Geriatric Trends Facing Nursing with the Growing Aging

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KEYWORDS

• Aging population • Frailty • Social determinants • Interdisciplinary syndrome care

KEY POINTS

- Health care systems in the United States will be impacted by the growing elderly population with longer life expectancy, which is expected to exceed 84 million by 2050.
- This longevity has resulted in more complex multiple chronic conditions that no longer can be managed under current models.
- Frailty has been described as the new tsunami or catastrophe similar to the prevalence of Alzheimer's disease and yet is significantly behind in understanding this complex syndrome.
- Providers are challenged to develop expertise in the assessment, treatment, and evaluation of these challenging geriatric syndromes.
- Interprofessional care models in place of single disease care models will be essential to achieve positive outcomes. Advanced practice nurses are in a strong position to facilitate change and meet the needs of this growing population.

INTRODUCTION

The Gerontological Society of America (GSA) was established in 1945 with a focus on promotion of research in aging and a current membership of more than 5,000 professionals representing a broad range of disciplines.[1] The mission of the society is to promote multidisciplinary and interdisciplinary research in aging, disseminate research, and support aging education, including higher education.[1] In 2017 GSA provided a series of *Trend Reports in Aging* accompanied by a webinar moderated by Dr Resnick, 2017 GSA president.[2–6] The webinar included the 4 section chairs to discuss key topics provided in their respective trend reports and open discussion on topics of prime importance for the future of aging services. The 4 sections and respective chairs included the Health Sciences Section (Dr Griebling), the Social Research, Policy and Practice Section (Ms Sykes), the Behavioral and Social Sciences Section (Dr Pillemer),

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and the Biological Sciences Section (Dr Zugich). The GSA followed these initial trend reports with a report in 2018 from 2 of the sections (Social Research and Policy and Health Sciences).[2,7] Key topics from these trend reports and webinar are explored in the areas of population growth, frailty, interdisciplinary syndrome care, social determinants of health, and provider availability as they relate to the growing elderly population, outcomes, and the role of the nurse. Further exploration of reimbursement and the financial impact in supporting these initiatives is also addressed.

POPULATION GROWTH

A discussion related to the aging population necessitates a review of the anticipated growth of the elderly population and interrelated importance to each of the key issues to be addressed. By 2050, the population of those age 65 and older in the United States will be nearly 84 million, almost double the population in 2012 with surviving Baby Boomers all over the age of 85.[8] The growth of the oldest old (age ≥85 years) is projected to double by 2036 and triple by 2049[8] (**Figs. 1** and **2**). Life expectancy has improved over the past 30 years. In 1972, the average life expectancy at age 65 was 15.2 years (to age 80.2); by 2010, the average life expectancy at age 65 had increased by 4 years to 19.1 years (to age 84.2).[8] There will be a greater percent of females in the older age groups, especially in 85 years and over (>60%) who are more likely to be widowed.[8] The population will become more ethnically and racially diverse, with a growing Hispanic proportion.[8]

After the Baby Boomer generation, birth rates began to decrease, which has resulted in lower ratios of working-age population, defined as ages 18 to 64 years, in proportion to the older population.[8] In 2010, there were 21 elderly for every 100 adults in the working age contrasted with the projection in 2050 of 36 elderly for every 100 working-age adults[8] (**Fig. 3**). There will be less working population to support the

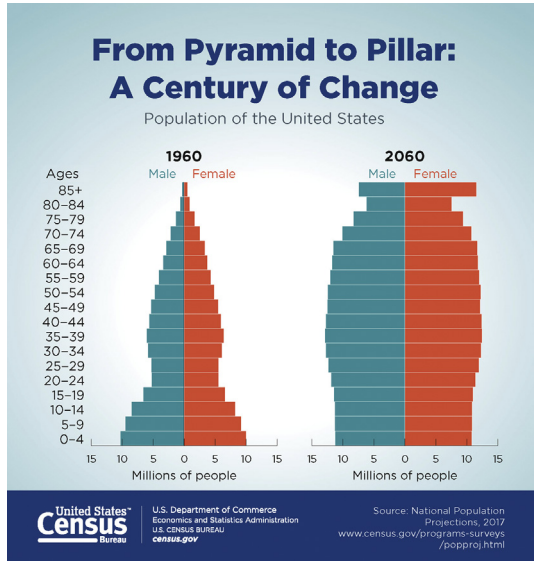

Fig. 1. Population change in the United States. (*From* United States Census Bureau. Pyramid to pillar: a century of change. Available at: https://www.census.gov/library/visualizations/2018/comm/century-of-change.html. Accessed November 9, 2018.)

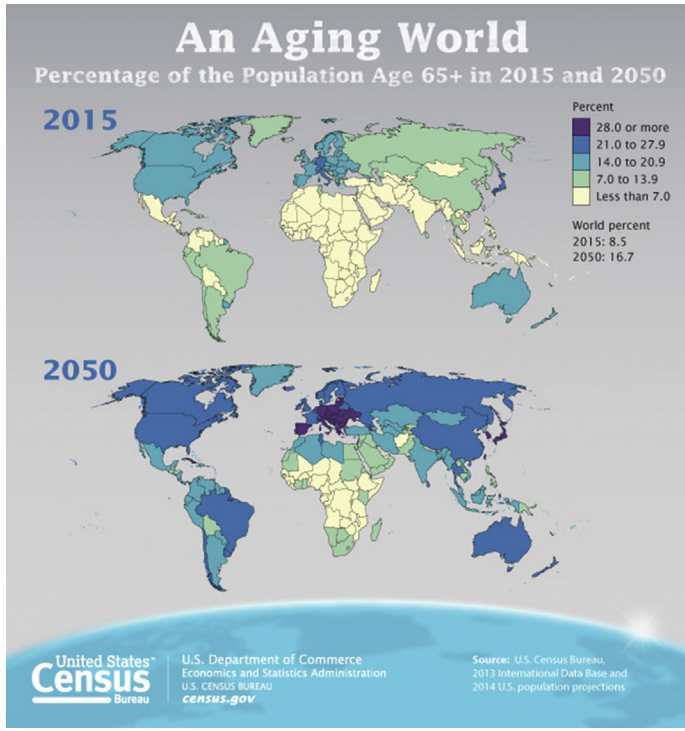

Fig. 2. An aging world. Percentage of the population age 65 years or older in 2015 and 2050. (*From* United States Census Bureau. An aging world. Available at: https://www.census.gov/library/visualizations/2016/comm/cb16-54_aging_world.html. Accessed November 9, 2018.)

ever-increasing volume and needs of the elderly from a support and financial perspective. Ninety percent of the households of those 65 and older receive Social Security and this number increase to as many as 94% for those 85 and older.[9] In 2014, at least one-half of the income for persons 65 and older was received from Social Security.[10] The poverty rate was higher for women, reaching 13% for people who were 85 and older and 18.1% for Hispanics.[9,10] With the population growth, larger shares of total resources may be spent on health care and caregiving in the future.

The growth of the elderly population, in the United States and globally, has been a topic of discussion for years as experts outlined the staggering numbers from the Baby Boomer generation to move into the over 65 classification. Combined with the increasing numbers of the older population is the extended life expectancy (higher with females) and shift in racial and ethnic composition to a higher percentage of non-white population and an increase in Hispanic origin (5-fold)[8] (**Fig. 4**). Along with this shift is the decreased growth rate of the post-Baby Boomer generation to support the needs of the growing elderly population. These challenges are important to be abreast of as we explore key future trends.

FRAILTY

Dr Nikolich-Zugich, chair of the Biological Science Section, Department Chair of the Department of Immunobiology, and Co-Director of the Arizona Center on Aging at the University of Arizona, in identifying 1 of the 3 areas of concern facing the care of

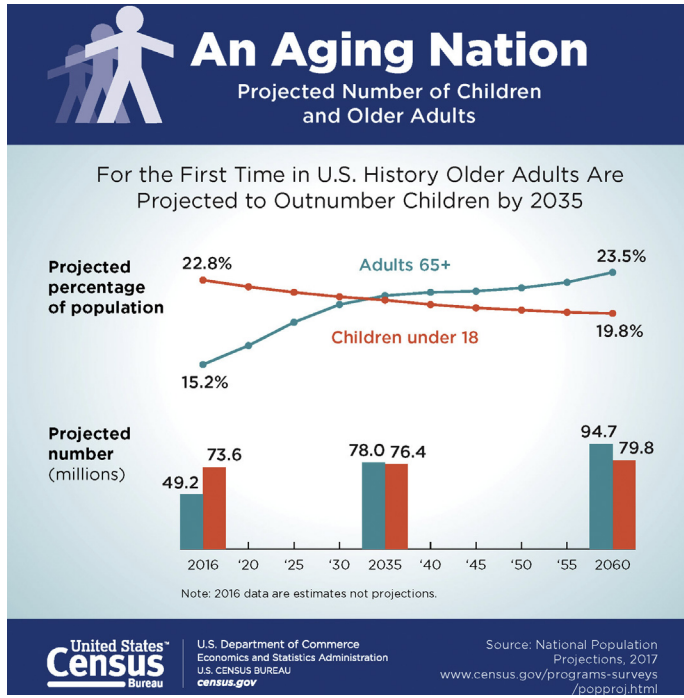

Fig. 3. Aging nation. (*From* United States Census Bureau. An aging nation. Available at: https://www.census.gov/library/visualizations/2018/comm/historic-first.html. Accessed November 9, 2018.)

the aging population, identified frailty. Dr Nikolich-Zugich described this concern as a tsunami or catastrophe similar to the prevalence of Alzheimer's disease.[11] He further explained that the study of frailty is about 30 to 35 years behind Alzheimer's in understanding the syndrome, yet the incidence is similar.[11]

Frailty is a condition "characterized by a decrease of reserves and functions across multiple physiologic systems, responsible for a compromised ability to cope with stressors."[12] The Frailty Index has operationalized frailty by the presence of 3 or more of the following components: unintentional weight loss, fatigue, weakness, decreased walking speed, and low physical activity level.[13] Adverse outcomes, such as death, falls, fractures, and hospitalizations, are associated with those experiencing frailty.[12,14] In a large European study, the prevalence of frailty for those aged 65 and older was 17% and those considered prefrail was as high as 42.3%.[15] Frailty is more common in women and those with a lower socioeconomic status.[15] Considering these factors, the urgency to expand research and understanding of this syndrome supports Dr Nikolich-Zugich's concern as a critical area for focus in caring for the growing aging population. Nurses and advance practice nurses fill a crucial role in gaining expertise in all aspects of this syndrome, from assessment and management to monitoring outcomes.

Dr Nikolich-Zugich described the challenge of conducting research on frailty owing to the difficulty in defining the syndrome and complexity of the syndrome.[11] This finding was supported in the article by Chen and colleagues,[16] who noted the lack of consensus on a single operational definition.[16] There is agreement to define frailty

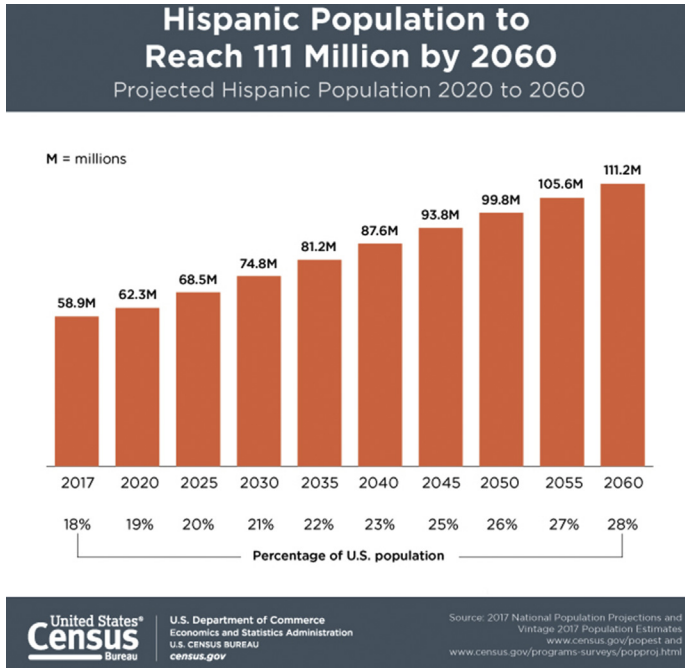

Fig. 4. Shift in the Hispanic population. (*From* United States Census Bureau. Hispanic population to reach 111 million by 2060. Available at: https://www.census.gov/library/visualizations/2018/comm/hispanic-projected-pop.html. Accessed November 9, 2018.)

as a clinical syndrome with increased vulnerability to stressors that lead to negative health outcomes.[16] In lieu of these challenges, research has identified an association of frailty with chronic inflammation and immune activation.[16] More recent studies are exploring biological responses, such as the study by Calvani and colleagues[17] analyzing biomarkers for sarcopenia and physical frailty. The hope is that studies like this will lead to an improved understanding of the pathophysiological pathways of frailty to develop interventions for treatment or monitoring.

From a behavioral science perspective, studies on frailty have been challenging owing to not only ambiguity of the definition, but also to a multitude of measurement instruments.[14] Theou and colleagues[18] in a scoping review on gaps in frailty research identified a number of issues: use of nonfrailty tools to measure frailty; lack of patient-oriented outcomes, such as quality of life; and limited clinical trial studies. From a behavioral and health science standpoint, interventions that have been identified as beneficial are exercise, nutrition, and comprehensive interdisciplinary assessment and treatment.[16] Even with these challenges, studies have grown in recent years with discussions occurring across clinical, social, public health, and research arenas.[14] The study of frailty is not limited to geriatrics or gerontology fields, but has been explored by other disciplines, including emergency medicine, cardiology, orthopedics, oncology, and general medicine.[18] This growing interest signifies the expansive nature of this phenomena.

Chen and colleagues[16] share that frailty may be reversible and, therefore, its recognition and management is essential in slowing progression and preventing disability.[19] de Llano and colleagues,[13] in a study of more than 800 participants 60 years or older,

identified the importance of the nurse's role in assessing elders for frailty and implementing individualized care plans to minimize the effects and prevent the consequences of the syndrome. Variables associated with frailty were low education level, obesity, lack of physical activity, cognitive deficit, poor health self-promotion, falls in the prior 12 months, and morbidity.[13] These factors were incorporated in design of the care plan for each participant using a frailty algorithm with a focus on health promotion, prevention, or reversal of frailty and/or rehabilitation. The algorithm classifies the client into 3 levels (nonfrail, prefrail, and frail) with corresponding interventions.[13] Interventions align with the underlying variables, such as education, nutritional assessment and guidance, assessment of muscle strength and exercise prescription, cognitive assessment and stimulation strategies, fall screening and prevention initiatives, and evaluation of the effects of polypharmacy.[13] Whether in a community, acute, or long-term care setting, nurses will be faced with the frailty syndrome and challenged to work with individuals in averting or managing this condition. Using instruments to classify frailty and tools to guide individualized treatment plans are essential to effectively manage this complex syndrome.

Chen and colleagues[20] support the views of Dr Nikolich-Zugich in stating frailty is an "emerging geriatric giant and poses wide-reaching consequences for the individual, family and society in the future." The complexity of this syndrome requires a multifaceted approach from a research and a practice perspective to manage this escalating challenge for the future. The description of the complexity of frailty in understanding the heterogeneous nature of the syndrome leads to the second key trend to explore: interdisciplinary syndrome care.

INTERDISCIPLINARY SYNDROME CARE

Dr Griebling,[6] chair of the Health Science Section, Senior Associate Dean for Medical Education at the University of Kansas School of Medicine, and Faculty Associate in The Landon Center on Aging, discussed in the trend report the challenge to discover ways to provide smarter care by focusing on geriatric syndromes rather than diagnosis-focused care. As described by Dr Griebling,[6] the focus is on treating the whole person instead of an organ system or specialty. In the webinar, Dr Griebling was asked to expand his discussion on syndrome-based care and the hurdles facing the ability to implement this approach.

Dr Griebling described the complexity of geriatric syndromes which typically have multifactorial causes and require various approaches to address the problem.[11] He offered an example in his role as a urologist managing a patient with incontinence and approaching the patient from a diagnosis perspective, dealing strictly with the type of incontinence rather than the larger picture to include possible issues of cognition, mobility limitations, or environmental factors.[11] He stresses in his example, that under syndrome care, the condition is not just limited to the bladder, but other aspects impacting a successful treatment plan.[11] Successful outcomes can only be achieved with a coordinated approach across disciplines, including monitoring multidimensional indicators. In syndrome care, the emphasis is on interdisciplinary care to provide a comprehensive view for planning and treatment.

Geriatric syndromes are characterized as multiple complex health states that cannot be classified into a discrete disease category and tend to occur later in life.[15] The presenting complaint may not reflect the underlying pathologic condition. Acute cognitive decline or falls may be indicative of an underlying condition such as an infection, drug interactions, or environmental factors.[15] Conditions considered to be included in the category of geriatric syndromes are frailty, urinary incontinence, falls, delirium, and

pressure ulcers.[15] The coordination of care across disciplines to achieve effective outcomes is limited under the current model of health services delivery.

Hurdles identified by Dr Griebling including the challenge to formulate teams to practice in this manner owing to the individual workload and lack of structures designed to foster interdisciplinary treatment.[11] A second hurdle was financing and reimbursement.[11] The current payment structure is designed by the use of procedural codes and specialized treatment. Dr Griebling described a grant project using an interdisciplinary model in which he participates as a member of a multicenter group via telemedicine to provide group behavioral care for adult patients with incontinence, which allows for economy of scale versus one-on-one care from multiple providers.[11] Examples like the one shared by Dr Griebling provide insight into possible ways to alter practice settings to meet the changing needs of the older population.

The literature supports Dr Griebling's viewpoint. Searle and Rockwood,[21] in describing frailty in the hospital setting, challenge providers to alter their view of the patient. They describe providers who have a primary disease focus and expect patients to present with well-defined problems that can be addressed with a structured course of treatment.[21] Searle and Rockwood[21] refer to this in the following manner: "Disease focused specialist who push on with the only course they know sometimes decry their frail patients as being unsuitable or requiring social support or failing to cope or thrive." Cesari and colleagues[22] echo a similar sentiment in describing the traditional approach of "stand-alone disease medicine" as being out of date in dealing with patients presenting with multiple conditions and syndromes. The risks associated with maintaining the traditional disease state approach include polypharmacy, because the patient is treated for multiple conditions simultaneously and undertreatment or inappropriate treatment of clinical conditions owing to lack of knowledge of the patient or poor understanding of syndrome care.[22] Patients, especially elderly patients, arrive with multiple issues with interacting medical and social etiologies that place them at greater risk for adverse outcomes. Both articles advocate for an approach that views the holistic individual versus a defined disease.

Support was also noted for Dr Griebling's comments in regard to expanding the interdisciplinary team in elder care management. In the discussion presented by Chen and colleagues[20] on the approach to frailty in primary care and the community, the authors point out the importance of a partnership among various health care providers (physician, nurse, social worker, case manager, dietician, allied health staff, exercise trainers, etc), together with the patient, which is needed to achieve significant and sustained improvement. Inzitari and colleagues[19] describe an interventional program focused on managing frailty, including multiple disciplines with a focus on physical exercise, nutritional support, healthy lifestyle education, and polypharmacy adjustments. The study is ongoing, but supports the messages shared by others on the need to shift from disease focused care to multiperspective care eliciting the expertise of a variety of disciplines.

Nurses and advance practice nurses have a significant role in interdisciplinary syndrome care. Hansen and colleagues[23] describe a nurse practitioner–led, interprofessional geriatric clinic operating within a rehabilitation hospital. Included as team members are a social worker and physical and occupational therapists. Referrals are mainly received from primary health care providers for patients displaying an acute change in condition that requires further evaluation from a clinician with geriatric expertise.[23] Both patients and referring practitioners expressed a high level of satisfaction and additional, nonreferred issues were frequently identified during the assessment process.[23]

The Collaboration for Hospitalized Elders Reducing the Impact of Stays in Hospital (CHERISH) is a program under evaluation on nongeriatric hospital units led by a facilitator who possesses skills centered on multidisciplinary team facilitation, geriatric expertise, and the evaluation of cycles of improvement.[24] The outcomes measured include a decrease in geriatric syndromes (delirium, functional decline, falls, pressure injuries, and new incontinence), decreases in length of stay, and decreases in institutional care.[24] Advanced practice nurses are ideally positioned to understand risk factors and geriatric syndromes, translate research into practice, and analyze outcomes. The successful implementation of integrated multidisciplinary programs are often limited by the lack of leadership expertise in the field of geriatric care and treatment.[25] Advance practice nurses can foster the expansion of knowledge and skills central to not only direct care givers, but also decision makers in guiding best practice model development.

Searle and Rockwood[21] summarized the benefit of person-centered health care to center on not only what the patient needs, but what they want, with the goals of better mobility, function, cognition, continence, pain control, and social engagement. To achieve these outcomes, coordination from a myriad of disciplines will be required to provide a unique perspective for overall goal attainment.

As we explore the multimodal, chronic disease processes affecting the elderly, it is important to examine from a broader perspective what information is available to address prevention and screening for high-risk individuals. The third focus area is social determinants of health.

SOCIAL DETERMINANTS OF HEALTH

Ms Sykes, Chair of Social Research, Policy and Practice Section, is retired from her most recent position as Senior Advisor for Aging and Public Health with the Environmental Protection Agency and prior positions as the Associate Director at the Centers for Disease Control and Prevention National Institute for Occupational Safety and Health, and Professional Staff with the US Senate Special Committee on Aging. Sykes identified health inequalities as 1 of her top 3 areas of concern in the future of aging.[11] Sykes shared her views on the social determinants of health and discussed income and health inequalities in the elderly, highlighting the differences as they relate to age and ethnicity.[3] In the report, Trends in Social Research, Policy and Practice,[3] Sykes explains this point in referring to the National Institute on Aging research report on health inequities that noted "Older U.S. racial and ethnic minority populations suffer premature morbidity over the life course, pointing to biological-environmental interactions that hold important implications for understanding mechanisms to explain health disparities." She identified the need to align policy to narrow the gap with the goal to improve care for all people, which can benefit the economic landscape through savings in health care expenditures. Sykes shared data from a report of *The Joint Center for Political and Economic Studies*, which calculated a savings of $229 billion dollars in the United States from 2003 to 2006 if health inequities had been eliminated.[26]

When viewing the issue of health and disease, society has generally focused on the health sector to address concerns, but as more information is gained on the impact of social determinants on health, the realization occurs that the issue is broader than the health sector alone. The conditions in which one is born, grows, lives, works, and ages are key determinants of health and mostly responsible for health inequities.[27] The distribution of money, power, and resources shape the circumstances of these conditions.[27] The issues must expand to include government, society, local communities,

support agencies, and businesses, along with the health care sector to address these challenges.

Reutter and Kushner[28] call nurses to this critical issue in stating, "nursing has a clear mandate to ensure access to health and health-care by providing sensitive empowering care to those experiencing inequities and working to change underlying social conditions that result in and perpetuate health inequities." The call to action includes strengthening the knowledge base on disparities and their effects, providing sensitive and nonjudgmental care, advocacy, and participating in research outlining outcomes supporting the need for change.[28] The authors point out the strong link between nursing, as a caring profession, and social inequities, which are the result of a lack of caring.[28] Nurses, through their daily interactions, witness the effects of health inequities at the individual level and can intervene through planned interventions. Advanced practice nurses and experienced nurses can mentor new nurses through their approach in caring for this population, which often experiences a lack of compassion. From a broader perspective, the authors call for nurses to advocate for change, not just in their own practice settings, but also for improved living and working conditions.[28] An example offered was a group in Canada with a nurse practitioner as one of the founding members with their primary focus on education, outreach to raise awareness of the impact of poverty on health outcomes, advocacy, and research.[28] The evaluation of outcomes as they relate to age, ethnicity, or income can provide insight into establishing specifically designed protocols.

The Commission on Social Determinants of Health included in its final recommendations to expand interdisciplinary research on the social determinants of health to decrease health inequities[29] (**Box 1**). Additionally, the report called for the expanded training of health practitioners to further understand the problem of health inequity, the social determinants, and possible solutions to build public and political awareness.[29] The report notes the limited inclusion of this topic in curriculums and training programs for health professionals, including nurses, and recommends its inclusion at the basic level of education.[29] A greater awareness of health inequities and gender influences on health outcomes is needed to guide practice strategies, including a focus on prevention and health promotion. The report calls for teaching and training materials on the social determinants of health to be accessible through free access sites to facilitate expanded education.[29]

The health care sector faces a number of challenges related to the growth of the elderly population, namely, multimodal geriatric syndromes, interdisciplinary care modeling, and understanding the social determinants of illness to develop approaches

Box 1
Three principles of action to achieve health equity

1. Improve the conditions of daily life—the circumstances in which people are born, grow, live, work, and age.
2. Tackle the inequitable distribution of power, money, and resources—the structural drivers of those conditions of daily life—globally, nationally, and locally.
3. Measure the problem, evaluate action, expand the knowledge base, develop a workforce that is trained in the social determinants of health, and raise public awareness about the social determinants of health.

From Commission on Social Determinants of Health (CSDH). A new global agenda. In: Closing the gap in a generation: health equity through action on the social determinants of health. Geneva (Switzerland): World Health Organization; 2008. p. 34; with permission.

to minimize the effects. All of these initiatives require a dedicated workforce of professionals to address these issues, which leads to the final trend: availability of the workforce and expanded use of advanced practice nurses.

PROVIDER AVAILABILITY

Dr Pillemer, Chair of the Behavioral and Social Sciences Section, is a Professor in the Department of Human Development, a Professor of Gerontology in Medicine at Weill Cornell Medicine, and the Senior Associate Dean for Research and Outreach in the College of Human Ecology. Dr Pillemer discussed his concern with the shortage of a professional workforce to care for the aging population, especially in conjunction with the explosion of Alzheimer's disease.[11] The need for more health care professionals was also shared by Dr Griebling as one of his major areas of concern for the future.[11]

The redistribution of the population discussed elsewhere in this article will result in a decrease in the relative size of the working population as compared with the nonworking population, along with adding to the need for workers to provide care to the aging population. Cohen[30] shared that there will be a "critical shortage of basic healthcare providers" in the future unless changes are made to the health care labor market.

The World Health Organization took a closer look at this issue in the report, *Global Strategy on Human Resources for Health: Workforce 2030.*[31] Findings from this report identified the supply of health care workers in many countries is insufficient.[31] Estimates could be calculated for only 165 countries owing to lack of available data to model the projections.[31] Projections by 2030 estimate a global deficit of health workers to meet needs at 18 million as compared with 7 million in 2013.[31] The worldwide demand will grow from 48 million in 2013 to more than 80 million in 2030.[31] There is the potential for the creation of nearly 40 million new health care–related jobs using the sample of 165 countries.[31] An additional challenge in the creation of these new jobs is to align the positions in the regions and countries with unmet population needs. The current pace of production will need to be accelerated, as the authors warn against complacency and that maintaining the status quo will result in too slow of progress.[31]

Taking a closer look at nursing, specifically in the United States, Zhang and colleagues[32] updated their prior study on nursing shortages and found 37 of the 50 states will experience significant shortages of nurses by 2030. The Western and Southern regions will experience the greatest shortage, which correlates with the growing elderly populations in these regions.[32] The projected shortfall of 1 million registered nurses in the original report was decreases to 500,000 by 2030.[32] In the area of primary care, it is estimated by 2025 there will be a shortage of nearly 24,000 full-time primary care physicians.[33] Additionally, there is a significant need for geriatricians, as noted by a decrease in geriatric fellows by 22%.[30] Nurse practitioners are predicted to have a surplus in all states and physician assistants will have an anticipated surplus in most states by 2025.[33] Taking a closer look at the trends in primary care delivery between physicians, nurse practitioners, and physician assistants, Xue and colleagues[33] examined a sample of elderly Medicare beneficiaries (2008–2014). Three models were compared: a physician model (MD only), a shared care model (MD and either nurse practitioner or physician assistant), and a nurse practitioner/physician assistant model (either nurse practitioner/physician assistant or both).[33] The physician model remains the most common model, but there was a shift to a greater use of the shared model (from 12% to 23%), whereas the nurse practitioner/physician assistant showed

minimal change (from 2.7% to 5.9%).[33] With the effective use of nurse practitioner and physician assistant roles, the shortage of physicians can be mitigated.[33] Xue and colleagues[33] described access to care for the vulnerable elderly population as a national priority and the shift in the shared care model, along with the nurse practitioner/physician assistant model, will work to serve the growing chronic disease burden in the elderly population. Although these are positive trends, there remains significant need for concern and continued proactive strategies.

The shortage of health care workers is a critical issue facing the health care delivery system not only in the United States, but globally. High-quality care cannot be attained without a system that supplies adequately trained providers. The financing to support a system that prioritizes quality and health is essential for success because the economy will be strained with the increased demand of resources brought on by the growing elderly population.

FINANCIAL IMPACT OF HEALTH

Each of the panelists touched on some aspect of financing during the webinar or within their respective trend report. The vast range of issues (reimbursement, the Affordable Care Act, federal research funding, and Supplemental Securities Income) mentioned were broad and cannot be fully addressed in this article.[3–6,11] Instead, an overview of changes in reimbursement and the importance of investing in health from a broad view will be addressed.

The Quality Payment Program was established by the Medicare Access and CHIP Reauthorization Act of 2015 as a quality incentive program for qualifying physicians and advanced practice nurses.[34] Reimbursement is based on value over volume referred to as the Merit-Based Incentive Payment System. The shift is to move from a fee-for-service model to linking payment to outcomes and quality. The system is currently in the second year of implementation (2018), with initial data collection on the performance measures collected in 2017.[34] The first payment adjustment will be made beginning January 2019 for those who qualify.[34] Merit-Based Incentive Payment System performance categories for 2018 include quality (50%), cost (10%), improvement activities (15%), and advancing care information (25%).[34] A total Merit-Based Incentive Payment System score will be calculated to determine payment, which will range from $\pm$4% in 2019 and adjust up to $\pm$9% in 2022.[34] In the area of quality, the practitioner chooses 6 items out of the list of quality measures (217 measures available for 2018) for reporting.[34] As an example, patient frailty evaluation is included on the list of quality measures. Cost will be calculated for Medicare spending per beneficiary and total per capita costs.[34] Improvement activities offers a list of 113 options for the practitioner to choose from, including improve health status of the community, improve self-care, and chronic disease prevention and self-management program.[34] Advancing care information centers on interoperability. In 2018, there is a bonus point structure available for treating complex patients with applicable performance submission.[34] The system change was designed to meet the Centers for Medicare and Medicaid Services overarching goals of better care, smarter spending, and healthier people.[34]

The importance of focusing on health not only from the perspective of improving or extending people's lives, but it also has an overall economic benefit. In low- and middle-income countries, health improvement has accounted for approximately an 11% economic growth.[35] This number is as high as 24%, when the value of additional lives (VLYs) was included.[35] VLYs is the intrinsic value of benefit of health that leads to a higher life expectancy (decrease mortality)—the authors refer to VLYs and economic growth as full income.[35] Full income provides a more complete view of health's

contribution to the well-being of a country.[35] The authors propose that, by including VLYs in projections for economic benefits, a greater proportion of assistance could be allocated for health because it would reflect a stronger return on investment.[35] Jamison and colleagues[35] shared by using VLYs between 2015 and 2035 the estimate of economic benefit would exceed costs by a factor of 9 to 20, supporting a very attractive investment argument. Understanding the value of health improvement from an economic standpoint provides a strong rationale for improved resource allocation to health and health-related resources.

To gain financial support for research, new programs, education, recruitment, certifications, and other initiatives to address the issues related to the growing aging population, an argument must be made to elicit the interest of policymakers and decision makers. The financial value to a country by reducing mortality while achieving a substantial return on investment, in the face of a surge in elderly population, provides support for further discussion to direct investment in health care programs to address these pertinent issues.

SUMMARY

The increased life expectancy and volume of the older population will have a significant impact on health care services in the future. Providers are challenged to examine the current health care structure and evaluate changes in approaches to align with the change in the population landscape. The historical approach of traditional medicine and models of care based on standalone and acute care treatments will no longer be effective with the more complex, multifaceted issues involving older individuals with multiple chronic conditions. This changing environment requires a different perspective that includes seeking collaboration across disciplines with the goal of simultaneous and coordinated interventions. Interprofessional syndrome care is needed to avoid negative interactions among treatment plans for different conditions, such as polypharmacy.

Social and health determinants of care are essential to incorporate in treatment planning because these factors are linked to higher rates of geriatric syndromes. Conditions such as frailty and other geriatric syndromes require a concerted effort to incorporate screening, assessment, and individualized care planning to address quality of life and reduce mortality risk. The complex conditions facing the growing geriatric population will require innovative approaches.

Advanced practice nurses are positioned to positively effect changes in the care of the geriatric population. The increasing availability of advanced practice nurses aligning with the significant need for primary care providers provides an opportunity to develop expertise in geriatric care. Every setting will be challenged with designing effective, quality-driven delivery systems. Advanced practice nurses can be at the forefront of every aspect of geriatric care, from piloting multidisciplinary care models to being a voice for change in sharing the impact of patient experiences as it relates to seeking health equity.

The Centers for Medicare and Medicaid Services has outlined in the revised payment model the support for change. The plan to drive greater collaborative practice and open avenues for advanced practice nurses to establish practice models to achieve improved care are essential to stimulate needed change. Designing the program with quality outcomes as the means for payment adjustments clearly outlines a priority shift from volume to value.

The GSA, through the trend reports and subsequent webinar, provided the foundation for this article to stimulate continued discussion and exploration of key factors

facing the care of the elderly.[3–6,11] Widening our knowledge and perspective of the aging population across disciplines and focus areas can lead to a more prepared workforce in planning for the future.

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