the way that providers seek a unifying "one size fits all" approach to diagnosis and treatment. *Clinical Care* Incorporation of core elements of geriatric models across healthcare settings to improve recognition of conditions early in patient encounters. Inclusion of interprofessional treatment plans with opportunities to develop multimodal and stepwise approaches to patient care.

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TABLE 2-1 Geriatric Principles with Examples of Their Current State and Proposed Future Directions *(continued)*

Principle	Examples of the Current State	Examples of Future Directions
Development of models of care utilizing geriatric expertise leads to improvements in quality care to older adults.	Geriatric "co-management" is gaining popularity in many fields, including orthopedic surgery, based on clear evidence showing its benefits (Friedman, Mendelson, Bingham, & Kates, 2009; Schnell, Friedman, Mendelson, Bingham, & Kates, 2010). Many other fields continue to practice without adequate input from geriatric specialists, leading to fractured clinical care and poor outcomes.	*Training/Education* All health professionals who care for older adults must master understanding of geriatric principles and skills. *Clinical Care* Build consensus regarding core elements of successful geriatric models of care to allow broad dissemination. All health professionals who care for older adults have training in geriatric principles and care. Continued collaboration between geriatric and specialty services to result in improved clinical care for older adults. *Health Policy* Development and implementation of reimbursements that support evidence-based geriatric models of care.

Historical Perspectives

While older adults have always been significant users of the healthcare delivery system, geriatrics as a field is relatively new. Its emergence partly reflects the changing demography in the United States in the last hundred years. For example, in 1910, average life expectancy was 49 years and the top 10 causes of death were almost entirely acute illnesses. By comparison, in 2015, life expectancy was almost 79 years and a majority of the top 10 causes of death were related to chronic conditions. During this roughly 100-year period, the U.S. healthcare system has added many years of life through new treatments and technologies. As a consequence, older adults today live with far more chronic conditions (which cannot be cured but need to be managed) and **functional limitations** that can impact their quality of health and life. Geriatrics as a field for all health professionals grew in response to the substantial new needs of this population.

Over the last 30 years, the field of geriatrics has built an impressive research base and has begun to contribute its unique knowledge to the broader healthcare community. Better understanding of the multifactorial nature of many geriatric health conditions has resulted in development of effective, targeted interventions for those conditions. Furthermore, principles that were once championed by few health professionals other than geriatricians and nursing

professionals have entered the clinical mainstream. For example, function—which has always played a large role in the geriatric assessment—is now understood as an important outcome in clinical research and quality measurement. The field of geriatrics has also widely disseminated ground-breaking healthcare delivery models that demonstrate the value of interprofessional team-based care as well as care planning that focuses on quality of life, not just quality of health—for example, Acute Care of the Elderly units (Landefeld, Palmer, Kresevic, Fortinsky, & Kowal, 1995), Geriatric Resources for Assessment and Care of Elders (Counsell et al., 2007), Program of All-inclusive Care for the Elderly (Eng, Pedulla, Eleazer, McCann, & Fox, 1997), Hospital Elder Life Program (Inouye et al., 1999), Nurses Improving Care for Health System Elders (Fulmer et al., 2002), and Interprofessional Approach to Fall Prevention (Eckstrom et al., 2016).

More recently, geriatrics has played a larger role in shaping the operations of healthcare organizations that either include a larger number of older adults among their patient populations or specifically target these older populations. Examples include co-management interventions such as ortho-geriatric services (Friedman et al., 2009; Schnell et al., 2010.), dementia care (Jennings et al., 2016), and age-friendly emergency rooms.

The United States spends more money on health care on a per capita basis than any other country in the world, yet has worse health outcomes than many other industrialized countries. There is an increasing recognition that continued growth in healthcare costs is not sustainable and, moreover, that we ought to be able to deliver better efficiency and effectiveness for the dollars we spend. Policymakers seeking to inject value into the system have begun to appreciate the importance of geriatric principles. For example, hospital readmissions of persons with multiple chronic conditions is now a quality measure, as are assessment and management of several geriatric syndromes (Centers for Medicare and Medicaid Services [CMS], 2015, 2016b; RTI International, 2015a, 2015b). The Medicare program has recently introduced a number of new tools to support this broader role for geriatric principles, including modest payments for home visits, transitional care, and care coordination and payment for advanced care planning discussions (CMS, 2015, 2016a).

Future Directions

There is growing recognition that the field of geriatrics does not fit the classic model of a medical specialty. As a result, its role in the future, while exciting, remains incompletely defined. What is clear is that geriatrics, unlike the traditional medical specialties such as oncology or neurosurgery, is not defined by a specific disease, organ, or set of medical procedures. So what roles will geriatrics play in the future?

As the population continues to age and healthcare delivery becomes more complicated, the core concepts of geriatrics will need to be infused across the various delivery system, the training of all types of healthcare professionals, and the development of healthcare policy. Table 2-1 details several key geriatric principles, examples of the current management approach to address them, and future directions within the areas of clinical training/education, clinical care, health policy, and technology.

Because we will never have a sufficient number of geriatric specialists to meet the needs of all older people, the training of all types of healthcare professionals will need to embrace geriatric principles and competencies. One way to accomplish this goal could be to develop a national geriatrics curriculum intended for all health professional trainees, so that the core principles of geriatrics can be widely disseminated to providers in all healthcare settings. A national geriatric curriculum would have components designed to reach multiple audiences, including patients and caregivers, trainees, and the full spectrum of health professions and practicing providers. Its dissemination would ensure that these principles reach broad audiences

and would provide necessary expertise to providers facing the unique challenges of treating older adults with complex needs. Such a national curriculum would facilitate the exposure of trainees from varied health professions, such as nursing, medicine, pharmacy, and rehabilitative therapies, to a common knowledge and skill base, further ensuring a well-trained, integrated, interprofessional workforce. The core of this curriculum would be the geriatric principles outlined in Table 2-1, with the mode of delivery tailored to the target audience.

In the direct clinical care environment, there will be an ongoing and increasing need for discipline-specific individuals who have specialized training in geriatrics. These professionals could play a variety of roles, including direct providers to the highest-need, most-complicated older adults; expert consultants to other healthcare providers who have only basic geriatric training; leaders of interprofessional care teams; and developers of tailored geriatrics programs and services within their institutions that are responsive to the needs of their communities.

Geriatrics as a field must continue to stress the importance of **person-centeredness** and interprofessional teams to improve patient care. In the last several years, the patient-centered care movement has gained a wide audience, whose members are seeking to improve the value of delivered clinical care. By its very nature, the geriatric approach to patient care has necessarily been patient-centered in its broad assessment of patient needs and tailored treatment plans. Moving forward, geriatrics can help the wider healthcare audience define value in clinical care. One truly patient-centered approach would be to transition from value as measured by lab values and disease-specific outcomes and events, to metrics based on providing care appropriate to the priorities of each individual older adult (Tinetti, Esterson, Ferris, Posner, & Blaum, 2016; Tinetti, Naik, & Dodson, 2016).

To achieve these improvements, health systems and clinical leaders will need to develop electronic medical records that can capture more than older individuals' medical problems—that is, records that can capture their functional limitations, the composition and strength of their social support networks, and, most importantly, their goals and preferences, both medical and personal. The current focus of clinical assessment and management documentation, which in turn drives decision making and care, is on traditional disease-based lists of conditions and their corresponding siloed management strategies. What is needed in the future is targeted assessment of patient goals and preferences as well as assessment and management of function, which tends to be the outcome of greatest importance to most older adults and persons of all ages with multiple conditions. Focus should be on interpreting results and findings in the context of each patient's unique goals and health preferences, health conditions, and healthcare trajectory.

Healthcare systems will also increasingly rely on technology to facilitate day-to-day tasks and to form networks of geriatrically trained professionals and patients across the globe to improve patient care. The advent of telemedicine has resulted in improved access to care, allowing wide dissemination of care to rural, isolated, and vulnerable communities. Within the field of geriatrics, telemedicine has shown the ability reduce both emergency room visits (Shah et al., 2015) and hospitalizations (Catic et al., 2014).

Finally, there will substantial need for geriatrically trained professionals to provide leadership in shaping public policy around programs that serve vulnerable adults. For older adults with complex histories, care in the current system is often fragmented among many siloed providers and geared toward achieving outcomes that may not be relevant to patients. In the face of the growing consensus about the need to improve the value of clinical care, the Institute for Healthcare Improvement introduced the ambitious Triple Aim (Berwick, Nolan, & Whittington, 2008), which focuses on improving population health, improving patient experience, and reducing costs. At this juncture, however, policymakers continue to argue about relevant outcomes.

Certainly geriatric principles have informed some progress in this area, as evidenced by Medicare's coverage of advanced care planning and transitional care models. However, many quality metrics are still tied to mortality or to disease-specific outcomes or laboratory measures that may not be relevant to medically complex older adults. As such, there is significant opportunity for geriatrics to contribute to a much wider sphere of influence through national health policy.

Summary

The population of patients age 65 years and older is expanding rapidly throughout the world. These patients have heterogeneous healthcare and psychosocial needs, as well as variable health goals, preferences, and priorities. These characteristics demand an evolution of the healthcare system from the traditional disease-based evaluation and intervention care, to a system tailored to each patient's unique set of goals, preferences, conditions, and needs. Through use of the geriatric assessment, individual patient needs can be identified in a thorough and structured fashion, allowing for individualized and tailored treatment plans. Geriatric principles are increasingly defining quality patient care, and advances in geriatrics will continue to guide the future directions of healthcare delivery.

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